Non-Regulatory Approaches to Management of Coastal Resources and Development in San Francisco Bay

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San Francisco Bay is the largest coastal water body in California. Many large, enclosed water bodies in other countries are likely to experience at least some of the Bay's problems. The management of the Bay's coastal resources may be relevant for other nations now facing similar problems. In particular, the California State Coastal Conservancy's experience as a non-regulatory problem-solving agency may be pertinent to situations which either have similar complex regulatory systems as the Bay Area, or which face problems not amenable to regulatory solution.

The Bay's Regulatory and Planning Structure in Outline

Before discussing the Conservancy's activities, a brief outline of the regulatory and planning structure for managing the Bay's coastal resources is needed to understand the Conservancy's role. Regulation of Bay resources involves many federal, state, and local government agencies. Most of them have limited or single purposes; three are of special importance.

The San Francisco Bay Conservation and Development Commission (BCDC), is the most important. It has overall regulatory control of development within its jurisdiction, which extends along a one hundred foot-wide strip around the entire nine-county Bay shore; plus inland along rivers which empty into the Bay for varying distances. BCDC was created by the California Legislature in the mid-1960s, mainly to deal with problems of uncontrolled filling and reclamation of the Bay such as loss of wildlife habitat, reduction in water area and quality, and loss of public access to the Bay shoreline. BCDC was also empowered to prepare and administer a Bay Plan, in order to guide land use around the Bay.

The second principal Bay regulatory agency is the United States Army Corps of Engineers. The Corps has permit authority over the nation's navigable waterways, which includes the Bay and the rivers that flow into it. This responsibility covers regulation of dredging, filling, and diking of the Bay.

The third main regulatory mechanism is comprised of the regional water quality control boards; two cover the Bay Area. These state agencies are responsible for establishing and monitoring water quality standards, including regulation of effluent into the Bay from industry, local sewage outfalls, and other sources.

Besides these three agencies, numerous others exercise other limited regulatory, planning, or advisory functions, including the nine counties and twenty-six municipalities that front the Bay, which also control development within their jurisdictions.

This patchwork of agencies, each with different mandates, functions, jurisdictional areas, and governmental positions, has, not surprisingly, resulted in duplication, inconsistencies, and often serious gaps in regulatory administration and planning. Budget shortages have also aggravated the problem. Nevertheless, significant progress has been made in several directions. In particular, large-scale filling and reclamation of the Bay has been halted, although smaller cumulative impacts are still being felt. Protection and provision of public access to the shoreline continues ahead. Public and

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official awareness of the continuing major problems of water quality, harbor and ship channel dredging and spoils disposal, maintaining adequate levels of freshwater inflows to the Bay, and protection of diked or seasonal wetlands is very high, and several planning efforts are underway to address these issues.

While regulation can prevent or limit certain actions that would injure the Bay's resources, it cannot, however, take positive actions to restore degraded resources, such as marshes, to directly provide access to the shoreline, or, in a great many cases, resolve use conflicts; nor can it prevent loss of resource lands through private sales or on-site actions outside regulatory jurisdiction. Some other mechanism is needed for these tasks.

The State Coastal Conservancy's Role in Bay Resource Management

The State Coastal Conservancy was created by the California Legislature in 1976 with a broad mandate: to protect, restore, and enhance coastal resources. Its primary function is to address resource and land use problems that the regulatory framework, and other limited purpose agencies, cannot handle. The Conservancy is a project design and implementation agency. It provides funds and technical assistance to carry out projects for agriculture preservation, public access, land acquisition, urban waterfront restoration, wetland and other habitat protection. The agency works closely with local governments, other public agencies, private land-owners, nonprofit organizations including land trusts, and community groups to achieve its purposes.

The Conservancy's original jurisdiction was limited to the coastal zone, from Mexico to the state of Oregon. Its scope of action was expanded to the Bay area in 1980. Following are several examples of Conservancy project activity that illustrate how the agency's unique approach to coastal resource management has been applied to Bay area problems.

Protecting Diked Wetlands and Agriculture

One of the most critical issues presently receiving attention is the preservation of the Bay's remaining diked wetlands (also called seasonal because they are covered with water only part of the year). Much of the Bay has been filled or reclaimed for farming or urban settlement during the past one hundred and fifty years. Many freshwater marshes have been lost. Much additional acreage has been diked and, while it no longer receives direct, vigorous tidal action, is classified as wetlands. These areas are outside the regulatory jurisdictions of both BCDC and the Corps of Engineers, and are therefore subject to immediate threat of damage and loss as development pressure continues unabated. Many acres of privately owned seasonal wetland have been plowed under or filled, thereby removing it from wetland designation. Also, this land has usually been zoned by the local governments for uses other than wetlands or open space, thereby increasing the development threat and inflating property values.

