



DELTA COMES UP FOR AIR

For anyone who missed the December 15 state-federal agreement to save the Delta — which was endorsed by urban, agricultural and environmental interests — here are its key elements:

- An Estuarine Habitat Standard that adds more fresh water to the Delta in late winter and spring when smelt, bass and other fish most need it. The standard is to be met by making sure there's enough outflow to keep the 2 ppt salinity line (parts per thousand of salt to water) in Suisun Bay — prime fish habitat — for up to 150 days between February and June, depending on the weather.
- Pumping controls that limit state and federal water project exports to no more than 35% of total inflow between February and June and 65% between July and January, but that provide new management and operational flexibility (see p. 3).
- A requirement that the San Joaquin River contain base flows of 1000 cubic feet per second (cfs) February through May when the river's fall-run salmon are migrating, and get 3000-8000 cfs pulses over 30 days in the most critical part (April-May) of the migration window.
- Gate closures and/or barrier use at the Delta Cross Channel, Old River and Georgiana Slough to minimize fish losses to pumps and export operations.
- Restrictions on the take of endangered species.
- A \$180 million fund for non-flow related improvements (see p.4).

Many of these elements have a complex series of caveats designed to maximize environmental benefits while minimizing water supply impacts. Pulling off this balancing act will be a feat measured not in the words of the agreement but in the deeds of those who implement it. The agreement is now being finalized in a state water quality control plan for the Delta. For a copy: (916)657-2390 ARO

ESTUARY

Y O U R B A Y - D E L T A N E W S C L E A R I N G H O U S E

Science by Consensus

Scientists have long been loath to suggest protective policies for the Estuary because of their enormous uncertainty about how the ecosystem, in all its complexity, actually works. But most agree that 100% certainty will be a long time and a lot of unavailable dollars coming, and that by then the last few winter-run salmon and smelt might be belly up.

For most of the water wars, meanwhile, scientists have found themselves flanked by lawyers and policymakers at the podiums of adversarial proceedings — a far cry from the textbook view of scientists as neutral observers.

"Scientists have been used as advocates, each presenting the views of a particular agency, water user or environmental group," says estuarine scientist Wim Kimmerer in a recent paper. "Opportunities for subjectivity abound in such a framework. The result has been a lack of agreement on key facts about the Estuary, on interpretation of analyses and on the likely results of management actions — a major impediment to resolution."

The policy gridlock was partly broken in the latest water wars offensive by a fresh approach to the science. In the four years before the Bay-Delta accord (see opposite), local scientists — from the engineers at the pump controls to the hydrologists at the flow meters and the biologists at the fish screens — participated in what has been called "consensus science" as workshop participants, species recovery team members and negotiators.

Who knows what William Safire might make of the term "consensus science," but a general definition would be to place a diverse group of scientific peers face-to-face, give them a specific problem, then ask them to find enough common scientific ground to reach consensus and make a recommendation, which in turn might inform policy.

This approach is a departure, in many ways, from the textbook view of scientists holed up in ivory towers in search of tiny kernels of untruth. "The role of scientists is usually to question," says consulting ecologist Jeff Harte, referring to the classic scientific duo of theory and falsification. "What's hidden is all the stuff we've come to accept," he says. The step-by-step path from hypothesis to testing to results to peer review to general acceptance was sped up and enhanced by the consensus science that backed up the Bay-Delta accord.

Another departure was synthesis. Traditionally, scientists have been most comfortable sticking like glue to their own disciplines and data and to not making wild leaps into what it all means in the big picture. But in the Estuary's case, such leaps were sorely needed.

"Vast amounts of data had been generated but no one ever really put it together to say what it meant," says U.S. EPA's Tim Vendliniski, who organized a series of consensus-building workshops two years ago for scientists under the S.F. Estuary Project. The purpose of the workshops was to develop a rationale for an estuarine standard — such standards, and what science they should be based on, were some of the most insurmountable obstacles in the early water wars.

Peter Moyle, who participated in the workshops and led the Delta's Native Species Recovery Team (another consensus-driven effort), says the group approach gave scientists access to hot, new data. "We've got all this unpublished stuff in our heads, some observation we made on the boat yesterday, some new data from the lab," he says. "As long as everyone at the table respects you, it's an opportunity to work with the most up-to-date information. It also encourages us to break out of our inherent cautiousness and conservativeness as scientists because everyone at the table signs off."

