

Governing Board

San Francisco Bay Restoration Authority

REVISED

Wednesday, April 22, 2009
2:00 PM to 4:00 PM

Meeting Location:
MetroCenter, Conference Room 171
101 8th Street, Oakland, California 94607

For additional information, please contact:
Fred Castro, (510) 464 7913

Agenda and attachments available at:
<http://www.abag.ca.gov/sfbra/meetings.html>

AGENDA

1. Welcome and Introduction of Governing Board Members

Information

Samuel Schuchat, Executive Officer, California State Coastal Conservancy

Attachment: Governing Board Members Biographical Statements

2. Summary of Legislation Establishing the Authority

Information

Kenneth Moy, Legal Counsel, Association of Bay Area Governments

Attachments: Assembly Bill No. 2954 (Chaptered September 30, 2008); "Greening the Bay," Save the Bay.

3. Overview of San Francisco Bay Wetlands Restoration Projects and Opportunities

Information

Judy Kelly, Director, San Francisco Estuary Project, and

Amy Hutzler, Program Manager, California State Coastal Conservancy

Attachment: SFEP Wetlands and Estuary Fact Sheets

Governing Board

San Francisco Bay Restoration Authority

AGENDA

4. Organizational Matters

Kenneth Moy, Legal Counsel, Association of Bay Area Governments

- A. Acceptance of Staff from the Conservancy and ABAG to support Authority and designation of ABAG's Executive Director, Legal Counsel and Finance Director as the Director, Legal Counsel and Treasurer for Authority, and of the Clerk of ABAG's Executive Board as Clerk of the Governing Board of Authority.

Action

Attachment: Moy memo dated April 6, 2009, including Resolution 1

- B. Adoption of *Conflict of Interest Code* and briefing regarding compliance by Governing Board members.

Action

Attachment: Moy memo dated April 13, 2009, including Resolution 2

- C. Briefing of *Brown Act* open meeting requirements.

Information

Attachment: Moy memo dated April 14, 2009

- D. Adoption of Parliamentary Rules.

Action

5. Authority Meeting Schedule and Items for Next Meeting

Samuel Schuchat, Executive Officer, California State Coastal Conservancy

6. Public Comment

7. Adjournment

Samuel P. Schuchat

Executive Officer
California State Coastal Conservancy

Samuel P. Schuchat became Executive Officer of the Coastal Conservancy in July 2001. He is also the Secretary to the California Ocean Protection Council and serves on the boards of the Los Cerritos Wetlands Authority, the Baldwin Hills Conservancy, and the Santa Monica Bay Restoration Commission. He was the Executive Director of the Federation of State Conservation Voter Leagues from 1998 to 2001; the Federation is the trade association of 26 environmental Political Action Committees (PAC) in as many states. From 1992 to 1998 he was the Executive Director of the California League of Conservation Voters, the nation's largest and oldest state environmental PAC with 25,000 members.

Mr. Schuchat has an extensive background in fund-raising and management of not-for-profit organizations. He has worked as a community and union organizer, has raised money for community art projects, and was the deputy director of Sacramento AIDS foundation in the late 1980s. He served on the California Fish and Game Commission from 1999 to 2004 including two years as Vice-President. He is currently serving on the Board of Temple Sinai in Oakland.

He received his BA in Political Science at Williams College in Williamstown, Massachusetts, in 1983, and his MA in Public Administration at San Francisco State University in 1989. He is an avid cyclist and birdwatcher, and has backpacked all over the Eastern and Western United States. He resides in Oakland with his wife and daughter.

California State Coastal Conservancy
1330 Broadway, 13th Floor
Oakland, CA 94612-2530

(510) 286-1015 – Tel
(510) 286-0470 – Fax

sschuchat@scc.ca.gov

Phil Ting

San Francisco Assessor-Recorder
City and County of San Francisco

As Assessor-Recorder of San Francisco, Phil Ting, is a solutions-focused, innovative reformer whose efforts have enabled him to generate over \$135 million in new revenue. Ting was appointed and later elected in 2005, becoming San Francisco's highest-ranking Chinese-American official.

An avid champion for innovative and good government policies in San Francisco, Ting launched GoSolarSF, San Francisco's first municipal solar energy incentive program; spearheaded efforts to help homeowners and tenants facing foreclosure; and introduced groundbreaking "Real Estate Watchdog" legislation which is aimed at capturing unreported changes of ownership. Ting also chairs the San Francisco Advisory Board for ChinaSF, a new public-private partnership dedicated to creating economic development opportunities by making San Francisco the gateway for Chinese companies looking to establish business operations in the Bay Area.

Ting began his career as a real estate financial advisor, gaining practical and hands-on experience in fiscal management and property assessments while working at Arthur Andersen and CB Richard Ellis. Prior to serving as the Assessor-Recorder, Ting also had a long history of civil rights advocacy - he was the Executive Director of the Asian Law Caucus, an organization founded in 1972 to advance and promote the legal and civil rights of the Asian Pacific Islander community. He is president of the Bay Area Assessors Association and serves on numerous boards including Equality California Institute and the California Alumni Association (Go Bears!).

Ting is a graduate of UC Berkeley and Harvard University's John F. Kennedy School of Government. He lives in San Francisco's Sunset District with his wife, Susan Sun and their daughter, Isabella.

1 Dr. Carlton B. Goodlett Place
City Hall, Room 190
San Francisco, CA 94102-4698

(415) 554-5596 – Tel
(415) 554-7915 – Fax

assessor@sfgov.org

John Gioia

Supervisor
County of Contra Costa

John Gioia serves as Vice-Chair on the Contra Costa County Board of Supervisors where he was first elected in 1998 and re-elected without opposition in 2002 and 2006. He also served as Chair of the Board in 2002 and 2006.

John serves on numerous boards and commissions, including: Board's Finance Committee, Association of Bay Area Governments Executive Board, San Francisco Bay Conservation and Development Commission, Bay Area Air Quality Management District Board, Bay Area Regional Agencies Joint Policy Committee, Rosie the Riveter / World War II Home Front National Historic Park Trust Member, West Contra Costa Integrated Waste Management Authority, Bay Area Regional Airport Planning Committee, Contra Costa Housing Trust Co-Chair, Contra Costa Retirement Association Board of Trustees, Doctors Medical Center Joint Powers Authority.

John grew up in West Contra Costa County where he graduated from El Cerrito High School and the University of California, Berkeley with a B.A. with highest honors in Political Science and earned his law degree from Boalt Hall School of Law at U.C. Berkeley. John practiced business and land use law in San Francisco and Richmond until his election to the Board of Supervisors.

John also served on the East Bay Municipal Utility District (EBMUD) Board of Directors from 1989 to 1998 and was President of EBMUD in 1995 and 1996.

John's public service was inspired by his father, who was a civics and history teacher at Kennedy High School in Richmond for 20 years. Under his leadership, John has worked to build coalitions to address issues challenging our community such as: access to health care, affordable housing, homelessness, youth violence, environmental justice, equal access to public transportation, and quality after-school programs for all children. John is recognized as a leader in regional government cooperation and is a strong advocate for those living with HIV / AIDS and for the residents of West Contra Costa County's diverse communities.

John lives in Richmond and is the proud parent of Christopher, an 11th grader in local public schools and four year old pre-schooler Emilia. John's wife, Jennifer is the Executive Director of a non-profit agency that works on education, afterschool, and nutrition issues in the Bay Area's lowest income communities.

11780 San Pablo Avenue, Suite D
El Cerrito, CA 94530

(510) 374-3231 – Tel
(510) 374-3429 – Fax

JGioia@bos.cccounty.us

Source: <http://www.co.contra-costa.ca.us>

Charles McGlashan

Supervisor
County of Marin

Public Service

Board of Supervisors, First Term, 2005-2009
Municipal Water District, Board of Directors, 2003-2005
Marin Economic Commission, 2001-2005, Vice Chair, 2002-2004

Community Service

Sierra Club Marin Group, Executive Committee, 2001-2005
Marin Conservation League, Board of Directors, 2000-2004, Vice President, 2002-2004
Environmental Education Council of Marin Board, 2000-2004
Sustainable Mill Valley, Steering Committee, 2001-2004
Sustainable Conservation, Board of Directors, 1995-2004
City CarShare, Advisory Board 2002-2004
Marin Countywide Plan Update, Sustainability Consultant, 2000
Marin Countywide Plan Update, Sustainability Working Group, 2001
Marin Countywide Plan Update, Economy & Equity Working Group, 2002

Education

MBA & Public Management Certificate, Stanford University, 1991, honors
Bachelor of Arts, Yale College, 1983, honors

Professional

Executive Director, California Environmental Dialogue, 2003-2004
Consultant in Environmental Management, 1990-2003, various firms
Business planning and management in high-technology and finance, 1983-1990

Personal

Charles lives in Mill Valley with his wife Carol

3501 Civic Center Drive
San Rafael, CA 94903

(415) 499-7331 – Tel
(415) 499-3645 – Fax

CMcGlashan@co.marin.ca.us

Source: <http://www.co.marin.ca.us>

Charles F. McGlashan IV
Marin County Board of Supervisors

Charles McGlashan was elected to the Marin County Board of Supervisors in 2004 and re-elected to a second term in 2008. His work is focused on sustainability in all facets of public policy: energy efficiency and renewable power, water conservation, affordable housing, local non-car transportation systems, bicycle and pedestrian improvements, smart community design, zero waste, green building, justice, public health, and habitat protection.

Mr. McGlashan currently serves as Chairman of the Marin Energy Authority (MEA), the Sonoma Marin Area Rail Transit Authority (SMART), and the Richardson's Bay Regional Agency (RBRA); as a commissioner on the Bay Conservation and Development Commission and the Joint Policy Committee for climate change; Local Agency Formation Commission; Golden Gate Bridge Highway & Transportation District Board of Directors; the Transportation Authority of Marin and its executive committee; and is a member of the Marin Housing Authority Board of Commissioners. He also serves as a board member for the GreenBelt Alliance and for the California Film Institute.

Charles was awarded the Environmental Leadership Award from the Environmental Education Council of Marin in 2006, the Youth Activist Award from Next Generation in 2007, a Bicycle Leadership Award from the Marin County Bicycle Coalition in 2007 and the Metropolitan Transportation Commission's 2008 Award of Merit for the Muir Woods Shuttle.

Prior to elected office, Mr. McGlashan worked for twenty-one years in environmental consulting, corporate finance and strategic planning. He also led non-profit entities working on State policy and high technology businesses.

He holds a BA from Yale and MBA from Stanford, both awarded with honors.

Rosanne Foust

Mayor
Redwood City

P.O. Box 391
1017 Middlefield Road
Redwood City, CA 94064

(650) 780-7220 – Tel
(650) 261-9102 – Fax

council@redwoodcity.org

204 Upland Court
Redwood City, CA 94062

(650) 368-1841 – Residence
(650) 780-7566 – Voicemail

rfoust@redwoodcity.org

Rosanne Foust

2009 Biography

- Mayor, City of Redwood City
- Vice President, SAMCEDA San Mateo County Economic Development Association
- Former Executive Vice President & Treasurer of Alsace Development International USA, Inc. From 1988 until 2007 managed U.S. offices in Boston, Los Angeles and Redwood City for economic development authorities of Alsace, France.
- Chair, San Mateo County Transportation Authority
- Current Deputy Chair of the Redwood City-San Mateo County Chamber of Commerce. Past Chair of the Board
- Board Member, Sequoia Awards
- Board Member, Redwood City Rotary
- Past Chair of the Redwood City Planning Commission, past President and Board Member of the Redwood Shores Community Association and past President of the Redwood City Library Foundation
- Member of the Sandpiper and Ralston PTA's
- Masters Degree in Public Administration from Notre Dame de Namur University and a Bachelor of Arts Degree in International Studies and Economics from Stonehill College in Massachusetts. Certificate from the Executive Management Program at UCLA's Anderson Graduate School of Management
- 2002 Athena Businesswoman of the Year
- Married with two children
- 14 year resident of Redwood City

Dave Cortese

Supervisor
County of Santa Clara

Dave Cortese (pronounced Cor-TEH-zy) is the District 3 representative to the Santa Clara County Board of Supervisors. He grew up in San Jose as part of a family that has been active in civic, cultural and business affairs for generations. He places high priority on transportation issues, education, and neighborhood services. Cortese was elected to the Santa Clara County Board of Supervisors in the fall of 2008. He lives with his wife Pattie and four children, David, Jr., Gina, Angela, and Matthew in the Evergreen area of San Jose.

Prior to the Board of Supervisors, Dave served two terms from 2000 to 2008 on the City of San Jose City Council. In 2006, he was appointed Vice Mayor by his colleagues on the Council. Dave also served on the East Side Union High School Board of Trustees where he was elected to two terms from 1992-2000. He served as President of the Board on two occasions. While there, Cortese chaired the Evergreen Valley High School "new school committee" and co-chaired a successful \$80 million bond campaign which led to the completion of the first new high school in Silicon Valley in over twenty-five years. He was also a leader on school safety issues, new partnerships with parents, and innovative programs which required more rigorous curriculum and reduced the dropout rate.

Dave was educated at Bellarmine College Prep, Santa Clara University, the University of California, Davis, and Lincoln University Law School. He holds a Bachelor's Degree in Political Science, and a Juris Doctorate in Law with certifications in Environmental Law and Mediation.

Soon after his swearing-in Cortese began establishing himself as a leader on the council. In spring 2002 he mediated a compromise of one of the thorniest issues ever to face the City of San Jose, a dispute between landlords and tenants rights advocates triggered by a proposed "Just Cause Eviction" ordinance. In the end, tenants ended up with an innovative program and landlord's walked away with an ordinance they could live with. Of the compromise, the San Jose Mercury News said, "Perhaps Jimmy Carter should share this year's Nobel Peace Prize with Dave Cortese. The San Jose City Councilman's shuttle diplomacy has helped end a year-long conflict between tenant activists and landlords over protections from eviction."

Cortese has also led in other ways. He has authored new ordinances clarifying the city's requirements for street trees, and protecting local businesses from the impacts of construction activities caused by local agencies. In addition he has risen to leadership positions in every organization he has served as well as been vocal as a reform leader in the City. As a councilman and a VTA board member he has chaired and co-chaired key transportation committees and has been a strong, vocal advocate for bringing light rail to the East Valley and BART to the South Bay, as well as freeway interchange improvements along Highway 101 at Tully, Capitol, Yerba Buena and Hellyer.

He was unanimously selected by 15 mayors from the entire county to serve as the President of the Santa Clara County Cities Association (SCCCA). In addition he is a member of the

Association of Bay Area Governments (ABAG), a 101 member city/county regional planning body for the entire Bay Area and has more recently been appointed by ABAG to the Metropolitan Transportation Commission. A complete list of Dave's professional affiliations is found below.

As a strong proponent of economic development and job creation he successfully spearheaded creation of a Joint Economic Policy Collaborative, a new regional body consisting of representatives of the fifteen cities in the county, fifteen business leaders in the county, and the CEO's of Joint Venture Silicon Valley, the Silicon Valley Manufacturing Group, and the Silicon Valley Chamber of Commerce. He is also a leader in the effort to bring professional baseball to San Jose.

Professional Affiliations

Dave has been involved in a variety of civic/community activities, including the Police Activities League (PAL) Board of Directors, Board of Directors of the East Valley YMCA, the Italian American Heritage Foundation, the President of the Sons of Sicily Club, member of the CHW Community Advisory Council, the PTA, and the Board of Directors of "Rotacare." He is or has been a member of the Santa Clara County Bar Association, the Santa Clara County School Boards Association, the San Jose Real Estate Board, the Tri-County Apartment Association, the Silicon Valley Toxics Coalition, the Cal Aggi Alumni Association, the Most Holy Trinity Church Development Committee, East Side Heroes and St. Francis of Assisi Parish. He has been directly involved with the Evergreen, East Hills, Alum Rock and Berryessa Little Leagues. He was one of the founders of East Valley Girls Softball (PAL) and formerly President of the San Jose (East-Evergreen) Rotary Club, and also a member of the Evergreen Business and Professional Association. He has also had the opportunity to work with his father, former Assemblyman Dominic L. Cortese over a political career that commenced in 1968. Dave has recently joined the board of trustees for Lincoln Law School.

County of Santa Clara
County Government Center
Tenth Floor - East Wing
70 West Hedding Street
San Jose, CA. 95110

(408) 299-5030 – Tel
(408) 298-6637 – Fax

Dave .Cortese@bos.sccgov.org

John Sutter

Ward 2 Board Member, Oakland
East Bay Regional Park District

First elected to the Board of Directors in 1996, Mr. Sutter was re-elected in 2000 and 2004. Mr. Sutter previously served as Oakland Vice Mayor, Oakland City Council member (elected three terms), Deputy District Attorney, and 14 years as an Alameda County Superior Court Judge.

He has previously held the office of President, People for Open Space (now Greenbelt Alliance), and has served on the boards of the San Francisco Bay Conservation and Development Commission (BCDC), Association of Bay Area Governments (ABAG), Sierra Club (local group), YMCA, OCCUR, Oakland Shoreline Committee, BART Trails Committee, Oakland Arts Council and the Oakland Cultural Affairs Commission.

John Sutter represents: most of Oakland, Piedmont, Canyon, Moraga, Orinda, Orinda Village, Rheem Valley, Lafayette, and Rossmoor.

Parks in his ward include: portion of Briones, Anthony Chabot (north of Keller Ave. if extended east), Claremont Canyon, Huckleberry, Leona Open Space, a small portion of Las Trampas, Middle Harbor, Redwood, Roberts, Sibley, and Temescal.

East Bay Regional Park District
2950 Peralta Oaks Court
P.O. Box 5381
Oakland, CA 94605-0381

(888) 327-2757 – Tel

jsutter@ebparks.org

San Francisco Bay Restoration Authority
Governing Board

Appointed March 19, 2009
By the Executive Board of the Association of Bay Area Governments

Chair

Samuel Schuchat
Executive Officer
California State Coastal Conservancy
1330 Broadway, 13th Floor
Oakland, CA 94612
Tel.: 510 286 1015
Fax: 510 286 0470
Email: sschuchat@scc.ca.gov

West Bay

Phil Ting
Assessor Recorder
City and County of San Francisco
City Hall, Room 190
1 Dr. Carlton B. Goodlett Place
San Francisco, CA 94102
Tel.: 415 554 5596
Fax: 415 554 7915
Email: assessor@sfgov.org

East Bay

John Gioia
Supervisor
Board of Supervisors
County of Contra Costa
11780 San Pablo Avenue, Suite D
El Cerrito, CA 94530
Tel.: 510 374 3231
Fax: 510 374 3429
Email: jgioia@bos.cccounty.us

North Bay

Charles McGlashan
Supervisor
Board of Supervisors
County of Marin
Civic Center
3501 Civic Center Drive, Suite 325
San Rafael, CA 94903
Tel.: 415 499 7331
Fax: 415 499 3645
Email: cmcglashan@co.marin.ca.us

South Bay

Rosanne Foust
Mayor
City Council
City of Redwood City
City Hall
1017 Middlefield Road
Redwood City, CA 94064
Tel.: 650 780 7220
Fax: 650 261 9102
Email: rfoust@redwoodcity.org

Bayside City/County

Dave Cortese
Supervisor
Board of Supervisors
County of Santa Clara
County Government Center
70 West Hedding Street, 10th Floor
San Jose, CA 95110
Tel.: 408 299 5030
Fax: 408 298 6637
Email: dave.cortese@bos.sccgov.org

Bayside City/Park District

John Sutter
Director
East Bay Regional Park District
2950 Peralta Oaks Road
P.O. Box 5381
Oakland, CA 94605
Tel.: 510 530 3711
Tel.: 888 327 2757
Email: jsutter@ebparks.org

Director

Henry Gardner
Executive Director
Association of Bay Area Governments
101 8th Street
Oakland, CA 94607
Tel.: 510 464 798
Fax: 510 464 7985
Email: henryg@abag.ca.gov

Assembly Bill No. 2954

CHAPTER 690

An act to add and repeal Title 7.25 (commencing with Section 66700) of the Government Code, relating to the San Francisco Bay Restoration Authority.

