

Water Use Efficiency Application

Section A: Urban Water Use Efficiency Implementation Projects

Water Efficient Landscaping

Submitted By



A Supportive Housing Community

2004 Water Use Efficiency Proposal Solicitation Package

APPENDIX A: Project Information Form

Applying for:

Urban

Agricultural

1. (Section A) **Urban or Agricultural Water Use Efficiency Implementation Project**

- (a) implementation of Urban Best Management Practice, # v. , iv.
- (b) implementation of Agricultural Efficient Water Management Practice, # _____
- (c) implementation of other projects to meet California Bay-Delta Program objectives, Targeted Benefit # or Quantifiable Objective #, if applicable _____
- (d) Specify other: _____

2. (Section B) **Urban or Agricultural Research and Development; Feasibility Studies, Pilot, or Demonstration Projects; Training, Education or Public Information; Technical Assistance**

- (e) research and development, feasibility studies, pilot, or demonstration projects
- (f) training, education or public information programs with statewide application
- (g) technical assistance
- (h) other

3. Principal applicant (Organization or affiliation):

Alameda Point Collaborative

4. Project Title:

Water Efficient Landscaping

5. Person authorized to sign and submit proposal and contract:

Name, title	John N. Shepherd, Exec. Dir.
Mailing address	677 W. Ranger Ave.
	Alameda, CA 94501
Telephone	(510)898-7800
Fax.	(510)898-7858
E-mail	jshepherd@apcollaborative.org

6. Contact person (if different):	Name, title.	Doug Biggs
	Mailing address.	677 W. Ranger Ave.
		Alameda, CA 94501
	Telephone	(510)898-7800
	Fax.	(510)898-7858
	E-mail	dbiggs@apcollaborative.org

7. Grant funds requested (dollar amount): **\$792,000**
(from Table C-1, column VI)

8. Applicant funds pledged (dollar amount):

9. Total project costs (dollar amount): **\$792,000**
(from Table C-1, column IV, row n)

10. Percent of State share requested (%): **100**
(from Table C-1)

11. Percent of local share as match (%): **0 (disadvantaged community)**
(from Table C-1)

12. Is your project locally cost effective?
Locally cost effective means that the benefits to an entity (in dollar terms) of implementing a program exceed the costs of that program within the boundaries of that entity.
(If yes, provide information that the project in addition to Bay-Delta benefit meets one of the following conditions: broad transferable benefits, overcome implementation barriers, or accelerate implementation.)

(a) yes
 (b) no

11. Is your project required by regulation, law or contract?
 If no, your project is eligible.
 If yes, your project may be eligible only if there will be accelerated implementation to fulfill a future requirement and is not currently required.
Provide a description of the regulation, law or contract and an explanation of why the project is not currently required.

(a) yes
 (b) no

12. Duration of project (month/year to month/year):	01/06 to 03/07
13. State Assembly District where the project is to be conducted:	16th District
14. State Senate District where the project is to be conducted:	9th District
15. Congressional district(s) where the project is to be conducted:	13th District
16. County where the project is to be conducted:	Alameda
17. Location of project (longitude and latitude)	37n47.10, 122w17.45
18. How many service connections in your service area (urban)?	200
19. How many acre-feet of water per year does your agency serve?	N/A

20. Type of applicant (select one):
- (a) City
 - (b) County
 - (c) City and County
 - (d) Joint Powers Authority
 - (e) Public Water District
 - (f) Tribe
 - (g) Non Profit Organization
 - (h) University, College
 - (i) State Agency
 - (j) Federal Agency
 - (k) Other
 - (i) Investor-Owned Utility
 - (ii) Incorporated Mutual Water Co.
 - (iii) Specify _____

21. Is applicant a disadvantaged community? If 'yes' include annual median household income.
- (a) yes, \$8,750 median household income
 - (b) no

(Provide supporting documentation.)

See attachment 1 for documentation

2004 Water Use Efficiency Proposal Solicitation Package
APPENDIX B: Signature Page

By signing below, the official declares the following:

The truthfulness of all representations in the proposal;

The individual signing the form has the legal authority to submit the proposal on behalf of the applicant;

There is no pending litigation that may impact the financial condition of the applicant or its ability to complete the proposed project;

The individual signing the form read and understood the conflict of interest and confidentiality section and waives any and all rights to privacy and confidentiality of the proposal on behalf of the applicant;

The applicant will comply with all terms and conditions identified in this PSP if selected for funding; and

The applicant has legal authority to enter into a contract with the State.

