

Developing the Berkeley Waterfront: Consideration of a Marina Village Concept

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Introduction

The Berkeley waterfront has been the site of active controversy since 1972, when the Berkeley City Council rejected development plans forwarded by the Santa Fe Pacific Realty Corporation, which owns much of Berkeley's waterfront, including the Meadow, Brickyard, North Basin Strip, Stables Area, and Frontage Road strip (south of University Avenue) as well as the submerged parcels of the North and South Basins (ROMA Planning, 1984) (Figure 1). The city proposed to acquire part of Santa Fe's land to hold as open space and to permit Santa Fe to develop the remainder of the waterfront in accordance with a plan created by the city. Santa Fe rejected the city's proposal, claiming they would be unable to earn a reasonable return on their investments under such a plan. At present, Santa Fe's public position is that the company no longer wishes to develop their land, but instead demands the city buy it for a "fair price" (Saltzer, 1989, pers. comm.). Santa Fe and the city of Berkeley are in litigation to resolve the conflict.

With the future of the Berkeley waterfront far from being settled, it is appropriate to consider alternative uses for the area. One such idea is for the state to acquire the land and restore it to natural condition for use as part of an East Shore State Park. This plan offers the most potential for ecological preservation, but its realization could prove politically impossible. The East Bay cities located from Richmond to Emeryville would need to cooperate in developing a proposal for the state to acquire the cities' waterfront areas as park land (Hearne, 1989, pers. comm.).

This paper briefly evaluates the major existing development proposals for the Berkeley waterfront in terms of planning and environmental concerns. It then presents an alternative development strategy, the Marina Village, which incorporates a mix of water-oriented uses to create a community which links Berkeley to the Bay while minimizing the negative environmental impacts of increased development. I illustrate how a new marina in the North Basin could serve as an integral part of this plan.

Past Studies

ROMA Planning and Urban Design drafted a waterfront concept for the city of Berkeley in 1984. A modified version of the plan was accepted by the city and was incorporated into an environmental impact report (EIR) prepared by Larry Seeman Associates in 1986. The EIR also includes

