

Joint Workforce Development Conference

Building a Sustainable Workforce



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Worcester, MA

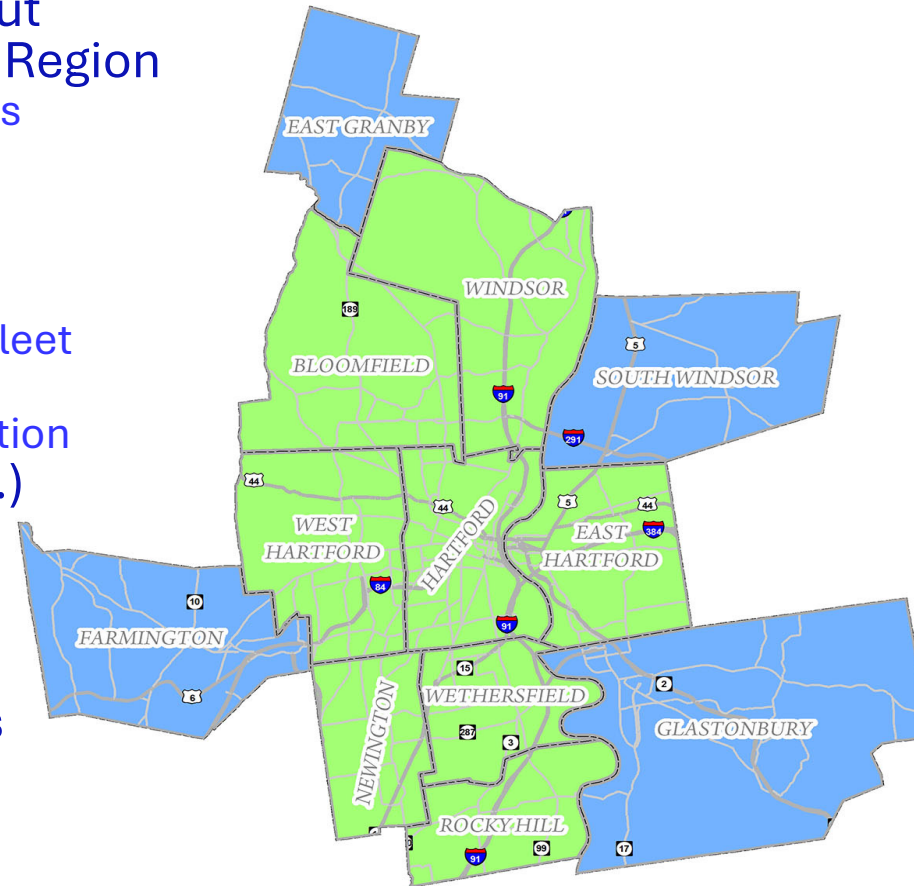
Topics Covered

- 💧 Overview of the Metropolitan District & Challenges
- 💧 Job Title Consolidation
- 💧 Recruiting Programs
- 💧 In-House Training & Succession
- 💧 Integrating Infrastructure and Staff

Overview & Challenges

About the Metropolitan District

- 💧 Largest water/wastewater utility in Connecticut
- 💧 Serve 400,000 in Greater Hartford, CT Capital Region
 - 40 billion gallons of water supply, reservoirs, dams
 - 7 Treatment facilities
 - Regional WW solids receiving facility
 - 2,700+ miles of buried pipes
 - 100 water and wastewater pump stations
 - 200+ vehicles and motor operated equipment in fleet
 - 2 laboratories
 - Hydro, solar and steam turbine electricity production
- 💧 430 employees (Ops, ENGR, HR, Finance, etc.)
- 💧 Annual Budget
 - Operating \$200M
 - Capital \$75M+
 - Clean Water Project (SSO/CSO) \$100M+
- 💧 Three unions represent majority of employees
 - Supervisory
 - Technical
 - Labor