_____	<u>John N. Shepherd, Executive Director</u>	_____
Signature	Name and title	Date

A-15c. Statement of Work, Section 1: Relevance and Importance

The Alameda Point Collaborative is a supportive housing program, serving 500 very low-income formerly homeless families and individuals located on the grounds of the converted Alameda Naval Air Station. Supportive housing combines the stability of a place to live with life and job skills training, advocacy to connect with services, and emotional assistance, all with the ultimate goal of providing residents with the help needed for them to be able to lead a stable, productive life.

APC manages 200 units of housing on 34 acres of land. All of the land was developed and previously managed by the Navy. Twenty acres of open space surrounding the housing is conventional landscaping that one would expect at a military installation - large expanses of lawn that in the past was frequently mowed and trimmed, heavily fertilized and treated with pesticides. Irrigation of these areas is provided by a manually regulated, high-impact spray system, resulting in a lack of consistent control over water application.

APC proposes to implement a large-scale landscape conservation project to replace the existing landscaping and irrigation system throughout the property. The project will have three components. The first component will replace the current method of high impact sprinklers and manual irrigation with more efficient automated irrigation. The second component will replace the existing turf with drought tolerant, water efficient landscaping, following the Bay-Friendly landscaping guidelines developed by the Alameda County Waste Management Authority. The third component of the project will install landscape specific and residential water meters in order to better measure and control water use, and to diminish water loss in the event of leaks.

The proposed project will achieve multiple CALFED benefits by:

1. Decreasing the amount of water diverted from the Bay-Delta;
2. Reducing existing irrecoverable loss by decreasing the amount of water flowing into a degraded aquifer; and
3. Improving water quality by decreasing the amount of contaminated water flowing directly into San Francisco Bay.

The East Bay Municipal Utility District (EBMUD) provides water for the APC. The primary source for water is the Pardee Reservoir on the Mokelumne River, a tributary of the California Bay-Delta. In 2000, the average water usage at Alameda Point was .25 mgd. This includes water used by the Alameda Point Collaborative as well as other uses by the City of Alameda. The proposed project will decrease water diverted from the Mokelumne River for landscape irrigation from an estimated current usage of over 80 acre-feet of water per year to less than 20 acre-feet of water per year.

The APC is located on a federally designated superfund site, with groundwater that does not meet State or federal standards for use. Because of this, any excess water entering the aquifer is irretrievably lost. The project will diminish this loss by reducing the amount of water needed, and installing more efficient irrigation systems that utilize weather-based controls to reduce run-off.

Storm sewers in the project site flow directly to San Francisco Bay, emptying at one of three outfalls along the Oakland Inner Harbor. Storm water investigations done by the EPA as part of the environmental clean-up of the former base have documented the presence of TPH, benzene, toluene, ethylbenzene, and xylenes in run-off water. Hand watering and the utilization of low quality and inaccurate sprinkler systems often results in excess run-off into storm -sewers. The project will greatly reduce this run-off.

The project is consistent with EBMUD's Water Management Plan goal of reducing water demand by encouraging the use of water efficient landscaping. The project is also consistent with the City of Alameda's Water Conservation Ordinance, which calls for the use of 90% drought tolerant plantings in all new landscaping.



Source: City of Alameda, 2001

Project Location
Alameda Point Collaborative
Water Efficient Landscaping Project



Aerial View of Project Site (Outlined in Red) taken in Feb. 2004
Courtesy www.terra-server-usa.com

APC PROPERTIES



26 November 2002

Housing

 Housing Units

 Turf Areas to be Replaced with Water Efficient Landscaping

Community Services

 Multi-Service Center

Economic Development

 Industry and Warehouse

 Office



A-15d. Statement of Work, Section 2: Technical/Scientific Merit, Feasibility

The intent of the project is to provide water-conserving plantings and irrigation systems and water metering to approximately 20 acres of open space around residential housing, APC offices and several leased industrial buildings.

The project will consist of the replacement of the current manually regulated irrigation system with an automated water efficient system, planting of drought resistant plants and extensive sheet mulching, and the installation of water meters.

- Irrigation

A combination of ET controllers for the large landscape areas and apartment complexes and individually monitored automatic controllers with rain gauge functions for the single-family residences. Many APC residents are physically or mentally disabled. Installing automated controllers will relieve them of the burden of having to monitor their own watering.

- Planting

Turf areas will be greatly reduced. Turf will be limited to carefully selected common areas that currently enjoy heavy use and that residents use for recreation activities.

