

Staff Report

# Fill Controls

**October 1984**

Including San Francisco Bay Plan Amendments  
adopted March 7, 1985

San Francisco Bay Conservation and Development Commission

This document was prepared with financial assistance from the Office of Ocean and Coastal Resource Management, National Oceanic and Atmospheric Administration, under the provisions of the federal Coastal Zone Management Act of 1972, as amended.

Staff Report

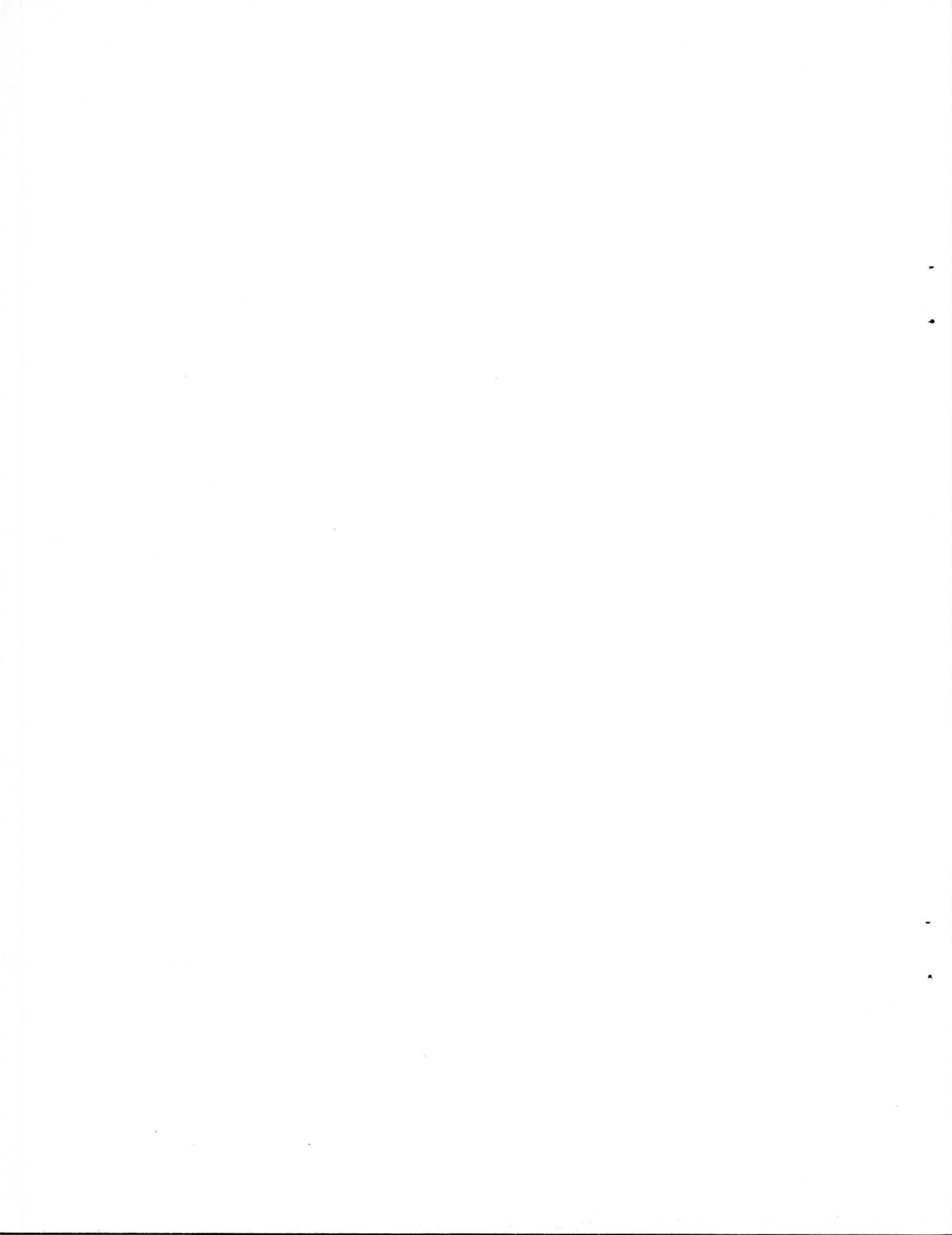
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FOREWORD

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Although an amendment to the Bay Plan policies on fill in the Bay on publicly-owned land was adopted in 1971, the fill policies have not received a comprehensive review since they were adopted in 1968 despite many intervening court decisions, new legislation, and Commission action on permits. Therefore, the Commission included a review of its control over Bay fill in its 1983-1984 planning program. The review was to cover three areas: (1) legislation and court decisions affecting the Commission's authority to control Bay fill with emphasis on the public trust; (2) adequacy of the Commission's policies on the filling of the Bay for commercial recreation purposes; and (3) mitigation for Bay fills that can be authorized but also cause adverse environmental impacts to the Bay. Regulation of activities in the shoreline band and the Suisun Marsh are generally not covered in this review, and related issues concerning houseboats and live-aboards are covered in a separate study.

This report is intended to provide the review and the background materials necessary for the Commission to determine whether it wishes to begin the Bay Plan amendment process and, if so, what subject it wants to consider. The report has been prepared with the assistance of the Office of the Attorney General, and most of the discussion and analysis of the public trust is taken directly from an informal letter of advice, dated April 28, 1982, written by Deputy Attorney General Kathleen Mikkelson. That letter is available from the Commission offices and should be consulted for a more complete legal discussion of the subject.



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EXECUTIVE SUMMARY

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Extent of Authority to Control Fill

At the time the Bay Plan was adopted, there was little uncertainty over the extent of the Commission's regulatory authority to control fill in the Bay. There did remain, in the minds of some however the question of whether private landowners had a constitutional right to some Bay fill to make use of their land if there was no other reasonable way to make use of it. The issue is particularly important because at that time the Commission found that as much as 22 percent of the Bay had been sold to private parties and those lands were generally closest to shore, most shallow, and thus most easily filled. There was also, at that time, uncertainty over the extent and nature of the public trust as it applied to those privately owned lands. The public trust is important because it is itself a property interest owned by the public and therefore provides more legal support for Commission action than the police power which forms the basis of most regulatory action.

Since that time, however, the courts have made it clear that, subject to the provisions of the McAteer-Petris Act and due process requirements of the Constitution, the Commission has more authority to control fill in the Bay than it currently exercises under the policies of the Bay Plan. This is particularly true of areas subject to the public trust which includes virtually all of the Bay. Since the Bay Plan was adopted, the courts have expanded the concept of the trust from one that only protects the public's interest in commerce, navigation and fisheries to the protection of environmental and recreational resources as well. The Bay Plan policies,

however, only explicitly recognize the narrower and older definition of the public trust. The staff recommends that the policies be rewritten to take those court decisions into account and explain the Commission's role in administering the trust.

#### Bay Fill for Commercial Recreation Uses

In addition to Bay fill for such clearly water-oriented purposes as water-related industry and recreation, the Bay Plan also allows fill for "Bay-oriented commercial recreation and Bay-oriented public assembly purposes" subject to certain other limitations. As noted above, the staff believes the Commission has the authority to impose more stringent controls over Bay fill than the policy now provides. Nevertheless, the staff does not recommend adopting more severe controls. A review of the permits involving Bay fill issued by the Commission since it was made permanent in 1969 indicates that the vast majority of fill was for projects on publicly-owned land for uses such as ports that are identified by the Bay Plan as water-oriented and beneficial. Most of the fill on privately-owned or publicly-owned land for commercial recreation purposes has been pile-supported and in relatively small amounts. The staff does not believe the impacts of these projects, as they were conditioned in BCDC permits, has been substantial; it does not foresee future problems with fill for commercial recreation purposes; and therefore it does not recommend amending the fill policy.

#### Mitigation

The Bay Plan and the McAteer-Petris Act allow the Commission to approve some Bay fill for water-oriented uses in certain circumstances. Even these

fills, however, will have unavoidable adverse impacts to the Bay. Inevitably, these authorized fills would reduce the size of the Bay. Given the 40 percent reduction in the size of the Bay that has already taken place, the Commission has considered any significant further reduction to be undesirable. Therefore, to reduce or eliminate these impacts, the Commission has often required mitigation for such fills in the form of enhancing the wildlife value of other areas, or restoring an equivalent or greater area to tidal action. The need for mitigation has always been determined on an individual project basis, taking into account the specific impacts of the project. Questions have recently arisen, however, concerning both the Commission's authority to require such mitigation, and the administration of the mitigation process.

This discussion only considers mitigation in the form of directly offsetting impacts from Bay fill and not other requirements, such as public access. Those other requirements may affect the public benefits of a project, but they should not be confused with offsetting the reduction in the volume, surface area, or wildlife value of the Bay caused by fill. Similarly, this report does not discuss dredging in great detail, although the Commission has required offsetting mitigation for new dredging (in contrast to maintenance dredging) of marshes and mudflats because of their value to fish and wildlife. Such dredging projects are usually associated with projects involving some fill in the Bay and the policies in the Bay Plan concerning marshes and mudflats are similar to those found in the McAteer-Petris Act relating to fills. Therefore, the analysis of mitigation for fill in the Bay is generally applicable to the new dredging of marshes and mudflats.

1. Authority. Although there is no explicit discussion of mitigation in either the Bay Plan or the McAteer-Petris Act, the Commission has relied on

certain of their provisions as well as the California Environmental Quality Act (CEQA) and the public trust in imposing mitigation requirements. The McAteer-Petris Act requires the Commission find that the public benefits of a project clearly outweigh the detriments caused by any Bay fill, and both the Act and the Bay Plan contain numerous references to minimizing the adverse environmental effects of fills. In the absence of any legislative intent to the contrary, the Commission has required various types of mitigation where it was necessary to make those findings. The "public benefits" test is very broad, however, and gives the Commission the discretion to consider many other factors, not just mitigation measures for specific adverse environmental effects. Nevertheless, in the past 10 years, the Commission has tended to limit its discretion and relate the benefits of a project more directly to its environmental impacts.

The California Environmental Quality Act is more explicit concerning the need to mitigate for specific significant adverse environmental impacts. CEQA requires all governmental agencies to take adverse environmental impacts into account and impose conditions to mitigate or avoid significant adverse effects on the environment. The primary limitations under CEQA are that the mitigation must be feasible and that the agency can only exercise the express or implied power provided by a law other than CEQA. Given the broad authority over fill in the Bay granted by the McAteer-Petris Act, it is clear that the Commission not only can, but must require feasible mitigation for significant adverse environmental impacts caused by Bay fill.

Further authority for the Commission to impose mitigation conditions comes from the public trust. As a public property interest, the

public trust allows the Commission to exercise considerable discretionary authority with respect to the development of lands subject to the trust.

Although the Commission has required mitigation under the authority discussed above for years, the absence of any discussion of it in the Bay Plan has led to confusion on the part of some applicants and the public. Consequently, the staff recommends the Commission begin the Bay Plan amendment process to incorporate the concept explicitly in the Bay Plan.

2. Administration. Of perhaps greater controversy than whether the Commission has the authority to require mitigation, is the process for specifying and implementing it. This process determines when, how much, and what type of mitigation should be required for different fills and the latter involves the mechanisms by which the mitigation is actually carried out.

Historically, the Commission has analyzed the impacts and benefits of individual projects to determine whether and what type of mitigation is necessary. As the policies of the McAteer-Petris Act and the Bay Plan support more than just the protection of the Bay's fish and wildlife resources, the Commission's case-by-case procedure has resulted in carefully tailored mitigation requirements that take into account all aspects of a project. This flexibility is advantageous because it allows every aspect of a project and its impacts to be evaluated. Its major drawback, however, is that an applicant does not know in advance what specific requirements will be imposed and what the cost will be. Although the staff does attempt to provide guidance early in project planning, only the Commission can make the ultimate decision concerning what will be required. Thus, there is an element of uncertainty that makes early cost estimates difficult. Some applicants also object to the amount of discretion exercised by the Commission under this system.

