



Partnership for Safe Water

Working Together to Protect Public Health by Optimizing Water System Operations



Program Fact Sheet

Treatment Plant and Distribution System Optimization Programs

The Partnership for Safe Water

The Partnership is a voluntary effort between six drinking water organizations, and more than **200 water utilities**. The goal of the Partnership is to provide a new measure of public health protection to millions by implementing prevention programs where legislation or regulation does not exist. The preventative measures are based around optimizing treatment plant performance and distribution system operation. The result is the production and delivery of superior quality water to all users.

Regulatory requirements for surface water filtration plants and drinking water distribution systems are becoming increasingly stringent. Accordingly, the Partnership program provides operators, field staff, managers and administrators with tools to assess the performance of treatment plants and distribution systems and develop plans to improve performance beyond even proposed regulatory levels.

Partner Organizations

The Partnership for Safe Water is comprised of an unprecedented alliance of six prestigious drinking water organizations:

- AWWA** – American Water Works Association
- AMWA** – Association of Metropolitan Water Agencies
- ASDWA** – Association of State Drinking Water Administrators
- NAWC** – National Association of Water Companies
- USEPA** – U. S. Environmental Protection Agency
- WRF** - Water Research Foundation

Subscriber Benefits

Optimized Operations and Improved Water Quality

- Utility subscribers benefit from procedures, software and manuals to implement and monitor water quality improvements.
- Plants that complete the self-assessment process reduce combined filter effluent turbidity by an average of over 60 percent.
- While individual utility data are kept private, Partnership subscribers have access to summary data from other program participants that enable comparison with industry benchmarks.
- Utility subscribers incorporate the program's protocols to effectively identify system limitations and issues.

- Employees of Partnership utility subscribers demonstrate a sense of purpose and a personal and team commitment to achieving the highest standards of water quality.
- Employees of Partnership subscriber utilities may also participate in program committees; thereby receiving valuable industry exposure critical for professional growth and development.
- The Partnership staff is available to assist and direct utility and plant personnel with all aspects of the program.

Recognition by your Community and Customers

- Participation in the program demonstrates your commitment to water quality and public health for consumers. Successful completion of the program phases earns awards, which can be highlighted to demonstrate your accomplishments to your community.

Regulator Confidence

- The Partnership's technical materials, processes, and software help prepare utilities to meet more stringent regulatory requirements.
- Utility participation in this unique program assures regulators, at all levels, that the highest level of operation is achieved by performance optimization.

Utility Eligibility

The utility must be a water system that provides filtered surface water or manages a water distribution system. Utilities of all sizes are eligible to participate. The utility must demonstrate that it has met all applicable regulatory requirements during the six months prior to applying for Partnership membership. Unfiltered systems, or those that do not maintain a disinfectant residual in the distribution system, are not eligible for the program at this time.

Partnership Phases

There are four phases to the Partnership:

- Phase I – Commitment
- Phase II – Baseline Data Collection
- Phase III – Self-Assessment
- Phase IV – Optimized System (*Optional*)

The first three phases are required; the last is optional.

Phase I: Commitment

To begin Phase I, complete the Membership Application and return it to the Partnership for Safe Water. Utilities may select to subscribe to the Treatment Plant Optimization Program, the Distribution System Optimization Program, or both programs (subscription dues apply to each of the programs.) Utilities enrolled in the Partnership must be in full compliance with all applicable regulations for a minimum of 6 months prior to the application date. When the signed application is received the utility will receive a packet containing the materials needed to begin the program. Utilities are not required to meet Partnership water quality goals to join the program.

Phase II: Baseline Data Collection

To complete Phase II and establish a performance baseline, the water system submits 12 months of performance data to the Partnership. Treatment plants provide raw and filtered water turbidity data; distribution systems provide disinfectant residual data. This is ideally accomplished within 180 days of joining the Partnership.

Partnership subscribers are provided with data collection and processing software as well as a technical manual that describes the Partnership's systematic approach to assessing operations, design, administration, and maintenance practices for each program. Data are submitted on an annual basis for as long as the utility wishes to participate in the Partnership. By continuing to analyze performance and submit data, the utility demonstrates the effect of their ongoing optimization efforts on water quality. All individual utility data are kept confidential.

The Partnership for Safe Water publishes an Annual Report summarizing the aggregate performance of all utility subscribers. This Annual Report is provided to all participating utilities so they may compare their performance with that of all subscribers.

Phase III: Self-Assessment

Phase III of the program culminates with the completion of a comprehensive self-assessment of treatment plant and/or distribution system performance and operations. There is no time requirement for the completion of Phase III. The assessment of existing operations allows for the identification of Performance Limiting Factors and the development of targeted Action Plans to improve performance. Phase III support tools, including a self-assessment guide, report template, and materials checklist are provided by the Partnership.

The Phase III Completion Report summarizes the self-assessment results and Action Plan. This report is reviewed by a team of utility peers and optimization experts from the Partnership's Program Effectiveness Assessment Committee (PEAC) to ensure an effective and unbiased process. Upon a successful review, the utility receives the Directors Award. Submissions of annual data are required to maintain Directors Award status, which is recognized by the Partnership at five year intervals.

Phase IV: Optimized System

Participation in Phase IV is voluntary and not required for ongoing Partnership participation. The objective of Phase IV is to provide recognition to filter plants and distribution systems that have achieved the highest possible levels of performance. Utilities applying for Phase IV recognition will be assessed against very stringent performance goals.

There are 2 levels of Phase IV performance recognition; the Presidents Award and the Excellence in Water Treatment or Excellence in Distribution System Operation Award. The Presidents Award represents meeting specific, numeric water quality standards, while Excellence Awards are for systems that demonstrate full optimization and meet all water quality and operational requirements.

Utilities must be a Directors Award winner in good standing with the Partnership to apply for Phase IV. No additional fee is required. All utilities interested in pursuing Phase IV must register with the Partnership and will receive more detailed information about the application process. Additional information may be accessed on the Partnership website at: www.awwa.org/partnership.

How to Subscribe

Subscribe to the Partnership by submitting a membership application to the Partnership for Safe Water. The annual subscription fees, listed below, are based on utility size and are pro-rated based on the application date. Utilities may participate in the Treatment Plant Optimization Program, Distribution System Optimization Program, or both programs. Separate fees are required for each program. Fees are established to make the program self-sustaining while providing value and benefits to utility subscribers. Contributions from sponsor organizations, as well as volunteer support, help to keep the program cost-effective for all subscribers.

Annual fees are invoiced in November and are due in February to allow budget allocation from either calendar year. Payment in US dollars is required. The membership application can be found on the Partnership website at www.awwa.org/partnership

Utility Population Served	Annual Fee
>700,000	\$3,600
525,001 - 700,000	2,700
350,001 - 525,000	1,800
175,001 - 350,000	1,300
88,001 - 175,000	1,000
35,001 - 88,000	600
18,001 - 35,000	300
<18,001	50

For additional information, please contact the Partnership Program Coordinator at partnership@awwa.org, or 303-347-6169.