[Approved by Governor September 30, 2008. Filed with
Secretary of State September 30, 2008.]

LEGISLATIVE COUNSEL'S DIGEST

AB 2954, Lieber. San Francisco Bay Restoration Authority.

(1) Existing law establishes the San Francisco Bay Area Conservancy Program, administered by the State Coastal Conservancy, to address the resource and recreational goals of the San Francisco Bay area in a coordinated, comprehensive, and effective manner and authorizes the conservancy to undertake projects and award grants in the San Francisco Bay area to achieve various goals, including the improvement of public access to the coast and the protection, restoration, and enhancement of natural habitats and connecting corridors, watersheds, scenic areas, and other open-space resources.

Existing law also establishes the San Francisco Bay Conservation and Development Commission and requires a person or governmental agency wishing to place fill, extract materials, or make a substantial change in the use of any water, land, or structure within the area of the commission's jurisdiction, as defined, to secure a permit from the commission. Existing law also authorizes the commission to amend, or repeal and adopt, the San Francisco Bay Plan, which is a comprehensive and enforceable plan for the conservation of the water in the San Francisco Bay and the development of its shoreline.

This bill would enact the San Francisco Bay Restoration Authority Act, which would establish the San Francisco Bay Restoration Authority to raise and allocate resources for the restoration, enhancement, protection, and enjoyment of wetlands and wildlife habitat in the San Francisco Bay and along its shoreline. The act would establish a governing board of the authority composed of a resident of the San Francisco Bay Area, as defined, who would be required to serve as chair, and specified local and regional governmental officials, impose membership requirements for the board, and require the board to, among other things, establish policies for the operation of the authority and convene a Bay Restoration Advisory Committee to assist and advise the board in carrying out its functions.

The act would authorize the authority to raise funds and award grants to public and private entities for eligible projects, including projects that restore, protect, or enhance tidal wetlands, managed ponds, or natural habitat on the

San Francisco Bay shoreline. The act would authorize the authority to, among other things, levy a benefit assessment, apply for and receive grants from federal and state agencies, solicit and accept gifts, fees, grants, and allocations from public and private entities, issue revenue bonds, incur bond indebtedness, and enter into joint powers agreements.

Because this bill would impose additional duties on local governmental agencies relating to the membership of the governing board of the authority, the bill would impose a state-mandated local program.

This bill would repeal the act on January 1, 2029.

(2) The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

The people of the State of California do enact as follows:

SECTION 1. Title 7.25 (commencing with Section 66700) is added to the Government Code, to read:

TITLE 7.25. SAN FRANCISCO BAY RESTORATION AUTHORITY
ACT

CHAPTER 1. FINDINGS AND DECLARATIONS

66700. This title shall be known and may be cited as the San Francisco Bay Restoration Authority Act.

66700.5. The Legislature hereby finds and declares all of the following:

(a) The nine counties surrounding the San Francisco Bay constitute a region with unique natural resource and outdoor recreational needs. The San Francisco Bay is the region's greatest natural resource and its central feature and contributes greatly to California's economic health and vitality. The bay is a hub of an interconnected open-space system of watersheds, natural habitats, scenic areas, agricultural lands, and regional trails.

(b) As the largest estuary on the West Coast of the United States, the San Francisco Bay is home to hundreds of fish and wildlife species and provides many outdoor recreational opportunities. The San Francisco Bay is home to 105 threatened species and 23 endangered species of wildlife. The San Francisco Bay and its tidal and seasonal wetlands and other natural shoreline habitats are a significant part of the state's coastal resources and a healthy bay is necessary to support the state's human and wildlife populations.

(c) The Legislature has declared, in the California Ocean Protection Act, that California's coastal and ocean resources are critical to the state's environmental and economic security and integral to the state's quality of life.

(d) A healthy San Francisco Bay is essential to a healthy ocean ecosystem. Forty percent of the land in the state drains to the San Francisco Bay. Pollution from cars, homes, and neighborhoods around the bay, as well as from communities as far away as Fresno, Redding, and Sacramento, drains into creeks, streams, and rivers that flow to the bay before entering the Pacific Ocean.

(e) The San Francisco Bay is an estuary that is a critical nursery for many ocean species, and the bay's wetlands, which are sheltered from high winds, big waves, and fast-moving water, provide plentiful food and protection from ocean predators. The bay's fertile mixing zone of fresh and salty water also generates the ocean's food chain base.

(f) The restoration, preservation, and maintenance of vital wetlands and San Francisco Bay habitat, improvement of bay water quality, provision of public access to the bay shoreline, and enhancement of shoreline recreational amenities for the growing population of the San Francisco Bay Area are immediate state and regional priorities that are necessary to address continuing serious threats posed by pollution and sprawl and to improve the region's quality of life.

(g) Wetland restoration in the San Francisco Bay is necessary to address the growing danger that global warming and rises in sea level pose to the economic well-being, public health, natural resources, and environment of California. Tidal wetlands can both assist with tidal and fluvial flood management and adapt to rises in sea level by accreting additional sediment and rising in elevation. Leading scientists from the Intergovernmental Panel on Climate Change and the United States government have found that the restoration of lost wetlands represents an immediate and large opportunity for enhancing terrestrial carbon sequestration.

(h) The importance of protecting and restoring the San Francisco Bay's tidal wetlands and other natural habitat was underscored by the 2007 Cosco Busan oil spill, and the critical importance of restoration projects and the long-term health of the bay are well-documented in regional plans and reports, including the San Francisco Estuary Project's Comprehensive Conservation and Management Plan, the San Francisco Bay Conservation and Development Commission's San Francisco Bay Plan, the Baylands Ecosystem Habitat Goals Report, the San Francisco Bay Joint Venture's "Restoring the Estuary" Implementation Strategy, the Resources Agency report, "California's Ocean Economy," and the Save The Bay's "Greening the Bay" report.

(i) The protection and restoration of the San Francisco Bay require efficient and effective use of public funds, leveraging of local funds with state and federal resources, and investment of significant resources over a sustained period for habitat restoration on shoreline parcels, parks, and recreational facilities, and public access to natural areas.

(j) The protection and restoration of the San Francisco Bay and the enhancement of its shoreline confer special benefits on property proximate to the bay. Properties proximate to the bay receive special benefits from the contribution of a healthy and vibrant bay to the region's economy and quality

of life, including improved access to the bay's shoreline, enhanced recreational amenities in the area, and protection from flooding.

(k) The San Francisco Bay Area needs to develop regional mechanisms to generate and allocate additional resources to address threats to the San Francisco Bay and to secure opportunities for the improvement of the bay and its shoreline, natural areas, and recreational facilities.

(l) It is in the public interest to create the San Francisco Bay Restoration Authority as a regional entity to generate and allocate resources for the protection and enhancement of tidal wetlands and other wildlife habitat in and surrounding the San Francisco Bay.

CHAPTER 2. DEFINITIONS

66701. Unless the context otherwise requires, the following definitions govern the construction of this title:

(a) "Advisory committee" means the Bay Restoration Advisory Committee convened by the governing board of the San Francisco Bay Restoration Authority pursuant to Section 66703.7.

(b) "Authority" means the San Francisco Bay Restoration Authority established as a regional entity pursuant to Section 66702.

(c) "Bayside city or county" means a city or county with a geographical boundary that touches San Francisco Bay, and includes the City and County of San Francisco.

(d) "Board" means the governing board of the San Francisco Bay Restoration Authority created pursuant to Section 66703.

(e) "Elected official" means an elected member of a city council or an elected member of a county board of supervisors.

(f) "Member" means a person appointed as a member of the governing board of the San Francisco Bay Restoration Authority pursuant to Section 66703.

(g) "San Francisco Bay" means the area described in subdivision (a) of Section 66610.

(h) "San Francisco Bay Area" means the area within the State Coastal Conservancy's San Francisco Bay Area Conservancy Program created pursuant to Chapter 4.5 (commencing with Section 31160) of Division 21 of the Public Resources Code and includes the Counties of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma.

CHAPTER 3. SAN FRANCISCO BAY RESTORATION AUTHORITY

66702. (a) The San Francisco Bay Restoration Authority is hereby established as a regional entity with jurisdiction extending throughout the San Francisco Bay Area.

(b) The jurisdiction of the authority is not subject to the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (Division 3 (commencing with Section 56000) of Title 5).

(c) The authority's purpose is to raise and allocate resources for the restoration, enhancement, protection, and enjoyment of wetlands and wildlife habitats in the San Francisco Bay and along its shoreline.

66702.5. It is the intent of the Legislature that the authority should complement existing efforts by cities, counties, districts, the San Francisco Bay Conservation and Development Commission, the State Coastal Conservancy, and other local, regional, and state entities, related to addressing the goals described in this title.

CHAPTER 4. GOVERNING BODY

66703. (a) The authority shall be governed by a board composed of seven voting members, as follows:

(1) One member shall be a resident of the San Francisco Bay Area with expertise in the implementation of Chapter 4.5 (commencing with Section 31160) of Division 21 of the Public Resources Code and shall serve as the chair.

(2) One member shall be an elected official of a bayside city or county in the North Bay. For purposes of this subdivision, the North Bay consists of the Counties of Marin, Napa, Solano, and Sonoma.

(3) One member shall be an elected official of a bayside city or county in the East Bay. For purposes of this subdivision, the East Bay consists of the portion of Contra Costa County that is west of the City of Pittsburg and the portion of Alameda County that is north of the southern boundary of the City of Hayward.

(4) One member shall be an elected official of a bayside city or county in the South Bay. For purposes of this subdivision, the South Bay consists of Santa Clara County, the portion of Alameda County that is south of the southern boundary of the City of Hayward, and the portion of San Mateo County that is south of the northern boundary of Redwood City.

(5) One member shall be an elected official of a bayside city or county in the West Bay. For purposes of this subdivision, the West Bay consists of the City and County of San Francisco and the portion of San Mateo County that is north of the northern boundary of Redwood City.

(6) Two members shall be elected officials of one or more of the following:

(A) A bayside city or county.

(B) A regional park district, regional open-space district, or regional park and open-space district formed pursuant to Article 3 (commencing with Section 5500) of Chapter 3 of Division 5 of the Public Resources Code that owns or operates one or more San Francisco Bay shoreline parcels.

(b) The Association of Bay Area Governments shall appoint the members.

(c) Each member shall serve at the pleasure of his or her appointing authority.

(d) A vacancy shall be filled by the Association of Bay Area Governments within 90 days from the date on which the vacancy occurs.

66703.1. The members of the board are subject to the Political Reform Act of 1974 (Title 9 (commencing with Section 81000)).

66703.2. A member shall exercise his or her independent judgment on behalf of the interests of the residents, the property owners, and the public as a whole in furthering the intent and purposes of this title.

66703.4. (a) A member appointed pursuant to subdivision (b) of Section 66703 may receive a per diem for each board meeting that he or she attends. The board shall set the amount of that per diem for a member's attendance, but that amount shall not exceed one hundred dollars (\$100) per meeting. A member may not receive a payment for more than two meetings in a calendar month.

(b) A member may waive a payment authorized by this section.

66703.5. The board shall elect from its own members a vice chair who shall preside in the absence of the chair.

66703.6. (a) The time and place of the first meeting of the board shall be at a time and place within the San Francisco Bay Area fixed by the chair of the board.

(b) After the first meeting described in subdivision (a), the board shall hold meetings at times and places determined by the board.

(c) Meetings of the board are subject to the Ralph M. Brown Act (Chapter 9 (commencing with Section 54950) of Part 1 of Division 2 of Title 5).

66703.7. (a) Not later than six months after the date of the board's first meeting described in subdivision (a) of Section 66703.6, the board shall convene a Bay Restoration Advisory Committee to assist and advise the board in carrying out the functions of the board. The advisory committee shall meet on a regular basis.

(b) The membership of the advisory committee shall be determined by the authority based upon criteria that provide a broad representation of community and agency interests within the authority's jurisdiction over the restoration of wetland areas in the San Francisco Bay and along its shoreline. The membership of the advisory committee may include, but is not limited to, representatives from the following:

- (1) The Department of Fish and Game.
- (2) The State Coastal Conservancy.
- (3) The San Francisco Bay National Wildlife Refuge Complex operated by the United States Fish and Wildlife Service.
- (4) Open space and park districts that own or operate shoreline parcels in the San Francisco Bay Area.
- (5) The San Francisco Bay Regional Water Quality Control Board.
- (6) The San Francisco Bay Conservation and Development Commission.
- (7) The San Francisco Bay Joint Venture Management Board.
- (8) The San Francisco Bay Trail Project.
- (9) The San Francisco Estuary Project.

(10) Nongovernmental organizations working to restore, protect, and enhance San Francisco Bay wetlands and wildlife habitat.

(11) Members of the public from bayside cities and counties in the San Francisco Bay Area.

66703.8. (a) The board is the legislative body of the authority and, consistent with this title, shall establish policies for the operation of the authority.

(b) The board may act either by ordinance or resolution in order to regulate the authority and to implement this title.

(c) Four voting members of the board shall constitute a quorum for the purpose of transacting any business of the board. A recorded majority vote of the total voting membership of the board is required on each action.

CHAPTER 5. POWERS AND DUTIES OF THE AUTHORITY

Article 1. General Provisions

66704. The authority has, and may exercise, all powers, expressed or implied, that are necessary to carry out the intent and purposes of this title, including, but not limited to, the power to do all of the following:

(a) (1) Levy a benefit assessment, special tax, or property-related fee consistent with the requirements of Articles XIII C and XIII D of the California Constitution, including but not limited to, a benefit assessment levied pursuant to paragraph (2), except that a benefit assessment, special tax, or property-related fee shall not be levied pursuant to this subdivision after December 31, 2028.

(2) The authority may levy a benefit assessment pursuant to any of the following:

(A) The Improvement Act of 1911, Division 7 (commencing with Section 5000) of the Streets and Highways Code.

(B) The Improvement Bond Act of 1915, Division 10 (commencing with Section 8500) of the Streets and Highways Code.

(C) The Municipal Improvement Act of 1913, Division 12 (commencing with Section 10000) of the Streets and Highways Code.

(D) The Landscaping and Lighting Assessment Act of 1972, Part 2 (commencing with Section 22500) of Division 15 of the Streets and Highways Code, notwithstanding Section 22501 of the Streets and Highways Code.

(E) Any other statutory authorization.

(b) Apply for and receive grants from federal and state agencies.

(c) Solicit and accept gifts, fees, grants, and allocations from public and private entities.

(d) Issue revenue bonds for any of the purposes authorized by this title pursuant to the Revenue Bond Law of 1941 (Chapter 6 (commencing with Section 54300) of Part 1 of Division 2 of Title 5).

(e) Incur bond indebtedness, subject to the following requirements:

(1) The principal and interest of any bond indebtedness incurred pursuant to this subdivision shall be paid and discharged prior to January 1, 2029.

(2) For purposes of incurring bond indebtedness pursuant to this subdivision, the authority shall comply with the requirements of Article 11 (commencing with Section 5790) of Chapter 4 of Division 5 of the Public Resources Code except where those requirements are in conflict with this provision. For purposes of this subdivision, all references in Article 11 (commencing with Section 5790) of Chapter 4 of Division 5 of the Public Resources Code to a board of directors shall mean the board and all references to a district shall mean the authority.

(3) The total amount of indebtedness incurred pursuant to this subdivision outstanding at any one time shall not exceed 10 percent of the authority's total revenues in the preceding fiscal year.

(f) Receive and manage a dedicated revenue source.

(g) Deposit or invest moneys of the authority in banks or financial institutions in the state in accordance with state law.

(h) Sue and be sued, except as otherwise provided by law, in all actions and proceedings, in all courts and tribunals of competent jurisdiction.

(i) Engage counsel and other professional services.

(j) Enter into and perform all necessary contracts.

(k) Enter into joint powers agreements pursuant to the Joint Exercise of Powers Act (Chapter 5 (commencing with Section 6500) of Division 7 of Title 1).

(l) Hire staff, define their qualifications and duties, and provide a schedule of compensation for the performance of their duties.

(m) Use interim or temporary staff provided by appropriate state agencies or the Association of Bay Area Governments. A person who performs duties as interim or temporary staff shall not be considered an employee of the authority.

66704.1. The authority shall not acquire or own real property.

66704.3. All records prepared, owned, used, or retained by the authority are public records for purposes of the California Public Records Act (Chapter 3.5 (commencing with Section 6250) of Division 7 of Title 1 of the Government Code).

Article 2. Grant Program

66704.5. (a) The authority may raise funds and award grants to public and private entities, including, but not limited to, owners or operators of San Francisco Bay shoreline parcels, for eligible projects in the counties within the authority's jurisdiction.

(b) An eligible project shall do at least one of the following:

(1) Restore, protect, or enhance tidal wetlands, managed ponds, or natural habitats on the San Francisco Bay shoreline.

(2) Build or enhance shoreline levees or other flood management features that are part of a project to restore, enhance, or protect tidal wetlands, managed ponds, or natural habitats identified in paragraph (1).

(3) Provide or improve public access or recreational amenities that are part of a project to restore, enhance, or protect tidal wetlands, managed ponds, or natural habitats identified in paragraph (1).

(c) In awarding grants pursuant to subdivision (a), the authority shall give priority to projects that, to the greatest extent possible, meet the selection criteria of the State Coastal Conservancy's San Francisco Bay Area Conservancy Program in accordance with subdivision (c) of Section 31163 of the Public Resources Code, and are consistent with the San Francisco Bay Conservation and Development Commission coastal management program for the San Francisco Bay segment of the California coastal zone and the San Francisco Bay Joint Venture implementation strategy updated list of Ongoing and Potential Wetland Habitat Projects.

(d) In reviewing and assessing projects, the authority shall solicit input from the advisory committee convened pursuant to Section 66703.7. The authority shall adopt a procedure for evaluating proposals in consultation with the advisory committee.

(e) Grants awarded pursuant to subdivision (a) may be used to support all phases of planning, construction, monitoring, operation, and maintenance for projects that are eligible pursuant to subdivision (b).

CHAPTER 6. FINANCIAL PROVISIONS

66705. (a) The board shall provide for regular audits of the authority's accounts and records and shall maintain accounting records and shall report accounting transactions in accordance with generally accepted accounting principles adopted by the Government Accounting Standards Board of the Financial Accounting Foundation for both public reporting purposes and for reporting of activities to the Controller.

(b) The board shall provide for annual financial reports. The board shall make copies of the annual financial reports available to the public.

66705.5. The authority shall be funded through gifts, donations, grants, state or local bonds, assessments, other appropriate funding sources, and other types of financial assistance from public and private sources.

CHAPTER 7. REPEAL

66706. This title shall remain in effect only until January 1, 2029, and as of that date is repealed, unless a later enacted statute, that is enacted before January 1, 2029, deletes or extends that date.