The remainder of the landscape will be re-designed with water-conserving plantings planned by exposure zones. The plant palette will be limited to climate-appropriate California native plants as well as plants from other compatible geographic areas and some edible landscaping as well.

Soil preparation and maintenance will include composting of organic debris removed from the site, the addition of site-produced organic compost to increase the water-holding properties of the existing sandy soil. Planting techniques will include extensive sheet-mulching to reduce evapotranspiration and to limit weed growth.

- Metering

Water meters and associated plumbing retrofits will be installed on each of the units in order to more effectively measure and control water use and to reduce water loss in the event of leaks. Currently, because of a lack of meters, leaks cannot be isolated, and water to entire blocks must be shut down at a main valve if there is a leak at a single unit. There is often a delay of hours to days in getting a utilities crew out to shut off the valve.

Task	Description of Deliverables	Schedule	FY06 Costs	FY07 Costs	Total Costs
1	Preparation of Irrigation Design Documents	1/06-3/06	\$ 28,000		\$ 28,000
2	Preparation of Planting Design Documents	2/06-4/06	\$ 19,000		\$ 19,000
3	Approvals and Bidding Process	4/06-6/06	\$ 11,750		\$ 11,750
4	Site Preparation	7/06-9/06		\$ 88,400	\$ 88,400
5	Installation of Irrigation System	9/06-11/06		\$ 55,250	\$ 55,250
6	Installation of Plants, Amendments and Mulching	11/07-01/07		\$ 465,800	\$ 465,800
7	Installation of Water Meters	2/07-3/07		\$ 123,800	\$ 123,800
		Total	\$ 58,750	\$ 733,250	\$ 792,000

The project is categorically exempt from CEQA under section 15304.

A-15e. Statement of Work, Section 3: Monitoring and Assessment

When the water system was first installed at what was then the Alameda Naval Air Station, no meters were installed that would enable the gathering of accurate pre-project water use. During the document preparation phase of the project, APC will gather information on current water usage for landscaping purposes by installing in-line temporary water gauges.

Pre-project and post project water use will be gathered over similar periods of time to determine the actual reduction in water usage. Changes in weather during the period, which would affect water needs, will be factored into the comparison.

Data will be made available to the DWR as part of the quarterly reporting, and annually for five years after the completion of the project. Information on the project and water savings will also be posted on the APC website at www.apcollaborative.org.

Consumer satisfaction is an important factor in the promotion and acceptance of water efficient landscaping. Resident satisfaction surveys will be conducted annually to gauge the level of acceptance of drought tolerant landscaping and any increase in awareness of the importance of water efficient landscaping.

A-15f. Qualifications of the Applicants and Cooperators

Project Managers for this project will be Georgia Madden of Feyerabend & Madden Landscape Design and David Widelock of Widelock Landscape Design. Feyerabend & Madden is known for site appropriate landscaping, and have presented at numerous landscaping forums and been featured on Home and Garden TV. Mr. Widelock has

designed and implemented many large-scale water efficient landscaping projects for various public and private agencies. Their resumes are attached.

APC has the capacity and a strong record of accomplishment of effectively undertaking infrastructure improvement projects that benefit our community. APC's first task as an organization was to renovate all 200 units of housing at a cost of \$10 million so that they could be occupied. The agency has since gone on to establish a thriving community garden, install playgrounds for the resident children, and renovate and lease out commercial space to generate revenue.

APC successfully completed a water efficient pilot project with funding provided by the Alameda Countywide Clean Water Program (ACCWP) Community Stewardship Project. The project demonstrated the utilization of permaculture principals in the design of water efficient landscaping. The experience gained in that project has helped to shape the concept for this water efficiency grant proposal.

APC is a supportive housing community serving the homeless, and thus qualifies as a disadvantaged community. We have 500 very low-income residents living in 200 units of housing, all of whom were homeless prior to coming to APC. Income is documented through tax records, pay stubs and entitlement documents at the time of enrollment, verified by APC and the records are kept on file. Based on these records, the median income of APC residents is 20% of the statewide annual median income per person, including government assistance. Current income and demographics for residents is included as Attachment 1.

A-15g. Outreach, Community Involvement, and Acceptance

Public outreach for the utilization of water efficient landscaping at APC began with the implementation of the ACCWP Community Stewardship Project. Design workshops were held to gather community input into project design of the pilot project, and a class was held to teach residents permaculture techniques for landscaping. Several residents have already begun to replace lawns with mulch and native plants.