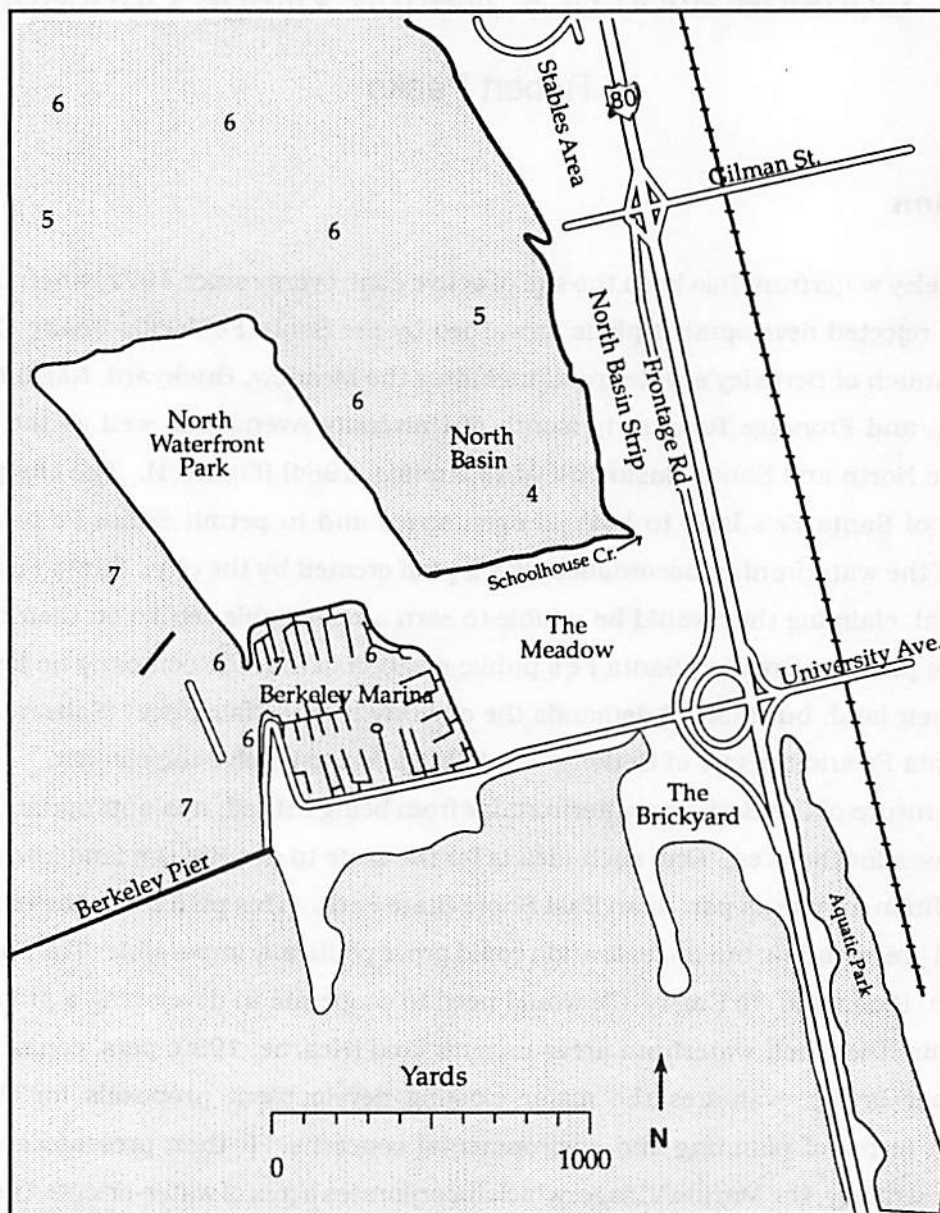


Figure 1. The Berkeley Waterfront

Note: numbers are water depths in feet taken at Mean Lower Low Water.

Source: NOAA

development proposals forwarded by the Sierra Club and Santa Fe.

Richard Register, author of *Ecocity Berkeley*, introduced me to the Marina Village concept as it could apply to the Berkeley waterfront. He envisions the marina as an island community where people live and work, connecting the city to the Bay.

Van Dyke (1984) considers economic viability, environmental impact, as well as the physical and engineering requirements of houseboat development.

Existing Waterfront Proposals

The EIR prepared for the city of Berkeley presents three viable development scenarios supported by various interests. They are the "Reduced alternative" by the East Bay Shoreline Task Force of the Sierra Club, the "Preferred alternative" endorsed by city of Berkeley, and the "Santa Fe alternative" originally drafted by the Santa Fe Pacific Realty Corp. (Larry Seeman Associates, 1986).

The Reduced Alternative: As proposed by the Sierra Club, this plan provides 300,000 square feet of construction for uses which include water-related commercial activity, retail businesses and restaurants, a hotel or cultural center, and a conference center (Figure 2). The developed area is confined to the North Basin Strip and Stables Area, with a landscaped esplanade providing continuous public access to the shoreline. Piers for small crafts and fishing as well as anchorage buoys for larger vessels would allow for water-oriented use of the North Basin. The Meadow would be acquired by the city and used for recreation and as open space.