MDC Water and Sewer System

- Legend
- Member Towns
 - Service Type**
 - Water Service Only
 - Water and Sewer Service

3
Miles



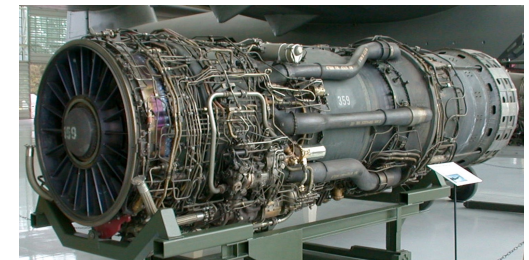
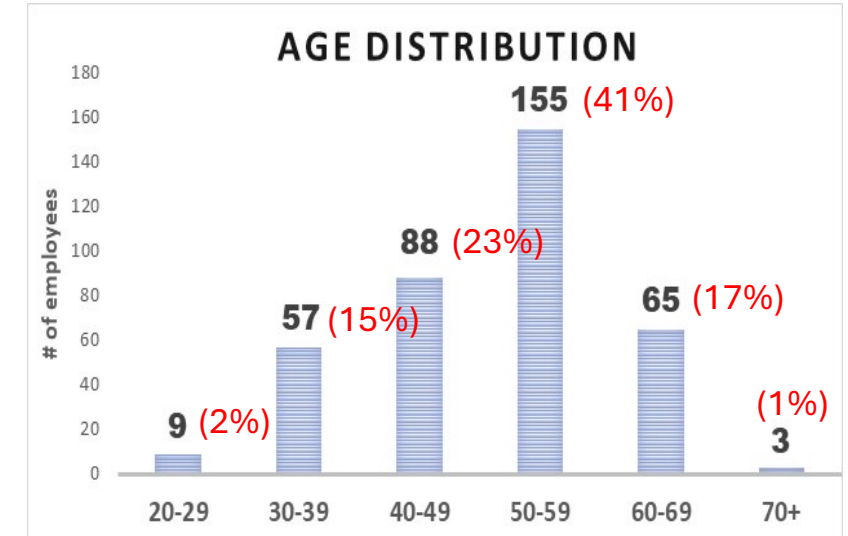
PEOPLE

PUMPS

PIPES

Big Challenges in a Small State

- 💧 US EPA Consent Decree and CT DEEP Consent Order in 2005
 - Eliminate 100% of Sanitary Sewer Overflows (SSOs)
 - Control Combined Sewer Overflows (CSOs) to a high level
 - \$2.5 billion program – mandated annual construction of \$90 million
 - One of the largest SSO/CSO programs in the US
- 💧 Several District towns among poorest in state
- 💧 Rates mandated by board to remain ‘as low as possible’
- 💧 Workforce in 2005 was over 700 – about 450 Jan 2025
- 💧 Average age of employees is 50, 15+ years tenure
 - Nearly 20% > 60 years old - less than 3% < 30 years old
 - 15% (60+) eligible for retirement now, 50% within 10 years
- 💧 Recruiting challenges exist for many positions, including engineering, instrumentation technicians & operators
 - Defense industry (submarines, helicopters, jet engines) in CT is booming, massive hiring – many 1,000s/yr.



HARTFORD

HOUSTON



WE

HAVE A

PROBLEM

Job Consolidation

Wastewater Operator Job Consolidation Foundation for Growth & Success

💧 One multi-skilled, flexible “operator”

- **OLD:** Nine unique job titles, no overlap in skills or experience
 - ❖ Consistent operations a challenge, staff siloed into one position/area for years, maybe career
 - ❖ Any absence required double-time fill in from same skilled employee excessive overtime costs
- **NEW:** One job title
 - ❖ Provided extensive cross-training
 - ❖ Required ‘hands-on’ assessment by supervision to determine competency
 - ❖ A complete ‘passing evaluation’ on all work station earned a higher pay grade