In addition to water efficiency and water quality benefits mentioned in section A-15c, the project will also have substantial social benefits as well. The Alameda Point Collaborative, a non-profit organization, will save money because of the diminished use of water and staff time spent irrigating. These savings can help support important services to assist the formerly homeless residents of APC overcome homelessness and gain stability. A first source hiring agreement that APC has with the city will employ residents in 15% of the labor force needed for this job. In addition to economic benefit, disadvantaged residents will also gain valuable job skills through the installation of the landscaping and irrigation systems. We estimate that at least five formerly homeless residents will gain training and employment through this project.

All 500 formerly homeless residents will indirectly benefit through the beautification of their community. Given that more than 270 of our residents are youth under the age of 18, the project will help to bring about a generational change in the way that

landscaping is viewed and utilized, particularly in low-income communities. The realization that low maintenance water efficient landscaping can help enhance a community will help lead to its expanded use.

Over the next decade the area around APC will be developed with more than 2,500 units of housing. By setting the precedent for water efficient landscaping, APC will promote its use in surrounding neighborhoods as well.

A-15h. Innovation

The project will undertake a large water efficient landscaping benefiting a disadvantaged community and will be an important demonstration of the value of water efficient landscaping in low-income communities.

APC will utilize permaculture principals in the implementation of the project as a means of developing a sustainable landscape that is ecologically sound, and economically viable.

The project will hire and train disadvantaged residents within compliance with labor regulations and the first source hiring agreement with the City of Alameda. Materials and documentation developed as part of the training process will be of benefit to other organizations and agencies seeking to involve disadvantaged communities in the implementation of water efficiency projects.

A-15i. Benefits and Costs

The project will dramatically reduce water needs on approximately 20 acres of open space at APC. The space is currently cool season turf manually irrigated. Projected water savings were calculated utilizing the methodology in the Guide to Estimating Irrigation Water Needs of Landscape Plantings in California. Conservative calculations indicate that the project will save at least 60 acre feet of water per year or 600 acre feet of water over the 10 year life of the project.

Calculations of water savings were based on utilizing zone 1 (the lowest) evapotranspiration rates, and assuming no watering at all would be needed in January and February. Current irrigation efficiency is extremely low and was calculated at 40%. Often times sprinklers are left running when facilities staff are off duty and a large amount of water is wasted. The landscape coefficient of the post project landscaping was based on using a low species factor(.4), low planting density(1) - partly as a safety precaution to improve visibility, and an average microclimate(1).

Pre Project Water Use:

$ET_L = .8$ (cool season turfgrass coefficient) X 24" (ET_O -Rainfall) = 19.20 inches

871,200 sq. ft. x 19.20 inches/40% efficiency x .623 inches/gal = **26,052,365 gal/year**

Post Project Water Use:

$ET_L = .4$ (landscape coefficient) X 24" (ET_O -Rainfall) = 9.6 inches

871,200 sq. ft. x 9.6 inches/80% efficiency x .623 inches/gal = **6,513,091 gal/year**

Savings

26,052,365 gal - 6,513,091 gal = 19,539,274 gal/325,828 gal/AF = 60 AF/year

Because of the nature of the Navy installed water distribution system at Alameda Point, APC at the present does not pay any water bills. Once meters are installed APC will be expected to pay water costs, and will budget for this. Therefore the reduced water demand will result in potential savings of more than \$57,000 (based on current rate of \$2.21 per 100 cubic ft.) per year to the agency, which could be redirected into direct program services for the formerly homeless low income residents of APC. The Agency will also benefit from savings derived by the reduced personnel time that will need to be spent manually irrigating.

Additional Benefits

As was previously mentioned the Bay-Delta water quality will benefit by the reduced inflow of water into degraded groundwater, and the reduced run-off directly into the bay.

The training and employment of formerly homeless residents will provide economic benefits to participants as well as a societal savings due to the potential decrease in services needed by these residents.

The landscaping methodologies to be used will decrease the amount of green waste going into urban landfills by diverting it for use as mulch and compost on the site. An estimated 16,000 cubic yards of mulch will be required for the project.

Budget Narrative

Administrative costs have been included for project oversight and have been calculated based on .5 FTE for the APC Facilities Manager. APC will pay for any other administrative costs out of our general budget. Planning and Implementation Costs were calculated based on cost estimates prepared based on reasonable square footage costs for installation of landscaping and irrigation systems, including labor and materials. The equipment line item refers to the cost of installing meters, and is based on information provided by EBMUD.

