NORK NORK NATER advancing water careers in lowa

www.wichita.edu/workinwater



- **Region 1** University of Southern Maine
- Region 2 Syracuse University
- Region 3 University of Maryland
- Region 4 University of North Carolina
- Region 5 Michigan Tech University
- Region 6 University of New Mexico
- Region 7 Wichita State University
- **Region 8** National Rural Water Assoc.
- **Region 9** Dominican University California State University
- Region 10 Rural Community Assistance Corp



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OUR MISSION

To be a collaborative resource, creating solutions to environmental challenges to improve quality of life in communities.

OUR SERVICES

The WSU Environmental Finance Center's clients are public works departments, cities and counties, water and wastewater utilities, public organizations, government agencies, non-profits, school districts, tribes and more.





WE'RE GLAD YOU'RE HERE!



What Keeps Water Utility Managers Up At Night?





Only a few people on Earth, out of billions, can take the limited fresh water and make it safe enough to give it to everyone else.







#1 Protectors of Health & Economic Development





WORK in WARE A dvancing water careers in Kansas

STEERING COMMITTEE

Kansas Association for Conservation and Environmental Education Kansas Municipal Utilities Kansas American Water Works Association City of Garden City Kansas Water Environment Association City of El Dorado City of Wichita Kansas Department of Health & Environment

Public Water Supply Section



Work in Water Experience – Part 1 Classroom Activities



1.5 – 2 hours

At School, Civic Center, Utility Meeting Room

> PowerPoint & Hands on Activities

Work in Water Experience – Part 2 Field Trip



1.5 – 2 hrs

At the Water and/or Wastewater Plant

Facility Tour & Career Talks

Work in Water Experience – Part 3 Summer Internship





6-9 Weeks

At the Water and/or Wastewater Plant

Internship, Mentoring, Hands-on Experiences

STUDENTS SAID



They learned about a career they might be interested in



They would tell their friends to attend Work in Water next year



The Work in Water Program is important

COUNSELORS SAID



Work in Water was a good use of the students' time

They would recommend Work in Water to other teachers/counselors

Getting Your Utility On Board

Sustainable solution for recruitment Focuses career interest on your industry Provides short-term support to operations Fosters leadership skills in current staff **Builds community relationships** Offers fresh perspectives



Connect with Counselors











You gotta stand out by making it easy!

Fit into the School Schedule



Full Day

- ▶ 1 group (<20) classroom then tours
- ► 2 groups alternating (>20)

2 Half Days

Early Starts

► 2 mornings before school starts

WARNING: Summer sessions didn't work for us...

2 Morning Sessions April 13, 2018

7:45 AM Students gather 8:00 AM Begin Work in Water Experience (715 W 2nd Street, OPD) 9:20 AM Students Released

April 20, 2018

7:45 AM Students Load the Bus 8:00 AM Bus Leaves School Lot

8:15 AM Tour the Water Reclamation Facility

9:15 AM Load Bus & Travel to Water Reclamation Facility

9:30 AM Tour the Water Treatment Plant

10:30 AM Load Bus

10:45 AM Students Back at School

Full Day – 2 groups

	8:30	8:45	9:00	11:15	12:00	2:30	2:45	3:00			
Group A	Bus leaves school	Introduction @ Utility Service Center	Facility Tours		Work in Water Session @ Utility Service Center	Introduction @	Bus Pick Up	Back to School			
Group B			Work in Water Session @ Utility Service Center	LUNCH	Facility Tours	Utility Service Center					

Full Day – 1 group

8:00	10:00	10:10	10:30	10:30	11:30	11:35	11:30	12:15	1:15	1:30	1:30	2:30	3:00
k in Water Experience Wheeler's Classroom the West High School		Bus Leaves Lot	Bus Arrives at Cedar Creek Wastewater Treatment Plant	Cedar Creek	Load Bus	Bus Arrives at Environmental Lab		Environmental Lab Tour	Load Bus		Water Treatment Plant Tour		Bus Arrives Back at School

Toolkit for Schools

Event Promotion Tools

Emails Posters Social Media Posts Announcement

Video Newspaper Article

Extend Learning Tools

Lesson Plans Student Research Projects



NORKin advancing water careers in lowa

WORK WATER



WSU's Work in Water Experience Coming to THS on April 11

Why Should Students Attend?

- Funday of career exploration & learning with friends
- Hondoon experiments, interactive projects and field trip to <u>topeko's</u> <u>Municipal Water Pacifities</u>. Participants qualify to apply for an exclusive paid summer internship
- · Use this experience to build your resume

What is the Work in Water Experience?

WSU Environmental Phance Center's Work in Water Experience teaches Konsas high school students about the official role that public water utilities fill in their community. This unique, hands-on learning gragram allows students to see the skills, technology, and people that are working to ensure the public has access to safe, healthy drinking water and water recycling resources.

The Work In Water Experience Introduces both college bound and non-college bound students to the vast range of career opportunities available in the water industry. Learn more

Contact: Mr. E. (785) 295-3150



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UNIVERSITY HUED WALL SCHOOL OF PUBLIC AFFAIRS Environmental Finance Center

Email **Templates**

Poster **Templates**

SIGN UP IN MR. E'S ROOM FOR WICHITA STATE UNIVERSITY'S

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- Fun day of career exploration & learning with friends
- Hands-on experiments, interactive projects and field trip
- Participants qualify to apply for an exclusive paid summer internship
- Put this experience on your resume

WORK in



Pre/Post Event Lesson Plans

Help Wanted

Have students write a job ad for one of the jobs that they learned about related to water or waste water. Make sure the job lists salary range, education required, skills necessary and job description.