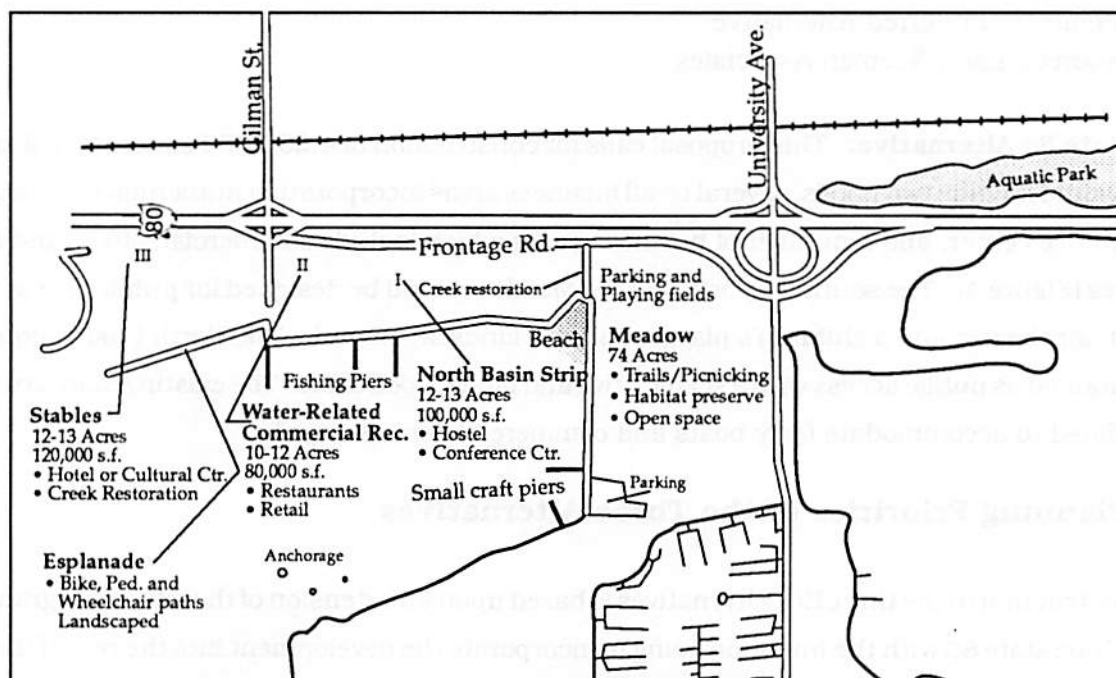


Figure 2. Reduced Alternative
Source: Larry Seeman Associates

The Preferred Alternative: This plan, prepared with endorsement by the Berkeley City Council, calls for a total of 565,000 square feet of building space to accommodate uses including two hotels, retail businesses and restaurants, and a conference center. The development is concentrated on the North Basin Strip and Stables Area with some construction on the eastern portion of the Meadow. The remainder of the Meadow would be acquired by the city for public open space.

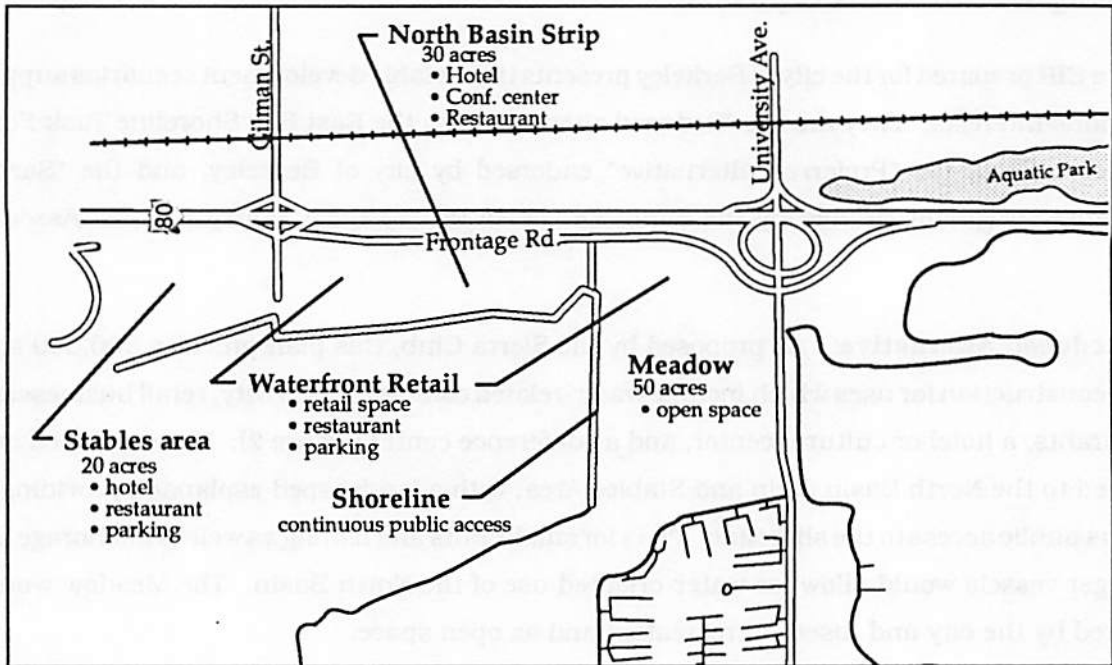


Figure 3. Preferred Alternative
Source: Larry Seeman Associates

The Santa Fe Alternative: This proposal calls for construction of 4,250,000 square feet of space which would include two hotels, several retail business areas incorporating numerous restaurants, a conference center, and a number of business parks which include commercial, office, and R&D activities (Figure 4). The southern portion of the Meadow would be designed for public access with an open air theater and a children's playground in a landscaped park. The North Basin shoreline is maintained as public access with a scenic drive and landscaped trails. The existing marina would be modified to accommodate ferry boats and commercial fishing vessels.

