Chapter 7 INCORPORATING THE NATURAL WATERSCAPE INTO BERKELEY PARKS: MAXIMIZING PUBLIC BENEFIT THROUGH PLANNING

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Designing recreational areas that incorporate creeks, rivers, and marinas is a popular practice among urban planners. This practice is evident in a number of recent projects undertaken in the City of Berkeley. This paper traces the development of two of these projects--Strawberry Creek Park and the North Waterfront Park Project--from the initial land use planning stages through the final construction phases. It evaluates neighborhood and regional needs for recreation, the development of on-site resources, and the resolution of conflicts concerning park development. Following an analysis of the final phase of construction, the two park projects are evaluated in terms of how effectively they will facilitate the enjoyment of the natural waterscape.

Strawberry Creek Park is currently under construction in the residential area near the old City Corporation Yard in West Berkeley (see map, p. viii). Due primarily to public input, the once-culverted stretch of the stream on the site has been exhumed. This new park is one of the few areas in Berkeley that affords public access to an exposed reach of creek. The park is funded by Measure Y which is funded by the City of Berkeley (see paper by Richard, this report).

The Coastal Conservancy, through its Nonprofit Organization Assistance Program, is funding a park project on the North Waterfront of Berkeley. The organization in charge of planning is the Design Associates Working with Nature, also known as DAWN. The group has taken an innovative approach to park planning through the re-establishment of a native plants ecosystem. The "Living Laboratory," as DAWN calls it, includes an on-site growing ground for the native plants which are eventually transplanted to the park area. The 1981 project proposal to the Waterfront Advisory Board of Berkeley emphasized an educational program as DAWN's primary goal. Their program provides Saturday workshops and open-houses and guided tours for organizations on field trips.

These two park projects do not offer the same recreational opportunities, but the presence of water on or near the site makes them similar. The similarity is in the fact that water is a desirable feature in park design, so the two parks have a valuable resource which should not be undermined by poor planning. An extra effort is necessary to plan parks such as these in a way which will attract the maximum number of people to the resource.

- 251 -

Strawberry Creek Park

The Strawberry Creek Park was originally known as SUDS. This name was a reference to the four streets--San Pablo, University, Dwight, and Shattuck--that border the park neighborhood. The Berkeley Parks and Recreation people, along with advocates of the "Creeks as Parks" movement, decided to emphasize the presence of Strawberry Creek on the site and renamed the project Strawberry Creek Park. In accordance with city policy, the park designers incorporated the creek into their plans, enhancing the natural setting for public enjoyment.

Before Strawberry Creek flows through the park site, it crosses through the Strawberry Creek Lodge property. The lodge site includes beautiful shady stretches along the densely vegetated banks of the stream. This stream segment exemplifies how creekside areas can provide aesthetically pleasing natural settings. A similar strip could be possible on the park site.

The potential park users are residents of the neighboring area. The four-acre lot is bounded on three sides by single-family detached homes and on one side by the Bonar Apartment complex on Bonar Street. There are approximately one hundred and fifty children in these surrounding homes (Wolfe, 1983, pers. comm.). The Strawberry Creek Lodge is located directly behind the proposed site of the practice field on Addison Street. The lodge houses one hundred and sixty elderly people (Anania, 1983, pers. comm.) in an independent living arrangement. These tenants are active elderly individuals capable of looking after themselves and enjoying light recreational activities. The Chaparral House, located on the Allston Way cul-de-sac, accommodates a maximum of forty-nine elderly people incapable of looking after themselves without assistance, but still capable of enjoying the outdoors (Cunningham, 1983, pers. comm.). Another main source of park users will be the West Campus of Berkeley High School on University Avenue. The West Campus has been scheduled to close within the next year or so, which alleviates many worries which might arise concerning teenage crime and violence in the park.

Existing recreational areas are inaccessible and are not adequately equipped to accommodate such a diverse neighborhood. There are two bowling greens in the immediate vicinity which serve elderly people, especially those from the Strawberry Creek Lodge. The Charley Door Totland is located on the same site as the new park and caters to the pre-school age crowd and their mothers. The other neighboring parks include the Berkeley Way Mini Park, Roosevelt Totland, Columbus Mini Park and the James Kenny Park.

