

# URBAN IRRIGATION WATER RATE STUDY



**UTILITIES DEPARTMENT**

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# URBAN IRRIGATION WATER RATE STUDY

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# URBAN IRRIGATION WATER RATE STUDY

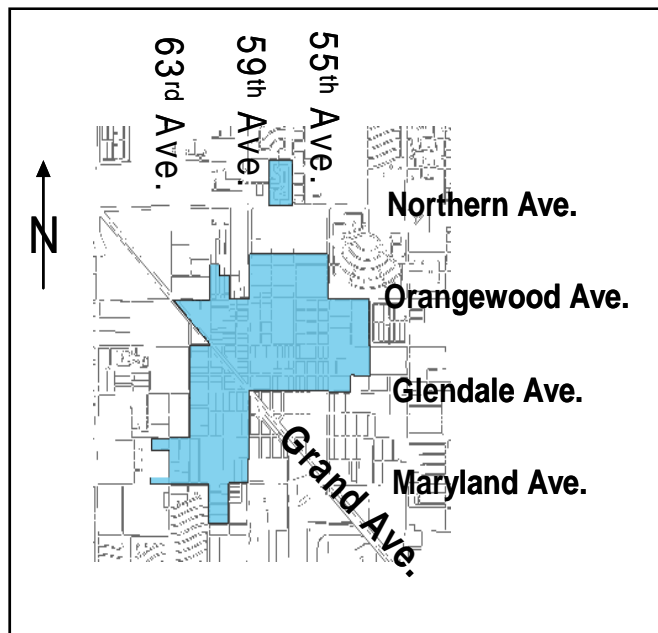
## I. INTRODUCTION

The purpose of this study is to determine the financial performance of the urban irrigation system, to determine if current revenues are sufficient to cover operation and maintenance costs, and further determine if rates for the provision of service need to be adjusted.

## II. BACKGROUND

The City has provided irrigation water service to its residents since 1912 (then the Town of Glendale). This was accomplished by the enactment of Ordinance Number 27, passed on January 8, 1912. This ordinance stipulated that the City is responsible for distribution of all irrigation water throughout the designated area and repair and maintenance of the main ditches and branches that run through the City's streets.

At the time the irrigation service was first implemented, the service area was bounded by Orangewood, Maryland, 53<sup>rd</sup>, and 63<sup>rd</sup> Avenues. As the City developed, additional parcels were incorporated into the service area while landowners in other areas opted to receive service directly from the Salt River Project. At that time, the City's provision of irrigation service was determined to be mutually beneficial to the City and to its customers. By providing irrigation service, the City could ensure a high level of customer service, coordinate the times for water deliveries, and minimize water damage to the streets and to residents' property. At one time, the irrigation system served 1,600 customers.



