

# ESTUARY



## ESTUARY

YOUR BAY - DELTA NEWS CLEARINGHOUSE

### BITS & BYTES

**ENVIRONMENTALISTS GOT LUCKY** when a federal appeals court ruled in their favor over a lawsuit against Unocal concerning their selenium discharges this spring. The judges ruled that the enviro's lawsuit could proceed because the \$780,000 the company agreed to pay as part of the 1994 settlement (see "Refineries") was not an actual "penalty" that would have precluded a private suit in the selenium matter.

**A NATIONAL INVASIVE SPECIES ACT** was introduced in Congress on March 29, 1996 (S1660/HR3217). The bill features voluntary national guidelines for ballast water exchange at high sea, as well as record-keeping to establish compliance. Such issues were also aired before a national audience at an educational forum on ballast exchange and non-native species held on June 17 by the S.F. Estuary Project.

**HOW TO BAND BIRDS, MAP GEOGRAPHY AND MONITOR WATER QUALITY** were skills participants in the Third Bay Area Volunteer Monitoring Conference learned during three field trips to local creeks. Over 125 would-be and experienced volunteer monitors and program managers attended the May 10-12 conference. In addition to the hands-on field trips, the event — coordinated by the S. F. Estuary Institute and Friends of San Leandro Creek — featured sessions on the student monitoring, data management and the role of volunteer monitoring programs in watershed management.

**SCHOOLCHILDREN WAVED BANNERS WRITTEN IN JAPANESE** off the shores of the South Bay's Bair Island on June 1, banners begging a developer to help the wetlands. It was the latest effort by environmental groups to turn up the heat on Kumagai Gumi Construction of Tokyo which has rebuffed attempts to add the island to the San Francisco Bay National Wildlife Refuge. The 1,700 acre diked Bair Island, which is actually three separate islands, is part of Redwood City, where it is zoned tidal, a city official says.

## Refineries Research Selenium Removal

Unocal, Shell, and Exxon are taking three different paths toward what hopefully will be a common destination — a significant reduction of selenium flowing from their refineries into the Bay.

Under terms of an out of court settlement with state regulators, the three oil companies agreed to reduce selenium discharge levels to 50 ppb by July 1998. The type of selenium — called selenite — discharged by the North Bay oil industry bioaccumulates in the food chain four times faster than the stuff coming downriver from the selenium-rich soils in agricultural areas upstream. But at the time of the settlement, no technology existed that would allow the oil companies to reach the reduction goal.

The refineries (along with three others that were already in compliance) undertook a joint study to identify potential selenium reduction methods. That study was completed last summer, and the three are now engaged in separate pilot testing programs.

Each refinery is using a proprietary approach it believes best fits its own circumstances. Exxon is developing a "reverse osmosis" technology, removing the selenium with a membrane filter, then feeding the waste products into a fluid coker. This bonds the selenium with coke, which then can hopefully be used as a fuel.

Unocal is testing an "ion exchange" method, circulating contaminated wastewater through a column packed with resin. As water flows through the column, selenium ions replace chloride ions on the outside of the resin beads. The refinery estimates that the process will generate 500-600 pounds of solid waste a day, which would contain about five pounds of actual selenium. Unocal engineer Marjorie Hatter says that the fact the process "is real specific to selenium," doesn't need wastewater ponds, and produces relatively small amount of

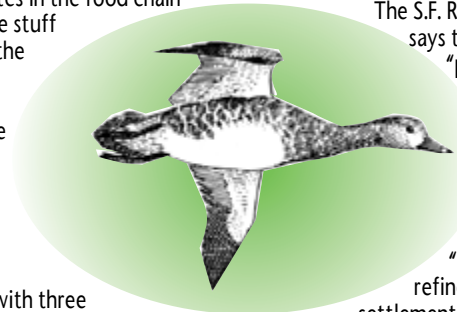
solid waste make it especially suitable for the Rodeo refinery.

Shell is redesigning its refinery in order to meet the state's clean fuels guidelines, and is pilot testing new wastewater treatment systems. It is also testing an iron coprecipitation-based control measure, in which iron particles bond with the selenium. The sludge, which contains selenium by products, is then treated as a hazardous waste product.

The S.F. Regional Board's Kim Taylor says the new technologies look "promising," although there are "still bugs to be worked out." Once the pilot tests are completed, the refineries will design and build full scale systems.

Taylor says the Board is "satisfied that all three refineries are complying" with the settlement, but environmentalists aren't so sure. They want board members to impose specific timelines for completion of the pilot tests and implementation of the new processes. They point out that high selenium levels have been found in Bay seals, birds and fish, and they fear that the substance could cause genetic and reproductive problems like those found in waterfowl living in the polluted Kesterson Refuge. "We believe that some assurances are needed," says BayKeeper's Mike Lozeau.

Contact: Kim Taylor (510)286-3821  
O'B



# CALFED BRIEF

## DEMANDING DEMAND MANAGEMENT

Brown lawns and abbreviated showers are facts of life for Californians during drought-time. Industry and agriculture, as well, tighten their belts when the reservoirs run dry. After the rain returns, however, water use habits often rebound to their high, pre-drought levels. The question which Californians now face is whether they will meet the increasing water needs of their fast-growing state through drought-style demand management — i.e. the reduction of demand through greater water conservation and efficiency — or by building new dams, reservoirs and canals.

The CALFED Bay-Delta process, now in the stage of narrowing long-term "options" for meeting increasing water needs while restoring the Estuary's health, is grappling with this contentious debate by developing a common program for demand management within each of its ten current options. CALFED's Bay-Delta Advisory Council (a public advisory group) has established a work group whose goal is to determine which water efficiency measures should be recommended and how they can best be implemented. According to chairperson Judith Redmond, the work group will concentrate on broad policy questions rather than getting stuck in the specifics of how much water will be reduced where.

CALFED's Rick Soehren says the work group is considering a flexible approach that allows local districts to "put together the best mix of water supply, water conservation, and water recycling for their service areas given regional conditions and changes in the water supply picture based on the outcome of the CALFED process." While receiving the strong support of local water districts, this flexible approach concerns the environmental coalition which fears some districts would leave water use efficiency out of the picture. Soehren agrees that regulatory and financial incentives will be necessary to ensure that adequate measures are implemented.

The Westlands Water District is one agricultural water district that has set an extremely positive precedent for local districts' ability to achieve significant water use efficiency. In the wake of the recent five-year drought, the district invested heavily in water-saving equipment and improved farm management practices achieving a per acre water use reduction of over 10% by 1992. The District's Tracy Slavin says other districts have had similar successes that are "just not as widely published." During the drought, Slavin explains, many districts experienced such reduced water

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# BULLETIN BOARD



**THE SACRAMENTO RIVER IS TOXIC 50% OF THE TIME** to bioassay test species, often exceeds water quality criteria for pesticides, copper, lead and mercury, yet supplies 80% of the Estuary's freshwater. These are three major reasons why the Central Valley Regional Board has deemed the river basin a priority watershed worthy of a combined new watershed management and toxic pollutant control effort. The pollutant component will implement basinwide water quality monitoring, develop site-specific water quality standards for the river (where appropriate), evaluate pollutant control options for point and nonpoint sources, and develop a program to meet any new standards. It will also serve as the water quality component of the board's new Sacramento River Watershed Program, which seeks to integrate all pollution control and natural resource stewardship programs on a watershed scale. "The metal problem starts at the top of the watershed with the Shasta mines and reaches all the way down to copper inputs to the South Bay," says the Board's Val Connor. "If you really want to address the problem you have to deal with the whole 26,000 square mile river watershed." Connor is now seeking participants for a stakeholder group of farmers, dischargers, water users, miners, fisherpeople, nature lovers and the like. (916)255-3111