Others, such as the Bay Planning Coalition, have suggested that guidelines be established to limit the Commission's discretion and provide guidance to applicants. Unfortunately, if such criteria are extremely detailed to take into account all of the different physical characteristics of a Bay site to be filled, the impacts of the project, the characteristics of the possible mitigation area, the different species of plants, fish and wildlife that may make use of the different habitat types, and the difficulties of assuring that the mitigation efforts are successful, the guidelines will be cumbersome in the extreme. Furthermore, the one instance of such procedures being developed, the Habitat Evaluation Procedure (HEP) established by the U. S. Fish and Wildlife Service, is subject to as much dispute and controversy as the Commission's case-by-case approach. However, despite the disadvantages of HEP, the process does provide some advantages: (1) the applicant is aware of the assumptions used in the process to determine the HEP value; (2) the applicant participates in the process; and (3) the applicant realizes the HEP process is a starting point from which negotiations in arriving at the agreed up on mitigation can begin. Simplified guidelines, on the other hand, while they avoid some of the problems of administration presented by HEP, have the disadvantage of being arbitrary because they inherently cannot take many distinctions into account. And, if they are subject to exceptions based on specific factors that may be identified in a permit application, they lose their predictive value and no longer provide much certainty. Finally, any independent set of criteria established by the Commission will inevitably be different from the results of the HEP program which is used by Federal and other state agencies to comment on Corps of Engineers' applications. Given this situation, the staff does not believe it

would be productive to attempt to establish criteria for mitigation. The staff, therefore, recommends the Commission continue its current case-by-case evaluation in consultation with other governmental agencies. The Bay Plan, however, should reflect the requirement that any mitigation should be commensurate with the impacts of the associated project, and the assumptions and general practices of the Commission should be described.

Two issues in the mitigation process deserve additional attention to make the system more effective and less cumbersome. The first is for public agencies to establish "mitigation banks." Applicants contributions to such banks would result in lands being restored to tidal action. The Commission supports one bank created by the East Bay Regional Park District and another by the State Coastal Conservancy, but the staff believes that similar programs elsewhere around the Bay would be desirable.

The second issue is really part of the first and involves the treatment the Commission will give to mitigation banks established by private parties. For example, an applicant may be in a position to acquire a relatively large area suitable for return to tidal action, but does not require that amount of land immediately for mitigation. The land not needed for mitigation could be diked off and sold or retained, but the cost of cross diking is high and the applicant may desire to return the entire area to tidal action and obtain a mitigation "credit" for the remainder that could be used to offset future fill projects. This would have the benefit of returning such areas to tidal action more quickly as well as eliminating the cost of constructing unnecessary dikes. The Commission now has no policies related to such proposals, and because a future Commission cannot legally be bound by the action of a prior Commission, there are problems involved in establishing a

procedure that will work and is fair to all parties. Nevertheless, the staff recommends that a Bay Plan amendment be considered that allows the Commission to give future specified mitigation credits to an applicant providing a greater amount of mitigation as part of a Commission permit condition.

#### Format and Procedure

This report is organized into sections covering the issues listed above. The last section, the staff's conclusions, recommends the Commission consider a possible Bay Plan amendment. If the Commission decides to continue with the approach suggested by the staff, the formal Bay Plan amendment process would begin with the staff preparing a descriptive notice of the proposed changes, and the scheduling of public hearings. No Commission action on a Bay Plan amendment can take place sooner than 90 days from the time the descriptive notice is distributed to the public. The staff is proposing this procedure because any changes to the policies on fill in the Bay Plan are likely to be controversial, and the staff believes it would be desirable to have some initial direction from the Commission before commencing a Bay Plan amendment process.

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CHAPTER I: AUTHORITY TO CONTROL FILL IN THE BAY

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The Commission's regulatory authority to control fill in the Bay comes from two sources: the police power, under which most land use regulation such as zoning is adopted, and the public trust, which is a property interest held by the public and exercised by agencies such as BCDC. When the Bay Plan was adopted in 1968, environmental regulation was in its infancy and it was not clear what power these two sources of authority conveyed. The police power derives from the ability of government to regulate for the purposes of public health, safety and welfare and is limited by the Fifth and Fourteenth Amendments of the Federal Constitution and parallel State Constitutional provisions. Since the Bay Plan was adopted, some regulations, such as requirements for public access, have been clearly upheld by the courts. Other regulatory limits are still not clear although consistent regulation administered under such well documented comprehensive plans as the Bay Plan receive considerable deference by the courts. In contrast to the ambiguities that afflict the limits of the police power, the authority derived from the public trust is now clearer and more extensive. This authority is therefore examined below.

Areas Subject to the Trust

Most parts of the Commission's "bay" jurisdiction are subject to the public trust. The two areas do not exactly coincide because: (1) the Commission's "bay" jurisdiction extends to any lands touched by tidal waters whereas the public trust extends to the mean high tide line which is slightly lower (these differences are rarely significant); (2) boundary agreements

between the State Lands Commission and private owners establish slightly different lines; and (3) some areas where the shoreline has been modified giving the Commission "bay" jurisdiction outside the area of the public trust. These exceptions are so rarely encountered that they are not discussed further.

Generally, all tidal areas below mean high water are subject to the public trust. Specifically, the public trust applies to the following areas:

1. Tidelands which are located between the mean low and mean high tide lines and patented to private parties under State-wide statutes. These patents only passed title to tidelands within the perimeter description of the patents. They did not convey any interest in submerged lands that may have been included within the boundary described and the State reserved a public trust easement in the tidelands.
2. Tide and submerged lands granted to private parties pursuant to statutes pertaining to specified portions of San Francisco Bay such as Board of Tideland Commissioners (BTLIC) lots. Some of these lots have been filled and are free of the public trust, but those that remain undeveloped are subject to it. (City of Berkeley v. Superior Court (1980) 26 Cal 3d 515.)
3. Tide and submerged lands granted by the State to public agencies in trust (legislative trust grants). The public trust applies to such lands,

which must be used only for the purposes authorized in the granting legislation and for a State-wide public benefit. Streets mapped through areas sold to private parties are often included in these grants.

4. Tide and submerged lands in the Bay that were never disposed of by the State either to private parties or to public agencies. These lands remain subject to the public trust and are controlled by the State Lands Commission, which may lease but cannot sell them.

Lands that are not subject to the public trust include:

1. Swamp and overflowed lands (lands lying above the mean high tide line, which are not subject to the public trust that applies to the adjacent tidelands).
2. Uplands (land located above the ordinary high water mark and thus not subject to the public trust).
3. Certain former tidelands that have been filled and improved by certain cut off dates.

#### The Public Trust as a Property Right

The public trust is a publicly-held property right. It is similar in nature to an easement except that it is held in trust by the State for all of the public and therefore, except in rare situations, the State cannot sell it or allow it to be interfered with. Although the concept of the public trust originated in Roman law, similar restrictions on private property subject to

the public trust were developed in English common law. These common law principles were largely added to the California Constitution after widespread abuses took place in the sale of tide and submerged lands to private parties shortly after California became a state (see Article X, Sections 3 and 4, and Article 1, Section 25).

Two kinds of ownership rights apply to tide and submerged lands: a public right referred to as the public trust or public trust easement, and ordinary private rights (these two kinds of rights are also sometimes referred to as the jus publicum and the jus privatum respectively.) Even where the private rights were sold by the State they are always subject to the dominant public rights that remained with the State.

The control of the State over those public rights can never be lost, except where the parcels are used in promoting the interests of the public or can be disposed of without any substantial impairment of the public interest in the lands and waters remaining. The trust can be terminated only pursuant to express legislative authorization, and the courts scrutinize such legislation to be sure that the legislative intent is clearly expressed and not merely implied.

Because of the existence of those public rights, the State holds tide and submerged lands subject to the public's right to use the lands for "commerce, navigation and fisheries." Moreover, the public right is broader than these terms might imply, extending to preservation of such lands in their natural state to serve as ecological units for scientific study and open space, and to provide food and habitat for birds and marine life. Also encompassed within appropriate public trust uses are hunting, bathing, swimming, boating, general recreation, and using the bottom of navigable waters for anchoring or standing. (Marks v. Whitney, 6 Cal 3d 259.)

Where tidelands were sold to private parties pursuant to general sales acts, the private party took title subject to the public's retained trust easement, because the lands were not sold in furtherance of public trust purposes, but rather to raise revenues. A landowner possessing such bare legal title could develop and use the property but only subject to the following limitations, until such time as the retained easement for the public trust purposes was exercised: The development could not (1) be inconsistent with public trust needs; (2) constitute a nuisance (something which endangers life or health, gives offense to the senses, violates the laws of decency or obstructs reasonable and comfortable use of the property); or (3) constitute a purpresture (an inclosure by a private party of that which belongs to and ought to be open and free to the enjoyment of the public at large).

#### Legislative Trust Grants to Local Agencies

Only seven months after statehood, the California Legislature made the first grant of tide and submerged lands, in trust, to the City of Martinez; ten days later San Francisco received the first of its grants. The grant program was aimed at transferring responsibility for the management of trust lands to local governmental agencies. Many of these grants specify the ways in which the grantee may use the land, but use is also limited by the terms of the McAteer-Petris Act.

The following legislative grants of tide and submerged lands are within BCDC's jurisdiction: Alameda, Albany, City and County of San Francisco, Benicia, Oakland, City of San Mateo, County of San Mateo, Vallejo, Richmond, South San Francisco, Berkeley, Burlingame, Emeryville, Pittsburg, Redwood City, Sausalito, Mill Valley, County of Marin, County of Sonoma, San Leandro,

Peralta Junior College District, San Rafael, San Francisco Port District and East Bay Regional Park District.

The State Lands Commission, or other agencies specified in the grant, retains the authority to monitor the grantee's actions to ensure that it properly carries out its public trust responsibilities.

#### Exercising the Public Trust

The enactment of the McAteer-Petris Act and the Suisun Marsh Preservation Act constituted both a legislative exercise of the State's police power and a delegation of authority to administer the public trust (see People ex rel. San Francisco Bay Conservation and Development Commission v. Town of Emeryville (1968) 69 Cal 2d 533 and City of Berkeley v. Superior Court (1980) 26 Cal. 3d. 515). Thus, when the Commission exercises its responsibilities under its enabling legislation, it is also exercising the public trust pursuant to legislative authorization. While the State Lands Commission is the state agency primarily responsible for administering the trust, the BCDC acts as a co-trustee for areas within its jurisdiction. Also, local governments holding granted lands have the authority to administer the trust on those lands. Other state agencies, such as the State Water Resources Control Board and the Department of Fish and Game, may also share responsibilities for the public trust.

Public agencies having trust responsibilities may assert the public trust easement over privately-owned tidelands in two ways. First, the State or its legislative trust grantee may affirmatively exercise its property interest through a public project that furthers trust purposes. For example, the City of Newport Beach, a legislative trust grantee, dredged away a parcel

of privately-patented tideland in the course of a program for the improvement of navigation. The courts ruled that the project was within the terms of the legislative trust grant in furtherance of trust purposes, and denied compensation to the private tideland owner. The State Lands Commission also exercised the trust in 1982 to determine that Albany Bay, between Golden Gate Fields and Point Isabel, should be preserved in its natural state. Second, the trust easement may be used to regulate the use of tidelands held by private patentees. The Acts and Plans that BCDC administers are examples of such trust-based regulatory control of privately-owned lands subject to the trust. No compensation is required for such assertions of the trust easement, as the planning and permit decisions made by BCDC in the course of land use regulation. (Public Resources Code Section 6312.)

