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

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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!