**AN OLD DINNER-DELICACY — THE CALIFORNIA RED-LEGGED FROG** — recently leapt onto the threatened species list. The decision marked the first federal listing under the Endangered Species Act in over a year, ending a moratorium on all federal listing activities enacted by Congress in April 1995. The frog, which dwells in small, coastal wetlands and freshwater streams from Marin County down to Ventura, has suffered from habitat loss, stream sedimentation and exotic predators such as the bullfrog. U.S. Fish & Wildlife's Karen Miller expects the listing to provide greater leverage in denying frog-threatening habitat alterations. (916)979-2710

MB

**OFFICIALS ARE WRAPPING UP TWO RECOVERY PLANS** for fish in follow-up to the 1993 listing of Delta smelt and 1990 listing of winter-run Chinook salmon as endangered species. The smelt joined a suite of six other native Delta fish in one of the new-style ecosystem-based, rather than single species based,

recovery plans U.S. Fish & Wildlife has embraced since 1994. The *Final Delta Native Fishes Recovery Plan* was completed this June. Meanwhile, *Draft Recommendations for Recovery of Sacramento River Winter-Run Chinook Salmon* were completed in March 1996 and are now being reviewed by agencies before release for public comment. Salmon recovery is also pushed in the March 1996 draft *Anadromous Fish Restoration Plan*. This 176-action plan — created to meet the Central Valley Project Improvement Act goal of doubling anadromous fish populations — is due for finalization this summer. (310)980-4021 (salmon); (916)979-2752 (Delta fishes); (209)946-6400 (AFRP) ARO

"**A THREAT TO THE TRUCE,**" is what one environmentalist called a deal proposed by San Joaquin valley agricultural water districts and big city water users to the State Water Board this spring. The deal would decrease minimum San Joaquin river pulse flows at Vernalis set under the Bay-Delta Accord to protect fall-run salmon and Delta smelt — a minimum the dealmakers agreed to when they signed onto the accord along with government and environmental interests in 1994. The deal proposes a flow reduction from 3000-8000 cfs over 30 days during the critical fall-run migration period to 2000-5000 cfs, flows that U.S. Fish & Wildlife's Marty Kjelson says aren't anywhere near enough to meet federal and state goals of doubling anadromous fish. Also irking environmentalists is a January filing by the City of San Francisco, also an original accord signer, in support of a lawsuit brought by the San Joaquin group last year which challenges the scientific backing of Vernalis flows. In the meantime, the San Joaquin group argues that their proposal is entirely consistent with the spirit of the accord and would even increase the level of environmental protection for San Joaquin River salmon. FH



## INSIDE THE AGENCIES

### LUKEWARM HOT SPOTS

Environmentalists vowed this May to fight to stop the State Water Board from scaling back its Bay Protection and Toxic Cleanup Program from a toxic hot spots ranking and clean-up program to a hot spot identification and monitoring program.

"Monitoring isn't good enough," says environmentalist Alvin Greenberg, who sits on the program's public advisory committee. "The program cries out for full implementation as our legislators first envisioned it."

Since the legislature created it in 1989, the program has failed to fulfill many of its mandates and meet its deadlines at the state level. It has still not produced an agreed-upon set of sediment quality objectives or ranking criteria for defining and prioritizing hot spots for clean up.

Criticisms of the program abound. Some accuse it of spending too much money on staff salaries and research and not enough on clean up. Others say the program and its advisory committee spent too much time bickering over how to characterize hot spots and assess relative risks. Fingers have been pointed in all directions — at dischargers on the committee for stalling agreement on the science, at the Governor for lack of interest in moving the program ahead, at environmentalists for being unwilling to compromise, at the State Board for program mismanagement.

"A charge was levied to investigate a problem and not a lot has been done," says Charles Batts of the Bay Area Dischargers Association. Fees on dischargers fund the program, but the shortfalls between projected and actual revenues have been a major problem. According to the Board's Gita Kapahi, "The law still requires us to do 100% of the program, but we only have 50% of the money."

"Both business and environmentalists agree we want to clean up hot spots," says the Bay Planning Coalition's Ellen Johnck, who also sits on the program's advisory committee. "The real crunch is how to do it in a cost effective way relative to the degree of environmental risk." Cost effective, at this point, seems to mean scaling back to a monitoring only program.

But environmentalists aren't planning to give in easy. Save the Bay, Greenberg and others want to strengthen not weaken the state's program. To do this, they say they may need to extend the January 1999 end date, find

new program funds, and get more citizens onto the advisory committee. Funds could come from adding agriculture to the group of "dischargers" assessed fees.

One obstacle, disagreement over the state of the science, had a breakthrough this May. Though dischargers claimed the science was too cutting edge to go with at a November State Board hearing, a panel of well-known scientists endorsed the program's scientific approach and studies this May, according to Kapahi.

At the regional level, the S.F. Board is already using the science they've developed under the program to guide hot spot screening and clean up. Indeed the S.F. Board's Karen Taberski says she's tired of hearing so many criticisms when her region's program has made so much progress — providing seed money for the now successful Regional Monitoring Program, completing the first study of contaminants in Bay fish, identifying five reliable reference sites for ambient Bay conditions (cleanest we can expect), selecting a preferred combination of five toxicity tests for anyone sampling sediments, developing a statistical method and using it to screen over 100 potential toxic hot spots and develop clean up priorities. Taberski says her region's Bay Protection effort has also been instrumental in coordinating sediment guidance for the clean up of numerous Department of Defense sites and other "hot spots" and cites the Central Valley Regional Board's work to pinpoint sources of pesticide toxicity in water and mercury accumulation in fish.

"Both regional boards have been busting themselves to identify sources of toxicity and place control measures on those sources," she says. "Our region has hit everything the Bay Protection legislation requires."

But where one region makes progress another does nothing, says Greenberg. "We still need some statewide accountability," he says. *ARO & EC*

## BUSINESS WISE

### TRIMMING PORT PLANS

How much more land will Bay ports need in 25 years to accommodate projected growth? Not as much as they once thought, says the S.F. Bay Commission.

On April 18, the commission officially revised its *Seaport Plan*, reducing the amount of property set aside, or "landbanked," for future port use, from 11,000 to just under 3,000 acres, even though the amount of cargo coming into the Bay is expected to increase from 16.5 million to over 43 million metric tons between 1995 and 2020. The Commission's Will Travis says the lesser amount of land will be adequate because newer technology allows ports to put "more cargo through less space faster."

The move was generally applauded by local government and property owners, who want to free up more prime shoreline acreage for other types of development. Alameda officials objected to the Commission's retaining 220 acres of the city's soon to be closed navy base, fearing it would interfere with their plans to convert the property to civilian use. But Travis points out that the Commission lifted the port designation from nearly 90% of the Alameda base and added more flexible language to the final plan which could free up the remaining 10% in the future.

Redwood City industries, worried that office and commercial development could disrupt access to their facilities, opposed the removal 106 acres in their area from the port plan. BCDC overruled their objections, however, saying the land won't be needed for



future port use.