In contrast, public agencies that employ only their police powers to regulate private property are limited by the Fifth and Fourteenth Amendments to the U. S. Constitution and parallel State Constitutional provisions prohibiting the "taking" of private lands without just compensation. The public trust doctrine, however, stands on an entirely different footing. When private owners obtain a private interest in areas subject to the trust, their interests are subject to the paramount power of the State to exercise the public trust, and even the sale of the underlying land cannot terminate or detract from the State's authority to administer trust areas. In other words, the public trust is a publicly-owned property right which may be used by the State or an appropriately designated trustee, such as BCDC, the State Lands Commission or local government, to promote public trust purposes or to protect public trust values. Because the private owner's use of that private interest must be compatible with the public trust, there is no requirement that an

owner be left with any reasonable economic use of the property. Nor is the payment of compensation required for exercises of the trust except for the taking of lawful improvements made in good faith. (Public Resources Code Section 6312.)

Moreover, it is clear that the State has the prerogative to choose between competing trust uses as long as the choice is reasonable (see National Audubon Society v. Superior Court (1983) 33 Cal. 3d. 419 and County of Orange v. Heim (1973) 30 Cal. App. 3d. 694). The Legislature delegated that responsibility to BCDC when it enacted the McAteer-Petris Act and the Suisun Marsh Preservation Act. Therefore, when the Commission determines that a proposed use is incompatible with such other public trust needs as the preservation of open water areas, it has the authority to reduce or eliminate those impacts that result from incompatible use.

#### BCDC and the Public Trust

The Commission's authority to control fill in the Bay was delegated by the Legislature in the McAteer-Petris Act (Government Code Section 66600, et seq.), the Suisun Marsh Preservation Act (Public Resources Code Section 29000 et seq.) and other enabling legislation; neither the police power nor the public trust doctrine grant the Commission any additional authority. The passage of the McAteer-Petris Act by the Legislature in 1965 (and subsequent amendments thereto) constituted not only an exercise of its police powers but also an exercise of the public trust by the Legislature where public trust lands are concerned. Similarly, passage of the Suisun Marsh Preservation Act constituted an exercise of the Legislature's responsibility as trustee to manage and protect the public trust lands in the Marsh. The Suisun Marsh

Preservation Act provides at section 29008 that the Suisun Marsh Protection Plan is "a more specific application of the general, regional policies of the San Francisco Bay Plan...." Therefore, in granting and denying permits for fill or marsh developments; in making determinations with regard to the Bay Plan, the Suisun Marsh Protection Plan, and the local protection programs; and in making federal consistency determinations; BCDC is discharging specifically delegated public trust responsibilities.

BCDC must look first to the specific terms of the Acts it administers and to its regulations, but public trust principles buttress its actions regarding public trust lands. Specific, explicit findings of consistency or inconsistency with the public trust needs help clarify the basis for BCDC's actions and should be stated where they apply.

In regulating the use of public trust lands, BCDC must distinguish between patents of tide or submerged lands to private parties and legislatively granted tidelands. Where called upon to evaluate proposed development on trust-encumbered tidelands patented to private parties, BCDC must determine whether the proposal is consistent with (1) the McAteer-Petris or Suisun Marsh Preservation Acts; and (2) the Bay Plan or Marsh Plan or local protection programs. This determination will inevitably require an analysis of whether it is consistent with public trust needs as set forth in the above Acts, Plans and programs. Where the proposed development is on legislatively granted tidelands BCDC can look to the language of the grant and to the Gift Clause of the California Constitution, Article XVI, Section 6, as additional sources of information on the types of uses allowed on public trust lands.

The difference between legislatively granted tidelands and tidelands patented to private parties is most evident in the rights and responsibilities

that pass to the landholder. In legislatively granted tidelands, the grantee receives both the public and private rights (subject to monitoring by the Legislature, the State Lands Commission or another designated state agency). Thus the legislative trust grantee has a greater responsibility to ensure that the uses it allows on public trust lands are consistent with the public rights because the dual rights in the property have not been severed, as they have been with the private patentee.

Further, the courts have held that legislatively granted tidelands must be used for state-wide public purposes. (Mallon v. City of Long Beach (1955) 44 Cal.2d 199, at 211; People v. City of Long Beach (1959), 51 Cal.2d 875, at 878 et seq.; and Haggerty v. City of Oakland (1958) 161 Cal.App.2d 407, 415.) Otherwise a gift of public property would be involved in violation of the Gift Clause, which states in pertinent part:

The Legislature shall have no power...to make any gift or authorize the making of any gift of any public money or thing of value to any individual, municipal or other corporation whatever....

In summary, the private owner of patented tidelands can use the property in any way that is consistent with public trust needs, as articulated in the Acts and Plans administered by BCDC. Legislatively granted tidelands, however, must be put to a public trust use that is authorized by the statute creating the trust, of state-wide public benefit, and consistent with public trust needs. Thus, a use which is not of state-wide public benefit, such as private residential use, may only be authorized if it is necessarily incidental to a state-wide trust purpose listed in the grant.

### Bay Plan Policies

The Bay Plan policies on fill in the Bay do not reflect either the extent of the public trust over the Bay or the extensive nature of the values

that can be protected under the trust. At the time the policies were originally adopted, neither of these issues were well articulated by the courts and the Bay Plan states that these issues should be resolved. Since that time, the courts have found that the trust applies to unfilled privately-owned tide and submerged lands that were sold by the State. They have also articulated a broader range of values that are legitimate trust purposes for example, leaving areas in their natural state. The staff believes that the earlier provisions of the Bay Plan should be amended to incorporate these recent court rulings and the guidance they offer the Commission in implementing the provisions of the McAteer-Petris Act, the Suisun Marsh Preservation Act, and the plans adopted pursuant to them.



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## CHAPTER II. BAY FILL FOR COMMERCIAL RECREATION

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In addition to authorizing fill in the Bay for clearly water-oriented uses such as ports or marinas, the Bay Plan also authorizes fill for "Bay-oriented commercial recreation and Bay-oriented public assembly" purposes under certain circumstances (see Fills in Accord with Bay Plan Policies a.(4) and a.(5) on pages 36 and 37 of the Bay Plan). These policies were adopted in part because of concerns over the legal authority of the Commission to prohibit fill on privately-owned land as well as a desire to develop certain areas around the Bay that might require some fill. As noted above, however, most of these areas are also subject to the public trust, and therefore, the Commission has greater authority to control fill in these areas than it presently exercises. A review of the Commission's permits, however, shows that very little fill in the Bay has been placed pursuant to these policies.

A review of the approximately 400 major permits issued by the Commission during the 13 years from 1970 through 1982 indicates that only ten involved projects remotely associated with these policies, including projects on publicly-owned land. Of those ten, six were relatively minor projects with less than 10,000 square feet of fill each. The remaining four were Alameda Marina Village in Alameda (Permit No. 39-79), Pier 39 in San Francisco (Permit No. 22-76), Portobello in Oakland (Permit No. 32-71), and the former Trimont project in Emeryville (Permit No. 6-70). Of these projects, Portobello involved only .46 acres of pile-supported fill for a restaurant and commercial recreation facilities, and the Trimont project, which involved a substantial amount of pile-supported fill (almost three acres), was subsequently abandoned

and the site used only for a marina. Thus, only the Pier 39 and Alameda Marina Village projects have actually had any significant impact on the Bay. Furthermore, both were associated with the removal of a greater amount of deteriorated old fill than was placed pursuant to the permits.

Given this history, the staff does not believe it can be demonstrated that the policies in the Bay Plan related to fill for commercial recreation purposes have resulted in any significant adverse impacts to the Bay. Therefore, the staff believes that if the Commission should amend the Bay Plan to further clarify its public trust responsibilities, no changes should be made in those policies.

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### CHAPTER III. MITIGATION FOR FILL IN THE BAY

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#### Background

The Commission's responsibility and authority to regulate fill in San Francisco Bay is clearly spelled out in its law, the McAteer-Petris Act (Government Code Section 66600 et seq.) and the Bay Plan policies. "Fill" is defined in the Act as "earth or any other substance or material, including pilings or structures placed on pilings, and structures floating at some or all times and moored for extended periods, such as houseboats and floating docks (Government Code Section 66632(a)). The Commission may authorize fill in San Francisco Bay only if it determines that the fill is a water-oriented use or is a minor amount of fill for improving shoreline appearance or public access to the Bay (Government Code Section 66605(a)). Once the Commission determines that the proposed fill is either a water-oriented use or a minor fill, it must specifically determine:

- (1) there is no alternative upland location available for the proposed use;
- (2) the minimum amount of fill necessary to achieve the purpose of the fill is proposed;
- (3) the nature, extent, and location of the fill is such that it will minimize harmful effects to the Bay, such as, reduction or impairment of the volume, surface area or circulation of water, water quality, fertility of marshes, or fish or wildlife resources;
- (4) that the proposed fill would be constructed subject to sound safety standards that can be reasonably expected to protect persons and

property from unstable geologic or soil conditions and flood or storm waters;

- (5) that a permanent shoreline would be established;
- (6) the applicant has valid title to the land to be filled and the uses to be approved.

Finally, the Commission must determine, in addition to all the specific tests above, that the "public benefits from the fill clearly exceed public detriment from the loss of the water areas." (Government Code Section 66605(a)-(g)).

In determining whether the public benefits exceed the public detriments of an authorizable fill, the Commission will consider whether the unavoidable impacts of the fill on the Bay resources would be compensated by an appropriate mitigation project. Even the most carefully conditioned fill, however, adversely affect the Bay. No matter how desirable the project, the fill will reduce the area of the Bay, and because 40 percent of the Bay has already been diked or filled, the Commission has viewed further reduction as undesirable. To reduce or eliminate this impact and others related to fill, the Commission has often required such mitigation as enhancing the wildlife value of elsewhere in the Bay, or restoring an equivalent or greater area to tidal action. The need for mitigation has always been determined on a case-by-case basis, taking into account the specific impacts of the proposed fill project. The Commission has recognized and required mitigation as a condition of some authorized fill projects since 1973. The basic authority of the Commission to impose mitigation requirements on fill in the Bay has not been challenged on legal grounds in the intervening ten years. Perhaps more important to project sponsors, is that such requirements serve to insulate

those receiving permits from BCDC from third party litigation. Moreover, the Commission has never been sued by any interest group or organization for issuing a permit contrary to the provisions of the McAteer-Petris Act. This is in marked contrast to other governmental agencies and has undoubtedly reduced project costs from the delays and expense of litigation. Nevertheless, questions have been raised concerning the authority of the Commission to require mitigation and this report will attempt to answer those questions.

#### Scope of Review

"Mitigation" refers to any action taken to lessen any effect, but as used in the California Environmental Quality Act (CEQA) refers to any action taken to lessen any adverse effect. Thus, it encompasses such diverse actions as construction practices designed to reduce erosion as well as the conversion of dry land into a new marsh which is connected to the Bay. The latter may be miles from a project site that adversely affects Bay, fish and wildlife resources. Mitigation can apply to effect on such things as the surface area or volume of the Bay, water quality, or public access. Mitigation, however, must actually lessen the adverse impact. For example, dedicating an existing tidal marsh to a public agency does not constitute mitigation for a project that destroys another tidal marsh because the change in ownership has no net effect on the habitat value of tidal marshes. Only if the change in ownership can directly be related to changes in management practices that improve wildlife habitat could it be considered mitigation. Similarly, providing public access does not constitute mitigation for fill in the Bay.