The only recourse appears to be acquisition -- assuming the owner is willing to sell and enough money is available. A recent case of the Conservancy's ability to act positively involves a project on the north shore of the Bay in Sonoma County. Sonoma has been one of the fastest growing counties in the Bay area in recent years. Its southern portion, lying closer to San Francisco Bay, is threatened with development. The County's planning priorities call for the shoreline area to remain as seasonal wetlands, and the uplands to remain in agricultural use; these farmlands are important sources of feedgrains for the regional dairy industry. The entire area also provides significant open space in a region where it is vanishing rapidly.

The Coastal Conservancy, working closely with the local nonprofit Sonoma Land Trust, prepared plans and funded the purchase of over 800 acres (over 330 hectares) of valuable diked wetland and farmland. This acquisition followed a prior purchase of several hundred more acres of farmland adjacent to this project site as part of the Conservancy's regional approach. The Conservancy and the land trust are now preparing detailed plans for enhancing the wetland area to improve its wildlife habitat

values. Discussions are in progress with the federal Fish and Wildlife Service regarding their permanent management of the site. Thus, the threat of development has been removed from a major Bay wetland site and farming area; and, in addition, threats to adjacent lands have probably been reduced as well.

This project has involved the Coastal Conservancy in yet another serious Bay problem, the disposal of material from the dredging of Bay harbors and ship channels. The Conservancy's Sonoma project site has been viewed by both the Corps of Engineers and the Port of Oakland as a potential disposal location. Several issues are involved, not least of which is whether such dredge-spoils are clean enough so they will not contaminate the sensitive wetland. Also, while the wetland area behind the dikes can probably benefit from having its level raised somewhat (it has subsided considerably over the years), it is yet unknown how much material could safely be placed there and what habitat impacts may occur. The Conservancy is studying this alternative.

Of note is the role of the Conservancy as financier and provider of technical assistance for the acquisition and enhancement planning of the site; its ability to do a multi-purpose project, in this case involving agriculture and wetlands, and part of the Bay public access trail route; its facility in working with the local land trust, which was the most effective way to proceed on this purchase; and, now, its ability to broker the partial resolution -- potentially -- of the dredge disposal issue. None of these are regulatory functions.

Resolving Multiple-Use Conflicts

On neighboring Suisun Bay, a few miles up the Sacramento River from San Francisco Bay, the Coastal Conservancy resolved a sensitive dispute concerning land use on a large ranch on the outskirts of the fastest growing community in the Bay Area. Initially, Conservancy help was urgently sought by still another local land trust, the Solano County Farmlands and Open Space Foundation, to acquire the 2,070 acre (828 hectares) Rush Ranch, which had suddenly come on the market. The ranch is adjacent to the city of Fairfield and is a prime candidate for development. It contains significant wetland area and rolling hills which have been used for cattle grazing. The uplands have been over-grazed, and the cattle have also damaged to the wetlands. The site has spectacular views of the surrounding Suisun Marsh, the largest inland tidal marsh remaining in the country.

The Conservancy, with its special ability to move rapidly, and the land trust were able to purchase the property within four months, and then proceeded to begin planning for restoring the degraded wetlands, expanding waterfowl breeding habitat, devising better grazing management practices, upland revegetation, and provision of public access and environmental education facilities. Providing adequate protection of the wetlands from cattle grazing, given previous practices, called for some sensitivity. A more heated conflict developed regarding whether hunting would be permitted on-site. Neighboring marsh areas have been used for many years for duck-hunting, and a small group of local people desired that hunting be extended to the Rush Ranch as well. This use was viewed as incompatible with the other proposed uses by some interests, but the Conservancy's planning process took it into account and explored its feasibility. This involved a fine degree of delicacy. As it has turned out, hunting does not appear feasible. The Rush Ranch management plan has now been agreed to by all concerned interests, and implementation is expected to proceed.