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CONSENSUS SCIENCE CONTINUED

Kimmerer writes that the workshops produced one of the first forceful statements from a diverse group of scientists about the response of the Estuary to freshwater flow. And their recommendation for a salinity- rather than flow-based standard provided the scientific justification for the new standards in the Bay-Delta accord.

Randy Brown is one of the scientists who didn't concur with the findings of the workshops. Brown, of the state's Department of Water Resources, had reservations about the approach. "The data should be so clear you don't need consensus," he says. "In the short run, maybe it helps coalesce some ideas. But in the long run, only the hard data will tell you if you're doing the right thing." Brown also thought the workshops should be revolving around outflow not salinity. Outflow has long been the focus of those scientists at the helm of the state and federal water project pumps, and Brown and BurRec participants at the workshops had similar problems with the focus. Though all participated in the scientific dialogue, none signed the final document. But 23 others concurred.

"Consensus science doesn't mean everyone has to be on board before anything can happen," says another participant, EPA's Bruce Herbold. "That's not the way science should work." But what it does mean, if you get enough of the best and brightest to concur, is that regulators have to pay attention.

But it took more than the workshop recommendations to make the leap from science to policy. After the workshops, it was Herbold's job to go back to the more outflow and operations-oriented scientists from Water Resources and BurRec, many of whom were engineers, and to hammer out the evolving salinity-based standard for the accord. Those follow-up meetings involved him in consensus-building on a smaller scale between state and federal agency scientists, and between two different views of the world.

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NEWS ROUND-UP

VOLUNTEERS WILL DO THE KIND OF ONGOING FIELD SAMPLING of Bay-Delta environmental conditions that water quality agencies all need but few can muster, if a new committee of government staffers and citizens led by the State Water Board has its way. The committee wants to improve links between volunteer monitoring groups, watershed awareness groups and public agencies. A Bay Area-based pilot project for this statewide effort will soon be launched by the S.F. Estuary Institute. Its plan is to canvass local agencies to discover their monitoring needs, develop a how-to guide for volunteers (including standard protocols, data quality and assurance procedures, sample field data sheets and data base formats) and nurture two actual on-the-ground volunteer efforts into action. (916)657-0518 & (510)231-9539

WINTER FLOOD WATERS SHUT DOWN A YUBA RIVER FISH LADDER and washed away a fish screen. But damage to environmental improvements along the Estuary's larger rivers was slight, due to ample space in most flood control reservoirs. Heavy winter rains turned the Sacramento National Wildlife Refuge complex into a giant lake, drowning and starving some upland critters, according to Fish & Wildlife's Greg Mansik. Mansik says flood waters have also done some good — scouring out years of accumulated silt from fish spawning gravels and introducing foods into rivers for resident catfish and other species.

ENVIRONMENTAL QUALITY REQUIREMENTS DO NOT HINDER ECONOMIC GROWTH, according to a new MIT study. The study found that states with the strongest regs had the strongest economies, that pollution control requirements often lead to reevaluations of production processes — and thus to more efficient manufacturing operations, that most corporate executives haven't the foggiest idea what complying with regs actually costs them, and that 99% of layoffs are caused by factors other than environmentalism. For a copy of study call: (617)253-8078.

THE TRIENNIAL BASIN PLAN OVERHAUL had the S.F. Bay and Central Valley Regional Water Quality Control Boards burning the midnight oil to meet the State Board's January 1995 deadline. The former undertook a massive plan reorganization and employed state-of-the-art new GIS mapping to make it more "user friendly," according to the Board's Michael Carlin. Carlin says the revised plan also includes a strengthened watershed approach, beefed-up chapters on monitoring and surveillance and a description of emerging new program areas, such as wetlands planning and sediment management. Carlin's counterpart in the Central Valley Board, Jerry Bruns, says the most significant changes in his agency's Delta Basin Plan are a whole new section on groundwater clean up and some clarification of toxicity objectives. Both plans were submitted to the State Board for review this February. (510)286-1325 & (916)255-3093