Although the concept of mitigation is very broad, the confusion surrounding it and BCDC is actually much more limited. Nearly everyone now recognizes that BCDC possesses the authority and responsibility to impose controls on construction practices in order to reduce adverse environmental impacts on Bay resources. They also recognize that BCDC has the responsibility to minimize the fill proposed in any project. These are independent and clearly specified requirements of the McAteer-Petris Act and the Bay Plan, similar to limiting fill in the Bay to water-oriented uses and requiring maximum feasible public access consistent with the project. Some people, however, have questioned the authority and responsibility of the Commission to require mitigation to offset the unavoidable adverse environmental impacts of Bay fill projects. These impacts are those that remain after all feasible measures have been taken to minimize the direct impacts of the proposed development. For example, some minimum amount of fill is usually needed for a new marine terminal; it may be the minimum necessary, but it still adversely impacts the resources of the Bay. Unless otherwise specified, this discussion considers mitigation only for similar unavoidable adverse environmental impacts from Bay fill that effect such Bay resources as fish and wildlife habitat and water quality, or its circulation, volume and surface area.

#### Authority to Require Mitigation

The Commission's authority to issue permits conditioned on mitigating the adverse impacts of fill derives from the McAteer-Petris Act and the California Environmental Quality Act (CEQA). This authority is further

supported, in most cases, by the Commission's responsibilities under the public trust.

1. McAteer-Petris Act. Neither the McAteer-Petris Act nor the Bay Plan contain the word "mitigation" -- a fact that should surprise no one since both were adopted before the term "mitigation" came into common usage through experience with the National Environmental Protection Act (NEPA) and CEQA. Nevertheless, the McAteer-Petris Act confers substantial discretionary authority on the Commission to control fill in the Bay and its harmful effects.

The clearest support for requiring mitigation for Bay fill in the McAteer-Petris Act is found in Government Code Section 66605(a) which states in part: "...further filling of San Francisco Bay...should be authorized only when public benefits from fill clearly exceed public detriments from the loss of water areas...." This, coupled with Government Code Section 66632(f), which states in part: "the Commission may grant a permit subject to reasonable terms and conditions including the uses of land or structures, intensity of uses, construction methods and methods for dredging or placing of fill," make it clear that the Commission has the authority to deny a permit if it determines that the public benefits do not exceed the detriments of a proposed fill, or it may impose reasonable conditions to mitigate for the adverse impacts of the fill if that is necessary to make the required findings about public benefits.

Further references supporting such authority can be found in Government Code Section 66605(d) which states in part: "...the nature, location and extent of any fill should be such that it will minimize harmful effects to the bay area, such as, the reduction or impairment of the volume, surface area, or circulation of water, water quality, fertility of marshes or

fish or wildlife resources." To the extent that fill is removed in another location, it would certainly reduce or minimize the adverse impacts of a proposed fill project. Given the Legislature's findings concerning the need to protect the Bay, it is reasonable for the Commission to interpret Section 66605(d) in such a manner.

The Bay Plan also supports mitigation requirements. Policies on Water Surface Area and Volume and Marsh and Mudflats contain language similar to that found in Government Code Section 66605(a): Filling and diking should only be allowed "for purposes providing substantial public benefits" (page 9). Referring to all fill in the Bay, the Bay Plan states that a proposed fill should be "modified as necessary to minimize any harmful effects" (page 37). Referring to Bay-oriented commercial recreation and public assembly on privately-owned land, the Bay Plan states that: "The proposed project would provide to the maximum extent feasible for enhancement of fish and wildlife and other natural resources in the area of the development" (page 36). The identical language with the addition of the phrase "and in no event would result in net damage in these values" also applies to similar uses on replacement piers on publicly-owned land (page 37).

Although Government Code Section 66605(d) and the cited sections of the Bay Plan can also be read in a more limited manner (i.e. applicable only to the project site), it is more likely that a court would give them a broader interpretation in light of the stronger language in Government Code Section 66605(a) and the strong legislative findings in support of the need to protect San Francisco Bay found in the McAteer-Petris Act.

This interpretation of the Commission's authority is reinforced by case law and subsequent actions of the Legislature. First, the courts have

held that the McAteer-Petris Act is to be given the broadest interpretation consistent with the reasonable meaning of the statute because of the importance the Legislature gave to the protection of the Bay (see People ex rel. San Francisco Bay Conservation and Development Commission v. Town of Emeryville (1968) 69 Cal. 2d 533). More specifically, in Golden Gate Bridge, Highway, and Transportation District v. Muzzi (1978) 83 Cal. App. 3d.), the Commission required mitigation to be undertaken for environmental impacts caused by the construction of a ferry terminal. The Bridge District could only satisfy the condition by the exercise of its power of eminent domain to acquire a degraded marsh that could be restored. Notwithstanding the fact that the court noted that the Bridge District's power of eminent domain did not explicitly include the power to condemn for mitigation, that the power of eminent domain must be strictly construed, and that any doubts concerning the existence of the power should be resolved against the condemning authority, the court upheld the authority of the District to condemn land to mitigate for the adverse environmental effects of the project. This case is important because the mitigation requirement was imposed by BCDC and because the Legislature expressly supported the result in the Muzzi case in making changes to the California Environmental Quality Act (see uncodified section 4 of SB 2011, Stats. 1982, C. 1438).

Thus, the staff believes it is clear that the McAteer-Petris Act authorizes the Commission to impose reasonable mitigation requirements, whether off-site or on-site, as long as the conditions are reasonable, if mitigation is necessary to find that the public benefits of a project exceed the public detriments caused by the Bay fill. The Commission also has the

alternative, in the exercise of its discretion, to deny a permit rather than requiring mitigation in the same circumstances.

Similar authority for mitigation relates to the new dredging (in contrast to maintenance dredging) of marshes and mudflats. Most dredging projects produce some fill in the Bay and the Bay Plan policies concerning marshes and mudflats follow the McAteer-Petris Act with respect to fill projects (see Bay Plan Policies on Fish and Wildlife, page 7, and Marshes and Mudflats, page 9). Thus, the basis for mitigating fill in the Bay applies as well to the new dredging of marshes and mudflats.

2. California Environmental Quality Act (CEQA). Under recent amendments to CEQA, it is clear that CEQA does not confer independent authority upon an agency to require mitigation (Public Resources Code Section 21004). If, however, discretionary authority exists under the agency's enabling legislation, however, CEQA requires that feasible measures be taken to mitigate for significant adverse environmental effects (Public Resources Code Section 21002.1(b)). If an agency determines that specific economic, social, or other conditions make alternatives to the project or mitigation measures infeasible, the agency may either deny the permit or approve the project without mitigation for a specific adverse environmental effect (Public Resources Code Section 21002.1(c)).

As noted above, BCDC clearly has discretionary authority under Government Code Section 66605(a) to require mitigation if that is necessary to find that project public benefits exceed the public detriments caused by any Bay fill. The term "public benefit" is very broad, however, and covers a variety of subjects recognized as beneficial by the Bay Plan and the McAteer-Petris Act such as public access and various forms of economic

development. CEQA on the other hand, requires the Commission to mitigate or avoid any specific adverse environmental effect caused by fill in the Bay if it is feasible to do so. (It should be noted that, if the Commission is a responsible agency, rather than the lead agency, it need only consider the effects of those activities involved in a project which it is required by law to carry out or approve (Public Resources Code Section 21002.1(d)). However, given the Commission's broad authority with respect to fill in the Bay, the exception has little importance.) Thus, CEQA requires the Commission to impose feasible mitigation conditions to avoid the significant adverse environmental effect of Bay fill; the McAteer-Petris Act allows the Commission to impose those conditions, but does not mandate them.

3. Public Trust. As noted previously, most of the Commission's Bay jurisdiction is subject to the public trust, which is a dominant, publicly-held property right. Thus, even where the underlying land may have been sold to private owners, the private interests they received are subordinate to the public property right. When BCDC exercises its responsibilities under the McAteer-Petris Act and the Suisun Marsh Preservation Act it is also exercising the public trust. When the trust is exercised by the State or an appropriately designated trustee, such as BCDC, there is no requirement that an owner be left with any reasonable economic use of the property. And where the McAteer-Petris Act authorizes the Commission to impose mitigation requirements, the public trust strengthens the Commission's stand if the mitigation requirement were attacked in court; this results from the exercise of a property right rather than the police power. The public trust doctrine gives the Commission no additional authority beyond

that in its enabling legislation, but as noted above, that legislation authorizes such requirements where the Commission deems it necessary.

4. Legislative Intent. The foregoing discussion is based on the ordinary meaning of the words used in the McAteer-Petris Act. This is the normal standard used in interpreting legislation, unless evidence discloses legislative intent to the contrary. The legislative history of the McAteer-Petris Act shows no contrary Legislative intent.

Nor is the history of the Commission in adopting the original Bay Plan of much assistance because the Legislature used different language in adopting the existing version of Government Code Section 66605(a) than was formulated by the Commission in originally adopting the Bay Plan, and, therefore, the Legislature's formulation would control regardless of the Commission's intention. However, the Bay Planning Coalition, in its report "Mitigation: What You Need to Know" (1983) noted that the concept of mitigation was raised in one of the technical background reports presented to the Commission prior to its original adoption of the Bay Plan. That consultant report dismissed the idea of mitigation as "impractical" and instead suggested a tax be imposed on all Bay fill.

The Commission rejected a tax on authorized fill but the reasons for rejection are unclear. The only discussion found in the minutes in support of a motion to exclude any mention of a fill tax in the Bay Plan is: "Commissioner Mellon said this would also mean, however, that public agencies, filling for public purposes that provide substantial public benefits, would also have to pay for that privilege. Commissioner Behr said he thought the policy was logical but not sensible." (San Francisco Bay Conservation and Development Commission Minutes, page 10, August 16, 1968). From this

discussion, it is impossible to determine why the Commission rejected the idea of a flat tax on fill. It may have been because it reduced the discretion of the Commission in determining public benefits, it was too difficult to justify in the abstract, it would be too costly for public agencies, it just was not well thought out or for other reasons not discussed by the Commission. All such conclusions are speculative. The staff has not found any Commission discussion of mitigation as it has been used in the past ten years. Because a tax is both practically and conceptually very different from mitigation, there is no evidence that the Commission either considered or rejected mitigation as it has been used.

That mitigation evolved from practical experience is likely, for the Commission began to regularly make use of the present process in approximately 1973, four or five years after the Bay Plan was adopted and the 1969 amendments to the McAteer-Petris Act were effectuated. The Commission should note that courts give great weight to long-standing administrative interpretations of legislation and agency practice in implementing legislation (see Pacific Legal Foundation v. California Unemployment Insurance Appeals Board (1981) 29 Cal. 3d 101). In addition, no litigation has been filed against the Commission in the intervening ten years challenging the basic authority of the Commission to impose mitigation requirements.

5. Commission Concerns in Shoreline Band. Although this section departs from the discussion of Bay fill mitigation, a discussion of the Commission's shoreline band concerns is useful at this point. Outside of priority use areas, the Commission's primary responsibility for projects within the shoreline band is the amount and quality of the public access provided. This limitation is expressed in Section 66632.4 of the

McAteer-Petris Act which states: "Within any portion or portions of the shoreline band which shall be located outside the boundaries of water-oriented priority land uses...the commission may deny an application for a permit for a proposed project only on the grounds that the project fails to provide maximum feasible public access, consistent with the proposed project, to the bay and its shoreline." This section clearly indicates the Legislature's intent to limit the discretion of the Commission when considering projects located within the shoreline band and outside of priority use areas.

Government Code Section 66632.4 may not exclude Commission consideration of other matters entirely, but the Commission has traditionally been very selective in evaluating issues not related to public access in the shoreline band outside of priority use areas. The source of ambiguity comes from Government Code Section 66632(f) which makes no distinction between permits for projects involving Bay fill and those in the shoreline band. It states in part:

A permit shall be granted for a project if the commission finds and declares that the project is either (1) necessary to the health, safety or welfare of the public in the entire bay area; or (2) of such a nature that it will be consistent with the provisions of this title and with the provisions of the San Francisco Bay Plan then in effect. To effectuate such purposes, the commission may grant a permit subject to reasonable terms and conditions including the uses of land or structures, intensity of uses, construction methods and methods for dredging or placing of fill.

