The Cost of Wasted Water

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Did You Know?

Do you know how much water you are wasting every day? How about every year? You may not realize that in normal manufacturing operations a tremendous amount of water is wasted. You may be surprised to know that although over 70% of the Earth's surface is water, 97% of that water is salt water, leaving only 3% for **fresh water**. Of that, only 1% is fit for human consumption. Though water is technically a renewable resource, our supply of water is decreasing faster than it can be replenished.

Close Off The Drain

The cost of water can add up quickly for a pass-through system, especially if running multiple shifts in a day.

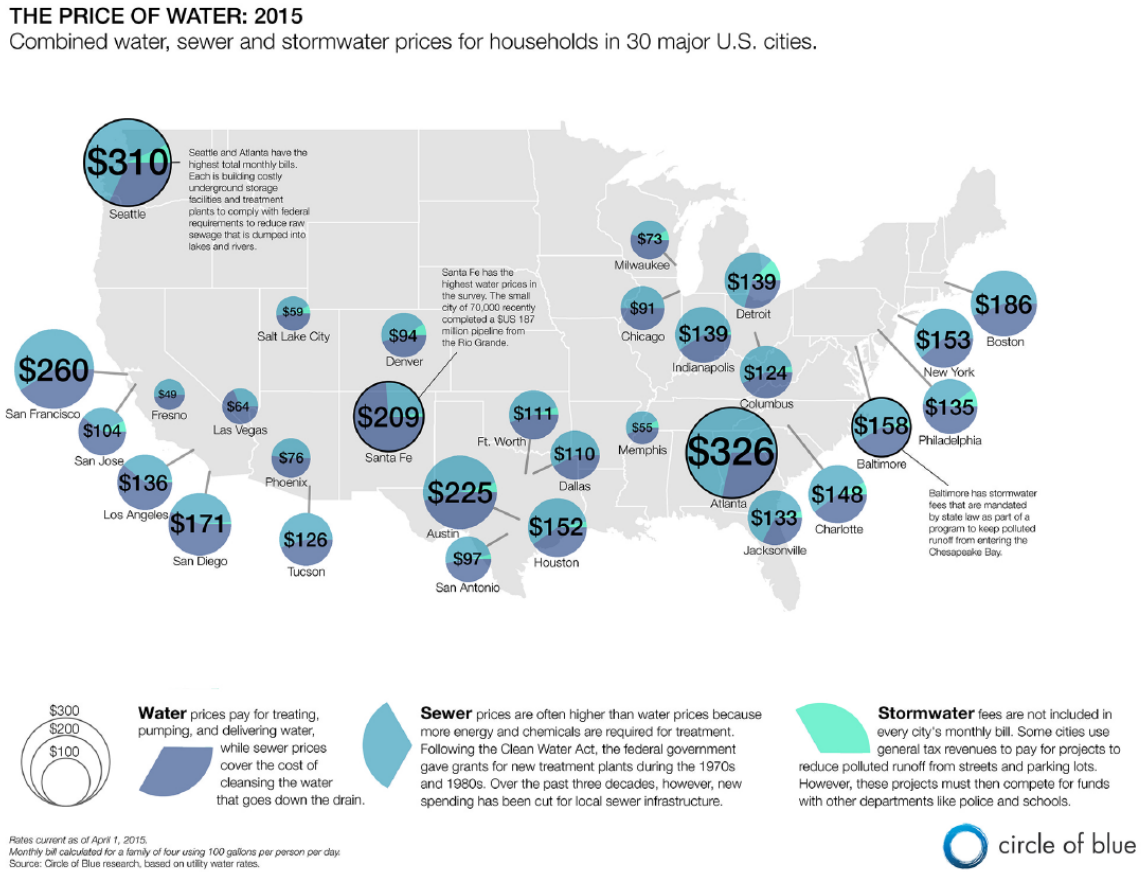
The REAL Cost of Water is:

Both the Water and Sewage Charges

Calculating Water Charges

- Water rates have skyrocketed over the past 12 years
  - Atlanta +233%
  - Portland +161%
  - Cleveland +131%
  - Chicago +116%
  - Dallas +75%

