



• **Board of Directors**
Executive Committee

December 14, 1999 Board Meeting

8-3

Subject

Participate in the American Water Works Association Research Foundation's (AWWARF) Voluntary Research Subscription Program--\$425,000.

Description

AWWARF has asked Metropolitan to participate in the 15th year of its Voluntary Research Subscription Program. The amount requested by AWWARF for calendar year 2000 is \$425,000. Please see [Attachment 1](#) for background information about the program and its benefits to Metropolitan and our member agencies. Metropolitan's contribution, along with contributions from other water utilities and consulting firms, will be used to fund critical applied research projects in the drinking water field. In addition, Metropolitan's contribution enables its member agencies to obtain an approximately 60 percent discount in their contribution to the AWWARF program. Collectively, this saves Metropolitan's member agencies \$240,000 per year. Currently, 22 member agencies are AWWARF subscribers. Furthermore, Metropolitan has been awarded over \$2.5 million in grant money from the program (see [Attachment 2](#)).

Policy

None.

Board Options/Fiscal Impacts

Option #1

Pay \$425,000 as Metropolitan's contribution to AWWARF's Voluntary Research Subscription Program for calendar year 2000.

Fiscal Impact: \$425,000.

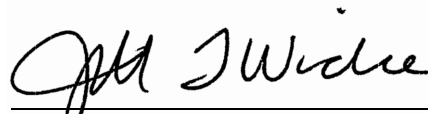
Option #2

Do not participate in AWWARF's program.

Fiscal Impact: None.

Staff Recommendation

Option #1



Jill V. Wicke
Acting Manager, Water System Operations

11/19/99
Date



Ronald R. Jester
General Manager

11/22/99
Date

[Attachment 1](#)
[Attachment 2](#)

Detailed Report

AWWARF is a non-profit corporation established in 1967 to promote, coordinate, and finance applied research in the operation and management of public water supply systems. Currently, AWWARF has over 1,000 utility subscribers, 52 consulting firm subscribers and 20 manufacturers. Metropolitan has been a subscriber since the first year of the program.

Applied research topics funded by AWWARF address key problems identified by the water industry and provide essential information for impacting the development of drinking water regulations. This research is critical for the implementation of the "good science" requirement for new regulations contained in the Safe Drinking Water Act Amendments of 1996. Metropolitan and its member agencies have benefited from AWWARF's program in a number of areas, including the Information Collection Rule; the Disinfectants/Disinfection By-Products (D/DBPs) Rule; the Enhanced Surface Water Treatment Rule; taste-and-odor-control strategies; and detection and treatment of microbial pathogens. Specifically, AWWARF has funded \$7.5 million on arsenic research, \$3.5 million for perchlorate, \$60.6 million on microbials and DBPs, \$3.5 million for reclamation and reuse projects, and \$32.3 million on *Cryptosporidium*. AWWARF also works with a number of agencies (e.g., Water Environment Research Foundation, U.S. Environmental Protection Agency) to provide co-funding for projects of mutual interest. Furthermore, Metropolitan's Water Quality Section has been awarded \$2,507,500 in grant money from AWWARF to be distributed over the next few years (Attachment 2).

AWWARF has asked Metropolitan to participate in the 15th year of its Voluntary Research Subscription Program. The amount requested by AWWARF for calendar year 2000 is \$425,000. This amount has increased from last year's contribution of \$412,500, due to increased research needs resulting from the implementation of the Safe Drinking Water Act Amendments of 1996. Utility contributions are based on \$1.85 per million gallons delivered per year, with credits given for water purchased from subscribing wholesalers and water sold wholesale. Therefore, Metropolitan covers approximately 60 percent of the AWWARF funding for our member agencies that are AWWARF's utility subscribers. Collectively, this saves Metropolitan's member agencies \$240,000 per year. Currently, 22 of Metropolitan's 27 member agencies are AWWARF subscribers.

Adequate funds for one-half of the proposed \$425,000 contribution have been budgeted for fiscal year (FY) 1999/2000 because payments must be made on a calendar-year basis. If the board approves this recommendation, the other half of the proposed \$425,000 contribution would be included in the FY 2000/2001 budget. The proposed contribution is categorically exempt from the California Environmental Quality Act because it involves only feasibility and planning studies.

**ACTIVE AWWARF GRANTS AWARDED TO METROPOLITAN
October-99**

Item No.	Project	Project Duration (Months)	Total Amount to MWD (\$)
1	Assessment of Molecular Epidemiology of Waterborne Cryptosporidium with Respect to Origin	30	165,000
2	Distribution of Generated Taste and Odor Phenomena	36	145,000
3	Case-Study:Disinfection/Disinfection By-Products Regulations	34	82,000
4	Characterization of Polar Fraction of NOM w/Respect to DBP Formation	24	72,000
5	Colonization of Biologically Active Filter Media w/ Pathogens	24	47,500
6	Health Effects of Disinfection & Disinfection By-Products	52	10,000
7	Formation, Occurrence, Stability and Dominance of Haloacetic Acids and Trihalomethanes in Treated Drinking Water	24	30,000
8	Filter Operational Effects on Pathogens Passage	27	147,500
9	National Assessment of Perchlorate Contamination Occurrence	18	100,000
10	Disinfection Efficiency and Dose Measure for Medium Pressure and Pulsed UV Disinfection	18	50,000
11	National Assessment of MTBE Occurrence in Drinking Water	41	150,000
12	A Comparative Study of Non-Thermal Technologies for Salinity Removal	18	63,400
13	Rapid Screening of Pathogens in Water	18	103,900
14	Feasibility Study to Develop an Artificial Intelligence System for Optimization of WTP Ops	24	73,000
15	Assessment of Blue-Green Algal Toxins in Raw and Finished Waters	22	21,000
16	Treatability of Perchlorate Containing Water by Reverse Osmosis	24	70,000
17	Removal of Bromate and Perchlorate in Conventional Ozone/GAC System	12	25,000
18	Early Warning Techniques and Communication Plans for Surface Water Taste-and-Odor Events	24	300,000
19	Comparison of Cell Culture and Animal Infectivity for Detection of Cryptosporidium Parvum	45	496,800
20	Removal of MTBE with Advanced Oxidation Processes	24	150,000
21	Inactivation of Pathogens by Innovative UV Technologies	36	200,000
22	Innovative UV Technologies to Oxidize Organic and Organoleptic Chemicals	36	5,400
	TOTAL		\$2,507,500