SEC. 2. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because a local agency or school district has the authority to levy service charges, fees, or assessments

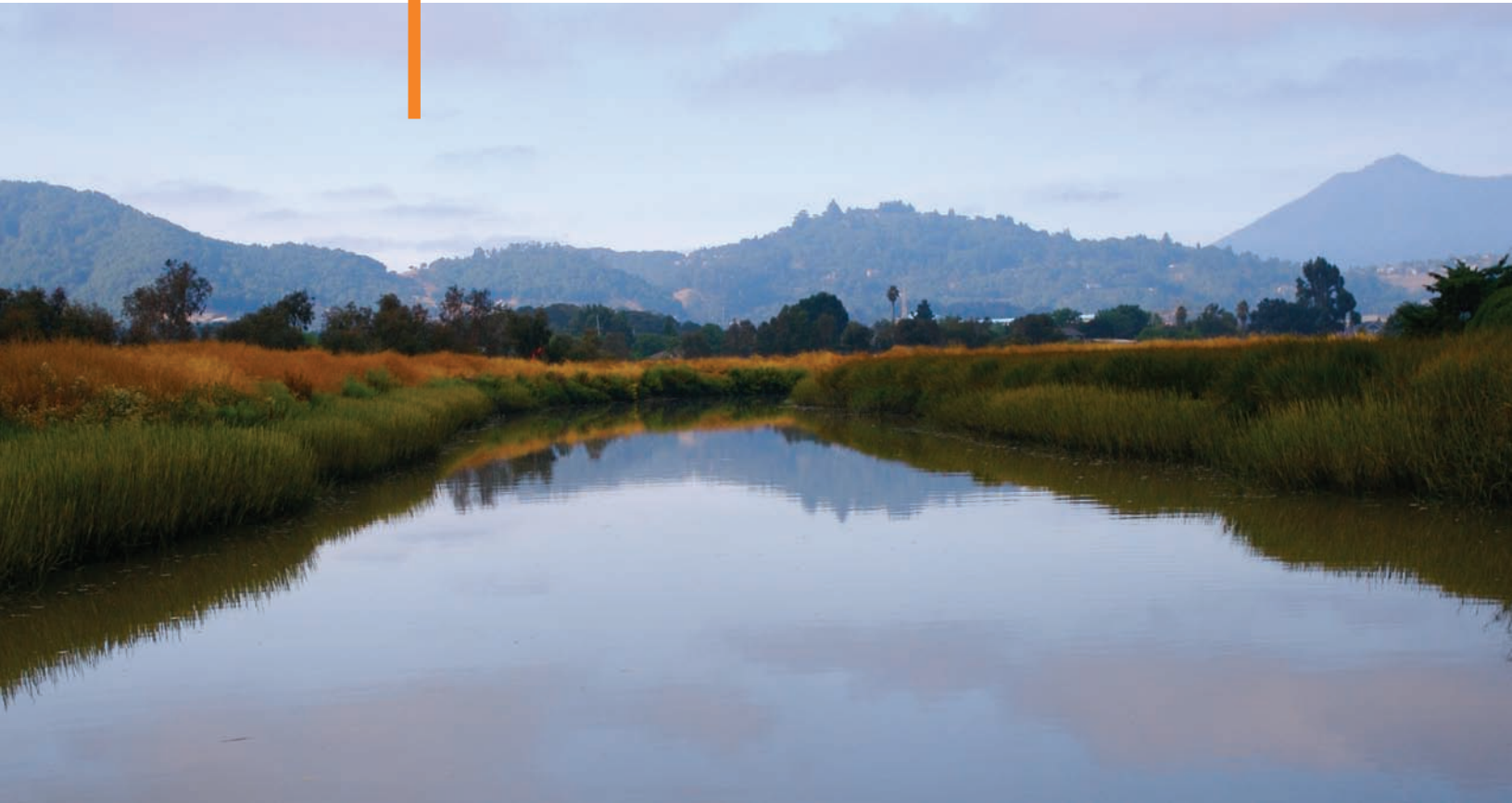
sufficient to pay for the program or level of service mandated by this act, within the meaning of Section 17556 of the Government Code.

O



GREENING THE BAY

FINANCING WETLAND RESTORATION
IN SAN FRANCISCO BAY



SAVE **THE** **BAY**

ABOUT SAVE THE BAY

Save The Bay is the oldest and largest membership organization working exclusively to protect, restore and celebrate San Francisco Bay. As its leading champion since 1961, Save The Bay is committed to making the Bay cleaner and healthier and connecting residents to it.

Save The Bay wages and wins effective advocacy campaigns to increase public access to the Bay, establish 100,000 acres of healthy wetlands around the Bay and protect the Bay from today's greatest threats: urban sprawl and pollution. This year, Save The Bay will lead thousands of volunteers in restoring 100 acres of Bay wetlands and subtidal habitats by hand and will engage and educate more than 10,000 students and adults about the Bay.

To find this report online, please visit:
www.saveSFbay.org/greeningthebay





GREENING THE BAY

Financing Wetland Restoration in San Francisco Bay

TABLE OF CONTENTS

EXECUTIVE SUMMARY/OVERVIEW.....	4
SAN FRANCISCO BAY – THE REGION’S MOST PRECIOUS ASSET.....	5
WETLANDS ARE VITAL TO FISH, WILDLIFE AND PEOPLE.....	7
HOW CLOSE ARE WE TO THE 100,000 ACRE TIDAL WETLAND GOAL?.....	9
LONG-TERM INVESTMENT NEEDED TO ACHIEVE GOAL	10
CHALLENGES TO SECURING FUNDS.....	11
POLICY RECOMMENDATIONS	14
NOTES AND SOURCES	17
CREDITS.....	17
APPENDIX A	18
MAP	19

EXECUTIVE SUMMARY/OVERVIEW

Today we have the most significant opportunity to make San Francisco Bay healthier for wildlife and people since 1961, when Save The Bay was founded to stop the Bay from being filled in. Over the next several decades, we can secure a healthy future for the Bay by restoring thousands of acres of thriving wetlands on the shoreline, reversing more than a century of degradation that reduced the size of our Bay by one-third. In 1999, the *Baylands Ecosystem Habitat Goals* report detailed where and how much Bay

acres of shoreline property already acquired and awaiting restoration to tidal wetlands. For the first time, this report assembles the projected costs of restoration projects being pursued all around the Bay, from Vallejo to San Jose. We highlight the political and institutional challenges facing government agencies and Bay advocacy organizations that need significant funds to restore our region's most precious natural resource. We reveal the overwhelming public support for Bay restoration and public willingness to bear the cost. We recommend specific policy initiatives

Save The Bay and many other partners are working hard to achieve this vision of 100,000 acres of healthy, thriving wetlands around the Bay – but the lack of steady, reliable funding to implement wetland restoration opportunities already in hand is the greatest obstacle to success.

to adequately fund the restoration of San Francisco Bay, which we will pursue.

For this opportunity to save the Bay again, we are all indebted to many people, including those who have made great advances in restoration science and

shoreline habitat should be reestablished to make the Bay ecosystem healthier. That report recommended restoring shoreline sites to increase tidal wetlands acreage to a total of 100,000 acres around the Bay, recreating vital, productive habitat that was nearly lost.

Save The Bay and many other partners are working hard to achieve this vision of 100,000 acres of healthy, thriving wetlands around the Bay – but the lack of steady, reliable funding to implement wetland restoration opportunities already in hand is the greatest obstacle to success.

Save The Bay's report, "Greening the Bay," presents our vision for a vibrant, healthy Bay ecosystem and outlines necessary steps to achieve it. This report documents the total estimated cost to restore an additional 36,176

practice, government agencies, conservancies and park districts who have purchased land and maintain it on shoestring budgets, and environmental organizations and individuals who have worked tirelessly over the years to ensure that the Bay's wetlands are restored and protected.

Over the last four decades, dedicated Bay Area residents have overcome overwhelming odds to prevent San Francisco Bay from being destroyed. By securing the funds necessary to fully restore Bay wetlands now, we can make the Bay healthier for people and wildlife long into the future.

SAN FRANCISCO BAY

The Region's Most Precious Asset

The Bay Area's quality of life and economy depend on a healthy and vibrant San Francisco Bay. This natural treasure defines our region, provides recreation and beauty, moderates our climate and generates many millions of dollars in economic benefits.

The Bay Area's quality of life and economy depend on a healthy and vibrant San Francisco Bay.

The largest estuary on the West Coast, the Bay is home to 500 species of wildlife, 128 of them

threatened or endangered, like the California clapper rail and salt marsh harvest mouse. The Bay is a crucial resting spot for millions

of migrating birds, and its sheltered waters provide critical nurseries for fish.

After the Gold Rush, the Bay was drastically altered by mass urbanization. People destroyed Bay wetlands to create more land, diked and drained marshes to create agricultural fields and salt ponds, and dammed many of the rivers that provided fresh water to the Bay and spawning habitat for salmon. Today it is one-third smaller than its original size and only five percent of the Bay's original wetlands remain.

By the 1960s, San Francisco Bay was being filled in at a rate of two square miles per year,

and raw sewage and chemicals flowed into it unchecked. Today the Bay is cleaner, but polluted runoff from our roads, cars and homes still carries motor oil, pesticides, trash and toxic chemicals into the Bay, impairing water quality and threatening

The Bay is home to 500 species of wildlife, 128 of them threatened or endangered.

fish, wildlife and people. Many other threats remain unresolved.

In the last 45 years, the Bay was saved from irreversible destruction only because



► In the last 45 years, the Bay was saved from irreversible destruction only because residents came together to stop massive Bay fill, regulate pollution and protect threatened shoreline sites where habitat can be restored.

By the 1960s, San Francisco Bay was being filled in at a rate of two square miles per year, and raw sewage and chemicals flowed into it unchecked.

residents came together to stop massive Bay fill, regulate pollution and protect threatened shoreline sites where habitat can be restored.

In 1999, the San Francisco Bay Area scientific community published the *Baylands Ecosystem Habitat*

Goals, a consensus, scientific blueprint detailing the amount of restored habitat around the region needed to make the Bay healthy and sustainable.

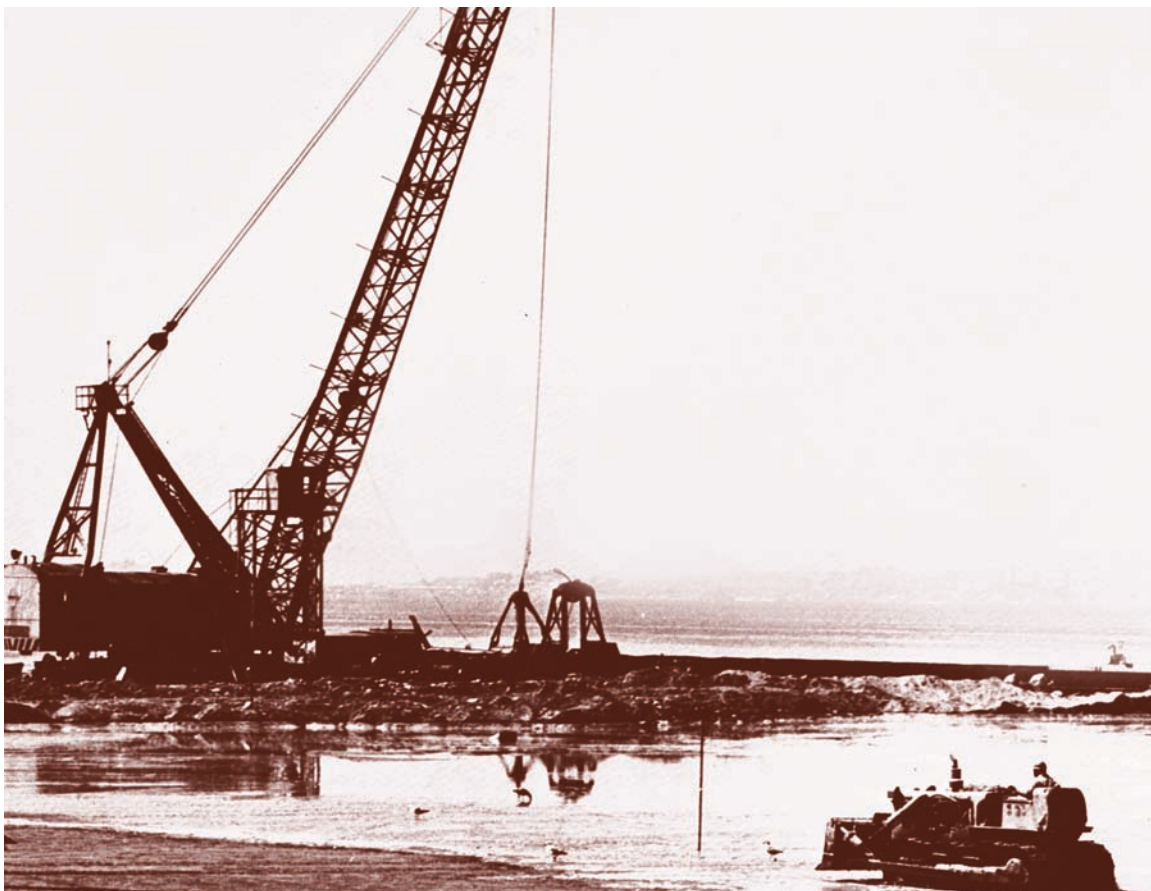
A central recommendation of this report is to attain at least 100,000 acres of tidal wetlands

around the Bay, which would provide a wide range of benefits to make the Bay ecosystem healthier and its water cleaner.

Using the *Habitat Goals*, scientists, government agencies, environmental organizations and residents have worked to restore San Francisco Bay. Together we have made significant progress toward protecting this vital natural and economic asset, and the ambitious 100,000 acre goal is actually in sight.

Although only five percent of the Bay's original wetlands remain, they account for 90 percent of California's total remaining tidal wetlands.

Reaching that goal within the next several decades requires decisive action now.



► **Dredging the old Third Street Terminal, Oakland.** By the 1960s, San Francisco Bay was being filled in at a rate of two square miles per year, and raw sewage and chemicals flowed into it unchecked.

WETLANDS ARE VITAL TO FISH, WILDLIFE AND PEOPLE

Wetlands are the lungs of the Bay, giving life to hundreds of fish and wildlife species that depend on them for survival and billions of small organisms that thrive in Bay mud to form the base of the food chain. In addition to providing vital habitat for fish and wildlife, wetlands provide major benefits to the community:

Clean Water

Healthy Bay wetlands trap polluted runoff before toxics can reach open Bay water.

Estimates are that up to 70 percent of the toxics in the San Francisco Bay come from

Wetlands produce \$4,650 per acre in flood control and dredging cost savings compared to engineered dams, reservoirs and channels.

polluted runoff.¹ Wetlands absorb and filter out many pollutants found in runoff, such as pesticides and fertilizers from farms and gardens or motor oil from cars. This filtering keeps the Bay water cleaner, and clean water is a key ingredient for a healthy Bay ecosystem.

Economic Benefits

Bay wetlands provide measurable economic benefits to the region. Wetlands produce \$4,650 per acre in flood control and dredging cost savings compared to engineered dams, reservoirs and channels. Because wetlands purify water so well, they are often used for tertiary treatment by municipal sewage plants.

Although only five percent of the Bay's original wetlands remain, they account for 90 percent of California's total remaining tidal wetlands. A 1992 case study estimated that California's wetlands provided as much as \$22.9 billion in value to the state annually, not including the incalculable value to wildlife.

Wetlands-based recreation and tourism in California generates \$200 million annually. Seventy-one percent of fish caught in California waters depend on wetland habitat, making San Francisco Bay a major contributor to the estimated \$890 million in retail value of fish sold each year across the state.²

Helps Curb Global Warming

Scientists have found that tidal salt marshes capture carbon from greenhouse gases in the air efficiently and effectively, helping to counter global warming. Every acre of restored, healthy salt marsh captures and converts at least 870 kilograms of carbon dioxide into plant material annually – equivalent to global warming emissions from driving 2,280 miles. Unlike some other plants, tidal salt marsh plants release only negligible amounts of methane (a powerful greenhouse gas) when they decay. These findings have led scientists from the United Nations and the White House to recommend wetland restoration as a strategy to fight global warming.³

Flood and Erosion Control

Wetlands act as sponges, slowing down and soaking up large quantities of water runoff during rainstorms and tidal inflow. Wetlands slowly release the water over a few weeks, which can help prevent massive flooding.

Wetlands prevent erosion by slowing down runoff, causing sediment in the water to settle on the bottom. The roots of wetland plants also hold sediment in place. Because tidal salt marshes provide natural flood control, significant wetland restoration may be a cost-effective way to help reduce the impact on developed shoreline areas of future sea level rise due to global warming.

Nurseries for Wildlife

Most Bay wetlands are in protected areas that are sheltered from big waves and fast-moving water and are ideal nurseries for young wildlife. Healthy wetlands provide food resources and protection from predators for fish, birds and mammals that use them to nurse and raise their young. Without these sheltered habitats, young salmon, water birds, seals and raptors might not survive.



- ▶ Healthy wetlands provide food resources and protection from predators for fish, birds and mammals that use them to nurse and raise their young.

HOW CLOSE ARE WE TO THE 100,000 ACRE TIDAL WETLAND GOAL?

In 1999, when the *Baylands Ecosystem Habitat Goals* was published, about 40,000 acres of tidal wetlands existed in the Bay – 60,000 acres short of the 100,000 acre goal.

Over the last seven years, full tidal action has been restored to additional shoreline areas to create 4,238 acres of wetlands in Napa, Hayward, Oakland and other sites.

An additional 32,850 acres of restorable Bay shoreline has been purchased by government agencies such as the U.S. Fish and Wildlife Service, the California Department of Fish and Game and the California Coastal Conservancy, and by private organizations and land trusts. These wetland restoration projects are each in different stages of restoration planning and construction. State and federal resource agencies have identified another 4,660 acres as priority parcels for acquisition.



► Thousands of acres of former salt ponds are now designated as ecological reserves and are being restored to tidal wetlands.

South Bay

The largest and highest-profile opportunity is the South Bay Salt Ponds (13,000 acres), which the U.S. Fish and Wildlife Service and the California Department of

Fish and Game purchased from Cargill Salt in 2003. The restoration of these former salt ponds will completely change the face of the South Bay, connecting residents to a shoreline from which they were walled off for over a century. Also in the South Bay are Pond A4 (310 acres) and Pond A18 (856 acres). Bair Island (1,400 acres) in Redwood City is being restored after decades of citizen action prevented it from being developed into another Foster City.

North Bay

Significant restoration projects in process include Napa-Sonoma Marsh (10,000 acres), Hamilton Field/Bel Marin Keys (2,434 acres), Montezuma Wetlands (1,876 acres), Sears Point (970 acres), Cullinan Ranch (1,564 acres), Napa Plant Site (1,460 acres), Dutch Slough (1,166 acres) and Bahia (418 acres).

East Bay

Additional ponds at the Eden Landing Ecological Reserve in Hayward (722 acres) are being planned for restoration.



► In October 2006, a levee breach at the Eden Landing Ecological Reserve in Hayward connected a dry 300-acre former salt pond to Bay tidal action for the first time in a century.

To reach the 100,000 acre goal scientists have set, approximately 22,912 additional acres will need to be purchased and restored from remaining diked historic baylands and salt ponds. Specific project sites have not yet been determined.

LONG-TERM INVESTMENT NEEDED TO ACHIEVE GOAL

Since the 1960s, when the destruction of Bay wetlands was accelerating, we have made significant progress to restore the Bay, creating regulations that protect wetlands and building public understanding about their importance.

The major challenge to achieving 100,000 acres of tidal wetlands is adequate funding.

The major challenge to achieving 100,000 acres of tidal wetlands is adequate funding. Wetland restoration

requires long-term, consistent funding for future acquisition, planning, on-the-ground construction, and operations and maintenance, including modifying levees and protecting electric transmission lines and other existing infrastructure to allow for restoration.

Save The Bay estimates it will cost about \$1.43 billion over 50 years (see Appendix A) to fully restore the 36,176 acres that are in

hand. Some \$370 million has already been devoted to these restoration efforts: \$254 million to purchase the land and \$116 million for planning, initial construction, scientific studies and monitoring, and operations and maintenance.

To date, most of the restoration funds have come from statewide resources bonds – sources that have met only a portion of the need and have not been consistently available. Other funds have come from federal and private regional sources. To leverage the \$370 million already invested into full restoration requires a reliable and coordinated funding approach and the will of Bay Area residents and civic leaders.

