

## Ramifications on clean water industry of operator attrition:

**Safety**—It is essential to have qualified WRRF workers who can properly use equipment and recognize conditions that can lead to discharge of untreated/partially treated sewage, equipment or process issues, injuries and/or death

**Permit compliance**—Possibility of fines, legal actions, costly upgrades, third-party lawsuits

**Public relations & education**—WRRFs and the industry as a whole suffer from an unfavorable public image, and any complications from significant loss of expertise will further this misperception

## WRRFs need operators who can ensure public health and save taxpayer dollars by:

- \$ Preventing process failure or facility upsets** that may result in the discharge of untreated or partially treated sewage
- \$ Performing routine maintenance** to minimize equipment damage and premature equipment breakdown
- \$ Ensuring proper equipment operation** resulting in reduced use of energy, chemicals and replacement parts
- \$ Undergoing proper training** to provide leadership capable of streamlining operations and processes
- \$ Having knowledge of relevant regulations** to protect against improper reporting to regulatory agencies

2024

## Current Operator Challenges:

There are **operator vacancy rates of up to 35%** without enough certified operators seeking employment

**High rate of loss of new operator hires** (3:1) to other employers

**Time needed for entry-level employees to become certified** makes efficient succession planning very difficult

**Many candidates don't have the KSAs** that higher-level certifications demand and struggle to pass exams

The **deficit of qualified personnel** is leading to competition among local WRRFs

Current operators are experiencing **denied vacation requests and delays in promotional opportunities**

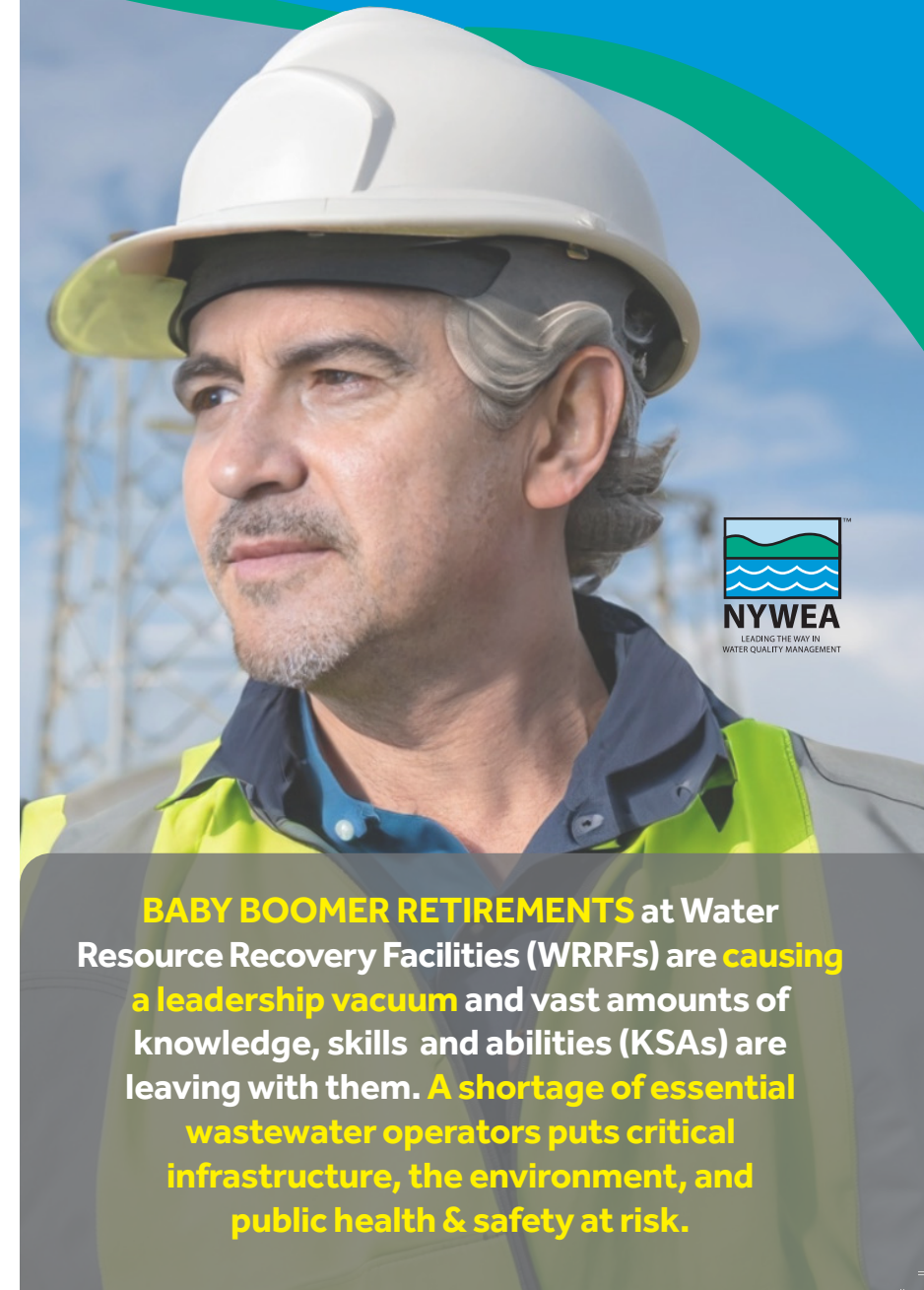
**Employee morale** is affected and fatigue is common

