

SAVE THE BAY'S

Community Based Restoration Program

Human Dimensions Research Project



SAVE THE BAY

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Restoring Americas Estuaries (RAE) and the National Oceanic and Atmospheric Administration (NOAA) Restoration Center are sponsors of the Human Dimensions Research Project. 2006 marks the pilot year of the Stewardship Ethic Survey and research projects by three RAE members, including Save The Bay (San Francisco), Galveston Bay Foundation, and Tampa BayWatch. Project results will be presented at the Annual Conference on Coastal and Estuarine Habitat Restoration in December 2006. For more information about this report, please contact Nicole Cheslock at 415.902.8494 or Nicole.Cheslock@Stanfordalumni.org.

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Executive Summary

Restore America's Estuaries (RAE) and National Oceanic and Atmospheric Administration (NOAA) sponsored three pilot Human Dimensions Research Projects to study the impact of volunteer participation in coastal restoration activities on stewardship ethic across the United States. Save The Bay, a non-profit organization working to protect San Francisco Bay, as well as Tampa Bay Watch and the Galveston Bay Foundation, worked with advisors, RAE, and NOAA to develop a Stewardship Ethic Survey and conduct research projects about volunteers in their respective areas. These studies serve as pilot projects that will inform future efforts in stewardship research.

Save The Bay provides education, advocacy, and restoration programs for the general public, as well as school, community, and corporate groups. For this project, Save The Bay focused on corporate and community group restoration volunteers. This report is based on information collected through surveys, field observations, and a focus group with volunteers in the San Francisco Bay Area in spring and Summer 2006.

The Stewardship Ethic Survey provided insight on volunteers' motivations, beliefs, and behaviors. For example, even before participating in a stewardship experience, volunteers exhibited a commitment to leaving a better environment for future generations and a strong concern for the health of the Bay. Prior to participating in restoration activities around San Francisco Bay, more than half of the participants *disagreed* with the statement, "The coastal environment is strong enough to cope with the impacts of modern society," and 44% *strongly agreed* that "Humans have an obligation to leave coastal environments in a better condition for future generations." Furthermore, most volunteers feel strongly that participating in coastal restoration activities is "the right thing to do" and necessary to prevent further habitat loss.



Save The Bay's volunteers are passionate and optimistic about restoration in and around San Francisco Bay. Following their participation in restoration activities, a small group of volunteers completed a follow up survey. Survey results show that volunteers believe Save The Bay's restoration program is a meaningful and educational experience. Highlights from volunteers' experiences include spending time outdoors and seeing the tangible results of their work to increase the number of native plants in the wetlands.

Intended as an attempt to uncover the impact of participation in restoration activities on volunteers' stewardship ethic, this project provides insight on a group of volunteers' motivations, beliefs, and interest in contributing to a healthier Bay.

San Francisco Bay

San Francisco Bay is one of the country's most beautiful natural treasures. The Bay supports an incredibly diverse array of wild and plant life: one handful of Bay mud contains up to 40,000 organisms! As noted on Save The Bay's online classroom (www.saveSfbay.org/bayclassroom), the Bay is also home to five federally endangered animal species, including the salt marsh harvest mouse, the San Francisco garter snake, the San Joaquin kit fox, the California least tern, and the California clapper rail. The Bay and its surrounding wetlands provide habitat for thousands of birds, some of which migrate here from as far away as Siberia. The Bay's tidal wetlands include habitat for NOA Trust Resource species of fish, crabs, shellfish, and many other intertidal and subtidal species, as well as anadromous and estuarine fish including chinook salmon, steelhead trout, Pacific herring, and California halibut. The Bay Area also provides an ideal recreation zone for seven million human inhabitants, who enjoy sailing, wind and kite surfing, hiking, biking, bird watching, and taking photographs in, on, and around the Bay.

The San Francisco Bay is the largest estuary in western North America. Rain and snow from almost half the state of California ends up in the rivers, streams, and creeks that drain into the Bay. These creeks, streams, and rivers comprise an enormous watershed that covers approximately 60,000 square miles, a drainage area so large that areas hundreds of miles away can impact the health of the Bay. Today, only about 40% of the fresh water that once flowed into the Bay still makes it here; about half of the freshwater flows—a key ingredient in the making of an estuary—are now diverted for use by farms, businesses, industry, and households. In addition to reduced fresh water flows, urban sprawl, pollution, habitat loss, and non-native invasive species also threaten the health of the San Francisco Bay.

Ninety percent of the Bay's wetlands have been filled in or reshaped for human use. As a result, the size of the Bay has shrunk by one-third. The impact of fill and development has translated to loss of habitat for the rich biodiversity of wildlife. The Bay Area's human population is expected to reach 7.8 million by 2020, which will increase urban runoff pollution and add even more pressure for shoreline development.

A compelling beginning

Save the Bay's History

Amid the impending danger of a bay-fill plan proposed to accommodate rapid expansion in the City of Berkeley, three East Bay women in 1961 mobilized thousands of Bay residents to help protect the Bay. These women—who became the founders of Save The Bay—and their neighbors were successful, and as news of their success spread, bay-fill projects throughout the region were halted.

Ultimately, thousands of Save The Bay members forced the State of California to acknowledge that the Bay belonged to the public and won a legislative moratorium against bay-fill in 1965 (McAteer-Petris Act). The organization was also instrumental in pursuing the creation of the Bay Conservation and Development Commission, a state agency that to this day reviews all Bay development proposals.

Save The Bay has since fought to close garbage dumps ringing the shoreline and stop untreated raw sewage flowing into the Bay; helped establish the San Francisco Bay National Wildlife Refuge; and helped stop the Peripheral Canal from draining more of the Bay's fresh water from upstream.

The organization was built, and flourishes, on a passion and commitment to preserving the majestic San Francisco Bay.

[Adapted from www.SaveSFBay.org]

Save The Bay

Established in 1961, Save The Bay is the oldest and largest membership organization working exclusively to celebrate, protect, and restore San Francisco Bay. For 45 years, Save The Bay has implemented education, policy, and restoration programs that inform Bay Area residents and encourage their participation in efforts to enjoy and protect the Bay.

During 2006, Save The Bay will engage approximately 5,000 volunteers in restoring more than 100 acres of wetlands, and will provide education and stewardship opportunities on the Bay for more than 5,000 local youth and adults. In addition to educational and experiential programming and policy work, Save The Bay connects with volunteers and the public through online resources at www.SaveSFBay.org. The online classroom is ideal for students of all ages who want to learn more about the Bay and ways to get involved. Calendars list community volunteer opportunities and recreational trips.

Mission and Programs

Given the Bay's incredible natural beauty and economic value, its health is of paramount importance to both the people and wildlife that depend on it for survival. Save The Bay offers several services directly related to its mission *to celebrate, protect, and restore the San Francisco Bay*.

Celebrate

Celebrating the Bay includes experiential learning experiences on the Bay and enjoyable trips for school and family groups. Through its "Canoes-In-Sloughs" and "Discover The Bay" programs, Save The Bay connects youth and adults to the San Francisco Bay, its islands, and surrounding wetlands through fun canoe, kayak, and outdoor adventures facilitated by experienced, well-trained field naturalists.

Protect

Save The Bay's advocacy work focuses on diminishing threats to the Bay, engaging the public by providing opportunities to take action for a better Bay and quality of life. A recent success story is the passage of the Healthy Beaches Bill, which requires water quality testing at Bay beaches. The "**Keep It Clean!**" campaign, which educates residents about toxic runoff flowing into the Bay and inspires them to change behaviors that may pollute it.



Restore

The focus of Save The Bay's restoration work involves increasing native vegetation (habitat) around San Francisco Bay. The Community-Based Restoration program focuses not only on ecological improvement, but also on providing volunteers with a rewarding Bay experience while educating them about the Bay's countless native and non-native species. To engage the public in Bay restoration, Save The Bay hosts community drop-in sessions and facilitates participation by school, community, and corporate volunteer groups.

Regional science planning efforts like the *Baylands Ecosystem Habitat Goals Project* (San Francisco Estuary Institute 2001) have determined that 100,000 acres of wetlands must be restored to ensure a healthy Bay. Volunteers are a vital component in this work. Since the Community-Based Restoration program began in 2000, more than 40,000 volunteers have participated in wetlands restoration projects.

Save The Bay has targeted several wetland restoration sites around the Bay to strategically highlight the vital importance of wetland restoration. The map (below) highlights existing restoration sites, four of which are described in greater detail below.

Eden Landing Ecological Reserve in Hayward

Save The Bay and the California Department of Fish and Game are working together to restore this 600-acre salt pond to thriving tidal wetlands. Restoring this former salt pond site will increase habitat for endangered waterfowl, shorebirds and fish, and provide endless recreation opportunities to residents who have been walled off from the shoreline for decades. In just the first six months, over 150 Save The Bay volunteers have removed more than 5,000 pounds of historic debris that has been dumped at the site, and collected seeds and cuttings to propagate 5,000 native plants for restoration.

Martin Luther King, Jr. Shoreline in Oakland

Save The Bay partners with East Bay Regional Park District on this wetland restoration project, near the Oakland Airport. This urban area includes some of the last remaining wetland habitat in the East Bay, including 50-acre Arrowhead Marsh, and provides a home for many species, including the California clapper rail and burrowing owls. Save



The Bay has worked with more than 15,000 volunteers at this site alone, who have removed more than 100 tons of invasive plants and planted more than 30,000 native seedlings to restore wetland habitat.

San Francisquito Creek and Palo Alto Baylands
Save The Bay partners with the City of Palo Alto Baylands Nature Preserve to restore wetlands at the mouth of San Francisquito Creek, a unique habitat for many native species, including shorebirds and anadromous fish,

such as steelhead salmon. For the past five years, Save The Bay staff and volunteers have focused on revegetating the salt marsh habitat by removing invasive species and planting native wetland plants. Save The Bay's loyal volunteers have thus far planted 40,000 native plants and removed more than 60 tons of non-native plants along San

Francisquito Creek.

Santa Venetia Marsh

In the last few years, the Marin County Open Space District has engaged local community volunteers to help control non-native invasive plants at Santa Venetia Marsh in San Rafael. With Save The Bay's support, the next phase will include planting 10,000 native seedlings, including marsh gum plant, coast silk tassel, monkey flower, coyote brush, sea lavender, and other native shrubs. Save The Bay is partnering with Marin County Open Space District to involve students, corporate groups, and community volunteers in restoration activities to enhance habitat and increase Marin residents' connection to their local shoreline.

Methodology

Save The Bay's Community-Based Restoration Program Human Dimensions Research Project incorporated two core groups of volunteers: corporate groups and the general public. Data was collected through surveys, observations, and focus groups from May through August 2006. Information was gathered through four program observations, pre-program survey responses from 70 volunteers, post-survey responses from 16 volunteers, and one focus group (as shown in Table I).

