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
Addressing Current NCWRP Needs
Instrumentation Centric

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

49 total analyzers
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
Building the Expertise – Basic Framework

- 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
Building the Expertise – Looking Forward

- 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