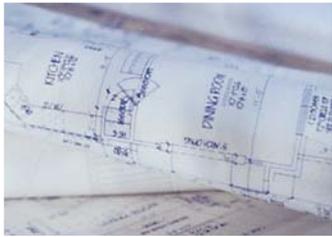


PROPOSITION 50 2004 URBAN WATER USE EFFICIENCY GRANT PROPOSAL

California Friendly Communities

Model Homes and Common Area Landscapes



The Metropolitan Water District
of Southern California

Water Resource Management Group
Regional Supply Unit & Water Use
Efficiency Program

Presented to:
California Department of Water Resources
Office of Water Use Efficiency

January 11, 2005



Family of
Southern California
Water Agencies

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, # 5, 6, 7, 10

(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):

The Metropolitan Water District of Southern California

4. Project Title:

California Friendly Communities

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

Name, title Stephen N. Arakawa, Manager
Water Resources Management Group

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Los Angeles, CA 90054-0153

Telephone (213) 217-6052

Fax. (213) 217-6119

E-mail sarakawa@mwdh2o.com

| | | |
|-----------------------------------|------------------|---|
| 6. Contact person (if different): | Name, title. | Carlos Michelin, Resource Specialist |
| | Mailing address. | P. O. Box 54143 Los Angeles, CA 90054-0153 |
| | Telephone | (213) 217-6645 |
| | Fax. | (213) 830-4527 |
| | E-mail | cmichelon@mwdh2o.com |

| | |
|---|--------------------|
| 7. Grant funds requested (dollar amount): <i>(from Table C-1, column VI)</i> | \$1,500,000 |
|---|--------------------|

| | |
|---|-----------|
| 8. Applicant funds pledged (dollar amount): | \$547,725 |
|---|-----------|

| | |
|--|-------------|
| 9. Total project costs (dollar amount): <i>(from Table C-1, column IV, row n)</i> | \$2,047,725 |
|--|-------------|

| | |
|---|-----|
| 10. Percent of State share requested (%) <i>(from Table C-1)</i> | 73% |
|---|-----|

| | |
|--|-----|
| 11. Percent of local share as match (%) <i>(from Table C-1)</i> | 27% |
|--|-----|

| | |
|--|--|
| 12. Is your project locally cost effective? <i>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.</i> <i>(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.)</i> | <input type="checkbox"/> (a) Yes <input checked="" type="checkbox"/> (b) No |
|--|--|

| | |
|--|--|
| 13. 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. <i>Provide a description of the regulation, law or contract and an explanation of why the project is not currently required.</i> | <input type="checkbox"/> (a) Yes <input checked="" type="checkbox"/> (b) No |
|--|--|

14. Duration of project (month/year to month/year): **12/15/05 to 12/15/08**
-
15. State Assembly District where the project is to be conducted: **35,37-80**
-
16. State Senate District where the project is to be conducted: **17, 19-40**
-
17. Congressional district(s) where the project is to be conducted: **23-53**
-
18. County where the project is to be conducted:
Los Angeles, Orange,
Riverside, San
Bernardino, San Diego,
Ventura
-
19. Location of project (longitude and latitude)
Entire MWD service
area
-
20. How many service connections in your service area (urban)?
Urban Water Wholesaler
- Population: 18 million
-
21. How many acre-feet of water per year does your agency
serve?
2.4 million acre-feet
-
22. 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 _____
22. Is applicant a disadvantaged community? If 'yes' include annual median household income.
(Provide supporting documentation.)
- (a) Yes, _____ median household income
 - (b) No (See A-15f.3)

**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.

Signature

Name and Title

Date

A-15c Statement of Work - Section One: Relevance and Importance

Metropolitan provides imported water service to more than 18 million residents over a 5,200 square mile service area that includes all or portions of Los Angeles, Orange, Riverside, San Bernardino, San Diego and Ventura counties. Metropolitan relies on State Water Project deliveries from the Bay/Delta for approximately one-third of the region's water supplies.

Under this proposal Metropolitan would collaborate with DWR to expand and add new program elements to leverage additional water saving opportunities that have been identified in the course of Metropolitan's ongoing implementation of the California Friendly Program. These include: a) securing state funding for 275 additional model homes to extend our ongoing program; b) creating a new program element with financial incentives for 210 additional model homes in multi-family developments; and c) creating a new program element with financial incentives for the installation of over 17 acres of California Friendly landscapes in common areas, thus leveraging builders to further invest in outdoor water conservation.

California Friendly Communities Prop 50 Proposal - Overview

This Prop 50 proposal from the Metropolitan Water District of Southern California invites the State of California, through the Department of Water Resources, to become a sponsor and collaborator in the continued development and implementation of the California Friendly Program – an innovative water conservation initiative, which aims to realize significant water savings through adoption by participating builders of voluntary water use efficiency standards for new home construction. A total of \$1.5 million is requested for the following objectives:

- a. Expansion of the California Friendly Model Home Program (Prop 50 Request = \$554,125): Metropolitan, in partnership with the U.S. Bureau of Reclamation, is implementing a model home program. Current resources will fund approximately 112 model home rebates. As described in Appendix A (California Friendly Program Materials), participating builders are eligible for up to \$2,500 per model home, provided they certify their compliance with all program specifications, which include: a High Efficiency Clothes Washer (HECW), High Efficiency Toilets (HET), a Weather-Based Irrigation Controller (WBIC) and California Friendly Landscaping in accordance with detailed specifications.

It is estimated that participating units will yield approximately 30% in water savings relative to prevailing conventional construction practices. In addition to these direct savings, showcasing the latest water-efficient technology in model homes is expected to leverage significant indirect water savings through: 1) builders who offer water-efficient package as a standard feature of their projects; 2) homebuyers who purchase a water-efficient package as an upgrade; and 3) current homeowners who visit the model home in search of retrofit ideas. Additionally, as described in this proposal, the program leverages a host of related benefits that accrue to the Bay-Delta, local watersheds, the marketplace, and the public at large.

- b. Addition of a New California Friendly Model Home Program Element Targeting Multi-Family Developments (Prop 50 Request = \$423,150): In the course of implementing the ongoing program, we have received several proposals relating to multi-family projects, which are not eligible for rebates under the terms of the existing grant agreement with USBR. It is noteworthy that some of these projects were advanced by either municipalities or non-profit organizations engaged in urban renewal and redevelopment – activities which rely extensively on public subsidies and that directly benefit disadvantaged communities and low-income families.

Another perspective to note is that the current program targets new construction, which is taking place principally along the outer perimeter of the service territory (mainly parts of Riverside, San Bernardino, and San Diego counties). Addition of this new program element would enable Metropolitan to promote water use efficiency throughout its entire service territory. Thus, infill and redevelopment projects in established communities would be able to participate. The program parameters are virtually the same for the participating model units. However, estimated indirect benefits must be represented differently because in high-density developments, production units typically do not feature any landscaping. Outdoor conservation accounts for the majority of the water-savings in the program. However, the multi-family program element would still be able to leverage meaning indirect savings by featuring indoor appliances and fixtures, which are likely to be specified by participating builders throughout the development.

- c. Addition of a New California Friendly “Common Area Landscapes” Element to Leverage Additional Investment by Builders in Outdoor Water Conservation (Prop 50 Request = \$225,000): This exciting new element would enable the California Friendly Program to address efficiency in all major water use facets of new tract home developments. Already, the California Friendly program has addressed: 1) outdoor water conservation in model and production units through the California Friendly Landscape Rebate Program for New Homes (with Eastern MWD); and 2) combined indoor and outdoor conservation through the regional model home program.

In terms of major water use by new home developments, common area landscapes represent the single remaining outlier. With this new element, we are confident the combined suite of California Friendly program elements will provide a comprehensive approach to optimizing water use efficiency in new homes projects. Program research has shown that the total estimated incremental cost for California Friendly landscapes is approximately \$0.80/square foot. In order to maximize the effectiveness of Prop 50 funds for this purpose, note the proposed incentive rate is only \$0.45/square foot for eligible landscape (compared to \$0.80/square foot for landscape attached to homes). This effectively would leverage builders to increase their direct investment in water use efficiency by absorbing the remaining \$0.35/square foot.

In total, Metropolitan is requesting a \$1.5 million Prop 50 grant for development and implementation of the program elements identified above over the course of a three-year period commencing with execution of the grant agreement.

Multiple benefits across CALFED program elements:

Implementation of the water use efficiency program proposed under this grant application would advance southern California's participation in State efforts to meet the CALFED Program's water supply reliability, water quality, and ecosystem restoration objectives, as detailed below. This regional demand management program would help offset Southern California's increasing water demands, relieving some of the growing regional pressures for additional quantities of State Water Project supplies from the Bay/Delta.

- a) Water Supply Reliability / Water Use Efficiency: Metropolitan projects that California Friendly model homes, as defined under our existing program (consisting of indoor and outdoor water conservation interventions) may yield water savings of nearly 30% relative to the typical estimated water use of conventional tract homes.