This \$1.43 billion estimate does not include the future cost of purchasing and restoring an additional 22,912 acres to reach the 100,000 acre goal.

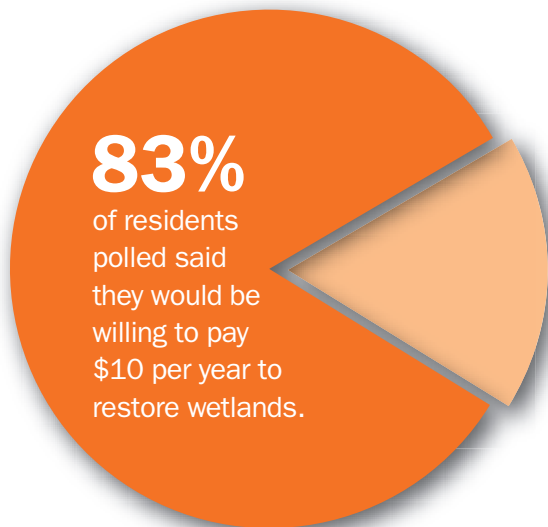


CHALLENGES TO SECURING FUNDS

CHALLENGE #1: \$1.43 billion is a significant yet achievable expense.

The estimated cost of restoring San Francisco Bay wetlands is significant yet achievable over the 50 year time-frame envisioned. **A modest annual average investment over 50 years will produce significant benefits for the Bay's health and the region's economy for present and future generations.** This investment is equivalent to \$4 annually for each Bay Area resident, which is not even half the cost of one movie ticket.

A strong majority of Bay Area residents say they would make this kind of investment. In 2006, 83 percent of residents polled by EMC Research said they would be willing to pay \$10 per year in taxes or fees to restore wetlands that would result in cleaner Bay water, provide flood control benefits, enlarge the San Francisco Bay National Wildlife Refuge and increase shoreline access for the public (see www.saveSFbay.org/greeningthebay for full poll results).



Most of the estimated expense is a one-time investment, with more than 80 percent needed for planning, construction and monitoring of the restoration projects.

Once restored, tidal marshes function naturally with low maintenance. The remaining expense is for ongoing operations and maintenance, security, public access facilities and protecting other infrastructure at restored marshes.



CHALLENGE #2: State and federal government agencies own most of the restorable land, but are not providing adequate funding to implement restoration.

Most of the \$370 million already invested in San Francisco Bay wetland restoration has come from state and federal funds, but no complete system exists to track all sources that have funded Bay restoration. Save The Bay's research indicates that state resource bonds have contributed at least \$167 million to Bay restoration, but it is unclear how much of the remainder has come from federal and local sources.

Six of the major restoration projects underway, totaling 31,746 acres, are on state or federal property. Unfortunately, state and federal agency budgets to manage these large areas have remained static even after the California Department of Fish and Game acquired 6,900 acres and the U.S. Fish and

Wildlife Service acquired 9,600 acres of South Bay Salt Ponds in 2003. The agencies now shoulder significant new responsibilities to manage land and water with complex infrastructure and the West Coast's largest wetland restoration project. For example, a single Bay Area Fish and Game staff person is responsible for all wildlife issues in three counties as well as managing over 6,400 acres of Fish and Game property. The lesson learned a decade after state resource agencies acquired North Bay salt ponds for restoration is that inadequate funding for operation and maintenance of the ponds can lead to



► Save The Bay relies on 5,000 volunteers each year to restore vital habitat by removing invasive weeds, planting native seedlings and cleaning up trash from the Bay shoreline.

significant problems and even higher restoration costs. Underfunding resource agencies managing Bay projects also increases the risk of flooding from levee failures and other threats to public safety.

Competition for state and federal funds to acquire and restore land is intense, but it is vital that state and federal agencies adequately

fund the San Francisco Bay shoreline land they own, and invest in its complete restoration.

CHALLENGE #3: There are few steady local or regional funding mechanisms supporting Bay wetland restoration.

To date, local public funding has only provided support for modest shoreline acquisition and restoration projects by open space districts or cities. Because there is strong public support throughout the Bay Area for funding Bay restoration, regional mechanisms should be established to channel

locally-generated funds toward this work.

Federal funding has leveraged private funding, as demonstrated by the generous support provided for the acquisition and initial planning of the South Bay Salt Ponds project by the William and Flora Hewlett Foundation, the Gordon and Betty Moore Foundation, the David and Lucile Packard Foundation and the Richard and Rhoda Goldman Fund. Individual and institutional philanthropic sources from the Bay Area could be tapped

to close the funding gap for Bay restoration. Business and corporate support may also be helpful in spurring matching contributions.

There are many ways to raise funds from a mix of federal, state and local sources and coordinate their disbursement and oversight. Greater contributions from all levels will be needed to meet overall Bay restoration goals.

CHALLENGE #4: Region-wide coordination of projects and funding is inadequate.

Many agencies and stakeholders are actively involved in restoring San Francisco Bay, and every agency crafts budgets differently. Some agencies and projects lack complete budgets and timelines, making it difficult to establish a comprehensive regional funding strategy that coordinates and sequences implementation. To secure the increased funding necessary to restore Bay wetlands, the region needs a formal, coordinated set of project priorities based on consistent budgeting and project readiness. That approach will help agencies and stakeholders advocate effectively for increased restoration dollars.

Currently there is no comprehensive accounting of Bay restoration funds from federal, state and other sources collected in one place. State bond allocations to San Francisco Bay from different agencies are not collected in one database. Without a complete compilation of funding already invested in the Bay, it will be difficult to leverage those funds strategically for additional support.



CHALLENGE #5: Government agencies, environmental organizations, cities and counties, and other stakeholders do not advocate with one voice.

The region is fortunate to have dozens of organizations, agencies and communities supporting Bay restoration, especially because there is so much work to do. While each entity has its own interests driven by organization mission, mandates, jurisdictional boundaries and other factors, the Bay Area public takes a broader view. The Bay is an ecosystem that touches nine counties and millions of people and ignores municipal borders. The EMC Research poll shows that Bay Area voters want to protect and restore the Bay as a whole – their support is not limited to individual projects or local priorities. There is high willingness in all nine Bay Area counties to pay modest taxes for Bay wetland restoration.

Establishing shared regional priorities for project funding and sequencing, and advocating for those shared priorities with one region-wide voice, is essential to success in securing needed state and federal funds.

There are practical benefits to advocating with one voice. Government agencies and elected officials hearing a consistent message will develop a clear understanding of Bay funding needs. Residents being asked for funding support will have high confidence that their dollars will be used wisely. Project funding decisions will less often be left to chance or the influence of the most seasoned lobbyists. Instead, project need, readiness and benefit to the Bay and community can determine the sequencing of implementation and funding.

POLICY RECOMMENDATIONS

Save The Bay proposes the following policy recommendations that address the challenges to raising the \$1.43 billion needed for a healthy, restored San Francisco Bay.

RECOMMENDATION #1: Establish a regional special district to oversee Bay wetland restoration funding.

San Francisco Bay is the heart of the Bay Area, transcending county and city borders. The Bay needs to be protected and restored as one entity, by and for the whole region.

The Bay needs to be protected and restored as one entity, by and for the whole region.

The San Francisco Bay Conservation and Development Commission (BCDC) demonstrates the success

of a regional approach to regulating shoreline development and public access. That agency's regional jurisdiction allowed it to introduce comprehensive regional planning of shoreline development and to block cities' individual plans to pave over the Bay.

Open space districts, park districts and other local special districts each have the authority to raise significant regional funds to acquire land, create greenbelts and protect upland open space. Some of these districts support small shoreline restoration projects within their own boundaries.

The Bay, however, lacks a single, regional body that can raise funds for land-owning agencies to maintain and enhance Bay shoreline sites and restore wetlands. **Because the Bay is one entity, we recommend that a regional Bay special district be established immediately to explore, promote and coordinate local and regional public fundraising mechanisms, and to**

develop priorities and sequencing for allocating funds. The special district should have a governance structure that ensures efficient and successful operations – this may include representatives from key state, regional or local agencies, elected officials, and other appropriate stakeholders.

There are several ways a special district could help secure regional funding. A promising option would be for the district to establish benefit assessments in communities adjacent to all or parts of the Bay, as used successfully by open space districts throughout the state.

It would be efficient and appropriate to establish this special district with the California Coastal Conservancy's San Francisco Bay Area Conservancy Program serving as the foundation. That program already has defined boundaries that encircle the Bay to include all nine Bay Area counties, its mission and priorities emphasize restoring San Francisco Bay wetlands, it makes grants for those purposes from state bond funds and it already manages several large Bay restoration projects. The Conservancy, however, lacks the additional authority to raise and collect funds as a special district. The Conservancy could gain that authority through entering into a joint powers authority with other jurisdictions, through state legislation or through a public vote.

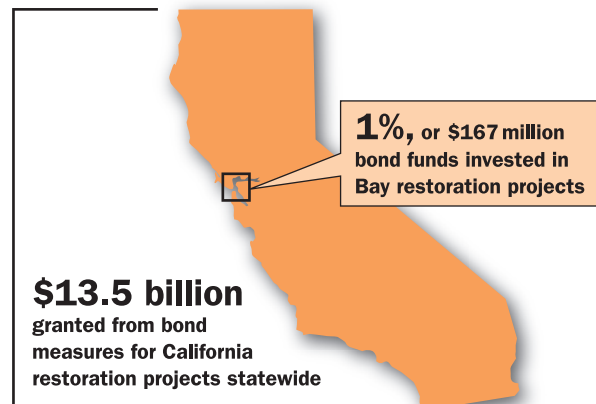
RECOMMENDATION #2: Target state and local resource bonds and other public sources to provide significant funds for Bay restoration.

California voters are supportive of statewide measures that fund open space and environmental protections – since 2000, voters have passed Propositions 12, 40, 50 and most recently 84. Although support for all four natural resource bonds was higher among Bay Area voters than statewide, Bay projects have received a disproportionately small fraction of the \$13.5 billion those measures contained for open space and park protection, water quality improvements, acquisition of public lands and wetland restoration. Despite San Francisco Bay’s importance to California, only about 1% of the total bonds to date (approximately \$167 million) have been invested in Bay restoration projects, with \$108 million from Proposition 84 still available for allocation to Bay projects.

Important examples of bond support for Bay projects include:

- \$1 million from Proposition 12 for Hamilton Field restoration planning
- \$1.2 million from Proposition 12 and \$1.05 million from Proposition 40 for Napa-Sonoma Marsh restoration planning, design and monitoring
- \$1 million from Proposition 50 for Sears Point restoration planning
- \$12.9 million from Propositions 40 and 50 for restoration planning and management for the South Bay Salt Ponds.

Local funding measures can also have a significant impact on the Bay shoreline, although they have not been pursued frequently enough. Oakland voters overwhelmingly supported Measure DD in 2002, which provided \$198 million to improve water quality, restore creeks and the waterfront, renovate parks and enhance recreational facilities. In 2004, the East Bay



Regional Park District sponsored Measure CC, a modest parcel tax to fund habitat restoration and public access infrastructure, which passed with more than the two-thirds vote necessary.

Save The Bay recommends that future statewide natural resource bonds provide significantly more funding for San Francisco Bay restoration. We also recommend that local and regional entities consider raising funds to enhance their Bay shoreline, provide public access for their residents and create vital habitat.

RECOMMENDATION #3: The San Francisco Bay Area congressional delegation should make full funding of the San Francisco Bay National Wildlife Refuge Complex a high priority, so the nation's largest urban wildlife refuge can meet its increasing land management and restoration responsibilities.

Of the major Bay wetland restoration projects in progress, 13,286 acres are located on refuge land. Federal funding for the San Francisco Bay National Wildlife Refuge Complex, which includes the Don Edwards San Francisco Bay National Wildlife Refuge and six other area refuge units, has not kept pace with the massive increase in its size and land management needs. This funding shortfall threatens the Refuge Complex's ability to manage large, priority restoration projects within its boundaries, including the South Bay Salt Ponds and Bair Island. Because total funding for national wildlife refuges has remained flat or decreased, it is vital that Congress increase the baseline budget for operations and maintenance of Bay refuges.

Over the next five years, the Refuge Complex requires \$2.4 million as a permanent addition to its base budget to support increased staffing, operations and maintenance and restoration monitoring. An additional \$28 million in one-time expenditures is needed to implement restoration to benefit threatened and endangered species and other public access facilities.



The Don Edwards San Francisco Bay National Wildlife Refuge, which is located in the South Bay, faces unique challenges as a wildlife oasis in the middle of an urban setting.⁴ More than two million people live within a ten-mile radius of the Refuge, and over 700,000 visitors explore the refuge every year. Virtually overnight, with the purchase of the South Bay Salt Ponds, the refuge grew in size by one-third without a

comparable increase in budget. Staff is now responsible for the operations and maintenance of 70 miles of levees, water control management structures, evaluation and monitoring required by regulatory agencies, and additional outreach, security and environmental education responsibilities. The Defenders of Wildlife 2004 report, *Refuges at Risk*, lists the Don Edwards National Wildlife Refuge as one of the nation's ten most threatened national wildlife refuges. Without significant funding to protect and restore the refuge and surrounding lands, the report warns that the restoration process will languish and increased urbanization and growth will threaten the Refuge and the endangered wildlife it protects.

NOTES AND SOURCES

- ¹ *Changing the Course of California's Water: The Impact of Polluted Runoff on our Aquatic Resources and Responsible Actions We Can Take.* By Jim Mayer, through the Lindsay Museum, 1995.
- ² Allen, J., Cunningham, M., Greenwood, A., and Rosenthal, L., 1992. *The Value of California Wetlands: An Analysis of Their Economic Benefits.* Campaign to Save California Wetlands.
- ³ U.S. Climate Change Technology Program: Technology Options for the Near and Long Term (2005), para 3.2.1.6, available at www.climatechange.gov/library/2005/tech-options/tor2005-3216.pdf (“Because they are inherently highly productive and accumulate large below-ground stocks of organic carbon, restoring lost wetlands and protecting those that remain clearly represents an immediate and large opportunity for enhancing terrestrial carbon sequestration”); Intergovernmental Panel on Climate Change, Special Report on the Regional Impacts of Climate Change: An Assessment of Vulnerability, para 5.3.1.6, available at www.grida.no/climate/ipcc/regional/104.htm#adapt.
- ⁴ In response to local citizens’ concerns that the Bay and its wildlife were being threatened by the urbanization of the South Bay, U.S. Congressman Don Edwards established the nation’s first congressionally-mandated national wildlife refuge in 1974. Named the Don Edwards San Francisco Bay National Wildlife Refuge in 1995, the Refuge is the nation’s first “urban refuge” and remains the largest national wildlife refuge in a metropolitan area. The San Francisco Bay National Wildlife Refuge Complex also includes the Antioch Dunes, Ellicott Slough, Farallon, Marin Islands, Salinas River and San Pablo Bay National Wildlife Refuges.

CREDITS

Research and Writing: Felicia Madsen, Athena Honore and Stephen Knight

Layout and Design: Fiona Burgess, FiBu Design and Jessica Castelli

Photos: Russ Juskalian, Brandon Andre and Save The Bay Archives

Copyright: 2007, Save The Bay

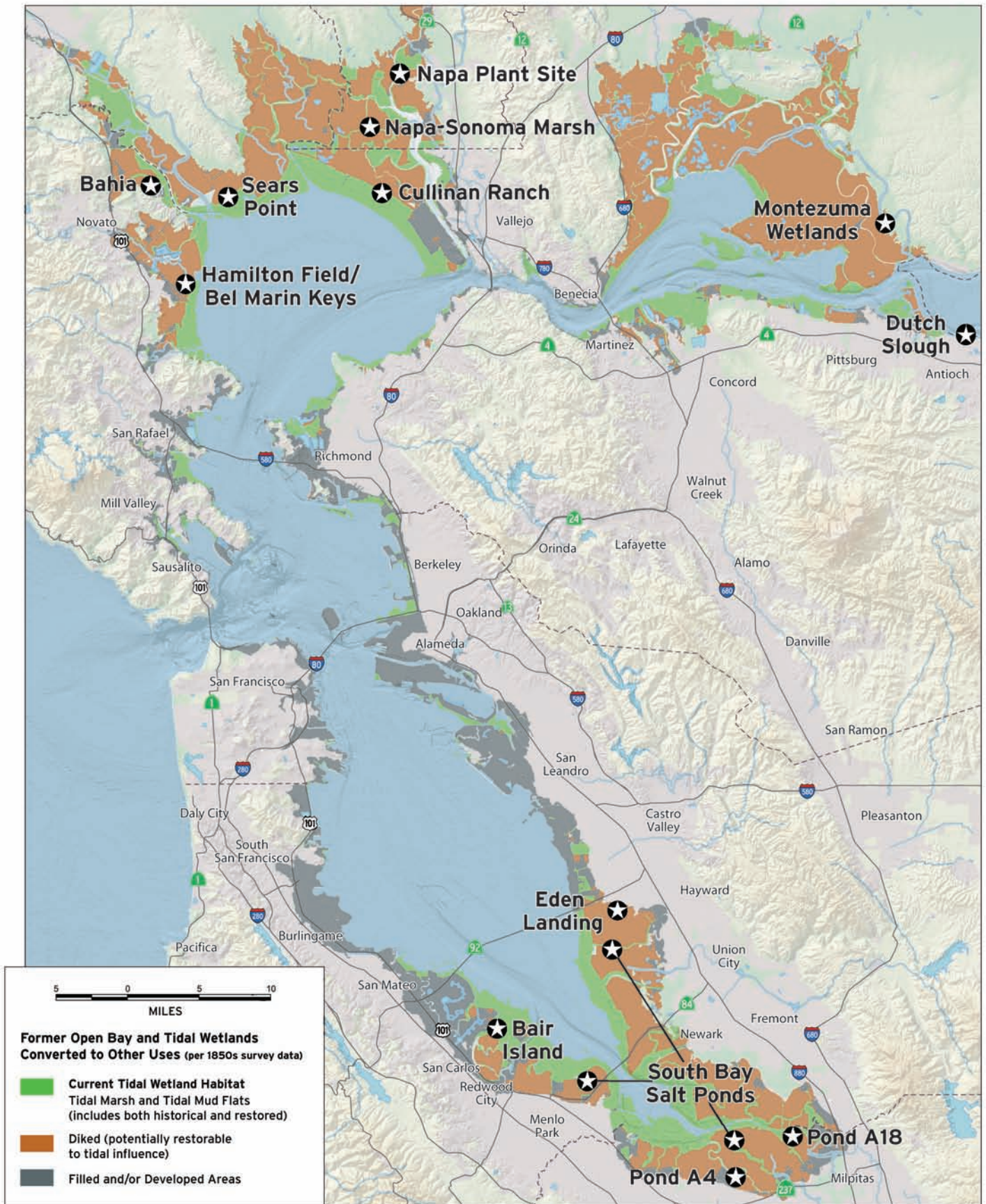
APPENDIX A

Completing these planned restoration projects will nearly double the Bay's tidal marsh

