

Community Participation and Creek Restoration in the East Bay of San Francisco

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ABSTRACT

The creeks of the upper East Bay of San Francisco have been the location of two decades of precedent setting creek restoration activities. This discussion will review the essential role of both citizen activism and NGOs in the advent of a restoration approach to creek management. Beginning with small pilot projects to “daylight” a culverted creek and spray paint signs on street drain inlets, participation in the restoration of the East Bay creeks has evolved into a complex layering of participants. This involves government agencies, three essential umbrella NGOs— Waterways Restoration Institute, the Urban Creeks Council and the Aquatic Outreach Institute, and local grassroots groups organized around individual creeks – the “Friends of” groups (i.e. Friends of San Leandro Creek). The discussion will focus on role of the “Friends of” groups in restoration advocacy and accomplishment and will present ongoing issues of inclusiveness and ecological effectiveness in citizen initiated creek restoration.

CREEK RESTORATION

Although the science of creek restoration has been widely researched and debated, less inquiry has been directed to the essential role that NGOs and citizen activism has played in both the evolution of creek restoration and its implementation. The East San Francisco Bay, the “East Bay,” has been for the last twenty five years an “innovation hearth” for creek restoration. In large part this has been the result of the commitment and expertise of several key activists and grassroots community support of the restoration idea. This paper discusses the relationship between creek restoration in the East Bay, NGOs, and grassroots citizen’s groups as they have grown together.

Community involvement in East Bay creeks began in the 1970s with citizens groups, from Boy Scout troops to creative artists, cleaning up the trash in open creeks in their neighborhoods. (Schwartz, 2000, 4; Waldman, 1993, 3) Then, in the 1980s a series of catalyzing events took place around East Bay creeks.

The City of Berkeley daylighted a short stretch of Strawberry Creek. Carol Schemmerling, Commissioner of Berkeley Parks

and Recreation, had been inspired by an article of Bay Area historian Grey Brechin on the possibilities of daylighting creeks in Sonoma County north of San Francisco (Schemmerling, 2003). Doug Wolfe, a landscape architect for the City of Berkeley, proposed that a short culverted stretch of Strawberry Creek crossing a new neighborhood park in Berkeley then culverted, be opened or “daylit.” As a first step in proposing the unprecedented idea, Wolfe named the new open space Strawberry Creek Park. As he later reported, this “lead to the question ‘Where is this creek?’ My answer was that it was ‘Twenty feet down and waiting’” (Wolfe, 1994, 2). Controversial in the extreme, Wolfe found political support from Carol Schemmerling, and David Brower, founder of Friends of the Earth, and a city council member. With vocal citizen support at public meetings the radical concept prevailed. The notion that a reopened creek could be an asset rather than a hazard proved to be a lasting inspiration (Schemmerling; Wolfe, 2-3).

Also in Berkeley, a small but telling community education act took place on city streets. With the success of Strawberry Creek Park, Carol Schemmerling wanted the location of the underground drainage systems and their connection to visible waters made obvious in the city landscape. Environmental activist Richard Register designed a stenciled sign for storm drain inlets along the streets of Berkeley announcing “Drains to Bay.” (Estuary Online, 1997) As a resident of Berkeley later recalled: “I was puzzled and then excited by the frog symbol on a storm drain announcing the presence of Derby Creek under my street. Eventually I came to accept that there was a real creek down there hidden away from view by the asphalt, houses, and lawns of Derby Street. And it was kind of thrilling to think of that bit of nature literally under my backyard” (Strain, 1995). Versions of this now exist all over the country.

The flood control project for Wildcat Creek in the north East Bay generated significant local attention. By the early 1980s, a twenty year history of flood control proposals, some quite innovative, had culminated in a bare bones proposal for a trapezoidal channel without vegetation to deal with flooding along Wildcat Creek, a stream running through a primarily African American low income neighborhood. Motivated local residents, committed environmental science advocates (particularly Ann Riley who went on to found the NGO Waterways Restoration Institute), and the newly formed NGO the Urban Creeks Council (Carol Schemmerling was on the Board) fought the traditional engineering solution and achieved a plan that dealt with flooding but also included restoration, water quality improvement, recreational trails, environmental education, and community outreach. The completed plan was generated not only from science but from community needs for aesthetics, open space, and job training. Residents and environmental advocates were at the table with engineers and government officials. Foundation funding provided community

residents with an expert, Phillip Williams a hydrologic engineer, to critique and counter proposed plans. The process, though arduous by all accounts, resulted in a significantly different conception of the purposes of a flood control project. (Riley, 1989; Riley, 2001; Darlington, 1984)

The Wildcat Creek project, according to Phillip Williams, “changed everything.” (Williams 2003, personal communication) It established restoration as an integral part of flood control management and demonstrated the importance of community involvement in restoration efforts. By the late 1980s, community groups interested in their local creeks began meeting as “Friends” groups (i.e., Friends of Cordinices Creek). These groups are the base advocates for community creek restoration in the East Bay, and became models for other groups regionally and then nationally.