Under this section, it could be argued that conditions on any subject discussed in the Bay Plan are appropriate for projects in the shoreline band as long as the Commission does not deny the permit. Furthermore, in contrast to Government Code Sections 66605(a) and (b) which explicitly restrict fill in the Bay, the restrictions on fill in Government Code Section 66605(d) are not

qualified by references to the Bay. Hence, it could be argued that the nature, location and extent of any fill in the shoreline band must be such that it will minimize harmful effects to the Bay Area including fish and wildlife resources. The Commission has never used such an expansive interpretation of these sections independently of other factors, however, because it would significantly undermine the emphasis of Section 66632.4.

In limiting its actions, however, the Commission has not completely excluded consideration of the adverse environmental effects of a project in the shoreline band under certain circumstances. Where a project involved both fill in the Bay and work in the shoreline band, and the fill in the Bay was an integral and necessary part of the project, the Commission has considered the impact of the project on wetlands within the shoreline band. For example, the Commission found in Permit No. 4-80 (Benicia Industries) that:

The proposed project requires fill in the Bay for the pile-supported bridge which provides access to the site and allows the operation of the project. As a direct result of that, diked wetland within the shoreline band will be adversely affected. Government Code Section 66605(d) states, in part, that to approve any fill the Commission must find: 'That the nature, location and extent of any fill should be such that it will minimize harmful effects to the bay area, such as the reduction or impairment of...fertility of marshes or fish or wildlife habitat.' Consequently, the Commission has the authority to require mitigation for the effects of the fill proposed, including those effects on diked wetlands which are recognized as wildlife habitat.

The staff believes the Commission has similar authority where work in the shoreline band will directly lead to subsequent fill in the Bay or similar adverse effects on the resources of the Bay. For example, in Permit Application No. 29-79 (Wong; application withdrawn prior to Commission vote), the staff recommended conditions affecting the waste water disposal system for a house within the shoreline band on very steep slopes where there was a high

risk that effluent from the leach field would surface and flow onto a beach and into the Bay below the house. The recommended findings state in part that:

this waste treatment system on this site presents a significant risk of water pollution in the Bay with potential impacts on water quality, public health, and public access to and along the shoreline. Consequently, Conditions...are necessary to assure that the project is consistent with Bay Plan Policies on Water Pollution and Public Access and with the provisions of Government Code Section 66632.4 requiring maximum feasible public access....that (without the conditions) Bay Plan Policies on Water Pollution would not be met and the project would not be consistent with Section 66632(f) and 66632.4 of the McAteer-Petris Act.

In addition, in Permit No. 19-82 (Mariott), the Commission did not restrict the height of the proposed Mariott Hotel in Burlingame despite objections that it would affect the safety of a nearby airport runway. However, the discussion before the Commission made clear that it would do so if it was convinced that the height presented such a safety hazard that it would require extending a runway into the Bay to avoid the hazard and keep the airport functioning.

There may also be situations where wetlands in the shoreline band should be incorporated into public access at a project site. BCDC's authority in such a situation would derive from its authority to require public access, however, not from an authority to require mitigation.

The precise extent of the Commission's authority under the McAteer-Petris Act in such examples requires an analysis of each project on an individual basis. Because such anomalous cases are infrequent and rare and because the Commission does not seek to extend its authority in the shoreline band, this report will discuss them no further.

The extent of the Commission's authority under the McAteer-Petris Act makes a significant difference in the way in which CEQA governs the

Commission's decisions in the shoreline band. Public Resources Code Section 21004 states:

In mitigating or avoiding a significant effect of a project on the environment, a public agency may exercise only those express or implied powers provided by law other than this division. However, a public agency may use discretionary powers provided by such other law for the purpose of mitigating or avoiding a significant effect on the environment subject to the express or implied constraints or limitations that may be provided by law.

Thus, to the extent that Government Code Section 66632.4 limits the Commission's authority over projects in the shoreline band outside of priority use areas to issues relating to public access, the same is true under CEQA.

In addition, Public Resources Code Section 21002.1 defines the respective responsibilities of "lead" and "responsible" agencies under CEQA. That section states in part:

A public agency functioning as a lead agency shall have responsibility for considering the effects, both individual and collective, of all activities involved in a project. A public agency functioning as a responsible agency shall have responsibility for considering only the effects of those activities involved in a project, which it is required by law to carry out or approve.

The Commission commonly acts as a "responsible" agency because most projects must first be approved by a local government, the "lead" agency. For such projects, BCDC is likely to be concerned chiefly with public access. In those few instances where BCDC is likely to be concerned chiefly with public access. In those few instances where BCDC must act as a lead agency, it must consider all effects of a project, but it is limited in the mitigation measures it can impose by the provisions of Public Resources Code Section 21004 discussed above.

6. Functional Equivalency. Because the McAteer-Petris Act limits the Commission's authority over projects in the shoreline band, certification of the Commission's regulatory program by the Resources agency as being "functionally equivalent" to the environmental impact reporting process may be affected. Public Resources Code Section 21080.5 allows the Secretary of the Resources Agency to certify a State agency's regulatory program as being the "functional equivalent" of the EIR process under certain conditions. The BCDC regulatory program has been certified in that manner. Recent amendments to CEQA in Public Resources Code Section 21004 reduced the authority of the Commission to consider some environmental effects of projects within the shoreline band, and may also affect the continued certification of the Commission's regulatory program as being functionally equivalent. This would significantly increase the amount of time it would take to process permit applications in the situations where BCDC must act as a lead agency because an EIR would be required rather than reliance on the Commission's "functionally equivalent" permit process, a much more timely process.

The reason the Commission's certification may be in jeopardy, at least with respect to projects in the shoreline band outside of priority use areas, is that certification is only possible if the rules and regulations adopted by the agency: "Require that an activity will not be approved or adopted as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impact which the activity may have on the environment." (Public Resources Code Section 21080.5(d)(2)(i)). If the Commission is unable to require mitigation for adverse impacts of projects in the shoreline band outside of priority use areas, the Secretary may have to withdraw BCDC's certification.

Thereafter, if the Commission was the lead agency for a project in the shoreline band, which could occur if the project required only non-discretionary, ministerial permits at the local government level, then the Commission may be forced to require the preparation of an EIR for the project. The process of EIR preparation can take up to a year. That is significantly greater than the procedures now used by the Commission under its certified program. Under the Commission's existing procedure, once the necessary information is available to review the environmental impacts of a project, the permit application is filed and the Commission must take action within 90 days. The only additional time beyond that needed for an ordinary permit is that the application summary must be distributed 30 days before a public hearing rather than the normal two weeks.

## Administration of Mitigation Requirements

As important as the Commission's authority to require mitigation is the process used by the Commission to specify and implement those requirements. These issues concern when, how much, and what type of mitigation should be required for project impacts, and the mechanisms by which mitigation is actually accomplished. The Bay Plan offers little guidance because mitigation has evolved through experience and good-faith compromise and flexibility by applicants and the Commission.

Traditionally, the Commission has analyzed the impacts and benefits of individual projects a project to determine whether mitigation is necessary and, if so, what type is appropriate. The analyses have employed site inspections, consultants, Environmental Impact Reports and the assistance of expert personnel from the State Department of Fish and Game, the U. S. Fish and Wildlife Service and the National Marine Fisheries Service. As the policies of the McAteer-Petris Act and the Bay Plan recognize, the importance of fish and wildlife, public access, economic development, water quality, and the climatic influence of the Bay, the Commission's case-by-case procedure has resulted in carefully crafted mitigation requirements that take into account all aspects of a project including the requirements of other regulatory agencies. This flexibility allows every aspect of a project to be individually evaluated, and this is particularly important given the limited geographical jurisdiction of the Commission. Often, projects before BCDC will have much greater impacts on resources outside of the Commission's jurisdiction that are within the control of other regulatory bodies. Coordinating the various interests and requirements of those agencies may complicate the already complex environmental impacts of many projects.

1. Factors that Affect Mitigation. Direct impacts of a project are easily identified but their magnitude and significance are difficult to measure. For example, the placement of an acre of fill in a marsh will obviously destroy the marsh vegetation in that area, its aquatic and wildlife habitat value, and reduce the Bay tidal prism and water surface area. However, that particular section of marsh may also provide an important route for wildlife to move from one portion of their habitat to another and perform an important water pollutant cleansing role and therefore, its destruction may affect a much wider area or may provide a unique habitat adapted to a particular endangered species. The value of the marsh for wildlife habitat varies with its elevation, soil character, existing vegetation, degree of existing disturbance, and the presence of other uses in the vicinity. Temporary construction impacts may eventually disappear but this may take years or, where the impact is severe, the site may never recover. The uses proposed on fill once it is placed can also have impacts beyond the immediate boundaries of the fill. Uses that involve significant human activity for example, can discourage use of adjacent areas by wildlife.

Cumulative as well as secondary or growth inducing impacts are even more difficult to measure. Such impacts result in two ways: from projects that encourage or allow other development to take place; new highways, bridges or sewer projects are examples and from those that establish a legal precedent making it difficult or impossible to deny any similar project. These projects and their impacts require especially careful analysis.

Nor are marshes the only complex resource; one part of the Bay may look like any other, but there are substantial hidden differences. A small fill in one location may only displace the volume and surface area of the

fill; in another it may permanently change circulation patterns, increase salinity, and reduce overall water quality. At another site the fill may destroy fish spawning grounds or shellfish beds, or displace a favored site for water-oriented recreation. All of these factors have to be considered in determining the detriments caused by any proposed fill in the Bay.

Once the adverse impacts of a fill project have been identified, it is necessary to determine whether the impacts can be reduced or eliminated through redesign. If unavoidable impacts remain, a decision must be made whether to deny a permit or to negotiate mitigation measures that will compensate those adverse impacts. It would certainly be preferable to simply require the equivalent benefits be established at a nearby location. Thus, if a fill was proposed in a marsh with certain characteristics, the same type of marsh should be created from dry land with little habitat or recreational value nearby and the success of the new marsh should be assured before the fill took place. Ideally, the mitigation proposal should compensate closely for the losses due to the project, both in matching the amount of lost resource and its type.

Areas that can be converted to similar habitat are rarely available near the project site, either because suitable land is unavailable or too costly. Moreover, few applicants can bear the cost of delaying a project for the three or four years it may take for some types of habitat to become established. Consequently, the Commission is faced with the difficult and complex task of judging the comparability of somewhat different types of impacts and benefits. This is often not an easy task since open waters may favor fishes while mudflats will provide more habitat for shorebirds, and there is no scientific consensus about the comparability of habitats that can be applied to the diverse Bay environment.

The type of project also warrants careful attention. For example, recurring activities such as the maintenance dredging of flood control channels have always been treated differently by the Commission than projects with impacts that take place only once. Maintenance dredging can have substantial impacts on vegetation that has grown up along the channel between dredgings. Nevertheless, the Commission has always considered it inappropriate to require the replacement of such vegetation for each dredging cycle because, over a long period of time, it would result in more replacement habitat than was destroyed. However, the Commission has continued to require that individual maintenance dredging projects take place in the least environmentally destructive manner.

Occasionally, there are also contentions that projects which may mitigate some existing adverse impact should not be the subject of other mitigation requirements directed at other, new impacts that may be caused by the project. In this case, the Legislature has determined that if a project is specifically required by a public agency to mitigate for an adverse impact of an existing facility, no other mitigation requirements can be imposed except for impacts arising from portions of the project that are not essential and directly related to the improvement of the adverse environmental condition (Government Code Section 65990 et seq.). If the project is not required by a public agency or if portions of the project are not essential and directly related to the improvement of the original environmental condition, however, the Legislature has specifically not limited the imposition of additional mitigation measures that may be necessary because the solving of some adverse environmental problems may cause others. To complicate the matter further, the limitation does not restrict any public agency acting pursuant to CEQA.

