

## Return Flow to MMSD South Shore Outfall

(Costs include corridor sharing with an Oak Creek Water Supply)

### Capital Cost

	Quantity	Unit Cost	Total
<b>Pipelines</b>			
25.8 of miles of 30-inch pipe	136,224	\$ 387	\$ 52,699,000
10% allowance for pipeline valves & appurtenances			\$ 5,270,000
5% allowance for improvements at MMSD South Shore outfall			\$ 2,635,000
<b>Pipeline Construction Cost</b>			\$ 60,604,000
<b>WWTP Effluent Pump Station</b>			
One 16.7 mgd pump station, generators and power supply	1	\$ 9,359,000	\$ 9,359,000
<b>Subtotal Return Flow Construction Cost</b>			\$ 69,963,000
3% markup for Bonds & Insurance			\$ 2,099,000
5% markup for Mob/Demob			\$ 3,499,000
8% markup for Contractors Overhead			\$ 6,045,000
4% markup for Contractors profit			\$ 3,023,000
25% Contingency			\$ 21,158,000
<b>Subtotal Markups and Contingency</b>			\$ 35,824,000
<b>Total Project Construction Costs</b>			\$ 105,787,000
8% allowance for pipeline engineering and design			\$ 8,463,000
12% allowance for permitting, legal and administration			\$ 12,695,000
8% allowance for pipeline engr services during construction			\$ 8,463,000
<b>Subtotal Other Project Costs</b>			\$ 29,621,000

GRAND TOTAL PROJECT COST

**\$135,408,000**

### Operating and Maintenance Cost

	Units	Quantity	Unit Cost	Ext. Cost	Total
Energy	mgd	11.7			\$ 485,338
O&M		2% of Capital cost of pump station	2%	\$ 9,359,000	\$ 187,180
MMSD South Shore Outfall		5% of current contract community sewer service fee	5%	\$ 3,658,838	\$ 182,942

**Alternative Total O&M (\$/yr.)**

**\$ 855,000**

**TOTAL PROJECT PRESENT WORTH (6%, 20 yrs)**

**\$ 145,408,000**

**TOTAL PROJECT PRESENT WORTH (6%, 50 yrs)**

**\$ 148,408,000**