

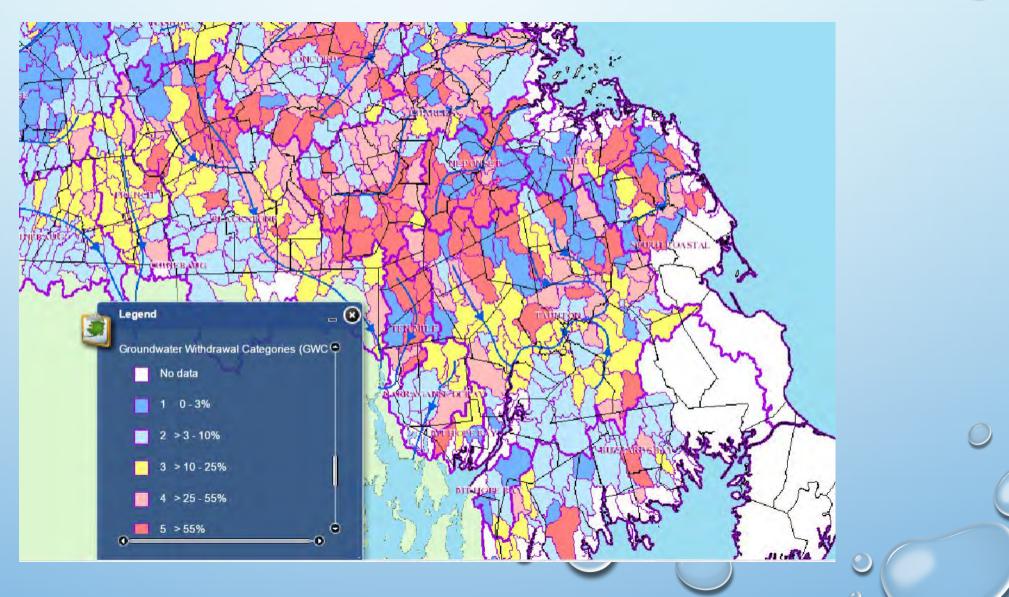
# WATER CONSERVATION INNOVATION TOOLS AND TACTICS