"The Commission did a quality job," says the Port of Oakland's Jim McGrath. Contact: S.F. Bay Commission (415)557-3686  
*OB*





# RE-HAB



## A THREE-YEAR SCORECARD

Wetlands Acquired and Restored in S.F. Bay-Delta Estuary Since 1993

### MAJOR ACQUISITIONS: 26,470 ACRES (of current wetland areas or areas to be restored to wetlands)

#### SOUTH BAY

- Baumberg Tract, 835 acres, Wildlife Conservation Board
- Don Edwards S.F. Bay Nat'l Wildlife Refuge, 2,746 acres, U.S. Fish & Wildlife
- Mayhews Landing, 108 acres, U.S. Fish & Wildlife
- Oliver Property, 155 acres, Hayward Area Recreation & Park District

#### NORTH BAY

- Cargill Salt Ponds -- Napa River Unit, 9,850 acres, Wildlife Conservation Board
- Napa-Sonoma Marshes Wildlife Area, 120 acres, Wildlife Conservation Board
- Shell Marsh, 60 acres, East Bay Reg. Parks
- Tolay Creek, 53 acres, Wildlife Conservation Board

#### DELTA

- Grizzly Slough Property, 500 acres, Dept of Water Resources
- Palm Tract, 1,213 acres, Cal Fish & Game
- Prospect Island, 1,200 acres, BurRec/Trust for Public Land
- Sherman Island, 6,400 acres, Water Resources
- Stone Lakes National Wildlife Refuge, 830 acres, U.S. Fish & Wildlife
- Twitchell Island, 2,400 acres, Water Resources

### COMPLETED RESTORATION ENHANCEMENT PROJECTS: 9,544 ACRES

#### SOUTH BAY

- New Chicago Marsh, Don Edwards S.F. Nat'l Wildlife Refuge, 340 acres, U.S. Fish & Wildlife
- San Leandro Shoreline Marsh, 172 acres, San Leandro
- Warm Springs Mouse Pasture, 25 acres, Don Edwards S.F. Nat'l Wildlife Refuge

#### NORTH BAY

- Cargill Salt Ponds--Napa River Unit, Pond 2A, 550 acres, Cal Fish & Game
- JFK Memorial Marsh, 20 acres, Napa
- Petaluma River Marsh, 55 acres, Sonoma Land Trust
- Sonoma Baylands, 37 acres, Coastal Conservancy



#### DELTA

- Ducks Unlimited -- 18 enhancement projects throughout the Delta, approx. 7000 acres
- Medford Island, 1,215 acres, private consortium
- Palm Tract, 130 acres, Cal Fish & Game

### IN-PROGRESS RESTORATION ENHANCEMENT PROJECTS: 18,828 ACRES

#### SOUTH BAY

- Cooley Landing Salt Pond, 128 acres, Mid-Peninsula Open Space District
- Charleston Slough, 150 acres, Mountain View
- Coyote Hills Enhancement, 1,021 acres, East Bay Regional Park District
- Knapp parcel--Don Edwards S.F. Bay Nat'l Wildlife Refuge, 400 acres, U.S. Fish & Wildlife
- Mosley Tract, 53 acres, San Jose
- Oliver Property, 155 acres, Hayward Area Recreation & Park District
- Oro Loma Marsh, 357 acres, East Bay Regional Parks

#### NORTH BAY

- Cargill Salt Ponds--Napa River Unit, 7,000 acres, Cal Fish & Game
- Cullinan Ranch--San Pablo Bay Nat'l Wildlife Refuge, 1,493 acres, U.S. Fish & Wildlife
- Hamilton Runway/Antennae Field, 930 acres, Coastal Conservancy
- Leonard Ranch, 520 acres, Sonoma Land Trust/Coastal Conservancy
- Petaluma Marsh--Burdell Unit, 640 acres, Cal Fish & Game
- Peyton Slough, 550 acres, Contra Costa Mosquito District/Cal Fish & Game/East Bay Regional Parks/Shell Trustees
- Point Edith Enhancement, 411 acres, Contra Costa Mosquito Abatement District
- Scottsdale Pond, 50 acres, Novato
- Sonoma Baylands, 285 acres, Costl. Conserv.
- Suisun Sand Company, 35 acres, East Bay Regional Parks
- Tolay Creek Est. Restoration Project, 433 acres, U.S. Fish & Wildlife/Cal Fish & Game
- Union City Marsh, 250 acres, Alameda Flood Control/S.F. Bay Joint Venture

#### DELTA

- Cosumnes River Watershed, 1,100 acres, Nature Conservancy/Partners for Wildlife
- Rush Ranch, 130 acres, Solano County Farmlands & Open Space District
- Yolo Basin Wetlands, 2,341 acres, Army Corps/Cal Fish & Game/Ducks Unlimited
- Yolo Basin Wetlands - Davis site, 396 acres, Army Corps/City of Davis

# CCMP BRIEF

## MUDDY WETLANDS PROGRESS

Stronger planning, improved regulation and increased acquisition and restoration are the main thrust of 12 wetland management actions called for in the S.F. Estuary Project's 1993 *Comprehensive Conservation and Management Plan* (CCMP). A new review of CCMP Implementation Progress suggests that since the plan's creation, little progress has been made toward a centerpiece action — creating a comprehensive, Estuarywide wetlands management plan — but essential elements of the planning process are moving ahead.

One element — the setting of goals for what types of wetlands are necessary where and in what quantities to maintain the ecosystem's health — is finally making headway after three years of false starts. This biological foundation for the regional wetlands management plan, known as the "ecosystem goals project," is due for completion by spring 1997. Another key planning element, the creation of geographically-focused, cooperative efforts to protect wetlands, has seen a substantial flowering in the North Bay (see opposite).

Although the political climate has shifted considerably since the CCMP called for stronger and smoother state wetlands protection policies and programs, both the state and the region have adopted no net loss policies since 1993, and a trial project for state assumption of federal 404 permitting is finally freeing itself from years of bureaucratic muckitymuck. But the CCMP's strong vision for improving the wetland regulatory system is far from realized.

CCMP actions calling for wetland acquisition and restoration efforts, while hampered by financial scarcity, made strides (see scorecard, corrections welcome) and necessity — the mother of improvisation — led to increased partnerships with private landowners to create conservation easements and habitat-improving land management practices. A rough accounting indicates that over 26,000 acres of wetlands have been acquired and over 28,000 restored (completed or in-progress) since 1993. Future acquisition and restoration efforts should be strengthened by the 1995 creation of the S.F. Bay Joint Venture (see opposite). For a copy of the new CCMP progress review, available July 10, call (510)286-0780.

ARO & MB



# COOPERATIVE EFFORTS

# Wetlands

## TO PROTECT AND RESTORE THE WETLANDS OF SAN FRANCISCO BAY

Wetlands and riparian habitat play a vital role in maintaining a healthy ecosystem because of their function in buffering the impact of floodwaters, cleansing pollutants from runoff, recharging overdrawn water supplies and providing critical habitat for waterfowl and hundreds of fish and wildlife species, not to mention many endangered flora and fauna. Shoreline and streamside wetlands also provide recreational opportunities and benefits to Bay Area residents and visitors. The tremendous loss of wetlands habitat throughout the San Francisco Bay-Delta region has resulted in substantial regulatory protections, as well as numerous cooperative initiatives to further enhance wetlands on a regional scale. The purpose of this fact sheet is to give an overview of the region's six major cooperative initiatives, highlight how they interact with and complement one another, and describe opportunities for public involvement.

### Six Regional Efforts

There are six major wetlands protection and enhancement efforts in the S.F. Bay-Delta region, three with a regionwide focus and three with a North Bay focus. The North Bay focus has evolved because government, activists and scientists all agree that the North Bay rim — with its over 40,000 acres of historic but now diked tidal wetlands — offers the most promising opportunity for large scale wetland restoration in the greater Bay Area.

Each of the six initiatives implements the following important state and regional wetlands policies and plans:

- ™ **California Wetlands Conservation Policy**, adopted by the Governor of California on August 23, 1993. The goals of this policy include ensuring no overall net loss and a long-term net gain in the quantity, quality, and permanence of wetlands; reducing procedural complexity in the administration of wetlands conservation programs; and encouraging partnerships and landowner incentives as a means to improve wetlands protection.
- ™ **Comprehensive Conservation and Management Plan** for the Bay and Delta (CCMP), a consensus plan developed by 100 public and private interests and signed by the governor of California and the administrator of the U.S. Environmental Protection Agency in 1993 (see inside). The CCMP features 147 actions designed to protect and restore the S.F. Estuary, including the creation of wetland ecosystem goals and a regional wetlands management plan, and the establishment of geographically-focused cooperative efforts to protect wetlands.