Inability to hire appropriately certified operators leading to **very costly supplemental private contracts** which can be **2 to 3 times current personnel rates**

An **increase in mandated staff overtime** at one utility (up to 95 times/year), resulted in 10,000 hours of overtime (\$280,242)

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# The Essential Water Resource Recovery Operator



**BABY BOOMER RETIREMENTS** at Water Resource Recovery Facilities (WRRFs) are **causing a leadership vacuum** and vast amounts of knowledge, skills and abilities (KSAs) are leaving with them. **A shortage of essential wastewater operators puts critical infrastructure, the environment, and public health & safety at risk.**

**Proactive Succession Plans are a must!**  
**The industry is moving faster than the workforce can adapt. Smaller communities often have more acute challenges because they must wait for someone to retire before a replacement can be hired.**

### The KSAs an essential water resource recovery operator now needs:

-  **STEM** A science, engineering, technology, and math (STEM) background
-  Proficiency with computers/software
-  Drive and initiative
-  Dedication and reliability
-  Critical thinking, problem-solving, and decision-making
-  The ability to collect information and implement appropriate data-based solutions
-  Aptitude to plan, organize, direct, and control (from NYSDEC guidance)

**In addition to finding qualified candidates, public perception about WRRF jobs remains an impediment.**



Strategy/funding needed to create programs/opportunities to change public attitude toward clean water industry



There is a significant amount of time needed for operators to become certified

**24/7**

Candidates for certification **may need to work nights, weekends, and holidays** in order to gain the necessary experience just to qualify to sit for the certification exams













Current pay rates cannot compete with emerging warehouse or delivery positions that have more traditional schedules with no need for advanced training or certification



Candidates must take a corresponding Civil Service exam which may be rarely offered, outdated, or not relevant to the actual position with extensive wait times for results



### A recruitment strategy is needed focusing on:

-  **Stressing the importance of clean water** for public health and the environment
-  **Educating high school students/public** about operator careers and the associated KSAs
-  **Promoting current job satisfaction of operators** and positive aspects of a water career
-  Improving **work schedules**
-  Creating more **attractive pay rates**
-  Streamlining the **operator certification process**
-  **Retooling the civil service process** for maximum accessibility
-  Assisting utilities in becoming **“Employers of Choice”**
-  Continuing to advance **NYWEA’s operator training program**
-  **Allocation of funds** from the federal Bipartisan Infrastructure Law and NYS Clean Water, Clean Air, and Green Jobs Environmental Bond Act **to accomplish recruitment goals**