

9. Estimated total quantifiable project benefits (dollar amount): \$19,561

Percentage of benefit to be accrued by applicant: 7,894,000 mg

Percentage of benefit to be accrued by CALFED or others: 24.2 AF

10. Estimated annual amount of water to be saved (acre-feet): 6,742,000 mg/ 51.3 AF

Estimated total amount of water to be saved (acre -feet): 10.02 mg / a year available in D.M.C.

Over 2 years

Estimated benefits to be realized in terms of water quality, instream flow, other:

11. Duration of project (month/year to month/year): 14 months 10/02-12/03

12. State Assembly District where the project is to be conducted: 17th district

13. State Senate District where the project is to be conducted: 5th district

14. Congressional district(s) where the project is to be conducted: 11th district

15. County where the project is to be conducted: San Joaquin

16. Date most recent Urban Water Management Plan submitted to the Department of Water Resources: 2001

17. Type of applicant (select one):
Prop 13 Urban Grants and Prop 13 Agricultural Feasibility Study Grants:
 (a) City
 (b) County
 (c) City and county
 (d) Joint power authority
 (e) Other political subdivision of the State,

DWR WUE Projects: the above entities (a) through (f) or:

- including public water district
- (f) Incorporated mutual water company
- (g) Investor-owned utility
- (h) Non-profit organization
- (I) Tribe
- (j) University
- (k) State agency
- (l) Federal agency

18. Project focus:

- (a) Agricultural
- (b) Urban

19. Project type (select one):
Prop 13 Urban Grant or Prop 13
Agricultural Feasibility Study Grant
Capital outlay project related to:

- (a) Implementation of Urban Best Management Practices
 - (b) Implementation of Agricultural Efficient Water Management Practices
 - (c) Implementation of Quantifiable Objectives (include QO number(s))
-

(d) Other (specify)

DWR WUE Project related to:

- (e) Implementation of Urban Best Management Practices
 - (f) Implementation of Agricultural Efficient Water Management Practices
 - (g) Implementation of Quantifiable Objectives (include QO number(s))
 - (h) Innovative projects (initial investigation of new technologies, methodologies, approaches, or institutional frameworks)
 - (i) Research or pilot projects
 - (j) Education or public information Programs
 - (k) Other (specify)
-

20. Do the actions in this proposal involve physical changes in land use, or potential future changes in land use?

- (a) Yes
- (b) No

If yes, the applicant must complete the CALFED PSP Land Use Checklist found at http://calfed.water.ca.gov/environmental_docs.html and submit it with the proposal.

**Consolidated Water use Efficiency 2002 PSP
Proposal Part One
A. Signature Page**

By signing below, the official declares the following:

The truthfulness of all representations in the proposal;

The individual signing the form is authorized to submit the proposal on behalf of the applicant; and

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.

_____	Nicholas Pinhey	02/28/02
Signature	Director Public Works	Date

CONSOLIDATED WATER EFFICIENCY USE PROGRAM

PROPOSAL PART TWO

City of Tracy

Project Summary

The City of Tracy is a community of 63,000 located in southwestern San Joaquin County. Tracy has approximately 18,000 metered water services, with an estimated 12,000 water services available for plumbing retrofits. Currently, the City supplies a mix of surface water and groundwater to its customers at a 60/40 percent mix. The City of Tracy has a contract with United States Bureau of Reclamation (USBR) for 10,000 acre-feet per year of surface water delivered via the Delta-Mendota Canal. Water conservation is a priority for the City and it has adopted a USBR approved Water Conservation Plan to comply with USBR water conservation requirements.

The City of Tracy Public Works Department is proposing to implement an ultra low-flush toilet retrofit program to achieve an objective of its adopted Water Conservation Plan. The proposed program will replace 1,500 older 5 gallon-per-flush toilets with 1.6-gallon ultra low-flush toilets to achieve an estimated 18.7 million gallons per year water savings.

The City pilot tested a toilet retrofit program in February 2000 and continued the replacement into 2001. A total of 530 toilets were replaced using a contractor who specializes in these types of programs. The cost per toilet, including City administrative costs, was \$142.00.

