



WEF Efforts to Train Operators

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WE ARE THE WATER QUALITY PEOPLE



A high-angle photograph of a worker in a bright orange safety suit with reflective yellow stripes, an orange helmet, and black boots. The worker is positioned inside a dark, confined space, possibly a manhole or a large pipe, and is using a tool. The word "OPERATORS" is overlaid in large white capital letters on a semi-transparent dark band across the center of the image.

OPERATORS

Challenges in Maintaining Level of Expertise Required for O&M

- New regulatory requirements
- New focus on sustainable practices
- Experts are retiring
- Lack of recognition



OPERATOR INITIATIVES



Programming For Operators Include:

- Short Course on Fundamentals of Nutrient Removal and Recovery – Theory, Technologies, Process Control, and Troubleshooting
- Nutrient Removal from the Utility and Operations Perspective
- Operator Q&A Panel: Experiences and Lessons Learned Meeting Low TN and TP Limits in the Mid-Atlantic Region



Programming For Operators Include Workshops Such as:

- Wastewater Microbiology
- Activated Sludge and BNR Process Control:
Hands-On in the Real World
- Back to Basics Laboratory Analysis, Chemistry,
and Troubleshooting

For more information, please visit www.weftec.org

Other Operator Events at WEFTEC

- Operations Challenge
- Operator Ingenuity Contest



TRAINING FOR THE OPERATOR OF THE FUTURE



WASTEWATER TREATMENT FUNDAMENTALS I

LIQUID TREATMENT

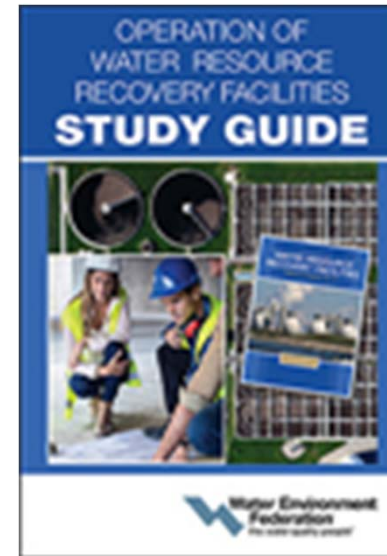
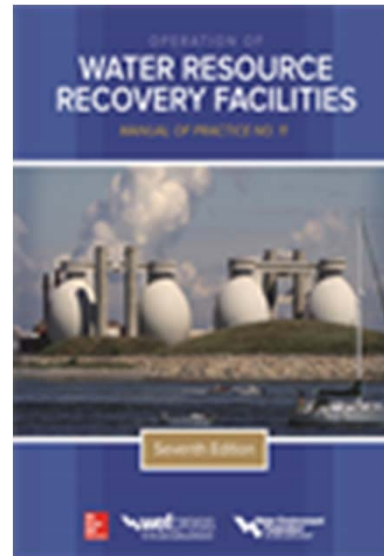
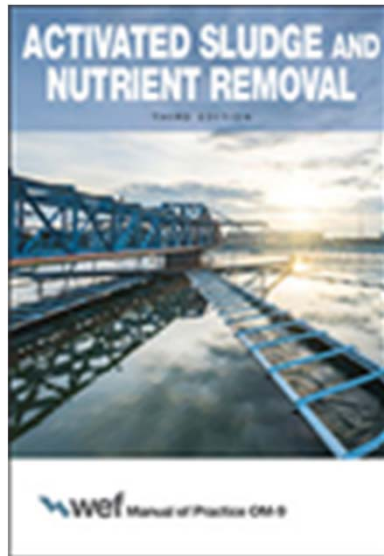


- Chapter 1: Introduction to Wastewater Treatment
- Chapter 2: Characterization and Sampling of Wastewater
- Chapter 3: Preliminary Treatment of Wastewater
- Chapter 4: Primary Treatment of Wastewater
- Chapter 5: Fundamentals of Biological Treatment
- Chapter 6: Wastewater Treatment Ponds
- Chapter 7: Fixed Film Treatment
- Chapter 8: Activated Sludge
- Chapter 9: Nutrient Removal
- Chapter 10: Disinfection