Other things these six efforts have in common:

- ™ Multi-party approach — all involve some kind of cooperative, public-private, partnership style approach rather than the more conventional single agency or group initiative.
- ™ Fill gaps in existing wetland management or regulatory programs.
- ™ Larger scope than a single wildlife refuge or shoreline park.

Representatives from all six efforts meet at least twice a year to improve coordination.

## REGIONWIDE SCOPE

### S.F. Estuary Project CCMP

Existing consensus on how wetlands should be protected, regulated and restored throughout the S.F. Bay-Delta Estuary region.

### S.F. Bay Area Wetlands Ecosystem Goals Project

Science-based effort to identify the types, amounts, and distribution of wetlands and related habitats needed to sustain diverse and healthy wetland plant and animal communities in the San Francisco Bay Area.

### San Francisco Bay Joint Venture

Effort to complete on-the-ground projects involving the acquisition, enhancement or protection of wetlands by leveraging existing public and private resources, developing new funding sources and creating public-private partnerships.

## NORTH BAY SCOPE

### North Bay Forum

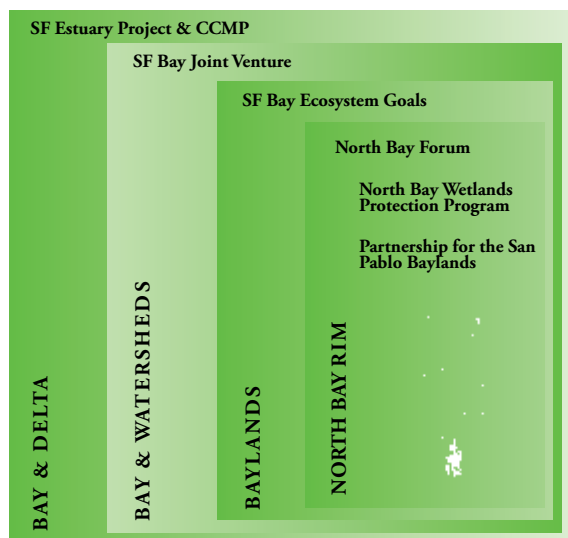
U.S. Environmental Protection Agency effort to coordinate the North Bay wetland and watershed resource management and regulatory activities of 12 government agencies — troubleshooting regulatory conflicts, streamlining wetland permit reviews, and helping landowners and local government solve problems.

### North Bay Wetlands Protection Program

S.F. Bay Conservation and Development Commission work with local government to develop a comprehensive North Bay Wetland Protection Plan to guide land use decisionmaking.

### Partnership for the San Pablo Baylands

Save San Francisco Bay Association effort to develop a non-regulatory wetland restoration, enhancement and management plan for the North Bay — primarily for private landowners — and to promote grassroots support for protection of the San Pablo baylands.



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## SAN FRANCISCO ESTUARY PROJECT

### Major Focus

Promoting existing consensus on how wetlands should be protected, regulated and restored throughout the S.F. Bay-Delta Estuary region.

### Products

*Comprehensive Conservation and Management Plan* for the Bay and Delta (completed 1993)  
*Regional Wetlands Management Plan* for the Bay and Delta (ongoing)

### Geographic Scope

The 12-county region of the San Francisco Bay/ Sacramento-San Joaquin River Delta Estuary.

### Overview

In response to the growing public concern over the decline in the nation's estuaries, the United States Congress created the National Estuary Program and established the San Francisco Estuary Project (SFEP). After a concerted collaborative effort of over 100 participants representing a wide variety of public and private interests, the SFEP produced the *Comprehensive Conservation and Management Plan* (CCMP) for the San Francisco Estuary in June 1993.

The CCMP is the only existing, consensus based, coordinated and comprehensive strategy to protect the San Francisco Bay-Delta Estuary. It lays out almost 150 actions related to dredging, land use, pollution, water use, fish, wildlife and wetlands.

For wetlands, CCMP developers agreed on twelve major actions including the creation of a *Regional Wetlands Management Plan*. According to the CCMP, this plan would describe regulatory and non-regulatory approaches to wetlands protection and consist of measures to: improve the wetland regulatory system; protect existing wetlands using the current, new and expanded programs of wetland acquisition, easement agreements and cooperative management systems; and expand the wetland resource base by restoring, enhancing and creating wetlands.

### Opportunities for Involvement

Three geographically-based subcommittees — North Bay, South Bay and Delta — meet regularly to facilitate the CCMP's implementation. Subcommittee meetings open to the public. Copies of the CCMP are available for review.

### Participants

**Bay Area Leads:** Association of Bay Area Governments, S.F. Bay Regional Water Quality Control Board and S.F. Estuary Project.

**Others:** CCMP signed by 12 federal and state government agencies, and 30 municipalities, environmentalists, business groups, boaters, fisherpeople, farmers and water users.

### Contact

Marcia Brockbank, S.F. Estuary Project, (510) 286-0780



Common Tule

## S.F. BAY AREA WETLANDS ECOSYSTEM GOALS PROJECT

### Major Focus

Identifying the types, amounts, and distribution of wetlands and related habitats needed to sustain diverse and healthy wetland plant and animal communities in the San Francisco Bay Area.

### Products

A biological foundation for all Bay wetlands protection programs and the regional wetlands management plan.

### Geographic Scope

San Francisco Bay lands, including existing and historic wetlands ranging from the South Bay to Suisun Bay. Eventual expansion planned to include stream habitats, riparian corridors and wetlands throughout Bay Area watersheds.

### Overview

The goals project, begun in 1994, is using all available scientific knowledge to identify the types, amounts, and distribution of wetlands and related habitats needed to sustain wetland plant and animal communities in the San Francisco Bay Area. Such goals are recognized by both the CCMP and the Governor's Wetlands Policy as a necessary biological foundation for a *Regional Wetlands Management Plan*.

The goals, scheduled for completion by spring 1997, will also offer biologically-sound guidance for the region's numerous regulatory and non-regulatory wetland protection programs, including those described in these pages. Entities which should find the goals useful include city and county planning departments that wish to better protect wetlands through zoning; open space, park and resource conservation districts interested in undertaking wetlands restoration or enhancement projects; private landowners seeking to improve wetlands on their properties; and state and federal resource agencies involved in wetlands regulation or mandates to protect fish and wildlife and their supporting wetland habitats.



Saltbush

### Participants

Coastal Conservancy, California Department of Fish and Game, California Department of Water Resources, National Marine Fisheries Service, S.F. Bay Conservation and Development Commission, S.F. Bay Joint Venture, S.F. Bay Regional Water Quality Control Board, S.F. Estuary Institute, S.F. Estuary Project, U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service.

### Opportunities for Involvement:

Public meetings are held to provide information about the project and to solicit comment and feedback.

For a current schedule, call (510)286-1221.

### Contact

Peggy Olofson, San Francisco Bay Regional Water Quality Control Board, (510) 286-0427

## SAN FRANCISCO BAY JOINT VENTURE

### Major Focus

Completing on-the-ground projects involving the acquisition, restoration or enhancement of wetlands by leveraging existing public and private resources, developing new funding sources and creating public-private partnerships.

### Products

An Implementation Strategy establishing specific goals and strategies for wetland and riparian habitat acquisition, protection and restoration.

### Geographic Scope

The San Francisco Bay Watershed (exclusive of the Sacramento-San Joaquin River Delta and Suisun Marsh and inclusive of the San Mateo Coast), which includes all or part of the nine Bay Area counties.

### Overview

The San Francisco Bay Joint Venture, launched in 1995, is a partnership between public agencies, environmental organizations, hunting and fishing groups, the business community, local government and landowners working cooperatively to protect, restore, increase and enhance all types of wetlands, riparian habitat and associated uplands throughout the San Francisco Bay watershed. Using a non-regulatory approach and an ecosystem perspective, the Joint Venture will focus on completing on-the-ground habitat projects by leveraging existing resources, developing new funding sources and creating unique partnerships. Joint Venture partners will use a range of wetlands protection strategies including acquiring fee or conservation easement interests in land from willing sellers, developing wetlands management incentive programs, offering wetlands enhancement cost-sharing programs, and providing technical assistance for landowners interested in wetlands restoration. Start-up funds for the venture were provided by the Coastal Conservancy and the U.S. Environmental Protection Agency.