- b) Water Management / Storage Flexibility / Environmental Water Account: Timing of withdrawals and reservoir levels are key considerations in determining Metropolitan's ability to participate in statewide flexible storage programs, which in years past have directly benefited the Environmental Water Account and its associated ecosystem restoration objectives. Implementation of the California Friendly program may contribute to relieving peak distribution system demands that lead to rapid reservoir drawdown – something that appears to be associated with demands for landscape irrigation and other outdoor water uses.

- c) Watershed Management / Ecosystem Restoration:
While the California Friendly program is principally designed to achieve long-term water savings, it also leverages a variety of incidental water-related benefits within the State Water Project watershed, including:
 - 1. Energy Conservation: Water use is linked to energy consumption in two ways. Water-using appliances like clothes washers tend to require less energy if they feature lower water factors. This program provides incentives for clothes washers with a water factor of 6.0. Also, the direct water savings achieved by demand management programs like this one help to avoid or defer energy consumption associated with transporting increasing quantities of water from the Bay-Delta. In the course of our program implementation we have maintained close contact with staff from Flex Your Power, the State's agent for promoting energy conservation.

2. Green Waste Reduction: The California Friendly plant palette (see www.bewaterwise.com) consists of nearly 1,200 varieties of plants with a low to moderate water requirement. These plants do not grow as fast, and therefore do not produce as much green waste as other varieties that consume vast amounts of water (e.g. cool-season turf). This benefit has proven to be of interest to waste management authorities such as the California Integrated Waste Management Board.

 3. Urban Runoff: The California Friendly program provides detailed landscape specifications to assist builders in implementing an array of mandatory (soil permeability rates, low-flow irrigation systems, weather-based irrigation controllers, etc.) and optional (permeable hardscapes, drainage features, etc) design features that contribute to achieving the program's water savings objectives. California Friendly projects may contribute to the efforts of local Regional Water Quality Control Boards to abate dry-season runoff and to reduce stormwater runoff through improved onsite retention.
- d) Science Program: The California Friendly program promotes the adoption of a new, urban water use efficiency ethic by the building industry while also raising the public's awareness of new water-efficient choices in the marketplace. The program is based on technically sound methodologies and sensible business processes. For instance, the water budget calculations were drawn from AB 325, with slight improvements. In terms of feasibility, Metropolitan's credibility with business leaders coupled with the program's business-friendly approach (voluntary and incentive-based) are credited for an already impressive list of participants, which includes KB Home, John Laing Homes, Shea Homes, Centex, Lennar, and K. Hovnanian. Several other builders continue to express interest and are evaluating opportunities for future participation.

The unique characteristics (location, design, size, etc.) of participating projects across Metropolitan's vast service territory are expected to yield a rich, transferable knowledge base that will enable builders and related trades to refine new business processes associated with program implementation, ensuring long-term viability. Once acceptance by the building industry and the public reaches critical mass in Southern California, it is highly probable that the program could be expanded through partnerships with other agencies for implementation on a statewide scale.

Finally, the California Friendly program helps address the shortcomings of other green building initiatives with respect to water use efficiency. Many in the water industry agree that such programs do not yet place sufficient emphasis on water. It is likely this program may serve as a catalyst for their eventual adoption of more meaningful water-related objectives. Metropolitan's close rapport with building industry leaders includes periodic contact with the National Association of Home Builders, which is engaged in the development of green building standards. While the principal objective is to achieve quantifiable water-savings, the program also leverages a considerable array of related incidental benefits.

- e) Environmental Justice: The proposed program elements will help introduce water-efficient landscaping practices to projects targeting a cross-section of socio-economic levels. Until now, given the extra expense and required expertise, this type of approach to landscaping has been featured principally in high-income developments, such as Shady Canyon in Irvine, where typical home prices exceed \$1 million. Already, the projects under implementation in the earlier phases of California Friendly run the gamut from first-time buyers, to retirement communities, to upscale developments. The vast service territory of Metropolitan assures a broad geographic distribution of projects. This proposal includes a new program element targeting multi-family developments, which is likely to benefit lower income communities.

Project goals and objectives:

- To achieve quantifiable water-savings consistent with federal, state, regional and local water use efficiency objectives, while also leveraging other related environmental benefits.
- To issue limited financial incentives designed to offset builders' incremental costs as a means of promoting builder acceptance and participation.
- To collaborate with the homebuilding industry to develop voluntary programs to assist builders in transitioning to new business practices that achieve higher water use efficiency in new homes.
- To promote the availability of California Friendly products and services throughout the homebuilding industry and related trades.
- To publicly recognize participating homebuilders and to promote public awareness of water-efficient homes in the marketplace through branding of Metropolitan's "California Friendly" trademark.
- To leverage additional water savings through the development of new program elements targeting multi-family developments and common area landscapes.

Need for project in context of local water planning issues:

This program will help achieve targets for resource development beyond Metropolitan's Integrated Resource Plan, which was updated in July 2004. Over the long-term, this effort helps meet CALFED water supply reliability objectives by reducing Southern California's residential water demand growth rate, resulting in more effective management of water resources and reduced pressure on water and energy distribution facilities. This program would influence purchase decisions and motivate strong public response through rebates for high efficiency toilet installations, reduce wastewater discharge to local sewerage systems and coastal estuaries, and result in withdrawals from local storage facilities at a lower rate. Several benefits accrue directly and

indirectly to CALFED and the Bay/Delta estuary or locally, within the State Water Project watershed, in a manner that is consistent with CALFED objectives.

1. Local: Significant portions of Metropolitan's 5,200 square mile service territory are experiencing some of the fastest rates of urban development in the nation (i.e. Riverside County is presently the fastest-growing county in California). Local authorities, including water districts, are actively assessing demand management alternatives to ensure sustainability. Metropolitan's California Friendly program is receiving significant support from local authorities. For example, in March 2004 the Western Riverside Council of Governments adopted a resolution to support implementation of the voluntary California Friendly Landscape pilot program, which is presently underway within the service area of Eastern Municipal Water District.
2. Regional: Metropolitan has on file with the state a copy of its Regional Urban Water Management Plan (RUWMP), dated December 2000, which is the basis for other local water agencies' plans to serve over 300 communities in southern California. Southern California has an extensive array of water use efficiency programs. The region's 1996 Integrated Resource Plan (IRP) identified supply targets for meeting growing demands for water. The updated 2004 IRP projects increases in water conservation targets as a growing source of future supplies. The California Friendly program and other new initiatives will help Metropolitan go beyond the identified water saving targets.
3. Statewide: Water savings realized through Southern California's water use efficiency programs have significant benefits to water management issues statewide, particularly the CALFED Program.
 - a. Bay-Delta Estuary (CALFED): Several benefits either accrue indirectly to CALFED and the Bay-Delta estuary and locally, within the State Water Project watershed. Metropolitan relies on State Water Project deliveries for a significant portion of the region's water supplies. The proposed program will offset growing demands associated with indoor and outdoor domestic water use related to new construction. This will help mitigate growing demands for additional exports from the Bay/Delta.
 - b. Colorado River: See item 5 "Federal / Colorado River."
 - c. Statewide / Water Conservation Practices: A unique characteristic of this proposal is the proactive implementation during construction of many of the objectives of the CUWCC's BMPs within the comprehensive framework of the California Friendly program, obviating the need for costly future retrofits. Note the multiple linkages to the following BMPs:

- v. Large Landscape Conservation: The common area landscaping element in this grant would enable Metropolitan to develop a new program targeting the water use efficiency of large, common area landscapes within tract developments, which are installed by builders and subsequently maintained by home owner associations.
 - vi. High Efficiency Clothes Washers: This grant application requests state funding to provide incentives for a total of 485 additional HECWs with a 6.0 water factor. These units will be installed in participating model homes, producing real water savings at the time of sale of that home, and leveraging additional savings potential through voluntary installations – first among homebuyers in the featured community (through either standard equipment or upgrade options offered by the builder), and also among “looky-loos” – non-buying visitors in search of upgrade ideas to retrofit their existing homes.
 - vii. Public Information: The California Friendly program is being implemented within the context of a large-scale regional water conservation public information campaign, which aims to increase public awareness of water-efficient homes and products for the home through billboards, radio and the Internet. The objectives of the campaign program include collecting data and feedback from stakeholders as a reference for the refinement of appropriate standards; recruiting homebuilders to participate; and exchanging program information and collaborating with local governments and other interested community members; branding Metropolitan’s “California Friendly” trademark as a water use efficiency standard that will orient consumers in the marketplace; public recognition of participating builders; and dissemination of technical findings.
 - x. Residential ULFT Replacement: By installing dual-flush and/or 1.0 gallon per flush toilets, this program ensures that these homes are not likely to require future WUE subsidies for a toilet retrofit.
4. Federal / Colorado River: This basin is facing an increasingly severe extended drought, resulting in lower allocations to all water users, including Metropolitan. The recent execution of the Quantification Settlement Agreement (QSA) has further reduced the total amount of river water available to Metropolitan. Water users throughout the seven-state basin are undertaking extensive water conservation efforts. For its part, Metropolitan is aggressively targeting new outdoor water conservation programs, such as the ongoing and proposed new phases of the California Friendly program.
5. Business-Friendly Approach to Water Conservation: The California Friendly program is a collaborative, “business friendly” water conservation program, that together with other water use efficiency initiatives will help the region continue to manage demands associated with construction activity. Citizens, public agencies and private industry have a joint responsibility to balance social and economic

activities within the limits of available natural resources. This program is singular in its ability to engage private industry on a voluntary, collaborative basis through an incentive-based program that helps all parties advance toward the common goal of sustainability. In recent years, Metropolitan efforts have engaged a diverse group of stakeholders toward this objective. The California Friendly program is the result of this participatory process.