DROUGHT'S SILVER LINING

SAMANTHA WOODS, NSRWA EXECUTIVE DIRECTOR

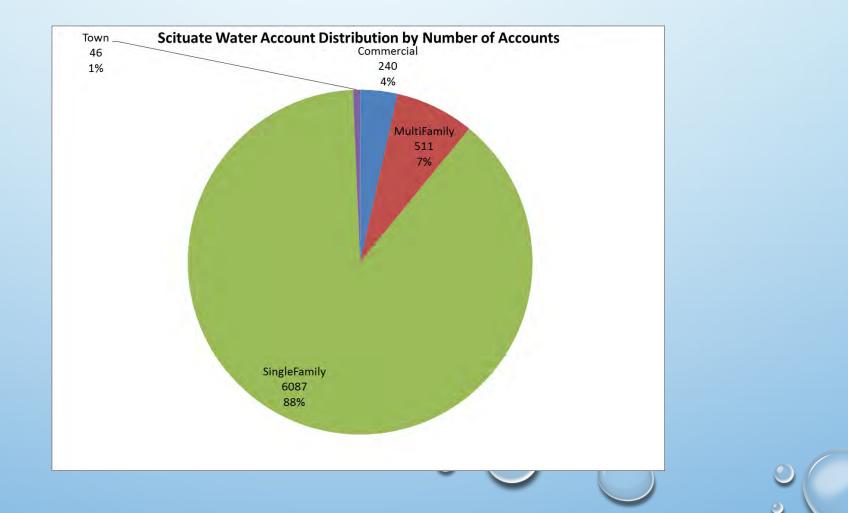
#### GROUNDWATER WITHDRAWAL CATEGORIES

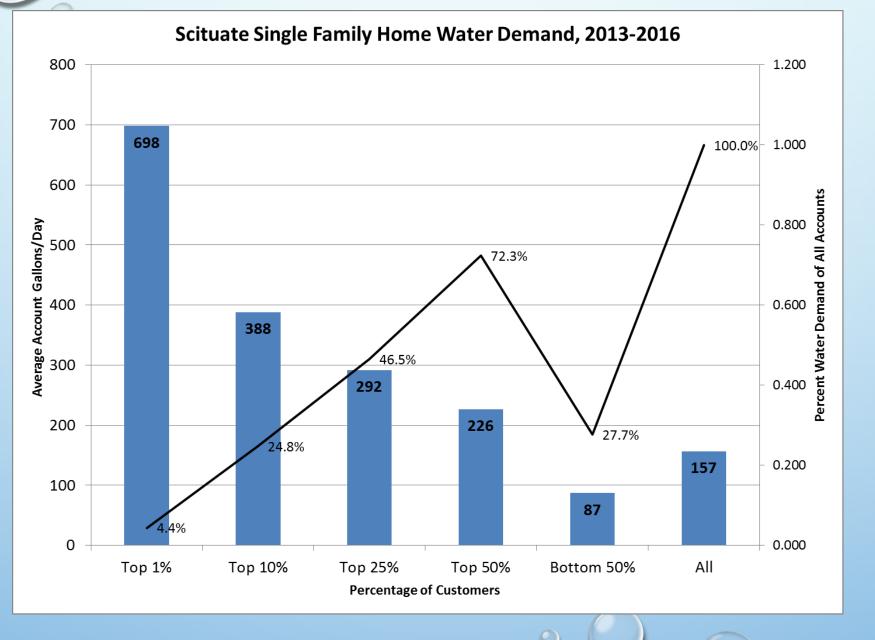


#### NET GROUNDWATER DEPLETED BASINS



#### UNDERSTAND WHO USES HOW MUCH WATER WHEN!





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# **IRRIGATION RESTRICTION**

- STARTED 2011
- IRRIGATION SYSTEMS ONLY
- WATER 1X/WEEK ON DAY BASED
  ON VOTING PRECINCT
- BASED ON PILOT EFFORT IN
  FRANKLIN, MA (USED TRASH DAYS)
- BROCHURE SENT TO ALL WATER
  CUSTOMERS
- 82% OF CUSTOMERS FELT THE RESTRICTION WAS A GOOD IDEA (WATER DIV. SURVEY, 2011)

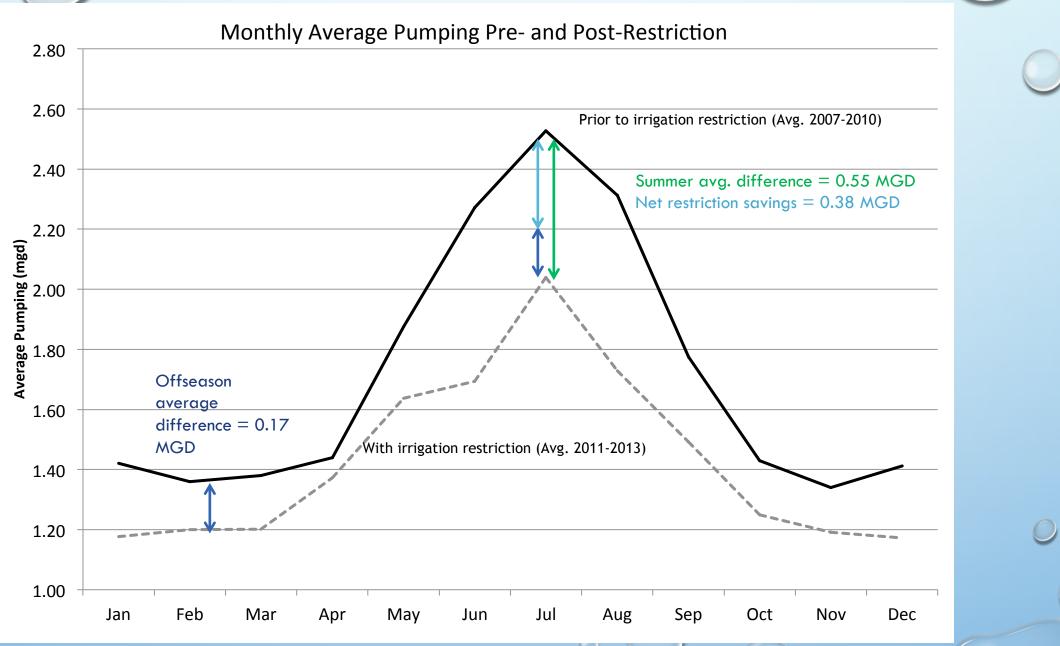


Scituate Reservoir low water level, September 2007.

The new Lawn Irrigation Restriction is not only the cheapest and most effective tool for stretching the town's water supplies for people, but is also part of the long term plan to restore First Herring Brook.