Tidal Wetland Restoration Project	Investment to Date: \$370 Million					Funds Needed to Complete: \$1.43 Billion				
	Tidal Acres	Landowning Agency (Year Acquired)	Acquisition	Planning & Implementation	Planning	Implementation	Monitoring (10 years)	Operations & Maintenance (50 years)	Total Needed:	
Montezuma Wetlands	1,876	Montezuma Wetlands, LLC (late 1980s)	\$4,450,000	\$44,500,000	\$0	\$100,000,000	\$5,000,000	\$5,000,000	\$110,000,000	
Napa-Sonoma Marsh	10,000	CA Dept of Fish & Game (1994)	\$10,000,000	\$6,000,000	\$0	\$40,000,000	\$3,140,000	\$3,000,000	\$46,140,000	
Cullinan Ranch	1,564	US Fish & Wildlife Service (1996)	\$6,000,000	\$500,000	\$0	\$12,000,000	\$500,000	\$9,500,000	\$22,000,000	
Eden Landing	722	CA Dept of Fish & Game (1996)	\$12,500,000	\$1,600,000	\$0	\$3,300,000	\$625,000	\$1,500,000	\$5,425,000	
Bair Island	1,400	US Fish & Wildlife Service (1999)	\$15,000,000	\$1,824,000	\$0	\$8,175,942	\$720,000	\$1,710,000	\$10,605,942	
Pond A4	310	Santa Clara Valley Water District (2000)	\$5,890,000	n/a	n/a	\$1,550,000	\$465,000	n/a	\$2,015,000	
Napa Plant Site	1,460	CA Dept of Fish & Game (2003)	part of SBSP	\$850,000	\$0	\$4,500,000	\$625,000	\$2,250,000	\$7,375,000	
Hamilton Field/ Bel Marin Keys	2,434	CA Coastal Conservancy (2003)	\$16,000,000	\$25,500,000	\$0	\$165,800,000	\$6,500,000	\$4,430,000	\$176,730,000	
Bahia	418	Marin Audubon Society (2003)	\$15,800,000	\$350,000	\$0	\$2,200,000	\$1,000,000	\$1,000,000	\$4,200,000	
South Bay Salt Ponds	13,000	US Fish & Wildlife Service /CA Dept of Fish & Game (2003)	\$100,000,000	\$33,000,000	\$0	\$750,000,000	\$30,000,000	\$200,000,000	\$980,000,000	
Dutch Slough	1,166	CA Dept of Water Resources (2003)	\$38,000,000	n/a	\$4,000,000	\$30,000,000	\$750,000	n/a	\$34,750,000	
Sears Point	970	Sonoma Land Trust (2005)	\$17,000,000	\$2,200,000	\$2,380,000	\$15,700,000	\$1,200,000	\$1,500,000	\$20,780,000	
Pond A18	856	City of San Jose (2005)	\$13,500,000	n/a	n/a	\$4,280,000	\$1,284,000	n/a	\$5,564,000	
TOTALS:	36,176	--	\$254,140,000	\$116,324,000	\$6,380,000	\$1,137,505,942	\$51,809,000	\$229,890,000	\$1,425,584,942	

SAN FRANCISCO BAY ESTUARY – TIDAL WETLANDS, THEN AND NOW

★ *Wetland restoration at these sites will nearly double the Bay's tidal marsh.*





SAVE THE BAY

350 Frank H. Ogawa Plaza
Suite 900
Oakland, CA 94612

(510) 452-9261

www.saveSFbay.org

SAN FRANCISCO ESTUARY PROJECT

San Francisco Bay-Delta Estuary

San Francisco Bay and the Delta encompass one of the nation's most biologically productive estuaries. Development, farming, commerce and recreation on its shores and waters, however, stress the Estuary's wildlife and ecosystem. To maintain and restore these natural resources, the San Francisco Estuary Project is charged with promoting environmentally sound management of the Bay and Delta.

Management Concerns — page 2

Glossary — page 2

Wildlife at Risk — page 3

Current Issues — page 4

The Estuary

The San Francisco Bay-Delta Estuary conveys the waters of two great California Rivers—the Sacramento and San Joaquin—into the Pacific Ocean. The Estuary sustains rich communities of crabs, clams, fish, birds and other aquatic life, serving as both an important wintering site for migrating waterfowl and as a spawning area for anadromous fish. Its waterways, wetlands and bays also form the centerpiece of America's fourth largest metropolitan region, enabling residents to pursue fishing, sailing, shipping, farming, oil refining and a host of other important economic and recreational activities.

History & Development

About 20,000 years ago, when the Pacific shore lay out beyond the Farallon Islands, the Bay consisted of a dry landscape traversed by gentle rivers. About 10,000 years later, melting glaciers raised the sea level—sending ocean waters inland through the Golden Gate, drowning the river valleys and creating the West Coast's largest estuary.

Indians thrived on the Estuary's shores for thousands of years until the Spanish discovered the Bay in 1769. Since then, a variety of human activities have changed the Estuary's size and ecology. First, upstream gold mining between 1849 and 1914 sent about 1 billion cubic yards of sediment downstream

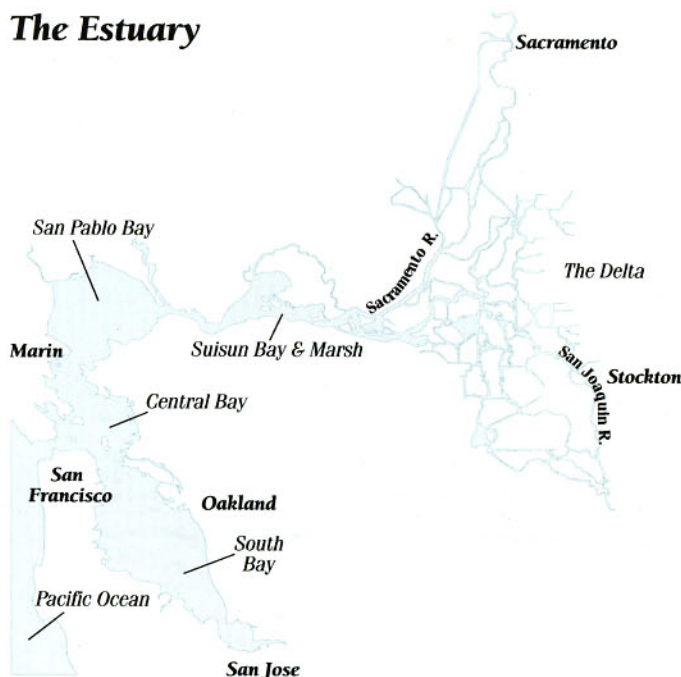
into the Estuary. Second, reclamation of land at the edge of the Bay and Delta filled in or altered 85–95% of the Estuary's wetlands. Third, 20th century water projects diverted millions of acre feet of fresh water away from the Estuary to farms, towns and industry.

Other activities which have modified the Estuary's ecology include: the overharvesting of fish in the early 1900s, the introduction of many non-native species, the discharge of sewage and agricultural drainage into the water, and a century of ongoing dredging and levee construction to control flooding and maintain waterway navigability and Delta agriculture. Today, about 8.4 million people live and work in the 12-county Bay-Delta region—placing ever increasing pressures on the Estuary's natural resources.

Vital Statistics

- The Estuary encompasses an area of roughly 1,600 square miles, including 700 miles of rivers and sloughs and 1,100 miles of levees. At mean sea level the Bayshore extends for 275 miles.
- Central Bay depths average 43 feet, southern and northern areas 15–17 feet. The Estuary's deepest point—360 feet below sea level—lies under the Golden Gate Bridge.
- The Estuary receives 90% of its freshwater from the Sacramento and San Joaquin Rivers and 10% from local drainage basins. Of the river flow, 80% comes from the Sacramento.
- The Estuary drains about 40% of California's landscape (over 60,000 square miles) and 47% of the state's total runoff.
- The Bay's total water volume at mean tide is over 5 million acre feet (see glossary). Each tidal cycle brings an enormous quantity of salt water in and out of the Estuary—about 1 1/4 million acre feet per cycle (the tidal prism). Daily freshwater inflows average 50 thousand acre feet.
- The salinity of freshwater flowing into the Delta ranges from 0.1–0.8 parts per thousand of salt to water; at the Golden Gate, the salinity can be up to 30 times greater.

The Estuary



Management Concerns

Glossary

acre foot: An acre of water 1 foot deep (approximately 326,000 gallons). The typical California family of five uses an acre-foot of water in and around the home each year.

anadromous fish: Fish that live some or all of their adult lives in saltwater but migrate to freshwater to spawn.

brackish: Somewhat salty water that is less salty than seawater.

dredging: The removal of sediments from the Estuary floor.

estuary: A body of water at the lower end of a river which is connected to the ocean and semi-enclosed by land. In an estuary, seawater is measurably diluted by freshwater from the land.

invertebrates: Small animals such as clams and worms that lack a spinal column.

levee: Raised bank of earth built to control or confine water (also known as dike).

mean: Mid-point between high and low points.

phytoplankton: Tiny floating plants that are eaten by minute animals, fish larvae and other larger organisms.

slough: A river inlet or a creek through a marsh or mudflat.

trace element: A naturally occurring compound such as selenium and silver that can be found in water and soil.

wetland: Transitional lands between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. Two major types of concern are seasonal wetlands inundated by winter and spring rainfall and flooding, and tidal wetlands flooded daily by ocean tides.

Pollution

The Estuary receives pollutants from a wide range of sources, including municipal sewage treatment plants, industry, urban and agricultural runoff, spills, marine vessel discharges and atmospheric fallout. Though significant progress has been made in reducing pollutant flows and eliminating raw sewage since the 1950s, trace metals, synthetic compounds, oil, grease, pesticides and other pollutants continue to accumulate in the Estuary. As of 1991, 5,000 to 40,000 tons of pollutants were entering the Estuary each year, and the amount has likely increased since then with recent population growth and urban development. Urban runoff from streets, storm drains and developed shorelines is one of the largest contributors to the Estuary's pollution. The greatest uncontrolled sources are untreated urban and agricultural runoff, although stormwater control and watershed management increased dramatically with new regulations under Clean Water Act Amendments.

Wetlands

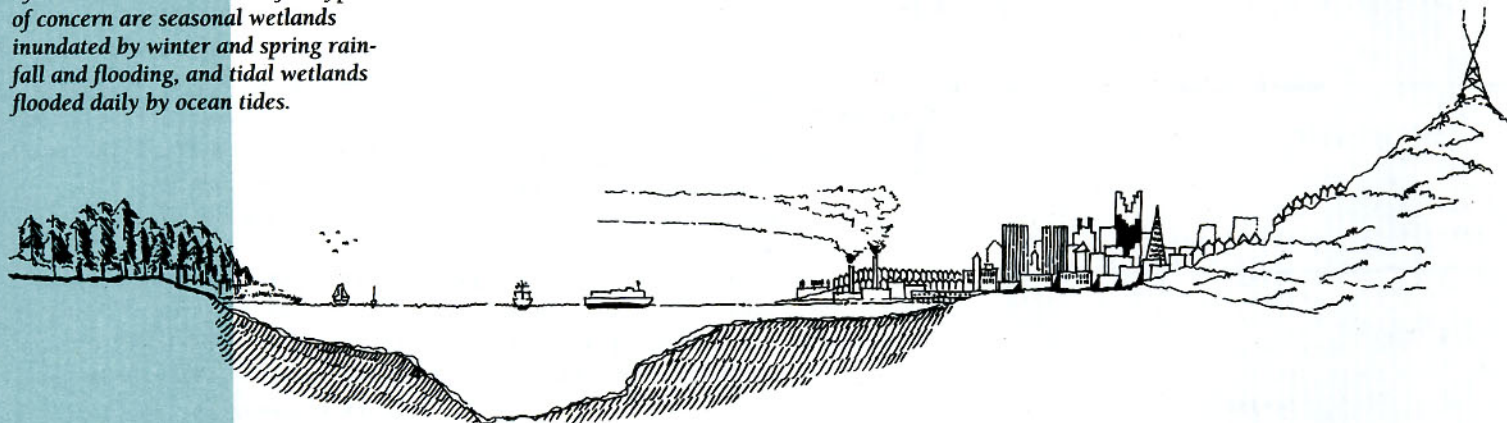
Wetlands provide vital nursery grounds for fish and crabs, and feeding and sheltering grounds for waterfowl and other wildlife. They also act as powerful natural filters and traps for sediments, making them vital not only to the estuarine ecosystem but also to water quality. Many of the Estuary's historic wetlands have been filled in or altered over the years as a result of urban development, agriculture, flood control and other activities. Experts estimate that in 1850, the Estuary (San Pablo, San Francisco and Suisun bays, and the Delta) included over 543,375 acres of tidal marsh. By 1985, these tidal wetlands had been reduced to 66,125 acres. Currently, the Estuary contains approximately 628,549 acres of tidal, seasonal and freshwater marshes, as well as farmed wetlands, mudflats, salt ponds and riparian woodlands, with Suisun Marsh the largest remaining wetland area in California.

Freshwater Flows

The dams, canals and reservoirs of California's water diversion projects represent the world's largest manmade water system and provide vital water to industries, farms, homes and businesses throughout the state. This diversion of fresh water flowing from rivers, streams and other sources into the Estuary has, however, fueled statewide controversy over possible adverse effects on water quality, fisheries and the ecosystem. The total volume and timing of fresh water reaching the Estuary can vary widely, mainly due to changing rainfall levels. During the past 60 years, annual freshwater flows have ranged from more than 60 million acre feet to less than 6 million acre feet, and averaged about 23 million acre feet. More than 14 million acre feet are currently diverted from the Estuary's supply. While most of this water is now used for agriculture, demand from California's growing cities and suburbs is on the rise.

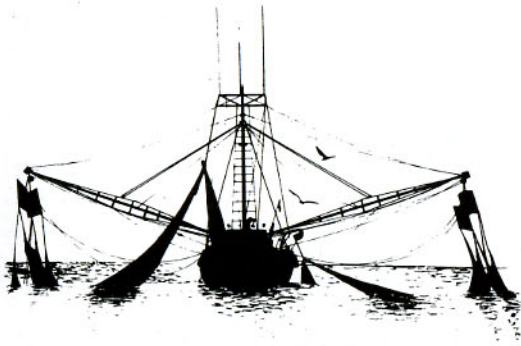
Dredging

To accommodate today's big tankers and container ships, the Estuary's harbors and channels have to be deepened by dredging. About 7 million cubic yards of sediment are dredged from the Estuary every year. Dredged sediments are then dumped at various aquatic or upland disposal sites around the Estuary. Some dredging activities can pose significant hazards to the estuarine ecosystem by stirring up toxics long buried in the mud, smothering bottom-dwelling organisms and clouding the water (turbidity).



Land Use

Primary land uses on Estuary shores include residential, commercial, agricultural and open space. In the northern and southern extremes of the Estuary, open space and agriculture predominate while residential and commercial land use concentrate in the Central Bay Area. About 1.6 million more people are expected to move into the Bay-Delta region by the year 2010—increasing water usage, placing added pressures on wetlands and fueling expansion throughout the region. With continued population growth over the past few decades, housing, industry, and other urban land uses are slowly replacing wetlands, farms and open space regionwide. Industries occupy over 8,000 acres of land on the bayshore and many send runoff and wastewater effluent into the Estuary. Meanwhile, chemically-intensive farming of almonds, sugarbeets, rice, cotton and other crops upstream promotes erosion and contributes pesticides and fertilizers to the Estuary via irrigation drainage. The Bay Area is also a leader in environmental preservation, however, with thousands of acres reserved for fish and wildlife habitat.



Who Uses the Estuary?

- Visitors to 290 shoreline recreational areas
- 489,000 recreational boaters
- 4000 commercial vessels per year
- Six major ports
- Over 300 marinas
- 21 Naval facilities
- Thousands of fishermen
- Over 200 industries and municipal sewage treatment plants
- The farmers of over 4.5 million acres of irrigated land
- Over 200 duck hunting clubs
- Hundreds of swimmers and windsurfers
- 20 million Californians (who receive drinking water diverted from the Estuary).

In Indian times, herds of elk and antelope roamed the hillsides around the Estuary, and hordes of salmon and thousands of seals and sea otters frequented its waters. According to eyewitness historical reports, the flocks of birds were sometimes so thick they blacked out the sky. Today the Estuary supports a more limited but substantial community of aquatic flora and fauna. Many of these plants and animals can be adversely affected by pollution, loss of habitat and other human impacts on the Estuary's ecosystem.

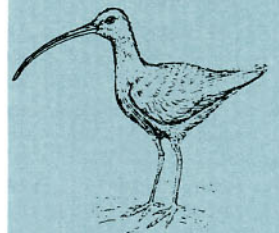
Plankton and Invertebrates The Estuary's food chain begins with minute drifting plants and animals known as plankton—which provide food for invertebrates such as shrimp, clams and worms. These small organisms sustain herring, bottom-feeding sturgeon and other larger aquatic creatures and form the basis of the entire estuarine food web.

Fish Estuarine waters provide habitat for over 120 fish species which can be divided into four basic groups: marine species from the ocean such as herring, anchovy and English sole; estuarine species requiring brackish waters, such as the longfin smelt and yellowfin goby; freshwater species such as sunfish and catfish; and anadromous (see glossary) species such as salmon, American shad and striped bass. Species popular with local sport fishermen include starry flounder, striped bass, sturgeon and salmon.

Birds The Estuary's wetlands feed and shelter millions of waterfowl, shorebirds and seabirds every year. As many as half the birds migrating the Pacific Flyway between the Arctic and Baja winter around the Estuary. On average, the region hosts 600,000–800,000 waterbirds at a time. Wintertime populations for the Delta include over a million pintail, mallard and other ducks, a quarter of a million geese, and thousands of tundra swans, greater sandhill cranes and other migrating birds, not to mention hundreds of stilts, avocets, hawks and other avian fauna. These significant bird populations led to the Estuary's designation as a "Western Hemispheric Shorebird Reserve of Critical Importance" and make it a favorite with birdwatchers and duck hunters.

Marine Mammals Though marine mammal populations were greatly reduced by overhunting and development, a few hundred harbor seals still frequent the shores of Mowry Slough below the Dumbarton Bridge and other spots within the Estuary. River otters can also be seen in Delta waterways and sea lions at San Francisco's Pier 39.

Endangered Species The Estuary area hosts 18 species of fish and wildlife on the government's rare, endangered, or threatened list, including the brown pelican, the salt marsh harvest mouse, the California freshwater shrimp, and the Delta smelt. About 3/4 of these species are associated with wetlands, among them the California clapper rail, whose local population dropped from 4,200–6,000 birds in 1979 to 1,200 in recent years. Wetlands also host many rare and endangered plants, such as soft-haired birds beak and Delta button celery.



Current Issues

Resources

San Francisco Estuary Project 1990-1998

Comprehensive Conservation and Management Plan

Status and Trends Reports: Dredging, Pollutants, Wetlands, Aquatic Resources, Wildlife, and Land Use.

Information Sheets: Dredging, Pollutants, The Delta, Fish and Wildlife, Water Use, Wetlands, Land Use, Agricultural Drainage, Monitoring.

An Introduction to the Ecology of the San Francisco Estuary

State of the Estuary, 1992-1997:

Vital Statistics, *New Science*, *Environmental Management*

Lay Person's Guide to the Bay and Delta, Water Education Foundation, 1997

Health Tips

- According to state health standards, Estuary waters are generally safe for swimming except after a storm.
- Fresh water from rivers and streams is not drinkable without treatment.
- California Department of Fish & Game (CDFG) regulations warn of potential health hazards from eating the Estuary's striped bass, shellfish and several species of diving ducks due to elevated levels of mercury, selenium and/or other trace contaminants. Copies of the regulations are available from CDFG.