### Participants

Alameda County Flood Control District, Bay Area Watershed Network, Bay Planning Coalition, Coastal Conservancy, California Department of Fish and Game, California Waterfowl Association, City of San Jose, Ducks Unlimited, East Bay Regional Parks District, Mosquito Abatement Districts (Alameda and Contra Costa), Napa County Resource Conservation District, National Audubon Society (and Golden Gate, Napa-Solano, Marin and Mt Diablo chapters), National Estuarine Research Reserve, National Park Service, Pacific Gas and Electric Company, S.F. Bay Conservation and Development Commission, S.F. Bay Regional Water Quality Control Board, S.F. Estuary Project, San Mateo County Department of Environmental Services, Save S. F. Bay Association, Sierra Club, U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service.

### Opportunities for Involvement

Management Board meetings open to the public.

### Contact

Nancy Schaefer, San Francisco Bay Joint Venture, (510)286-6767



## NORTH BAY FORUM

### Major Focus

Coordinating the North Bay wetland and watershed resource management and regulatory activities of 12 government agencies — troubleshooting regulatory conflicts, streamlining wetland permit reviews, and helping landowners and local government solve problems.

### Products

Regular problem-solving and information sharing meetings.

Technical and stewardship workshops for landowners and government.

### Geographic Scope

North Bay rim from Carquinez Strait in the east to Gallinas Creek in Marin County, including the land in between within the watersheds of the Petaluma and Napa Rivers.

### Overview

This program began in 1992 as a cooperative effort among 12 signatory agencies to coordinate resource management activities in the North Bay called the North Bay Initiative. Since then, it has worked with landowners and local governments using a non-regulatory approach to achieve environmental restoration, preserve agriculture, share information and data, and create public/private partnerships for resource protection. In 1995, the Initiative changed its name to the North Bay Forum to reflect the addition of new functions such as getting more landowner involvement and providing a means of sharing information on new wetland projects and watershed management activities.

### Participants

**Lead:** U.S. Environmental Protection Agency

**Signatory Agencies:** California Department of Fish and Game, Napa and Southern Sonoma County Resource Conservation Districts, National Marine Fisheries Service, Natural Resources Conservation Service, S.F. Bay Conservation and Development Commission, Coastal Conservancy, State Department of Water Resources, State Lands Commission, U.S. Fish and Wildlife Service, Wildlife Conservation Board.

**Others:** Partnership for San Pablo Baylands, S.F. Bay Regional Water Quality Control Board and the public.

### Opportunities for Involvement

Meetings held every other month with the CCMP North Bay Geographic Subcommittee. Open to public.

### Contact

Paul Jones, U.S. Environmental Protection Agency, (415)744-1976.

## NORTH BAY WETLANDS PROTECTION PROGRAM

### Major Focus

Working with local government to develop a comprehensive *North Bay Wetlands Protection Plan* to guide land use decisionmaking.

### Products

*North Bay Wetlands Protection Plan* (scheduled for completion in 1997).

*North Bay Land Use and Public Ownership Report* (completed May '96)

*North Bay Wetlands Background Report* (scheduled for completion 1996).

### Geographic Scope

North Bay rim, including Marin, Sonoma, Napa and Solano Counties from Gallinas Creek to the Carquinez Strait. The planning area is bounded by the Bay on the south, Highway 101 on the west, Route 116 and 12 on the north and Route 29 on the east encompassing the lower reaches of the San Pablo Bay watershed.

### Overview

The North Bay Wetlands Protection Program is a voluntary partnership between the S. F. Bay Conservation and Development Commission and eight local governments in the North Bay. The program centers on land use planning and seeks to provide local government with the tools and information needed to ensure the protection, enhancement and restoration of North Bay wetlands, while allowing uses that are consistent with wetland values and functions to continue and guiding other incompatible uses to other appropriate locations. Additionally, the program seeks to achieve long-term gains in wetland acreage and establish clear and consistent criteria for the evaluation of proposed development projects that may impact wetland and riparian areas. Once complete, the wetlands protection plan will also provide greater predictability regarding the kinds of projects and activities that can occur in the planning area. Appropriate elements of the Protection Plan will be incorporated into local government general plans and enforceable regulations.

### Participants

**Lead:** S.F. Bay Conservation and Development Commission

**Others:** Marin, Sonoma, Napa and Solano Counties and the Cities of San Rafael, Novato, American Canyon and Vallejo.

### Opportunities for Involvement

Public notified and invited to review staff planning background reports and to participate in regular meetings of the Steering Committee.

### Contact

Jeff Blanchfield, S.F. Bay Conservation and Development Commission (415)557-3686

## PARTNERSHIP FOR THE SAN PABLO BAYLANDS

### Major Focus

Developing a non-regulatory wetland restoration, enhancement and management plan for the North Bay — primarily for private landowners — and promoting grassroots support for protection of the San Pablo baylands.

### Products

Grassroots-based wetland restoration, enhancement and management plan for San Pablo baylands.

### Geographic Scope

North Bay rim, including portions of Marin, Sonoma, Napa and Solano Counties bordering San Pablo Bay.

### Overview

Save San Francisco Bay Association launched the Partnership for the San Pablo Baylands in 1995 to protect, enhance and restore the ecologically and culturally valuable baylands along San Pablo Bay. The Partnership is a collaborative effort among those who live and work in the Baylands, along with interested citizens and government agencies, to draft, adopt and implement a wetland restoration, enhancement and management plan. The plan will focus on integrating the management of wetland resources with the management of existing land uses such as agriculture, and on getting private landowners involved in protecting wildlife habitat. The Partnership's three main objectives are to galvanize grassroots support for Baylands protection by undertaking a public education campaign, to build a partnership among landowners, citizens and government agencies to develop the plan mentioned above, and to establish an ongoing program to ensure plan implementation.

### Participants

**Lead:** Save San Francisco Bay Association

**Others:** Napa County and Southern Sonoma County Resource Conservation Districts, S.F. Bay Regional Water Quality Control Board, local government and landowners.

### Opportunities for Involvement

Several public events will be held to highlight the importance of the baylands. Call for a schedule.

### Contact

Marc Holmes, Save San Francisco Bay Association, (707)644-1752



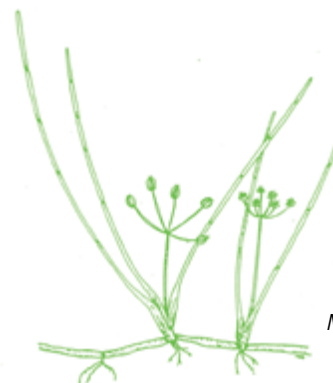
Pickleweed



Cordgrass



Gumplant



Mason's Lilaeopsis

# Wetlands

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## OTHER REGIONAL PROGRAMS RELATED TO WETLANDS

### Bay Area Wetlands Planning Group

The California Resources Agency convenes this ad-hoc interagency group to address policy issues, assist with planning efforts and promote regulatory efficiency. Both state and federal resource and regulatory agencies participate. For more information, contact Craig Denisoff (916)654-2753.

### Bay Area Regulatory Pilot Project

The S.F. Bay Regional Water Quality Control Board, in cooperation with the U.S. Army Corps of Engineers and the S.F. Bay Conservation and Development Commission (BCDC) has undertaken this Pilot Project to streamline the permitting process for projects impacting wetlands while strengthening wetlands management and protection. The primary objectives are: assessing the feasibility of state assumption of Section 404 permitting from the federal government; evaluating the potential consolidation of Section 404, 401 and BCDC permits; and developing an improved permitting process that will provide better service to applicants. For more information, contact Michael Carlin (510)286-1325.

