

The Effectiveness of the Permitting Process for Dredging in the San Francisco Bay Area

Kristen Thall

Introduction

Regulatory problems currently surrounding dredging and dredge spoils disposal in the San Francisco Bay Area are of two types: environmental and economic. The environmental problems can also become legal problems because the United States and the State of California have enacted statutes which enforce environmental preservation and protection, some specifically touching upon water quality. These statutes, however, most often have economic consideration clauses, which require balancing environmental and economic factors.

The purpose of this paper is to examine the roles of the agencies that contribute to the permitting process and to discuss their functions as viewed by agency personnel. Currently, there is not a single agency which has regulatory power to make a final permitting decision, but several which must concur before a permit can be given out. This causes difficulties because the agencies involved are not sure of the others' role in the process.

History of Dredging

Two reasons exist for dredging in San Francisco Bay. The first is maintenance dredging, which is required to maintain clear shipping channels. As currents move within the Bay, they constantly deposit silt in the shipping channels, which must then be dredged in order for the ships to move about with adequate clearance. The second type of dredging is for major projects in the area, such as the Oakland Harbors project. This requires the deepening of the Inner and Outer Harbor shipping channels and the turning basin of the Port of Oakland to accommodate the new deep-draft ships that commercial shipping lines now utilize to carry cargo. Smaller-scale projects include the deepening of the Bay in order to create a new boat marina.

In the past two types of disposal sites for the dredge spoils have been utilized: in-Bay and land sites. In-Bay disposal is the most economical since the dredged material is already on a barge, which only has to travel a short distance to dump its contents (Chisholm, 1988, pers. comm.). However, the dredged material is usually contaminated with heavy metals and other toxics. When these spoils are placed in a disposal site in the Bay, the contaminants become available and circulate through the water. These contaminants then may bioaccumulate in the fish and other Bay inhabitants (Lemlich, 1988, pers. comm.).

Various in-Bay disposal sites have been used in the past, but only three are currently in use. The Alcatraz site, off the southeast shore of Alcatraz Island, is the largest. Table 1 shows the average amount of disposal per year at the three sites. Alcatraz is filling in very quickly, and in the future will be used only for maintenance dredging disposal. All future project dredging will have to resort to alternatives such as land disposal or ocean disposal (Tong, 1988, pers. comm.).

| <u>Site</u> | <u>Corps O & M^a</u> | <u>Navy permits</u> (in million cubic yards) | <u>Other permits</u> | <u>Total</u> |
|-------------|------------------------------------|---|----------------------|--------------|
| Carquinez | 2.0 | - | 0.5 | 2.5 |
| San Pablo | 0.4 | - | - | 0.4 |
| Alcatraz | 1.3 | 1.8 | 2.0 | 5.1 |
| Total | 3.7 | 1.8 | 2.5 | 8.0 |

^a O & M is annual operational and maintenance dredging by the Corps.

Table 1. Average Annual Disposal Quantities at Approved Disposal Sites

Source: Corps, 1987, Table 2-1.

Land disposal sites are better environmentally because the contaminants are not dispersed throughout a liquid medium. The dredged material and soils can then be used to create marshes, islands, landfills, dikes and levees. But problems still arise when the process of bioaccumulation occurs in the plants grown on this land, and they are then consumed by animals or humans (Lemlich, 1988, pers. comm.). Running out of sites to fill is another problem which proves this solution to be only a temporary one. Economically, the land disposal method is quite expensive because of the cost and time of transporting the material to the site and the expense of manpower and materials to construct the levee, marsh or island (Chisholm, 1988, pers. comm.).

The environmental problems of the controversial ocean disposal alternative are similar to the problems with in-Bay disposal, but, because of the distance away from the actual dredging site, the costs of transportation are extremely high (Corps, 1988).

The Role of the Corps

The Corps is the lead permitting agency for all dredging projects. As such, it must regulate dredging in accordance with federal and state laws. There are three major federal and one state

statute which affect a siting decision. The first is the National Environmental Policy Act (NEPA), which requires an Environmental Impact Statement (EIS) for all federal projects. An EIS requires an analysis of all environmental impacts of the proposed projects, and NEPA necessitates that the lead agency consider these impacts before making a final decision. All dredging projects are considered to be federal projects since dredging requires a permit from the Corps (Chisholm, 1988, pers. comm.).

The Clean Water Act (CWA) requires the best available technology that is economically feasible for controlling all effluents, including dredge spoils. This statute requires all polluters to utilize technology to minimize the contamination, as long as it is within their economic means (Findley and Farber, 1988). The Marine Protection, Research and Sanctuary Act (MPRSA), otherwise known as the "Ocean Dumping Act," protects the ocean as a disposal site, a new alternative currently being considered by agencies (Duff, 1988, pers. comm.).

The California Environmental Quality Act (CEQA) is NEPA's counterpart in the state of California. It requires the lead agency for any proposed project in the state to write an Environmental Impact Report (EIR) and to consider these impacts when making a decision. It also has an overriding economic consideration clause (Newton, 1988, pers. comm.).