Experimental Uses of Treated Wastewater in Marsh Enhancement

A controversial subject is whether treated wastewater can be used to enhance freshwater or brackish marsh habitats without impairing habitat or water quality. If it can, urban communities needing a place to put their wastewater can solve more than one problem. The Conservancy is involved in three projects to test the feasibility of using treated wastewater. These projects, in Sonoma County and the cities of Hayward and Palo Alto, are still in progress so conclusions cannot yet be drawn. Of interest, however, is the innovative role the Conservancy can play in demonstrating

new methods for coastal resource management. For such projects, stringent water quality standards and other permit requirements must be met, of course.

Providing Public Access to the Bay Shore

Enabling the public to enjoy the Bay is an important objective of the Conservancy, as well as the Bay Plan. The Conservancy has funded many miles of hiking and bicycle trails around the Bay, working with local governments to identify the route and sharing construction costs. More recently, a regional planning process led by the Association of Bay Area Governments (ABAG), pursuant to state legislation, has formulated a plan for a Bay Trail around the entire Bay. (A similar Ridge Trail is intended to create a second route along the upland ridges behind the Bay.) The Conservancy is now working with local governments and other public agencies, such as park or sanitary districts, to develop links in this overall Bay Trail system.

Recreational access has been provided in other ways as well. The Conservancy has worked with cities and regional park districts to acquire and develop for public use large areas fronting on the Bay. Such projects are underway in Albany and Berkeley and along the Carquinez Strait, all on the East San Francisco Bay shore. The Berkeley and Albany projects both involve development of waterfront parks on landfills created many years ago before BCDC restrictions on filling went into effect. Large landfills are no longer permitted because of the Bay's ecological sensitivity.

Restoring the Bay's Urban Waterfronts

The Conservancy's urban waterfront program has been active in the Bay area as well. Funding and technical assistance has been given to several small cities, such as Suisun City, Benicia, Martinez, Antioch, and Sausilito to prepare and implement plans for all or part of their waterfront areas. These plans have focused on public access and recreation, visitor-serving commercial facilities, and waterfront-dependent industries.

On a larger scale, the Conservancy is working with the Port of San Francisco to modernize Fisherman's Wharf's commercial fishing facilities, and to improve public access to the area. The Conservancy also funded a preliminary feasibility study for a commercial fishing and marine research center; commercial fishing is a priority coastal-dependent use.

Another aspect of the Conservancy's approach is worthy of mention here. Several years ago, the Conservancy, at the request of BCDC and ABAG, sponsored a series of community workshops for the East Bay communities of Albany, Berkeley, and Emeryville, to identify projects along the East Bay shoreline that would open it for public recreational use. The projects mentioned earlier, as well as others, were included in that workshop planning process. This approach has been used successfully by the Conservancy in many urban situations where multi-purpose waterfront restoration is needed, and community consensus must be obtained.

Lessons From the Conservancy's Experience

Regulation as a tool for coastal resource management can, within limits, be effective. In San Francisco Bay, for example, BCDC, with its relatively narrowly defined authority and focus, has been able to substantially curtail major landfilling of the Bay. BCDC is also developing planning and permit guidelines to take into account potential impacts of sea level rise. Problems remain, however, regarding cumulative impacts of small fills that are still permitted and loss of diked or seasonal wetlands, issues that arise because of gaps in regulatory jurisdictions.

Beyond regulatory limits, however, other approaches are needed to solve problems of a non-regulatory nature. The State Coastal Conservancy's experience, both in the San Francisco Bay area and along the California coast, demonstrates one uniquely successful way of addressing such complex, multiple interest issues through direct project action.

The Conservancy's ability to take into account relevant interests and achieve community consensus through its projects, is another vital element in getting beyond stalemates that frequently occur when the regulatory process cannot resolve an issue. The projects provide an attainable goal in which accommodation of the various interests and concerns can clearly be seen.

As a state government agency, the Conservancy can act on a broader scale and insure that statewide, and even national, interests are adequately addressed beyond purely local concerns. Problems such as regional wetland protection and Bay Trail siting are examples of this aspect.

Lastly, the complexity of San Francisco Bay's resource problems and the urgency with which action is needed call for both long-range planning and immediate action. The Coastal Conservancy, as a problem-solving, project implementing agency, has concentrated on immediate action. Yet its projects are directly concerned with solving problems which, if ignored, will have long-term adverse impacts. Fortunately, enough is known by now that such action is well-directed. In addition, though, the Conservancy participates in the long-range planning effort for the Bay sponsored by the U. S. Environmental Protection Agency under its National Estuary Protection Program. This enables the Conservancy to contribute its experience to the planning while providing a link between it and immediate needs.

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