



American Water Works
Association



Partnership for Safe Water

Treatment Plant
Performance Improvement
for All

What is the Partnership for Safe Water?

- Began in 1995 to address *Cryptosporidium* concerns.
- Six organizations “partnered” to form the Partnership for Safe Water
 - American Water Works Assn. (AWWA)
 - US Environmental Protection Agency (US EPA)
 - Assoc. of Metro Water Agencies (AMWA)
 - National Assoc. of Water Companies (NAWC)
 - Assoc. of State Drinking Water Administrators (ASDWA)
 - AWWA Research Foundation (AWWARF)

Cynthia Dougherty,

Director Office of GW & DW, USEPA

→ "Utilities completing the *Partnership* self-assessment clearly demonstrate their commitment to protect health by reducing the risks of *Cryptosporidium* in treated water."

Steering Committee Members

- **Jim Fay (Chair), Champlain Water District, AWWA Rep**
- **Ed Chescattie, Pennsylvania DEP, ASDWA Rep**
- **Eric Bissonette, U.S. EPA Rep**
- **Chet Shastri, Fort Wayne City Utilities, IN, AMWA Rep**
- **Keith W. Cartnick, United Water, NJ, NAWC Rep**



Membership Facts

- **There are more than 56,000 community water systems in the U.S.**
- **About 10,000 of these use Surface Water sources**
- **There are about 220 water utilities currently enrolled in the Partnership (that's about 2% of those eligible)**
- **Partnership plants serve more than 85 million customers nationwide**

Membership Facts

- The Partnership for Safe Water program has been very effective in improving water quality for over 85 million people served by utilities participating in the program. This represents over 60% of the U.S. population served by surface water in the country.
- More than 220 utilities and 403 Water Treatment Plants are currently enrolled in the program. Ninety percent of the largest utilities in the U.S. are participating partners.

Partnership Facts

- **All size utilities and surface water treatment plants can join the program.**
- **The program requires collection of turbidity data that is used for regulatory compliance. You do this anyway!**
- **The cost of the program is low. This is not a barrier to participation.**
- **More than half of the current participants have received awards. You can too!**

**The Partnership is for All Surface
Water Treatment Plants
Regardless of Size**

Why 0.1 NTU is a Prudent Goal

- Optimized treatment producing a turbidity of 0.1 NTU achieved *Giardia* and *Crypto* removals about 5 logs 90% of the time.
- A small difference in turbidity (0.1 to 0.2) can produce a large (1 log) increase in particles.
- Parasite removal was 1 log lower during filter maturation.

How can I join the Partnership for Safe Water?

- Easy! Just fill in the application page you can get from www.partnershipforsafewater.org
- Send it to the Partnership Coordinator with your fee.
- That's all!

What do you get?

- Higher Quality Water
- Recognition Awards
- Understanding What's Happening
- Customer Satisfaction
- Regulatory Compliance

Participating utilities report that the program's tenacity goals to improve water quality have measurable positive impacts on overall utility empowerment, team work, and morale.

Annual Fees

Utility Population Served	Annual Fee
>700,000	\$3,300
525,001-700,000	2,450
350,001-525,000	1,675
175,001-350,000	1,200
88,001-175,000	800
35,001-88,000	500
18,001-35,000	250
<18,001	50

Understanding the Program

- Four Phases

1. Join
2. Submit turbidity data (baseline and every year)
3. Conduct Self-assessment

Directors Award

Five-Year Directors Award

10-Year Directors Award

4. Achieve fully optimized performance

Excellence in Water Treatment Award

Five-year & Ten year Excellence in Water Treatment Award

Annual Data Submittal

- Data collection software is provided.
- Fill in your turbidity results for your combined filter effluent (the data you submit for compliance)
- Due in June each year (so you don't have another report due in January).