No dredging may take place without approval from the Corps. In order for it to issue a permit, several other agencies, including the RWQCB, EPA, BCDC, and USFWS, need to concur with its decision. The Corps applies for certification from the RWQCB under Section 401 of the CWA if the dredging is to occur in the Bay and another if the spoils are to be disposed of there also (Duff, 1988, pers. comm.; Chisholm, 1989, pers. comm.).

The Role of the RWQCB

The Regional Water Quality Control Board (RWQCB) is the state agency which is responsible for controlling water quality and which certifies permits issued by the Corps for filling the Bay. The RWQCB tries to work with the Corps and not against it, but has the authority to issue a Clean Up and Abatement Order to stop a project if procedures were not followed correctly or if project plans were changed following issuance of a permit (Carlin, 1988, pers. comm.).

The Role of the EPA

The Environmental Protection Agency (EPA), particularly the Water Quality division, has discretionary approval over the dredging permits issued by the Corps of Engineers. The RWQCB acts for the EPA under Section 404 of the Clean Water Act for in-Bay disposal (Duff, 1989, pers.

comm.). There is a memorandum of agreement (MOA) between the Corps and EPA that if there is a disagreement between the two agencies concerning in-Bay dredging and disposal, they must go through the inter-agency appeal process that is described below (Oshida, 1989, pers. comm.).

For disposal outside the Bay the agencies look to Section 103 of MPRSA. EPA and the Corps must utilize testing criteria set forth in a manual written by both agencies (Oshida, 1989, pers. comm.). If the EPA and the Corps disagree on the location of a disposal site, an inter-agency appeal process begins. If no agreeable solution is found at any other levels of the two agencies, the process can reach Washington D.C., where the Administrator of the EPA and the head engineer for the Corps will make a decision (Duff, 1988, pers. comm.; Oshida, 1989, pers. comm.).

The Role of BCDC

Working concurrently with the RWQCB is the San Francisco Bay Conservation and Development Commission (BCDC). Any agency proposing dredging projects must write concurrency statements showing how they have stayed within the limitations set by BCDC. Thus, this agency also has discretionary approval over the permit.

The Corps also writes a consistency document for in-Bay dredging and disposal to ensure compliance with the guidelines of BCDC, and private dredgers must also obtain a permit (Goldbeck, 1989, pers. comm.). If the disposal is scheduled for outside the Bay, the Corps permit must be consistent with the Coastal Zone Management Act (CZMA). The Corps' procedures must be consistent with this statute. If the two agencies disagree on the consistency of the project with the laws, BCDC could sue the Corps, leaving the courts to decide (Duff, 1989, pers. comm.; Goldbeck, 1989, pers. comm.).

The Role of the USFWS

The U.S. Fish and Wildlife Service (USFWS) aids the Corps in the EIS process by advising them on rare and endangered species in the area of concern. The federal Fish and Wildlife Coordination Act provides for the transfer of monies from the Corps to the USFWS for the purpose of conducting studies and evaluations and, therefore, providing recommendations on the decision about a project. The Corps must then address all the points that the USFWS has brought up, and if the USFWS does not feel they were adequately addressed, the conflict is resolved by going through the channels, eventually ending in Washington D.C. (Nakaji, 1989, pers. comm.). The Corps, on the other hand, feels that the USFWS's role is only to comment on

the projects (Duff, 1989, pers. comm.). The conflicting roles of the agencies are beginning to become apparent.

The Role of Interest Groups

There are various interest groups which play a major role in decision making, and they have a wide range of concerns and interests. The Port of Oakland's Environmental staff have obvious interests in the dredging disposal at this time. On the other side is the Pacific Coast Federation of Fishermen's Associations.

Citizen's groups whose only concern is for the well being of the environment are very important players in the siting decision process. In 1972, the Supreme Court ruled that citizens groups do have standing in a court of law, which means that they have the right to bring a lawsuit against an agency on the basis of injury due to an unclean environment. Prior to this landmark decision, private citizens were not entitled to protest a project in court on the sole basis of injury to aesthetics or the preservation of the environment.

The environmental staff of the Port of Oakland is aware of the impacts of dredging on the environment, but they also recognize the role dredging plays in their business. They are especially interested in any environmental policy regarding dredging which limits the amount of dredging because it is an integral part of the port's business. A policy that limits dredging in any way increases the possibility of damage occurring to the operational gear of the ships belonging to the port's constituents. Although the Corps does operational and maintenance (O & M) dredging on the channels through which the ships move, it is the port's responsibility to maintain and deepen the berths for new projects, for instance the deepening required so that the new deeper draft ships can utilize them (Meyer, 1989, pers. comm.).