The Planning Priorities of the Three Alternatives

Construction in the three EIR alternatives is based upon an extension of the city street gridwork across Interstate 80 with the intention being to incorporate the development into the rest of the city (ROMA, 1984). I find this an unrealistic approach because the freeway limits access to the waterfront from the rest of the city by physically cutting off the city street grid, permitting access to the bay only from the few streets with freeway overpasses. In both the Reduced and Preferred alternatives, the waterfront development would suffer from this separation because they do not offer their own focus for activity.

This lack of focus occurs because the new development is completely separated from the existing marina, with the Meadow as open space between them. A waterfront visitor arriving in the area must choose whether to go to the North Basin strip, or to visit the marina, and the businesses

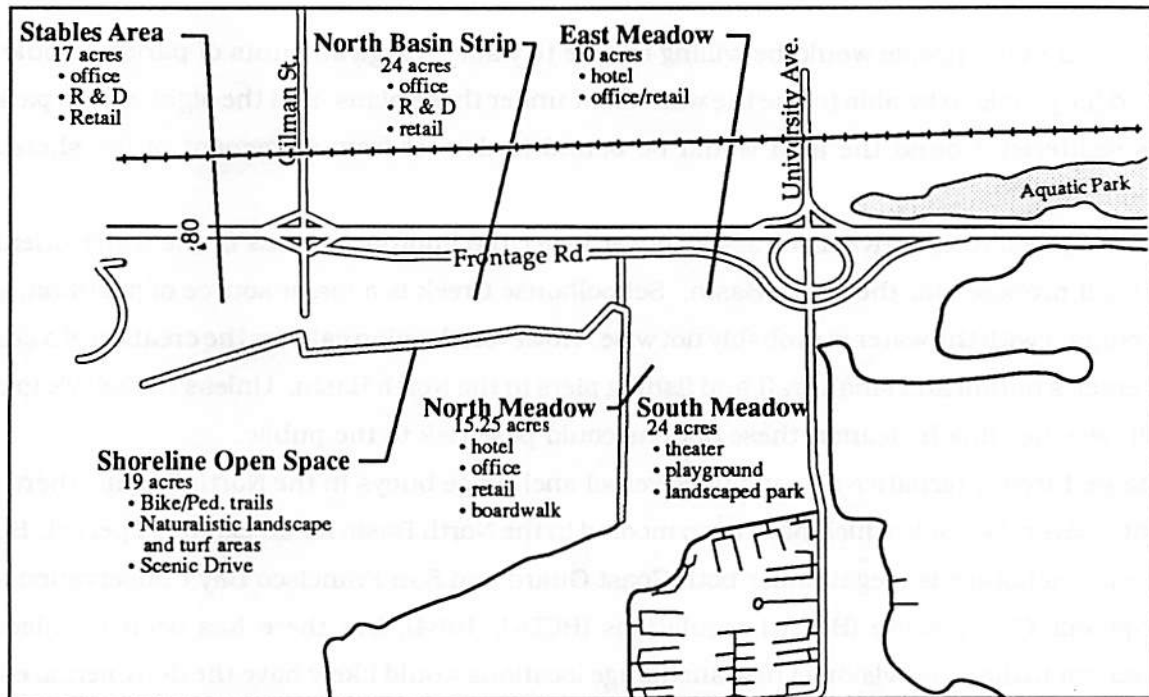


Figure 4. Santa Fe Alternative
Source: Larry Seeman Associates

of each location must compete with each other to attract waterfront visitors. This competitive relationship between the two development centers will prevent the area from having a unified and cohesive character; it will appear fragmented and confusing to potential users. That is, the waterfront visitor would be unable to locate a center of activity.

The Santa Fe alternative would yield a waterfront focus, but the intensity and extent of the project would create an activity center of a magnitude similar to the existing downtown. A visitor to the Santa Fe waterfront would tend to be overwhelmed by the magnitude of the project and find the environment to be artificial. Specifically, the Santa Fe alternative strives to provide a small-town environment, but this environment cannot be realized without including housing into the plan. A visitor would feel as if he or she is visiting a coastal town, but would also wonder whose town it is. There would be no community of people make this "town" their home.

