

DATE ISSUED: April 25, 2001

REPORT NO. 01-081

ATTENTION: Natural Resources & Culture Committee
Agenda of May 2, 2001

SUBJECT: Retrofit of the Miramar Marine Corps Air Station Golf Course

SUMMARY

Issue - Should the City of San Diego enter into an agreement with the Marine Corps Community Services of the Marine Corps Air Station Miramar to finance construction of reclaimed water retrofit facilities?

Manager's Recommendations - 1. Authorize the City Manager to enter into a Memorandum of Agreement for \$904,737, between Marine Corps Community Services and the City of San Diego for the proposed implementation of reclaimed water retrofit project.

2. Authorize the City Auditor to appropriate \$954,737, from the Water Fund, Unappropriated Fund Balance to CIP No. 70-941.0, Annual Allocation for Reclaimed Water Retrofit Systems to fund this Agreement.

3. Authorize the expenditure of \$954,737, from Water Revenue Fund 41500, CIP No. 70-941.0, Annual Allocation for Reclaimed Water Retrofit Systems, to fund this proposed reclaimed water retrofit project.

Other Recommendations - None.

Fiscal Impact - This agreement will reimburse the Miramar Memorial Golf Course, located at the Marine Corps Air Station Miramar, up to \$904,737. Funding will be available in Water Revenue Fund 41500, Capital Improvement Program 70-941.0, Annual Allocation for Reclaimed Water Retrofit Systems when the money is appropriated from the Water Fund, Unappropriated Fund Balance.

In addition, \$50,000 will be expended for required work by City Forces, such as the meter and backflow assembly, swivel ell, gate valves and labor and materials. The total amount of this project is \$954,737.

BACKGROUND

In September 1997 the City of San Diego commissioned a thirty million gallon per day (mgd) North City Water Reclamation Plant (NCWRP) and the reclaimed water distribution system, which were the result of almost ten years of negotiation, planning, design and construction. The

Reclaimed Water Distribution System (RWDS) includes approximately forty miles of pipeline, four pressure zones, two pump stations, nine pressure reducing stations and a nine-MG reservoir. Landscape irrigation is the largest use of the reclaimed water, with other uses including cooling towers, construction water and dust suppression. Since 1996 the City has been working with more than two hundred potential customers with site-by-site evaluations to determine what water system modifications are needed to meet State and County Health Department regulations in order to use reclaimed water. Since 1997, there have been more than 125 customers connected to the system.

Reclaimed water is approved for nearly all non-potable uses. The production of reclaimed water at the North City plant is carefully monitored by responsible local health and quality control agencies, ensuring that the City produces a highly treated, filtered and disinfected product that meets State Department of Health Services criteria. According to the strict standards set out in Title 22 of the California Code of Regulations, reclaimed water is safe for all human contact. For more than thirty years, reclaimed water has been safely used throughout the country in recreational lakes, sprinkler systems for parks and businesses, irrigation and manufacturing processes.

There are extensive rules and regulations covering its use, with one being the placement of signage in reuse areas. All pipes, sprinkler heads, meter boxes and other irrigation equipment are properly marked or color coded purple to avoid any potential for cross-connections and to distinguish them from potable supplies.

In order to introduce reclaimed water to an existing site which uses potable water, certain modifications have to be made to ensure that reclaimed water is not cross connected with potable water. These modifications include installation of backflow prevention devices, separation of the reclaimed water system from potable water system, the identification and marking of the reclaimed water components, and installation of signs to inform the public that the reclaimed water is being used.

DISCUSSION

NCWRP was constructed as a result of a settlement agreement between the City and the United States Environmental Protection Agency (EPA). The EPA provided the City a grant for the construction of NCWRP. As a condition of the grant, the Water Department is required to market reclaimed water to the existing potable water customers. As part of the marketing program, in 1997, the Water Department created a Reclaimed Water Retrofit Capital Improvement Project which pays for customer on-site modifications.

The City of San Diego's incentive program to make reclaimed water available to businesses (Resolution No. RR-287560), applies to the Miramar Memorial Golf Course, located at 45249

Miramar Way. This agreement will reimburse Marine Corps Community Services of Marine Corps Air Station Miramar for design and construction costs of modifying the Golf Course to use reclaimed water. Miramar Memorial Golf Course is required to retrofit their existing on-site potable water distribution system to accept reclaimed irrigation water. They anticipate using 400 acre feet per year of reclaimed water for irrigation. The City also has an agreement with Torrey Pines Golf Course to retrofit their property to use reclaimed water for irrigation. They have been on-line since 1998 and use approximately 350 acre feet of reclaimed water per year. The average customer usage of reclaimed water is 10 acre feet per year.

The Water Department has aggressively encouraged Marine Corps Community Services of Marine Corps Air Station Miramar to use reclaimed water since 1997. We have made presentations on-site, provided information on the Reclaimed Water Program, guided them through the North City Water Reclamation Plant, and continuously worked together to form this reimbursement agreement. The Miramar Memorial Golf Course would be one of the larger users of reclaimed water in the North City area. Marine Corps Community Services (MCCS) is also considering the use of reclaimed water for a fish pond on the property. The approximate demand for the pond is 125 acre feet per year.

This agreement also allows the City to beneficially use a United States Bureau of Reclamation Grant to increase the use of reclaimed water. The Bureau of Reclamation has provided the City \$1,800,000 for the current fiscal year. Miramar Memorial Golf Course will use about one half of that grant. The Bureau has agreed to reimburse the City 25% of the retrofit cost within the next two years.

Beneficial Reuse Goals set by the EPA grant agreement are 6,250 acre feet per year by the year 2003, and 12,500 acre feet per year by 2010. This agreement with Marine Corps Community Services of Marine Corps Air Station Miramar will contribute towards those goals.

CONCLUSION

The Marine Corps Community Services of Marine Corps Air Station Miramar agreement will increase reclaimed water use by 400 acre feet per year, and provide effective use of the United States Bureau of Reclamation grant money set aside to increase the use of reclaimed water.

ALTERNATIVE

Do not adopt the resolution. This is not recommended due to the impact this will have towards meeting the year 2003 beneficial use goal set by the EPA.

Respectfully submitted,

Larry Gardner
Water Department Director

Approved: George I. Loveland
Senior Deputy City Manager

GARDNER/SFH