The latest policy which concerns the Port's environmental staff is the recent policy proposed by the RWQCB, which would place a cap on all O & M dredging in the Bay, as well as on the amount of material which will be allowed to be disposed of at Alcatraz, the nearest and therefore the most economical disposal site. In order to persuade the various agencies to see their position, the Port will lobby at the public hearings being held on the proposal. The Port maintains that agencies do not always follow proper procedure regarding proposed policy that would negatively affect their business, and the Port can therefore attempt legal remedies. Policy undermining the Port's position will almost always bother other interest groups, including the military which must also utilize clear channels. Joining together, they can then

attempt to receive authorization from Congress to maintain policy at the status quo (Meyer, 1989, pers. comm.).

Another interest group, which sits between the two "sides" of dredging, is the Pacific Coast Federation of Fishermen's Association (PCFFA). While trying to protect key fishing grounds from disposal and contamination so that the fishermen can still utilize them, the PCFFA must protect the fishermen who work out of O & M dredged harbors. The Corps recently has been trying to get out of dredging "small use ports" for monetary and time reasons, but the PCFFA feels the Corps may have lost interest in helping the fishermen because they have opposed some of the Corps' disposal site decisions. Trying to resolve the conflicts, the PCFFA utilizes the court system, as was done in the recent much publicized court case, Half Moon Bay Fishermen's Association (a group belonging to the PCFFA) v. Weinberger. PCFFA also takes its problems to the public, in order to increase support from other citizens (Grader, 1989, pers. comm.).

Citizens for a Better Environment (CBE) is an environmental group that lobbied with the PCFFA during its unsuccessful court case. CBE feels that dredging is hardly the issue; it is the disposal of the dredge spoils. Although the Port of Oakland has agreed to take its dredge spoils to an as-yet-undesignated ocean disposal site, CBE is still advocating they be taken off the continental shelf or be disposed of upland (Davis, 1989, pers. comm.).

CBE is a research and local action group; its latest research project was a study of the "toxic hotspots" of the Bay Area, which showed that the sediments in the areas to be dredged were heavily polluted (CBE, 1987). CBE then used the results of the study to protest projects such as Homeporting, the Oakland Harbors, as well as O & M. It publicizes the results through the media, appearing at public hearings, and commenting on environmental impact documents (Davis, 1989, pers. comm.).

Although CBE consistently backs efforts by agencies such as RWQCB to limit dredging and disposal in the Bay, it feels that the other agencies have not gone far enough, and CBE eventually wants an end to all dredging and disposal in the Bay. Yet, it feels this will not be accomplished until the double standard has ended, that is to say: public interest groups, such as CBE, must back up all their statements with facts and figures, but when a marina claims that it is economically infeasible for it to dispose anywhere outside the Bay, no one demands their facts and figures (Davis, 1989, pers. comm.).

Conclusions

In order for a dredge and disposal project to be approved and completed, the agencies involved and the interested public groups must be reasonably satisfied with the compromises made in order to reach a decision. From the interviews with various agency personnel, it is obvious that, even though they do not always know precisely what the others' job is, when there is a conflict, the agencies can settle their differences among themselves. But, the public and private interest groups must form coalitions and fight agency decisions with attempts to publicize their cause and through litigation.

Through statutes designed to protect our environment, dredging and disposal decisions can take a very long time. These statutes set up channels for agencies to go through in order to obtain the proper permits. If the procedure is done correctly, each public notice has adequate response time, each point of concern is sufficiently addressed, every concerned group has been suitably notified of decisions, and everything is taken into account when a decision is made, then the regulatory system should work. And it will most often be the best decision for everyone's needs. Unfortunately, as seen by the ruckus that occurs during the permitting process for proposed dredging projects, although the system could work, it does not always satisfy everyone.

In order for this process to work, the contributing agencies must be educated about their role in the process and must follow proper procedure during the permitting process. But, I do not believe this will occur because of the present attitude of agency personnel towards other agency personnel.

The other option is to place one agency clearly in charge of the permitting process. This lead agency would make a final decision on the basis of recommendations received from the other agencies. Such input should be called for in administrative procedures. This agency must be federal in order for policy to be consistent throughout the country. The EPA does not have the expertise to take over such a task. Although it is involved in the permitting process, this agency enjoys discretionary approval in only one area.

The Corps would be the obvious choice since it is the agency that actually issues the permits and actually handles much of the dredging. But, the construction and operations branch of the Corps is made up of engineers who look for the most cost efficient method for constructing a project, regardless of the environmental impacts. Under this branch, most applications for dredging permits would be automatically approved and issued.

The environmental branch of the Corps is much smaller, but could be expanded. The backgrounds of the personnel of this branch are varied in the sciences, and they already write or review the environmental impact statements of the dredging projects. Although they may be prone to influence from the larger construction and operations branch, I believe they would make permitting decisions with a consciousness for the environment. Therefore, I recommend this final proposal, having the environmental branch of the Corps as the lead agency, as the best alternative to the present permitting process.

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SECTION II MANAGEMENT IN TERRESTRIAL
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