These existing recreational facilities are inadequate for the demands of the neighborhood they are intended to serve. The Charley Door Totland is often overrun by older children, and complaints of bullies are common from the parents of toddlers, as expressed during informal interviews concerning the park (Neighbors, 1983, pers. comm.). Adults are not attracted to these facilities because of the concentrated use by youths and because of the lack of opportunity for more sedentary activities such as picnicking or strolling. Barbecue facilities at the Totland are rusted and rarely, if ever, used (Mason, 1975).

In light of these deficiencies, appropriating funds from Measure Y for the development of parks with permanent facilities is an acceptable use of city money. Only then will adults, tots, and teens be assured of needed open space and recreation facilities (Mason, 1975).

The services planned for Strawberry Creek Park include two lighted tennis courts, lighted volley ball courts, and lighted full and half-courts for basketball. Free tennis lessons will be offered to the local residents. Picnic and barbecue facilities will be located in such an area as to encourage frequent use. A natural setting will be provided for aesthetic enjoyment (Figure 1).

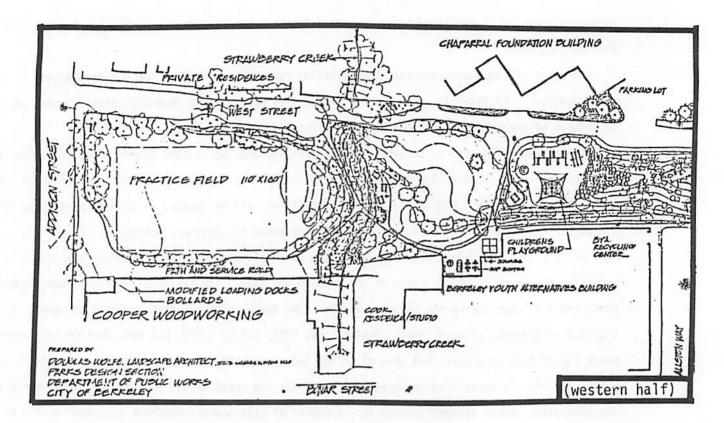
Aside from the man-made amenities which the park will provide, the presence of the creek is a natural asset which the other parks in the area do not have. The existence of the stream, however, presented a dilemma during the planning stages. The Berkeley Master Plan supports the preservation and enhancement of open creeks (Master Plan, 1977, Policy 3.26), but this section of Strawberry Creek flowed from an unculverted channel on the lodge property into a culverted stretch on the park site. The dilemma arose over the question of whether the creek should be left covered or whether the park plans should include opening it. A number of city council meetings were held during the planning process of the park. Two alternatives were shown at the first meeting, one with the creek culverted and one with the culvert removed (FIgures 2 and 3). The consensus was to open the creek.

The opposition to unculverting the creek took many forms. First was the argument of cost. Tearing out the cement culvert, disposing of the debris, and stabilizing the creek bed could have involved a large sum of money if it had not been handled properly. Another issue was raised concerning the question of liability. The city is responsible for damages incurred by people using the park and for injuries suffered on the park grounds (see paper by Hsiu, this report). This issue made some city officials hesitate to support the opening of the creek (Lotter, 1983, pers. comm.).

Not all of the city officials and engineers involved in the design of the park voted against unculverting the channel. Some were in favor of uncovering the creek for the popular aesthetic reasons. In light of the economical plan eventually devised to carry out the project, it was generally agreed that an unculverted stream outweighed the negative sides of the issue.

Public opinion was very much in favor of unculverting the creek. There were a few concerns expressed about rats and other health hazards already mentioned by the city, but the majority were in favor of an unculverted flow. The positive response was enough to decide the issue.