By 1991, United States federal legislation required that local agencies that managed urban runoff provide programs to improve water quality. The Aquatic Outreach Institute began in 1987 as the education department of the San Francisco Estuary Institute an NGO that monitored water quality in the San Francisco Bay. By the early 1990s it received funds from a consortium of county and state agencies to increase community understanding of the impacts of urban runoff on water pollution and the importance of creeks and watersheds in local ecology in the East Bay. It has an extensive program to train teachers in creek oriented education for elementary, junior high, and high school kids. (Aquatic Outreach Institute, 2003)

Along with the Waterways Restoration Institute and the Urban Creeks Council, the Aquatic Outreach Institute is a third NGO supporting local efforts at creek restoration in the East Bay. As they have evolved they have divided tasks in support of local restoration efforts. The Waterways Restoration Institute provides environmental science support and evaluation of creek restoration efforts. The Urban Creeks Council focuses on restoration implementation at the local level, such as daylighting and revegetation, and manages job training crews of at risk youth (the East Bay Conservation Corps) and volunteer labor (Urban Creeks Council, 2002). The Aquatic Outreach Institute focuses on education, publishing a newsletter *Creeks Speak* the “Voice of East Bay Citizens for Creek Restoration” which connects all the local “Friends” groups. They also foster the establishment of local Friends groups as non-profits, able to apply for funding and organize advocacy (Aquatic Outreach Institute).

I watched the evolution of a local Friends group form with the support of AOI—the Friends of San Leandro Creek. In 1993 a few people began meeting who had an interest in the San Leandro Creek. With AOI they completed some initial projects. They designed a logo of a rainbow trout, first designated as a species in San Leandro Creek. They used this logo as the

marker for signs delineating the watershed boundary of the creek in the City of San Leandro. AOI wrote and published a booklet on the history of the Creek for wide distribution in the city. AOI helped establish a mailing list to announce regular meetings. And finally AOI assisted the organization in filing the necessary legal documentation to establish themselves as a tax exempt NGO eligible for funding from local, state, and federal sources. Since their establishment as a non-profit in 1995 they hold regular monthly meetings to organize a variety of creek related activities such as an annual clean up of the creek before the rainy season, an annual “Watershed Festival,” and advocacy for project funding. The projects the Friends of San Leandro Creek undertook were: a public access park along the creek that included native plant restoration, a public art project, a small restoration project by a junior high school, and an under construction environmental education center along the creek.

In general, the Friends groups are able to broadly promulgate watershed awareness and creek restoration through key roles and activities in the East Bay. From the beginning, Friends groups organized creek clean-ups, now part of a state wide “Coastal Clean-up Day” that takes place before the rainy season. Clean-ups often draw many people who are not regular members of the friends groups. They reach out to other civic organizations, and in the process, make a very wide public aware of the importance and potential of urban creeks.

Very importantly, Friends groups are identifiable political entities. They can turn out in force for public meetings and encounters with politicians. Flood control agencies, the Army Corps of Engineers (who in the U.S. are responsible for many waterways and flood control projects), city public works departments, and open space agencies all have to deal with the Friends groups on projects that concern creeks, above or below ground.

The Friends groups provide an extraordinary source of volunteer labor in restoration activities. Much restoration work is very labor intensive and requires hand work. The Friends provide the labor to remove exotic species, plant natives, maintain restoration areas, build trails for public access, and build and run native plant nurseries. Many restoration projects would not be established nor survive without volunteer labor. Water quality monitoring in creeks is also a major volunteer activity of the Friends groups, alerting appropriate agencies in case of deterioration and demonstrating improvements.

Friends groups also imagine and conceive projects that are very locally responsive, often creative, that are not in the realm of “official” restoration activities. They expand awareness by just showing up at community events with the frequency and enthusiasm that an agency or even NGO representative could not.

Some issues exist, however, in focusing restoration efforts at the Friends level.

Using some GIS analysis of census tract data and the location of “befriended” creeks, on average the income levels around befriended creeks is \$8-10,000 higher than those that are not befriended. Creeks that are more culverted are less likely to be befriended. Low income areas tended to have more creeks that are culverted than ones that are still daylighted. This emphasizes the issue that the Friends groups tend to draw from the more privileged residents of the East Bay and hence many, though by no means all, restoration efforts are concentrated in more privileged neighborhoods.¹

At a grassroots level “restoration” can be many things that would not stand the test of an environmental scientist. For example, the Friends of San Leandro Creek removed exotic species and replanted the short stretch of the bank with redwoods—native to many creeks in Northern California but not this one. Hence the redwoods are as exotic as eucalyptus in this location and not self sustaining. Getting the right mix of enthusiasm and restoration science at the grassroots level can be a challenge. My colleague Matt Kondolf, a fluvial geomorphologist who studies stream restoration, fears that many restoration projects are more “gardens” than restoration.

Most of the restoration projects that have taken place in the East Bay in the last twenty years are non-contiguous projects of less than 500 feet in length. While often an object of great enthusiasm among local residents, from an environmental science point of view tough questions need to be asked as to how these projects really build healthy, self-sustaining ecological systems. In a recent study of the daylighting of a 250 foot section of Baxter Creek in the east Bay City of El Cerrito notes that the biological metrics of a restored urban stream are “an order of magnitude lower than those found in non-urban streams in coastal California.” (Purcell, Friedrich and Resh, 2002, 692-3) The hope is that these small projects will add up to larger, robust systems, but this has to be seen as a very long term goal.

Nonetheless, what has emerged in the East Bay in the last twenty years is a mutually supportive relationship between advocacy NGOs with expert staff and very grassroots citizens groups both working towards creek restoration. Together they constitute a powerful force of change in the way government agencies on the local, state and federal levels approach the management of water resources in urbanized areas. In the process they have changed the mindset of the wider public to understand the importance of the urbanized hydrologic systems. Alameda County, one of the two counties that cover the East Bay, reported that a series of surveys showed that in 1991-92 very few residents knew that urban runoff flowed to the San Francisco Bay; by 1994 70% of residents understood the

relationship between stormwater flows and the Bay, by 1999 the figure was up to an astounding 85%. (Schwartz, 6) The base of this kind of “watershed awareness” lies in the “Friends” groups that now cover much of the urbanized watershed of the East Bay.

ENDNOTES

¹ The author would like to thank Jeff King for his assistance in this GIS analysis.

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