### San Francisco Bay Water Quality Control Plan

The Basin Plan is the master policy document of the S. F. Bay Regional Water Quality Control Board, providing the legal, technical and programmatic bases of water quality regulation in the region. A 1995 Basin Plan update included several improvements to wetlands protection, many of which were recommended in the CCMP. Among the recent additions to the Basin Plan are a "no net loss" policy, a wetlands alteration policy addressing wetlands fill and hydrologic modification, clarification of wetlands as "waters of the state," a mitigation policy, and a policy on the use of dredged material to restore wetlands. The Regional Board continues to explore additional ways to improve wetlands protection and management. For more information, contact Peggy Olofson (510)286-0427.

### Long Term Management Strategy for Dredged Material

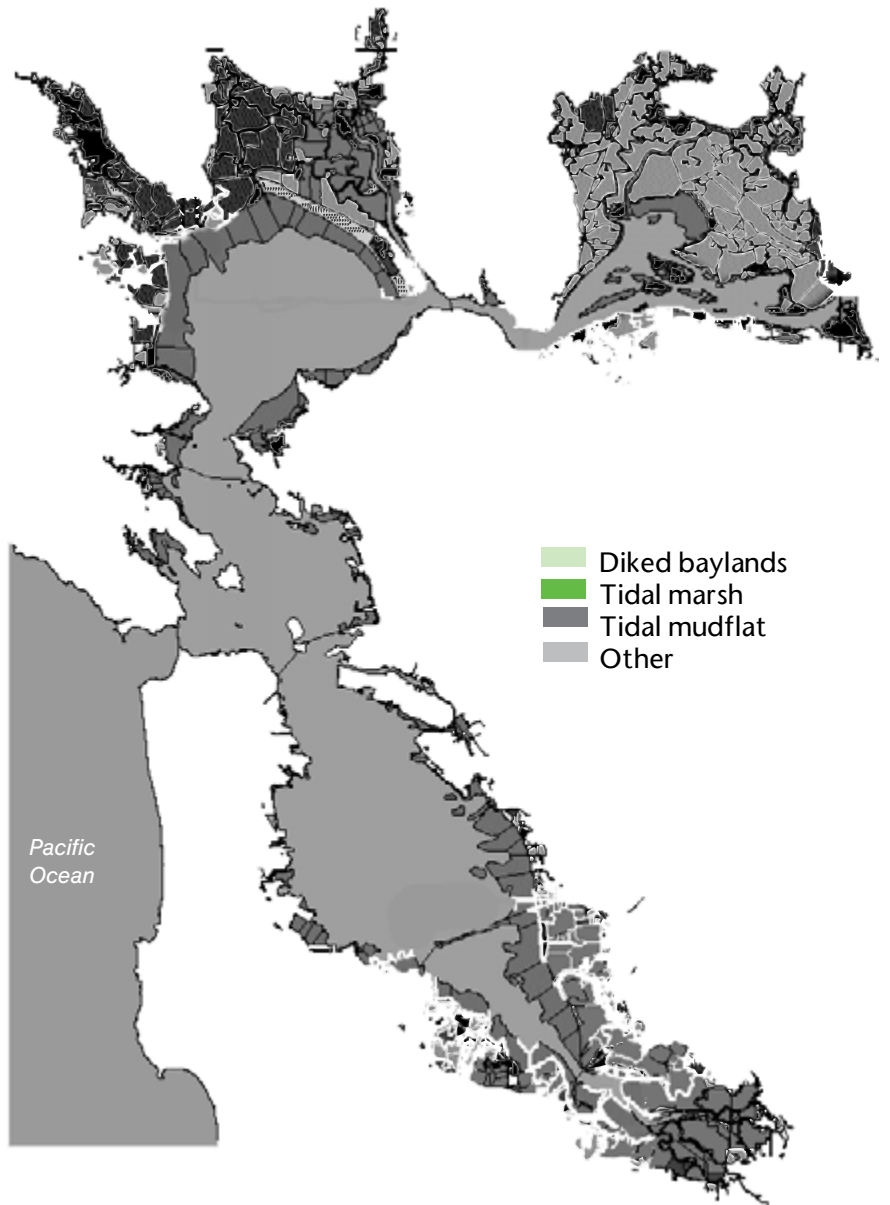
The LTMS was initiated in 1990 to address the disposal of dredged materials from ports and channels in the San Francisco Bay Area. This public/private partnership brings 20 agencies and 47 special interests — including fishing and navigation groups, environmental organizations and the public — together to develop a regionally acceptable strategy for managing the Bay Area's dredging and disposal

needs over the next 50 years. The specific goals of LTMS are: to conduct necessary dredging and dredged material disposal in an environmentally sound and economically prudent manner; to eliminate unnecessary dredging; to maximize beneficial reuse of dredged material; and to develop a coordinated permit review process for dredging projects. Maximizing the beneficial reuse of dredged material may include significant new efforts to use dredged material for wetland enhancement and restoration. For more information on the LTMS beneficial reuse effort contact Steve Goldbeck (415)557-3686.

### CALFED Bay-Delta Program

In 1994, the state and federal governments signed the Bay-Delta Accord and launched CALFED, a cooperative program aimed at developing a long-term solution to the conflicts over the competing uses of Delta waters. This partnership of ten state and federal agencies has developed a series of options designed to improve ecosystem quality, water supply reliability, water quality and system vulnerability in the S.F. Bay-Delta Estuary. All of the options include some degree of wetland protection, restoration or enhancement. Proposed options will be narrowed through extensive review, public input and environmental impact evaluation. For more information, call (916)657-9780.

## BAY WETLANDS TODAY



Source: San Francisco Estuary Institute, Regional Wetlands Atlas



## LEGAL BRIEF

### THE ZOMBIE DRAIN

In the African Congo, natives fear a voodoo snake deity called a zombie for its power to reanimate a dead body. In California's San Joaquin Valley, environmentalists fear a similar power has breathed new life into a drainage project they thought long laid to rest — completion of a controversial canal that would export the valley's saline and selenium-tainted drainage water to the Bay and Delta. This "zombie drain" has been making increasingly less ghostly appearances in courts, state policies and government plans of late.

Because the San Joaquin Valley was once a great inland sea, a layer of clay now underlies the productive agricultural center, trapping irrigation water in a saline basin. The San Luis Unit Authority Act of 1950 required the government to help farmers drain the land and it began by building the 85-mile-long San Luis Drain. The drain was never completed and connected to Delta rivers or waterways, first due to ballooning costs and later because its truncated terminus at Kesterson National Wildlife Refuge led to shocking birth deformities in refuge birds, which biologists attributed to selenium in the drain water. The drain was closed, most thought forever.

A 1990 report detailed alternatives to draining the salt and selenium-tainted water into the Bay and Delta, stressing water conservation measures and land retirement. But the \$50 million report's recommendations have only been implemented by pilot programs so far. In the meantime, as BurRec attorney Jim Turner phrased it, "the bathtub was filling." In 1993, farmers in the Westlands Water District, where the drainage problem is most severe, persuaded a federal district court judge to request BurRec to complete the San Luis Drain. The Bureau appealed the decision and on May 1, 1995, the Ninth Circuit Court in San Francisco ordered all parties into mediation.

But BurRec, bound by an order from the district court judge, has already had to begin discussions with the State Board concerning requirements for its drain discharge permit. The Board, in turn, has directed its staff to give BurRec guidance concerning environmental documentation for the drain. Giving the zombie drain further shape in reality is the Board's 1995 *Water Quality Plan* which states that "Ultimately it will be necessary for in-basin management of salts to be supplemented by the disposal of salts outside the San Joaquin Valley... [BurRec] should reevaluate alternatives for completing a drain..."