Table I. Save The Bay Data Collected for Human Dimensions Research Project

Date	Site	Group	Total Volunteers	Pre - surveys	Post - surveys	Observation	Focus Group ¹
5/19/06	SFQ	AOL	20	19	4	✓	-
5/26/06	SFQ	Blue Roads w/ school	23	14	3	✓	✓
6/17/06	Santa Venetia	Corporate and Community Group (MWH, MBA, Rotary)	12	12	3	✓	-
6/20/06	Palo Alto Bay Lands	Homestead Technologies	8	7	2	✓	-
6/24/06	Eden Landing	Community Saturday Project	24	1	0	-	-
7/5/05	Eden Landing	Community Saturday Project	28	6	1	-	-
7/15/06	Oakland	Community Saturday Project	33	8	2	-	-
7/15/06	Palo Alto	Community Saturday Project	24	2	1	-	-
8 dates	4 sites		172	69	16	4	1

Program Observations

Field observations provide useful information on program implementation and volunteer engagement. Melissa Amschl-Meir, a former Save The Bay staff member, observed four sessions from start to finish and completed observation protocols following each observation. The observation protocols detailed Save The Bay's program implementation and approach to engaging and educating volunteers during the restoration sessions. In addition, the protocols indicated ways in which the program enhances connections between volunteers and the organization. Volunteers' engagement level and social interaction added insight about the impact that participation in hands-on restoration activities may have on participants' stewardship ethic.

Surveys

Staff and representatives from Restore America's Estuaries, NOAA and three RAE member organizations (Tampa Bay Watch, Save The Bay, and Galveston Bay Foundation) created the pilot Stewardship Ethic Survey. The survey took the following into account: demographics, background, motivations for participating in restoration, beliefs about the coastal environment and human involvement, eco-friendly behaviors, and barriers to acting environmentally responsibly. The demographics section gathered

¹ On account of important deadlines, one corporate group was not available to participate in a focus group, and another planned corporate focus group was not possible on account of logistical challenges. A conference call (group interview) was conducted with one corporate group.

information such as age, sex, and zip code. Background questions focused on Save The Bay membership, volunteer activities, and recreational uses of the Bay. Motivations centered on possible reasons for participating in restoration. The beliefs section included prompts on topics such as coastal development and the success of restoration efforts. Behavioral questions focused on other environmentally conscious behaviors, including recycling, conservation, and proper disposal of toxic products. Finally, the survey included a section addressing potential barriers to acting in an environmentally responsible way. Volunteers were asked if they were willing to be contacted one month after the restoration event, and if so, to submit their name, email address, and other contact information.

Prior to participating in a Save The Bay restoration event, volunteers received an email that asked them to participate in the study and directed them to the online survey hosted on Survey Monkey². Save The Bay staff took responsibility for informing volunteers about the research project and inviting them to participate in the survey. The online survey was originally designed to be open for two weeks prior to the restoration event. Based on low initial response rates, the research team decided to make the online survey available up until the event. In addition, Save The Bay staff or a research team member gave volunteers the opportunity to complete a hard copy of the survey at the beginning of each restoration session. One month after the restoration events, an email with a link to the post-survey was sent to the volunteers who agreed to be contacted. Two weeks later, those who did not complete the post-survey were sent a reminder email. Almost half of the volunteers who agreed to be contacted completed the post program survey. Ten emails were returned on account of incorrect email addresses.

Focus Group

Focus groups are an effective means of exploring topics in depth through group discussion and feedback about a common experience. The focus group conducted for this project provided useful information about the program experience and possible areas for improvement. It was held with six professionals from Blue Roads, a start-up company that partnered with a local elementary school to participate in a Save The Bay restoration program. The focus group was conducted at the company's office, taped on audio and visual recorders, and transcribed. It was held at noon and lunch was provided. Focus group participants were asked open-ended questions and encouraged to describe their reactions, suggestions, and restoration experience. The prompts that served as a base for the focus group included:

- Describe your reaction to the restoration activities and content covered by Save The Bay staff.
- Discuss what you learned. Specifically, what did you learn about wetlands? Doing restoration? About ways that you can take care of the Bay?
- What degree of responsibility do you believe people have to restore the Bay?
- Do you currently seek out information regarding the local environment?
- What would you tell others to encourage them to get involved?
- What would you like to see with respect to follow-up from Save The Bay after volunteering?
- Please share other comments/information regarding the day or the impact of the day.

² Survey Monkey is an online survey tool accessible at www.surveymonkey.com.

Analysis

Observation and focus group results reveal that volunteers are highly engaged and productive during Save The Bay's hands-on restoration sessions around San Francisco Bay. The information collected from surveys, program observations, and focus groups shows that volunteers feel strongly about doing their part to make a positive difference. They feel capable of, and responsible for, making a positive impact on the Bay and its surrounding wetlands.

Save The Bay field staff serve as positive role models and inspiration for volunteers. Seventy-five percent of one volunteer group (N=12) thought field staff were *highly effective* as "enthusiastic advocates for a restored and protected Bay". Reflections from volunteers ranged from "The staff we worked with were awesome," to "I thought your [Save The Bay's] staff were very knowledgeable and had a wonderful and fun attitude that contributed to a great experience for the whole group."



The restoration sessions included more than hands-on restoration activities (like removing non-native species, planting, weeding, and mulching). In order to increase participant awareness about the role of wetlands and the impact of development, most programs begin with an introduction to Save The Bay's mission to celebrate, protect, and restore the Bay.

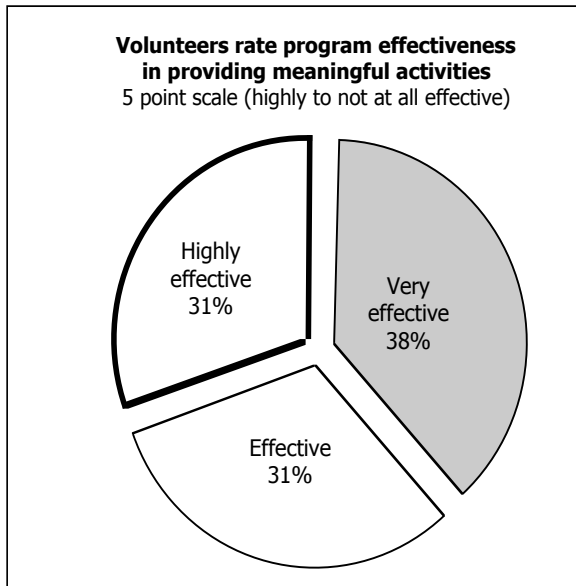
Save The Bay staff uses visuals of the salt harvest mouse and "before/after" maps—highlighting the 90% loss of wetlands over time—to introduce volunteers to the role of the wetlands and emphasize the impact of regional development. As remembered by one corporate volunteer, "The maps were the most impactful things I saw." Volunteers learn about non-native invasive species and gain information about how restoration increases habitat for local wildlife and contributes to a healthier Bay.

Does participation in community-based restoration impact an individual's sense of stewardship?

Described by one volunteer as "empowering," participation in Save The Bay's coastal restoration work provides meaningful, direct, hands-on, educational opportunities for volunteers. While it is difficult to ascertain the full impact of one restoration experience on volunteers' stewardship ethic, we present the following information in response to the core research question (above):

- Appreciation of the Bay
- Belief in the value of taking action
- Attitudes toward coastal restoration
- High interest in ongoing restoration activities
- Interest in ongoing contact with Save The Bay
- Highlights from volunteers' experience

Our hypothesis was that, given the joy and high levels of engagement visible in field observations, people would provide positive feedback on their experience, and that there would be little to no change from the preexisting pro-environmental attitudes evident from survey data before volunteers' participated in restoration activities.



When asked to rate the success of the restoration program in providing meaningful volunteer experiences, all of the participants rated Save The Bay's program highly as shown in the circle graph on this page. We believe that having a positive experience, combined with the prominent desire to help the environment, encourages ongoing support from Save The Bay's restoration volunteers.

When asked to indicate their interest in a variety of Save the Bay's programs after their participation in coastal restoration activities, 91% (10 out of 11) were interested in participating in more

restoration activities with Save The Bay. During one multi-corporate/community group restoration session, a volunteer commented, "I feel like I should do it [volunteer] more often. I knew it was good to do, but it's just such an easy thing." Nine out of eleven volunteers (82%) were interested in participating in recreation opportunities on the Bay through Save The Bay's canoe or kayak trips.

An appreciation for the Bay is one indicator of individuals' stewardship ethic. Half of the volunteers rated the program *highly effective* (the highest rating on a 5 point scale) for encouraging appreciation of the Bay and wetlands. More than a third thought the program was *very effective* in encouraging an appreciation of the surrounding area. In addition, all of the volunteers felt that Save The Bay's program effectively addressed the value and importance of taking action.

Volunteers' Highlights

"Getting down in the dirt and enjoying manual labor that was doing some good."

"Working with my hands outdoors and seeing how quickly the volunteers weeded the levee."

"Seeing the number of people willing to spend the time and energy."

"Just being outdoors, seeing the number of weeds we had taken out and feeling like what we did helped."

"Comparing the area of restoration to the area inhabited by non-native plants."

Data suggests that participation in a Save The Bay restoration program increased already strong attitudes about coastal restoration. Before participating, 31% of volunteers *strongly agreed* that "Humans have an obligation to leave the coastal environments in a better condition for future generations." After participating, 50% of volunteers *strongly agreed* with this statement. An appreciation of the Bay, combined with the belief that human action can make a positive difference, become powerful tools for engaging people in opportunities to restore the wetlands. Highlights from volunteers

suggest that participating in restoration activities is rewarding for many reasons.

Volunteers' strong desire to interact with the environment, and their commitment to creating a healthy Bay complements the efforts of Save The Bay's outreach to restoration volunteers.

Pre- / Post- Survey Responses

Thirty-eight volunteers (60%) agreed to be contacted one month after the restoration session for a follow-up inquiry about their experience. Of the 38 volunteers who agreed to be contacted, 16 (or 42%) completed the post-survey. We compared data across sections of the Stewardship Ethic Survey in an attempt to provide insight on the impact of participation.

The comparison of pre- and post-survey results for this small sample is not an ideal indicator of how beliefs, behaviors, motivations, and barriers may have been changed as a result of participation in the restoration projects. Even so, the results from the 16 pre- and post-surveys are presented below (Table II in Section VIII shows survey results across response categories).

Motivations

The percentage of volunteers who thought "experiencing something new" was very or extremely important for participating in coastal restoration decreased (from 44% to 25%) after engaging in restoration activities. As with the pre-survey results, post-survey responses show the following to be *very important* reasons prompting participation in coastal restoration. These results (pre-survey, post-survey) are detailed below:

- To return part of the coast to it's proper condition (26%, increase to 56%)
- To learn about the natural environment (31%, increase to 56%)
- To improve the area for wildlife and other species (50%, increase to 69%)
- To feel empowered to make a difference (44%, no change)
- To be outdoors (38%, no change)

Beliefs

There were minimal shifts in the number of volunteers who *agreed* or *strongly agreed* with the coastal environment statements on the survey. In some cases, it appears that pro-coastal environment protection and restoration beliefs were reinforced through volunteering. It is interesting to note that there was a sharp decrease after participation in the percentage of volunteers who *strongly agreed* that they could take more personal responsibility for the Bay. This might have occurred because people believed they had already taken responsibility for the Bay and therefore did not need to do as much (not an intention of the Save The Bay program). It would be worthwhile to more deeply investigate this question in future studies. The minimal changes in the volunteers who *agreed* or *strongly agreed* with select pro-environmental coastal environment belief statements are shown below.