Operator Identified Advantages

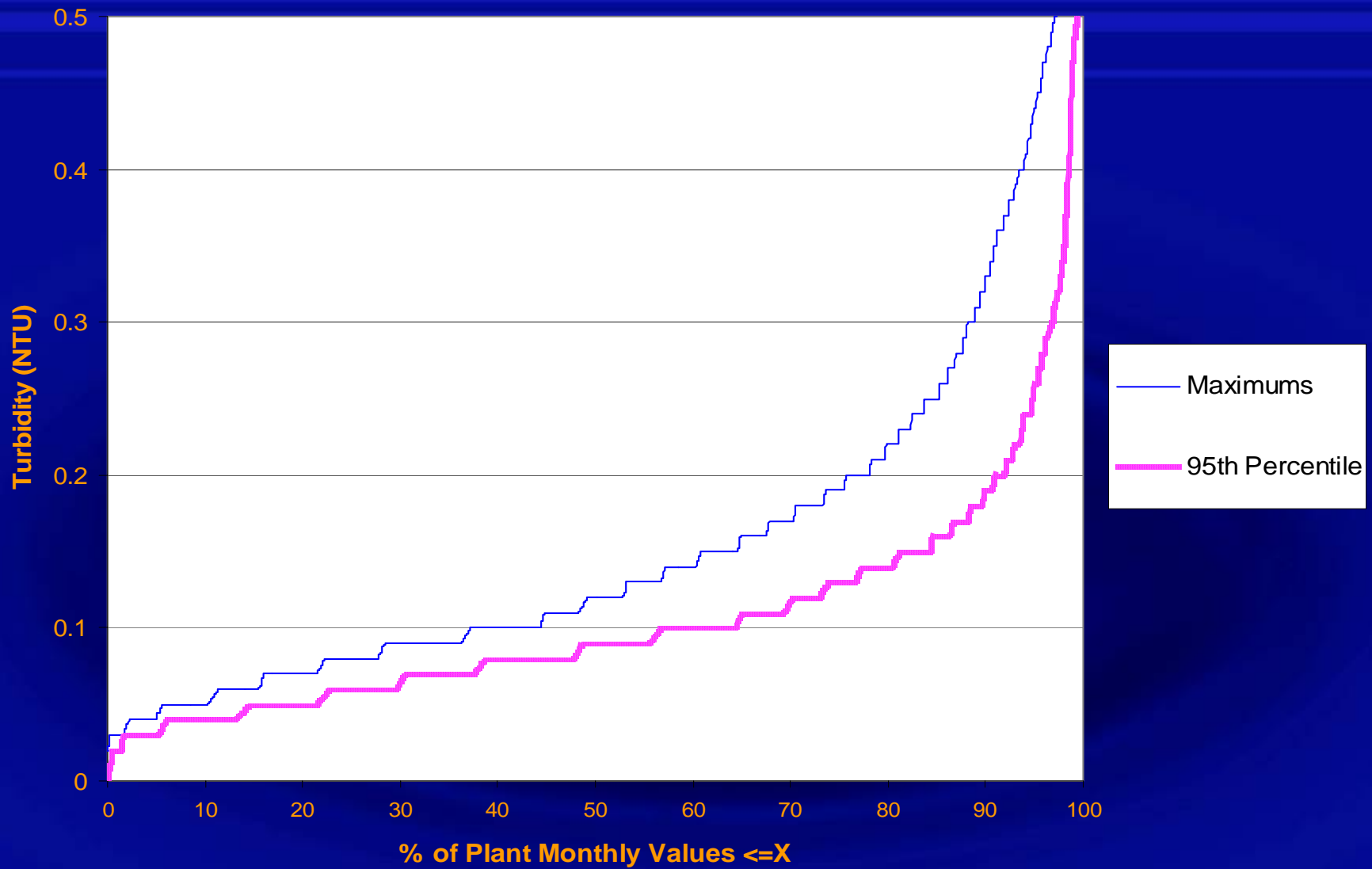
- Process awareness.
- Effort involves entire organization
- Builds operating cohesion
- Water quality emphasis carried forward
- Recognition for a job well done

Awards

- Recommended by trained treatment plant professionals following a thorough review.
- Peer review communications are confidential
- Data is kept strictly confidential
- Utilities direct public relations for their awards

Partnership continues to announce and promote award-winning utilities' accomplishments through press releases sent to various media.

Frequency Distribution of Monthly 95 Percentile Turbidity Values (6/04-5/05)