Project Scalability

Full funding would provide the maximum benefits to Bay-Delta water quantity and quality, as well as having the most benefit to the impacted low-income community. In the event that only partial funding is available, the project is scalable. Each of the major components - metering, irrigation, and landscaping could be done as stand alone projects and still have beneficial outcomes. A more effective project scaling would be to do each of the project components over a portion of the project site rather than the entire 20 acres.

Applicant: Alameda Point Collaborative - Water Efficient Landscaping Project

THE TABLES ARE FORMATTED WITH FORMULAS: FILL IN THE SHADED AREAS ONLY

Section A projects must complete Life of investment, column VII and Capital Recovery Factor Column VIII. Do not use 0.

Table C-1: Project Costs (Budget) in Dollars

	Category (I)	Project Costs \$ (II)	Contingency % (ex. 5 or 10) (III)	Project Cost + Contingency \$ (IV)	Applicant Share \$ (V)	State Share Grant \$ (VI)	Life of investment (years) (VII)	Capital Recovery Factor (VIII)	Annualized Costs \$ (IX)
	Administration ¹								
	Salaries, wages	\$12,000	0	\$12,000	\$0	\$12,000	10	0.1359	\$1,631
	Fringe benefits	\$4,000	0	\$4,000	\$0	\$4,000	10	0.1359	\$544
	Supplies	\$0	0	\$0	\$0	\$0	10	0.1359	\$0
	Equipment	\$0	0	\$0	\$0	\$0	10	0.1359	\$0
	Consulting services	\$0	0	\$0	\$0	\$0	10	0.1359	\$0
	Travel	\$0	0	\$0	\$0	\$0	10	0.1359	\$0
	Other	\$0	0	\$0	\$0	\$0	10	0.1359	\$0
(a)	Total Administration Costs	\$16,000		\$16,000	\$0	\$16,000			\$2,174
(b)	Planning/Design/Engineering	\$46,000	0	\$46,000	\$0	\$46,000	0	0.1359	\$6,251
(c)	Equipment	\$120,000	0	\$120,000	\$0	\$120,000	10	0.1359	\$16,308
(d)	Materials/Installation/Implementation	\$570,000	0	\$570,000	\$0	\$570,000	10	0.1359	\$77,463
(e)	Implementation Verification	\$0	0	\$0	\$0	\$0	10	0.1359	\$0
(f)	Project Legal/License Fees	\$10,000	0	\$10,000	\$0	\$10,000	10	0.1359	\$1,359
(g)	Structures	\$0	0	\$0	\$0	\$0	10	0.1359	\$0
(h)	Land Purchase/Easement	\$0	0	\$0	\$0	\$0	10	0.1359	\$0
(i)	Environmental	\$0	0	\$0	\$0	\$0	10	0.1359	\$0
(j)	Construction	\$0	0	\$0	\$0	\$0	10	0.1359	\$0
(k)	Other (Specify)	\$0	0	\$0	\$0	\$0	10	0.1359	\$0
(l)	Monitoring and Assessment	\$25,000	0	\$25,000	\$0	\$25,000	10	0.1359	\$3,398
(m)	Report Preparation	\$5,000	0	\$5,000	\$0	\$5,000	10	0.1359	\$680
(n)	TOTAL	\$792,000		\$792,000	\$0	\$792,000			\$107,633
(o)	Cost Share -Percentage*				0	100			

* Cost share not required as APC is a disadvantaged community

1- excludes administration O&M.

Applicant: Alameda Point Collaborative - Water Efficient Landscaping Project

THE TABLES ARE FORMATTED WITH FORMULAS: FILL IN THE SHADED AREAS ONLY

Table C-2: Annual Operations and Maintenance Costs

Operations (1) (I)	Maintenance (II)	Other (III)	Total (IV) (I + II + III)
\$105,000	\$10,000	\$0	\$115,000

based on 2 FTE's for grounds

(1) Include annual O & M administration costs here.

Table C-3: Total Annual Project Costs

Annual Project Costs (1) (I)	Annual O&M Costs (2) (II)	Total Annual Project Costs (III) (I + II)
\$107,633	\$115,000	\$222,633

(1) From Table C-1, row (n) column (IX)

(2) From Table C-2, column (IV)

Applicant: Alameda Point Collaborative - Water Efficient Landscaping Project

THE TABLES ARE FORMATTED WITH FORMULAS: FILL IN THE SHADED AREAS ONLY

Table C-5 Project Annual Physical Benefits (Quantitative and Qualitative Description of Benefits)