- 253 -



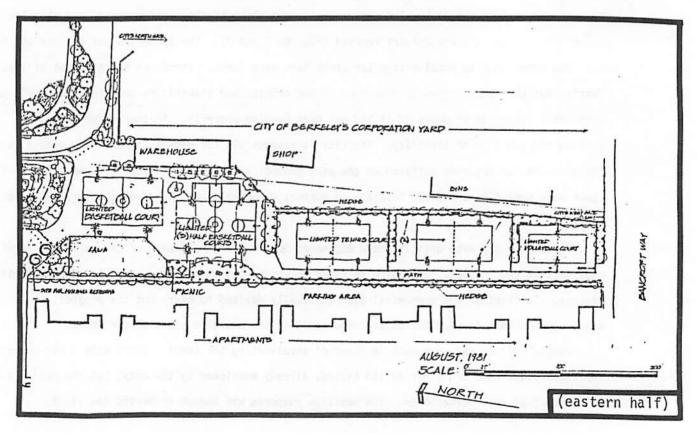
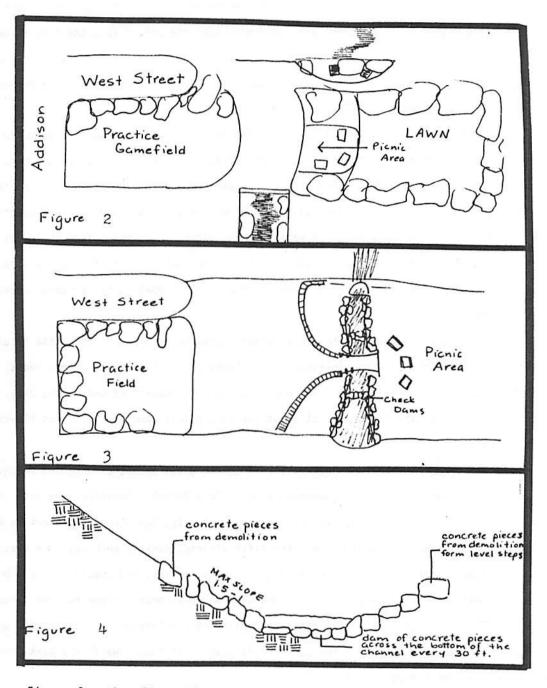


Figure 1. Strawberry Creek Park Plan Source: Department of Public Works, City of Berkeley



- Figure 2. the alternative park design presented by Doug Wolfe with the creek culverted
- Figure 3. the alternative park design with the creek unculverted
- Figure 4. plans for stabilizing the creek bed and banks

The opened creek was then designed as cheaply as possible, in order to prevent the city directors from vetoing the plan on the grounds of insufficient funds. The cutbacks of the economical plan included using the concrete from West Street, which was torn up, to pave and stabilize the creek banks. The bottom of the channel was lined with concrete pieces from the same street. The broken pieces of culverting were hauled to the city landfill nearby to reduce transportation costs. The landscaping was designed with drought-resistant shrubs which do not require a permanent irrigation system (Figure 4) (Wolfe, 1983, pers. comm.).

Maintenance of the water quality at a sufficiently clean level was not found to be a problem by the city, and routine testing is not considered necessary (Wolfe, 1983, pers. comm.). In light of the pollution that characterizes other Berkeley creeks (see section on Water Quality, this report), however, it may be wise to periodically check the quality of Strawberry Creek at the park site. The city does not encourage swimming or wading in the water, or drinking from the creek. Human nature, however, will draw children to the water on hot summer days. Plans to erect a sign warning that the water is not suitable for human consumption should be accompanied by periodic checks which may help to prevent injury.

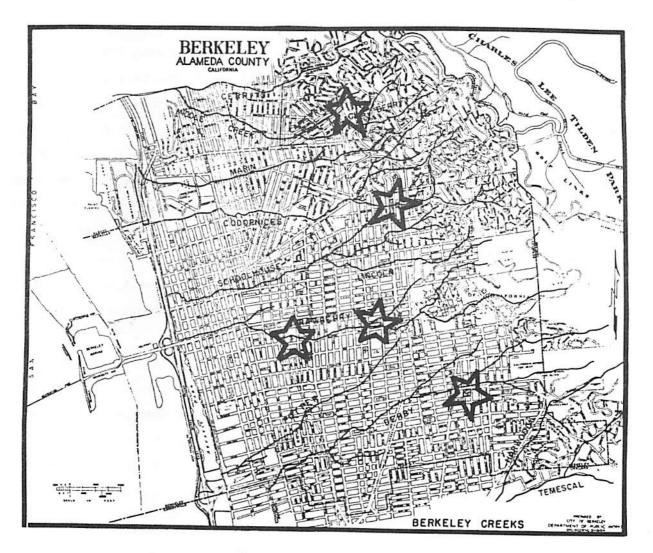
It might also be suggested to use an alternative, or at least a compromise solution, for stabilizing the creek. The existing rip-rap not only looks bad, but with its jagged edges, also constitutes a safety hazard. Since liability was one of the chief concerns raised by the city, providing extra funds for riparian vegetation, or at least for some plants combined with less rip-rap, should be given serious consideration.