A RECENT STUDY FOUND HIGH LEVELS OF HUMAN-HARMING TOXINS IN BAY FISH, leading state health officials to warn local recreational fishers to limit their consumption of white croaker, perch, shark, halibut, striped bass and sturgeon. But a tandem Save the Bay seafood consumption study suggests such warnings may not be effective, as virtually none of the anglers surveyed knew of an already-existing health advisory for striped bass. Cultural and language barriers may be hindering efforts to reach those most likely to eat contaminated fish — subsistence fishers who depend on their catch for food — according to the study. Leaders from the at-risk communities are now the target of outreach efforts. (510)452-9261 & (510)286-1346

ARO & KA



ACCORD AFTERMATH

FLEX-TIME FOR FLOWS

Dive under the surface chop of river outflow percentages, isohaline positions and channel closure periods in the new Bay-Delta accord and there's an strong undercurrent of change in how we manage flows to protect imperiled fish. Rather than imposing a fixed standard and continuous limit on export pumping year in, year out, the agreement gives pump managers an annual water budget and allows them to meet biological goals (such as a doubling in the salmon population) with that budget however they like.

"It's a new paradigm of how to operate," says the Department of Water Resources' Bob Potter. "Basically, when the fish aren't present, we may exceed diversion limits and bank water for future supply." Conversely when the fish are present, pumping may drop below limits.

The idea of tuning pumping to the actual physical and biological conditions that exist at any given time is something The Natural Heritage Institute's Dave Fullerton calls "adaptive management." Water managers in the Columbia River Basin are already trying it out. For application to the Bay-Delta, it will mean stepped-up monitoring to assess when and where the fish are in the system (see p. 4), corresponding daily and monthly adjustments in pump operations, and careful oversight by a whole new multi-agency, multi-interest "Operations Group" charged with deciding, among other things, what the split between export and outflow will be on a day-to-day basis.

"Adaptive management can be a frightening concept because it means that we must trust institutions to make good decisions on the fly about the environment," writes Fullerton in a recent analysis of the agreement (see *Now in Print*). "We will no longer be able to simply fall back on black and white standards. But I would argue that such standards are so inefficient that they reduce to unacceptable levels the amount of environmental protection that we can justify politically and economically."

If done right, adaptive management may bring a lot more bang for the buck in terms of the water costs of environmental

protection. It's also much more flexible. "It's built into the structure that you learn from your mistakes," says fish biologist Peter Moyle. "If you make a mistake you have the flexibility to correct it immediately, instead of having to go through a whole Bay-Delta hearing and negotiation process all over again."

Adaptive management uses experimentation as a strategy for managing large ecosystems. According to EPA's Patrick Wright, the theory is to create a decision-making process that allows you to incorporate the results of ongoing studies into management decisions. "We don't do enough learning in our regulatory programs," says Wright.

Adaptive management underlies the accord in several places, not only within

the new water export accounting system, but also in the set of measures to protect migrating Chinook salmon. Under the triennial review of standards established by the agreement, if some measures work better or worse than predicted, they can be adjusted. "In this way, surprises become opportunities to improve previous management decisions rather than to reject them," says Wright.

"If we become serious in our monitoring, data analysis and response management, we could see big improvements," says Russ Brown, a Jones & Stokes hydrologist who has long been a vocal proponent of adaptive management.

Contact: Dave Fullerton (415)288-0550; Bob Potter (916)653-6055; Patrick Wright (415)744-1993 ARO

HOW I SEE IT

WHY THE ACCORD WORKED



BETSY RIEKE
ASST. SECRETARY
FOR WATER AND SCIENCE
U.S. DEPT. OF INTERIOR

"Several key ingredients made the Bay-Delta negotiations succeed. First, we walked into a situation where everyone — urban users, business, even the agricultural community — was so tired of being unable to solve the problem they were ready to move. Second, we benefitted from the leadership of several relative newcomers to the Bay-Delta water wars. People like the [San Luis-Delta Mendota Water Authority's] Dan Nelson, [EPA's] Felicia Marcus and I didn't bring along much baggage vis-a-vis the others at the negotiating table. Third, we managed to meet Governor Wilson's demand that we, the federal government, get it together. We formed ClubFed, an association of EPA, Interior and Commerce agencies all with one form of mandate or another to protect the habitat and wildlife of the Bay-Delta. ClubFed enabled the federal agencies to speak as a chorus and to be accountable as a group.