As proposed, the replacement of 1,500 toilets would take place over a two-year period at an estimated cost of \$156.00 per toilet. The total estimated cost of the program is \$234,000 with the City contributing a \$50,000 share.

A. Scope of Work: Relevance and Importance

1. The proposal is to replace 1,500 older 5-gallon-per flush toilets with 1.6-gallon ultra low-flush toilets over a two-year period to achieve an estimated 16.7 million gallons per year water savings.
2. The City of Tracy receives the majority of its water supply via the Delta, thus the water savings directly addresses the CalFed goals of conserving water supplies south of the Delta. This project is consistent with the Best Management Practices element of the adopted City of Tracy Water Conservation Plan as approved by the USBR.

B. Scope of Work: Technical/Scientific Merit, Feasibility, Monitoring and Assessment

1. The City of Tracy conducted a pilot project that successfully replaced 530 older toilets with ultra-low-flush toilets. The project utilized extensive public outreach and was conducted in cooperation with the Tracy schools and students. Students were encouraged to volunteer and participate in the outreach program. Participating schools received \$15 per toilet retrofit to be used for student clubs and activities. The City engaged the professional services of a company specializing in plumbing retrofits to carrying out the bulk of the work. These services were performed through a standard City contract administered through the Public Work Department. The pilot program successfully demonstrated the feasibility of performing retrofits.

Based on the success of the pilot program, the City proposes to move forward with the implementation of a program to retrofit 1,500 older toilets using the similar procedures.

2. Task List and Schedule

Note: This task list and schedule is for program implementation and assumes funding is available as of October 1, 2002. All tasks leading to the acceptance of the funding are not listed.

Task 1 – Preparation of Request for Proposals for services –	10/1/02
Task 2 – Selection of service provider (solicit, select) –	11/1/02
Task 3 – Prepare services agreement –	11/15/02
Task 4 – Council approval of agreement	12/3/02
Task 5 – Execute agreement	12/10/02
Task 6 – Program start up (Phase I – 750 fixtures)	01/03/03
Task 7 – Quarterly report prepared and submitted	01/31/03
Task 8 – Public Outreach	01/03 to 2/03
Task 9 – Distribution and Retrofit	02/03 to 04/03
Task 10 – Quarterly report	04/30/03
Task 10– Retrofit verification	04/03 to 05/03
Task 11 – Preparation of report on Phase I Completion	06/03
Task 12 – Program start up (Phase II – 750 fixtures)	07/03
Task 13 – Public Outreach	07/03 to 08/03
Task 14 – Quarterly report	07/31/03
Task 14 – Distribution and Retrofit	08/03 to 10/03
Task 15 – Retrofit verification	10/03 to 11/03
Task 16 – Preparation of report on Phase II Completion	12/03

3. Monitoring and Assessment

Monitoring and assessment of the proposed program is quite simple and straightforward. The services agreement with the contractor spells out in detail the deliverables (outcomes). To insure that only those pre 1993 neighborhoods

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will receive new toilets a copy of a City water bill and identification will be required. Also, we will specify in the contract that old toilets must be exchanged and returned to a certain location, within a two to three week period, in order to insure compliance. These toilets will be crushed and recycled. The contractor will be required to submit a spreadsheet with the names and addresses of the people who received an ultra-low flow toilet. We can then enter those addresses into our database to monitor those homes and apartments that have received new toilets.

The most important measure of success (outcome) is the number of older toilets actually removed and replaced. Because the contractor will likely have distribution event with students participating, advertising and preparation will be needed. This will heighten the public's awareness of the need for replacing old, inefficient toilets with new, efficient toilets.

The students participating in these events are also educated about water saving toilets due to their required preparation.

The involvement of schools is another measure of success.

C. Qualifications of the Applicants and Cooperators

1. See attached Resumes
2. Based upon the success of the pilot program, the City of Tracy proposes to use professional contract services to perform the majority of the program implementation. The City will utilize a Request for Proposal process to select the contract service provider.