Contacts

California Department of Fish & Game, 1416 9th St., 12th floor, Sacramento, CA 95814 (916)653-7664

California State Department of Water Resources, 1416 9th St., Sacramento, CA 95814-5515 (916)653-5791

Central Valley Regional Water Quality Control Board, 3443 Rottier Road, Suite A, Sacramento, CA 95827-3098 (916)255-3000

Communities for a Better Environment, 500 Howard St., Suite 506, San Francisco, CA 94105 (415)243-8373

S.F. Bay Conservation and Development Commission, 30 Van Ness Avenue #2011, San Francisco, CA 94102 (415)557-3686

San Francisco Estuary Institute, 180 Richmond Field Station, 1301 South 46th St., Richmond, CA 94804 (510)231-9539

S.F. Bay Joint Venture, Coastal Conservancy, 1330 Broadway, Suite 1100, Oakland, CA 94612 (510)286-6767

S.F. Bay Regional Water Quality Control Board, 1515 Clay St., Suite 1400, Oakland, CA 94612-1413 (510)622-2300

San Francisco Estuary Project, c/o RWQCB, 1515 Clay St., Suite 1400, Oakland, CA 94612-1413 (510)622-2465

Save S.F. Bay Association, 1736 Franklin St., 4th floor, Oakland, CA 94612 (510)452-9261

U.S. Environmental Protection Agency, Region 9, 75 Hawthorne St., San Francisco, CA 94105 (415)744-2125

Water Education Foundation, 717 K St., Suite 517, Sacramento, CA 95814 (916)444-6240

Wetland Loss

Human activities in the Estuary have caused the loss or conversion of more than 500,000 acres of tidal wetlands and thousands of acres of shoreline and stream habitat. Many remaining wetlands are still threatened by filling or diking. Other wetlands may suffer from illegal filling in the future.

Fish Population Decline

Over the years, pollution, dam construction, overfishing and other stresses have diminished the Estuary's recreational and commercial fisheries. Only a few species—herring, anchovies, crayfish, staghorn sculpins, gobys and bay shrimp—remain stable enough for commercial catch inland and most are sold as bait. Of the Estuary's current fish species, striped bass, Delta smelt and winter-run salmon have been hard hit. The adult striped bass population numbered about 0.6 million (less than 1/3 its historic level). Winter-run salmon have been listed as a threatened (state) and endangered (federal) species, while the abundance of other salmon runs is kept stable through large-scale hatcheries. Meanwhile, the Delta Smelt was listed as a federal and state threatened species in 1993. This native smelt has proved much more susceptible to habitat alterations in the Delta than some non-native "exotic" species such as the chameleon goby.

PCB and DDT Contamination

Organochlorines, such as polychlorinated biphenyls (PCBs) and dichlorodiphenyltrichloroethane (DDT), are among the most toxic pollutants. Although banned for more than 20 years and declining over the long run, these chemicals persist in the Estuary and are still found in fish, seals, and waterfowl. In 1993-1996, PCB concentrations in water were considerably higher than EPA criteria at all 24 water quality monitoring stations in the Bay. DDT concentrations in sediment samples were also high at many stations during this period.

Diversion Debate

California continues to debate how to protect the various beneficial uses of the Estuary's water and what the quality of Estuary waters should be. Agriculture now receives 80% of California's water, and cities and industries 20%. Some scientists consider current flow levels too low to sustain the Estuary's fish, wildlife and water quality; others contest that current flow levels are no lower than historic natural ones. The U.S. Environmental Protection Agency has set a standard allowing up to two parts per thousand of salt water in the Delta; if salt water levels exceed that standard, more fresh water must be released.



Dredging Planning

Concern over the impacts of dredging activities on water quality and wildlife have led to disagreements about whether to limit dredging and where to locate disposal sites. Some fishermen believe that ongoing disposal off Alcatraz is a major cause of a declining Central Bay fish catch. Meanwhile, the navigability of the Estuary is at stake, with ports and marinas in need of dredging and disposal sites such as Alcatraz reaching capacity. To address the issue, the Army Corps of Engineers and other agencies initiated a cooperative effort to establish a Long Term Management Strategy (LTMS) for Estuary dredging activities. The LTMS seeks to develop an environmentally suitable and economically sensible approach to dredging over the next 50 years.

Exotic Species Invasion

Native species of estuarine organisms are fast giving way to exotics, many of whom currently arrive via ship hulls and ballast water. One such intruder, a small clam from Asia called *Potamocorbula amurensis*, has multiplied from a few specimens found in 1986 to densities of over 30,000 per square meter in one year. By itself, this clam species may have ingested enough plankton to prevent some Suisun Bay plankton blooms. Exotic species growth among fish and other organisms promises to continue altering the Estuary's food web and ecosystem.

Sea Level Rise

Recent studies indicate that global warming could lead to an accelerated sea level rise of 2-3 feet in the next 100 years. Concerned over impacts on the Estuary's shoreline, the Bay Conservation and Development Commission conducted further research and found that during the last two decades the relative annual sea level rise has been nearly double the historic rate of .0039 feet per year observed since 1854. Homes and shoreline property throughout the region may be threatened by this sea level rise, not to mention the Estuary's low-lying farm and marshlands.

Estuary Project

The San Francisco Estuary Project's primary goal is to restore and maintain water quality and natural resources while promoting effective management of Bay and Delta Waters. This publication includes an introduction to the five major issues the Estuary Project addressed in the **Comprehensive Conservation and Management Plan** completed in March 1993: decline of the Estuary's biological resources, increased pollutants, freshwater diversion and altered flow regime, increased waterway modification, and intensified land use. If you'd like to volunteer for the Estuary Project, or have a project representative come speak to your group, please call (510)622-2465.

SAN FRANCISCO ESTUARY PROJECT

Wetlands

Wetlands provide invaluable habitat for fish and wildlife, improve water quality, protect urban and agricultural areas from flooding, and serve many other vital functions within the San Francisco Estuary. Despite their central role in the Estuary's ecology, however, many wetlands face degradation or destruction due to urban encroachment. The San Francisco Estuary Project seeks to promote conservation, restoration, and environmentally sound management of the Estuary's wetlands.

Value of Wetlands — page 2
 Wetland Types — page 2
 Pressures on Wetlands — page 3
 Current Issues — page 4

The Estuary

San Francisco Bay and the Delta combine to form the West Coast's largest Estuary. The Estuary conveys the waters of the Sacramento and San Joaquin Rivers into the Pacific Ocean. The Estuary encompasses roughly 1,600 square miles, drains over 40% of the state, contains about 5 million acre feet of water at mean tide, and redistributes about 80–280 million cubic yards of sediment every year. Its Delta and watershed provide drinking water to 22 million Californians, and irrigation water to 4.5 million acres of farmland. The Estuary also hosts a rich diversity of aquatic life. Each year, two-thirds of the state's salmon pass through the Bay and Delta, as do nearly half of the waterfowl and shorebirds migrating along the Pacific Flyway. Finally, Estuary waters enable the nation's fourth largest metropolitan region to pursue shipping, farming, fishing, recreation, commerce and other activities.

Wetlands

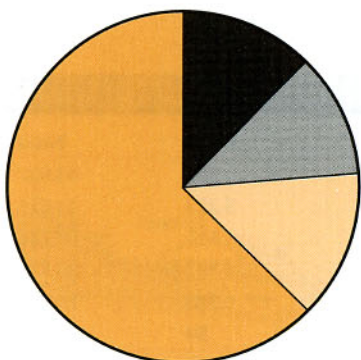
The Estuary encompasses a total of 628,549 acres of wetlands, according to the U.S. Fish and Wildlife Service National Wetland Inventory. Over half of these (385,755 acres) are farmed wetlands; the remainder include marshes, mudflats, streambanks, riparian woodland, salt ponds and other transitional areas between Estuary waters and the land. The largest remaining tidal wetland in California is the Suisun Marsh in the North Bay (over 72,000 acres). In the South Bay, the San Francisco Bay National Wildlife Refuge protects over 19,000 acres of wetlands. Many smaller wetlands, ranging from tiny strips of salt-loving cordgrass to farm fields flooded by winter rains, ring the Bay. Whatever its size or derivation, each wetland plays an important role in the health of the Estuary.

History

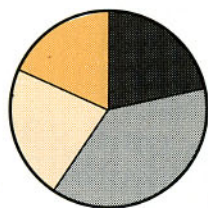
Native Americans lived along the Bay shoreline for over 3,000 years, harvesting wetlands for food and natural salt. The arrival of European settlers in 1769 signalled the beginning of drastic changes in the Estuary. The largest wetland loss occurred between 1860 and 1930, when 97 percent of the Delta's 450,000 acres of tidal marsh were diked and planted with crops to feed California's rapidly growing population. Over time, agriculture and salt production replaced tens of thousands of acres of tidal wetlands in San Francisco Bay.

Urban expansion during the after the Gold Rush filled thousands of acres of wetlands with bayside housing and commerce. A second era of rapid growth followed World War II, sacrificing more wetlands to highways, airports, landfills and other urban development. Flood control and water diversion projects, built to serve agricultural and urban areas, destroyed wetlands and riparian corridors, and altered natural freshwater flows to the remaining downstream wetlands. Tidal marshes suffered most (see pie charts).

Wetland destruction continued until the mid-1960s, when public outcry over a shrinking Bay led to the creation of the San Francisco Bay Conservation and Development Commission (BCDC). Although the rate of Bay fill has decreased dramatically since then, wetland losses continue, particularly in diked seasonal wetlands, which are difficult to delineate and often incorrectly perceived as habitat of little value to fish and wildlife.



1850
545,375 acres



1987
~44,371 acres

The Estuary's Tidal Wetland Acreage

- Central & South
- San Pablo Bay
- Suisun Bay
- Delta

Egret: Ricardo Perez

Dredging Operations

Wetland Types

Marshes: Tidal salt and brackish marshes occupy a narrow zone between mudflats and uplands, and receive ocean tides. They sustain salt-tolerant vegetation, fish nursery grounds, migratory birds and several threatened wild-life species. Salt marshes contain mostly pickleweed and cordgrass; brackish marshes (fresh and saltwater mix) host a wider range of vegetation. Freshwater marshes, while influenced by tidal action, are dominated by



Pickleweed

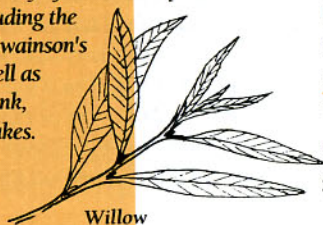
freshwater from rivers and streams. They support freshwater plants such as tule reed and cattail, and at least 57 wildlife species.

Mudflats lie between tidal marshes and the edge of the Bay at low tide. Incoming tides cover mudflats with shallow water, providing habitat for invertebrates, fish, and shorebirds.

Salt Ponds are commercial facilities that extract salt from Bay water by evaporation. Algae is the main vegetation, brine shrimp and birds the primary inhabitants.

Seasonal Wetlands are shallow depressions that typically contain standing water during the rainy season but become drier in summer and fall. They include diked (formerly tidal) salt and brackish marshes, farmed wetlands, abandoned salt ponds, inland freshwater marshes and vernal pools. Diked marshes sustain waterfowl and endangered species. Farmed wetlands support hay production, grazing and row crops. Vernal pools, which fill with rain water in the wet season and dry out in late spring, contain plants that can withstand extremes in water availability.

Riparian Forests are found along stream-sides and Delta forests, Delta levees and channel islands. They contain leafy shrubs such as blackberry and wild rose, and trees such as cottonwood, alder and willow. Riparian forests sustain the Estuary's greatest diversity of land and aquatic bird species (including the threatened Swainson's hawk), as well as raccoon, skunk, deer and snakes.



Willow

Water Quality Improvement

Through a variety of mechanisms, wetlands improve the water quality of urban and agricultural runoff that flows through them. Wetlands trap some natural pollutants, and some wastewater and stormwater contaminants, and either retain them or convert them by biochemical processes to less harmful forms. Wetlands also trap and stabilize sediment that, suspended in the water, can interfere with fish and plant growth, as well as fishing.

Flood Control

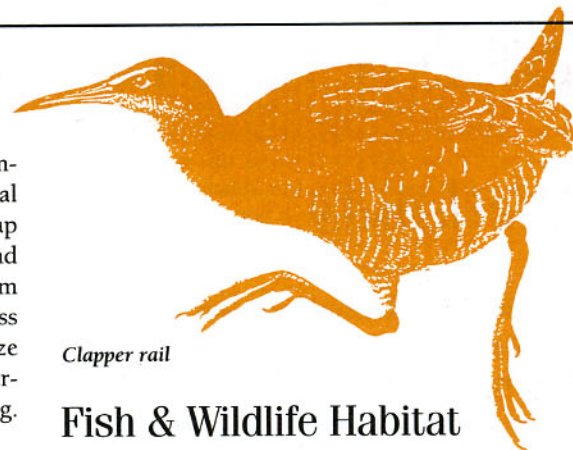
Many freshwater and riparian wetlands pond stormwater, thereby enlarging flood channel capacity when rivers overflow their banks. Delta flood basins and agricultural lands bordering San Francisco and San Pablo Bays also pond water during heavy rains and release it gradually into the Bay at low tide, reducing the flood threat to urban areas when storm runoff coincides with high tide.

Groundwater Recharge

Wetlands can play an important role in replenishing groundwater supplies by allowing transport of ponded surface water into underground basins. In the Delta, for example, surface water flows downward through the permeable peat soil that underlies wetlands. In the South Bay, water from streams and creeks percolates into the underground aquifer, which supplies many drinking water wells.

Open Space

The Estuary encompasses about 300 recreational areas along the Bay shoreline, and in Delta wetlands and waterways. These wetlands provide opportunities for fishing, hunting, walking, environmental education, wildlife observation, photography and picnicking.



Clapper rail

Fish & Wildlife Habitat

Populations of over 300 fish and wildlife species breed, raise young, feed and rest in Estuary wetlands. Countless clams, worms and other invertebrates thrive in mudflats; migratory birds winter in marshes; and fish and crabs use shallow waters as nursery grounds. Wetlands support a food web in which detritus (see glossary) provides food for invertebrates, which are in turn eaten by shorebirds, fish, crabs and human clam diggers. As wetlands become rare, so do some of the species that live in them. Estuary wetlands sustain over 60 plant and animal species that are either listed as rare, threatened or endangered or are candidates for such listing. Of the animal species, the California clapper rail, California least tern, and salt marsh harvest mouse are best known due to their presence on several bayshore properties proposed for development. Of the plant species, palmate-bracted bird's beak and Solano grass, found in vernal pools, are the most endangered.

Shoreline Stabilization

Vegetated wetlands reduce bank and shoreline erosion caused by stream runoff, tidal waters and wave action. Wetlands absorb and dissipate wave energy that would otherwise erode shores and banks. This allows suspended sediment to settle and build up, encouraging more wetland vegetation to take root and further stabilizing the shore.

Estuary Wetlands Acreage

Habitat Type	S.F. Bay ¹	Suisun Bay	Delta	Total
Mudflats	57,776	5,994	322	64,092
Salt/Brackish/Freshwater Marsh	25,466	10,682	8,223	44,371
Seasonal Wetlands	21,150	47,482	16,502	85,134
Farmed Wetland	27,344	8,064	350,347	385,755
Riparian Forest	2,322	404	9,788	12,513
Salt Ponds	36,603	27	54	36,684
Total Wetlands	170,661	72,652	385,236	628,549

¹Includes South/Central Bay and San Pablo Bay

Source: Adapted from Meiores et al., 1991

Pressures on Wetlands

Shoreline Development

The Bay Area's growing population may spur further shoreline development, posing a threat to wetlands. Shoreline residential areas, even those not built on filled wetland, can damage adjacent wetlands by introducing contaminated surface runoff, litter, household pets that hunt wetland wildlife, and human intruders. Continued industrial development along the Estuary shoreline can harm wetlands either directly, by destroying them during construction, or indirectly, by producing toxic runoff and wastewater discharges that may damage wetland plants and wildlife.

Freshwater Diversion

Agriculture and urban growth have led to flood control and water development projects that have produced major wetland losses in the Central Valley and Delta. More of these projects are being proposed to serve increasing demand. Such additional freshwater diversion could cause freshwater or brackish marshes to convert to salt marshes in the Estuary, thus changing the types of species existing in these marshes. Better conservation and management of California's already developed water supplies is necessary to limit the need for additional projects.

Agricultural Practices

Agricultural practices such as tilling the soil and soil compaction promote soil loss and land subsidence, increasing pressure on Delta levees (see glossary). Levee failure may cause flooding, erosion and salt intrusion, thereby degrading water quality and altering wetland habitat. Contaminated agricultural drains can have similar effects. However, some agricultural practices such as winter flooding of cornfields and delayed ploughing of crop residues until Spring can benefit birds and waterfowl.

Runoff & Pollution

Continued urban development increases wastewater flows and surface runoff into the Estuary. To some extent, wetlands can help contain or reduce pollutants. The artificially created DUST (Demonstration Urban Stormwater Treatment) marsh in Fremont California is demonstrating how well wetlands control stormwater pollution. Without proper management, however, accumulated pollutants can degrade wetlands and threaten the food chains they support.

Port, Airport & Highway Expansion

Many of the Estuary's ports, industrial piers and associated facilities are located on or adjacent to wetlands and deepwater habitat. As the shipping industry continues to grow, expansion plans for these facilities may require wetland fill. Currently proposed municipal and airport expansions would fill a total of 300 to 500 acres of wetlands. Planned highway and bridge projects around the Bay could fill 362 acres of wetlands over the next 25 years.

Solid Waste Disposal

Urban expansion creates a need for more solid waste disposal sites, which historically have been located largely in wetland areas. Two recent projects, the Newby Island Sanitary Landfill Expansion in Santa Clara County and the Acme Landfill Expansion in Contra Costa County, affected a total of about 260 acres of seasonal wetlands. Toxic leakage from disposal sites, particularly those that handle hazardous wastes, can damage wetland ecology.

Dredged Material Disposal

In-Bay disposal of material dredged from Estuary shipping channels and ports increases suspended sediment concentrations and can release pollutants disruptive to fish and wildlife resources and wetland processes. The need for new disposal sites may produce added pressures on wetlands, as well as new opportunities for wetland creation or enhancement using clean dredged material.

Glossary

detritus: Small particles of organic matter, largely derived from the breakdown of dead vegetation.

estuary: A partially enclosed body of water where river water meets and mixes with ocean water.

fill: Soil, sand and debris deposited in aquatic areas, such as wetlands, to create dry land, usually for agricultural or commercial development purposes.

groundwater recharge: Replenishment of water that circulates in underground aquifers.

invertebrates: Small organisms like worms and clams that lack a spinal column; many siphon water and suspended sediments for food.

levee: A raised bank of earth built to control or confine water; also known as a dike.

peat: Partially carbonized vegetable tissue that forms as plants decompose in water and are deposited and compacted.

permeable: Able to be infiltrated by water.

riparian: Habitat occurring along the bank of a river, pond, or small lake.

runoff: Water from rain, melted snow or agricultural or landscape irrigation that flows over the land surface.

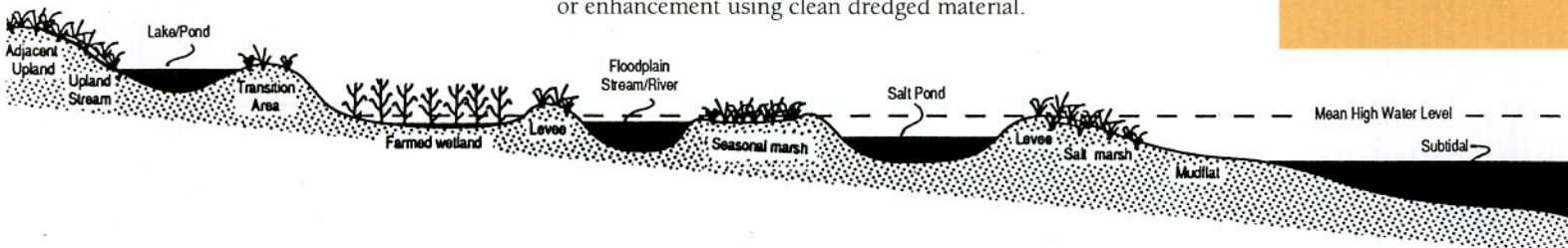
sediment: Mud, sand, silt, clay, shell debris and other particles that settle on the bottom of waterways.

slough: A channel through a marsh or mudflat.

suspended sediments: Undissolved particles floating in water.

tide: The alternating rise and fall of the ocean and Bay surface that occurs twice a day, caused by the gravitational pull of the sun and the moon upon the earth.

wetland: Lands that are often transitional areas between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water.



