

# Water Conservation For A Growing World

Where is the water?

2% Trapped in Icebergs

1% Fresh Water

97% Saltwater

Where the water goes...

Not Potable

Available for use

## PROBLEM:

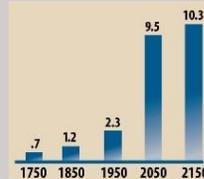
5.3 billion

people will suffer from water shortages by 2025

48

UN estimate of the number of nations that will face freshwater "stress" or "scarcity" by 2025

## PROBLEM:



World Population Growth in billions

Average Water Use Per Person, Per Day

6 SOLUTIONS

### 1 Water Transfers



Colorado River

35 Million

The number of people in 7 states served by the sharing of the water in the Colorado River Basin, up 10 million people from 1990-2008. Per capita water usage is DOWN 1% in the same time period.



40

The number of gallons of gray water produced per person per day in the United States; water that could be re-used for other purposes, such as irrigation.

Repricing \$350

The average price charged in the US per year, per household for water. The same amount would cost \$1,700 in Guatemala City.



Alternative Plant Selection

60% The amount of water a typical household could save each year by switching their outdoor landscaping to low-water-use grasses, wildflowers and/or plants native to the area.

Desalination



6.8 BILLION

The number of gallons of freshwater produced DAILY by the world's 13,600 desalination plants. This represents less than 1% of the world's needs.

Efficient Irrigation



5 The number of easy steps to save the most water with an automatic irrigation system. HOW? Design: Proper design ensures proper coverage and no overlap or overspray. Installation: critical to the proper operation of the system. Product: The latest technology, such as smart controllers, can save the most water. Use: Even the best system must be programmed and used properly to save water. Maintenance: Prevents leaks and other water-wasting problems.

## TOP 10 REASONS TO GET A WATER RESOURCES CAREER

Adapted from: [watergrades.com/1960/top-10-reasons-to-get-a-career-in-the-water-treatment-industry/](http://watergrades.com/1960/top-10-reasons-to-get-a-career-in-the-water-treatment-industry/)

### 1. Get a CAREER not a JOB!

- A career is an occupation that a person fulfills for a significant portion of their life with opportunities for advancement.
- A job is simply a position of regular employment where a person gets paid.
- A career will last you the rest of your life whereas a job will allow you get by.
- There is always room for advancement in a career, but not always with just a job.

**2. Room for Advancement** - Most water facilities have opportunities for advancement in a variety of certification level positions including: engineers of all specialties, tradesmen of all types, environmental and lab technicians, treatment process and systems operators, office administrators and assistants, public education and outreach directors and coordinators, and more depending on what titles are used.

**3. College is an option, not a requirement** - The best way to get into the water industry is to get certification as a lab or environmental technician, tradesperson, or water operator.

**4. Great Pay!** - Bureau of Labor Statistics 2015 median pay rate examples:

- \$37,000 to \$45,700 per year for lab or environmental technicians
- \$36,000 to \$57,000 per year for water treatment plant operator

**5. Benefits included** - Public pensions, medical insurance, vision insurance, dental insurance, life insurance paid vacation and sick time in addition to paid holidays are just a few of the benefits that may come with water management and treatment sector jobs.

**6. Recession Proof** - Water is vital aspect of life for every living being on earth so we know that water will always be in demand, especially safe drinking water.

### 7. Good Job Outlook

- The Bureau of Labor Statistics projects that the [job outlook for water treatment operators](#) will grow by 12% over the next 7 years.
- There are 524,400 jobs in the Water/Wastewater Sector according to Select USA (US Chamber of Commerce)
- 30-50% of current workforce will retire within 10 years! (WRF)

### 8. Benefit Society

- Hold your head high and take pride in a career that provides a service that everyone in the entire world needs to survive.

**9. Relocation Options** - Field skills and certifications allow you to move anywhere in the USA

**10. Paid training** - Many water companies pay for their employees to attend a wide variety of trainings to acquire electrical, mechanical, technical, chemical, plumbing, writing, computers, programming, supervisory, and other skills that will benefit the company and better prepare the employee for whatever situations they may face.

**EARTH'S FRESH WATER RESOURCES ARE QUITE LIMITED.** Globally, exponential human population growth, increasing demand, inefficient use, pollution, and changing weather patterns are causing concern, conflicts, and crises over issues of providing access to adequate, safe water sources. **OPPORTUNITIES IN WATER SECTOR CAREER FIELDS ARE RAPIDLY EXPANDING** to address and find solutions to these problems.

# ONLINE WATER CAREER RESOURCES



Environmental Technician



Plant Operator



Maintenance Supervisor - Mechanic

**VIDEO LINK: [www.bwdh2o.org/resources/videos/#careers](http://www.bwdh2o.org/resources/videos/#careers)**



Laboratory Technician



Plant Engineer



Electrician - Instrumentation Technician



***"WE MAKE WATER FROM BEAVER LAKE CLEAN AND SAFE TO DRINK BECAUSE WE CARE!"***

[bwdh2o.org](http://bwdh2o.org)



AWWA CAREER CENTER  
Education/Internships/Jobs  
[awwa.org/resources-tools/career-center.aspx](http://awwa.org/resources-tools/career-center.aspx)



**AMERICAN WATER RESOURCES ASSOCIATION**

*Community, Conversation, Connections*

[careers.awra.org](http://careers.awra.org)



[workforwater.org](http://workforwater.org)



[bls.gov/ooh/](http://bls.gov/ooh/)