

# Pure Water San Diego: Operator Training and Readiness

City of San Diego  
Public Utilities Department

# Pure Water – Training and Readiness



- Challenge: **Developing the right approach**
- Goal: **Building the expertise**





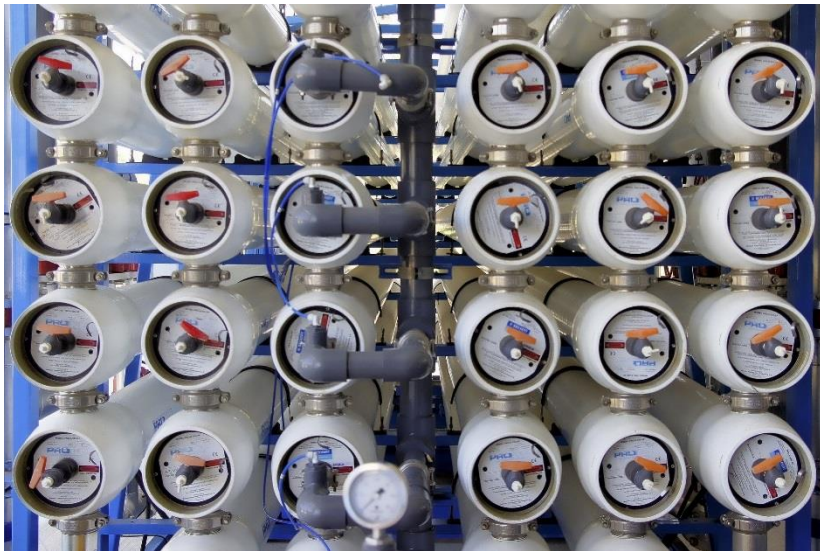
# Developing the Right Approach



- Specialized facility
- Needs of NCWRP
- Instrumentation centric
- Clean-in-place process is complicated and requires attention to detail
- Identifying appropriate training balance



# Specialized Facility





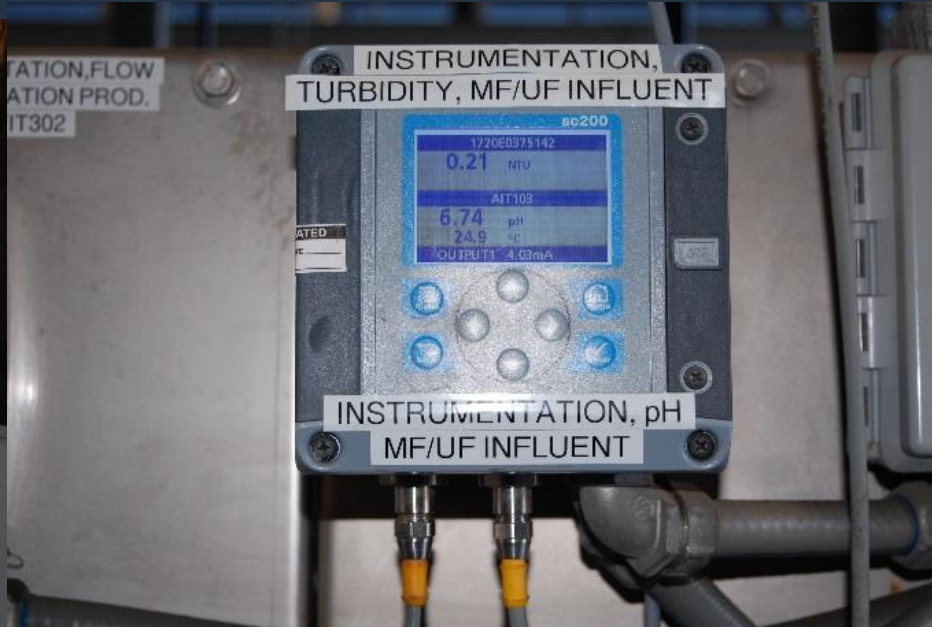


# Addressing Current NCWRP Needs





# Instrumentation Centric



49  
total  
analyzers

- Highly reliant on instrumentation to ensure that unit processes are in the correct operating range



# Clean-in-Place (CIP) Process



- Multi-stepped, precise approach is required
- Various hazardous chemicals used
- Team approach used to ensure valving is correct and equipment is protected



# Identifying Appropriate Training Balance



- Determining right blend of **theoretical and field level exposure**
- Using the right level of assistance from Trussell Technologies
- Staff rotations (identifying frequency and types)
- Identifying additional needs and procedures as experience is gained



- Core document is the **DPWF Operations Plan**
- Dedicated full time in-house trainer
- Detailed round sheets
- Training supported by well written SOPs and SMPs
- Support expertise from Trussell
- Maintenance team training on larger maintenance activities





# Building the Expertise – What We've Learned

- **Real expertise takes considerable time and effort**
- **“Awareness” training benefits from repeated exposure**
- **Instrumentation and Control requires ongoing and dedicated support**





- Additional training modules from Trussell Technologies
- More in depth training needed on instrumentation calibration
- Balancing maintenance needs of all facilities
- Continuing to develop own in house training expertise