Statement	Pre-Survey	Post-Survey	Change
Isolated restoration projects will significantly improve the overall quality of the Bay.	6% Strongly Agree 50% Agree	13% Strongly Agree 44% Agree	↑ Strong Agreement
Humans have an obligation to leave coastal environments in a better condition for future generations.	31% Strongly Agree 38% Agree	50% Strongly Agree 44% Agree	↑ Overall Agreement
I make a positive impact on the Bay.	6% Strongly Agree	13% Strongly Agree	↑ Strong

	50% Agree	44% Agree	Agreement
I can take more personal responsibility for protecting the Bay.	31% Strongly Agree 56% Agree	6% Strongly Agree 75% Agree	↓ Strong Agreement ↑ Agreement

Actions

Both pre- and post-survey responses reflect that the majority of volunteers *always* do the following:

- Refrain from littering (94%, no change)
- Dispose of motor oil at approved sites (88%, no change)
- Recycle newspapers, cans or bottles (69%, increase to 75%)
- Turn off water when brushing their teeth (50%, increase to 63%)

There was an increase in people who *almost always*:

- Walk, bike, carpool or take public transportation (13%, increase to 31%)
- Buy products that are environmentally friendly (25%, increase to 44%)

Barriers

There were minimal changes with respect to volunteers' overall reaction to the potential barriers to acting in an environmentally responsible way. Fewer people agreed with the following statement after participating in Save The Bay's program:

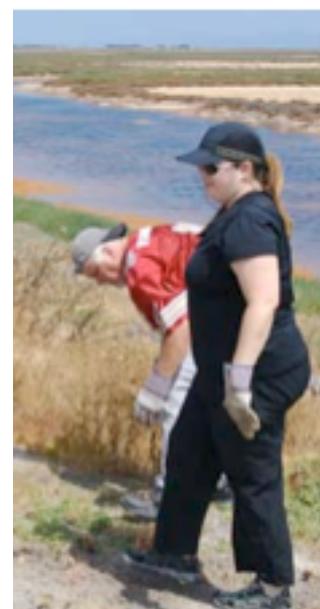
- I'm not sure who to contact to volunteer for environmental causes. (25%, decreased to 13%)
- I don't always know how to behave pro-environmentally. (56%, decreased to 50%)
- I don't have time to volunteer for environmental projects. (25%, decreased to 13%)

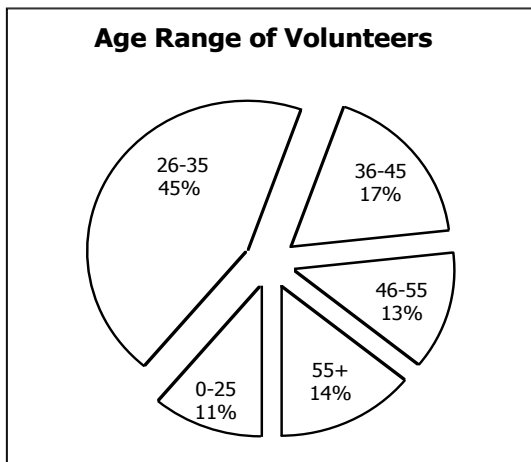
The slight changes between pre- and post-survey responses across sections of the survey are attributed to the small sample size. The remaining pages in this section focus on what we learned about volunteers.

Demographics

Given the emphasis on corporate volunteer groups, including many local technology businesses and start-up companies, it is not surprising that the volunteers are a highly educated group of adults. When asked to report their level of education, 43% noted completing post-graduate studies and 41% had earned college degrees.

There were an almost equal number of responses from female (51%, N=32) and male (49%, N=31) participants. The volunteers came from near and far to lend a hand in Save The Bay's restoration projects. Most of the volunteers live within 10 miles of the Bay and have lived in the same zip code for an average of 8.7 years. Three people came from 50 miles away. Despite their close proximity to the Bay, most people did not know whether they lived within the San Francisco Bay watershed, which provides excellent support for the importance of the mapping and educational component in Save The Bay's restoration programs.





With respect to age distribution, most volunteers were in the 26-35 age range.

The chart depicts the distribution of volunteers by age. Again, with the study's emphasis on corporate and community/professional groups, such as the Rotary Club and Marin Bar Association, it is understandable that most volunteers are adults.

Recreation

More than half of the volunteers (57%, N=39) reported recreating on the Bay in the previous year. Almost all of those who use the Bay for recreation purposes engage in "quiet" or motor-free sports. Table II notes the number of days and volunteers who participated in outdoor recreational activities.

Table II. Restoration volunteers' recreational uses of San Francisco Bay

Recreational Activities	# Days in the past year	# People
Walk / Run / Bike*	535	33
Photography	46	9
Sailing	36	7
Bird-watching	27	7
Kayaking	22	11
Swimming	25	5
Fishing	14	5
Canoeing	11	2
Power Boating	1	1

*Includes hiking and biking trails with views of the Bay (but not adjacent to the Bay).

Research suggests that positive outdoor childhood experiences promote an appreciation for the natural environment. It is noteworthy that this group of adult volunteers offers a wide view on the role outdoor experiences play in building an appreciation for the Bay. Eleven percent *strongly agreed* with the statement "People can appreciate the Bay without spending time on it;" 24% of volunteers *agreed* and 33% *disagreed*. As we strive to gain insight on the factors contributing to an individual's stewardship ethic, and because many volunteers from corporate groups have children, it is worthwhile to understand how people internalize and build connections, for themselves and for their families, to their surroundings.

Save The Bay's "Discover The Bay" recreational outings provide easy-to-access, guided trips on canoe, kayak, and foot. Individuals as well as corporate and community groups can sign up for scheduled excursions or customize Bay outings. Knowing that more than half of the restoration volunteers like to spend some of their free time on the Bay makes the restoration programs a worthy outlet for publicizing Save The Bay's recreational opportunities. In addition, this provides strong support for Save The Bay's model of

combining on-the-water canoe and kayak programs with participation in habitat restoration projects. Save The Bay offers combination programs at two restoration sites, including Bair Island in Redwood City and the Marin Islands in San Rafael.

Past Volunteer Experience and Membership³

As a whole, the restoration volunteers reported not being especially active in volunteering for environmental projects prior to their experience with Save The Bay. In fact, more than half (54%, N=37) had not volunteered in environmental activities at all over the past 12 months. Ten percent (N=7) had volunteered in the last month and 29% (20) had volunteered in the last year. Almost half of those who had volunteered in the previous year were returning Save The Bay volunteers (43%, N=15). Other groups where people had volunteered included *Bay Nature* magazine, Rotary Club, and Sierra Club.

The majority of survey responses came from non- Save The Bay members (91%, N=63). It is interesting to note that 67% of the Save The Bay members reported volunteering for environmental projects in the past year.

Volunteers were more active with respect to community engagement for other (non-environmental) projects. Seventy percent of the volunteers had been involved in community activities in the last year, with almost one-third volunteering in the last month. As far as volunteering in general, 9% had volunteered in the last 60 days; 9% had volunteered in the last 90 days; 23% had volunteered in the last year; and 30% had not volunteered at all.

Given the overall community engagement level, there is potential to promote additional volunteer opportunities to a broader audience on a regular basis at Save The Bay's restoration events. Survey results suggest that targeting other community organizations may be an effective venue for publicizing volunteer opportunities with Save The Bay. In addition, building on the positive experience at the end of each session may encourage volunteers' ongoing support of Save The Bay's work through membership and participation.

Post-survey responses show that 91% of the respondents are interested in hands-on restoration activities and 46% are interested in other volunteer opportunities with Save The Bay. In addition, 18% would be interested in hearing more about membership.

³ The final version of the San Francisco survey received by Save The Bay did not include a prompt related to how participants found out about the program. This is information that Save The Bay may collect in future studies and is noted here to inform the aggregation of data across three sites.

Motivations

Save The Bay's volunteers were motivated to participate in coastal restoration activities because they are concerned about avoiding further degradation of habitat, want to improve the area for wildlife, and believe in leaving a healthier environment for future generations. Volunteers feel strongly that their actions will make a positive impact on the environment, and their inspiration may be rooted in forward thinking

Volunteers have a strong interest in improving the area for future generations. Almost half of the volunteers (48%) *strongly agree* with the statement that "Humans have an obligation to leave coastal environments in a better condition for future generations." Thirty-eight percent *agree* with this statement.

One corporate volunteer who participated in Save The Bay's program alongside a local fifth grade class said, "The biggest impact was showing the next generation that they can make a difference also." (The description provides more information on the corporate and school partnership.)

What motivates participation in coastal restoration activities?

Most volunteers rated the following reasons as *extremely important*:

- To prevent a larger ecological crisis (44%, N=30)
- To improve the area for wildlife (41%, N=28)
- To do something positive for future generations (41%, N=28)
- It's the right thing to do (37%, N=25)
- To return part of the coast to its proper condition (35%, N=24)

In line with volunteers' desire to leave a better environment for future generations, 45% of volunteers *strongly disagree* that "Nature will restore our coastal environment; there is no need to do restoration work," and more than half (55%) *disagree* that "The coastal environment is strong enough to cope with the impacts of modern society." The text box indicates the top reasons that underlie volunteers' participation.

Volunteers rated a handful of the possible motivators as *very important*. For example, being outdoors was considered *very important* by 35% of respondents. When asked to reflect on their experience at the end of the restoration activities, volunteers often emphasized their satisfaction with spending time outdoors:

"It was great being outside; I had been here before but it is good to know the plants."

"It was nice to be outdoors, and interacting with coworkers in a different environment."

The value of the outdoor experience is also prominent a month later when volunteers were asked to share one highlight from the restoration day. Just less than one half of the responses (46%) were about being outside. In the words of one volunteer, "It was cool being with the marsh cranes and birds and having my hands in the grass."

Volunteers rated a handful of the possible motivators as *moderately important*:

- Experiencing something new (35%)
- Being with friends (34%)
- Making the area more useful for other human uses (32%)
- Feeling empowered to make a difference (26%)

Eighty percent of volunteers considered learning about the natural environment at least *moderately important*. While almost all of the motivators held significance for the majority of volunteers, 10% of people rated the following as *not at all important* in driving their participation: being with friends and making the area more useful for other human uses.

Blue Roads and Sunnybrae Elementary School

Employees from Blue Roads, a start-up software company, epitomize the importance volunteers place on providing for the next generation. Based on the results of an in-house survey of employees' interests, the Blue Roads' Community Engagement Team combined their colleagues' interests in education and the environment by partnering with a nearby elementary school. The company provided the human and financial resources to co-volunteer with a fifth-grade class through Save The Bay's restoration program.