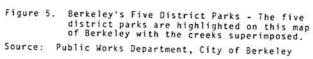
The end product of this project will reflect the great amount of time and energy expended to insure the fulfillment of the neighborhood needs. In a densely populated area with inadequate recreational space and a lack of organized recreational activity, the Strawberry Creek Park will be a welcome addition. This facility will be only the fifth district park in Berkeley. (A district park is characterized by a size of at least two acres, toilet facilities, and special-use equipment.) Of the five recreational areas, this will be the second with an above-ground creek running through its property (Figure 5). Live Oak Park is the other such district facility and it carries the unculverted flow of Codornices Creek. In light of the public's favorable attitude towards the park, this portion of Measure Y was well appropriated.

DAWN'S "Living Laboratory"

The two and seven-tenths acre DAWN project located at the end of Spinnaker Way at the Berkeley Marina involves replanting with native Californian vegetation an area developed primarily for aesthetic enjoyment and educational purposes. The "living Laboratory" includes a site for growing the native vegetation used in the recreational area. The plant growing grounds serves a dual purpose of nursery and educational laboratory (DAWN, 1983). The project is actually only Phase I of three development

- 256 -





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phases planned for the North Waterfront Park over the next fifteen to twenty years.

In reference to the specific site of the park, the City of Berkeley, Alameda County, the East Bay REgional Park District, the Bay Conservation and Development Commission, the U.S. Army Corps of Engineers and the Regional Water Quality Control Board--all of which exercise some jurisdiction over the project--are in basic agreement on designating the city-owned disposal site as appropriate for a shoreline park (North Waterfront Land Use Plan, 1976, pp. 6-7). The city, for its part, maintains that the area should be "visually interesting" and attractive, with easy public access. Recreational opportunities should be enhanced and the use of the waterfront area by diverse populations should be insured (Master Plan, 1977). The Berkeley City Council reaffirmed in their final decision that the publicly-owned land north of Spinnaker Way should be used for unstructured public recreation. The term "unstructured" refers to the absence of facilities such as basketball courts, nets, goalposts and other equipment. The area will be bicycle- and pedestrian-oriented, and protected from the intrusion of incompatible uses (Berkeley City Council, 1976).

When Phases I, II, and III are complete, the park will provide a variety of services and land use opportunities. Vista points, a pond, a wildlife sanctuary, plant growing grounds, plants and grasses will contribute to the aesthetic quality of the park. Fishing and picnic areas, an outdoor amphitheatre, paths for pedestrians, bicyclists, joggers and the handicapped, day camp and overnight camping areas will compose the unstructured recreational opportunities of the park (Figure 6).

DAWN's Living Laboratory is unique and offers diverse opportunities to park users. Design Associates Working with Nature has three objectives (DAWN, 1983):

- to establish a California coastal plant community at the Berkeley North Waterfront Park; to attract large numbers of people to the marina and bring them in contact with a native plant community.
- 2. to serve as a prototype for future restoration efforts.
- to educate Berkeley city gardeners and the public about native ecosystems.

The group's objectives are compatible with those of the city.

DAWN's laboratory consists of a germination bed, a greenhouse, over three thousand plants and onequarter acre of experimental plants (Figure 7) (DAWN, 1982). The organization has hosted a number of field trips including such groups as the California Native Plant Society, Dr. Herbert Baker's botany class from the University of California, and the Marin Chapter of the Native Plant Society (DAWN, 1982).