Over 200 online courses for CEUs and PDHs
at <http://knowledgecenter.wef.org>

WEF Publications



For more information, go to
<https://www.e-wef.org/>

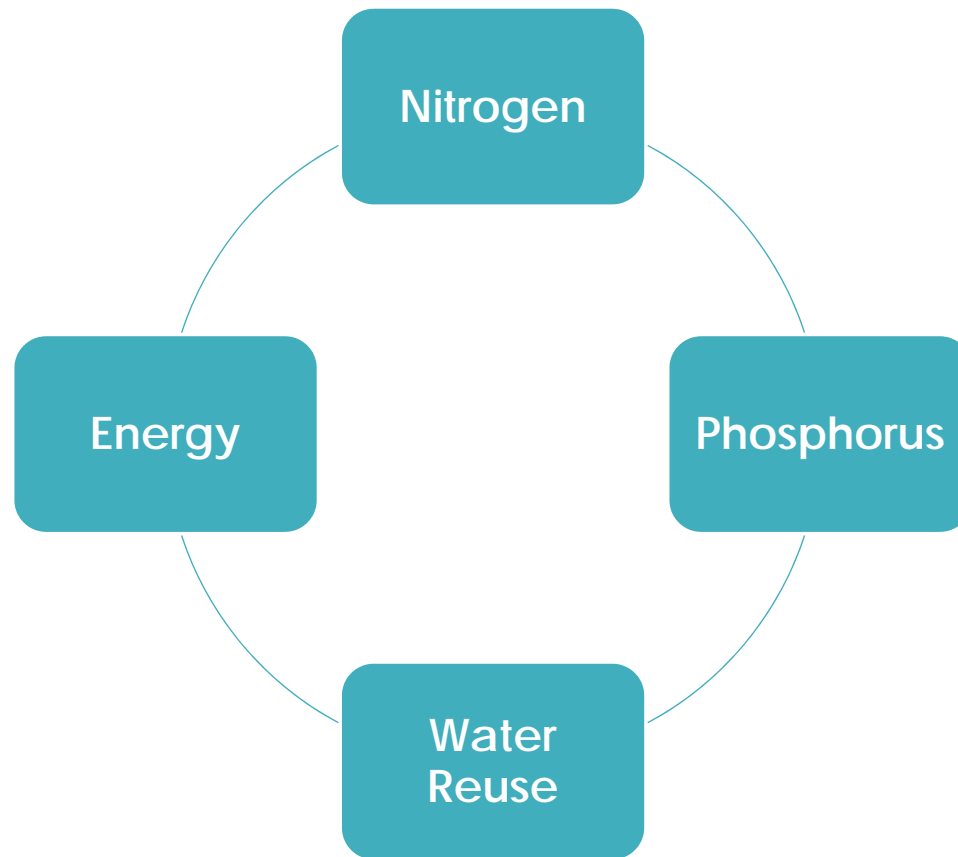
More Operator Resources:



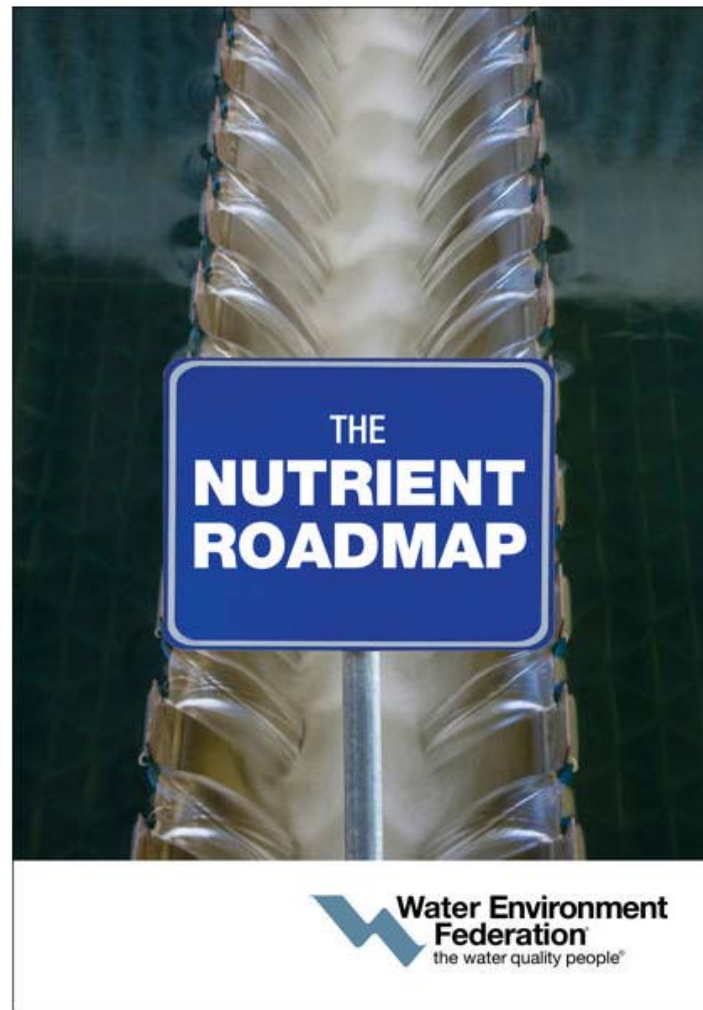
Three black megaphones are arranged in a fan shape, pointing upwards and outwards. They are set against a background of a bright blue sky with scattered white clouds. A dark horizontal band is superimposed over the middle of the image, containing the title text.

Other Nutrients-Related Initiatives

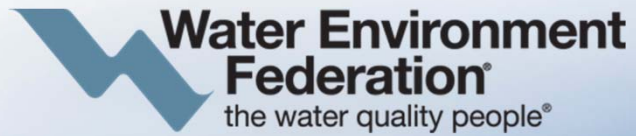
WEF Resource Recovery Data Collection Survey



For more information, please visit
<https://www.wef.org/resource-recovery-survey>



Please let me know if you'd like a complimentary copy, or e-mail me at mbrown@wef.org



THANK YOU!

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www.wef.org

www.weftec.org