All of the focus group participants from Blue Roads emphasized the value of working beside kids during the restoration event. In fact, one reflected that the experience just would not have been as rewarding without the students: "To me, personally, if the kids hadn't been there, I would have liked

it about half as much...because really to see in their eyes, them understanding it, and seeing the bigger world outside just 'me and my I-pod,' was really, really profound. I was really excited at the end of the day that not only did I do this great thing, but [I also] introduced kids to concepts and what you can do as an individual and just the environment around you. [The day] really, really was rewarding. I would definitely recommend it to other organizations."

The restoration activities were powerful themselves. Students and adults partnered to mulch native plantings and weed out invasive plants. During the wrap up dialogue, volunteers' enthusiasm and pride was unmistakable. Students thanked Blue Roads for their time and shared their favorite part of the day:

"I loved how you guys took the time off work to show us everything."

"I learned a lot of stuff I didn't know."

"Everyone helped and communicated with each other."

The adults' highlights echoed many of the students' sentiments:

"I liked sharing everyone's vision of learning more about the Bay."

"I liked what we did to help the Bay."

Beliefs

Beliefs play a major role in volunteers' participation and support of restoration projects. The survey asked volunteers to indicate the extent to which they agree with fifteen statements about the coastal environment and interaction between humans and that environment.



Prior to engaging in the restoration session, the volunteers were concerned about the impact of development on the health of the Bay and shared an understanding that they could play a role in bettering the environment.

The strong stewardship ethic embodied by most volunteers is most evident in their responses to the following statements (% agree, % strongly agree):

- I make a positive impact on the health of the Bay (49%, 12%)
- I can take more personal responsibility for protecting Bay habitats (53%, 27%)
- Working together we can improve the quality of the Bay (53%, 42%)

The majority of volunteers did not feel strongly about the coastal environment belief statements on the survey, but instead either agreed or disagreed with the ideas presented. However, two exceptions elicited *strongly agree* responses from most volunteers:

- Protecting Bay habitats is as important as restoring them (53%, N=35)
- Humans have an obligation to leave coastal environments in a better condition for future generations (48%, N=32)

The emphatic belief in the importance of protection may have implications for how Save The Bay can further engage restoration volunteers in the organization's advocacy work on behalf of San Francisco Bay. Save The Bay's campaigns focus on Bay Area issues that impact the health of the bay and quality of life for residents. For example, Save The Bay's website currently educates online visitors about the Healthy Bay Beaches Law, which requires water monitoring in the Bay to meet state standards and informs people about water quality at local beaches. Perhaps emphasizing the link between membership and protection efforts would be fruitful.

Volunteers typically agreed with nine of the fifteen statements about the coastal environment. The results suggest that volunteers believe in the positive impact of taking action through restoration projects and are confident that they can improve the health of the Bay. Most volunteers *agreed* with the following:

- I can take more personal responsibility for protecting Bay habitat. (53%, N=35)
- Working together, we can improve the quality of the Bay. (53%, N=35)
- I make a positive impact on the health of the Bay. (49%, N=33)
- Humans are severely abusing the coastal environment. (48%, N=32)

- The ecological nature of the coastal environment is very delicate or easily upset. (47%, N=31)
- Isolated restoration projects will significantly improve the overall quality of the Bay. (44%, N=29)
- When humans interfere with coastal environments, it often produces disastrous consequences. (41%, N=27)
- People can appreciate the Bay without spending time on or around it. (33%, N=22)
- Some negative impacts to the Bay are acceptable in exchange for some benefits to society. (30%, N=20)

Most volunteers *disagreed* with the following:

- **The coastal environment is strong enough to cope with the impacts of modern society.** (55%, N=36)
- **Nature will restore our coastal environment; there is no need to do restoration work.** (47%, N=31)
- Humans have the right to modify the coastal environment to suit their needs. (44%, N=29)
- Restoration activities are only a short-term, temporary solution. (33%, N=22)

While none of the statements elicited strong disagreement from *most* of the volunteers, a significant portion *strongly disagreed* with the first two bullet points (highlighted in bold font).

For the most part, people took a stance on the belief statements, but some statements elicited a greater diversity of responses than others. Controversial or difficult statements related to balancing human and non-human uses of the environment. When asked to share their views on the statement, "Some negative impacts to the Bay are acceptable in exchange for some benefits to society," volunteers fell on both sides of the issue with 29% in the middle (or neutral), 26% disagreeing, 12% strongly disagreeing, and 30% agreeing. A similar



statement, "Humans have the right to modify the coastal environment to suit their needs," elicited stronger pro-environmental results: 32% neutral, 44% disagree, 12% strongly disagree and 11% agree or strongly agree. More in-depth interviews with volunteers could illuminate how they interpret the statements and why they feel the way they do.

Taken in context of volunteers' beliefs, concerns and interest in taking action for a better coastal environment, volunteers' eco-friendly actions are most evident in basic everyday ways.

Behaviors

Before their coastal restoration volunteer experience with Save The Bay, the majority of volunteers reported *always* engaging in common actions associated with being environmentally responsible. These actions include refraining from littering (78%),

recycling (63%), disposing of used motor oil at approved sites (63%), and conserving water by shutting it off when brushing their teeth (44%). Thirty-nine percent of volunteers reported that they *almost always* use low wattage, energy efficient bulbs.

When more resources, including time, knowledge or money are required for pro-environmental behaviors, the percentage of volunteers who *always* engage in the behaviors declines. Instead, most volunteers *sometimes* take action. Most volunteers reported that they *sometimes* do the following:

- Buy recycled products. (73%, N=47)
- Buy environmentally friendly products. (67%, N=43)
- Pickup litter (that is not their own). (59%, N=38)
- Encourage others to do environmentally friendly activities. (52%, N=33)
- Follow local environmental issues. (55%, N=35)
- Contribute money to environmental groups. (33%, N=21)

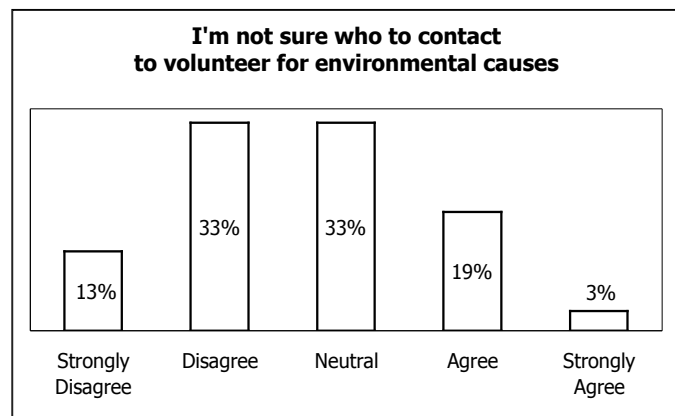
Most (34%) of Save The Bay's restoration volunteers reported that they *almost never* take part as volunteers in public meetings, and 30% *never* do. This is not surprising in context of the above data regarding past volunteer experience and extent to which people follow local environmental issues. Informing volunteers about threats and providing information on what, when, and how they can take action for a healthier Bay may be an effective means of encouraging participation as well as building a stronger connection between Save The Bay and community members. Providing a Bay Savers email alert list sign up sheet at restoration events may be an effective way of doing this.⁴

Barriers

In trying to assess obstacles to eco-friendly behavior, the survey posed seven possible barriers to acting in an environmentally responsible way.

Data indicates that most of the "barriers" or misconceptions were not especially relevant. For example, the majority of volunteers *disagreed* with the following statements:

- I am not really concerned about trying to act pro-environmentally. (55%)
- I think acting pro-environmentally costs too much. (45%)
- I don't know where to find information about how to behave pro-environmentally. (45%)
- Acting pro-environmentally is inconvenient. (39%)
- I don't have time to volunteer for environmental projects. (36%)

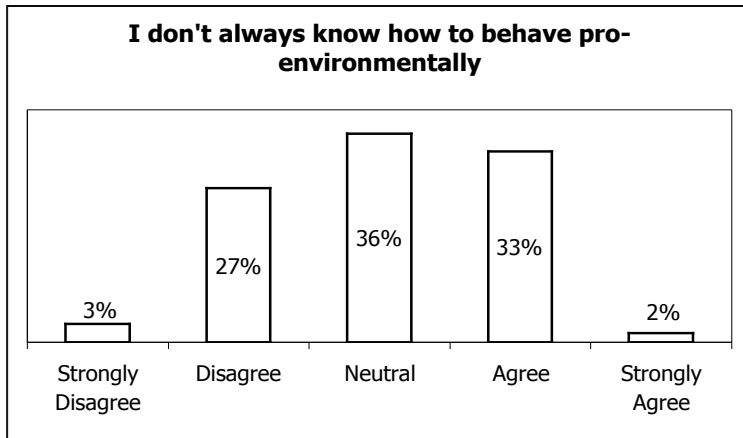


Data suggests that people care about acting pro-environmentally, do not believe that it is inconvenient or costs too much, and know where to find information.

⁴ The information gleaned from program observations, focus groups, and follow-up surveys provides more suggestions about how Save The Bay may promote environmentally responsible behavior through restoration programming. Please see the Opportunities section of this report.

However, there is a gap between awareness of resources and procedural knowledge evidenced by the 33% of volunteers who agree that they “don’t always know how to behave pro-environmentally.”

The charts show the range of responses for a selection of the barrier statements.



Connecting volunteers with opportunities to take action appears important in fostering environmentally responsible behavior. In addition, triggers (such as magnets regarding pollution prevention), information like Save The Bay’s “10 Ways to Save The Bay” cards, or tools (such as online resources for where to dispose of mercury

thermometers) may be useful for broader public action.

Summary of Results

The results of the Human Dimensions Research Project cannot be generalized for all of Save The Bay's volunteers. Nevertheless, we gained insight about volunteers who participated in specific restoration events and ideas for further engaging volunteers in Save The Bay's work. The results show that volunteers who came to help restore San Francisco Bay were interested in making a positive impact, are concerned about the coastal environment, and want to leave it a better place for future generations.

Most volunteers felt that participating in the restoration program was extremely important to reduce a larger ecological crisis, improve the area for wildlife, and do something positive for the future. The restoration sessions evoked praise of the natural surroundings, increased volunteers' understanding of the role of native plants in the health of the Bay, and provided a way for people to make a positive impact on the San Francisco Bay.

Similar to the findings reported by Tampa Bay, out of a need to "do their part," volunteers' concerns about habitat destruction cross over into other parts of their lives. The majority of volunteers indicated that they make other eco-friendly decisions in their lives, but it is unclear whether this is a direct result of participating in restoration activities. Restoration appears to be one facet of volunteers' efforts to improve the local environment and participate in their local communities.

Save The Bay's volunteers are highly motivated to make a positive difference through hands-on restoration. Survey responses suggest that volunteers strongly believe that their participation can make a positive impact on the environment.