Environmental Aspects of the Proposals

The Reduced and Preferred Alternatives create a waterfront area which is not easily served by public transportation. Since the new development areas are not near the existing marina, buses must service the two separate locations; decreased efficiency and decreased ridership would result. Much the same would be true for people arriving at the waterfront by car. In order to visit both parts of the area, one would have to drive to and park at each one, since the distance between them is

greater than many people would be willing or able to walk. Large amounts of parking would be required for people to be able to use the waterfront under these plans, and the sight of cars parked in lots scattered around the area would be bound to detract from enjoyment of the shoreline environment.

The Reduced Alternative also raises concern over the appropriateness of the water-oriented activities it proposes for the North Basin. Schoolhouse Creek is a major source of pollution, and direct contact with the water is probably not wise. However, the plan calls for the creation of a beach at the creek's outfall and small craft and fishing piers in the North Basin. Unless Berkeley's urban run-off becomes much cleaner, these options could pose risk to the public.

The Reduced Alternative also includes vessel anchorage buoys in the North Basin. There are presently several vessels which have been moored in the North Basin for an extended period. Such long-term anchorage is illegal under both Coast Guard and San Francisco Bay Conservation and Development Commission (BCDC) regulations (BCDC, 1984), but there has been no effective enforcement to date. Provision of new anchorage locations would likely have the detrimental effect of lending an appearance of legality to such activity. The environmental concern about long-term mooring is over wastewater discharge from the vessels. Where there is no provision of utilities, occupants on an anchored vessel might dump wastes overboard rather than make the effort to dock at a wastewater-pumpout facility.

None of the three alternatives gives much consideration to restoring natural habitats along the waterfront. The Santa Fe plan would pave the shoreline to create a scenic drive, and the Reduced and Preferred Alternatives offer only to landscape the shoreline and create a pedestrian path along it. While the waterfront created by any of these three plans may be pleasantly landscaped, they all fall short of offering any natural habitat areas.

The Marina Village Alternative

Development along the waterfront should be designed to provide the developers a decent return on their investment without degrading the shoreline environment, both in its human use and natural habitat aspects. The project should take advantage of its shoreline location to provide a marine atmosphere where people interact with the sea. The design should encourage use of public transportation and minimize the need for parking areas. Additionally, the development plan should include efforts to restore natural shoreline habitat and open space. Finally, the plan must be economically viable. The Marina Village Concept proposed here seeks to fulfill all these objectives.

This concept for the Berkeley waterfront locates development around the existing marina to create a focused activity center. A combination of living and work spaces permit the wide range of activities associated with actual small town life. Additionally, water-oriented uses are highlighted

in this plan—a reflection of the area's seaside location.

This project's scale would be 300,000 to 500,000 square feet of new construction. A project of this size would be able to realize successfully the "village" atmosphere and avoid overwhelming the visitor with the magnitude of the development. The Sierra Club's legal staff have stated that the city could limit development to 300,000 square feet of construction while still providing the developer with a sufficient income to avoid the legal charge of "taking" (Hearne, 1989, pers. comm.).

Uses could include a hotel and conference center, as well as retail and office space, on the south side of the existing marina (Figure 5). The eastern edge of the marina could accommodate retail and office uses. A large, centralized parking area could also be located in this area, to the east of the waterfront retail space. The remainder of the Meadow would stand as open space, with fill around Schoolhouse Creek being removed and the creek restored. The stables area is the only area along the North Basin Strip which would be developed. It could include office and commercial space