Implementation status of demand management projects (SB60 Report):

As part of its efforts to document and report its performance in implementing regional water use efficiency programs, Metropolitan periodically submits a progress report to the State Legislature, as required by SB 60. If desired, a copy of the 2004 report may be downloaded from Metropolitan’s website at www.mwdh2o.com.

Further implementation of existing water management activities / Initiating new ones:

This proposal consists of three elements. It requests funding for 275 additional model homes under an existing program; and it proposes the development of two new elements – funding for 210 rebates for multi-family developments and funding for a new incentive for common area landscapes.

Further Implementation of the Existing California Friendly Program:

- In September 2003, the U.S. Bureau of Reclamation awarded Metropolitan a \$182,000 grant for the development and implementation of the “California Friendly Landscape Pilot Rebate Program for New Homes.” The scope of this program was to develop a set of water-efficient landscaping specifications (including plant palette and irrigation systems) and to provide financial incentives and technical assistance to voluntary participants from the homebuilding industry. The balance of 2003 and the first quarter of 2004 the project team focused on the program’s research and outreach activities. Several prospective participants were identified by summer 2004. In October 2004, KB Home became the first participant to execute a “builder rebate agreement,” committing to install California Friendly landscapes in the front yards of all 79 units of its “*Valdemos*” development in the City of Temecula. The first model homes under this program are expected to open to the public in March 2005. In December 2004 John Laing Homes signed a similar agreement for its “*Holiday*” project in Sun City and Shea Homes signed another for its “*Adeline’s Farm*” project in French Valley. These are expected to account for the full amount of remaining rebates available. Therefore, the project is considered fully subscribed at this time.

- In March 2004, Metropolitan's Board of Directors authorized the "California Friendly Model Home" pilot program, allocating \$250,000 for its development and implementation. The project offers technical support and financial incentives to participating homebuilders. Model homes are eligible for rebates of up to \$2,500, provided they comply with the following terms: a) exhibit California Friendly Landscapes (must comply with detailed specifications); b) feature a weather-based irrigation controller; c) showcase a high efficiency clothes washer (water factor of 6.0); and d) install high efficiency toilets (either dual-flush or one gallon per flush). Furthermore, builders commit to keep the model home open to the public for up to one year, and also offer the water-efficient features listed above as either standard features of production units, or optional upgrades.
- In September 2004, the U.S. Bureau of Reclamation reaffirmed its support for the California Friendly Program, increasing its original grant award by \$80,000. The increased federal funding is earmarked for rebates under the California Friendly Model Home program. Metropolitan's USBR's combined funding will provide financial incentives for a total of 112 model homes throughout Metropolitan's service area. After research and development activities were completed (from March through October), program registration by builders was opened in November 2004 during the Building Industry Association's annual "Building Industry Show" held in Anaheim. Subsequent to the BIS Show, a high level of outreach activity has begun. To date, one model home rebate has been subscribed by each of five builders of projects at "The Preserve", a development by Lewis Operating Corp. in the City of Chino (within the Inland Empire Utilities Agency service area). Model homes are projected to open in February 2005.
- In October 2004, Metropolitan's Board of Directors entertained a staff report on the development of the "California Friendly Water Efficiency Recognition Program," directing staff to continue its development of an implementation plan for the California Friendly Certification Program for the Board's review in 2005. In the interim, as part of its overall water conservation campaign, Metropolitan will continue its public outreach and marketing efforts to advance public awareness and consumer recognition of Metropolitan's "California Friendly" trademark as a brand associated with water use efficiency and sustainable development.

Developing a New Initiative:

- In Fall 2004, Metropolitan staff conducted a periodic performance appraisal on the implementation status of the overall California Friendly Program, finding that to date, the overall program is both meeting and exceeding early projections for acceptance by local governments and participation by the building industry. Among the strategic objectives identified for 2005 are: a) conducting community outreach at a statewide level on the status of the California Friendly Program (in 2005 Metropolitan will be a sponsor and presenter at the annual "EcoLandscape Forum" held in February in Sacramento); and b) securing additional resources to expand the ongoing model

home program beyond 2006; and introducing two new elements to address multi-family developments and common area landscapes.

- A Prop 50 grant is of significant importance to the overall program in two major regards: 1) It would serve as a vehicle for the State of California, through the Department of Water Resources, to join the federal, regional, and local agencies already engaged in the leadership and development of this innovative program; and 2) It would enable Metropolitan and its partners to ultimately deliver a comprehensive and integrated solution package to ensure water use efficiency in new communities.

A-15d Statement of Work - Section Two: Technical/Scientific Merit, Feasibility Description of Methods, Procedures, Equipment, and Facilities:

The California Friendly Program presently targets water use in new single-family tract homes, addressing indoor appliances and fixtures and outdoor landscaping and irrigation systems for homes. Additional funding would extend program implementation beyond 2006, ensuring sufficient projects to galvanize industry acceptance.

Development of the new program elements would be closely tied to the ongoing model home program. The new multi-family element would follow the same parameters of the existing program, except that it would target higher density developments. The common area landscape element would provide a lower incentive amount of \$0.45 per square foot for implementing the program's landscaping standards.

The water budget methodology was established by AB 325 (the 1992 California Landscape Model Ordinance). Attached as Appendix A is a set of California Friendly program materials Landscaping Specifications for New Homes, which details among other items: eligible plant stock, design guidelines, irrigation equipment, and performance requirements. It is anticipated some refinements to these specifications will be necessary to address unique characteristics of large landscape areas.

The process to develop the updated specifications would include consultation with builders, landscape experts, and other stakeholders. While implementation procedures would closely follow those in place for ongoing elements: identification of interested builders, review of proposed project for eligibility (location, timing), project design, execution of a rebate agreement with builder, construction, verification, payment of incentives, and ongoing water use monitoring.

1. Feasibility: This program would further refine and implement a variant of an approach already under implementation. As demonstrated in the early phases of this program, the building industry has expressed its continued interest in participation in Metropolitan's voluntary, incentive-based programs.

2. Technical Adequacy: While we expect program specifications to evolve over time, Metropolitan and its partners have developed a streamlined approach to the effective implementation of a sophisticated program consisting of many elements. The technical basis for the program is drawn largely from experience implementing AB 325, with improvements. The ongoing program relies on state-of-the-art technology for irrigation systems, fixtures and appliances. Moreover, an array of program resources and materials has been developed to assist participating builders.

3. Readiness to Proceed: Because Metropolitan already has two phases of this program already under implementation, it is prepared to develop and implement the proposed element as a natural extension to the program. Work would begin immediately upon execution of the contract. One of the key benefits is that based on the experience gained by industry from their participation in the two ongoing phases of the program, it is expected they will be better equipped for participation in the proposed new phase.

4. Project Implementation Plan (Schedule, Tasks, Deliverables, Start & End Dates, and Costs):

a) Tasks, schedule and deliverables

| | Task | Month Due | Deliverable |
|----|---|---|--|
| 1 | Execute grant agreement with DWR | 1 | Executed agreement |
| 2 | Program planning and development of new program | 1-6 | Revised specifications and new materials for common area element. |
| 3 | Outreach and coordination with collaborators | 1-6 then ongoing | Meetings with BIA, builders, local governments, and member agencies |
| 4 | Statements of Interest and assessment of proposed projects | 6 – 12 then ongoing | Statements of interest and preliminary project data |
| 5 | Technical assistance to builder's project teams. Plan checking. | 9-12 then ongoing | Plan checking results. Project meetings. Approvals to execute rebate agreements. |
| 6 | Builder rebate agreements | 12 then ongoing | Executed rebate agreements committing builder's participation and setting aside of financial incentives until completion. |
| 7 | Construction Phase and Builder Installation | 14 then ongoing | Monitoring and coordination of project progress. Opening date commitments. |
| 8 | Marketing and public outreach coordination | 12 then ongoing | Meetings with builder's marketing team. Schedule of events. Development of marketing materials, as needed. Public recognition. |
| 9 | Verification and Issuance of Rebates. | Post Construction | Onsite inspection. Field inspection logs. Invoices. Rebate checks. |
| 10 | Secure resources for impact assessment and evaluation | 16 - 20 | Designation of technical staff or consultants to work on program analysis |
| 11 | Ongoing implementation | 18 – 36 | Completion of steps outlined above for participating projects on ongoing basis |
| 12 | Program administration and performance monitoring | Ongoing w/ reports on 3,6,9,12...36 | Quarterly progress reports and invoices. Issuance of credits to member agencies. Internal reporting. |
| 13 | Impact assessment and evaluation | 18, 24, 30-36 | Scoping meetings, study plan, data collection, analysis and reporting. |

b) Program Budget

EXPANSION OF MODEL HOME PROGRAM

| | Unit Costs | Proposed Units | Total Costs |
|-----------------------------------|-----------------|----------------|-------------------|
| Metropolitan Contributions | \$ 485 | 275 | \$ 133,375 |
| WBIC \$ | 65 | 275 | \$ 17,875 |
| HECW \$ | 60 | 275 | \$ 16,500 |
| HET (3 @ \$20 ea.) \$ | 60 | 275 | \$ 16,500 |
| CF Landscape (\$0.15/sq.ft.) \$ | 300 | 275 | \$ 82,500 |
| DWR Prop 50 Share | \$ 2,015 | 275 | \$ 554,125 |
| Total Incentive per Unit | \$ 2,500 | 275 | \$ 687,500 |