Calculating Water Charges

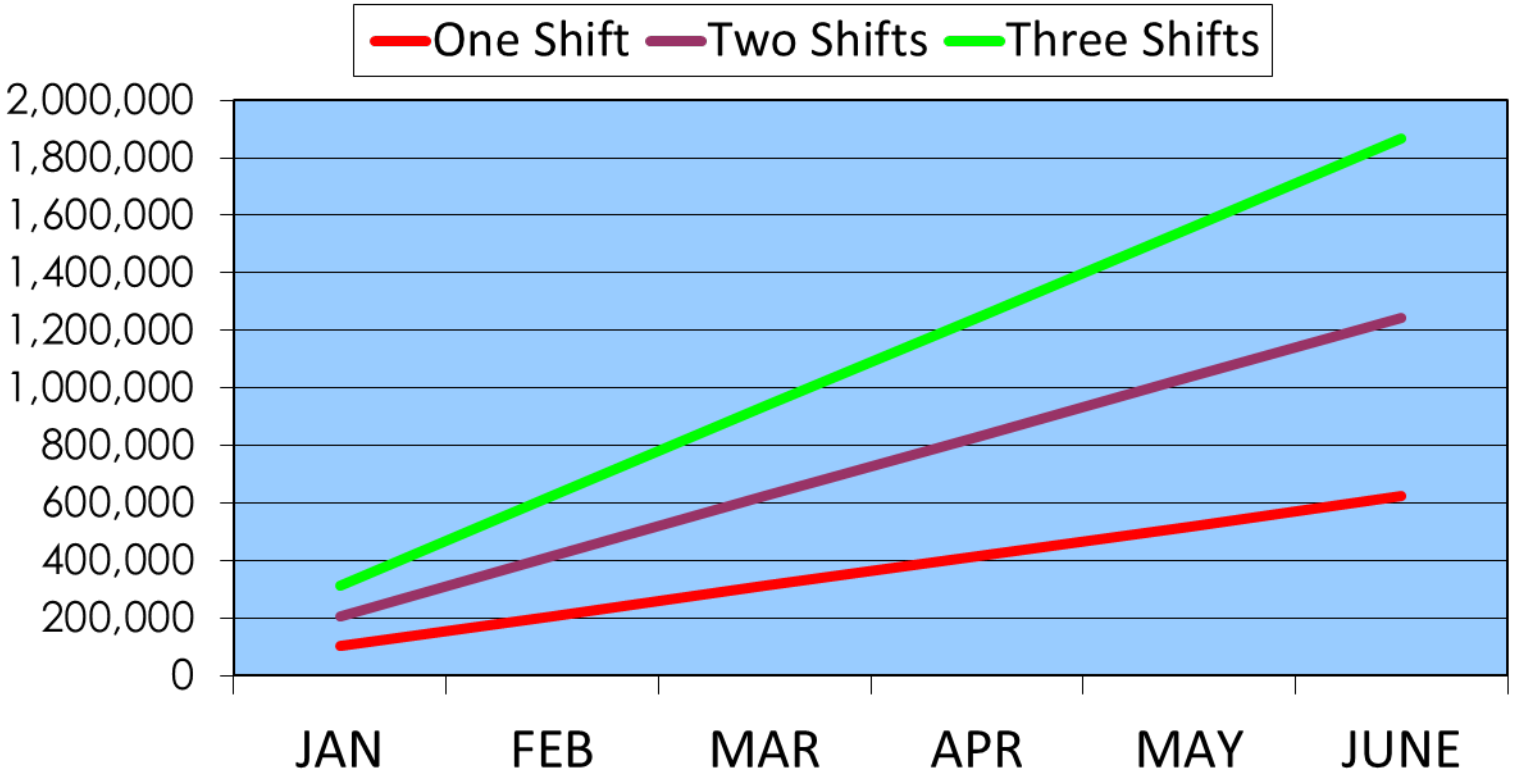


Calculating Water Charges

Typical Water and Sewage Rates Based on Fifty 40 Hour Weeks.

Water Use		Cost Per Thousand Gallons		
GPM	**Annual**	**$2.00**	**$5.00**	**$8.00**
1	120,000	$240	$600	$960
5	600,000	$1,200	$3,000	$4,800
10	1,200,000	$2,400	$6,000	$9,600
25	3,000,000	$6,000	$15,000	$24,000
50	6,000,000	$12,000	$30,000	$48,000
75	9,000,000	$18,000	$45,000	$72,000
100	12,000,000	$24,000	$60,000	$96,000

Months of Water Use @ 10 gpm



What Are the Ways to Cool Water?

- Water to Air Recirculator
- Cooling Tower
- Tap Water
- Closed Loop Water Chiller

Water to Air Re-circulator

- No control of water temperature
- Dependent on load (limited cooling capacity)
- Humidity and ambient can effect cooling

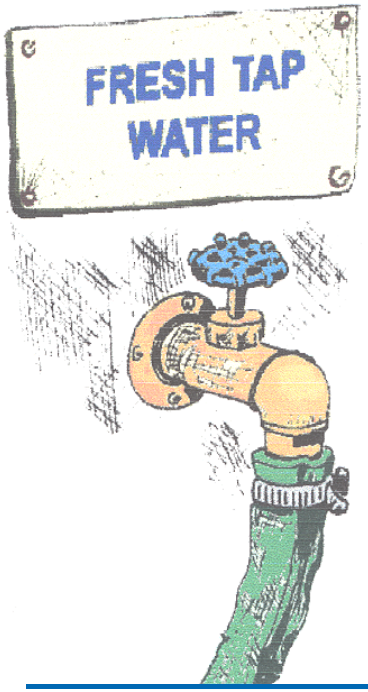
Cooling Tower

The most objectionable of all cooling processes:

- No control over the chilled water temperature
- Evaporation leads to increased water $$$
- Dirt and other contaminants lead to poor heat transfer
- Cannot dump due to EPA regulations

Tap Water

Please Don't Use More Than 6M Gallons Per Year!



- No control over water temp
- Condensation is a problem
- Cost of water
- Cost of dumping

The Best Solution

Closed Loop Water Chiller

Why a Closed Loop Water Chiller?

1. **ABSOLUTE CONTROL:**

Finest product in the lowest production time

2. **REPEATABILITY Of PARTS AND TOLERANCES:**

Control the temperature and duplicate parts with exacting tolerances

3. **PROPER HEAT TRANSFER:**

Consistent temperature for optimal performance

4. **PROTECT YOUR INVESTMENT:**

Keeps capital equipment and valuable components from failing

5. **SAVE IN COST OF WATER AND SEWAGE:**

This alone can pay for the chiller!

WHO NEEDS A CHILLER?

- Resistance Welders
- Lasers
- Waterjet
- Thermal Spray
- Plasma Cutters

<u>Anyone with an application that requires cooling water!!</u>

Cost: Water vs. Electricity

JH1000 (460/3) = FLA 7 @ 10 gpm

Annual Cost of Electricity = $1,500

Annual Cost of Water = $6,000
(Single shift 10 gpm flow at cost of $5 per 1000 gallons)

Operating Costs Saved: $4,500
+ lower maintenance and downtime for cleaning

Payback less than two years

COMMENTS?

QUESTIONS?

THANK YOU!