"Another ingredient of success was the region's unusually sophisticated environmental community and unusually engaged business community. The latter helped us make the Bay-Delta a non-issue in the 1994 election. With a Democratic president and a

Republican governor in California, the Bay-Delta could have become a bitter partisan issue. But the business community was able to hold the feet of both the federal and the state government to the fire and demand a solution by the end of the year. When you get a letter signed by the CEOs of Bank of America, Southern California Edison, PG&E and the like, you have to wake up and pay attention.

"Another milestone was when the urban water users put their own proposal on the table — the first time any user group had actually agreed to give up a specified amount of water to the Bay-Delta environment. The urbans then worked to build consensus with the agricultural community. The enviros, in turn, were sophisticated enough to recognize the importance of compromise. They helped our scientists and policymakers see a way to a compromise agreement with the urban/ag coalition. Another major milestone was the signing of the state/federal framework agreement in the summer of 1994, which emphasized the federal commitment to having the state adopt its own standards.

"This was probably one of the oldest and most intractable of the Western water wars. Without the leverage of the Endangered Species Act, and without all the negotiators really trying to understand what it was the other side saw as a conflict, it might never have been resolved." ARO

CONSENSUS SCIENCE CONTINUED

"Engineers generally assume that nature exists for human purposes and that they can mitigate virtually all negative impacts arising from their projects," writes political scientist Paul Sabatier in a recent paper. "In contrast, wildlife biologists tend to view virtually all species as having intrinsic worth and are skeptical of the ability of humans to manipulate natural systems without unforeseen adverse consequences..."

Despite different world views, Herbold says that at a certain point on the science side of the Bay-Delta negotiations, a few biologists and a few engineers bridged the communications gap and "really drove this thing."

"Integration between the physical knowledge that engineers have and the biological knowledge that biologists have has skyrocketed as a result of this effort," says Herbold. "We're so far beyond where we were, I'm really jazzed."

The science behind the accord didn't stop with the state and federal engineers and biologists. The water users and watchdogs — the CUWA/AG coalition (California Urban Water Agencies and the agricultural interests) and the environmentalists — also pitched in with their own proposals and opinions.

"It was kind of a poor man's peer review," says the Bay Institute's Gary Bobker. "It enabled us to get past misunderstandings of the science and better receive improvements to the science."

While consensus science may not be a panacea for all the tough environmental questions of the future, its role in the Bay-Delta accord suggests the importance of providing more opportunities for scientists to step down from their ivory towers and single interest soapboxes and step into conference rooms where they can put their heads together. In this scientific synergy, perhaps, lies the closest we can get to truth in terms of our relationship with what's left of nature. ARO

ACCORD AFTERMATH

REALITY-CHECKS

Bay Delta managers must expand the web of underwater instruments, communication links and research programs now taking the Estuary's environmental pulse in order to comply with the new Bay-Delta agreement and monitor the success of its water management approach. At the heart of this new approach to pulse-taking is something called "real-time monitoring" in which Bay-Delta managers base their decisions not just on models and projections of flows and fish movements but also on actual in-the-water conditions.

As a first step into real-time, government scientists have been brainstorming with water users and environmentalists to come up with a monitoring plan for inclusion in the forthcoming state Water Quality Plan for the Delta. In draft form already, this includes a list of goals and objectives, plus 27 pages of research questions, according to Cal Fish & Game's Pat Coulston. Coulston says the proposed research will not only back up the accord, but will also include more coordination with work going on upstream and more communication between fish and toxics research. "We need to try and tease out the relative importance of pollutant and other effects versus water management effects on fish populations," he says.

Hydrologist Russ Brown of Jones & Stokes says the monitoring push will also likely require new technologies (such as unmanned instruments capable of picking up passing schools of fish); upgrades of current programs measuring physical and chemical factors such as salinity and temperature; and more rapid reporting of monitoring results to operations managers.