NEW MULTI-FAMILY MODEL HOME PROGRAM ELEMENT

| | Unit Costs | Proposed Units | Total Costs |
|-----------------------------------|-----------------|----------------|-------------------|
| Metropolitan Contributions | \$ 485 | 210 | \$ 101,850 |
| WBIC \$ | 65 | 210 | \$ 13,650 |
| HECW \$ | 60 | 210 | \$ 12,600 |
| HET (3) \$ | 60 | 210 | \$ 12,600 |
| Landscape (\$0.15/sq.ft.) \$ | 300 | 210 | \$ 63,000 |
| DWR Prop 50 Share | \$ 2,015 | 210 | \$ 423,150 |
| Total Incentive per Unit | \$ 2,500 | 210 | \$ 525,000 |

NEW COMMON AREA LANDSCAPE PROGRAM ELEMENT

| | Cost / Sq.Ft. | Proposed Sq.Ft. | Total Costs |
|-----------------------------------|----------------|-----------------|-------------------|
| Metropolitan Contributions | \$ 0.15 | 750,000 | \$ 112,500 |
| DWR Prop 50 Share | \$ 0.30 | 750,000 | \$ 225,000 |
| Total Incentive per Unit | \$ 0.45 | 750,000 | \$ 337,500 |

PROGRAM IMPACT ASSESSMENT AND EVALUATION

Consultant

| | |
|--------------------------|-------------------|
| DWR Prop 50 Share | \$ 250,000 |
|--------------------------|-------------------|

PROGRAM ADMINISTRATION

Landscape Consultant

| | |
|--------------------------|------------------|
| DWR Prop 50 Share | \$ 47,725 |
|--------------------------|------------------|

Program Management

| | |
|-----------------------------------|-------------------|
| Metropolitan Contributions | \$ 200,000 |
|-----------------------------------|-------------------|

TOTAL PROGRAM FUNDING

| | |
|-------------------------------|--------------------|
| Total MWD Contribution | \$ 547,725 |
| Total DWR Contribution | \$1,500,000 |

Projected 3-Year Cashflow for Prop 50 Funds

| PERIOD | TASK | DWR FUNDS |
|----------------|---|-----------------------|
| YEAR 1 (1-12) | Landscape Consultant: Refine specs for new program elements | \$10,000 |
| YEAR 2 (13-24) | Model Home Rebates (SFD) | \$354,125 |
| | Model Home Rebates (MF) | \$223,150 |
| | Common Area Rebates | \$122,500 |
| | Landscape Consultant: Technical assistance & plan check | \$22,500 |
| | Impact Assessment Program Analysis: Scoping, data requirements, data collection | \$75,000 |
| YEAR 3 (25-36) | Model Home Rebates (SFD) | \$200,000 |
| | Model Home Rebates (MF) | \$200,000 |
| | Common Area Rebates | \$100,000 |
| | Landscape Consultant: Technical assistance & plan check | \$17,725 |
| | Impact Assessment Program Analysis: Data collection and analysis and reporting | \$175,000 |
| Total | | \$1,500,000.00 |

c) Metropolitan’s Rationale for Funding Water Conservation

The Metropolitan Water District of Southern California funds conservation programs at the rate of \$154 per acre-foot directly and through its member agencies as part of the implementation of Southern California’s Integrated Water Resources Plan (IRP). The IRP established resource targets based on a number of criteria including cost effectiveness. Through the IRP, cost effectiveness for local resources including conservation was determined to be up to \$250 per acre-foot of water, when the payment is made at the time of water production. Since most conservation programs are funded through upfront payments and the savings accrues over time, the \$250 value is present valued at 6% for the typical life of a conservation measure—twenty years. The present value of Metropolitan’s \$250 per acre-foot value of local resources is approximately \$154 per acre-foot. In addition to this direct incentive, Metropolitan pays overhead through staff management and marketing estimated at about 10%. Therefore, the local value of conserved water paid through Metropolitan conservation programs is approximately \$169.40 (\$154 x 110%) per acre-foot.

d) Preliminary Plans and Specifications and Certification Statements:
Not applicable.

e) Environmental Documentation:

The proposed activity is not defined as a project under CEQA because it involves continuing administrative activities, such as purchases for supplies, general policies and procedure making (Section 15378(b)(2) of the State CEQA Guidelines). In addition, the proposed activity is not subject to CEQA because it involves other government fiscal activities, which do not involve any commitment to any specific project, which may result in a potentially significant physical impact on the environment (Section 15378(b)(4) of the State CEQA Guidelines).

Since the proposed activity is not subject to CEQA pursuant to Sections 15378(b)(2) and 15378(b)(4) of the State CEQA Guidelines, no further action is required for consideration of this application and subsequent program implementation.

f) Intellectual Property: This intellectual property provision does *not* apply to intellectual property owned by applicant MWD *prior* to the award of this grant, including, but not limited to applicant's pending application for its "California Friendly" trademark.

A-15e Statement of Work - Section Three: Monitoring and Assessment

Project Monitoring and Evaluation Plan (Water Savings and Bay-Delta System Benefits - including monitoring & assessment costs)

- a) How pre-project conditions and data baselines will be determined, assumptions, and anticipated accuracy of data: The typical water use baseline for new tract homes has been estimated as part of the implementation of the first two phases of the California Friendly Program. Table 8 (Cost Share Data) summarizes details on the water savings associated implementation of the proposed program elements. Appendix 2 details the typical landscape water use and estimated savings from California Friendly common area element. Common area landscape water usage would be determined by monitoring of actual water usage as recorded by dedicated landscape meters.
- b) Explanation of monitoring methodology and data fields collected to assess results: Landscape: Actual water use data from readings of dedicated landscape meters will allow monitoring of how participating areas are performing relative to their calculated water budgets. Total irrigated area will enable us to calculate the estimated water use relative to actual usage.
- c) How data results will be used to evaluate success in relation to project goals: Success is principally determined by the voluntary participation of homebuilders. Once eligible projects are identified by participants, they will be designed to meet program specifications, assuring significant water savings. However, actual water

usage data will be collected and compared to the theoretical water budget as a means of documenting water savings and refining program specifications and recommended landscaping practices.

- d) How will external factors (weather, social conditions) be taken into account: As previously described, implementation of this program is taking place across development projects catering to all socio-economic classes. Also, one of the principal benefits of this program is to minimize landscape water demands and to ensure that irrigation systems automatically adjust to changing weather conditions through the use of weather-based irrigation controllers.

- e) How will project materials and data be handled, stored, reported and made available to DWR and others? Project materials consist of technical references and specifications, collateral marketing materials (brochures) and program implementation documents. All of these, except the latter are expected to be available to the public via a website presently under development, which will be linked to the already established www.bewaterwise.com site. Program implementation documents consist of builder rebated agreements, project plans, and other project data, which will be kept on file by Metropolitan and its participating member agencies. Relevant data will be reported periodically as required by DWR.

- f) Estimated costs for implementation of the monitoring and assessment plan: The major cost components for monitoring and assessment tasks include: consulting fees for landscape design expertise and program analysis. Consultants will assist with various implementation tasks, including market studies to help identify potential building industry participants and to document industry preferences and any reasons keeping builders from participating; monitoring of implementation progress; program-wide ongoing collection of water use data from participating agencies; an analysis of water-savings and cost-effectiveness; and a summary of project results, which may serve as a guideline for future expansion of implementation outside of the southern California. As identified in the budget, a total of \$47,725 is allocated to a landscape consultant, whose technical assistance to builders and plan checking will ensure the highest probability that participating projects will realize the projected cost savings. Also, \$250,000 is allocated for the impact analysis and program evaluation to thoroughly assess the implementation process and to analyze program results.