Current Issues

Resources

San Francisco Estuary Project 1990–1998

Comprehensive Conservation and Management Plan

Status and Trends Reports on: Wetlands and Related Habitats in the San Francisco Estuary, Land Use and Population, Pollutants in the San Francisco Estuary, Dredging and Waterway Modification, Wildlife, and Aquatic Resources

An Introduction to the Ecology of the San Francisco Estuary

State of the Estuary, 1992–1997: Vital Statistics, New Science, Environmental Management

Information Sheets on:

Agricultural Drainage, Pollution, Aquatic Organisms and Wildlife, Dredging and Waterway Modification, Water Usage, The Delta, The Estuary, and Land Use

Bay Area EcoAtlas, <http://www.sfei.org>

Contacts

Audubon Society, Golden Gate Chapter, 2530 San Pablo Ave., Suite G, Berkeley, CA 94702 (510)843-2222;

Marin Chapter, (415)383-1770;

Santa Clara Valley Chapter, (408)252-3747

Bay Planning Coalition, 303 World Trade Center, San Francisco, CA 94111 (415)397-2293

Homebuilders Association of Northern California, P.O. Box 5160, San Ramon, CA 94583 (925)820-7626

California Department of Fish & Game, 1416 9th Street, 12th floor, Sacramento, CA 95814 (916)653-7664

Central Valley Regional Water Quality Control Board, 3443 Routier Road, Suite A, Sacramento, CA 95827-3098 (916)255-3000

S.F. Bay Conservation and Development Commission, 30 Van Ness Avenue #2011, San Francisco, CA 94102 (415)557-3686

S.F. Bay Regional Water Quality Control Board, 1515 Clay Street, Suite 1400, Oakland, CA 94612 (510)622-2300

San Francisco Estuary Project, c/o RWQCB, 1515 Clay Street, Suite 1400, Oakland, CA 94612 (510)622-2465

Save S.F. Bay Association, 1736 Franklin St., 4th floor, Oakland, CA 94612 (510)452-9261

U.S. Army Corps of Engineers, 333 Market Street, San Francisco, CA 94105-2197 (415)977-8618

U.S. Environmental Protection Agency, Region 9, 75 Hawthorne St., San Francisco, CA 94105 (415)744-2125

U.S. Fish and Wildlife Service, 3310 El Camino Ave., Suite 130, Sacramento, CA 95825-6340 (916)979-2725

Wetlands Ecosystem Goals Project, c/o RWQCB, 1515 Clay Street, Suite 1400, Oakland, CA 94612 (510)622-2454

Development and Mitigation

In order to protect the public value of wetlands, regulatory agencies restrict wetlands activities to those that require a water-dependent location such as ports, marinas and water-related industry. Whatever the regulations, people continue to view wetlands as desirable locations for housing, restaurants and many other uses. Decision-makers must determine to what extent these uses merit further wetland loss or degradation. Most but not all wetland fill permits require wetland creation, restoration and/or enhancement to offset the loss. Regulatory agencies generally require that an equal or greater wetland acreage be created or a degraded wetland be restored, either on the development site or elsewhere. In practice, however, this no overall net loss policy has not been completely effective. A new or restored wetland rarely completely replaces the lost wetland's functions or values, and sometimes displaces resident wildlife species.

Regulation and Management Conflicts

Many federal, state, and local government agencies, as well as private and semi-private land trusts, regulate and manage the Estuary's wetlands. With each agency working with varying budgets to enforce its own laws, programs and policies, the result has been uneven wetland protection. Farmed wetlands, for example don't fit any current wetland definition and thus remain unregulated.

Sea Level Rise

California's current warming trend may result in smaller snowpacks and less freshwater runoff into the Estuary. According to a recent study, the sea level is likely to rise 2–3 feet in the next 100 years, as polar caps melt and thermal expansion of the oceans occurs. These changes will bring more saltwater into the Estuary, converting fresh and brackish marshes to salt marshes and affecting plant growth patterns, fish spawning and other wetland activities. Moderate to high sea level rise may also flood tidal marshes, converting them to mudflats or open water.

Public Access

Demand for public access to wetlands is increasing. While access trails encourage public appreciation of wetlands, they can sometimes damage limited remaining wetlands and adjacent upland, and introduce disruptive visitors to important wildlife nesting, feeding and resting sites.

San Francisco Bay Area Wetlands Ecosystem Goals Project

The San Francisco Bay Area Wetlands Ecosystem Goals Project (Goals Project) began several years ago as an effort to answer the question "How much of what kind of wetlands do we need where, and why?" The Goals Project subsequently evolved into a cooperative public-private partnership to develop wetland habitat goals—goals representing a shared vision of the Bay Area's wetlands and associated habitats needed to insure a healthy Bay ecosystem. The Goals Project systematically quantified wetland types, locations, and amounts to establish the baseline data needed to monitor the health of Bay Area wetlands and to restore fish and wildlife populations. Based on the scientific findings, the wetland habitat goals are intended to provide valuable data to decision-makers involved in land use

planning and wetlands restoration and landowners wishing to improve their property's wetlands.

The wetland ecosystem goals report—written descriptions and illustrative maps recommending a mosaic of wetlands and related habitats—completed its public review and comment period the summer of 1998. The completion of the Goals Project marks the opportunity to begin active preparation of a regional wetlands plan for the Bay Area. See contact list for a copy of the goals.

A Case Study

On January 15, 1997, after two decades of environmental battles, the Peninsula Open Space Trust (POST) negotiated an agreement to purchase Bair Island, the largest remaining, restorable wetland area along the southern shorelines of the San Francisco Bay.

POST will pay the Japanese developer Kumagai Gumi Co. Ltd. \$15 million for the 1,626-acre property east of Redwood City. The purchase of the island was negotiated with the help of a three-year, 100% financing package. In order to retire the loan and transfer the property to the wildlife refuge, POST is seeking a \$10 million appropriation from the Federal Land & Water Conservation Fund and is raising the remaining \$5 million from local sources.

The marshlands, visible to motorists along Highway 101 for nearly two miles south of the San Mateo Bridge, will become a wildlife refuge. POST plans to transfer ownership to the Don Edwards San Francisco Bay National Wildlife Refuge, a 25,000-acre system of sloughs, marshes and salt ponds ringing the south part of the Bay, from Redwood City to Hayward.

Bair Island is a rare and special place. It consists of marshes, wetlands, and diked bay wetlands. The island is home to five endangered species: California clapper rail, salt marsh harvest mouse, California least tern, peregrine falcon and California brown pelican. The rail (a large but secretive, ground nesting bird) and the mouse (which may be the only mammal to drink exclusively salt water) have already lost 84 percent of the tidal marsh habitat they need to survive.

Much of the land—divided into three sections—has been diked and drained. But biologists expect that they can easily restore it by breaching levees and allowing bay waters to flood back in, creating lush grasses and wildlife habitat with little effort.

Estuary Project Goals

The San Francisco Estuary Project's primary goal is to restore and maintain water quality and natural resources while promoting effective management of Bay and Delta waters. The Project's Comprehensive Conservation and Management Plan contains the following goals to improve wetlands management:

- *Protect and manage existing wetlands.*
- *Restore and enhance the ecological productivity and habitat values of wetlands.*
- *Expedite a significant increase in the quantity and quality of wetlands.*
- *Educate the public about the values of wetland resources.*

The Estuary Project is now working cooperatively with agencies, environmentalists, business and the public to implement the Comprehensive Conservation and Management Plan.

MEMO

TO: Governing Board
San Francisco Bay Restoration Authority

FR: Kenneth K. Moy
Legal Counsel

RE: 'Interim' Staff

DT: April 6, 2009

The San Francisco Bay Restoration Authority (Authority) is created by statute as a “regional agency” without a dedicated source of funding. The Association of Bay Area Governments (ABAG), the State Coastal Conservancy (Conservancy) and the Authority have overlapping goals regarding marsh restoration on the San Francisco Bay shoreline. ABAG and the Conservancy have offered staff resources to support the Authority’s efforts on an as needed basis until further notice. The Authority is empowered to accept such assistance as ‘interim’ staff [Govt. Code §66704(m)]. The ABAG and Conservancy staff will not be Authority employees.

To facilitate and document this process, the Authority should formally accept the offer from ABAG and Conservancy by adopting Resolution 1 (attached). Further, the Authority should consider appointing interim staff to fill certain roles:

- ABAG’s Executive Director as Director of the Authority;
- ABAG’s Legal Counsel as Legal Counsel to the Authority;
- ABAG Finance Director as the Authority’s Treasurer; and
- Clerk of ABAG’s Executive Board as Clerk to the Authority’s governing board.

These appointments will facilitate ordinary and routine business and governmental transactions and establish clear responsibility for specialized functions.

Please note that under certain circumstances, I may have a conflict of interest if I am in position of having to advise the Governing Board on a matter potentially adverse to ABAG’s interest. In that event, I will so advise the Board and suggest a course of action.

When the Authority authorizes a financing to fund restoration, it may be possible to reimburse ABAG and/or the Conservancy for the costs of interim staff. The proposed resolution is worded to preserve the potential for reimbursement.

RECOMMENDED ACTION:

Adopt Resolution 1.

Attachments

Cc: Henry L. Gardner, ABAG
Amy Hutzler, State Coastal Conservancy

San Francisco Bay Restoration Authority

Resolution 1

Resolution accepting use of the Association of Bay Area Governments' and State Coastal Conservancy's staff as staff to the San Francisco Bay Restoration Authority

Whereas, the San Francisco Bay Restoration Authority (hereinafter "Authority") was established by the San Francisco Bay Restoration Authority Act (AB 2954) as a regional entity to generate and allocate resources for the protection and enhancement of tidal wetlands and other wildlife habitat in and surrounding the San Francisco Bay; and

Whereas, the Association of Bay Area Governments (hereinafter "ABAG"), a joint powers agency formed pursuant to the agreement of its members and California Government Code §§ 6500, *et seq.*, and the State Coastal Conservancy (hereinafter "Conservancy"), a State of California agency, have goals in common with the Authority with respect to restoration and enhancement of natural habitats and watersheds and providing access to recreation opportunities along the San Francisco Bay; and

Whereas, to facilitate the ordinary and routine business and governmental transactions necessary to the Authority, ABAG and Conservancy offered their staff on an interim basis to the Authority; and

Whereas, the Authority should consider appointing the following interim staff to fill certain roles:

- ABAG's Executive Director as Director of the Authority;
- ABAG's Legal Counsel as Legal Counsel to the Authority;
- ABAG Finance Director as the Authority's Treasurer; and
- Clerk of ABAG's Executive Board as Clerk to the Authority's Governing Board; and

Whereas, the Authority intends to reimburse ABAG and Conservancy for use of interim staff from the proceeds of any financing undertaken to fund restoration projects to the extent permitted by law.

San Francisco Bay Restoration Authority

Resolution 1

Now Therefore Be It Resolved, that the Governing Board of the San Francisco Bay Restoration Authority hereby accepts the offer by the Association of Bay Area Governments and the State Coastal Conservancy of their staff on an interim basis and appoints the following specific interim staff to the positions listed below:

- ABAG's Executive Director as Director of the Authority;
- ABAG's Legal Counsel as Legal Counsel to the Authority;
- ABAG Finance Director as the Authority's Treasurer; and
- Clerk of ABAG's Executive Board as Clerk to the Authority's Governing Board.

Passed and adopted this 22nd day of April, 2009.

Samuel Schuchat
Chair

Attest:

Frederick Castro
Clerk of the Governing Board



MEMO

TO: Governing Board
San Francisco Bay Restoration Authority

FR: Kenneth K. Moy
Legal Counsel

RE: FPPC – Conflict of Interest Code (COIC)

DT: April 13, 2009

BACKGROUND AND ANALYSIS

The statute creating the San Francisco Bay Restoration Authority (Authority) explicitly subjects the members of the Governing Board to the Political Reform Act of 1974 (Act).¹ One aspect of the Act requires a government agency subject to the Act adopt a conflict of interest code (COIC). Another requires individuals with the ability to materially influence the agency's actions to file a Form 700 disclosing their financial interests. Both are done so one can identify when a decision that is before the government agency has the potential to materially affect one's personal financial interest. One is then obligated to evaluate the potential impact and to take the appropriate action under the Act, e.g. recusal from discussions of, or voting on, a particular matter.

Over the past thirty years, the agency responsible for implementing the Act, the Fair Political Practices Commission (FPPC) has promulgated a significant body of regulations, opinion letters and advisory materials. Consequently, adoption of a COIC is now a matter of form. The following have been furnished by the FPPC for use by the Authority in adopting its COIC.

- ◇ Notice of intention to adopt a conflict of interest code
- ◇ Proposed conflict of interest code for the Authority²
- ◇ Appendix A [FPPC Version] to the COIC listing those required to file a Form 700

As the materials indicate, the substantive provisions of the COIC are contained in a regulation promulgated by the FPPC. The only decision before the Governing Board is designating who is required to file a Form 700 in Appendix A. Please note that the Appendix A provided by the FPPC does not list Governing Board members, or the Director or the Treasurer of the Authority. This conforms to standard FPPC practice.

¹ CA Govt Code Sec. 66703.1

² In the interests of conserving resources, I have not furnished a hard copy version 2 Cal. Code of Regs. Sec. 18730. This section can be viewed online at this location:

http://weblinks.westlaw.com/result/Default.aspx?cnt=Document&db=CA-ADC-TOC%3BRVADCCATOC&docname=2CAADCS18730&findtype=W&fn=_top&ifm=NotSet&rlt=CLID_FQRLT11943495112134&rp=%2FSearch%2Fdefault.wl&rs=WEBL9.03&service=Find&spa=CCR-1000&vr=2.0

One copy will be available at the meeting. I will send an electronic version (pdf) upon request to kennethm@abag.ca.gov or 510.464.7914.



MEMO

My office has been engaged in a six month long discussion with staff of the FPPC regarding whether this form and practice are appropriate for ABAG and three joint powers agencies affiliated with ABAG. ABAG and each of the affiliated joint powers agencies are regional entities. The FPPC's version of Appendix A assumes that if a person files a Form 700 for one government agency, there is no need for that person to file a second Form 700 for a second government agency. This is not accurate in the cases of ABAG and its affiliated joint powers agency. It is also not accurate in the case of the Authority.

A councilmember or supervisor filing a Form 700 may list all financial interests that could be affected by an action of the city or county. That Form 700 may not disclose a financial interest that could be affected by the actions of a regional entity with a geographical jurisdiction different than the city's or county's. The most apparent example is real property located outside a city or county but within the ABAG region.

Consequently, ABAG and each of its affiliated joint powers agencies have filed COICs with an Appendix A that includes members and alternates of their governing boards, program directors, finance officers and legal counsels. This exceeds FPPC requirements but ensures that filers of Form 700 disclose and, more importantly, are aware of, potential conflicts arising out the regional reach of those agencies. I am recommending that the Authority follow the same procedure. See Appendix A [Recommended Version].

If the discussions with the FPPC cause a change in that recommendation and approach, the Governing Board will be notified and a new recommendation submitted.

Each recipient of this memorandum should consider the copy of the 'Notice of Intent to Adopt a Conflict-of-Interest Code' included in this memorandum as the official service of the Notice as required by the FPPC.

RECOMMENDED ACTION:

- ◇ Adopt of Resolution 2
- ◇ Authorize staff to submit forms to FPPC, including Appendix A [Recommended Version]

Cc: Henry L. Gardner
Herbert L. Pike
Kenneth K. Moy

APPENDIX A [FPPC VERSION]

Designated Positions

Disclosure Category

Consultant*

(The following positions are performed by consultants: General Counsel, Administrator, Claims Manager, and Insurance Broker. Other duties may be performed by consultants, as needed.)

* Consultants shall be included in the list of designated positions and shall disclose pursuant to the broadest disclosure category in the code subject to the following limitation:

The [agency head] may determine in writing that a particular consultant, although a "designated position," is hired to perform a range of duties that is limited in scope and thus is not required to fully comply with the disclosure requirements in this section. Such written determination shall include a description of the consultant's duties and, based upon that description, a statement of the extent of disclosure requirements. The [agency head's] determination is a public record and shall be retained for public inspection in the same manner and location as this conflict-of-interest code (Gov. Code Section 81008).

The following positions are not covered by the code because they must file under Government Code Section 87200 and therefore, are listed for informational purposes only:

- Members of the Board of Directors
- Alternate Members of the Board of Directors
- Program Director/Administrator
- Assistant Program Administrator
- Treasurer (if not a Board Member or Alternate)
- Consultants who manage public investments

An individual holding one of the above listed positions may contact the Fair Political Practices Commission for assistance or written advice regarding their filing obligations if they believe that their position has been categorized incorrectly. The Fair Political Practices Commission makes the final determination whether a position is covered by section 87200.

SAN FRANCISCO BAY RESTORATION AUTHORITY

NOTICE OF INTENTION TO ADOPT A
CONFLICT-OF-INTEREST CODE

NOTICE IS HEREBY GIVEN that the San Francisco Bay Restoration Authority (Authority) intends to adopt a conflict-of-interest code pursuant to Government Code Section 87300 and 87306. Pursuant to Government Code Section 87302, the code will designate employees who must disclose certain investments, income, interests in real property and business positions, and who must disqualify themselves from making or participating in the making of governmental decisions affecting those interests.

A forty-five (45) day written comment period has been established commencing on April 22, 2009 and terminating on June 8, 2009. Any interested person may present written comments concerning the proposed Code no later than June 8, 2009 to the San Francisco Bay Restoration Authority (Authority), c/o ABAG, 101 8th Street, Oakland, CA 94607 or by telephone at 510.464.7913. No public hearing on this matter will be held unless any interested person or his or her representative requests, no later than fifteen (15) days prior to the close of the written comment period, a public hearing by so notifying Fred Castro, Clerk of the Board at the address or phone number written above.

The Authority has prepared a written explanation of the reasons for the designated positions and the disclosure responsibilities and has available all of the information upon which its proposed Code is based for review, if desired, on request of the Authority, at c/o ABAG, 101 8th Street, Oakland, CA 94607.

Copies of the Authority's proposed Code are available to interested persons by contacting Fred Castro in writing at the Authority, at the address and telephone number written above. All written comments concerning the proposed Code should be submitted directly to Fred Castro at the Authority on or before June 8, 2009.

NOTE: This notice should be filed with the Fair Political Practices Commission and served individually on agency employees and officers affected by this code forty-five (45) days prior to agency action.

CONFLICT-OF-INTEREST CODE FOR THE
SAN FRANCISCO BAY RESTORATION AUTHORITY

The Political Reform Act (Government Code Section 81000, et seq.) requires state and local government agencies to adopt and promulgate conflict-of-interest codes. The Fair Political Practices Commission has adopted a regulation (2 Cal. Code of Regs. Sec. 18730) that contains the terms of a standard conflict-of-interest code, which can be incorporated by reference in an agency's code. After public notice and hearing, the standard code may be amended by the Fair Political Practices Commission to conform to amendments in the Political Reform Act. Therefore, the terms of 2 California Code of Regulations Section 18730 and any amendments to it duly adopted by the Fair Political Practices Commission are hereby incorporated by reference. This regulation and the attached Appendix, designating positions and establishing disclosure categories, shall constitute the conflict-of-interest code of the San Francisco Bay Restoration Authority (Authority).

Individuals holding designated positions shall file their statements of economic interests with the Authority, which will make the statements available for public inspection and reproduction. (Gov. Code Sec. 81008.) All statements will be retained by the Authority.