	Qualitative Description - Required of all applicants ¹				Quantitative Benefits - where data are available ²
	Description of physical benefits (in-stream flow and timing, water quantity and water quality) for:	Time pattern and Location of Benefit	Project Life: Duration of Benefits	State Why Project Bay Delta benefit is Direct ³ Indirect ⁴ or Both	Quantified Benefits (in-stream flow and timing, water quantity and water quality)
Bay Delta	The project will decrease the amount of water irrecoverably removed from the Bay Delta by at least 600 acre feet over the life of the project.	The location of the benefit will be EBMUD's water source at Pardee Reservoir on the Mokelumne River. The Benefit will occur year round commencing Jan. 07.	10 years	This is a direct benefit to the Bay Delta as it will increase water quantity to the Bay Delta.	600 acre feet of water
	The project will decrease the amount of stormwater and groundwater contamination that flows directly into the Bay.	The location of the benefit will be the San Francisco Bay, specifically the Oakland Estuary. The Benefit will occur year round commencing Jan. 07.	10 years	This is a direct benefit to the Bay Delta as it will improve water quality of San Francisco Bay.	Comparable projects have reduced runoff by more than 40%. APC will access data from the Navy and EPA who currently monitor stormwater runoff to determine change in stormwater runoff quantity and quality as a result of the project.

Qualitative Description - Required of all applicants ¹				Quantitative Benefits - where data are available ²
	Description of physical benefits (in-stream flow and timing, water quantity and water quality) for:	Time pattern and Location of Benefit	Project Life: Duration of Benefits	State Why Project Bay Delta benefit is Direct ³ Indirect ⁴ or Both
Local	<p>By reducing the amount of water used, the project will reduce the price the agency will be required to pay for water.</p> <p>The agency will save the cost of staff required for manual irrigation.</p> <p>The project will provide job training and employment opportunities for very low-income formerly homeless residents of APC.</p>	<p>Ongoing, beginning at a time to be determined.</p> <p>Ongoing, once project completed.</p> <p>The benefit will occur during construction phases of the project with the possibility of permanent employment afterwards at either APC, with the contractors or with other companies.</p>	<p>Indefinite</p> <p>Indefinite</p> <p>1 year for training, indefinite for follow-on employment</p>	<p>Quantified Benefits (in-stream flow and timing, water quantity and water quality)</p> <p>\$57,000 per year at current rates.</p> <p>Current wage and benefits saved would be \$24,000 per year.</p> <p>15% of the workforce required to complete the contract will be hired from APC residents.</p>

¹ The qualitative benefits should be provided in a narrative description. Use additional sheet.

² Direct benefits are project outcomes that contribute to a CALFED objective within the Bay-Delta system during the life of the project.

³ Indirect benefits are project outcomes that help to reduce dependency on the Bay-Delta system. Indirect benefits may be realized over time.

⁴ The project benefits that can be quantified (i.e. volume of water saved or mass of constituents reduced) should be provided.

Applicant: Alameda Point Collaborative Water Efficient Landscaping Project

THE TABLES ARE FORMATTED WITH FORMULAS: FILL IN THE SHADED AREAS ONLY

Table C-6 Project Annual Local Monetary Benefits

ANNUAL LOCAL BENEFITS	ANNUAL QUANTITY	UNIT OF MEASUREMENT	ANNUAL MONETARY BENEFITS
(a) Avoided Water Supply Costs (Current or Future Source)*	60	Acre Feet	\$57,464
(b) Avoided Energy Costs	0		\$0
(c) Avoided Waste Water Treatment Costs	0		\$0
(d) Avoided Labor Costs	.5	FTE	\$24,000
(e) Other (describe)	0		\$0
(f) Total [(a) + (b) + (c) + (d) + (e)]			\$81,464

Table C-7 Project Local Monetary Benefits and Project Costs

(a) Total Annual Monetary Benefits [(Table C-6, row (f))]	\$81,464
(b) Total Annual Project Costs (Table C-3, column III)	\$222,633

Table C-8 Applicant's Cost Share and Description

Applicant's cost share %: (from Table C-1, row o, column V)	0
Describe how the cost share (based on relative balance between Bay-Delta and Local Benefits) is derived. (See Section A-7 for description.)	
Provide Description in a narrative form.	
The Alameda Point Collaborative is a supportive housing program for very low-income formerly homeless families and individuals. The median income of residents as documented at intake is less than 20% of the State median income. Because this qualifies as a disadvantaged community based on income, the project is exempt from providing a cost share.	

Attachment 1
Documentation Regarding
Disadvantaged Community Status

APC: Demographics

Date 1/10/2005 - 1/10/2005

Report criteria: Adults resident at any time during date range.