- g) Annual reports on benefits and costs for five years after installation. Re-evaluation of cost/benefit analysis included in final report: The single direct benefit expected to be derived from this program is a reduction in the amount of water used by new tract home developments relative to the water use levels associated with typical construction practices. However, included among the many indirect benefits associated with California Friendly Communities are: a reduction in dry-weather urban runoff and green waste (biomass) and lower landscape maintenance requirements.

A-15f. Qualifications of the Applicants and Cooperators

1. Carlos Michelon, Resource Specialist (Project Manager)

Mr. Michelon holds a Bachelor's Degree in Civil Engineering, specializing in Construction Management, and a Minor in Urban and Regional Planning from the University of Southern California. His 15 years of professional experience include construction management for Tutor Saliba Corporation as a Junior Engineer (MetroRail and LA Central Library projects), and 14 years with Metropolitan.

His experience in the water industry includes over a decade assisting senior and executive management with policy development and representation in Sacramento and Washington, D.C. on state and federal resource management issues and related public processes (e.g. Framework Agreement, Category III, the CALFED Bay-Delta Program, SWRCB water quality and water rights proceedings, etc.). He has extensive experience with collaborative inter-agency processes, having provided ongoing technical support to WRM Group Manager, Steve Arakawa and V.P. for SWP Resources, Tim Quinn in numerous forums (e.g. CUWA, ACWA, Bay/Delta Urban Coalition, the Ag/Urban Group, CALFED, BDPAC, Western Urban Water Coalition, etc).

In recent years Mr. Michelon has played a key role in coordinating and administering state and federal grants awarded to Metropolitan for local resource development projects. He presently manages implementation of two new outdoor water conservation initiatives: a \$1.8 million Prop 13 grant for weather-based irrigation controller incentives (DWR) and a \$262,000 federal grant for the development and implementation of the California Friendly Landscape and Model Home pilot projects.

2. William McDonnell, Senior Resource Specialist (Supervising Senior)

Mr. McDonnell holds a Bachelor's Degree from the University of Massachusetts and a Master's Degree from The University of La Verne, both in Business Administration. He has 24 years of professional management experience with municipalities and utilities (electric, gas and water). Over the course of his career he has held positions with Southern California Edison, Honeywell DMC Services, the cities of Pasadena and Anaheim, and Metropolitan where he has managed incentive-based resource conservation programs aimed at improving efficiencies in new construction with the building industry, municipalities, and commercial and residential customers.

He has been with Metropolitan for nearly 9 years, having managed an \$11 million annual residential conservation program. He has extensive experience representing water conservation interests in various plumbing industry associations. Currently, he represents Metropolitan on the plumbing standards committee of the American Society of Mechanical Engineers. He facilitates the monthly meetings of Metropolitan's member agency conservation coordinators – Southern California's principal venue for the advancement of regional water conservation programs and policies. He manages Metropolitan's Commercial, Industrial and Institutional Conservation Program, with an annual budget of \$3 million for incentives throughout

the entire service territory. He also provides policy oversight and guidance on the development and implementation of the California Friendly program.

3. Andy Hui, Regional Supply Unit Manager, Water Resource Management Group
Mr. Hui has 19 years experience working with local resource development projects including recycled water, groundwater recovery, water conservation and seawater desalination. He oversees the implementation of local resource development projects by a staff of 18, in addition to several consultants.
4. Tim Blair, Water Use Efficiency Program Manager, Water Resource Management Group
Mr. Blair has a bachelor's degree in Quantitative Economics and Decision Sciences from the University of California, San Diego. Prior to joining Metropolitan in 1992, he was a staff economist for the Los Angeles Department of Water and Power. In his twelve years with Metropolitan, Mr. Blair has been project manager for strategic water resource planning and water transfers. He is presently responsible for the development of policy and strategies for Metropolitan's incentive programs in conservation, water recycling, groundwater recovery, and seawater desalination.

Role of external cooperators:

This unique and complex program relies heavily on inter-agency, inter-disciplinary teams and voluntary participation by private industry and stakeholders. The outline below highlights some of the stakeholders and their role as collaborators:

- U.S. Bureau of Reclamation: The Southern California office of the Lower Colorado River Region is Metropolitan's partner in the development of the California Friendly program. The Bureau helped craft the original vision for this program, and to identify the objectives that are now being implemented. USBR has been an active participant in outreach efforts to the building industry and they actively monitor program implementation. Federal funds awarded through a grant help underwrite financial incentives to participants.
- State of California, Department of Water Resources: It is our hope that, through this award, the State will join the Bureau and Metropolitan as a partner, actively engaged in the development and implementation of the proposed new program elements.
- Member Agency Conservation Coordinators: Metropolitan has twenty-six member agencies, which in turn have numerous sub-agencies. Collectively we serve over 300 communities in Southern California. The program is implemented in collaboration with local agencies, requiring extensive coordination with their conservation coordinators and other staff. To date, ongoing implementation has focused exclusively on tracts of new homes, with a geographic scope that includes portions of Riverside, San Bernardino and Ventura counties. This grant award would enable us to also address infill development of multi-family projects, which would engage participants in built-out or established areas within our service territory (parts of 3 other counties).

- **Building Industry Association (BIA):** The BIA has been a principal collaborator in the development of this program. They provide ongoing guidance from an industry perspective that helps ensure the program is developed and implemented in a manner that is feasible and responsive to the needs and interests of builders. They provide ongoing assistance in facilitating the program's outreach effort to recruit new participants; and they help identify and resolve obstacles to implementation.
- **Local Governments:** Construction activities require a variety of permits issued by local governments. An integral step in the implementation process is the outreach to local government. An example of this is the resolution of support adopted in March 2004 by the Western Riverside Council of Governments, a regional council of the larger Southern California Association of Governments. We also periodically receive new requests for information and positive feedback from local water districts and municipalities.
- **Homebuilders:** To date the list of participating builders includes: KB Home, John Laing Homes, Shea Homes, Centex, K. Hovnanian, and Lennar. We have an ongoing dialogue with many other builders who are actively identifying projects for participation. One of the principal challenges associated with implementation of this program is the lengthy implementation schedule. Typically, builders may require up to a year of lead time for planning and design before a project can be admitted to the program.
- **Other Stakeholders:** Through its extensive community outreach efforts, Metropolitan has convened an ongoing "Heritage Landscape Forum" that serves to engage interested community members in a valuable information exchange, ultimately benefiting program implementation. The compilation of the California Friendly plant palette is an example of a program resource created in close collaboration with stakeholders.
- **Consultants:** As warranted by program objectives and the workload, Metropolitan will procure the necessary consulting resources to supplement staff's efforts in completing all program objectives. Examples of ongoing agreements include: landscape and irrigation design expertise, market research, and public relations. Additional resources unique to this proposal may also include program administration, impact assessment and program evaluation.

Previous water use efficiency grants awarded to Metropolitan:

As southern California's principal water resource management agency, Metropolitan manages an extensive portfolio (exceeding \$100 million) of public funds dedicated to local resource projects. This consists of federal, state and other special purpose grants for water use efficiency programs addressing urban water conservation, water recycling, ocean water desalination, and groundwater recovery projects. An outline of ongoing urban water conservation grants includes:

- USBR Water Conservation Field Services Grants:
 - Commercial, Industrial, and Institutional Regional Water Conservation Rebate Program - \$250,000 (1998-99)
 - California Friendly Landscape Pilot Rebate Program for New Homes - \$182,000
 - California Friendly Model Homes Pilot Rebate Program - \$80,000
 - City Makeover Grant Program - \$50,000
 - Artificial Turf to Save Water and Reduce Urban Runoff
 - World Water Forum: An Innovative Conservation Grant Program for College Teams
 - Industrial Water Recirculation Study
- Department of Water Resources:
 - Prop 13 Weather-Based Irrigation Controller Incentive Program - \$1.8 million
 - Prop 13 High Efficiency Clothes Washer Rebate Program - \$2.5 million

Disadvantaged communities:

In the course of implementing the ongoing phases of the California Friendly program, Metropolitan has received proposals from municipal governments and non-profit organizations for projects benefiting low-income and disadvantaged communities within the cities of Ontario and Long Beach. Unfortunately, the submitted proposals did not match the established project eligibility criteria under the terms of the grant and we were not able to fund them. DWR's funding of this grant proposal could enable Metropolitan to secure program participants in disadvantaged communities. The proposal includes a new element targeting multi-family projects. Many of these are infill or redevelopment projects in disadvantaged areas. Metropolitan welcomes the opportunity to collaborate with DWR to earmark a portion of its Prop 50 grant for rebates for this purpose.