In the meantime, farmers, bureaucrats, and environmentalists remain in mediation, trying to find a solution to a thorny byzantine issue marked not only by squabbles over money and political

*continued next page*

## CAPITAL BEAT

### KINDER, GENTLER SPECIES ACT?

No issue is a more sensitive barometer of environmental politics than the Endangered Species Act (ESA). As the 104th Congress draws to its rocky close, it now looks as if ESA reauthorization will be delayed once again. But the battle lines are being drawn now, with Republicans drafting what is being called a more centrist ESA that nonetheless could have drastic consequences for the Bay Delta Accord. At the same time, a tough cadre of grassroots and Washington, D.C. environmentalists are recovering from last year's onslaughts and rallying around a new and stronger version of the act.

By the end of May, the politics of endangered species had moved considerably from the hot seat they occupied at the beginning of the session when Alaska Congressman Don Young pledged to make sweeping changes in the law. Most people expected a tougher fight after the momentum gained when Young's committee held a series of controversial briefings around the country. Ignoring criticisms that the briefings were stacked with pro-development forces, Young and California Congressman Richard Pembro introduced a bill that would have made the goal of species recovery optional and established takings compensation.

After the initial brouhaha, the Young-Pembro bill went nowhere. House Speaker Newt Gingrich reportedly played a crucial role in halting the action. If Gingrich had not intervened, it's not clear whether the environmental community would have had the clout to stop Young's efforts.

The lead group on the issue was the Endangered Species Coalition, an alliance of the so-called "Big 10" green groups and others. The coalition fell prey to the classic conflict between uncompromising grassroots activists and inside-the-Beltway pros who believe they have a hammerlock on the art of the possible. After months of infighting, the coalition went into hibernation in early winter.

In early 1996, the Endangered Species Coalition regained momentum. But a splinter group of high-level environmentalists, including the Environmental Defense Fund's Michael Bean and the Nature Conservancy's John Sawhill, entered into secret negotiation with the Republican majority aimed, reportedly, at developing a kinder, gentler ESA — one with more carrots and fewer sticks. One veteran

environmental lobbyist thinks the Bean group didn't necessarily expect a bill to emerge out of the negotiations, but they wanted to be regarded as open to dealing with Republicans in case Democrats failed to regain control of Congress in November.

Once the negotiations came to light in April, coalition members felt free to adopt the strategy they had believed in all along. They released a draft of a stronger ESA called the Endangered Natural Heritage Act (ENHA). Written over the winter by representatives of national environmental organizations and grassroots activists, this new act has been endorsed by 160 organizations nationwide.

"We sat down with activists who have been implementing the law for years and years and said where are the loopholes?" says Kieran Suckling of the Southwest Center for Biological Diversity.

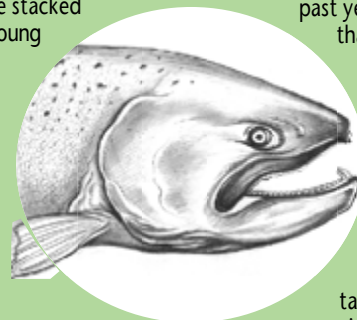
Suellen Lowry of the Sierra Club Legal Defense Fund says the ENHA clarifies the current law by establishing that recovery is the goal of endangered species preservation.

In past years, developers have argued that projects which would not impact current population levels of an endangered species are acceptable. Conservation biologists, of course, don't agree — stressing the importance for establishing viable populations of species. ENHA would also make implementation plans mandatory, include species listed before 1978 in critical habitat protection, and eliminate the 60-day notice for lawsuits on ESA implementation.

Neither ENHA nor the compromise Republican bill are expected to hit the floor this session. Moderate Republicans were reportedly not able to convince Young and Pembro to support the compromise bill negotiated by EDF's Bean and others. But even if it isn't radical enough to satisfy Pembro and Young, the compromise being circulated from the office of Congressman Jim Saxton is already worrying California resource managers. There's a good possibility that an obscure, densely worded provision could exempt existing water projects from ESA consultation.

The importance of the Endangered Species Act in managing the Bay and Delta cannot be overestimated, says U.S. Fish & Wildlife's Mike

*continued next page*



## THE ZOMBIE DRAIN - CONT'D

power, but also by changing beliefs about humanity's right to produce radical changes in the landscape.

"I can understand these people," says BurRec's Turner. "They are alleging that when they bought their lands and developed their farming interests, they did it with the understanding that the land was going to be drained. For them, the Bureau has reneged on its promise. How are they going to live and make money?"

According to Turner, the position of the BurRec is that, although there may have been an original authorization for the Secretary of Interior to construct the drain, times have changed since 1960.

"Costs are now so high and the environmental damage has intensified," says Turner. "I think there are some valid legal claims that are going to have to be resolved, but I feel confident that our side will prevail."

Not only have big water projects fallen out of favor, but increased awareness of pollution problems in the Bay and Delta are limiting the opportunity for increases in pollution load. According to Terry Young of the Environmental Defense Fund, selenium is already accumulating in Bay birds and organisms. "The oil refineries that discharge selenium into the Bay are in the process of ratcheting down their discharges," she says. "The drain would add a significant new load."

Ken Swanson of the Westlands Water District says that drainage water can be treated to remove selenium before it is discharged. The treated water would be run through a diffuser which would provide for rapid dilution in the receiving water body. This is radically different from the situation at Kesterson, where the water collected in one area, says Swanson.

"The drain envisioned 20 years ago was a lot larger than is needed today," he says. "The drain's original design capacity was 450 cubic feet per second. We're envisioning a 150 cubic feet per second drain, so the facilities we based our estimates on are different from what the Bureau based its cost estimates on."

Swanson says the reduced figures reflect the adoption of water conservation measures by agricultural interests in the San Joaquin Valley. He added that the water district would phase in drainage, starting with about 8,000 acre feet annually and building to 60,000 acre feet per year over the next century.

"Retiring land really isn't an alternative unless someone wants to come in and buy land from these guys at market value," Swanson says. "That kind of money isn't there."

Terry Young disagrees. Pilot projects based on

the 1990 report, *A Management Plan for Agricultural Subsurface Drainage and Related Problems on the Westside San Joaquin Valley*, have shown that it is feasible to deal with the valley's drainage problems without adding to the Bay's pollutant load, says Young. The real clash is between the old system of subsidized agriculture that often ignored the realities of the arid American West and a new environmental ethic spurred by budget constraints. Even proponents admit that nobody really knows what the San Luis Drain and its associated water treatment facilities would cost in the long run. But Young says she is convinced that the major cost will be borne not by San Joaquin Valley farmers, but by U.S. taxpayers.

"The drain is a whole lot less expensive for them than treating their own pollution or accomplishing enough source reduction, says Young. "It would be paid for the same way the rest of the San Luis Project and aqueduct was paid for. In a nutshell, the farmers ultimately have to repay the capital expense, but they get a very low interest rate and such a long amount of time to repay that the amount shrinks over time. Basically, it's a huge subsidy."

Subsidy or not, public acceptance remains a major hurdle for the ghost drain to transcend in its quest for new life, according to the State Board's Jerry Johns. "The only way people will allow the drain in their backyard is if we have done absolutely everything else we can to manage salts and the discharge is shown to be safe," he says. Contact: Swanson (209)224-1523; Turner (916)979-2155; Young (510)658-8008  
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*Editors Note: In related news, the Central Valley Regional Board approved a basin plan amendment this May which adopts a 5 ppb selenium objective (over a four-day average) for the San Joaquin River.*

## CAPITAL BEAT CONT'D

Thabault. Not only was a lawsuit over the act responsible for the Bay-Delta Accord — a temporary truce in the water wars — but as the various aspects of the accord are implemented, they must go through the ESA process. Essentially, the ESA is a stick that is used intermittently to help move ecosystem management efforts forward, according to Thabault. If water projects were exempted from the species act, there would be little incentive for all parties to stay on board.