Example -Yearly Percentile data

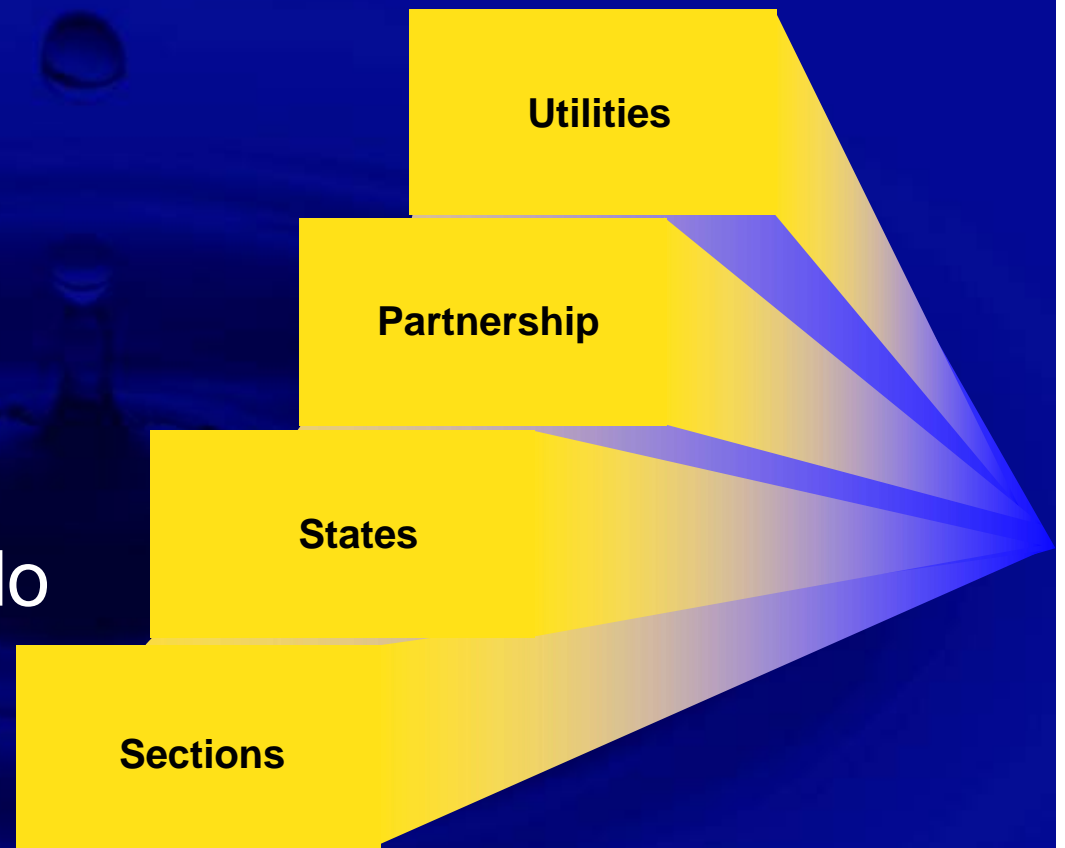
Combined Effluent	
Percentile	Yearly
50	0.05
75	0.05
90	0.06
95	0.06
96	0.06
97	0.06
98	0.06
99	0.07
Avg	0.05
Min	0.02
Max	0.08
RSD	0.15
Spike Counter	
0 - 0.1	2190
0.1 - 0.2	0
0.2 - 0.3	0
0.3 - 0.4	0
0.4 - 0.5	0

You Shouldn't Wait Until Your Plant is Optimized to Join

- **The program is designed to help you achieve optimized plant performance**
- **Whatever your plant performance is now you can start at that point to improve**

State Optimization Programs- Integrate with the *Partnership*

- Area-Wide Optimization Program Targets Plants that are in trouble
- *Partnership* is for Plants that are good but want to do even better
- PROGRAMS ARE COMPATABLE



Sections Have a Critical Role

Form

**Treatment Plant Optimization
Committees**

Treatment Plant Optimization Committees

- **Discuss Optimization Strategies**
- **Help Each Other Achieve Partnership Awards**
- **Have Representatives on National Partnership Committee**
- **Hold Meetings at their Section Conferences**
- **The committee's eligible for up to \$500 in expenses from Partnership.**

Pennsylvania Section AWWA very active as regional partner.

South Carolina has active treatment plant optimization committee.

Past Partnership cooperation with NEWWA Filtration Committee.

No Reason Not to Join

Optimization is what you do every day

**The Partnership gives you the
recognition you deserve**

Summary

- All surface water treatment plants can and should join the Partnership for Safe Water
- Sections can help by forming treatment plant optimization committees

New England Partnership Treatment Facilities - Connecticut

- **Aquarion Water Company of Connecticut**
 - Nine treatment Facilities
- **Connecticut Water Company**
 - Two Treatment Facilities
- **South Central Connecticut Regional Water Authority**
 - Four Treatment Facilities
- **Town of Manchester**

New England Partnership Treatment Facilities- Continued

- **Biddeford & Saco Water Company
(Maine)**
- **Abington/Rockland Joint Water Works
(MA)**
- **North Andover Water Department (MA)**
- **Manchester Water Works (NH)**
- **Burlington Public Works, Water Division
(VT)**
- **Champlain Water District (VT)**

New England Partnership Treatment Facilities

**When you join the Partnership,
You have good company here in
New England !**



For More Information

- Partnership Website,
www.partnershipforsafewater.org
- Debby Qualls, Program Coordinator,
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