A-15g Outreach, Community Involvement, and Acceptance

a) Local Governments:

- In March of 2004 the executive board of the Western Riverside Council of Governments adopted a resolution to support implementation of the voluntary California Friendly Landscape program within the council's jurisdiction.
- Program implementation includes outreach to local planning authorities. Program implementation briefings have been held with officials from the cities of Temecula and Chino. As the program continues to expand, these outreach activities are expected to increase.

b) Plan for Public Outreach to Affected Groups or Individual:

Key elements that are part of Metropolitan's overall outreach strategy in support of this program include: 1) a regional public information and outreach campaign to ensure consumer awareness of the "California Friendly" trademark and its branding or association with water use efficiency, use of print, radio and billboards, "Straight from the Tap" cable television show, www.bewaterwise.com website and other resources; 2) various meetings and program presentations facilitated by the BIA and other stakeholders; 3) project specific briefings to local officials as needed.

c) List of Local Groups and Interested Parties and Level of Support:

Metropolitan's member agencies and subagencies, where the program will be implemented have provided letters of support urging the State's issuance of the requested grant. Examples include:

- Eastern Municipal Water District
- Inland Empire Utilities Agency
- San Diego County Water Authority

d) List Any Potential Third Party Impacts:

We are aware of none.

e) Estimate of people or organizations expected to receive training, employment or other social or economic benefits: This list is quite extensive as, in addition to the direct water-saving benefits, the program leverages substantial indirect benefits that accrue to individuals, organizations and the public at large.

- Building industry's assimilation of a new water-efficiency design ethic and adoption as a standard business practice:
 - Planning authorities
 - Developers
 - Homebuilders
 - Landscape architects
 - Irrigation designers
 - Landscape and irrigation contractors

- Market transformation / stimulating market demand for new water-efficient products and services:
 - Nurseries / green industry
 - Irrigation hardware manufacturers and suppliers (e.g. controllers)
 - Appliance manufacturers and suppliers (e.g. clothes washers)
 - Retail and distribution channels
 - Contractors and maintenance personnel
- Differentiation of water-efficient products in the marketplace and availability of more cost-effective and resource-efficient choices for consumers:
 - Water-efficient homes
 - Water-efficient products and services for the home
- Development and implementation with the homebuilding industry of a practical, business-friendly program conducive to the voluntary implementation of water use and other related best management practices:
 - Estimated 30% reduction in water use relative to typical tract homes and related benefits to water purveyors;
 - Abatement of dry-season urban runoff and increased retention of stormwater runoff from residential landscapes through the use of state-of-the-art irrigation systems, and other site characteristics (e.g. soil permeability rates) addressed in the California Friendly Landscape specifications
 - Reduced biomass waste stream due to reliance on slow-growing, water efficient plant stock – helps waste management authorities manage limited local landfill capacity;
 - Long-term water and energy savings to homebuyers, and associated demand management benefits for utilities;

f) Opposition to the Project:

We are aware of none. However, there have been anecdotal reports of a high-level of resistance to native landscaping by neighbors and local authorities in instances where individual homeowners have attempted to retrofit their landscapes in a “native” theme in areas where landscaping standards are governed by a local homeowners association (HOA). We do not anticipate this problem because the program does not involve landscape retrofits. Rather, it addresses new construction, which in most cases is expected to feature a consistent landscaping theme throughout the new community.

A-15h Innovation

Innovative methodologies or technologies to be employed that could contribute to improved efficiencies throughout the state: This program relies on state-of-the-art irrigation technology and water-using appliances and fixtures for the home. Additionally, based on the unique research conducted to date by Metropolitan in collaboration with the building industry, the program introduces new methodologies, tools and technical resources to assist builders with the practical implementation of program objectives. Thus, the program has been designed with a long-term objective of being highly transferable to other parts of the state and beyond. The following is an outline of some of these water-efficient elements include:

- Detailed California Friendly Landscaping specifications – six pages of technical data detailing program design specifications;
- California Friendly Plant Palette: Data on a broad array of native, Mediterranean and other low-water-using plant stock suitable to Southern California’s climate (see www.bewaterwise.com);
- High Efficiency Clothes Washers (HECW): Requires a washer with a water factor of 6.0 or better;
- High Efficiency Toilets (HET): Requires either dual-flush or 1.0 gallon per flush toilets;
- Weather-Based Irrigation Controllers (WBIC): Also known as “smart controllers,” these devices automatically self-adjust their irrigation schedules according to changing weather conditions;
- Stream Rotator Sprinklers: This innovative sprinkler technology boosts distribution uniformity as high as 85% while operating at low pressure (30 psi);
- Low-Volume Irrigation Systems: Commonly referred to as “drip systems,” these low volume systems apply water directly to the root zone of plants through emitters or micro-spray devices; and
- If this grant is awarded, a new program element will be developed addressing large landscape areas. It is probable that in the course of program development and implementation we may identify additional technologies to be added to this list.

In addition to the individual technologies listed above, we believe this program is highly innovative in our opinion that water use efficiency is currently under-represented within the framework of a variety of “green building” programs (e.g. LEED, Energy Star, etc.), which principally focus on energy efficiency among other elements. The California Friendly program is already engaging building industry leaders to collaboratively develop standards and business practices that are in accordance with the importance of water use efficiency to our region and our State.

A-15i Cost/Benefits

Qualitative Description of Indirect Benefits:

This program's objective is to implement a highly effective regional demand management initiative within the State Water Project watershed, consistent with CALFED water use efficiency objectives.

I - Benefits Accruing to the Bay-Delta:

1) Avoided Future Withdrawals from the Bay-Delta System: Metropolitan's implementation of this and other water use efficiency programs either offsets or defers State Water Project deliveries from the Bay-Delta to meet urban water demands.

2) Participation in Flexible Storage Programs: In the past, Metropolitan has participated in statewide flexible storage programs that support CALFED's environmental restoration objectives (e.g. Environmental Water Account). In general, southern California's ability to participate in this type of program is a function of storage and distribution system operational flexibility. Growing demands over time may erode system flexibility, potentially reducing our ability to participate in such programs, which are linked to direct environmental benefits within the Bay-Delta estuary. Prop 50 grant awards for Metropolitan's proposed water conservation programs would greatly assist ongoing regional efforts to preserve system flexibility, strengthening our ability to continue flexible storage programs into the future.

3) Innovation and Knowledge Transfer: Metropolitan continues to play a leadership role in the development and implementation of innovative water use efficiency programs. Existing Metropolitan programs cover a wide range of conservation initiatives, from financial incentives for water efficient appliances to educational resources, such as our *Protector del Agua* program, which provides classroom instruction to promote outdoor water conservation among professionals and homeowners. New programs pioneered by Metropolitan under this grant are can serve as a valuable, transferable reference for future initiatives likely to be implemented elsewhere in the State.

II - Benefits to Southern California Watersheds:

1) Water Efficient Appliances and Fixtures: Under this program, Metropolitan is promoting the latest water-efficient technology for the home, providing financial incentives for high efficiency toilets and clothes washers. These indoor devices discharge wastewater into regional sewerage systems for treatment and disposal. It is generally acknowledged that indoor water conservation programs yield significant direct benefits to the region's wastewater sector and coastal watersheds through lower discharge volumes.

2) State-Of-The-Art Irrigation Systems and Reduced Runoff: One major issue faced by local retail utilities, municipalities, and regulatory agencies is the evolution of Total Maximum Daily Load (DL) standards. While our program's principal objective is to achieve water savings, we have made a deliberate effort to demonstrate the potential for reducing urban runoff as part of a voluntary, incentive based approach in the California Friendly program.

3) Other Public and Fiscal Benefits: As detailed in Section A-15g, there is significant potential for providing benefits in multiple areas including water savings. As a result, this program warrants consideration based on potentially large cost savings to public agencies and ratepayers by reducing requirements for future capital improvements and water importation.

2) State-Of-The-Art Irrigation Systems and Reduced Runoff: One major issue faced by local retail utilities, municipalities, and regulatory agencies is the evolution of Total Maximum Daily Load (DL) standards. While our program's principal objective is to achieve water savings, we have made a deliberate effort to demonstrate the potential for reducing urban runoff as part of a voluntary, incentive based approach in the California Friendly program.

3) Other Public and Fiscal Benefits: As detailed in Section A-15g, there is significant potential for providing benefits in multiple areas including water savings. As a result, this program warrants consideration based on potentially large cost savings to public agencies and ratepayers by reducing requirements for future capital improvements and water importation.