D. Benefits and Costs

1. Budget Breakdown and Justification

a. Direct Labor Hours –

Water Resources Coordinator	100 hours
Deputy Director of P.W.	12 hours
Director	8 hours

b. Salaries -

Water Resources Coordinator	\$3,789/ month
Deputy Director of P.W.	\$8,203/ month
Director	\$9,089/ month

c. Overall rate -

Water Resources Coordinator	\$28.68/hour
Deputy Director of P.W.	\$47.33/hour
Director	\$64.49/ hour

d. Travel -	N/A
e. Supplies -	N/A
f. Services of consultants -	\$210,000
g. Equipment -	N/A
h. Other direct costs -	\$4,000
i. Total direct costs -	\$214,000
j. Indirect costs (overhead at 9.5 %)	\$20,000
k. Total Costs	\$234,000

2. Cost- Sharing

The City of Tracy is budgeting \$50,000 towards the implementation of the proposed program. The total grant amount being requested is \$184,000. The City's share will be included in the water conservation budget as approved by the City Council.

3. Benefit Summary and Breakdown

- a. Quantitative benefits – The installation of 1,500 ultra-low-flush toilets is estimated to save 16.7 million gallons of water per year. This equates to 10.02 million gallons of surface water and 6.68 million gallons of groundwater saved per year. This will help reduce dry year water demands in Tracy, while helping to reduce energy and water treatment costs. An added benefit is the reduction in water bills for the customers who retrofit their homes.
- b. Qualitative benefits – The public outreach component (via the involvement of the schools) helps increase community awareness of the value of water resources and conservation.

4. Assessment of Costs and Benefits

The cost to purchase, treat, distribute and monitor water for the City of Tracy is \$1,165.71 per million gallons

Cost of program – \$234,000

Savings to City (per year) – \$19,561

E. Outreach, Community Involvement and Acceptance

Working through the school system is a proven means to bring communities together and provide the City with lasting water savings. One of the failures of

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many public programs is that when the program ends, the savings end. Our experience with school education/involvement programs is that when they involve students directly in their own family and friend's homes, sustained savings occur.

For Tracy, the program will involve the two high schools and several elementary schools:

?? One elementary school's 5th grade classes (180 students) would be selected for the students to participate in the "Learning to be Water-Wise" program. This specially designed; award-winning program consists of a total curriculum add-on about water conservation and covers many California State math and science curriculum requirements. Teachers that have used this program in California love it because it gives them real tools for the students to apply in their homes, learn math and science concepts, and involve parents in their children's learning. The "Learning to be Water-Wise" program covers the total Indoor portion of the Water Survey (BMP 1), some of the Outdoor portion all of the required plumbing retrofits (BMP 2), and is a school education program (BMP 8).

?? The contractor would again work directly with Tracy High School students, who would be trained to assist with the High School HET Special Event – the weekend distribution of 400 HET's (high-efficiency toilets) (BMP 14). Along with the HET distribution, those residents needing new showerheads and faucet aerators would receive those devices for self-installation. The contractor provides program oversight, training, on-site event coordination and data tracing for all school programs. The students are responsible for marketing the program in their neighborhoods, utilizing materials developed and provided by the contractor and City. The school receives a \$15 payment for each new toilet distributed and old toilet returned for recycling. Students designate which extracurricular activity for which they want funding, rather than the funds being deposited into general administrative accounts. This is a powerful motivator. Students see the direct benefit to areas that affect them.

?? The contractor would then integrate the other BMP elements into the high school and elementary programs. First, the school districts involved would be offered up to 10 free large landscape water surveys (BMP 5). Second, 10-20 of the homes receiving Indoor water surveys will be given free Outdoor water surveys which would provide them with outside irrigation schedules and recommendations to save water outdoors (Outdoor portion of BMP 1). Third, information about all of the school water conservation

activities would be published in the City utility bill inserts as well as being forwarded as press releases to the media (BMP7).

C. Qualifications of the Applicants and Cooperators

1. Resumes:

a. Name: Terry Ronneberg

Employed by the City of Tracy for 27 years. I've been the Water Resources Coordinator for the City for the past 9 years. I've written and managed the City's Water Conservation Program and specifically managed, for the past two years, the toilet retrofit program.

b. Name: Nicholas Pinhey

Employed by the City of Tracy for 6 years as the Director of Public Works. I have 22 years of water utility experience including managing water conservation programs, water quality programs and grant fund programs.