APPENDIX A [RECOMMENDED VERSION]

<u>Designated Positions</u>	<u>Disclosure Categories</u>
Governing Board	All
Director*	All
Treasurer**	All
Legal Counsel	All
Consultant***	

* This position is held by the Executive Director, ABAG.

** This position is held by the Finance Director, ABAG.

*** Consultants shall be included in the list of designated positions and shall disclose pursuant to the broadest disclosure category in the code subject to the following limitation:

The Director may determine in writing that a particular consultant, although a "designated position," is hired to perform a range of duties that is limited in scope and thus is not required to fully comply with the disclosure requirements in this section. Such written determination shall include a description of the consultant's duties and, based upon that description, a statement of the extent of disclosure requirements. The Director's determination is a public record and shall be retained for public inspection in the same manner and location as this conflict-of-interest code (Gov. Code Section 81008).

San Francisco Bay Restoration Authority

Resolution 2

Resolution authorizing the Notice of Intention to Adopt a Conflict of Interest Code by the San Francisco Bay Restoration Authority

Whereas, the San Francisco Bay Restoration Authority (hereinafter “Authority”) was established by the San Francisco Bay Restoration Authority Act (AB 2954) as a regional entity to generate and allocate resources for the protection and enhancement of tidal wetlands and other wildlife habitat in and surrounding the San Francisco Bay; and

Whereas, pursuant to Government Code Section 66703.1 members of the Authority’s Governing Board (Board) are subject to California’s Political Reform Act of 1974, Government Code Section 81000, *et seq.*, and are required to adopt a Conflict of Interest Code (Code); and

Whereas, pursuant to Section 18750.1(c)(3), every agency which proposes to adopt a conflict of interest code shall prepare a Notice of Intention to Adopt a Conflict of Interest Code opening a 45-day comment period to review the proposed Conflict of Interest Code which is attached hereto as Exhibit A.

Now, Therefore, Be It Resolved that the Governing Board of the San Francisco Bay Restoration Authority hereby authorizes the Notice of Intention to Adopt the Conflict of Interest opening the 45-day comment period to review the proposed Code.

Passed and adopted this 22nd day of April, 2009.

Samuel Schuchat
Chair

Attest:

Frederick Castro
Clerk of the Governing Board



MEMO

To: Governing Board
SFBRA

Fr: Kenneth Moy, Legal Counsel
ABAG

Re: Open Meeting Law

Dt: April 14, 2009

Pursuant to the statute creating the San Francisco Bay Restoration Authority (Authority)¹, meetings of its Governing Board are subject to the Ralph M. Brown Act, one of the State's open meeting laws. This memorandum proceeds from the premise that most members of the Governing Board have a working familiarity with the purpose of the act and public policy that underlies it. The Clerk of the Governing Board will, in consultation with my office, ensure that its meetings are properly noticed, the agendas comply with legal requirements and posted timely and the conduct of the meeting complies with public participation requirements. This can include, to the extent there is interest in doing so, meeting by tele- or video- conferencing.

The most important Brown Act issue for Governing Board members is the requirement that discussions of, and decisions regarding, all matters that come before the Authority occur at a 'meeting'. This has evolved into a legal prohibition against 'serial meetings': a set of actions that enable a majority of the members of the Governing Board to develop concurrence on a course of action to be taken by the Authority outside of a properly noticed and conducted meeting. Two reliable publications discuss serial meetings:

*Open & Public IV: A Guide to the Ralph M. Brown Act*², 2007, League of California Cities at pages 15-18 (attached)

*The Brown Act: Open Meetings for Legislative Bodies*³, 2003, California Attorney General's Office at pages 11-13 (attached)

I will be prepared to discuss 'serial meeting' issues or questions at the meeting.

¹ CA Govt. Code Sec. 66703.6(c)

² The full publication is available at: http://www.cacities.org/resource_files/26038.7456_OP_IV_reduced.pdf

³ The full publication is available at: http://ag.ca.gov/publications/2003_Intro_BrownAct.pdf

Attachment

Open & Public IV: A Guide to the Ralph M. Brown Act

■ RETREATS OR WORKSHOPS OF LEGISLATIVE BODIES

There is consensus among local agency attorneys that gatherings by a majority of legislative body members at the legislative body's retreats, study sessions, or workshops are covered under the Brown Act. This is the case whether the retreat, study session, or workshop focuses on long-range agency planning, discussion of critical local issues, or on team building and group dynamics.⁹

- Q.** The legislative body wants to hold a team-building session to improve relations among its members. May such a session be conducted behind closed doors?
- A.** *No, this is not a proper subject for a closed session, and there is no other basis to exclude the public. Council relations are a matter of public business.*

■ SERIAL MEETINGS

One of the most frequently asked questions about the Brown Act involves serial meetings. Such meetings at any one time involve only a portion of a legislative body, but eventually involve a majority.

The problem with serial meetings is the process, which deprives the public of an opportunity for meaningful participation in legislative body decision-making. Except for teleconferencing discussed below, the Brown Act specifically prohibits "any use of direct communication, personal intermediaries, or technological devices that is employed by a majority of the members of the legislative body to develop a collective concurrence as to action to be taken on an item by the members of the legislative body."¹⁰

The serial meeting may occur by either a "daisy-chain" or a "hub-and-spoke" sequence. In the daisy-chain scenario Member A contacts Member B, Member B contacts Member C, Member C contacts Member D and so on, until a quorum and collective concurrence has been established. The hub-and-spoke process involves, for example, a staff member (the hub) communicating with members of a legislative body (the spokes) one-by-one for a decision on a proposed action,¹¹ or a chief executive officer briefing a majority of redevelopment agency members prior to a formal meeting and, in the process, information about the members' respective views is revealed. Each of these scenarios violates the Brown Act.

A legislative body member has the right, if not the duty, to meet with constituents to address their concerns. That member also has the right to confer with a colleague or appropriate staff about local agency business. However, if several one-on-one meetings or conferences leads to a "collective concurrence as to action to be taken" among a majority, the Brown Act has been violated. In one case, a violation occurred when a quorum of a city council directed staff by letter on an eminent domain action.¹²

On the other hand, a unilateral written communication to the legislative body, such as an informational or advisory memorandum, does not violate the Brown Act.¹³ Such a memo, however, may be a public record.¹⁴

The phone call was from a lobbyist. "Say, I need your vote for that project in the south area. How about it?"

"Well, I don't know," replied Board Member Adams. "That's kind of a sticky proposition. You sure you need my vote?"

"Well, I've got Baker and Charles lined up and another vote leaning. With you I'd be over the top ..."



Practice Tip:

Staff must exercise care not to achieve a collective concurrence by not disclosing the other members' views and positions when briefing legislative body members.

Moments later, the phone rings again. "Hey, I've been hearing some rumbles on that south area project," said the newspaper reporter. "I'm counting noses. How are you voting on it?"

Neither the lobbyist nor the reporter has violated the Brown Act, but they are facilitating a violation. The board member may have violated the Brown Act by hearing about the positions of other board members and indeed coaxing the lobbyist to reveal the other board members' positions by asking "You sure you need my vote?" The prudent course is to avoid such leading conversations and to caution lobbyists, staff and news media against revealing such positions of others.

The mayor sat down across from the city manager. "From now on," he declared, "I want you to provide individual briefings on upcoming agenda items. Some of this material is very technical, and the council members don't want to sound like idiots asking about it in public. Besides that, briefings will speed up the meeting."

A recent case supports the consensus among local agency attorneys that staff briefings of legislative body members are allowed if staff is not used as a conduit for developing collective concurrence on the matter, and if during such briefings staff does not disclose the views and positions of other members.¹⁵ Members should always be vigilant when discussing local agency business with anyone to avoid conversations that could lead to a collective concurrence among the majority of the legislative body.

"Thanks for the information," said Council Member Smith. "These zoning changes can be tricky, and now I think I'm better equipped to make the right decision."

"Glad to be of assistance," replied the planning director. "Any idea what the other council members think of the problem?"

The planning director should not ask, and the member should not answer. A one-on-one meeting that involves a member of a legislative body takes a step toward collective concurrence if either person reveals or discusses the views of other members.

- Q. The agency's web-site includes a chat room where agency employees and officials participate anonymously and often discuss issues of local agency business. Members of the legislative body participate regularly. Does this scenario present a potential for violation of the Brown Act?
- A. Yes, because it is a technological device that may serve to allow for the development of a collective concurrence as to action to be taken.
- Q. A member of a legislative body contacts two other members on a five-member body relative to scheduling a special meeting. Is this an illegal serial meeting?
- A. No, the Brown Act expressly allows this kind of communication, though the members should avoid discussing the merits of what is to be taken up at the meeting.

Particular care should be exercised when staff briefings of legislative body members occur by email because of the ease of using the "reply to all" button that may inadvertently result in a Brown Act violation.

■ INFORMAL GATHERINGS

Often members are tempted to mix business with pleasure—for example, by holding a post meeting gathering. Informal gatherings at which local agency business is discussed or transacted violate the law if they are not conducted in conformance with the Brown Act.¹⁶ A luncheon gathering in a crowded dining room violates the Brown Act if the public does not have an adequate opportunity to hear or participate in the deliberations of members.

Thursday, 11:30 a.m. As they did every week, the board of directors of Dry Gulch Irrigation District trooped into Pop's Donut Shoppe for an hour of talk and fellowship. They sat at the corner window, fronting on Main and Broadway, to show they had nothing to hide. Whenever he could, the managing editor of the weekly newspaper down the street hurried over to join the board.

A gathering like this would not violate the Brown Act if board members scrupulously avoided talking about irrigation district issues. But it is the kind of situation that should be avoided. The public is unlikely to believe the board members could meet regularly without discussing public business. A newspaper executive's presence in no way lessens the potential for a violation of the Brown Act.

- Q. The agency has won a major victory in the Supreme Court on an issue of importance. The presiding officer decides to hold an impromptu press conference in order to make a statement to the print and broadcast media. All the other members show up in order to make statements of their own and be seen by the media. Is this gathering illegal?
- A. *Technically there is no exception for this sort of gathering, but as long as members do not state their intentions as to future action to be taken and the press conference is open to the public, it seems harmless.*

■ TECHNOLOGICAL CONFERENCING

In an effort to keep up with information age technologies, the Brown Act now specifically allows a legislative body to use any type of teleconferencing to meet, receive public comment and testimony, deliberate, or conduct a closed session.¹⁷

"Teleconference" is defined as "a meeting of a legislative body, the members of which are in different locations, connected by electronic means, through either audio or video, or both."¹⁸ In addition to the specific requirements relating to teleconferencing, the meeting must comply with all provisions of the Brown Act otherwise applicable. The Brown Act contains the following specific requirements:¹⁹

- Teleconferencing may be used for all purposes during any meeting.
- At least a quorum of the legislative body must participate from locations within the local agency's jurisdiction (except health authorities may count members located outside of their jurisdiction for up to 50% of the quorum as long as the notice and agenda for the meeting include the teleconference number and access code).
- Additional teleconference locations may be made available for the public.



Practice Tip:

Before teleconferencing a meeting, legal counsel for the local agency should be consulted.

- Each teleconference location must be specifically identified in the notice and agenda of the meeting, including a full address and room number, as may be applicable.
- Agendas must be posted at each teleconference location, even if a hotel room or a residence.
- Each teleconference location must be accessible to the public and have technology, such as a speakerphone, to enable the public to participate.
- The agenda must provide the opportunity for the public to address the legislative body directly at each teleconference location.
- All votes must be by roll call.

- Q.** A member on vacation desires to participate in a meeting of the legislative body and vote by cellular phone from her car while driving from Washington, D.C. to New York. May she?
- A.** *She may not participate or vote because she is not in a noticed and posted teleconference location.*

The use of teleconferencing to conduct a legislative body meeting presents a variety of new issues beyond the scope of this guide to discuss in detail. Therefore, before teleconferencing a meeting, legal counsel for the local agency should be consulted.

■ LOCATION OF MEETINGS

The Brown Act generally requires all regular and special meetings of a legislative body, including retreats and workshops, to be held within the boundaries of the territory over which the local agency exercises jurisdiction.²⁰

An open and publicized meeting of a legislative body may be held outside of agency boundaries if the purpose of the meeting is to:

- Comply with state or federal law or a court order, or for a judicial conference or administrative proceeding in which the local agency is a party.
- Inspect real or personal property, which cannot be conveniently brought into the local agency's territory, provided the meeting is limited to items relating to that real or personal property.

- Q.** The agency is considering approving a major retail mall. The developer has built other similar malls, and invites the entire legislative body to visit a mall outside the jurisdiction. May the entire body go?
- A.** *Yes, the Brown Act permits meetings outside the boundaries of the agency for specified reasons and inspection of property is one such reason. The field trip must be treated as a meeting and the public must be able to attend.*

- Participate in multiagency meetings or discussions, however, such meetings must be held within the boundaries of one of the participating agencies, and all involved agencies must give proper notice.
- Meet in the closest meeting facility if the local agency has no meeting facility within its boundaries or at its principal office if that office is located outside the territory over which the agency has jurisdiction.

Attachment

The Brown Act: Open Meetings for Legislative Bodies

committee by testifying, asking questions or providing information. In addition, the opinion concluded that observers could not sit at the dias.

D. Social or Ceremonial Occasions

Attendance by a majority of the members of the legislative body at a purely social or ceremonial occasion is not deemed to be a meeting, so long as the members do not discuss among themselves specific business within the jurisdiction of the body. (§ 54952.2(c)(5).) This has long been the law in California. (*Sacramento Newspaper Guild v. Sacramento County Bd. of Suprs.* (1968) 263 Cal.App.2d 41; 43 Ops.Cal.Atty.Gen. 36, 38 (1964).) In practice, this prohibition may sometimes be difficult to observe since persons attending social or ceremonial occasions frequently wish to discuss specific issues with their governmental officials. However, where a majority of a legislative body is present, the members must not discuss specific business within the jurisdiction of the body to avoid violating the Act.

2. Serial Meetings

The issue of serial meetings stands at the vortex of two significant public policies: first, the constitutional right of citizens to address grievances and communicate with their elected representatives; and second, the Act's policy favoring public deliberation by multi-member boards, commissions and councils. The purpose of the serial meeting prohibition is not to prevent citizens from communicating with their elected representatives, but rather to prevent public bodies from circumventing the requirement for open and public deliberation of issues.

The Act expressly prohibits serial meetings that are conducted through direct communications, personal intermediaries or technological devices for the purpose of developing a concurrence as to action to be taken. (§ 54952.2(b); *Stockton Newspapers, Inc. v. Redevelopment Agency* (1985) 171 Cal.App.3d 95, 103.) This provision raises two questions: first, what is a serial meeting for purposes of this definition; and second, what does it mean to develop a concurrence as to action to be taken.

Typically, a serial meeting is a series of communications, each of which involves less than a quorum of the legislative body, but which taken as a whole involves a majority of the body's members. For example, a chain of communications involving contact from member A to member B who then communicates with member C would constitute a serial meeting in the case of a five-person body. Similarly, when a person acts as the hub of a wheel (member A) and communicates individually with the various spokes (members B and C), a serial meeting has occurred. In addition, a serial meeting occurs when intermediaries for board members have a meeting to discuss issues. For example, when a representative of member A meets with representatives of members B and C to discuss an agenda item, the members have conducted a serial meeting through their representatives as intermediaries. The statutory definition also applies to situations in which technological devices are used to connect people at the same time

who are in different locations (but see the discussion below concerning the exception for teleconference meetings).

Once serial communications are found to exist, it must be determined whether the communications were used to develop a concurrence as to action to be taken. If the serial communications were not used to develop a concurrence as to action to be taken, the serial communications do not constitute a meeting and the Act is not applicable. In construing these terms, one should be mindful of the ultimate purposes of the Act -- to provide the public with an opportunity to monitor and participate in the decision-making processes of boards and commissions. As such, substantive conversations among members concerning an agenda item prior to a public meeting probably would be viewed as contributing to the development of a concurrence as to the ultimate action to be taken. Conversations which advance or clarify a member's understanding of an issue, or facilitate an agreement or compromise among members, or advance the ultimate resolution of an issue, are all examples of communications which contribute to the development of a concurrence as to action to be taken by the legislative body. Accordingly, with respect to items that have been placed on an agenda or that are likely to be placed upon an agenda, members of legislative bodies should avoid serial communications of a substantive nature concerning such items.

Problems arise when systematic communications begin to occur which involve members of the board acquiring substantive information for an upcoming meeting or engaging in debate, discussion, lobbying or any other aspect of the deliberative process either among themselves or with staff. For example, executive officers may wish to brief their members on policy decisions and background events concerning proposed agenda items. This office believes that a court could determine that such communications violate the Act, because such discussions are part of the deliberative process. If these communications are permitted to occur in private, a large part of the process by which members reach their decisions may have occurred outside the public eye. Under these circumstances, the public would be able only to witness a shorthand version of the deliberative process, and its ability to monitor and contribute to the decision-making process would be curtailed. Therefore, we recommend that when the executive director is faced with this situation, he or she prepare a memorandum outlining the issues for all of the members of the board as well as the public. In this way, the serial meeting violation may be avoided and everyone will have the benefit of reacting to the same information.

However, this office does not think that the prohibition against serial meetings would prevent an executive officer from planning upcoming meetings by discussing times, dates, and placement of matters on the agenda. It also appears that an executive officer may receive spontaneous input from any of the board members with respect to these or other matters so long as a quorum is not involved.

The express language of the statute concerning serial meetings largely codifies case law developed by the courts and the opinions issued by this office in the past. In *Frazer v. Dixon Unified School District* (1993) 18 Cal.App.4th 781, 796-798, the court concluded that the Act applies equally to the deliberations of a body and its decision to take action. If a collective commitment were a necessary component of every meeting, the body could conduct most or all of its deliberation behind closed doors so long as the body did not actually reach agreement prior to consideration in public session. Accordingly, the court concluded that the collective acquisition of information constituted a meeting. The court cited briefing sessions as examples of deliberative meetings which are subject to the Act's requirements, and contrasted these sessions with activities that fall outside the purview of the Act, such as the passive receipt of an individual's mail or the solitary review of a memorandum by an individual board member.

In *Stockton Newspapers, Inc. v. Redevelopment Agency* (1985) 171 Cal.App.3d 95, 105, the court concluded that a series of individual telephone calls between the agency attorney and the members of the body constituted a meeting. In that case, the attorney individually polled the members of the body for their approval on a real estate transaction. The court concluded that even though the meeting was conducted in a serial fashion, it nevertheless was a meeting for the purposes of the Act. (See also, 65 Ops.Cal.Atty.Gen. 63, 66 (1982); 63 Ops.Cal.Atty.Gen. 820, 828-829 (1980).)

3. Individual Contacts Between Members of the Public and Board Members

The prohibition against serial meetings must be reconciled with the exemption for individual contacts and communications contained in section 54952.2(c)(1). Individual contacts or communications between a member of a legislative body and any other person are specifically exempt from the definition of a meeting. (§ 54952.2(c)(1).) The purpose of this exception appears to be to protect the constitutional rights of individuals to contact their government representatives regarding issues which concern them. To harmonize this exemption with the serial meeting prohibition, the term "any other person" is construed to mean any person other than a board member or agency employee. Thus, while this provision exempts from the Act's coverage conversations between board members and members of the public, it does not exempt conversations among board members, or between board members and their staff.

By using the words "individual contacts or conversations" it appears that the Legislature was attempting to ensure that individual contacts would not be defined as a meeting, while still preventing the members of a body from orchestrating contacts between a private party and a quorum of the body. Accordingly, if a member of the public requests a conversation with an individual member of the board, who then acts independently of the board and its other members in deciding whether to talk with the member of the public, no meeting will have occurred even if the member of the public ultimately meets with a quorum of the body.