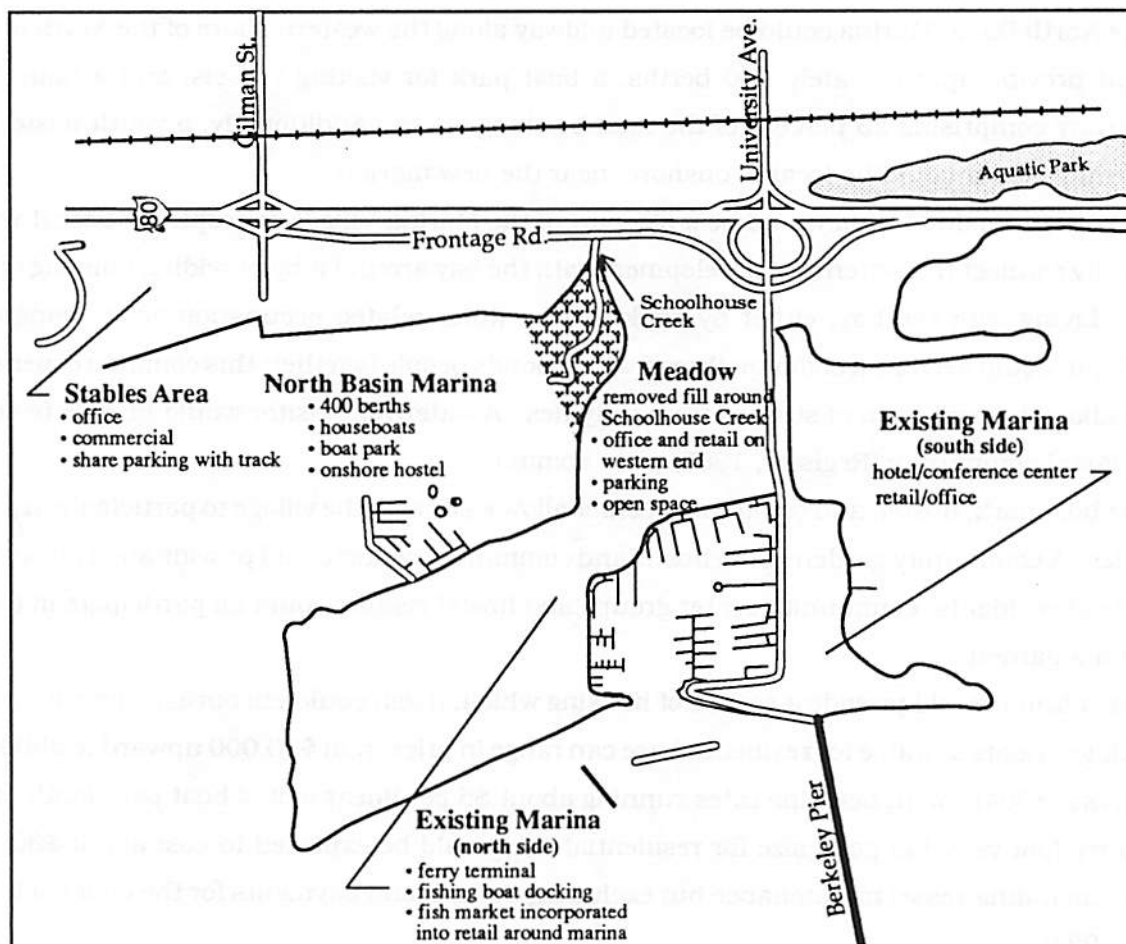


Figure 5. The Marina Village Proposal

Source: base map NOAA

which stand alone and do not contribute to the rest of the waterfront, except as an employment source. Since the racetrack requires overflow parking in the area, parking might be shared between the track and the business activities.

The northern part of the existing marina could be modified to increase its ability to accommodate water-oriented uses. A ferry terminal would allow Berkeley to benefit from trans-bay ferries which are being proposed as a way to reduce commute traffic into San Francisco. Docks for commercial fishing vessels could also be installed. A fish market and distribution center could supply fresh seafood to waterfront customers and merchants throughout the city. The modifications to the existing marina would require some berthing space be removed; it could be relocated to a new marina in the North Basin.

North Basin Marina

The North Basin Marina could be located midway along the western shore of the North Basin. It might provide approximately 400 berths, a boat park for visiting vessels, and a houseboat community comprising 25 percent of the total berthing space. Additionally, a youth hostel and community center could be located onshore, near the new marina.

The North Basin Marina would be a key part of the Marina Village concept, because it would physically connect the waterfront development with the bay around it by providing housing on the water. Living with the bay, either by working in a water-related occupation or by living on a houseboat, could become a common thread which bonds people together; this common experience would allow the formation of strong community ties. A waterfront visitor would be able to visit a true coastal community (Register, 1989, pers. comm.).

The boat park, hostel, and community center allow visitors to the village to participate in group activities. A community garden at the hostel and community center could provide such an activity; houseboat residents, community center groups and hostel visitors could all participate in caring for such a garden.

The marina would provide a source of housing which, itself, could encourage diversity within the Village. Boats suitable for residential use can range in price from \$10,000 upward to \$500,000 (Van Dyke, 1984). With berthing rates running about \$5 per linear foot of boat per month, living on a forty-foot vessel (a good size for residential use) could be expected to cost about \$300 per month, including vessel maintenance but excluding utilities and payments for the boat itself (Van Dyke, 1984).