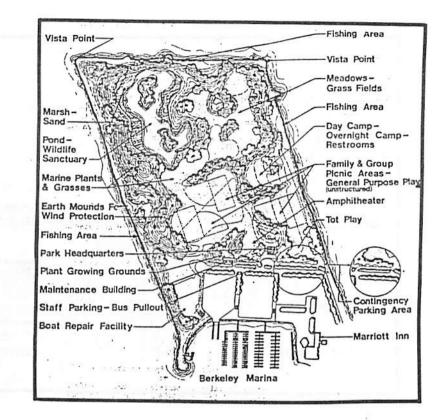


Figure 6. North Waterfront Land Use Plan Source: Design Associates Working With Nature

California is world-renowned for its incredible variety of coastal flora, but most of the urban parks in the state are dominated by imported vegetation. DAWN's land management approach is to use all native plants for landscaping. This approach is economically viable and at the same time aesthetically pleasing, and the resulting landscape is durable enough to permit human intrusion. Economic benefits come from the fact that native plants are adapted to California's climate and therefore require a low level of maintenance, especially irrigation. The Living Laboratory demonstrates what the EAst Bay Shoreline Park would look like if the natural vegetation were to exist. The Coastal Conservancy and other involved agencies will have an opportunity to examine alternative land management geared for beauty, ease of management, cost, unique character and social value (DAWN, 1982).

The DAWN natural vegetation park differs from common neighborhood parks in that the users come from a much wider area. Project developers expect six thousand to ten thousand visitors per year (DAWN, 1982). The potential visitor service area includes all of the Northern San Francisco Bay Area.

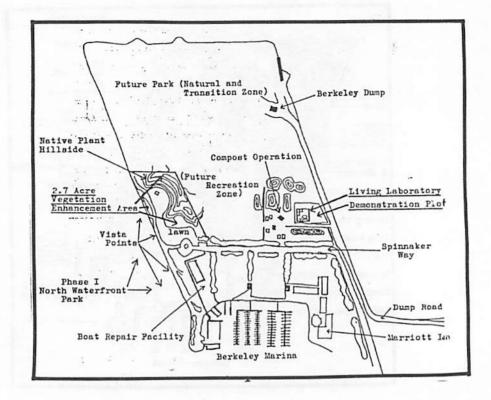


Figure 7. DAWN's Living Laboratory Source: Design Associates Working With Nature

There are approximately one million people within this thirty-minute radius of the park. The immediate neighborhood is mainly industrial but there is a regular flow of people to the boat docks and also to the Marriott Inn located near the site. The park is easily accessible by the network of highways in the Bay Area and by public transportation.

Public opinion has been strongly in favor of the park and the City of Berkeley has been supportive for the most part (Kaplow, 1983, pers. comm.). The one objection expressed by the city concerned the possible job competition between the city gardeners and the DAWN maintenance crew, who are knowledgeable in native ecosystems. The DAWN gardeners have assured concerned officials that they will train workers in their area of expertise so the city can assume the responsibility of maintaining the Living Laboratory. Not only will Berkeley acquire workers experienced in handling native California plants, the city will also benefit from the low maintenance cost required for such an ecosystem.

The DAWN Living Laboratory is an unconventional land use that fulfills a regional need for educational and recreational opportunities. Scenic areas with native California vegetation such as the DAWN project are virtually nonexistent. If native plants are used in landscaping, then they are usually of the brandname gender which stock most of the nurseries (Kaplow, 1983, pers. comm.). The vegetation, the location on the marina and the minimal maintenance requirements all contribute to the potential success of the park.

Working within the constraints of satisfying land management officials while pleasing the public is a problem faced by park planners. The neighborhood where the park is planned, the type of activity planned, as well as the added dilemmas posed by a creek on the site, make public input a necessity for a suitable finished product. The two parks examined in this report have shown in their planning processes a sensitivity towards neighborhood needs and an interest in public input for the projects. Berkeley residents as well as residents from surrounding areas will have access to two well-planned parks, one mainly for recreational enjoyment on a creekside site and one for aesthetic and educational purposes on the Berkeley waterfront.

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