One newly on-line real-time example is in Suisun Bay, where this January teams from a NOAA/San Francisco State partnership deployed three pairs of conductivity-temperature sensors to measure salinity changes in the shallows of Suisun Bay (see map). S.F. State's Mike Vasey says the new stations will fill a data gap related to the new salinity standard and complement existing monitoring in the deeper channels.

"We need more information about how the upper, shallower parts of the bay are tied to the salinity issue," says Vasey, adding that these shallows host important nursery grounds for Delta smelt. The new stations will be radio linked to a dedicated phone line and a computer at the California

NEW SHALLOW WATER MONITORING STATIONS



Maritime Academy, enabling users to dial and hear a synthesized voice tell them, for example, just how salty and warm the water is out in Suisun's Honker Bay.

Contact: Pat Coulston (209)948-7800;
Mike Vasey (415)338-1957 ARO

NO-FLOW DREAM DOUGH

Water users often complain that there's too much emphasis on the environmental toll of water exports and not enough on other threats. This December, they decided to put their money behind their concerns by making a downpayment on a \$180 million fund for non-flow related Estuary improvements.

High on the funding priority list are steps to minimize fish losses to unscreened diversions. Other potential improvements on a now 500-item long list include habitat restoration, monitoring and water purchases for environmental purposes. Fund staffer Walt Wadlow says his task force also drew on the S.F. Estuary Project's *Comprehensive Conservation and Management Plan* (CCMP) for fodder, and is now exploring ways to more closely link the two efforts and the CVPIA restoration fund. A draft implementation plan is scheduled for release this March.

Contact: Walt Wadlow (408)265-2607
ext. 2772 ARO

DREDGE SCOOP

CARGILL'S DREDGE LOCKS

Mallard isn't a duck, it's a dredge used by Cargill to maintain the 200 miles of channels, levees and locks that surround and access its 29,000 acres of salt ponds. Whether and how this mechanical duckling can get on with its work is now being discussed by permitting agencies.

At stake are wetland fringes that host endangered birds and rodents and which might be temporarily disturbed by *Mallard* dredging and cutting its way in and out of the locks (see below). Ways to minimize these impacts have been the subject of a recent slate of meetings between Cargill and officials from the S.F. Bay Commission, the Army Corps and environmental agencies.

According to the salt company's Jill Singleton, none of the impacted acreage is pristine but much offers valuable habitat despite 100 years of ongoing maintenance work. Without this work, levees would fail, and all habitat would be lost, she says. Out of a total of 38 locks, *Mallard* enters an average of three per year. "Only 17 acres of marsh will be impacted at any one time and most of that recovers substantial vegetation within a few years," she says.

Cargill has offered to mitigate for the temporary impacts by creating 34 acres of permanent new tidal marsh. It's also offering to undertake protective measures such as giving wildlife agencies a chance to identify locally sensitive areas well before

Mallard reports for work and training dredge operators to minimize disturbance. Other measures are recommended in the Bay Commission's recently released environmental assessment — among them providing buffer zones between operations and sensitive species, replanting access cuts with plugs of cordgrass, and taking steps to inhibit growth of invasive exotic plant species in disturbed areas.

Such measures are and have been part of the negotiations over Cargill's application for both a Commission and Corps permit. In terms of the state permit, the S.F. Bay Commission voted on February 16 to xx (to come)

The Corps, meanwhile, is gearing up to release a public notice on the federal permit and is also doing battle in court, where Cargill is arguing its maintenance activities are exempt from Clean Water Act and Rivers and Harbors Act regulations. Contact: Jill Singleton (510)790-8157; Rick Cooper, Bay Commission (415)557-3686; Liz Varnhagen, Army Corps (415)744-3318 ARO

OAKLAND BID BELOW BALLPARK

Deepening the Oakland harbor will cost \$12 million less than expected. The Army Corps had ball-parked the cost of dredging Oakland's main channel down to 42 feet, and then transporting the material to the ocean, Sonoma Baylands and Galbraith Golf Course disposal sites, at \$54 million. But the four actual bids ranged from \$42.5 to \$67 million. The Port of Oakland's Rob