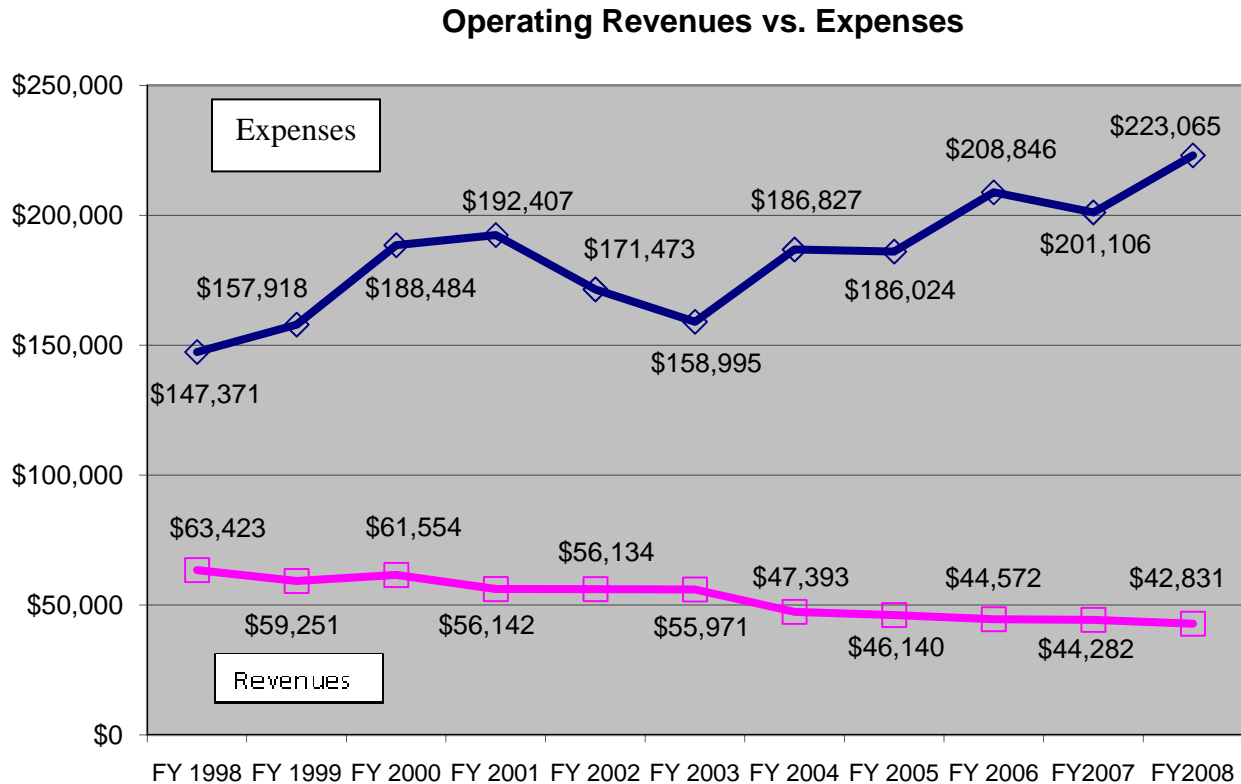
**Figure 1 – Irrigation Service Area**

Currently, the irrigation system serves only approximately 410 customers during the seven-month irrigation service season. As shown on **Figure 1**, above, the current service area is divided by Grand Avenue. East of Grand Avenue, the service area is bounded by Northern, Glendale, Grand, and 53<sup>rd</sup> Avenues. The western portion of the service area is bounded by Glendale, Maryland, Grand, and 64<sup>th</sup> Avenues. The delivery system currently consists of approximately 23 miles of mains, valves, and other appurtenances.

### III. REVENUES VS. EXPENSES

Historical irrigation service operational and maintenance costs were researched and compared to the revenue generated by this service. **Figure 2**, below, is a comparison of operational expenses versus revenue for the eleven most recent fiscal years.

For the past eleven fiscal years, on average, operating costs were \$183,865 and revenues were \$52,518, yielding an average annual deficit of \$131,347. All revenue shortfalls are absorbed by the Utility Department's operating budget. Based on FY 2008 revenue and operating expenses, in order to make the revenues collected from the service cover the total operating costs, the monthly service charge would need to be increased by \$58.21 per customer. The typical residential customer owning a lot of up to 12,000 square feet is currently charged \$19.51 per month for seven months (i.e., \$136.59 annually). Council direction on this service is to raise the cost of this service the amount that the city is raising potable water rates. For FY 09/10 that increase is 11% to take effect in the October billing period.



**Figure 2 – Revenues vs. Expenses (1998 – 2008)**

As shown in **Table 1** below, actual irrigation rates vary pursuant to a schedule of rates based on lot size.

<b>Lot Size Range (SF)</b>	<b>Annual Fee</b>	<b>Monthly Fee</b>
0 - 12,000	\$ 136.59	\$ 19.51
12,001 - 15,000	\$ 157.08	\$ 22.44
15,001 - 18,000	\$ 177.57	\$ 25.37
18,001 - 21,000	\$ 198.06	\$ 28.29
21,001 - 24,000	\$ 218.55	\$ 31.22
24,001 - 27,000	\$ 239.03	\$ 34.15
27,001 - 30,000	\$ 259.52	\$ 37.07
30,001 - 33,000	\$ 280.01	\$ 40.00
33,001 - 36,000	\$ 300.50	\$ 42.93

**Table 1 - Schedule of Irrigation Water Rates**

#### **IV. RECOMMENDATIONS**

The comparison of expenses to revenues clearly indicates that the revenues generated from the provision of urban irrigation service are insufficient to cover the ongoing operation and maintenance costs. Rates for service must be increased in order to reduce the shortfall. This approach entails increasing urban irrigation water service rates when water rates are increased. The proposed increase would equal the percentage increase of water rate revenues and would become effective at the same time when water rates are adjusted in October 2009.

**Table 2** presents the proposed urban irrigation water service rates reflecting an increase of 11% to parallel the proposed increase in potable water service revenues.

<b>Lot Size Range (SF)</b>	<b>Annual Fee</b>	<b>Monthly Fee</b>
0 - 12,000	\$ 151.61	\$ 21.66
12,001 - 15,000	\$ 174.36	\$ 24.91
15,001 - 18,000	\$ 197.10	\$ 28.16
18,001 - 21,000	\$ 219.85	\$ 31.40
21,001 - 24,000	\$ 242.59	\$ 34.65
24,001 - 27,000	\$ 265.32	\$ 37.91
27,001 - 30,000	\$ 288.07	\$ 41.15
30,001 - 33,000	\$ 310.81	\$ 44.40
33,001 - 36,000	\$ 333.56	\$ 47.65

**Table 2 – Proposed Schedule of Irrigation Water Rates**