💧 Higher License Incentive

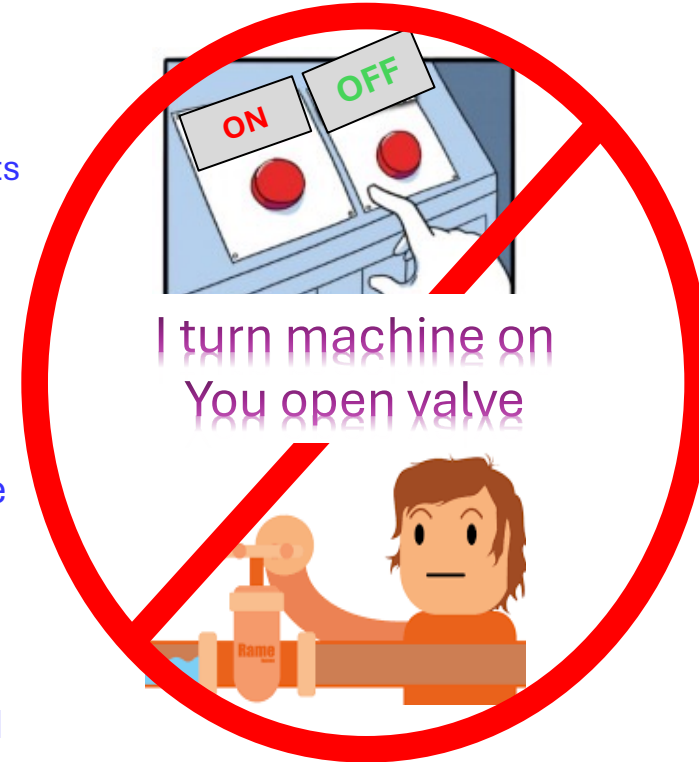
- Achieving a level of license higher than position requires also earned a higher pay grade
- Provided test prep materials, training classes, etc.
- Encouraged professional development

💧 Doubling down encouraged!

- Getting a “passing evaluation” to operate all work stations **AND** a higher license earned **TWO** pay grade increases

💧 Utility gain?

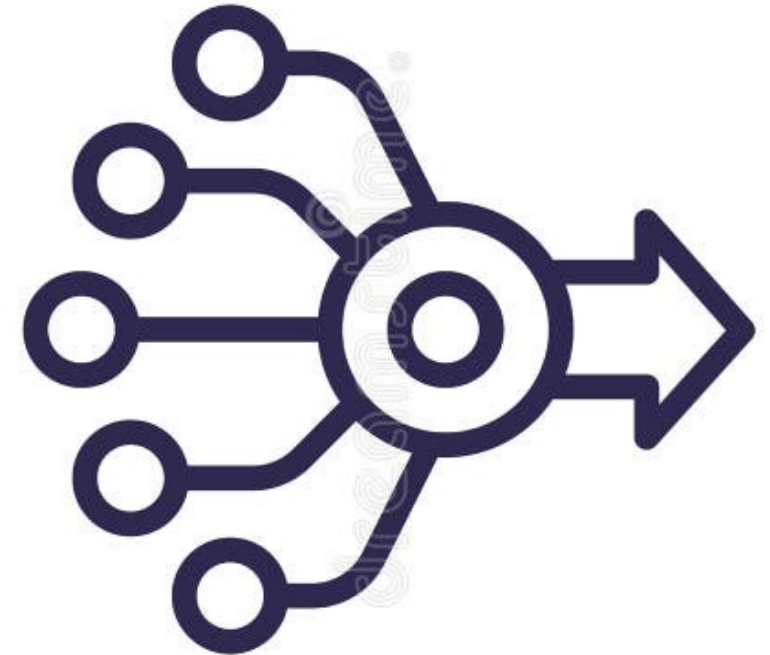
- Flexibility
- “Big picture’ perspective,
- Better compliance perspective
- Reduced staffing – 6 on a shift, down from 10-12