There is a market for new marina space on the Bay. New marinas built in 1983 and 1984 provided several thousand new berths, but the new space served only to stabilize previously rising berthing rates (Meier, 1988, pers. comm.). Rising berthing rates indicates a condition where the demand for berthing space outstrips the supply of new spaces. When the new spaces became

available and berthing rates stabilized as a result, the market was in equilibrium. However, since that time, the Bay Area has continued to experience population growth and increased housing pressures, which have the effect of increasing marina demand. Therefore, it seems plausible that there is sufficient demand for general marina space, and particular demand for houseboat space, to warrant construction of a new marina of the scale and type proposed here

Costs for developing a marina are similar to those of building a same-sized project on land. Because the North Basin is protected from major wave action, little breakwater construction would be required. Also, the water depths found mid-way along the North Basin shore are similar to those found in the existing marina (Figure 1), and dredging required for the marina would be minimized as a result. With such reduced breakwater construction and dredging requirements, total development costs can be estimated to be \$10,000 per berth (1982 dollars) (Kirkland, 1982). At the berthing rates stated above, the project's repayment period would be approximately 10 years, which is apparently normal for land-based development.

All construction activity in the Bay and within 100 feet of the shoreline comes under the regulatory control of BCDC. New marina construction must minimize the amount of net added bay fill. Allowed fill is that of the piers, boats, and some minor filling to improve the shoreline. BCDC considers houseboats to be a private use of the bay—wherever there is a houseboat, the public is denied access to the bay. For this reason, as well as environmental concerns, BCDC policy limits houseboats to five percent of the total boat count for any new marina (BCDC, 1984). The North Basin Marina proposal would exceed this total, and the developer would have to prove that an exception to the policy could further the public interest. Extensive mitigation efforts which address the potential negative environmental impacts and public access aspects of houseboats might warrant exception to the policy.

Environmental Impacts of Marinas: Benthic organisms may be adversely affected by marinas and houseboats in particular. Boats which sit on the bottom mud during low tide deprive the organisms of light and water circulation. Also, the shadows cast by boats and piers reduce the amount of light reaching benthic organisms. While the exact impacts are unknown, BCDC requires that all vessels in a marina float at all stages of the tidal cycle to keep from disturbing the underlying mud. Since a houseboat does not leave its berth very often, its shadow remains a constant threat to the benthic organisms in its path.

Marinas can also lead to an increase in sedimentation, and dredging is often needed to maintain sufficient water depth to keep vessels afloat. A specific site study would be required to determine whether construction of the North Basin Marina would cause such an increase in sedimentation.

One other major impact of marina development is to drastically alter the appearance of the shore and adjacent waters where the marina sits. Views may be obstructed as a result of marina

construction. In the case of the North Basin Marina, the only view that might be obstructed is that of San Quentin Prison and the Chevron refineries; boats might actually improve the scenic quality of the North Basin.

Mitigation Efforts: The most direct way to mitigate concerns about the marina's added fill and the large percentage of houseboats is to remove fill and improve public access to other parts of the Bay. I suggest removing fill from the Meadow near Schoolhouse Creek in an effort to enlarge the Bay and create wetlands around the new shore. This would be a difficult and ongoing task which is not guaranteed to succeed.

Conclusion

The Marina Village plan differs from the proposals considered in the EIR in that it is a long-range development plan for the Berkeley waterfront, and the others are short-term solutions which address Santa Fe's profit-driven desire to improve its property for an immediate return. The Sierra Club and the City of Berkeley have both responded to the Santa Fe plan by simply cutting back on the amount of construction that Santa Fe should be allowed to perform. A better solution would be a careful development plan which emphasizes appropriate water-oriented activities and seeks to improve the natural Bay environment.

Realizing such a vision is a very difficult prospect. The Marina Village would require close cooperation between the city and the developer; city-owned land around the existing marina might have to be given up for development, with the developer building new parks and restoring habitat areas in return. Additionally, BCDC must be persuaded to permit the mitigation experiment to warrant an exception to existing houseboat policy.

The Marina Village could create a community of people and businesses who would be in a position to care about the long-term quality of their environment. This sense of community is probably the surest measure of any project's success, because residents who care about the quality of their environment are going to improve it and maintain it in a healthy state.

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