Questions involving these types of projects have primarily arisen with respect to requirements of the Regional Water Quality Control Board to clean up a source of water pollution caused by such things as poorly designed landfill sites. As the Regional Board ordinarily does not require a specific project to cleanup such a situation and there are usually several methods of accomplishing such cleanup operations, however, the limitations of this section of the Governmental Code usually do not apply.

Given BCDC's limited geographical jurisdiction, it is also not uncommon that, while a project may have some impacts on the Bay, more significant impacts will be caused outside of BCDC's jurisdiction within areas of concern to other agencies. For example, a project may involve a small amount of fill in the Bay but large amounts of fill in seasonal wetlands. In such a situation, the fish and wildlife agencies may prefer mitigation for the impacts to seasonal wetlands to take the form of restoration of the same type of wetland habitat. Although the Commission's concern is for impacts to the Bay, it may be beneficial to everyone in such a circumstance for the mitigation for the Bay fill to be combined with whatever mitigation may be required for the impacts outside of the Commission's jurisdiction. The developer is then obligated to establish only a single mitigation project. Although the type of habitat enhanced may be different from the portion of the Bay affected, it is often possible to establish a comparable value based on the facts of the particular situation. The circumstances can also be reversed, with larger areas being restored to tidal action than would be justified on the basis of impacts to the Bay, but are accepted by other agencies as appropriate for impacts occurring outside of BCDC's jurisdiction.

The results in such circumstances are rarely quantified, and usually are obtained from a process of negotiation. Quantifying the results and precisely defining how much mitigation is attributable to which part of a project is rarely desired by process participants if a satisfactory result is obtained. The agency personnel are often not able to spend the time necessary because of budget constraints. Applicants are not interested in extending the amount of time necessary to establish that amount of information; nor do they want arguments to develop among decision-makers over appropriate allocations if the overall result is satisfactory. The end result of this situation, however, is that the decision-making process is not well articulated. While this form of negotiation to reach agreement may not be desirable from a philosophical viewpoint of how government should operate, it appears to work well for the parties involved and therefore there appears to be little incentive to change it.

In addition to the complicating factors discussed above, the same applicants fear that different regulatory agencies will impose conflicting or duplicating mitigation requirements because of their different perspectives and mandates. Although the staff cannot document any evidence to support those fears, they cannot be dismissed because they affect investment decisions. Furthermore, the potential for conflict exists even if it has not occurred - adding an element of uncertainty to the process. The only place it can arise, however, is when a developer is not able or willing to provide in-kind mitigation for each type of habitat affected by a project. If truly comparable mitigation is available for each type of habitat affected, conflicts should not exist. It is only if a developer desires to substitute or offset one type of habitat with another that the potential for conflict arises.

In these situations, it is particularly important for the agencies involved to coordinate their activities to determine what mitigation is appropriate. Where the objectives of each agency can be accomplished through a single mitigation proposal, it is certainly desirable, both from the developer's point of view and the public's. A single mitigation proposal is likely to be less costly than several unconnected ones and it is more likely to be successful. The Corps of Engineers has exercised leadership in this area by holding regular interagency working meetings to discuss proposed projects informally. This has assisted in the formulation of mitigation proposals that are acceptable to, or at least not opposed by, the various agencies. The absence of conflicts at the BCDC level is partly a result of this informal coordination and partly due to the recognition of the value of the Bay by the other agencies. The success of this informal system is demonstrated by the fact that the staff has only been able to find one case where there was an actual conflict between what could be considered a BCDC mitigation requirement and those of another agency. That project involved a temporary dike built in the Bay by the Port of Oakland as part of airport construction. The BCDC permit required the dike to be removed by a specified date, but least terns, an endangered species, began making use of the area, and the U. S. Fish and Wildlife Service objected to the removal of the dike. Although the conflict was eventually resolved, it took a long time.

This informal system is not infallible, but it should be encouraged. This is particularly true with respect to mitigation bank proposals which are discussed in more detail in a later section.

Finally, there can be situations where a resource is sufficiently rare and important that it should be treated as being irreplaceable. In such

situations, the habitat should be protected from adverse impacts and mitigation is realistically not an appropriate option. This situation is most likely to occur with habitat necessary for endangered species and wildlife priority use areas identified in the Bay Plan, such as the Emeryville Crescent.

2. Mitigation Project Issues. Where the purpose of mitigation is simply to provide an area of open water subject to tidal action, it is relatively simple to design the mitigation project. Even here, however, flooding of inland areas, erosion, sedimentation, mosquito abatement concerns, and water quality and circulation must be taken into account, and complications can easily arise. For example, the restoration of the Ravenswood Triangle to tidal action has been stalled for a number of years by litigation threatened by an inland property owner over potential flooding concerns and past actions unrelated to the mitigation project.

Of greater concern is the success of mitigation projects involving the restoration of wetland vegetation of one kind or another. For example, Dr. Margaret Race of the University of California, Berkeley, in a study of 11 previous wetland restoration projects in San Francisco Bay to be published soon concluded that particularly for earlier mitigation projects:

All have been plagued by multiple problems such as high soil salinities, incorrect slope, improper tidal elevations, incomplete vegetation establishment, channel erosion, sedimentation or poor tidal circulation. Based on these findings, it is debatable whether any sites in San Francisco Bay can be described as complete, active or successful restoration projects at present.

Although many of these projects were not associated with permit conditions, some were. Of these Dr. Race noted:

In many cases, these approved permits mean the certain loss of existing wetland areas. Admittedly, the number of permits associated with wetlands is small. However, considering the paucity of wetland

areas in San Francisco Bay and most west coast estuaries, the loss of even small amounts poses potentially serious environmental consequences. Even if replacement acreage is greater than the original amount lost, there is no guarantee of a net wetland gain given the present state of the art.

Dr. Race concluded that despite noted limitations of earlier mitigation projects, mitigation and restoration efforts should continue and that more emphasis should be placed on mitigation project planning.

It is clear, as Dr. Race has pointed out, that many early mitigation projects were not as successful as anticipated. This is particularly true of artificial planting programs of wetland vegetation. The lack of success with artificial planting programs has almost uniformly delayed the success of restoration efforts. These delays can be substantial while natural processes eventually revegetate a site if soils and elevations are appropriate. Several of the earlier programs reviewed by Dr. Race and cited as failures for example, have since begun to restore themselves through natural colonization. This can only occur however, if the soil types, slopes, elevations and tidal characteristics are appropriate for the type of vegetation desired. Depending upon the site, this can require substantial grading to accurate elevations or a long wait while the natural processes of erosion and sedimentation reconfigure the site to characteristics more compatible with successful vegetation.

Successful restoration is possible, however, it is clear from the studies of previous projects that future projects require careful planning in a field where there are few experienced professionals, and at least three years, at the very minimum, under ideal conditions for natural revegetation to take place. It is almost uniformly more time consuming if the mitigation site is expected to serve additional functions such as a source of fill for other

projects or as a disposal area for dredge spoils or other materials. Where competing purposes are present, the care that must be taken to establish the site characteristics needed for successful revegetation are almost always compromised to some extent. The lack of success with artificial planting programs also means that an existing natural seed source of the plant desired must generally be nearby. These limitations do not mean that restoration efforts should be abandoned. They do mean that care must be taken in designing mitigation projects, in realistically assessing grading needs and in providing time for mitigation measures to reach maturity.

3. Reducing Uncertainty. Given the complications discussed above that can add considerable uncertainty to the permit process, it is understandable that applicants have expressed a desire for an objective procedure that will allow them to determine in advance what mitigation will be required so that the development process is more predictable. Predictability is extremely valuable when funds must be committed in advance, particularly for a major project that may take years to bring to fruition, and any reduction in uncertainty will improve the ability of applicants to make project development decisions.

Several approaches are possible to reduce the existing degree of uncertainty -- unfortunately, all have serious problems of one kind or another.

The most comprehensive and objective procedure available for evaluating the entire range of project impacts and proposed mitigation is the Habitat Evaluation Procedure (HEP) devised by the U. S. Fish and Wildlife Service and widely used by the State Department of Fish and Game as well. The U. S. Fish and Wildlife Service uses HEP to evaluate project proposals and make recommendations to other agencies such as BCDC and the U. S. Army Corps

of Engineers. It is used by the Fish and Wildlife Service after the impacts of a project have been minimized and in conjunction with policies concerning appropriate use of fill in wetlands and the types of habitat that should not be disturbed at all or can be offset with in-kind or less comparable mitigation.

The HEP system is a method for quantifying the habitat value of a site for the species that make use of it. In practice, the U. S. Fish and Wildlife Service often uses representative or key species representing the range of species making use of a site rather than making an exhaustive investigation of every species. This information can be aggregated across the range of species making use of a site to determine the general value of the area for wildlife, but the information is also available by species type. Changes in the habitat value can be quantified in the same way, and the effects of a project can, therefore, be compared to the improvement caused by the proposed mitigation. Because the information is developed for each species and can be aggregated or not, it is possible to determine whether the mitigation proposed will benefit the same species that are affected by the project or whether trade-offs between species are being proposed. The system can also be used to give a present value for changes that take place over time.

HEP involves using an interdisciplinary team of fish and wildlife professionals to evaluate the existing and future value of the project site and the mitigation site as habitat for key species. The changes in habitat values are expressed in habitat units or annualized habitat units if time is a factor. The negative effects on the project site can then be compared to the improvements that will take place on the mitigation site through enhancement activities. The use of a team of professional wildlife experts tends to

eliminate biases as well as assuring that all of the habitat values of both the project and mitigation site are recognized. The time involved is considerable, however, and it does require a mitigation site and enhancement program to be available for evaluation.

Because HEP is time consuming and requires a reasonably well defined project and mitigation program, it is not employed as often as might be expected. Instead, as noted previously, most mitigation is worked out on a less formal, less well articulated basis. Nevertheless, when it is used, its comprehensiveness and objectivity illustrates well the range of mitigation that may be necessary. The U. S. Fish and Wildlife Service provided three examples where HEP was used around the Bay Area that, while not necessarily involving projects in BCDC jurisdiction, illustrate the range of factors that can be involved. The following summarizes the HEP analyses:

a. Port of Oakland Airport. Although it is reported by the Port of Oakland that this particular project has not materialized in the acquisition of a mitigation project site in the Hayward area, as once proposed, the process followed is illustrative of the HEP procedure. The project involved the incremental filling of a 200-acre site at the Oakland Airport that had been previously diked off from the Bay. The site consisted of seasonal wetlands containing pickleweed stands, unvegetated flats that were seasonally flooded and a permanent pond. The HEP team evaluated two projects - one involving an initial 66-acre fill and the second involving the eventual 200-acre fill. The mitigation evaluated consisted of the purchase of some former salt ponds in the Hayward area and enhancing their wildlife habitat value by returning them to tidal action and creating habitat consisting of 25 percent salt marsh, 50 percent intertidal mudflat and 25 percent subtidal open

water. The required mitigation acreage for the two fills was calculated after site inspections by the HEP team to range from 51 to 54 acres for the 66-acre fill and from 209 to 226 acres for the 200-acre fill. In this example, the HEP team concluded that it would be appropriate to allow enhanced habitat for fish resulting from the mitigation program to offset detriments to other species at the project site. It should be noted that the ranges in mitigation acreage required result from different assumptions being used concerning the project site and the mitigation site. For example, in one of the models the 66-acre fill was assumed to be half on diked pickleweed and half on unvegetated flats that were seasonally flooded; in others it was assumed to contain some of the permanent pond. The results, however, demonstrate the range of mitigation that may be necessary to offset different types of habitat - in this case, seasonal wetlands for areas subject to tidal action. The results range from .77 acres of mitigation for each acre filled to 1.1 acres for each acre filled depending upon the type of habitat affected and the timing of the habitat enhancement on the mitigation site.

b. Lincoln Properties/Redwood City. This project involved the filling of 88 acres of a former Leslie Salt Company wash pond, and the mitigation proposed was the same as described above for the Port of Oakland project (i.e. converting former salt ponds to tidal action with 25 percent salt marsh, 50 percent intertidal mudflat, and 25 percent subtidal open water). The HEP team calculated that 45 acres of mitigation would be required for this diked-off former wash pond that is essentially devoid of vegetation and only seasonally wet.

c. Newport North/Napa River. The project involved fill placed over 17 acres of seasonal wetlands and 55 acres of grasslands with mitigation

proposed in the form of creating ponds subject to tidal action adjacent to the project. The HEP team calculated the number of acres of ponds that would be required under two assumptions - the first was that the ponds would only be six inches deep, and the second was that the ponds would be four to six feet deep. In the former case, the HEP team concluded that 225 acres of mitigation would be required and in the latter case 155 acres would be necessary. The team noted that the reason the mitigation requirement was so high was because of the extremely poor habitat that would be provided by the ponds as they were proposed by the developer.