Andrews says DUTRA, whose low bid won the contract, kept costs down by getting creative with equipment. DUTRA is building a customized dipper dredge (basically a backhoe on a barge) that can do a better, faster job of removing hard Merritt sands than a traditional clamshell rig. It's also mobilizing two new scows with a 5000 cubic-yard capacity to transport the material, as well as a fleet of existing 3000 cy scows, where the Corps

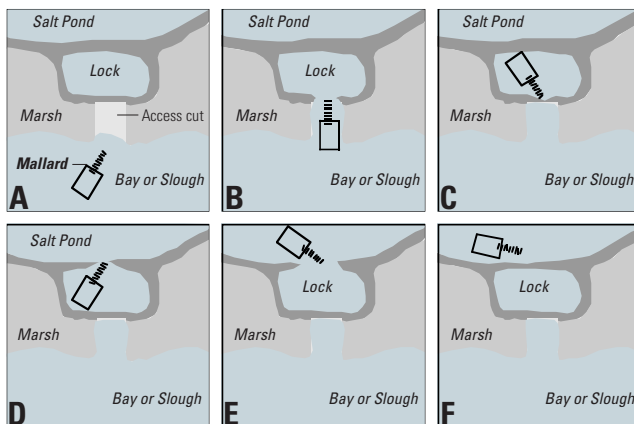
had thought only the latter would be used. The larger scows will enable DUTRA to make fewer of the expensive 51-nautical-mile round trips to the ocean dump site. Andrews says under DUTRA's proposed schedule, the first batch of outer harbor material will arrive at Sonoma Baylands in late April. (510)272-1166

HARD SCIENCE

MERCURY IN A HAYWARD WASTE-WATER MARSH probably doesn't threaten the wildlife that feed there, concludes a recent study. After the S.F. Regional Board raised concerns that effluent entering the marsh contained high levels of the trace metal, scientists analyzed sediment, invertebrates, fish, bird eggs and muskrat livers and found low or near background levels in all but the eggs of black-necked stilts. The stilt eggs contained more mercury than that found in three other bird species, but because of the low levels measured elsewhere in the marsh ecosystem scientists think the stilts accumulated the mercury outside the immediate area. (510)471-0577 ext. 553

ONLY A TINY PERCENTAGE OF SMELT SAMPLED IN THE DELTA WERE EXOTIC WAKASAGI or hybrids, according to an analysis that used electrophoretic techniques to distinguish between the Japanese invader and Delta smelt — a threatened species. The study aimed to discover whether the wakasagi — a species abundant in California reservoirs and now creeping into the Delta — is having a significant ecological or genetic impact on its Delta lookalike. But of 231 specimens collected in 1994, researcher Peter Moyle found 93% were Delta smelt, 6% were wakasagi and 1% were hybrids between the two. Data also showed no backcrossing — mating back — between hybrids and Delta smelt. Moyle says there's thus no evidence that the Delta smelt is suffering from having a few of its Japanese relatives in town. (916)752-6355

DREDGE LOCK OPERATION PROCEDURE



CAPITAL BEAT

ELEPHANT STAMPEDE ON SPECIES ACT

The new Republican majority has been going after the controversial Endangered Species Act with a dizzying array of procedural weapons. First, Alaska Congressman Don Young, who replaced California's environmental strongman George Miller as head of the House Committee on Resources, appointed three task forces to tackle his top priorities: the act, private property rights and wetlands. The task forces, which will be holding hearings around the country, are supposed to come up with proposals by June.

Young's Senate counterpart is moderate Republican John Chafee, who heads the Environment and Public Works Committee. Unlike Young, who has been criticized for short-circuiting the subcommittee process by appointing all-Republican task forces, Chafee is giving his committee a year to come up with a proposal on the Endangered Species Act through the usual legislative process.

Many Republicans don't want to wait for Chafee's proposal to meet Young's in conference committee. Two Texas Republicans, Congressman Lamar Alexander and Senator Kay Bailey Hutchinson, have introduced matching bills that would prohibit any new listing of endangered species and stop consultation between agencies on projects affecting such species — effectively preventing government from setting conditions for developers. In late January, Senate Majority Leader Bob Dole fired another salvo by appointing Hutchinson to head a committee on regulatory reform. Hutchinson says her first priority would be the Endangered Species Act.