Bottle It?

- Compare bottled water and tap water. Use EPA's fact sheet on bottled water and online resources.
- Compare the regulations that impact bottled water with the regulations that impact water from public water systems.
- How do the costs compare? How much tap water can you buy for the cost of a bottle of water? A can of pop? etc.

Money Down the Drain

Calculate the amount of water lost due to water leaks. Set a faucet to drip. Have students conduct their own experiment to answer the questions: how much water do I loose in a month, week, year if my faucet drips at this rate.

Water Droplet Journey

Have students write a journal, create a presentation, etc about the journey of a water drop, falling as rain, and then going through the city's water system.

Water Chemistry Debate

Research both sides of the issue, and then hold a classroom debate on fluoridation of municipal water supplies. Be sure to discuss credible vs. non-credible websites. How do you tell the difference?

Water Pollution From Inside the House

Have students research issues related to prescription drugs in wastewater. How are antibiotics, painkillers, endocrine disrupters, etc impacting wildlife, fish and human water supplies? Have students develop a plan to reduce this type of pollution.

PRE EVENT STUDENT RESEARCH

Fun Websites to Explore the Water Treatment Process

- Audio Blog What Happens to "Number 2" in the Second City
 - → https://soundcloud.com/curiouscity/what-happens-to-number-2-in-the-second-city
- · Interactive Online Graphics for "Where Does Your Poop Go"
 - → http://interactive.wbez.org/curiouscity/poop/

Water Career Sites to Explore

- www.workforwater.org
- Top 10 Reasons to Get a Career in Water
- http://watergrades.com/1960/top-10-reasons-to-get-a-career-in-the-water-treatment-industry/

Scholarships

 Kansas American Water Works Association, Terry L. McKanna Scholarship – One or more \$1,000 scholarships each year. Students enrolled in an accredited college or university in KS. Applicants should be enrolled in courses related to career fields associated with the waterworks industry.

→ http://www.ksawwa.org/conference/terry-l-mckanna-scholarship.html

American Water Works Association – various scholarships for various academic levels
 http://www.awwa.org/membership/get-involved/student-center/awwa-scholarships.aspx



Messages that Resonate







Connecting Classroom to Careers



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Transportation



Make plans EARLY!

Costs vary

Make or break

Ask what the rules are

Ask what process is best

- School sets it up
- Utility sets it up

Cover costs

- ► Year 1 WiW Mini-grant
- Year 2+ utility, sponsor, grant,



PLANT TOUR EXPERIENCE



Ottawa - 2017

Preparing for Plant Tours



✓ Clean up
 ✓ Spruce up
 ✓ Up and running
 ✓ Signs up
 ✓ Prepare ALL staff

Plant Tours

Show process basics

Emphasize importance of safety and reliability

Visit the lab, basins, SCADA, offices, break room


Interactive Plant Tours

- Do a chlorine or other test
- Have microorganism samples ready to view in microscopes
- Have some examples filter, pump, pipe, tool, meter, map, etc
- Water taste test
- Safety equipment relay



Wichita - 2017



INTERNSHIP EXPERIENCE



Lorraine – El Dorado



Ricky - Ottawa



Bryce - Ottawa



Connor – Pittsburg







Miguel – Wichita





Hiring an Intern

- 1. Touch base with HR
- 2. Finalize process
- 3. Choose interview panel
- 4. Review applications& interview
- 5. Choose





Hosting an Intern

- Provide **broad range** of experiences
- Provide **meaningful** work
- Assign a **buddy**, go-to
- Talk about what to expect
- Check-in frequently
- Recognize hard work



Bryce, Ottawa - 2017



Possible Intern Experiences

Attending council meeting Customer service/billing Distribution system chlorine residual testing Hydrant testing/flushing Lab tests Lead repairs Meter reading Painting/mowing/etc Plant tours Residuals or sludge management Safety training Sewer cleaning Social media Staff meeting Well maintenance



Potential Challenges

- Intern Age/Laws
- Safety Concerns
- Enthusiasm
- **Generational Differences**
- Time
- Lack of Job Experience
- Transportation



Capstone Projects

Summer-long project

Intern's choice

Purpose: Share what they learned

Presentation Video Display for city hall A school lesson Blog Social media posts Sky's the limit



Lorraine, El Dorado - 2016



Evaluate Everything!

The Experience students, counselors, teachers

Internship intern, staff, managers, etc

We will provide you with eval tools!



Why Evaluate?

Measure Success

Report Success

Identify Needed Program Changes

Increase Program Support

Calculate Value – cost vs benefit





The Future of Your Utility

Pipeline of Talent Positive Impact on the Community

Engaged Employees

Increased Productivity



Take Pictures!

INSTAGRAM CONTEST!

Enter for your chance to win a \$50 Amazon Gift Card!

Water Instagram Contest Rules

- Ittend Work in Water Experience and Field Trip!
 Follow @WorkinWater
- Post a photo that tells us why water is important to your community
- 4. Add #workinwater and mention your school!

Make sure your account is set to public