There's no question that whatever happens with the act, the Bay Area will be among the most affected places in the country. The future of Delta smelt and winter run Chinook salmon may be decided in a tangle of Republican re-election efforts and rifts between grassroots and Washington, D.C. environmentalists — many of whom may not even know that a multi-million dollar effort at ecosystem management is in their hands.

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## PLACES TO GO & THINGS TO DO



### WORKSHOPS & SEMINARS

#### Exotic Pest Plants: Threat to Food and Habitat

**TUES-7/16-7-9 PM**

**Topics:** More land is being lost, both in natural and agricultural areas, to pest plants than to development. The California Native Plant Society will discuss this threat and what actions can be taken against it.

**Sponsor:** Bay Area Environmental Forum Peninsula Conservation Center, 3921 E. Bayshore Road, Palo Alto (415)856-7579

#### CCMP Progress Review Workshop

**FRI-8/2-9:30 AM - 4:00 PM**

**Topic:** A review of progress made in implementing the S.F. Estuary Project's 1993 *Comprehensive Conservation and Management Plan* for the Bay and Delta. Discussion of gaps, roadblocks and new priorities. Preparatory workbook available upon request after July 1.

Metro Center, 101 Eighth Street, Oakland  
**Sponsor:** San Francisco Estuary Project (510)286-0460

#### A Healthy Home: Non-Toxic Alternatives for the Home, Garden, Pets & Your Neighborhood

**TUES-8/20-7-9 PM**

**Sponsor:** Bay Area Environmental Forum Coyote Point Museum, 1651 Coyote Point Dr., San Mateo (415) 342-7755

#### State of the Estuary Conference

**THURS-SAT-10/10-12-All Day**

**Topics:** The 3rd Biennial Conference will provide a scientific forum for evaluating progress towards restoring the ecological health of the Estuary. Thursday and Friday will include plenary sessions on: biological resources, wetlands, water quality, freshwater flows, and land use/watershed management as well as a general policy discussion. Saturday's program will be geared more to the general public. All three days will feature poster presentations.

Golden Gate Club, Presidio, San Francisco  
**Sponsor:** San Francisco Estuary Project (510)286-0460



### MEETINGS & HEARINGS

#### CALFED Public Workshop

**TUES-6/25-All Day**

**Topics:** Preliminary discussions on the Phase II alternatives — the three alternatives that CALFED will take into environmental review. Beverly Garland Hotel, 1780 Tribute Road, Sacramento (916)979-7900

#### SFEP/EPA North Bay Forum

**THURS-7/18-9 AM - 12 PM**

**Topics:** Discussion of wetlands and ecosystem restoration activities in the North Bay.

Southern Sonoma RCD, 1318 Redwood Way, Conference Room, Petaluma

#### Bay Commission

**THURS-7/18-1 PM**

**Topics:** Public hearings and possible votes on the Concord Weapons Station, Mare Island reuse and Redwood Shores Public Access Plan.

Metro Center, 101 Eighth Street, Oakland (415)557-3686

#### BDAC Meeting

**FRI-7/19-10AM**

**Topics:** Advisory Council meeting on CALFED's phase II alternatives; opportunity for public comment.

Sacramento Convention Center, Room 204 (916)448-1300



### HANDS ON

#### Kayak Trip to Brooks Island

**SUN-6/30-All Day**

**Activities:** This easy half-mile paddle will take you to a protected island accessed by reservation only, where you can enjoy a two-hour natural history tour. No kayaking experience necessary. Register at (510)452-9261 by June 27th.

**Sponsor:** Save the Bay

**Cost:** \$85

#### Animal Tracking

**SUN-7/7-11-1:30**

**Activity:** Learn a few things about the animals that live in the salt marsh as you make plaster casts of the tracks they leave behind. Please bring clothes that can get muddy. Rubber boots are a must.

**Sponsor:** Hayward Shoreline Interpretive Ctr. 510/797-7657

## NOW IN PRINT

#### *A Guide to Reviewing Environmental Policy Studies*

M. Cubed, California EPA  
Copies from (916) 323-1532

#### *Layperson's Guide to Water Marketing and Transfers*

Elizabeth McCarthy, Water Education Foundation  
Copies from (916)444-6240

#### *Layperson's Guide to Agricultural Drainage*

Laura Mahoney, Water Education Foundation  
Copies from (916)444-6240

#### *Nonindigenous Aquatic Species in a United State Estuary: A Case Study of the Biological Invasions of the S.F. Bay and Delta*

Cohen & Carlton, U.S. Fish & Wildlife and Sea Grant

Publication # PB96-166525/\$49 per copy.  
Copies from (703)487-4650

#### *Policy Environmental Impact Statement/ Programmatic Environmental Impact Report*

Copies from Army Corps, (510)744-2300

#### *Water Transfers in California: A Framework for Sustainability and Justice*

Loh & Gomez, Pacific Institute  
Copies from (510)251-1600

#### *North Bay Land Use and Ownership*

S.F. Bay Commission/North Bay Wetlands Protection Program  
Copies from Jeff Blanchfield (415)557-3686

### NOW ON LINE

Communities for a Better Environment is now on-line <http://www.cbe.org>

Save San Francisco Bay Association is now on-line at <http://www.savesfbay.org>

California Urban Water Agencies has developed a Bay-Delta database intended to be a comprehensive, integrated data management system which will contain biological, water quality, hydrodynamic, and physical data from the Bay-Delta regional area.  
<http://www.dcse.com/cuwa.html>

### Trash to Treasures

**SAT-7/20-1-3 PM**

**Activity:** Reception for the opening of a new exhibit featuring wild and wonderful creations made by both professional and amateur artists from cast-off junk, industrial discards, recycled whatzmagings, and anything else the cat dragged in.

**Sponsor:** Hayward Shoreline Interpretive Ctr. 510/797-7657



# CALFED BRIEF CONT'D

supply and increased water costs that investment in drip-irrigation sprigets, pre-irrigation sprinklers, and other more efficient equipment became necessary for survival. Having invested significant capital in this equipment, districts and local farmers continue to use it.

But environmentalists believe that even greater water savings are possible from improved irrigation efficiency and from shifts in cropping patterns away from low-value, water-intensive crops such as alfalfa and irrigated pasture. They are concerned that conservation measures which they view as partial, on the urban scene as well, will be accepted as adequate demand management. Without stronger emphasis on demand management, they fear the CALFED process could prematurely reach the conclusion that new water moving and storing infrastructure is the best solution to California's perpetual water shortage.

Environmentalists have reason for concern. Despite a clear consensus supporting increased demand management, most water agencies involved with the CALFED process seem to think that new water infrastructure is a foregone conclusion. The California Urban Water Agencies' Byron Buck says, "Conservation is part of the solution, not the total solution. California will gain 12 million people in the next 20 years. Conservation can not meet all of the increased demand." The Natural Resources Defense Council's Ronnie Weiner insists that better management of the existing resource could stretch beyond what anyone is willing to see. "Looking to cement as the first solution is what got us into trouble in the first place," she says.

Contact: Judith Redmond, (916)756-8518;  
Byron Buck, (916)552-2929;  
Ronnie Weiner, (415)777-0220 MB

# ESTUARY



## ESTUARY

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*ESTUARY is a bimonthly publication dedicated to providing an independent news source on Bay-Delta water issues, estuarine restoration efforts and implementation of the S.F. Estuary Project's Comprehensive Conservation and Management Plan (CCMP). It seeks to represent the many voices and viewpoints that contributed to the CCMP's development. ESTUARY is funded by individual and organizational subscriptions and by grants from diverse state and federal government agencies and local interest groups. Administrative services are provided by the S.F. Estuary Project and Friends of the S.F. Estuary, a nonprofit corporation. **For a free trial subscription (three issues), mail your name and address to Liz Blair of ESTUARY at the address above. Views expressed may not necessarily reflect those of staff, advisors or committee members. Printed on recycled paper with soy-based inks by Alonzo Printing Co.***

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