Number of adults (defined as persons with	194	
Number of households	161	
Adult/child		
Adult	194	40.5%
Child	285	59.5%
	479	
Age		
< 6	54	11.3%
6 - 12	116	24.2%
13 - 17	82	17.1%
18 - 25	61	12.7%
26 - 40	68	14.2%
41 - 60	90	18.8%
61 +	8	1.7%
	479	
Gender		
Female	286	59.7%
Male	190	39.7%
No answer	2	0.4%
Transgender/other	1	0.2%
	479	
Health insurance		
Medi-Cal	93	47.9%
Medicare	13	6.7%
No answer	34	17.5%
No insurance	33	17.0%
Other	13	6.7%
Private insurance	5	2.6%
Veteran's Assistance	3	1.5%
	194	
Household income		
No income	53	32.9%
\$ 251 - 500	15	9.3%
\$ 501 - 1000	54	33.5%
\$1001 - 1500	26	16.1%
\$1501 - 2000	8	5.0%
\$2001 +	5	3.1%
	161	
Household type		
Couple with children	35	18.0%
Couple without children	7	3.6%
No answer	1	0.5%
Other	18	9.3%
Single person	49	25.3%
Single person with children	84	43.3%
	194	

APC: Demographics

Date 1/10/2005 - 1/10/2005

Report criteria: Adults resident at any time during date range.

Number of adults (defined as persons with **194**

Number of households **161**

Housing type

No answer	1	0.5%
Permanent	110	56.7%
Transitional	83	42.8%
	194	

Race

African-American/Black	277	57.8%
Asian	4	0.8%
Caucasian/White	51	10.6%
Hispanic	24	5.0%
Multi-racial	13	2.7%
Native American	96	20.0%
Native Hawaiian/Pac. Islander	5	1.0%
No answer	9	1.9%
	479	

Attachment 2 Resumes

Feyerabend & Madden is a landscape architecture and garden design firm located in Emeryville, California. Bobbi Feyerabend and Georgia Madden both have a background in the fine arts. Bobbi's training in sculpture, landscape architecture and horticulture was at the University of California Berkeley and Merritt College, Oakland, California. Georgia's training in design, landscape design and horticulture was at The Ohio State University, the University of California Extension and Merritt College, Oakland, California.

Education and professional experience

Bobbi Feyerabend

- Bachelor of Fine Arts, University of California, Berkeley
- Teaching Certificate, University of California, Berkeley
- Certificate in Landscape Horticulture, Merritt College, Oakland, CA
- Certificate in Landscape Architecture, University of California Extension, Berkeley
- California License in Landscape Architecture #3542

- **Team designer** - The Trees of San Francisco. A Plan for the Management of the City's Urban Forest (1991)

Winner - Award of Excellence, American Society of Landscape Architects

Department of Public Works, Division of Landscape Architecture, City of San Francisco

- **Landscape Designer** - Barbara L. Feyerabend Landscape Design, Oakland, California
- **Landscape Architect and Partner** - 10 years, Feyerabend & Madden Landscape Design, Emeryville, California

Instructor, Landscape Design - Department of Landscape Horticulture, Merritt College, Oakland, California

Instructor, Landscape Design – The Garden at Heather Farm, Walnut Creek, CA

Instructor, Landscape Design - The Botanical Gardens at Strybing Arboretum in Golden Gate Park, San Francisco.

Past President - the California Horticultural Society

Member of the Citizens Advisory Committee of the Joaquin Miller Community Center in Oakland, CA

Member of the Garden Committee of the Camron-Stanford House on Oakland's Lake Merritt

Georgia Madden

- Bachelor of Fine Arts, The Ohio State University
- Master of Fine Arts, The Ohio State University
- Certificate of Horticulture, Merritt College, Oakland, California
- Studies at the University of California Extension in Landscape Architecture

- **Head designer** - Reliable Landscape Company, Albany, California, design/build firm
- **Associate designer** - Stephen Suzman Design Associates, San Francisco, California, estate and residential garden design
- **Landscape Designer and Partner** - 10 years, Feyerabend and Madden Landscape Design, Emeryville, California

Co-Chair, Design Committee, 8 years - West Alameda Business Association

Spearheaded the redevelopment of the west end business district, culminating in the funding of a 1.5 million dollar upgrade to the area.