Emphasize Volunteer and Recreation Opportunities

Make material regarding upcoming volunteer and restoration opportunities, as well as opportunities for community action, readily available through Save The Bay during the restoration program. A positive outdoor experience with Save The Bay creates a prime time to engage volunteers in conversations about the restoration work (and other fun activities) happening at sites throughout the Bay and provide a calendar of the events for the coming month or season. Another idea recommended by a focus group participant is to send one copy of the Save The Bay newsletter and upcoming events calendar to the office so people can share it or post it on the company bulletin board.

More than half of the volunteers surveyed had taken part in recreation on the Bay in the last year. Both corporate and community volunteers voiced interest in hearing more about canoe and kayak outings on the Bay.

Increase Coverage of Current Topics and Save The Bay's Advocacy Work

Volunteers are interested in learning about the Bay. Though they know where to find resources and who to contact for information about environmental issues, they don't consistently know how to act. Based on the low percentage of people following local environmental issues, take advantage of the opportunity to inform volunteers about current Save The Bay campaigns. Snack or lunch times may be an ideal time to spread the word. Make the "10 Ways to Save The Bay" handout easily accessible at the restoration sessions. Consider creating a weekly email that highlights one way recipients can help Save The Bay, and encourage volunteers to add their name to the email list during restoration programs.

Outreach and Membership

As noted by one focus group participant, Save The Bay should consider targeting the many corporate offices within walking distance to the Bay for nearby restoration projects. Even though this person used to work very close to the Bay, he had no idea that opportunities existed to lend a hand in improving the health of the Bay through a few hours of volunteering.

Emphasizing the reduced membership rate for volunteers during the restoration session—and explicitly noting the benefits as well as impact of membership—may inspire more volunteers to join Save The Bay. Clarify the role membership funds, as well as trip costs, play in the organization and how contributions are linked to Save The Bay's commitment to celebrate, protect, and restore the Bay. Emphasize opportunities for families with children to participate in Save The Bay's activities and outings.

Leverage the Enthusiasm and Resources of Corporate Volunteers

One small start-up company with an active and environmentally conscience employee base took incredible initiative to partner with a local fifth grade class. Employees created and presented a pre-restoration trip slide show at the school and provided transportation and lunch for the class. The model was highly effective in creating a positive restoration session based on adult feedback. Consider how Save The Bay can foster relationships between groups in the community and provide existing in-house resources such as the watershed curriculum guide or the pre-trip slide show as a brown-bag lunch topic.

Recommendations

Based on informal communications between the Research Team and Save The Bay, much of the data gathered, analyzed, and reported throughout this project has been both informative and useful. In consideration of ongoing research and program evaluation, the following recommendations are based on experience and lessons learned.

Surveys

To increase the relevance of information to Save The Bay staff, the general public, and others working and living in the San Francisco Bay Area, revise the survey to account for specific local content and define attitudes and knowledge regarding restoration and coastal environments. Shorten the survey significantly, as the length seemed to give many respondents cause to consider not completing it. Given Save The Bay's great care in providing an educational experience for participants beyond the procedural information of restoration activities, consider learning more about what volunteers know and don't know prior to their volunteer experience with Save The Bay. An updated survey will be presented in a supplemental report to Save The Bay for ongoing use by the organization.

To increase the return rate on post-surveys, utilize an incentive such as Galveston Bay's promise to raffle off one annual membership (or a Save The Bay t-shirt) to a volunteer who completes the follow-up survey.

Lastly, we encountered communication and technology issues. Appoint data collection logistics and contact with corporate group coordinators to one person for continuity and seamless interaction with volunteer coordinators.

Focus Groups

Focus group participants were excited to share their views and ask questions about Save The Bay. Consider using focus groups with one or more targeted groups annually. In addition to gathering information about volunteers' experience and gaining good ideas about program developments or improvements, the focus group is an opportunity to build a stronger connection between the organization and small group of people. Consider having an outside consultant conduct the focus group. At the end of the focus group, invite a Save The Bay staff person into the room to answer organizational questions that came up during the focus group and to distribute educational materials.

Tables

Overview

Event Date	Site	PRE (N)	% Sample	Agreed to follow-up	POST (N)
5/19/06	SFQ	19	28%	11	4
5/26/06	SFQ	14	20%	8	3
6/17/06	SVM	12	17%	7	3
6/20/06	PABL	7	10%	3	2
6/24/06	Eden Landing	1	1%	1	0
7/8/06	Eden Landing	6	9%	3	1
7/15/06	OAK	8	12%	4	2
7/15/06	PABL	2	3%	1	1
Total		69		38	16

Pre Program Survey Results

1. Are you a member of Save The Bay?

Total responses: 69

	Yes	No
5/19/06	0	19
5/26/06	0	14
6/17/06	0	12
6/20/06	0	7
6/24/06	1	0
7/8/06	3	3
7/15/06 - Oakland	0	8
7/15/06 - Pal Alto	2	0
Total	6	63
%	9%	91%

2. Have you volunteered for other environmental activities in the past?

Total responses: 69

	30 days	60 days	90 days	12 months	Not at all
5/19/06	0	1	1	8	9
5/26/06	0	0	0	1	13
6/17/06	1	1	0	5	5
6/20/06	0	0	0	4	3
6/24/06	0	0	1	0	0
7/8/06	2	1	0	0	3
7/15/06 - Oakland	4	0	0	1	3
7/15/06 - Palo Alto	0	0	0	1	1
Total	7	3	2	20	37
%	10%	4%	3%	29%	54%

If yes, what type of group(s) have you volunteered with?

Total responses: 35

	Save The Bay	Work	Social Club	Comm. Org	School	Faith	Other
5/19/06	8	1	0	2	0	1	1
5/26/06	0	0	0	0	0	0	1

6/17/06	2	0	0	2	2	1	3
6/20/06	0	4	0	0	0	0	0
6/24/06	0	0	0	1	1	0	0
7/8/06	2	0	1	1	2	0	0
7/15/06 - Oakland	2	2	1	3	3	0	0
7/15/06 - Palo Alto	1	0	0	0	0	0	0
Total	15	7	2	9	8	2	5
%	43%	20%	6%	26%	23%	6%	14%

3. Have you volunteered for another community activity or project (non-environmental) during the past:

Total responses: 69

	30 days	60 days	90 days	12 months	Not at all
5/19/06	4	1	1	3	10
5/26/06	4	1	2	6	1
6/17/06	4	3	1	1	3
6/20/06	3	0	2	2	0
6/24/06	0	1	0	0	0
7/8/06	2	0	0	2	2
7/15/06 - Oakland	3	0	0	2	3
7/15/06 - Pal Alto	0	0	0	0	2
Total	20	6	6	16	21
%	29%	9%	9%	23%	30%

4. Have you recreated on the Bay at any time during the past 12 months?

Total responses: 69

	Yes	No
5/19/06	13	6
5/26/06	7	7
6/17/06	8	4
6/20/06	4	3
6/24/06	1	0
7/8/06	2	4
7/15/06 - Oakland	2	6
7/15/06 - Pal Alto	2	0
Total	39	30
%	57%	43%

5. Approximately how many days did you participate in each of the following activities during the past 12 months?

	5/19/06	5/26/06	6/17/06	6/20/06	6/24/06	7/8/06	7/15/06 Oak	7/15/06 PA	Total
Power Boating	0	1	0	0	0	0	0	0	1
Photography	4	1	8	5	8	20	0	0	46
Diving	0	0	0	0	0	0	0	0	0

Kite Surfing	0	0	0	0	0	0	0	0	0
Swimming	0	5	4	0	8	8	0	0	25
Fishing	1	2	10	0	1	0	0	0	14
Canoeing	1	0	0	0	0	10	0	0	11
Bird-watching	1	5	3	0	4	14	0	0	27
Sailing	2	22	7	0	1	4	0	0	36
Windsurfing	0	0	0	0	0	0	0	0	0
Snorkeling	0	0	0	0	0	0	0	0	0
Kayaking	0	2	10	2	2	2	3	1	22
Walk / Run / Bike	286	62	126	20	3	20	12	6	535
Other:	30	0			0			0	30

MOTIVATIONS

6. Please indicate how important each item is to you as a reason to participate in local restoration.

Total responses to statements in this section: 68

To be Outdoors

	Not at all important	Slightly important	Moderately important	Very important	Extremely important
5/19/06	0	2	10	5	2
5/26/06	0	1	7	4	2
6/17/06	1	1	2	6	2
6/20/06	0	0	2	4	1
6/24/06	0	0	0	0	1
7/8/06	1	1	0	2	2
7/15/06 - Oakland	0	0	3	2	2
7/15/06 - Palo Alto	0	0	0	1	1
Total	2	5	24	24	13
%	3%	7%	35%	35%	19%

To be with friends

	Not at all important	Slightly important	Moderately important	Very important	Extremely important
5/19/06	3	3	10	2	1
5/26/06	0	0	6	8	0
6/17/06	0	2	2	5	3
6/20/06	0	3	2	2	0
6/24/06	0	0	0	0	1
7/8/06	1	3	0	1	1
7/15/06 - Oakland	2	0	3	1	1
7/15/06 - Palo Alto	1	1	0	0	0
Total	7	12	23	19	7
%	10%	18%	34%	28%	10%

To return part of the coast to its proper condition

	Not at all important	Slightly important	Moderately important	Very important	Extremely important
5/19/06	0	2	5	10	2
5/26/06	0	2	3	4	5
6/17/06	0	0	3	3	6
6/20/06	1	0	3	2	1
6/24/06	0	0	0	0	1
7/8/06	0	1	1	0	4
7/15/06 - Oakland	0	1	2	0	4
7/15/06 - Pal Alto	0	0	0	1	1
Total	1	6	17	20	24
%	1%	9%	25%	29%	35%

To improve the area for wildlife/other species

	Not at all important	Slightly important	Moderately important	Very important	Extremely important
5/19/06	0	1	10	3	5
5/26/06	0	1	4	4	5
6/17/06	0	1	0	3	8
6/20/06	0	1	2	3	1
6/24/06	0	0	0	0	1
7/8/06	0	2	0	0	4
7/15/06 - Oakland	0	1	2	1	3
7/15/06 - Palo Alto	0	0	0	1	1
Total	0	7	18	15	28
%	0%	10%	26%	22%	41%

To do something positive for future generations

	Not at all important	Slightly important	Moderately important	Very important	Extremely important
5/19/06	0	0	3	7	9
5/26/06	0	1	1	7	5
6/17/06	0	2	1	2	7
6/20/06	0	0	5	2	0
6/24/06	0	0	0	0	1
7/8/06	0	2	0	2	2
7/15/06 - Oakland	0	0	0	3	4
7/15/06 - Palo Alto	0	0	0	2	0
Total	0	5	10	25	28
%	0%	7%	15%	37%	41%

To learn about the natural environment

	Not at all important	Slightly important	Moderately important	Very important	Extremely important
5/19/06	1	3	7	7	1
5/26/06	0	2	6	3	3
6/17/06	0	2	3	4	3
6/20/06	0	2	3	2	0
6/24/06	0	0	0	0	1
7/8/06	0	2	0	2	2
7/15/06 - Oakland	0	2	2	1	2
7/15/06 - Palo Alto	0	0	0	2	0
Total	1	13	21	21	12
%	1%	19%	31%	31%	18%