	Step 1	Step 8
Pay Grade 7	\$ 72,176	\$ 86,611
Pay Grade 8	\$ 75,608	\$ 90,750
Pay Grade 9	\$ 79,394	\$ 95,264

Additional Successes

- 💧 **Consolidated Wastewater Supervisor jobs**
 - Had Satellite (smaller WWTPs) supervisors and Shift Supervisors (at main plant)
 - Went to “Supervisor” – able to run any of the 4 WWTP
 - Increased pay for obtaining a higher level license
- 💧 **Consolidated Wastewater Crew Leader jobs**
 - Had Satellite (smaller WWTPs) crew leaders, and are crew leaders & shift crew leaders (at main plant)
 - Went to “Crew Leader” – able to work at any of the 4 WWTPs
 - Increased pay for obtaining a higher level license
- 💧 **Consolidated Operations jobs**
 - Collection & distribution system
 - Maintainers & repair jobs, crew leaders, etc.



Recruiting

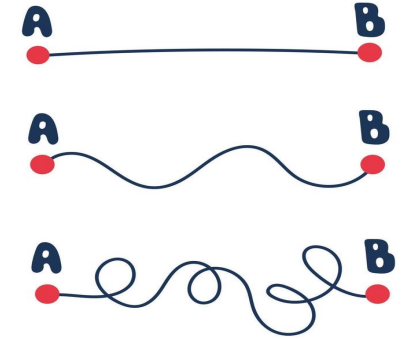
We Must Use Better Strategies



Multi-Pronged Approach

💧 High School

- Learn & Earn – 4 week program: 2 weeks training followed by 2 weeks working
- Try A Trade – Technical HS students get into to trades and work for summer along staff
- Work study – during school year, work along staff as part of curriculum
- Outreach – presentations, plant tours, licensing guidance, etc.
- **Developed entry-level “trainee” jobs in DW, WW and working on I&C**



💧 College

- Hire interns for summer in all aspects of utility, engineering, finance, HR, operations, etc.
- **Starting co-op program in summer 2025**

💧 Internal (yes ‘recruiting’ internally)

- Grow & develop staff to perform jobs at higher levels

💧 Critical job postings left “open until filled”

- Avoid specific time limits – prevent ‘missing’ a qualified applicant



2025 Try A Trade Participants



In-House Training & Succession

In-House Job Training

💧 New Facilities Training - prior to start-up

- Infrastructure focused - trade specific
 - ❖ Mechanical
 - ❖ Electrical
 - ❖ Controls/automation
 - ❖ Operations
- Process focused - “Big picture” – interactions of all equipment as a system
- Maintenance & Safety Procedures
- Standard Operating Procedures



💧 Hard to hire trades

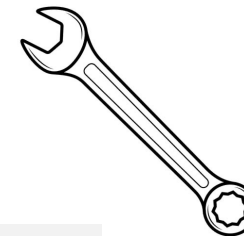
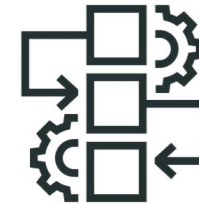
- Pilot project to train mechanics for instrumentation & controls jobs
 - ❖ Spend time next to I&C staff
 - ❖ Complete basic I&C course

💧 Supervisory & Leadership

- Strive for internal promotions, seek external as needed
- Occasional consultant training
- In-house classes, exercises
- Extensive on-line platform
- OJT with long-tenured staff – “SMEs”

💧 Safety

- Online classes focused on departmental needs
- Hands-on for certain tasks
 - ❖ Confined space entry
 - ❖ First aid / CPR / AED
 - ❖ Forklift operations



