

***Billerica Water Quality
Education
-A 20 Year Success Story***

Jeff Kalmes



My Experience

- 📁 29 years of experience
 - 📁 Operator, Lab Tech, Plant Supervisor
 - 📁 Grade 7 Wastewater License
 - 📁 2008 [NEWEA](#) Public Educator Award
 - 📁 2011 [WEF](#) National Public Educator Award

How I Started

📖 Classroom Visits

📖 1994 TO 2015

📖 Grade 1 Thru Grade 5






📖 100+ Classrooms visits in April & May

📖 What was my Plan?



My Lesson Plan

Classroom Visits

-  Grade 1- Water Cycle
-  Grade 2- Surface Water +
-  Grade 3- Ground Water +
-  Grade 4- Wastewater +
-  Grade 5- Drinking, Surface and Storm Water Everything!



Show the Magic!

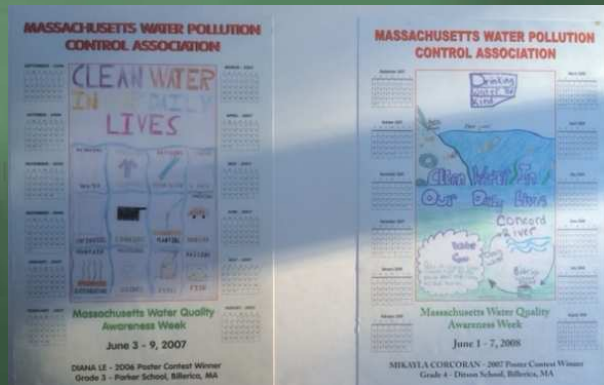
- 📖 Treatment Plant Tours
- 📖 Include the Parents
 - 📖 They don't know this stuff either!
- 📖 Shock everyone by demonstrating the daily work we perform to clean our water





What Came Next

- 📖 World Water Monitoring Day
 - 📖 2008 to present
 - 📖 Hands on training
 - 📖 D.O. Ph Temp Turbidity
 - 📖 Parent and local news involvement





Partner with Local Colleges

 WPI

 Aluminum Project




 UML

 Wastewater courses





Potential Job Seekers

Local middle and high schools

-  These kids are looking at our field for job opportunities
-  Tours, some hands on
-  License tests

Lowell Vocational Tech

-  Developing a career day/class for jobs in our industry
-  Lab and Equipment Operators, Trades people



Involve and Educate Your Town Management

- 📁 Yes, more tours!
- 📁 Invite your Town Manager, FIN Comm, Town Meeting Reps
- 📁 We need them to believe us
- 📁 Never ending education of what we do to the people who will fund it!







Use Everything Available to You

- 📖 Local newspapers and cable TV stations
 - 📖 Host a walk thru tour
 - 📖 Show off processes and equipment
 - 📖 Explain:
 - 📖 how our local taxes are used
 - 📖 The costs of cleaning our drinking and waste water



Keep Evolving and Involving

New Mentoring Program

-  Four people so far have been involved
-  Friends and family members
-  Hands on training, Pumps, Lab, Flow Pattern etc
-  Resulted in two people who have now chosen to enter the water and wastewater field



Results

📁 Dropped Water Usage

📁 in Billerica was 100 GAL/PPPD now 70 GAL/PPPD

📁 Local residents educated

📁 thru local cable TV and newspapers

📁 New people introduced to our industry

📁 from our new Mentoring Program

📁 Employee involvement = employee pride!



Remember to Show Off!

Industry Magazines

 W.E.T. -Clarifier Upgrade: <http://www.weftec.org/>

 <http://www.newea.org/>

 TPO- COMAG & Public Education: <http://www.tpomag.com/>

 Air-Blower: <http://www.airbestpractices.com/magazine>

 http://www.wef.org/publications/page_wet.aspx

 Mass. Operators Association:

 <http://www.mwpca.org/resources>

