

March 25, 2008

AGENDA ITEM NO.

COUNCIL MEETING

APPROVED BY



DEPARTMENT DIRECTOR

CITY MANAGER

FROM: PATRICK N. WIEMILLER, Public Works Director   
Public Works Department

BY: EFREN BAÑUELOS, Assistant Director   
Public Works Department, Capital Management Division

MARY J. GONZALEZ, Grant Writer   
Public Works Department, Administration

SUBJECT: ADOPT A RESOLUTION AUTHORIZING THE SUBMISSION OF APPLICATIONS FOR AND ACCEPTANCE OF GRANT FUNDS FROM THE CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION URBAN FORESTRY PROGRAM INNOVATIVE URBAN FORESTRY PROJECTS GRANT AND AUTHORIZING THE EXECUTION OF DOCUMENTS BY THE PUBLIC WORKS DIRECTOR OR HIS DESIGNEE

**KEY RESULT AREA**

One Fresno

**RECOMMENDATIONS**

Staff recommends that the City Council adopt a resolution authorizing the submission of applications for and acceptance of grant funds from the California Department of Forestry and Fire Protection Urban Forestry Program Innovative Urban Forestry Projects and authorizing the execution of documents by the Public Works Director or his designee.

**EXECUTIVE SUMMARY**

The California Department of Forestry and Fire Protection (CAL FIRE) Urban Forestry Program administers grant funds to improve urban forest resources, facilitate the planting of trees in cities, and improve the quality of the environment in urban areas through the establishment and improved management of urban forest resources. The Department of Public Works staff has worked in collaboration with the Department of Public Utilities staff to seek funding for the Median Island Xeriscape Demonstration Project to compete for the Innovative Urban Forestry Projects Grant Funds. The project proposes to demonstrate a quality landscape alternative to conventional landscapes through the selection of low-water consuming plant species of trees and shrubs, decorative rock or concrete features, and drip irrigation system to minimize water waste.

## **KEY OBJECTIVE BALANCE**

The resolution balances the three Key Objectives of Customer Satisfaction, Employee Satisfaction and prudent Financial Management. Customer Satisfaction is achieved by improving the landscaping of public facilities and the educational demonstration of low water consuming plants available for landscaping to local residents. Employee Satisfaction is achieved by planning, designing and implementing median island landscape improvements to enhance the urban forest resources. Prudent Financial Management is achieved by utilizing grant funds to facilitate community improvements and maximizing the City resources to the fullest extent possible.

## **BACKGROUND**

CAL FIRE has administered a variety of urban forestry grant projects throughout the state of California, and the City of Fresno has a strong history of participating in the Urban Forestry Program for several years. The Innovative Urban Forestry Projects Grant is funded through the voter-approved Proposition 40, *California Clean Water, Clean Air, Safe Neighborhood, Parks, and Coastal Protection Act of 2002*. The State of California recognizes trees are a valuable economic asset to cities. The Urban Forestry Program will evaluate projects on the following criteria:

- The project demonstrates innovative techniques for developing and managing urban forest and vegetative resources that can be duplicated in other urban areas;
- The project has regional and/or statewide significance;
- The degree of active community participation provided by the project;
- The project uses trees or other vegetation to reduce consumption of finite energy resources, or to produce energy and other products from urban forests; and
- The project develops public awareness of the need for managing urban forest resources.

The Department of Public Works is managing an existing demonstration project for the Department of Public Utilities for Xeriscape Landscaping of a median island on Shields Avenue from Blackstone Avenue to Fresno Street. Xeriscaping (pronounced Zer-i-skaping) is a term often used to describe landscaping with water conservation as a major objective. Staff submitted a Pre-Proposal to the CAL FIRE Urban Forestry Program for review in September of 2007 and the project has been selected with great interest for a return of a full proposal to the program. The project proposes to demonstrate a quality landscape alternative to conventional landscapes through the selection of low-water consuming plant species of trees and shrubs, decorative rock or concrete features, and drip irrigation system to minimize water waste.

This project is a community demonstration project that will provide a visual example in the heart of Fresno that an alternative landscape feature can conserve water and extensively beautify the City. The total project cost is estimated to be \$278,241 and the Department of Public Utilities has budgeted \$100,000 to the project. The application for grant funds may provide additional funding to implement this innovative demonstration project. Once completed, the Department of

Public Utilities Water Conservation Program will have a useful presentation tool to include in their numerous outreach events to educate the community on viable landscape alternatives for the Central Valley climate and to promote Xeriscape landscaping to the community.

#### **FISCAL IMPACT**

The Department of Public Utilities has provided \$100,000 from Water Enterprise Funds to the existing capital project, which will also be the source to satisfy the local matching fund requirements to the program. The application seeks approximately \$179,335 to complete the project implementation. CAL FIRE has invited the City project to submit a full proposal, indicating there is substantial interest in funding the project. There will be no impact to the General Fund as a result of this grant application. Staff is requesting the approval of the resolution authorizing the submission of applications for and acceptance of grant funds from CAL FIRE and allowing the Director of Public Works or his designee to sign agreements on the City's behalf.