Applicant:

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 | \$200,000 | 0 | \$200,000 | \$200,000 | \$0 | 0 | 0.0000 | \$0 |
| | Fringe benefits | \$0 | 0 | \$0 | \$0 | \$0 | 0 | 0.0000 | \$0 |
| | Supplies | \$0 | 0 | \$0 | \$0 | \$0 | 0 | 0.0000 | \$0 |
| | Equipment | \$0 | 0 | \$0 | \$0 | \$0 | 0 | 0.0000 | \$0 |
| | Consulting services | \$0 | 0 | \$0 | \$0 | \$0 | 0 | 0.0000 | \$0 |
| | Travel | \$0 | 0 | \$0 | \$0 | \$0 | 0 | 0.0000 | \$0 |
| | Other | \$0 | 0 | \$0 | \$0 | \$0 | 0 | 0.0000 | \$0 |
| (a) | Total Administration Costs | \$200,000 | | \$200,000 | \$200,000 | \$0 | | | \$0 |
| (b) | Planning/Design/Engineering | \$0 | 0 | \$0 | \$0 | \$0 | 0 | 0.0000 | \$0 |
| (c) | Equipment Purchases/Rentals/Rebates/Vouchers | \$1,550,000 | 0 | \$1,550,000 | \$347,725 | \$1,202,275 | 10 | 0.1359 | \$210,645 |
| (d) | Materials/Installation/Implementation | \$0 | 0 | \$0 | \$0 | \$0 | 0 | 0.0000 | \$0 |
| (e) | Implementation Verification | \$47,725 | 0 | \$47,725 | \$0 | \$47,725 | 0 | 0.0000 | \$0 |
| (f) | Project Legal/License Fees | \$0 | 0 | \$0 | \$0 | \$0 | 0 | 0.0000 | \$0 |
| (g) | Structures | \$0 | 0 | \$0 | \$0 | \$0 | 0 | 0.0000 | \$0 |
| (h) | Land Purchase/Easement | \$0 | 0 | \$0 | \$0 | \$0 | 0 | 0.0000 | \$0 |
| (i) | Environmental Compliance/Mitigation/Enhancement | \$0 | 0 | \$0 | \$0 | \$0 | 0 | 0.0000 | \$0 |
| (j) | Construction | \$0 | 0 | \$0 | \$0 | \$0 | 0 | 0.0000 | \$0 |
| (k) | Other (Specify) | \$0 | 0 | \$0 | \$0 | \$0 | 0 | 0.0000 | \$0 |
| (l) | Monitoring and Assessment | \$250,000 | 0 | \$250,000 | \$0 | \$250,000 | 0 | 0.0000 | \$0 |
| (m) | Report Preparation | \$0 | 5 | \$0 | \$0 | \$0 | 0 | 0.0000 | \$0 |
| (n) | TOTAL | \$2,047,725 | | \$2,047,725 | \$547,725 | \$1,500,000 | | | \$210,645 |
| (o) | Cost Share -Percentage | | | | 27 | 73 | | | |

1- excludes administration O&M.

Applicant:

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

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) |
|-----------------------|---------------------|----------------|---------------------------------|
| \$0 | \$0 | \$0 | \$0 |

(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) |
|------------------------------------|---------------------------------|--|
| \$210,645 | \$0 | \$210,645 |

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

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

Table C- 4: Capital Recovery Table (1)

| Life of Project (in years) | Capital Recovery Factor |
|----------------------------|-------------------------|
| 1 | 1.0600 |
| 2 | 0.5454 |
| 3 | 0.3741 |
| 4 | 0.2886 |
| 5 | 0.2374 |
| 6 | 0.2034 |
| 7 | 0.1791 |
| 8 | 0.1610 |
| 9 | 0.1470 |
| 10 | 0.1359 |
| 11 | 0.1268 |
| 12 | 0.1193 |
| 13 | 0.1130 |
| 14 | 0.1076 |
| 15 | 0.1030 |
| 16 | 0.0990 |
| 17 | 0.0954 |
| 18 | 0.0924 |
| 19 | 0.0896 |
| 20 | 0.0872 |
| 21 | 0.0850 |
| 22 | 0.0830 |
| 23 | 0.0813 |
| 24 | 0.0797 |
| 25 | 0.0782 |
| 26 | 0.0769 |
| 27 | 0.0757 |
| 28 | 0.0746 |
| 29 | 0.0736 |
| 30 | 0.0726 |
| 31 | 0.0718 |
| 32 | 0.0710 |
| 33 | 0.0703 |
| 34 | 0.0696 |
| 35 | 0.0690 |
| 36 | 0.0684 |
| 37 | 0.0679 |
| 38 | 0.0674 |
| 39 | 0.0669 |
| 40 | 0.0665 |
| 41 | 0.0661 |
| 42 | 0.0657 |
| 43 | 0.0653 |
| 44 | 0.0650 |
| 45 | 0.0647 |
| 46 | 0.0644 |
| 47 | 0.0641 |
| 48 | 0.0639 |
| 49 | 0.0637 |
| 50 | 0.0634 |

(1) Based on 6% discount rate.

Applicant: **METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA**

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 |
|-----------|---|---|------------------------------------|--|---|
| | 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 | <p>1) Avoided Future Withdrawals from the Bay-Delta System: Offsetting or deferring deliveries of increased quantities of State Water Project supplies from the Bay-Delta to meet growing demands; 2) Ability to Participate in Flexible Storage Programs: help preserve southern California's ability to continue supporting CALFED's environmental restoration objectives through participation in flexible storage programs into the future; and 3) Innovation and Transferable Knowledge Base: New programs pioneered by Metropolitan under this grant are likely to serve as a transferable reference for future implementation elsewhere in the State.</p> | <p>1 & 2) Implementation of the proposed demand management programs would allow the projected increase in SWP supply availability through Banks pumping plant to bolster operational flexibility in southern California and statewide. This and other demand management interventions by Metropolitan are designed to manage growing demands in a manner that protects the region's operational flexibility. Without such water conservation projects, any new SWP supplies would flow rapidly through the system to meet end use demands, eroding storage flexibility - particularly during seasonally dry periods when peak demands are experienced; 3) The proposed project would require three years from the date of contract execution for completion. While Metropolitan would disseminate periodic status reports on implementation a final report would not be available until project completion.</p> | 10 Years | <p>While the benefits associated with these projects are reported by Metropolitan as "indirect" Bay-Delta benefits, we believe the Department is in a better position to assess whether the linkages established in this proposal between demand management, regional storage flexibility, supply reliability and ecosystem restoration constitute a "direct" benefit to the Bay-Delta system.</p> | Not available |

| | | | | | |
|-------|--|--|----------|-----------------|---------------|
| Local | <p>1) Water Efficient Appliances and Fixtures: the latest water-efficient technology for the home is likely to yield significant direct benefits to the wastewater sector and coastal watersheds through lower discharge volumes; 2) State-Of-The-Art Irrigation Systems and Reduced Runoff: California Friendly projects contribute to reducing urban runoff as part of a voluntary, incentive based approach; 3) Other Public and Fiscal Benefits: Great potential for delivering multiple benefits. Large-scale water savings likely to result in commensurate cost savings to public agencies and ratepayers for deferred and avoided costs associated with potable water and wastewater.</p> | <p>1) High Efficiency Clothes Washers with a water factor of 6.0 and High Efficiency Toilets (dual flush or 1.0 gallon per flush) will begin to generate water savings immediately upon occupancy, resulting in modest daily reductions in wastewater flows (relative to other conventional appliances and fixtures). These savings could increase exponentially if these devices are implemented throughout all units in new developments, as is our eventual objective; 2) California Friendly landscapes featuring weather-based irrigation controllers coupled with stream rotators and drip irrigation systems will efficiently deliver only the appropriate amount of water to the landscape without generating dry-season urban runoff. During storm events permeable hardscapes and other drainage features will help retain a portion of the stormwater runoff onsite. These measures are expected to contribute to a reduction in fertilizer and pesticide loads reaching coastal storm channel discharge locations; 3) Depending on the scale of implementation achieved, communities may realize cost savings as a result of deferred capital projects a</p> | 10 years | Not applicable. | Not available |
|-------|--|--|----------|-----------------|---------------|

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:

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

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) | 159 | AF | \$24,503 |
| (b) Avoided Energy Costs | 0 | | \$0 |
| (c) Avoided Waste Water Treatment Costs | 0 | | \$0 |
| (d) Avoided Labor Costs | 159 | \$/AF | \$2,450 |
| (e) Other (describe) | 0 | | \$0 |
| (f) Total [(a) + (b) + (c) + (d) + (e)] | | | \$26,953 |

Table C-7 Project Local Monetary Benefits and Project Costs

| | |
|---|-----------|
| (a) Total Annual Monetary Benefits [(Table C-6, row (f))] | \$26,953 |
| (b) Total Annual Project Costs (Table C-3, column III) | \$210,645 |

0.127954616

Table C-8 Applicant's Cost Share and Description

| | |
|---|-----------|
| Applicant's cost share %: (from Table C-1, row o, column V) | 27 |
| 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. | |

TABLE C-8
BASIS FOR PROGRAM COST SHARE

CALIFORNIA FRIENDLY COMMUNITIES - PROGRAM COSTS

EXPANSION OF MODEL HOME PROGRAM

| | Unit Costs | Proposed Units | Total Costs |
|-----------------------------------|-----------------|----------------|-------------------|
| Metropolitan Contributions | \$ 485 | 275 | \$ 133,375 |
| WBIC | \$ 65 | 275 | \$ 17,875 |
| HECW | \$ 60 | 275 | \$ 16,500 |
| HET (3 @ \$20 ea.) | \$ 60 | 275 | \$ 16,500 |
| CF Landscape (\$0.15/sq.ft.) | \$ 300 | 275 | \$ 82,500 |
| DWR Prop 50 Share | \$ 2,015 | 275 | \$ 554,125 |
| Total Incentive per Unit | \$ 2,500 | 275 | \$ 687,500 |

DWR/MWD Ratio 4.2

Notes: 1) CF Landscape incentive covers builder's estimated incremental cost (relative to typical construction practices) for complying with program specifications. These costs include irrigation hardware, plant stock, additional labor and materials, and significant administrative overhead to properly manage program participation; 2) Model Home Program offers \$2,500 per participating model - See attached program materials; 3) Prop 50 contribution is calculated as difference between program's established incentive of \$2,500 per model, minus Metropolitan's \$485 contribution.