To experience something new

	Not at all important	Slightly important	Moderately important	Very important	Extremely important
5/19/06	2	5	8	3	1
5/26/06	1	3	7	1	2
6/17/06	3	3	2	3	1
6/20/06	1	1	3	1	1
6/24/06	0	0	0	0	1
7/8/06	0	3	2	1	0
7/15/06 - Oakland	0	1	2	2	2
7/15/06 - Palo Alto	0	0	0	2	0
Total	7	16	24	13	8
%	10%	24%	35%	19%	12%

To prevent a larger ecological crisis

	Not at all important	Slightly important	Moderately important	Very important	Extremely important
5/19/06	1	3	4	6	5
5/26/06	0	1	4	2	7
6/17/06	1	1	0	2	8
6/20/06	0	2	2	1	2
6/24/06	0	0	0	0	1
7/8/06	0	2	0	1	3
7/15/06 - Oakland	0	1	1	2	3
7/15/06 - Palo Alto	0	0	0	1	1
Total	2	10	11	15	30
%	3%	15%	16%	22%	44%

To feel empowered to make a difference

	Not at all important	Slightly important	Moderately important	Very important	Extremely important
5/19/06	2	2	7	6	2
5/26/06	1	2	6	2	3
6/17/06	1	4	0	4	3

6/20/06	0	4	1	0	2
6/24/06	0	0	0	0	1
7/8/06	0	2	1	1	2
7/15/06 - Oakland	0	0	2	3	2
7/15/06 - Palo Alto	0	0	1	1	0
Total	4	14	18	17	15
%	6%	21%	26%	25%	22%

To make the area more useful for other human uses

	Not at all important	Slightly important	Moderately important	Very important	Extremely important
5/19/06	2	4	6	5	2
5/26/06	0	1	6	3	4
6/17/06	2	3	2	2	3
6/20/06	1	1	3	0	2
6/24/06	0	0	0	0	1
7/8/06	2	4	0	0	0
7/15/06 - Oakland	0	1	4	1	1
7/15/06 - Palo Alto	0	0	1	1	0
Total	7	14	22	12	13
%	10%	21%	32%	18%	19%

It's the right thing to do

	Not at all important	Slightly important	Moderately important	Very important	Extremely important
5/19/06	0	2	4	6	7
5/26/06	0	4	2	5	3
6/17/06	0	1	1	2	8
6/20/06	1	2	1	1	2
6/24/06	0	0	0	0	1
7/8/06	0	2	0	3	1
7/15/06 - Oakland	1	1	0	2	3
7/15/06 - Palo Alto	0	1	0	1	0
Total	2	13	8	20	25
%	3%	19%	12%	29%	37%

Beliefs

7. In the following questions, please indicate the extent to which you agree or disagree about the coastal environment.

Total responses to the statements in this section: 66

Humans have the right to modify the coastal environment to suit their needs.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Don't know
5/19/06	0	8	10	0	0	1
5/26/06	3	6	4	1	0	0
6/17/06	1	7	2	2	0	0
6/20/06	0	2	3	1	1	0
6/24/06	0	1	0	0	0	0
7/8/06	2	2	0	1	0	0

7/15/06 - Oakland	1	2	2	0	1	
7/15/06 - Palo Alto	1	1	0	0	0	0
Total	8	29	21	5	2	1
%	12%	44%	32%	8%	3%	2%

When humans interfere with coastal environments, it often produces disastrous consequences.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Don't know
5/19/06	0	0	6	7	5	1
5/26/06	1	2	1	7	3	0
6/17/06	0	1	2	5	4	0
6/20/06	0	0	2	3	1	1
6/24/06	0	1	0	0	0	0
7/8/06	0	0	0	2	3	0
7/15/06 - Oakland	0	0	1	1	3	1
7/15/06 - Palo Alto	0	0	0	2	0	0
Total	1	4	12	27	19	3
%	2%	6%	18%	41%	29%	5%

The coastal environment is strong enough to cope with the impacts of modern society.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Don't know
5/19/06	5	11	2	0	0	1
5/26/06	6	8	0	0	0	0
6/17/06	3	8	0	1	0	0
6/20/06	1	4	1	0	0	1
6/24/06	1	0	0	0	0	0
7/8/06	2	1	0	1	0	1
7/15/06 - Oakland	1	4	1	0	0	0
7/15/06 - Palo Alto	2	0	0	0	0	0
Total	21	36	4	2	0	3
%	32%	55%	6%	3%	0%	5%

Some negative impacts to the Bay are acceptable in exchange for some benefits to society.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Don't know
5/19/06	1	6	6	6	0	0
5/26/06	0	6	4	4	0	0
6/17/06	2	1	4	5	0	0
6/20/06	0	1	3	3	0	0
6/24/06	0	0	1	0	0	0
7/8/06	0	2	1	1	0	1
7/15/06 - Oakland	4	0	0	1	0	1
7/15/06 - Palo Alto	1	1	0	0	0	0
Total	8	17	19	20	0	2
%	12%	26%	29%	30%	0%	3%

Isolated restoration projects will significantly improve the overall quality of the Bay.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Don't know
5/19/06	0	4	3	8	1	3
5/26/06	0	1	3	3	6	1
6/17/06	0	1	3	6	1	1
6/20/06	0	0	1	4	0	2
6/24/06	0	0	0	1	0	0
7/8/06	0	1	1	3	0	0
7/15/06 - Oakland	0	0	0	3	1	2
7/15/06 - Palo Alto	0	0	0	1	1	0
Total	0	7	11	29	10	9
%	0%	11%	17%	44%	15%	14%

The ecological nature of the coastal environment is very delicate or easily upset.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Don't know
5/19/06	0	1	2	10	4	2
5/26/06	0	1	0	9	4	0
6/17/06	0	1	2	2	6	1
6/20/06	0	0	1	3	2	1
6/24/06	0	0	0	1	0	0
7/8/06	0	0	1	2	2	0
7/15/06 - Oakland	0	0	0	3	3	0
7/15/06 - Palo Alto	0	0	0	1	1	0
Total	0	3	6	31	22	4
%	0%	5%	9%	47%	33%	6%

Humans are severely abusing the coastal environment.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Don't know
5/19/06	0	0	3	11	3	2
5/26/06	0	0	4	5	4	1
6/17/06	0	1	0	8	2	1
6/20/06	0	0	2	3	1	1
6/24/06	0	0	0	1	0	0
7/8/06	1	0	1	1	2	0
7/15/06 - Oakland	0	0	0	3	3	0
7/15/06 - Palo Alto	0	0	0	0	2	0
Total	1	1	10	32	17	5
%	2%	2%	15%	48%	26%	8%

Nature will restore our coastal environment; there is no need to do restoration work.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Don't know
5/19/06	6	12	0	0	0	1
5/26/06	6	7	1	0	0	0
6/17/06	8	3	0	1	0	0
6/20/06	1	5	0	0	0	1
6/24/06	1	0	0	0	0	0
7/8/06	3	1	1	0	0	0
7/15/06 - Oakland	3	3	0	0	0	0

7/15/06 - Palo Alto	2	0	0	0	0	0
Total	30	31	2	1	0	2
%	45%	47%	3%	2%	0%	3%

Restoration activities are only a short-term, temporary solution.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Don't know
5/19/06	2	5	5	4	2	1
5/26/06	2	2	6	3	0	1
6/17/06	2	6	1	1	1	1
6/20/06	0	4	0	1	1	1
6/24/06	1	0	0	0	0	0
7/8/06	0	3	1	1	0	0
7/15/06 - Oakland	1	1	0	2	1	1
7/15/06 - Palo Alto	1	1	0	0	0	0
Total	9	22	13	12	5	5
%	14%	33%	20%	18%	8%	8%

Protecting Bay habitats is as important as restoring them.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Don't know
5/19/06	0	0	0	10	9	0
5/26/06	0	0	1	5	8	0
6/17/06	0	1	0	3	8	0
6/20/06	0	0	1	5	1	0
6/24/06	0	0	0	0	1	0
7/8/06	0	0	0	1	4	0
7/15/06 - Oakland	0	0	0	3	3	0
7/15/06 - Palo Alto	0	0	0	1	1	0
Total	0	1	2	28	35	0
%	0%	2%	3%	42%	53%	0%

Humans have an obligation to leave coastal environments in a better condition for future generations.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Don't know
5/19/06	0	0	1	10	7	1
5/26/06	0	0	0	5	9	0
6/17/06	1	1	0	3	6	1
6/20/06	1	0	3	1	2	0
6/24/06	0	0	0	0	1	0
7/8/06	0	0	0	2	3	0
7/15/06 - Oakland	0	0	0	3	3	0
7/15/06 - Palo Alto	0	0	0	1	1	0
Total	2	1	4	25	32	2
%	3%	2%	6%	38%	48%	3%

People can appreciate the Bay without spending time on or around it.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Don't know
5/19/06	0	6	5	7	1	0
5/26/06	0	4	5	3	2	0
6/17/06	0	4	3	2	2	1
6/20/06	1	3	2	0	1	0

6/24/06	0	0	1	0	0	0
7/8/06	0	1	1	3	0	0
7/15/06 - Oakland	0	3	1	0	1	1
7/15/06 - Palo Alto	0	1	0	1	0	0
Total	1	22	18	16	7	2
%	2%	33%	27%	24%	11%	3%

Working together, we can improve the quality of the Bay.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Don't know
5/19/06	0	0	0	12	6	1
5/26/06	0	0	0	7	7	0
6/17/06	1	0	0	6	5	0
6/20/06	0	0	0	4	3	0
6/24/06	0	0	0	0	1	0
7/8/06	0	0	0	3	2	0
7/15/06 - Oakland	0	0	1	2	3	0
7/15/06 - Palo Alto	0	0	0	1	1	0
Total	1	0	1	35	28	1
%	2%	0%	2%	53%	42%	2%

I make a positive impact on the health of the Bay.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Don't know
5/19/06	0	1	5	10	1	2
5/26/06	0	1	4	5	3	1
6/17/06	0	2	0	6	2	2
6/20/06	0	2	3	1	0	1
6/24/06	0	0	0	0	1	0
7/8/06	0	0	0	4	1	0
7/15/06 - Oakland	0	0	2	5	0	0
7/15/06 - Palo Alto	0	0	0	2	0	0
Total	0	6	14	33	8	6
%	0%	9%	21%	49%	12%	9%

I can take more personal responsibility for protecting Bay habitats.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Don't know
5/19/06	0	1	4	9	4	1
5/26/06	0	0	2	7	5	0
6/17/06	0	2	0	6	3	1
6/20/06	0	0	1	5	1	0
6/24/06	0	0	0	0	1	0
7/8/06	0	0	0	3	2	0
7/15/06 - Oakland	0	0	1	4	1	0
7/15/06 - Palo Alto	0	0	0	1	1	0
Total	0	3	8	35	18	2
%	0%	5%	12%	53%	27%	3%