Environmentalists plan to direct their counterattacks to the hearings being held across the country by Young's task force and to the reauthorization fight itself, rather than to bills like Hutchinson's, which they see as too radical to pose a serious threat.

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BIG PLANS

NEW NORTH BAY NEXUS

A new lodestar brightened the wetter reaches of the North Bay universe this winter, when government, environmentalists and landowners decided to strengthen plans for the protection of the largest undeveloped collection of historic baylands, wetlands and open space remaining in San Francisco Bay.

Though these 40,000 acres on the North Bay rim, called San Pablo Baylands, were once expansive wetlands, they were later diked to create hay farms, salt ponds and vineyards. "Luckily, our farmers have been good stewards of the land. It doesn't have houses and shopping centers on it," says Save San Pablo Baylands' Myrna Hayes.

So far, the North Bay's agricultural bent has staved off most development pressures. But now the big farms and ranches are being sold. "We need to do something now or all these incredible lands will just be paved over," says U.S. EPA's Sunny Kuegle. Those doing something already — scattered and myriad restoration related projects are underway — haven't been very coordinated to date. Restoration projects have also been hampered by the sheer number of federal, state and local agencies involved in wetland regulation — a source of ongoing frustration for landowners who must deal with regulators. "Whenever you try to do anything, one agency says one thing; another says something else. There's too much confusing cross-talk," says oat-hay farmer Jim Haire. To streamline the process, the S.F. Estuary Project's CCMP calls for a coordinated intergovernmental system that can ensure consistency in wetlands regulation and protection — the kind of system now being designed in the North Bay.

State and federal agencies are now gathering under the umbrella of the U.S. EPA-sponsored North Bay Initiative Forum. "The Forum brings agency representatives and project sponsors together so they can discuss what's going on, brainstorm ideas, find overlaps and look for ways to collaborate," Kuegle says.

Regional planning efforts on other fronts promise to inform and complement Forum initiatives. On the coordination front, the Estuary Project's North Bay Geographic Subcommittee will be developing a matrix tracking who's doing what where in the region. On the local government front, the S.F. Bay Commission's North Bay Management Program is now partnering with cities and counties to develop a legally enforceable blueprint for land use in the Baylands.

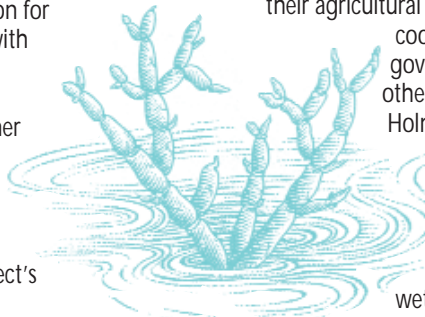
"Local governments have the most comprehensive ability to regulate land use," says the Commission's Jeff Jensen. "Through this program, they can retain their authority and continue to plan for wetlands protection with the technical assistance of the state and federal governments." Jensen says program results will be incorporated into local general plans and zoning ordinances, as well as the Commission's *Bay Plan*.

But involving government isn't enough, says Save the Bay's Marc Holmes. "We felt that two groups were being left out — landowners and the general public," he says. Holmes' group recently proposed and won substantial funding for a new public-private partnership program for San Pablo Baylands protection.

"Our objective is to leave the property in private hands and then encourage the owners to do wetland restoration, enhancement and protection on their land. It will benefit the landowners in terms of being able to continue their agricultural operations and to develop cooperative relationships with government agencies that otherwise would only regulate," Holmes says. The new partnership will also mount an aggressive campaign to gain grassroots support for Baylands protection and will develop a consensus-based wetland enhancement plan.

Holmes expects that the partnership — and indeed the whole North Bay planning process — could serve as a national model, a lodestar for future efforts. "The vast majority of remaining wetlands are privately held. Unless we figure out a way to manage these lands as environmental resources, they will continue to deteriorate," says Holmes. Contacts: Myrna Hayes (707)557-9816; Marc Holmes (510)452-9261; Jeff Jensen (415)557-3686; Sunny Kuegle (415)744-2019

KA



PLACES TO GO & THINGS TO DO



WORKSHOPS & SEMINARS

Facilitating and Mediating Effective Environmental Agreements

THUR-SAT•3/23-25•All day

Topic: Hands-on practice in negotiating agreement between various interests.