Succession

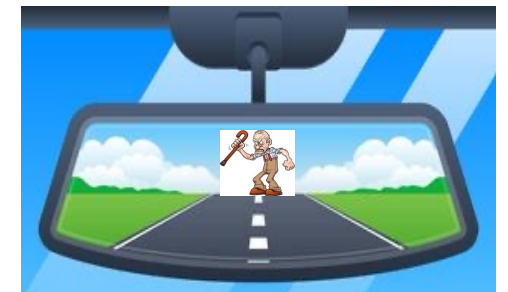
- 💧 Always looking internally
 - Infrastructure & operational complexities of certain jobs make internal candidate easier to transition
 - Provides opportunities for “known quantities”
- 💧 Staffing accommodation for transitions
 - Use ‘Assistant’ position as opportunities for developing employee to prepare for higher level position
 - Example: A superintendent provides advance notice of retirement
 - ❖ Create & fill an assistant superintendent role
 - ❖ Allow transfer of knowledge
 - ❖ Gain experience with support network readily available
 - ❖ Determine if ‘assistant’ is ready for higher level role
- 💧 Staff engagement
 - Meaningful, honest discussions with staff about career aspirations, areas for growth
 - Especially important for younger/new hires
 - Balance utility needs with staff needs
 - **Working to develop internal mentoring program and individual development plans**
- 💧 Staff rotation
 - Move operators, crew leaders and supervisors to new areas or different facilities
 - Keep skills fresh – promotes cross training
 - Offers opportunities for in-depth experience



Integrating Infrastructure and Staff

Infrastructure Intensive & People Dependent – **24/7/365**

- 💧 View Employees as ‘treasured natural resources’ – as vital as the water that drives our industry
 - High tech equipment needs operators, maintenance, repairs
 - Lack of staffing = lack of continuity of operations
 - Empowerment brings about many powerful benefits
- 💧 Engage all levels of staff in design, construction, control strategies & start-up
 - Buy-in = success
 - Ownership gained by honest engagement
 - Small changes, often minimal cost impact, provide respectful long-term benefits
 - Supports team behavior
- 💧 Old school attitudes need to be looked at in the rearview mirror
 - Fix when broke
 - Tell what to do, when to do, how to do, never why...



Results

Big Successes in a Complex Program

- 💧 Met all Clean Water programmatic milestones to date
 - Invested more than \$600 million in collection system upgrades
 - Invested more than \$500 million in wastewater facilities
 - Completed a \$500 million deep tunnel system
- 💧 Running an infrastructure intensive utility with significantly less staff
- 💧 Workplace culture improvements
 - Very low grievances
 - Very low turnover
 - Multiple internal applicants for virtually every job posting
 - Recently conducted a ‘Happiness Study’
 - ❖ 67% of employees participated
 - ❖ 71% rated themselves overall as Satisfied, Happy or Very Happy
 - ❖ 85% satisfied, like or love their job!
 - ❖ Addressing common theme issues like improving communications



Bringing In New Employees

- 💧 Hired 3 high school interns to full time positions
 - 2 water treatment trainees
 - 1 wastewater treatment trainee (2nd WW OIT transfer from Maintenance)
 - All spent summer & fall 2024 with us – extended time gave us & them confidence
 - Treatment staff drove these successes
 - LT 4 (\$62,296) – will go to LT 8 (\$75,608) with license (in 4 years, \$90,750)

W.H Filters WTP OIT
Alexi Toro-Ruyack



RES 6/Collinsville WTP OIT
Dayshawn Smith



HWPCF WWTP OIT
Levar Mingo



Summary & Conclusions

Closing Thoughts

- 💧 Infrastructure needs and improvements **MUST** support staff.
- 💧 Managing staff growth & development is challenging, costly, difficult, at times frustrating, but absolutely necessary.
- 💧 Utilities must embrace new thinking and new actions to meet challenges of the future.
- 💧 The ‘let’s wait for...’ ‘do nothing’ ‘hope/luck” option will bury your utility and punish existing staff.
- 💧 There is no singular solution – this issues requires a multi-pronged approach, patience, effort and a ‘fresh’ perspective.



Questions, Comments & Further Discussion?

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