Board Member, 3 years - West Alameda Business Association

Advisory Board Member – Ploughshares Nursery

Selected public projects include

The Botanical Gardens at Strybing Arboretum, Golden Gate Park, San Francisco, California

- Design and Renovation – The Meso-American Cloud Forest
- Renovation – The Asian Discovery Garden
- Renovation – The Rhododendron Garden

Network Associates Coliseum and Oakland Arena in Oakland, California

- Planting and Irrigation Renovation of the Oakland Arena
- Design – New Entrance and Demonstrations Gardens at 66th Avenue

Amador Flower Farm, Plymouth, California

- Design and installation management – 12 acre demonstration garden

Professional and community affiliations

- American Society of Landscape Architects
- California Horticultural Society
- Mediterranean Plant Society
- California Native Plant Society

DAVID WIDELock LANDSCAPE DESIGN
LANDSCAPE ARCHITECT
RESUME

Registration: Licensed Landscape Architect in California since 1991; License # 3577.

Education: Certificate in Landscape Architecture, U.C. Berkeley Extension; 1988.
BA, Literature, Reed College, Oregon; 1969.

Experience: David Widelock has a thorough background in both design and technical aspects of landscape architectural design, including plant selection, grading and drainage, irrigation, and construction detailing. He is experienced in project management, including cost estimating, construction observation, and coordination with consultants, clients, and public agencies. He specializes in state-of-the-art irrigation design. Mr. Widelock was a co-editor of the award winning Thousand Oaks Urban Forestry Report, prepared by Wolfe-Mason Associates. He contributes his previous experience as sole proprietor of a landscape construction and maintenance service, and his practice in residential design in addition to his years as a landscape architect.

Work history:

1977-1989 Sole proprietor of a landscape maintenance and renovation service
1988 HWA, Walnut Creek, CA, designer and draftsman
1989 Thomas Baak and Associates, Walnut Creek, CA, designer and draftsman
1989 Wolfe Mason Associates, Berkeley, CA, co-editor of Thousand Oaks Urban Forestry Report
1990-1994 Andrea Lucas Associates (later Sites Pacific), Berkeley, CA, project designer and project manager
1995 Manuel Fernandez Associates, Union City, CA, project designer and project manager
1995-2000 Sites Pacific, Berkeley, CA, project designer and project manager
1990-present owner, David Widelock Landscape Design

Selected Project Experience:

Parks:

Arroyo Viejo Park, Oakland, CA
Courtland Creek Park, Oakland, CA
Chinese Garden Park (Chinese Cultural Center), Oakland, CA
Golden Gate Audubon Society Center, Aquatic Park, Berkeley CA
Quarry Lakes Regional Park, Fremont, CA
Thousand Oaks Park, Berkeley, CA
Bay Trail at the Presidio
Ft. Baker Mission Blue Butterfly Habitat Restoration

Educational:

Analy High School, Sebastopol, CA
Brentwood Elementary School, Brentwood, CA
El Molino High School, Forestville, CA
University of California at Berkeley Environmental Health and Safety Facility
University of California at Davis; Solano Park Site Renovation

Utilities and Public Agency Work:

Alameda County Water Treatment Facility, Fremont, CA
Atmospheric Emergency Response Facility, Lawrence Livermore National Laboratory,
Livermore, CA
Courtland Creek Park, Oakland, CA
Lemoore Naval Air Station, Lemoore, CA
Madera State Prison; Madera, CA
Oakland Coliseum Arena, Oakland, CA
San Andreas Water Treatment Facility, Expansions #1 and #2, San Mateo, CA
Travis Air Force Base

Environmental Restoration and Erosion Control:

Duffield Residence, Danville, CA
El Cerrito Creek Landslide Repair, Berkeley, CA
Head Royce School, Oakland, CA
Liquid Gold Superfund Site, Richmond, CA
Quarry Lakes Regional Park, Fremont, CA
San Andreas Water Treatment Facility, Expansions #1 and #2, San Mateo, CA
Thousand Oaks School, Berkeley, CA

Urban Forestry:

City of Thousand Oaks Urban Forestry Report

Housing:

Apple Hill Estates, Brentwood, CA
Ashton Apartments, San Jose, CA
Cotati Cohousing, Cotati, CA
Sanders Ranch, Moraga, CA

Sequoyah Heights Homeowner's Association, Oakland, CA
St. Francis Square Apartments, San Francisco, CA
St. Francis Wood, San Francisco, CA
Villa Mira Vista Homeowners Association, Richmond, CA

Hospitals:

Alta Bates Hospital, Berkeley, CA
Kaiser Hospital, Oakland, CA

Awards:

ASLA National Award, 1991, for the Thousand Oaks Urban Forestry Report, Wolfe Mason Associates