Justification: Showcasing WUE model homes leverages additional voluntary investments by: 1) builders who may offer this WUE package as a standard feature; 2) builders who offer optional WUE upgrade packages to homebuyers; and 3) visitors in search of retrofit ideas for existing homes (the looky-loo effect). See Estimated Benefits for projected savings and additional leverage potential.

NEW MULTI-FAMILY MODEL HOME PROGRAM ELEMENT

| | Unit Costs | Proposed Units | Total Costs |
|-----------------------------------|-----------------|----------------|-------------------|
| Metropolitan Contributions | \$ 485 | 210 | \$ 101,850 |
| WBIC | \$ 65 | 210 | \$ 13,650 |
| HECW | \$ 60 | 210 | \$ 12,600 |
| HET (3) | \$ 60 | 210 | \$ 12,600 |
| Landscape (\$0.15/sq.ft.) | \$ 300 | 210 | \$ 63,000 |
| DWR Prop 50 Share | \$ 2,015 | 210 | \$ 423,150 |
| Total Incentive per Unit | \$ 2,500 | 210 | \$ 525,000 |

DWR/MWD Ratio 4.2

Notes: Calculations for the new multi-family model homes are treated in identical fashion to the single-family model homes. In order to do this, the common area landscape of the multi-family home complex must be credited as attached to the model.

Justification: Showcasing WUE model homes in multi family settings is expected to have the same effect as for single family homes, that is to leverage additional voluntary investments by: 1) builders who may offer this WUE package as a standard feature; 2) builders who offer optional WUE upgrade packages to homebuyers; and 3) visitors in search of retrofit ideas for existing homes (the looky-loo effect). However, as described in the benefits projection table, the project's ability to leverage additional savings must be treated differently, as they do not contain any additional landscaping.

NEW COMMON AREA LANDSCAPE PROGRAM ELEMENT

| | Cost / Sq.Ft. | Proposed Sq.Ft. | Total Costs |
|-----------------------------------|----------------|-----------------|-------------------|
| Metropolitan Contributions | \$ 0.15 | 750,000 | \$ 112,500 |
| DWR Prop 50 Share | \$ 0.30 | 750,000 | \$ 225,000 |
| Total Incentive per Unit | \$ 0.45 | 750,000 | \$ 337,500 |

DWR/MWD Ratio 2

Notes: Metropolitan's \$0.15 / sq.ft. incentive is based on the wholesale value of estimated water savings calculated at \$154/AF. Matching Prop 50 funds are proposed to be added at a lower ratio (2:1) in order to maximize the total area to be influenced by the grant. Our research shows that the incremental cost for builders to comply with the California Friendly Landscapes specifications is approximately \$0.80 per square foot. The proposed partial incentive leverages builders to absorb remaining \$0.35/sf.

Justification: This new program element is designed to leverage potentially high returns in terms of various environmental benefits, including water savings; particularly considering that the proposed incentive rates are lower than those offered for the model home units. This would enable the program to influence a larger area at a lower capital outlay cost. Common area landscaping represents the single major "piece of the puzzle" that remains untapped in the California Friendly program to date. A Prop 50 grant would ensure the California Friendly program address all major water uses within new tract home projects.

PROGRAM IMPACT ASSESSMENT AND EVALUATION

| | |
|--------------------------|-------------------|
| Consultant | |
| DWR Prop 50 Share | \$ 250,000 |

PROGRAM ADMINISTRATION

| | |
|-----------------------------------|---------------------|
| Landscape Consultant | |
| DWR Prop 50 Share | \$ 47,725 |
| Program Management | |
| Metropolitan Contributions | \$ 200,000 |
| Total MWD Contribution | \$ 547,725 |
| Total DWR Contribution | \$ 1,500,000 |

CFMH (SFD) PROJECTED SAVINGS

| | |
|-------------------------|------------------|
| Units | 275 |
| Savings per Unit (rate) | 0.1755 AFY |
| Savings per Year | 48.26 AF |
| Duration / Useful Life | 10 years |
| Program Savings | 482.63 AF |

CFMH (MF) PROJECTED SAVINGS

| | |
|--|------------------|
| Units | 210 |
| Savings per Model Unit (incl/com.area) | 0.1755 AFY |
| Savings per Year | 36.855 AF |
| Duration / Useful Life | 10 years |
| Program Savings | 368.55 AF |

CFL COMMON AREA INCENTIVES

| | | |
|--|------------------|------------------------------|
| Total Landscape Area | 750,000 sq.ft. | |
| Conversion to acres (43560 sq.ft./acre) | 17.22 acres | |
| Potential Water Savings per sq.ft. | 4.30 ft/yr | See attachment for CFL calcs |
| Potential Annual Water Savings | 74.04 AFY | |
| Duration / Useful Life | 10 years | |
| Total Potential Water Savings over 10 Year Life c | 740.36 AF | |

APPENDIX 2

Metropolitan Prop 50 Grant Application California-Friendly Communities Proposal

Estimated Water Savings - Common Area Element

BASELINE WATER USE

| | | |
|--|-------------|--------------|
| Average ETo in MWD Service Territory | 4.52 | ft/yr |
| Crop Coefficient (Kc) - Consistent w/ Local County Landscape Ordinance | 1.00 | |
| Irrigation Efficiency (IE) - Newly Installed System In New Tracts | 0.60 | |
| MAWA/LA = (ET)(Kc / IE) | 7.53 | ft/yr |

NATIVE PLANTS & EFFICIENCY IMPROVEMENTS

| | | |
|--|-------------|--------------|
| Average ETo in MWD Service Territory | 4.52 | ft/yr |
| Combined Statewide Average Crop Coefficient per AB 325 (Kc) | 0.50 | |
| Irrigation Efficiency (IE) (greater than 0.625 by use of drip) | 0.70 | |
| MAWA/LA = (ET)(Kc / IE) | 3.23 | ft/yr |

Potential Water Savings

| | |
|-------------|--------------|
| 4.30 | ft/yr |
|-------------|--------------|

MAXIMUM REBATE AMOUNT UNDER MWD \$154/AF POLICY

| | | |
|--|-------------|--------------------|
| Water Savings Value (\$154/AF = \$0.0035/ft ³) | 0.015 | \$ / sq.ft. |
| Duration / Service Life of New Landscape | 10 | yr |
| Wholesale (MWD) Value of Water Savings over 10 years | 0.15 | \$ / sq.ft. |
| MWD Rebate Amount (after rounding up) | 0.15 | \$ / sq.ft. |

BUDGET FOR REBATES

| | | |
|--|-------------------|----------------|
| Metropolitan's Proposed Cost Share | \$ 112,500 | \$ 0.15 |
| Requested Prop 50 Match from DWR (2:1) | \$ 225,000 | \$ 0.30 |
| Total Rebate Budget | \$ 337,500 | \$ 0.45 |

Cash Rebate per ft²

| | |
|-------------------|----------------|
| \$ 112,500 | \$ 0.15 |
| \$ 225,000 | \$ 0.30 |
| \$ 337,500 | \$ 0.45 |

CALIFORNIA FRIENDLY COMMON AREA - POTENTIAL AREA

| | | |
|--|----------------|--------------|
| Program Budget for Rebates | \$ 337,500 | \$ |
| Combined Rebate Amount (per Square Foot) | \$ 0.45 | per sq.ft. |
| Maximum Area Eligible for Rebates | 750,000 | sq.ft. |
| Conversion from square feet to acres (43560 sq.ft./acre) | 17.22 | acres |

| | |
|----------------|--------------|
| \$ 337,500 | \$ |
| \$ 0.45 | per sq.ft. |
| 750,000 | sq.ft. |
| 17.22 | acres |

POTENTIAL WATER SAVINGS

| | | |
|--|-------|-------|
| Maximum Area Eligible for Rebates | 17.22 | acres |
| Potential Water Savings per sq.ft. | 4.30 | ft/yr |
| Total Potential Water Savings per Year | 74.06 | AFY |

| | |
|-------|-------|
| 17.22 | acres |
| 4.30 | ft/yr |
| 74.06 | AFY |

Total Potential Water Savings over 10 Year Life

740.63 AF

ESTIMATED NUMBER OF REBATES (Range)

| | | |
|--|-----------|-----------------|
| Total Area | 750,000 | sq.ft. |
| Maximum Area to Be Awarded per Project | 15,000 | sq.ft. |
| Estimated Number of Projects to Be Awarded Common Area Grants | 50 | Projects |

| | |
|-----------|-----------------|
| 750,000 | sq.ft. |
| 15,000 | sq.ft. |
| 50 | Projects |