These examples demonstrate the wide variety of mitigation that may be necessary depending upon the quality of the habitat at the project site that will be affected and the change in the habitat quality of the mitigation site that is being proposed. It should also be noted that the use of HEP, with its reliance on a team of wildlife experts quantifying its evaluations in much more detail than found in BCDC permits, does not reduce controversies over the results obtained. All of the developers of the projects noted above proposed much smaller amounts of mitigation than calculated by the HEP team. Thus, it does not appear that quantifying results in detail with the best information available will reduce controversy over the individual evaluations performed by BCDC and other agencies that routinely deal with similar matters such as the Corps of Engineers and the Coastal Commission.

Other systems of determining mitigation requirements, however, can be devised that do not require the elaborate investigations inherent in HEP. Standards or guidelines can be established that prescribe the amount and type of mitigation that is required for different types of impacts. Although these have the virtue of reducing discretion, being easier to administer and

providing greater certainty in the development process than HEP or a case-by-case analysis, they are also inherently arbitrary because to some degree they cannot take into account all of the variations that can be encountered given the diversity of the Bay system. Moreover, to the extent that the standards reduce discretion, they also reduce the flexibility of the Commission and developers in trying to resolve unique problems. Depending upon how such a system is established, the standards would also have additional effects.

At one end of the range, the standards can be set very stringently so that in almost all cases, the mitigation required will be more than would be required under a case-by-case analysis. This would provide certainty in the development process, but probably would not be acceptable to developers. At the other end, the standards could be set very loosely. Certainty in the BCDC permit process might thereby be assured, but it is likely that continuing controversy would take place at the Corps of Engineers level as conservation groups and the fish and wildlife agencies transferred their concerns to that level. Furthermore, it is unlikely that such standards would provide appropriate mitigation for impacts to the Bay. Thus, it is unlikely that certainty in the overall development process would be established. In between these extremes is an infinite range of possibilities that could work well in some cases and not in others depending on the particular circumstances surrounding the project.

A third alternative would overlay any of the above sets of standards with an ability to make exceptions if anything different about the project or the mitigation site were demonstrated. This, of course, would reduce the degree of certainty provided by the standards. The method of

establishing the existence of exceptional circumstances would also make a difference in the way the system worked. For example, the system could be established so that only the permit applicant would have the opportunity to demonstrate exceptions. Or, at the other end of the spectrum, anyone could raise an objection to the use of the guidelines and the applicant would then have the burden of demonstrating that the mitigation proposed was appropriate. Any such system has obvious defects.

Another possibility is to provide standards only for in-kind mitigation; that is, where the proposed mitigation is in fact comparable in every significant way to the area impacted by the project. Other mitigation proposals would be evaluated on a case-by-case basis. The only problem in establishing the standards would be to determine the additional mitigation that should be required to offset any difference in time between when the impacts take place and when the replacement habitat is successfully established. Although such a system has the advantage of providing certainty in some cases, it is not likely to be applicable to many projects and its utility is therefore questionable. Its primary value would be psychological; it would clearly show that the Commission intends only to require mitigation commensurate with the impacts of a project.

A variation on the latter approach would be to describe the approach the Commission intends to take with respect to mitigation without specifying ratios of filled areas to mitigation; rather the Commission would articulate its view of its authority, what limits there are to the exercise of that authority, what factors it will consider in requiring mitigation, and how it would prefer to see such requirements implemented. Although such an approach would not provide certainty to developers, it would have the benefit

of eliminating some of the confusion and misconceptions that dominate some discussions of this subject.

The staff believes some variation of the last approach holds the greatest promise. This issue has attracted enough controversy that the staff believes it would be desirable for it to be resolved through a Bay Plan amendment. An amendment requires a two-thirds vote of the Commission, and, therefore, will represent a true consensus of the Commission that is more likely to receive the emphatic support of the Commission in future permit decisions. This is important to permit applicants because 13 affirmative votes are required by the McAteer-Petris Act to approve any permit. The staff believes this is more likely to provide at least some modicum of lasting predictability than an uneasy compromise over a particular ratio of fill to required mitigation. It will also allow the Commission a degree of flexibility that the staff believes experience has shown is desirable in dealing with the diverse environments around the Bay. Finally, the staff seriously doubts that a consensus can be reached for any particular set of standards.

4. Mitigation Banks. Where it is possible to do so, it is usually preferable to have any necessary mitigation performed on the project site. The applicant has control of the land, any enhancement work can be coordinated with construction of the project, administration of permit conditions can be more easily coordinated, there is usually a greater incentive for the developer to have the mitigation succeed, and most importantly, there is a greater likelihood that the benefits of the mitigation will offset the actual impacts of the project if they are close together. Unfortunately, it is sometimes not feasible for mitigation to take place on the project site

because the land is not available and off-site work may be necessary. Where off-site land is available to the applicant, this will present little problem, but suitable land sometimes cannot be acquired or the price may not be reasonable. Furthermore, it is occasionally preferable to have mitigation take place off-site when on-site mitigation may result in a small isolated wetland with limited value, and particularly if there is an opportunity to combine the mitigation with other on-going enhancement projects to create a single large, well-managed and maintained wetland.

In either of these cases where off-site mitigation may be necessary or desirable, "mitigation banks" can play a useful role. Such a "bank" would normally consist of either restoration of tidal action to an area that has been diked off from the Bay or enhancement of an existing tidal marsh carried out by some party other than the applicant, but the applicant would provide funds to accomplish a pro-rata share of the compensation work in lieu of doing the compensation work directly. Although the concept is deceptively simple, the complications involved can be as great if not more so than those discussed previously for evaluating independent mitigation programs associated only with the development. For example, if only a few large mitigation banks are established in an attempt to consolidate efforts and improve the chances that the mitigation will be successful, there will be less likelihood that the compensation chosen at the mitigation bank site is comparable to that affected by projects.

This also raises a serious problem in formulating an agreement as to the type of compensation work that should be accomplished at mitigation bank sites. BCDC's emphasis is on enhancing the Bay because so much of it was diked and filled in the past, and most of its mitigation requirements will be

for fill in the Bay. However, this is a very small amount of the activity for which mitigation may be required around the Bay. Corps of Engineers personnel informally estimated that perhaps only 5 percent of the projects the Corps deals with in the Bay Area involving mitigation issues also concern fill in the Bay. Consequently, BCDC is unlikely to have a significant, direct impact on the success or failure of any mitigation bank in terms of funds contributed to the bank. More importantly, however, other agencies such as the U. S. Fish and Wildlife Service have identified at least a potential imbalance in wildlife enhancement efforts around the Bay. The Service conducted a review of possible projects in Alameda County and noted that it was likely that areas would be returned to tidal action as mitigation for the filling of large areas of diked wetlands. The Service noted that this could result in an imbalance between salt marshes and seasonal marshes which also have a major but different value to wildlife. The Service also noted that many completed restoration projects have neglected to include transitional habitat formerly associated with tidal marshes and that diked wetlands now tend to play the role held by transitional habitats. The Service recommended that a balanced mixture of wetland types including tidal and seasonal salt marsh as well as freshwater marsh be established.

The Service's approach is certainly desirable as a long-term service goal. However, there may well be some conflicts unless the Service's goals coincide with the Commission's broader Bay resource protection goals. Until there are a diverse group of mitigation banks providing different types of compensation that can compare closely with project impacts, there is likely to be some imbalance. Since most mitigation bank programs will require BCDC permits, and the mitigation bank programs can only be successful with the

support of other regulatory agencies because of the small contribution provided by BCDC, the need for coordination is obvious. To date, this coordination has taken place informally and successfully on an individual among agency staffs, but there is a potential for conflict.

The mitigation bank concept also has other complications that need to be addressed. For example, appropriate guarantees that the enhancement work will actually be accomplished must be included in any program, particularly if funds for the work only become available over a long period of time. When mitigation is being performed directly by an applicant, the success of the mitigation and its maintenance is ordinarily the responsibility of the applicant and enforcement action can be taken directly against the project if the mitigation requirements are not satisfied. Mitigation banks allow an applicant to buy-out of the system and therefore other arrangements have to be made to guarantee the mitigation will proceed as anticipated. There is virtually nothing that would discredit a regulatory system more than requiring an applicant to expend funds for something that never materialized. Consequently, the institutional arrangements surrounding mitigation banks must be carefully considered whether the program is administered by a public agency or a private entity of some kind.

Additional arguments have been raised against the use of mitigation banks at all. Some members of the public testified before the Commission that lands that were already publicly-owned should not be enhanced with funds provided by private applicants. Their view was that these lands would eventually be enhanced with public funds and it was more important at this time to encourage the enhancement of additional privately owned land. This approach depends on the expectation that publicly-owned lands will not be

developed and funds for their enhancement will become available. Given the financial condition of many local governments, however, this may not be a valid assumption. On the other hand, recent voter approval of Propositions 18 and 19 on the State ballot resulted in more than \$15 million being made available for wetland acquisition, restoration, and enhancement projects in San Francisco Bay.

Concerns have also been expressed that the widespread use of mitigation banks will encourage applicants and regulatory agencies to rely on them rather than attempting to redesign a project to reduce its impacts, require more comparable mitigation, or deny inappropriate projects. Given the somewhat mixed success of past mitigation projects, there is a fear that mitigation banks will result in an overall decrease in wildlife habitat over time. Concerns have also been raised that for at least the foreseeable future, there will not be very many mitigation banks and their capacity will, therefore, be limited. That limited capacity may be dominated by the larger developers who are more sophisticated, whereas it is the smaller developers with less resources that need the service more.

Further, some commentators have argued that mitigation banks do not insure appropriate mitigation for future unknown authorized Bay fills. The physical characteristics of the mitigation bank site may not be equivalent to the Bay resource lost by an approved fill.

Although these concerns may prove to be true, there is no evidence that can demonstrate their validity at this time because there is simply very little experience with mitigation banks at all. On the other hand, every regulatory agency that gets involved in the issue has experience with the difficulties mitigation can cause particularly small-scale development

applicants. Given this situation, it appears appropriate to continue to encourage such programs under appropriate controls realizing that mitigation banks are at an infant stage and much more needs to be learned about them and their chances for long-term success. Although BCDC is unlikely to have a significant impact on the success or failure of the mitigation bank concept because of the limited amount of Bay fill authorized, BCDC's approach to mitigation banks could have a significant effect on the projects for which some fill in the Bay can be authorized.