Sponsor: CONCUR

University of California at Berkeley

Cost: \$750 (510)649-8008

Kids in Creeks

Various dates and times in March and April

Topic: Prepares educators to teach about creek ecology and restoration (registration limited to teachers in Alameda and Contra Costa counties)

Sponsor: San Francisco Estuary Institute
(510)231-9539, ext. 655

Internet Training for Water Programs Staff

Various dates in March, April and May

Topic: How to use the Internet as it relates to water issues.

Sponsor: Water On-Line

Cost: \$225
(916)758-4211

A New Dawn in the Delta?

THUR-FRI•4/6-7•All day

Topic: Impact of the Cal-Fed agreement on water users and the water rights process.

Sponsor: California Water Resources Association

Radisson Hotel, Folsom
(916)446-6507



HANDS ON

San Leandro Creek Watershed Festival

SAT•4/8•12-4 PM

Activities: Explore San Leandro Creek, sample for aquatic insects and stencil storm drains.

Sponsor: Friends of San Leandro Creek
Root Park, San Leandro
(510)231-9539, ext. 423



MEETINGS & HEARINGS

CCMP North Bay Geographic Subcommittee/North Bay Initiative Forum

THUR•3/2•9:30 AM

Topic: CCMP implementation progress and wetlands projects in the North Bay.
Conf. Room 4A—S.F. Regional Board, Oakland
(510)286-0924

Harbor Safety Committee

THUR•3/9•9:30 AM

Marina Bay Boat House
2580 Spinnaker Way, Richmond
(415)441-7988

CCMP Watershed Subcommittee

FRI•3/17•9:30 AM

Topic: CCMP implementation progress related to watershed protection.
S.F. Regional Board, Oakland
(510)286-0924

Bay Commission

THUR•3/16•1 PM

Room 455—State Building, San Francisco
(415)557-3686

Public Hearing on Resolution 92-49: Groundwater Clean Up

THUR•3/23/10 AM

Hearing Room—901 "P" Street, Sacramento
(916)657-0990

SFEP South Bay Geographic Subcommittee

THUR•4/13•9:30 AM

Topic: CCMP implementation progress.
S.F. Bay National Wildlife Refuge, Newark
(510)286-0924

SFEP Delta Geographic Subcommittee

WED•4/19•9:30 AM

Topic: CCMP implementation progress.
Jean Harvie Community Center, Walnut Grove
(510)286-0924

SFEP Watershed Demonstration Projects Quarterly Meeting

TUES•4/25•9:30 AM

Topic: Report on native fish inventory of Bay-Delta watershed and update on other demonstration projects.
Conf. Rm. 4A—S.F. Regional Board, Oakland
(415)744-1990

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U.C. Berkeley's GIS mapping of Bay-Delta land use and environmental conditions (an ongoing S.F. Estuary Project Watershed Demonstration Project) is accessible to PC users via Internet and GRASSLinks. URL contact: <http://www.regis.berkeley.edu/>

CAPITAL BEAT CONTINUED

In the short-term, however, the act is particularly vulnerable on the issue of funding. Reauthorization has been delayed for two years, and endangered species protection has been funded through an exception to the rules. An appeal to the rules committee, particularly by Don Young, could pose a powerful threat.

Young's staff has been subtly threatening such a move. But a former environmental lobbyist who has worked with Young in the past says that an overt attack on ESA funding is unlikely, despite Young's reputation as a foe of the environment (the League of Conservation Voters gave him a zero rating).

The lobbyist, who asked not to be named, thinks a more likely approach will be for them to say no money can be spent to list species. "They'd rather prevent the program from being implemented and pay the bureaucrats to just sit there so they don't have constituents that are mad at them, but the radicals are satisfied," says the lobbyist.

By crippling the act, which has long dominated Bay Area land and water policies, Congress runs the risk of sidetracking efforts at genuine reform. The Environmental Defense Fund's Michael Bean, for instance, has expressed interest in adding incentives to landowners to preserve species rather than relying on the act's command-and-control provisions. But in the current political climate, the best ESA supporters can hope for may very well be a stalemate.

Contact: House & Senate
(202)224-3121

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