8. How close do you live to the Bay?

Total responses: 64

Miles	Frequency	%
0-5	35	54.7%

6-10	12	18.8%
11-15	3	4.7%
16-20	8	12.5%
21-30	3	4.7%
31+	3	4.7%

Additional responses: "close" and "don't know"

ACTIONS / BEHAVIORS

9. In the following items, please indicate how often you do each of the following.

Recycle newspapers, cans, or bottles	Never	Almost Never	Sometimes	Almost Always	Always	N/A
5/19/06	0	0	5	4	10	0
5/26/06	0	0	2	3	8	0
6/17/06	0	0	1	2	9	0
6/20/06	0	0	1	2	4	0
6/24/06	0	0	0	1	0	0
7/8/06	0	0	1	2	2	0
7/15/06 - Oakland	0	0	0	0	5	0
7/15/06 - Palo Alto	0	0	0	0	2	0
Total	0	0	10	14	40	0
%	0%	0%	16%	22%	63%	0%

Refrain from littering	Never	Almost Never	Sometimes	Almost Always	Always	N/A
5/19/06	0	0	1	4	14	0
5/26/06	0	0	1	2	9	1
6/17/06	0	0	0	2	10	0
6/20/06	0	0	0	0	7	0
6/24/06	0	0	0	0	1	0
7/8/06	0	0	1	1	3	0
7/15/06 - Oakland	0	0	0	1	4	0
7/15/06 - Palo Alto	0	0	0	0	2	0
Total	0	0	3	10	50	1
%	0%	0%	5%	16%	78%	2%

Pick up litter that is not your own	Never	Almost Never	Sometimes	Almost Always	Always	N/A
5/19/06	0	2	15	1	1	0
5/26/06	0	0	9	4	0	0
6/17/06	0	1	5	4	2	0
6/20/06	0	1	5	0	1	0
6/24/06	0	0	0	1	0	0
7/8/06	1	0	1	2	1	0
7/15/06 - Oakland	0	1	2	2	0	0
7/15/06 - Palo Alto	0	0	1	0	1	0
Total	1	5	38	14	6	0
%	2%	8%	59%	22%	9%	0%

Encourage others to do environment-friendly activities

	Never	Almost Never	Sometimes	Almost Always	Always	N/A
5/19/06	0	4	14	1	0	0
5/26/06	0	1	7	4	1	0
6/17/06	0	2	5	4	1	0
6/20/06	0	3	3	1	0	0
6/24/06	0	0	0	0	1	0
7/8/06	1	0	1	2	1	0
7/15/06 - Oakland	0	1	2	2	0	0
7/15/06 - Palo Alto	0	1	1	0	0	0
Total	1	12	33	14	4	0
%	2%	19%	52%	22%	6%	0%

Walk, bike, carpool, or take public transportation to work or to run errands

	Never	Almost Never	Sometimes	Almost Always	Always	N/A
5/19/06	0	4	12	2	1	0
5/26/06	0	5	6	1	1	0
6/17/06	0	4	4	4	0	0
6/20/06	1	1	3	1	1	0
6/24/06	0	0	1	0	0	0
7/8/06	0	1	3	1	0	0
7/15/06 - Oakland	0	1	1	2	0	0
7/15/06 - Palo Alto	0	1	0	1	0	0
Total	1	17	30	12	3	0
%	2%	27%	48%	19%	5%	0%

Drive a hybrid efficient car

	Never	Almost Never	Sometimes	Almost Always	Always	N/A
5/19/06	12	5	1	0	1	0
5/26/06	7	3	0	0	2	1
6/17/06	9	0	0	1	2	0
6/20/06	7	0	0	0	0	0
6/24/06	0	0	1	0	0	0
7/8/06	3	0	0	1	0	0
7/15/06 - Oakland	2	1	0	0	0	2
7/15/06 - Palo Alto	1	0	0	0	0	1
Total	41	9	2	2	5	4
%	65%	14%	3%	3%	8%	6%

Dispose of used motor oil at approved sites, e.g. Jiffy Lube

	Never	Almost Never	Sometimes	Almost Always	Always	N/A
5/19/06	1	2	2	2	9	3
5/26/06	0	0	0	2	10	1
6/17/06	0	0	1	1	9	1
6/20/06	1	0	0	0	5	1
6/24/06	0	0	0	0	1	0
7/8/06	2	0	0	1	2	0
7/15/06 - Oakland	1	0	0	0	3	1

7/15/06 - Palo Alto	0	0	0	0	1	1
Total	5	2	3	6	40	8
%	8%	3%	5%	9%	63%	13%

Turn off water instead of letting it run while brushing my teeth

	Never	Almost Never	Sometimes	Almost Always	Always	N/A
5/19/06	1	1	7	6	4	0
5/26/06	0	0	0	5	8	0
6/17/06	1	0	2	5	4	0
6/20/06	1	0	1	0	5	0
6/24/06	0	0	0	1	0	0
7/8/06	0	0	0	2	3	0
7/15/06 - Oakland	0	0	1	2	2	0
7/15/06 - Palo Alto	0	0	0	0	2	0
Total	3	1	11	21	28	0
%	5%	2%	17%	33%	44%	0%

Buy products that are environmentally-friendly

	Never	Almost Never	Sometimes	Almost Always	Always	N/A
5/19/06	0	0	12	7	0	0
5/26/06	0	0	11	1	1	0
6/17/06	0	0	7	3	2	0
6/20/06	0	0	5	1	0	1
6/24/06	0	0	0	1	0	0
7/8/06	0	0	3	0	2	0
7/15/06 - Oakland	0	0	3	1	1	0
7/15/06 - Palo Alto	0	0	2	0	0	0
Total	0	0	43	14	6	1
%	0%	0%	67%	22%	9%	2%

Buy recycled products

	Never	Almost Never	Sometimes	Almost Always	Always	N/A
5/19/06	0	1	16	2	0	0
5/26/06	0	0	11	1	1	0
6/17/06	0	1	7	2	2	0
6/20/06	0	1	5	1	0	0
6/24/06	0	0	0	1	0	0
7/8/06	0	0	3	0	2	0
7/15/06 - Oakland	0	1	3	1	0	0
7/15/06 - Palo Alto	0	0	2	0	0	0
Total	0	4	47	8	5	0
%	0%	6%	73%	13%	8%	0%

Use low-wattage, energy-efficient light bulbs

	Never	Almost Never	Sometimes	Almost Always	Always	N/A
5/19/06	0	2	7	9	1	0
5/26/06	0	0	5	4	4	0
6/17/06	1	1	3	5	2	0
6/20/06	0	0	1	3	3	0
6/24/06	0	0	0	1	0	0

7/8/06	0	0	4	0	1	0
7/15/06 - Oakland	0	0	2	3	0	0
7/15/06 - Palo Alto	0	0	2	0	0	0
Total	1	3	24	25	11	0
%	2%	5%	38%	39%	17%	0%

Adhere to fishing, boating and hunting laws	Never	Almost Never	Sometimes	Almost Always	Always	N/A
5/19/06	0	0	0	2	9	8
5/26/06	0	0	0	1	7	5
6/17/06	1	0	0	1	4	6
6/20/06	0	0	0	0	2	5
6/24/06	0	0	0	1	0	0
7/8/06	0	0	0	0	2	3
7/15/06 - Oakland	0	0	1	0	1	3
7/15/06 - Palo Alto	0	0	0	0	0	2
Total	1	0	1	5	25	32
%	2%	0%	2%	8%	39%	50%

Contribute money to an environmental group	Never	Almost Never	Sometimes	Almost Always	Always	N/A
5/19/06	3	5	9	0	2	0
5/26/06	0	2	1	7	2	1
6/17/06	0	0	6	5	1	0
6/20/06	4	1	1	0	0	1
6/24/06	0	0	0	1	0	0
7/8/06	1	0	0	1	3	0
7/15/06 - Oakland	0	1	4	0	0	0
7/15/06 - Palo Alto	1	0	0	0	1	0
Total	9	9	21	14	9	2
%	14%	14%	33%	22%	14%	3%

Participate in public meetings on environmental issues	Never	Almost Never	Sometimes	Almost Always	Always	N/A
5/19/06	7	8	4	0	0	0
5/26/06	3	6	4	0	0	0
6/17/06	1	4	5	0	2	0
6/20/06	3	2	1	0	0	1
6/24/06	0	0	1	0	0	0
7/8/06	1	1	2	0	1	0
7/15/06 - Oakland	2	1	1	0	0	1
7/15/06 - Palo Alto	2	0	0	0	0	0
Total	19	22	18	0	3	2
%	30%	34%	28%	0%	5%	3%

Follow local environmental issues	Never	Almost Never	Sometimes	Almost Always	Always	N/A
5/19/06	0	4	12	2	1	0
5/26/06	0	0	12	1	0	0

6/17/06	0	0	5	4	3	0
6/20/06	1	2	3	1	0	0
6/24/06	0	0	0	1	0	0
7/8/06	1	0	1	2	1	0
7/15/06 - Oakland	0	1	2	2	0	0
7/15/06 - Palo Alto	1	1	0	0	0	0
Total	3	8	35	13	5	0
%	5%	13%	55%	20%	8%	0%

BARRIERS

10. Thinking about the activities listed above, to what extent do you agree or disagree with each of the following as reasons for preventing you from acting pro-environmentally?

I think acting pro-environmentally costs too much

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
5/19/06	3	12	4	-	-
5/26/06	1	5	6	1	-
6/17/06	6	4	1	1	-
6/20/06	1	5	1	-	-
6/24/06	1	-	-	-	-
7/8/06	3	1	1	-	-
7/15/06 - Oakland	1	2	-	2	-
7/15/06 - Palo Alto	1	-	-	1	-
Total	17	29	13	5	-
%	27%	45%	20%	8%	0%

I don't always know how to behave pro-environmentally

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
5/19/06	-	5	6	8	-
5/26/06	-	2	6	5	-
6/17/06	-	4	8	-	-
6/20/06	-	2	1	3	1
6/24/06	1	-	-	-	-
7/8/06	1	1	2	1	-
7/15/06 - Oakland	-	3	-	2	-
7/15/06 - Palo Alto	-	-	-	2	-
Total	2	17	23	21	1
%	3%	27%	36%	33%	2%

I am not really concerned about trying to act pro-environmentally

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
5/19/06	3	10	6	-	-
5/26/06	2	9	1	1	-
6/17/06	5	7	-	-	-
6/20/06	1	5	1	-	-
6/24/06	1	-	-	-	-
7/8/06	2	1	1	1	-
7/15/06 - Oakland	1	2	2	-	-
7/15/06 - Palo Alto	1	1	-	-	-
Total	16	35	11	2	-

%	25%	55%	17%	3%	0%
Acting pro-environmentally is inconvenient	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
5/19/06	1	9	7	2	-
5/26/06	1	5	5	2	-
6/17/06	4	5	2	1	-
6/20/06	-	1	5	1	-
6/24/06	1	1	-	-	-
7/8/06	1	-	2	-	-
7/15/06 - Oakland	1	3	2	-	-
7/15/06 - Palo Alto	1	1	-	-	-
Total	10	25	23	6	-
%	16%	39%	36%	9%	0%

