

**MEMORANDUM OF AGREEMENT BETWEEN
MADISON WATER UTILITY
AND THE BOARD OF REGENTS OF THE UNIVERSITY OF WISCONSIN**

MADISON WATER UTILITY, located at 119 East Olin Avenue, Madison, Wisconsin, hereafter referred to as the DONOR, desires to provide funds for the support of drinking water system research. For this purpose, it is mutually agreed by the DONOR and THE BOARD OF REGENTS OF THE UNIVERSITY OF WISCONSIN SYSTEM as follows:

- (1) The project will be under the administration of the Engineering Experiment Station, The University of Wisconsin-Madison, and will be conducted under the supervision of Professor Gregory W. Harrington, Department of Civil and Environmental Engineering, The University of Wisconsin-Madison.
- (2) The DONOR will place at the disposal of the BOARD OF REGENTS OF THE UNIVERSITY OF WISCONSIN SYSTEM the sum of \$38,000 per academic year for no more than three (3) consecutive academic years starting with the 2008-2009 academic year. The time period for the agreement will be September 1, 2008 through August 31, 2011.[gwh1]
- (3) Either party, at the start of each academic year, may terminate this agreement with written notice delivered to the other party no later than March 1st prior to the start of the academic year.
- (4) Payments will be made upon presentation of quarterly invoices. Payment will be to the UNIVERSITY OF WISCONSIN and will be sent to the Director, Research & Sponsored Programs, The University of Wisconsin, 442 A.W. Peterson Building, 750 University Ave, Madison, Wisconsin 53706.
- (5) The UNIVERSITY will keep these funds separate in an account to be called Madison Water Utility Drinking Water Research and use them to employ competent research workers to carry on the research referred to above, to purchase necessary supplies and equipment, and to defray travel and other necessary expenses.
- (6) The UNIVERSITY will furnish laboratory facilities and such usual equipment as is required for the work on this project insofar as the facilities of the UNIVERSITY permit.
- (7) Upon termination of this agreement, any equipment, material, or supplies remaining in stock will become the property of the UNIVERSITY unless it has been accepted on a loan basis for use in the project by prior agreement.
- (8) The Program Directors will render, upon completion of each project, suitable reports on the work accomplished, with the understanding that the UNIVERSITY, in accepting these funds for the purpose herein stated, intends that they shall be used for the promotion of scientific knowledge in the field referred to; that the results of such research shall be made public, through publication or otherwise, in any manner that the UNIVERSITY may deem desirable, keeping in mind that that public interest or welfare shall be dominant. Prior to publication by the UNIVERSITY, the results of these investigations are not to be used for sales promotion except by previous consent of the UNIVERSITY. When the results of the research are published, the UNIVERSITY agrees to make acknowledgment of the aid received from the DONOR.

The above memorandum has been presented to THE BOARD OF REGENTS OF THE UNIVERSITY OF WISCONSIN SYSTEM and accepted by them on _____, and is declared effective upon the signatures of the Director of Research & Sponsored Programs of THE UNIVERSITY OF WISCONSIN and the Dean of the College of Engineering for THE UNIVERSITY OF WISCONSIN-MADISON, and the Mayor and Clerk of the City of Madison and the General Manager of Madison Water Utility.

(Date)

Date	Dean, College of Engineering
Date	Director, Research Administration - Financial
Date	Mayor, City of Madison
Date	Madison City Clerk
Date	General Manager, Madison Water Utility

Proposed Budget
 Agency: Madison Water Utility

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
A. Senior Personnel						
1. Greg Harrington, PI	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
3.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
5.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
6.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Senior Personnel	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
B. Other Personnel						
1. Post Doctoral Associates	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2. Other Professionals	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
3. Graduate Student 50%	\$ 19,596	\$ 20,380	\$ 21,195	\$ -	\$ -	\$ 61,171
4. Project Asst	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
5. Undergraduate Students	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
6. Secretarial-Clerical	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
7. Other - LTE	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Salaries	\$ 19,596	\$ 20,380	\$ 21,195	\$ -	\$ -	\$ 61,171
C. Fringe Benefits						
38.5% *A 2.0% *B5	\$ 4,020	\$ 4,180	\$ 4,340	\$ -	\$ -	\$ 12,540
13.5% *B1&B4 49.5% *B6						
20.5% *B3 17.5% *B7						
Total S&W + FB	\$ 23,616	\$ 24,560	\$ 25,535	\$ -	\$ -	\$ 73,711
D. Equipment						
1.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
3.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
5.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
6.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
E. Travel						
1. Domestic	\$ 1,000	\$ 1,040	\$ 1,082	\$ -	\$ -	\$ 3,122
2. Foreign	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
F. Other Direct Costs						
1. Materials & Supplies	\$ 3,500	\$ 3,640	\$ 3,786	\$ -	\$ -	\$ 10,926
2. Publications	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
3. Computer Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4. Shop Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
5. Subcontracts	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
6. Tuition Remission	\$ 8,000	\$ 8,320	\$ 8,653	\$ -	\$ -	\$ 24,973
Total Other Direct Costs	\$ 11,500	\$ 11,960	\$ 12,438	\$ -	\$ -	\$ 35,898
G. Total Direct Costs						
	\$ 36,116	\$ 37,560	\$ 39,055	\$ -	\$ -	\$ 112,731
H. Indirect Costs NOT ALLOWED BY MWU						
48.5% of G-D-F5>\$25,000 - F6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
I. Total Costs						
	\$ 36,116	\$ 37,560	\$ 39,055	\$ -	\$ -	\$ 112,731

BUDGET EXPLANATION

- All items include a 4% inflation adjustment.
- One graduate student is committed to the project with a 50% appointment as a research assistant. All research assistants receive fringe benefits and tuition remission. Costs to research projects are fringe benefits at 20.5% of salary and tuition remission at \$8,000 per year.
- Domestic travel is for mileage from campus to Madison unit wells. Costs for the first year were based on costs incurred on the current project, with inflation factored in for Years 2 and 3.
- Supply budget is for miscellaneous laboratory and research supplies. The first year cost was estimated from the costs incurred on the current project, with inflation factored in for Years 2 and 3.
- No indirect costs are applied, per policy of the Madison Water Utility (on file with the Office of Research and Sponsored Programs, University of Wisconsin-Madison).