

# **PWEA's Hybrid Operator Training How WEF's Grant Helped Fund a New Initiative**





# WEF Announces Member Association Grant Program

- PWEA formed a 10-person ad-hoc committee to focus on submitting a grant application
- Decision made to submit application for a \$15,000 seed grant and provide matching funds to develop a new training program
- PWEA focus was education and to develop a training program that was competitive with PA Rural Water Association





# Grant Initiative

- Strategic Planning
- Support of WEF's goal to provide a wide range of professional contact and programming
- Financial viability
- Operator training focus



# Operator Training

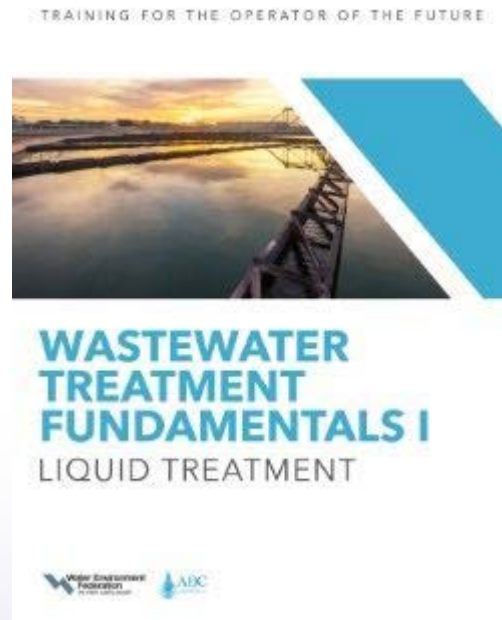
- Why reinvent the wheel?
- A better use of funds
- Curriculum development





# PWEA's Hybrid Operator Training

- Here's the book – go teach





# Target Audiences

- Workforce development – those wanting to join the clean water profession
- Professional development – those wanting to obtain an operator's certification (license)
- Continuing education – operators needing continuing education credit for license renewal

# Basic Assumptions

- Community colleges across the state were offering introductory wastewater training courses
- The colleges were having problems recruiting new students
- We needed to attract students from a wider area to support a course



# Go Virtual

- Decided to go virtual before the pandemic started
- Attract students from all over the state
- Attract retired & experienced instructors no matter where they reside
- Reduced costs to offer the training







# Hybrid Course Format

- Virtual class with a live instructor
  - Students must provide responses during each class
- Live help via email any time during the course
  - Extra help virtual sessions for the math work
- Homework assignments
  - Reading
  - Written homework submitted weekly
- Final written chapter exam



# Course Structure

- Weekly two-hour live webinar session
- Weekly two-hour reading assignment
- Weekly written “Test Your Knowledge”
- Written chapter exams
- Courses last no more than two months each (5 to 8 weeks)

# Course Breakdown

- Course 1

- Chapter 1 – Introduction to Wastewater Treatment
- Chapter 2 – Wastewater Characteristics

- Course 2

- Chapter 3 – Preliminary Treatment
- Chapter 4 – Primary Treatment

- Course 3

- Chapter 5 – Fundamentals of Biological Treatment
- Chapter 6 – Wastewater Treatment Ponds

# Course Breakdown (cont'd)

- Course 4
  - Chapter 7 – Fixed Film Treatment
- Course 5
  - Chapter 8a – Activated Sludge (aeration tank)
- Course 6
  - Chapter 8b – Activated Sludge (secondary clarifier)
- Course 7
  - Nutrient Removal
- Course 8
  - Disinfection

# Program Schedule

		# of sessions	Jun-20	Aug-20	Oct-20	Dec-20	Feb-21	Apr-21	Jun-21	Aug-21	Oct-21	Dec-21	Feb-22	Apr-22
<b>Course 1</b>	Intro & WW Characteristics	5	101				102							
<b>Course 2</b>	Prelim & Primary	8		201				202						
<b>Course 3</b>	Bio & Ponds	5			301				302					
<b>Course 4</b>	Fixed Film	6				401				402				
<b>Course 5</b>	Act Sludge, Pt1	7					501				502			
<b>Course 6</b>	Act Sludge, Pt2	7						601				602		
<b>Course 7</b>	Nutrient	8							701				702	
<b>Course 8</b>	Disinfection	7				800				801				802



# Lessons Learned

- Class size – 15 is a good size class
- Webinar software selection
- Course moderator needed
- Instructors must practice with software
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# Thank You!