PNW/EB/MJG/eam  
Updated Adopt Reso Xeriscape Rpt 3-25-08

- Attachments: (A) Council Resolution  
(B) Water Savings Comparison  
(C) Project Vicinity Map

RESOLUTION NO. \_\_\_\_\_

A RESOLUTION OF THE COUNCIL OF THE CITY OF FRESNO, AUTHORIZING THE SUBMISSION OF APPLICATIONS FOR AND ACCEPTANCE OF GRANT FUNDS FROM THE CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION URBAN FORESTRY PROGRAM INNOVATIVE URBAN FORESTRY PROJECTS GRANT AND AUTHORIZING THE EXECUTION OF DOCUMENTS BY THE PUBLIC WORKS DIRECTOR OR HIS DESIGNEE (PROJECT: MEDIAN ISLAND XERISCAPE DEMONSTRATION PROJECT)

WHEREAS, The California Department of Forestry and Fire Protection (CAL FIRE) Urban Forestry Program provides grant funds to eligible local agencies to improve urban forest resources, facilitate the planting of trees in cities, and improve the quality of the environment in urban areas through the establishment and improved management of urban forest resources; and

WHEREAS, the California Department of Forestry and Fire Protection administers the grant program and has requested applications from eligible agencies for the 2007/2008 fiscal year; and

WHEREAS, the applicant's governing body to certifies by resolution approval of the application and program participation; and

WHEREAS, the City of Fresno will enter into an agreement with the State of California for development of the Project; and

WHEREAS, the City has FY 2007/2008 appropriations available as matching funds.

NOW THEREFORE BE IT RESOLVED THAT THE CITY COUNCIL OF THE CITY OF FRESNO HEREBY:

SECTION 1. Approves the application for and acceptance of up to \$179,335 in grant funding from the FY 2007/2008 Innovative Urban Forestry Projects Grant Program for the Project and participation therein, consistent with constitutional and local law requirements and this resolution; and

SECTION 2. Certifies, consistent with constitutional and local law requirements and this resolution that the City has or will have sufficient funds to provide the match funds and to operate and maintain the Project; and

SECTION 3. Certifies that the City has reviewed, understands and, to the extent consistent with all constitutional and local law requirements and this resolution, agrees to the provisions contained in the application and program guidelines, manual and related documents; and

SECTION 4. Appoints and authorizes the Department of Public Works Director or his designee and each of them as the agent for the City of Fresno to conduct all negotiations, execute and submit all documents including, but not limited to applications, agreements, amendments, payment requests and so on which may be necessary for the completion of the aforementioned Project, subject to prior approval as to form by the City Attorney's Office.

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CLERK'S CERTIFICATION

STATE OF CALIFORNIA )  
COUNTY OF FRESNO )  
CITY OF FRESNO )

I, REBECCA E. KLISCH, City Clerk of the City of Fresno, certify that the foregoing resolution was adopted by the Council of the City of Fresno, California, at a regular meeting thereof, held on the \_\_\_\_\_ day of \_\_\_\_\_, 2008.

AYES:  
NOES:  
ABSENT:  
ABSTAIN:

REBECCA E. KLISCH  
City Clerk

By \_\_\_\_\_  
(Deputy)

APPROVED AS TO FORM:

JAMES C. SANCHEZ  
City Attorney

By     *R*      
Robert R. Coyle, Senior Deputy

Date:     3-12-08

**Shields Avenue Median Islands  
Irrigation System  
Water Savings Comparison**

Fresno's typical weather patterns require peak irrigation in the month of July and little to no irrigation during the months of December, January, and February.

The following calculations were developed for irrigation valves (stations) covering 750 square feet of landscape during the peak irrigation month of July. Savings in water usage is based on three things:

No over application of water,  
Less evaporation because no water is applied through the air and the soil surface  
is not over saturated, and Plant choice.

**BASE IRRIGATION CALCULATION AT PEAK DEMAND**

Typical irrigation system; pop up spray heads with precipitation rate of 1.8" per hour, automatic control valve, electric controller. Valve flow assumes 30.0 gallons per minute. Peak run time is 22 minutes per day, three days per week. Plant material requires moderate amounts of water.

Daily Water Use:	30 GPM x 22 Minutes	=	660 Gallons used
Weekly Water Use:	660 Gallons x 3 Days	=	1,980 Gallons used
Monthly Water Use:	1,980 Gallons x 4 Weeks	=	7,920 Gallons used

**Total Base Water Use for One Valve (Station) per Month Equals 7,920 Gallons**

**XERISCAPE IRRIGATION CALCULATION AT PEAK DEMAND**

Typical drip irrigation system includes sub surface drip line with herbicide impregnated in line emitters and precipitation rate of 1.5" per hour, filter, automatic control valve, and electric controller. Valve flow assumes 6.0 gallons per minute. Peak run time is 40 minutes per day, three days per week. Plant material requires low amounts of water.

Daily Water Use:	6.0 GPM x 40 Minutes	=	240 Gallons Used
Weekly Water Use:	240 Gallons x 3 Days	=	720 Gallons Used
Monthly Water Use:	720 Gallons x 4 Weeks	=	2,880 Gallons Used

**Total Xeriscape Water Use for One Valve (Station) per Month Equals 2,880 Gallons**

**Total Water Savings per Month Equals 64%**

**DEMONSTRATION PROJECT**  
**MEDIAN ISLAND XERISCAPE – SHIELDS AVENUE**  
**BLACKSTONE AVENUE TO FRESNO STREET**



**Legend:**  
Proposed Median Island Xeriscape  
Demonstration for Water Conservation Landscape