



Water Education Curriculum

Erin Guerrero
Public Affairs Manager - Education

Program Outline



Curriculum Program Outline

- Careers in the Water Industry
- Seven Units
- Water Awareness Topics
 1. Urban Water Cycle
 2. Water History in the Area
 3. Water Distribution
 - a) Integrated Operations Center (IOC)
 - b) SCADA
 - c) GIS
 4. Water Filtration and Desalination
 5. Water Quality, Testing, and Backflow
 6. Water Treatment
 - a) Recycled Water
 7. Job Shadowing
- Capstone Project

Curriculum Components

- Lesson Plan Components (Each Unit)
 - Pre and post unit assessments
 - Unit “Fast Facts”
 - Lecture and or PowerPoint Presentation(s)
 - Presentation script
 - Presentation (with embedded videos)
 - Classwork
 - Hands-on Activities
 - Field trips
 - Student projects
 - Community events, etc.
 - Electronic Student Portfolio
 - Job Shadowing
- Capstone project
- Standards Alignment will be noted in each lesson plan

Lesson Activities

- Jeopardy
- Water Management Game
- Water Filtration Experiments
- pH and Turbidity Experiments
- Backflow Activity
- Other Interactive Hands-On Activities



Field Trips

- Water History – EMWD District tour
- Water Filtration
 - Desalter facility
 - Filtration facility
- Operations and Maintenance Center
 - Water chemistry lab
 - IOC, SCADA, GIS
- Wastewater Treatment
 - Recycled water
 - Groundwater Plus
- EMWD Water Distribution
- Job Shadowing – Main Office and other sites



Student Projects

- Vlogs
- Journals
- Video shorts
- Video montage
- Reflection papers
- Elevator pitch
- Podcast
- Game creation
- APP Creation
- Student choice (teacher approved)



Student Portfolio

Student Portfolio Includes:

- Class work
- Notes
- Assessments
- Student projects
- Any work created during the program

Job Shadowing Career Day(s)

Program Completion

- Complete job shadowing program
- Capstone project
- Complete portfolio development
 - Portfolio presentations
- Participation in community events
 - Rotary, chamber events, public speaking, volunteer awareness
- Post high school internship/apprenticeship opportunities
- Scholarship opportunities



Student Capstone



Comprehensive to Cover Complete Program

- Peer reviews
- Presentation to selection group of individuals (EMWD board members and staff, community members, school administrators)

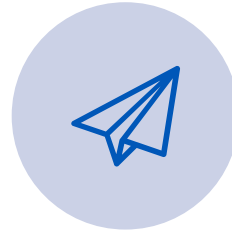
Capstone Project Options

- Debate
- Case study
- Podcast
- Video
- Student choice (teacher approved)

Questions and Feedback



SoCAL Water Week
2024 Teacher
Workshop



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