Although experience with mitigation banks is extremely limited, the staff believes the following elements should be incorporated into any system:

- (a) The land should already be acquired. There are too many uncertainties in the land acquisition process to rely on expectations that land will be purchased.
- (b) It would be preferable if the enhancement work was already completed according to approved plans. All costs except maintenance costs would, therefore, be known and the success of the enhancement work could be evaluated. This requirement could be eliminated if the agency involved had a proven record of success with similar enhancement programs, and the Commission had the ability to withdraw funds from the program and transfer them to another if the work was not proceeding.

- (c) The per acre cost of the mitigation work should be identified and limited to land acquisition, planning, enhancement work, program administration, and maintenance.
- (d) The change in habitat value of the mitigation site should be well documented so there is an adequate basis for comparing it to future project impacts.
- (e) An adequate accounting system should be maintained so enhancement work is not paid for more than once.
- (f) The site should be permanently protected and maintained.

A further difficulty in devising any successful privately-operated mitigation bank is gaining the confidence of the applicants about the Commission's future actions. For example, an applicant may be in a position to acquire a relatively large area suitable for restoration to tidal action, but does not require that amount of land immediately for mitigation. Different approaches are possible in this situation:

- (a) Several applicants could combine their mitigation requirements and if they coincided with the area involved, could jointly share the cost of the restoration. It is unlikely, however, that the timing of several projects will coincide in this fashion.

- (b) The land not needed for mitigation could be diked off and sold or retained for future use. Unfortunately, the cost of cross diking is high.
- (c) The applicant may instead desire to return the entire area to tidal action and obtain a mitigation "credit" for the remainder to offset future fill projects. Such a credit could also be transferable. A variation on this approach would simply allow the applicant to obtain a tax deduction for dedicating the additional acreage. The restoration of larger areas than required has the benefit of obtaining the wildlife benefits more quickly as well as eliminating the cost of unnecessary cross dikes.

No applicant is likely to restore a larger area at the present time, however, except where a tax deduction is desirable. The applicant has no guarantee that he will obtain any credit for the restoration of the larger area when a future permit application is filed. This problem may well be insoluble if absolute guarantees are needed before a developer would be willing to do it. The Commission cannot bind a future Commission in exercising its regulatory responsibilities under the McAteer-Petris Act.

Thus, the Commission cannot legally guarantee that a future Commission would allow some amount of fill without additional mitigation based on an existing mitigation program. The one thing the Commission can do, however, to assure applicants that any excess mitigation would receive some credit would be to include language to that effect in the Bay Plan as well as execute an agreement with a permittee that would provide such mitigation. Although a future Commission could amend such a provision, it would take a two-thirds vote of the Commission to do so. It is unlikely that any such attempt would succeed if the Commission had made a commitment and someone had relied on it. As with any other mitigation bank, it would be necessary to permanently guarantee its protection and maintenance and to accurately document the improvement in wildlife habitat so that any future project impacts could be compared to it. In addition, if the credit was transferable, it would be necessary to establish a system for identifying who owned rights to the credit. Otherwise, the Commission could find itself in the position of trying to decide between different private parties who claimed that they should receive the same credit. The private parties involved would also have to exercise some care if the credit was transferable because it might become characterized as a security requiring registration with state and federal agencies.

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CHAPTER IV. CONCLUSIONS

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Based on the above discussion, the staff believes that the San Francisco Bay Plan should be amended to (1) accurately reflect the current status and Commission responsibility to exercise the public trust; and (2) provide a basis in the Plan for the Commission's requirement of mitigation for authorized Bay fills.

Public Trust

The Bay Plan policy on the Public Trust (page 37) now states:

f. Public Trust. Many private owners of Bay lands hold title subject to rights of the public, derived from English common law and the California Constitution, as to use of waterways for commerce, navigation, and fishing. These rights, sometimes called the "public trust" for commerce, navigation, and fishing, are the subject of considerable legal debate, and court tests may be required to determine their practical significance. Any necessary court tests should be completed as soon as possible; in the meantime, an applicant for a fill permit should be required to show either that the public trust does not apply to his lands, or that the filling would be consistent with the trust.

The staff believes this policy should be amended to incorporate recent court decisions and state the Commission's responsibility in exercising the trust. The staff suggests that the following language would be more appropriate:

f. Public Trust. Much of the public and privately-owned tide and submerged lands of the Bay are subject to the public trust which is a paramount property right owned by the public and exercised by governmental agencies such as BCDC and the State Lands Commission. Any project on lands subject to the public trust should be consistent with public

trust needs for the area, and, in the case of lands subject to Legislative grants, should also be consistent with the grant and incidental to State-wide public purposes. In exercising the trust, whether it be for commerce, navigation, fisheries, wildlife habitat, recreation, or open space, the Commission should be guided by the policies of the McAteer-Petris Act and the Bay Plan and relevant case law.

### Mitigation

The Bay Plan now contains no discussion of mitigating the unavoidable adverse effects of Bay fill by improving other wildlife habitat or returning areas to tidal action, although that has been the practice of the Commission. The staff believes that the Bay Plan should be amended to reflect the Commission's past decisions and describe the general parameters the Commission uses to evaluate mitigation.

The staff further believes that there are four alternatives the Commission should consider: (1) adopting a policy that establishes general mitigation parameters (Alternative A below); (2) adopt a policy similar to Alternative A, but with more detailed mitigation guidelines (Alternative B below); (3) adopting the U. S. Fish and Wildlife Service HEP process discussed in this report which would give detailed guidelines in determining mitigation; and (4) not adopting a Bay Plan mitigation policy.

#### 1. Alternative A

Mitigation for the unavoidable adverse impacts of any fill in the Bay should be considered by the Commission in determining whether the public benefits of the project clearly outweigh the detriments caused by the fill and whether the impact of the fill has been minimized. Any mitigation should compensate specific adverse impacts of the fill on Bay resources, be as near the project site as practicable, and be subject to appropriate controls to

insure the mitigation proposal is successful and permanently protected and maintained. Every effort should be made to facilitate the implementation of mitigation requirements by encouraging the restoration of tidal action to larger areas than required by the Commission or other governmental agencies; such excess mitigation should be taken into account by the Commission when evaluating future fill projects by the same project sponsor.

2. Alternative B

As used herein, mitigation usually consists of measures to compensate the unavoidable adverse impacts to the resources of the Bay from projects involving fill in the Bay, and usually consists of restoring an area to tidal action or enhancing its wildlife habitat value. The mitigation site should preferably be on-site or as near the project site as possible and is not a substitute for reducing the amount of fill or meeting the other requirements of the McAteer-Petris Act such as limiting Bay fill to water-oriented uses.

Mitigation for the unavoidable adverse impacts of any fill in the Bay should be considered by the Commission in determining whether the public benefits of the project clearly outweigh the detriments caused by the fill, whether the impact of the fill has been compensated, and where necessary to comply with the policies of the Bay Plan and the California Environmental Quality Act. The following factors should be considered in determining whether the mitigation proposed is appropriate:

- a. It should be as near the project site as possible;
- b. It should be commensurate with the timing and adverse impacts of the fill on the resources of

the Bay and preferably have the same characteristics as the area affected by the fill such as similar habitat type, recreational potential, surface area and volume;

- c. Where feasible, mitigation required for a project should be combined into a single mitigation program, and the Commission should coordinate its regulatory efforts with other agencies to avoid duplicating mitigation requirements; and
- d. It should be subject to appropriate controls to assure it is successful and permanently guaranteed and maintained.

When similar mitigation is proposed to compensate the unavoidable adverse impacts of any Bay fill, the Commission should consider the various costs of the alternatives in deciding the appropriate mitigation.

APPENDIX: ADOPTED BAY PLAN POLICIES



SAN FRANCISCO BAY PLAN POLICY AMENDMENT NO. 5-84  
PUBLIC TRUST AND MITIGATION POLICIES

The above referenced Bay Plan amendment was adopted by the Commission on March 7, 1985 and involves changes to page 37 of the San Francisco Bay Plan, reprinted September 1983. Paragraph "f. Public Trust" has been changed and new paragraph "h. Mitigation" has been added as set out below.

Public Trust

The lined out language is deleted from paragraph "f. Public Trust" (page 37).

~~f. Public Trust. Many private owners of Bay lands hold title subject to rights of the public derived from English common law and the California Constitution, as to use of waterways for commerce, navigation, and fishing. These rights, sometimes called the "public trust" for commerce, navigation, and fishing, are the subject of considerable legal debate, and court tests may be required to determine their practical significance. Any necessary court tests should be completed as soon as possible; in the meantime, an applicant for a fill permit should be required to show either that the public trust does not apply to his lands, or that filling would be consistent with the trust.~~

The following new language and footnote is added to paragraph "f. Public Trust" (page 37).

f. Public Trust. Virtually all the publicly and privately-held unfilled tidelands and submerged lands within the jurisdiction of the Commission are subject to the public trust. The public trust is a paramount public property right held in trust by the State for the benefit of the public. Title to this public trust ownership is vested in the State Lands Commission or legislative grantees. The purpose of the public trust is to assure that the lands to which it pertains are kept for trust uses, for example commerce, navigation, fisheries, wildlife habitat, recreation, and open space. The McAteer-Petris Act and the Bay Plan are an exercise of authority by the Legislature over public trust lands and establish policies for meeting public trust needs. As a result, the public trust

ownership provides additional support for Commission decisions affecting such lands. When the Commission takes any action affecting lands subject to the public trust, it should<sup>1/</sup> assure that the action is consistent with the public trust needs for the area and, in case of lands subject to legislative grants, should also assure that the terms of the grant are satisfied and the project is in furtherance of state-wide purposes.

1/ As used in the Bay Plan, "should" is mandatory.

#### Mitigation

The following new paragraph "h. Mitigation" is added to page 37 of the Bay Plan.

h. Mitigation. Mitigation for the unavoidable adverse environmental impacts of any Bay fill should be considered by the Commission in determining whether the public benefits of a fill project clearly exceed the public detriment from the loss of water areas due to the fill and whenever mitigation is necessary for the Commission to comply with the provisions of the California Environmental Quality Act. Whenever mitigation is needed the mitigation program should be provided as part of the project. Mitigation should consist of measures to compensate for the adverse impacts of the fill to the natural resources of the Bay, such as to water surface, volume or circulation, fish and wildlife habitat or marshes or mudflats. Mitigation is not a substitute for meeting the other requirements of the McAteer-Petris Act concerning fill. When mitigation is necessary to offset the unavoidable adverse impacts of approvable fill, the mitigation program should assure:

- (1) That benefits from the mitigation would be commensurate with the adverse impacts on the resources of the Bay and consist of providing area and enhancement resulting in characteristics and values similar to the characteristics and values adversely affected;
- (2) That the mitigation would be at the fill project site, or if the Commission determines that on-site mitigation is not feasible, as close as possible;

- (3) That the mitigation measures would be carefully planned, reviewed, and approved by or on behalf of the Commission, and subject to reasonable controls to ensure success, permanence, and long-term maintenance;
- (4) That the mitigation would, to the extent possible, be provided concurrently with those parts of the project causing adverse impacts; and
- (5) That the mitigation measures are coordinated with all affected local, state, and federal agencies having jurisdiction or mitigation expertise to ensure, to the maximum practicable extent, a single mitigation program that satisfies the policies of all the affected agencies.

If more than one mitigation program is proposed that satisfies all five factors above, the Commission should consider the cost of the alternatives in determining the appropriate program.

To encourage cost effective and comprehensive mitigation programs, the Commission should extend credit for certain fill removal and encourage land banking provided that any credit or land bank is recognized pursuant to written agreement executed by the Commission. In considering credit or land bank agreements, the Commission should assure that the five factors listed above will be met.