I don't have time to volunteer for environmental projects	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
5/19/06	-	8	5	5	1
5/26/06	-	2	7	4	-
6/17/06	-	7	3	2	-
6/20/06	-	2	2	3	-
6/24/06	1	-	-	-	-
7/8/06	3	-	1	1	-
7/15/06 - Oakland	-	3	2	-	-
7/15/06 - Palo Alto	-	1	1	-	-
Total	4	23	21	15	1
%	6%	36%	33%	23%	2%

I'm not sure who to contact to volunteer for environmental causes	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
5/19/06	1	4	7	6	1
5/26/06	-	6	4	3	-
6/17/06	2	3	6	1	-
6/20/06	-	4	2	1	-
6/24/06	1	-	-	-	-
7/8/06	3	-	-	1	1
7/15/06 - Oakland	1	3	1	-	-
7/15/06 - Palo Alto	-	1	1	-	-
Total	8	21	21	12	2
%	13%	33%	33%	19%	3%

I don't know where to find information about how to behave pro-environmentally	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
5/19/06	1	10	6	2	-
5/26/06	1	6	5	1	-
6/17/06	1	5	5	1	-
6/20/06	-	4	2	1	-
6/24/06	1	-	-	-	-
7/8/06	3	-	1	1	-

7/15/06 - Oakland	1	3	1	-	-
7/15/06 - Palo Alto	-	1	1	-	-
Total	8	29	21	6	-
%	13%	45%	33%	9%	0%

11. Are you...

Total responses: 63

	Male	Female
5/19/06	14	5
5/26/06	7	6
6/17/06	7	5
6/20/06	3	4
6/24/06	0	1
7/8/06	0	5
7/15/06 - Oakland	0	5
7/15/06 - Pal Alto	0	1
Total	31	32
%	49%	51%

12. Highest Level of Education

Total responses: 63

	12th grade or less	High School	Some college	College	Post grad
5/19/06	0	1	1	9	8
5/26/06	0	0	3	7	3
6/17/06	0	0	0	2	10
6/20/06	0	0	1	4	2
6/24/06	0	0	0	1	0
7/8/06	2	0	0	1	2
7/15/06 - Oakland	1	0	1	1	2
7/15/06 - Pal Alto	0	0	0	1	0
Total	3	1	6	26	27
%	5%	2%	10%	41%	43%

13. Do you live in the SF Bay Watershed?

Total responses: 63

	Yes	No	I don't know
5/19/06	6	3	10
5/26/06	3	3	7
6/17/06	7	2	3
6/20/06	1	2	4
6/24/06	1	0	0
7/8/06	2	2	1
7/15/06 - Oakland	0	1	4
7/15/06 - Pal Alto	1	0	0
Total	21	13	29
%	33%	21%	46%

14. May we contact you in a month for a brief follow-up about your experience?

Total responses: 63

	Yes	No
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5/19/06	11	8
5/26/06	8	5
6/17/06	7	5
6/20/06	3	4
6/24/06	1	0
7/8/06	3	2
7/15/06 - Oakland	4	1
7/15/06 - Palo Alto	1	0
Total	38	25
%	60%	40%

16. How old are you?

Total responses: 63

Range	Frequen cy	%
0-25	7	11%
26-35	28	44%
36-45	11	17%
46-55	8	13%
56 - 65	8	13%
66+	1	2%
	63	100%

Table II: Pre- / Post- Survey Comparisons**Are you a member of Save The Bay?** (Pre and Post – 16 responses)

	Yes	%	No	%
PRE	2	13%	14	88%
POST	2	13%	14	88%

MOTIVATIONS (Pre and Post – 16 responses)

Please indicate how important each item is to you as a reason to participate in local restoration.

Motivation Statements		Not at all	Slightly	Moderately	Very	Extremely
To be Outdoors						
PRE		0%	6%	19%	38%	38%
POST		6%	13%	25%	38%	19%
To be with friends						
PRE		19%	25%	38%	19%	0%
POST		13%	19%	44%	19%	6%
To return part of the coast to its proper condition						
PRE		6%	6%	19%	25%	44%
POST		0%	0%	13%	56%	31%
To improve the area for wildlife/other species						
PRE		0%	6%	6%	50%	38%
POST		0%	0%	6%	69%	25%
To do something positive for future generations						
PRE		0%	0%	19%	38%	44%
POST		0%	6%	6%	63%	25%
To learn about the natural environment						
PRE		0%	19%	25%	31%	25%
POST		0%	19%	25%	56%	0%
To experience something new						
PRE		6%	19%	31%	25%	19%
POST		6%	6%	63%	13%	13%
To prevent a larger ecological crisis						
PRE		0%	13%	6%	31%	50%
POST		0%	6%	31%	25%	38%
To feel empowered to make a difference						
PRE		0%	38%	6%	44%	13%
POST		6%	6%	31%	44%	13%
To make the area more useful for other human uses						
PRE		19%	13%	44%	19%	6%
POST		19%	31%	38%	13%	0%
It's the right thing to do						
PRE		0%	19%	0%	50%	31%
POST		6%	0%	19%	44%	31%

Beliefs about the Coastal Environment (Pre and Post – 16 responses)

Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Don't Know
Humans have the right to modify the coastal environment to suit their needs.						
PRE	0%	44%	44%	6%	6%	0%
POST	0%	38%	44%	0%	6%	13%
When humans interfere with coastal environments, it often produces disastrous consequences.						
PRE	0%	0%	31%	31%	31%	6%
POST	0%	0%	25%	38%	38%	0%
The coastal environment is strong enough to cope with the impacts of modern society.						
PRE	38%	56%	6%	0%	0%	0%
POST	31%	56%	6%	0%	0%	6%
Some negative impacts to the Bay are acceptable in exchange for some benefits to society.						
PRE	6%	31%	25%	31%	0%	6%
POST	0%	31%	25%	38%	6%	0%
Isolated restoration projects will significantly improve the overall quality of the Bay.						
PRE	0%	6%	6%	50%	6%	31%
POST	0%	0%	31%	44%	13%	13%
The ecological nature of the coastal environment is very delicate or easily upset.						
PRE	0%	0%	0%	56%	44%	0%
POST	0%	0%	6%	63%	31%	0%
Humans are severely abusing the coastal environment.						
PRE	0%	0%	13%	44%	25%	19%
POST	0%	6%	13%	25%	50%	6%
Nature will restore our coastal environment; there is no need to do restoration work.						
PRE	50%	44%	0%	0%	0%	6%
POST	50%	44%	6%	0%	0%	0%
Restoration activities are only a short-term, temporary solution.						
PRE	13%	25%	0%	25%	13%	25%
POST	0%	38%	31%	25%	6%	0%
Protecting Bay habitats is as important as restoring them.						
PRE	0%	0%	6%	31%	63%	0%
POST	0%	0%	0%	44%	56%	0%
Humans have an obligation to leave coastal environments in a better condition for future generations.						
PRE	6%	0%	13%	38%	31%	13%
POST	0%	0%	6%	44%	50%	0%
People can appreciate the Bay without spending time on or around it.						
PRE	6%	25%	19%	31%	6%	13%
POST	6%	19%	31%	31%	6%	6%
Working together, we can improve the quality of the Bay.						
PRE	0%	0%	0%	31%	63%	6%
POST	0%	0%	6%	44%	50%	0%
I make a positive impact on the health of the Bay.						
PRE	0%	6%	19%	50%	6%	19%
POST	0%	0%	44%	44%	13%	0%
I can take more personal responsibility for protecting Bay habitats.						
PRE	0%	0%	6%	56%	31%	6%
POST	0%	0%	19%	75%	6%	0%

ACTIONS (Pre and Post – 16 responses)

Eco-friendly action statements		Never	Almost Never	Sometimes	Almost Always	Always
Recycle newspapers, cans, or bottles						
	PRE	0%	0%	6%	25%	69%
	POST	0%	0%	6%	19%	75%
Refrain from littering						
	PRE	0%	0%	0%	6%	94%
	POST	0%	0%	0%	6%	94%
Pick up litter that is not your own						
	PRE	0%	6%	69%	19%	6%
	POST	0%	0%	69%	25%	6%
Encourage others to do environment-friendly activities						
	PRE	0%	38%	50%	13%	0%
	POST	0%	25%	56%	19%	0%
Walk, bike, carpool, or take public transportation to work or to run errands						
	PRE	0%	19%	56%	13%	6%
	POST	13%	25%	25%	31%	6%
Drive a hybrid efficient car						
	PRE	69%	6%	0%	0%	13%
	POST	63%	13%	6%	6%	6%
Dispose of used motor oil at approved sites, e.g. Jiffy Lube						
	PRE	0%	0%	6%	0%	88%
	POST	0%	0%	0%	0%	88%
Turn off water instead of letting it run while brushing my teeth						
	PRE	6%	0%	6%	38%	50%
	POST	0%	13%	6%	19%	63%
Buy products that are environmentally-friendly						
	PRE	0%	0%	69%	25%	6%
	POST	0%	0%	50%	44%	6%
Buy recycled products						
	PRE	0%	0%	81%	13%	6%
	POST	0%	0%	75%	19%	6%
Use low-wattage, energy-efficient light bulbs						
	PRE	0%	6%	50%	19%	25%
	POST	0%	6%	38%	25%	31%
Adhere to fishing, boating and hunting laws						
	PRE	0%	0%	0%	0%	44%
	POST	0%	0%	0%	0%	31%
Contribute money to an environmental group						
	PRE	6%	25%	38%	6%	25%
	POST	13%	19%	44%	6%	19%
Participate (as a volunteer) in public meetings on environmental issues						
	PRE	44%	38%	19%	0%	0%
	POST	25%	63%	13%	0%	0%
Follow local environmental issues						
	PRE	0%	19%	63%	19%	0%
	POST	0%	19%	63%	13%	6%

BARRIERS (Pre and Post – 16 responses)

Statements		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I think acting pro-environmentally costs too much						
	PRE	44%	31%	19%	6%	0%
	POST	25%	56%	13%	6%	0%
I don't always know how to behave pro-environmentally						
	PRE	0%	31%	6%	56%	6%
	POST	0%	25%	19%	50%	6%
I am not really concerned about trying to act pro-environmentally						
	PRE	44%	44%	13%	0%	0%
	POST	25%	69%	6%	0%	0%
Acting pro-environmentally is inconvenient						
	PRE	25%	13%	50%	13%	0%
	POST	0%	50%	25%	25%	0%
I don't have time to volunteer for environmental projects						
	PRE	6%	38%	31%	25%	0%
	POST	6%	31%	50%	13%	0%
I'm not sure who to contact to volunteer for environmental causes						
	PRE	19%	31%	25%	25%	0%
	POST	6%	50%	31%	13%	0%
I don't know where to find information about how to behave pro-environmentally						
	PRE	19%	44%	25%	13%	0%
	POST	13%	44%	25%	19%	0%