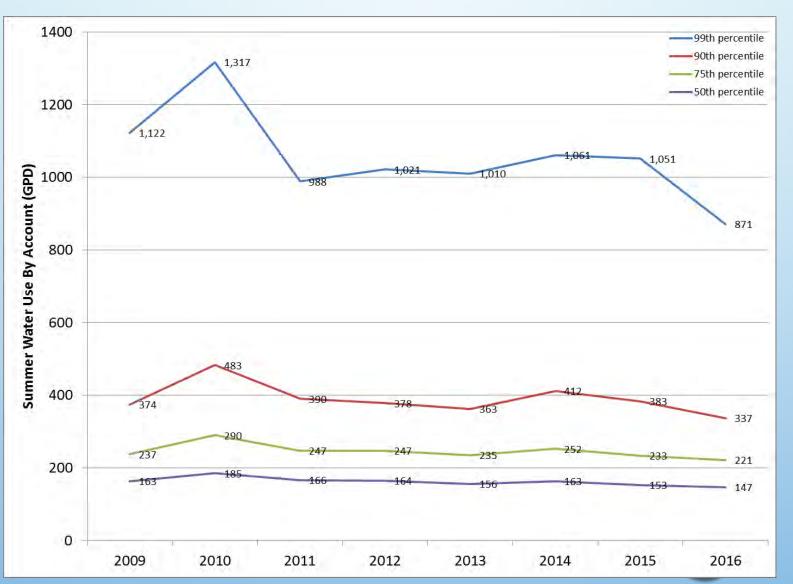
Introducing ... Scituate's new Lawn Irrigation System Restriction: Your Voting Precinct is #3 You may use in-ground lawn irrigation systems connected to the town's water supply system only on <u>WEDNESDAYS</u>.

Why does Scituate need a new Lawn Irrigation Restriction? Learn more inside! ->



# TOWN OF SCITUATE SUMMER DEMAND 2009-2016

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# PRIVATE WELL BYLAWS

• Mass Rivers Alliance 58 towns surveyed

- Hamilton, Wenham, Topsfield and Falmouth have private well bylaws
- No lawsuits to date



Table 1. Obstacles to Addressing Private Well Regulations

Obstacle	Number of Towns Indicating Obstacle*
Bylaw including private wells has never been considered in the town	25
Concern that the town does not have authority to regulate private wells	22



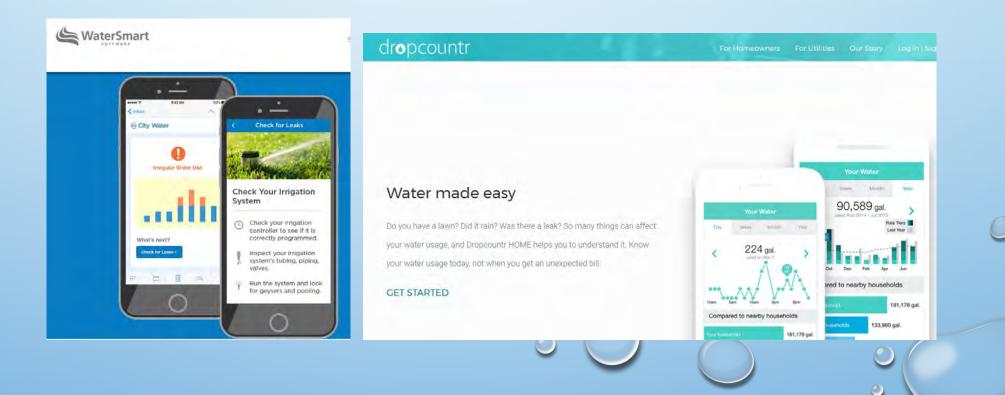




# TECHNOLOGY

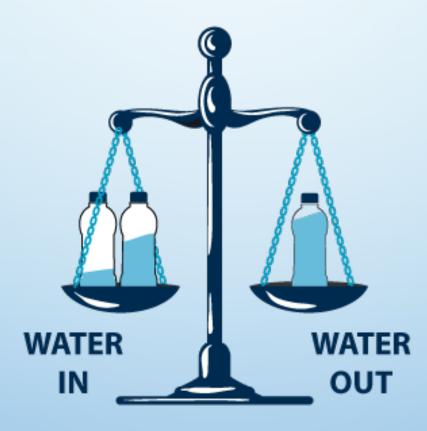
Great promise but...

- Get people to sign up
- Data may be limited and not real time depending on system
- Needs staff to operate and customize message
- \$\$





#### WATER BALANCE POLICY



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# EDUCATION AND FEEDBACK



#### WATER SYSTEM UPDATE 11/17/16

POSTED ON: NOVEMBER 17, 2016 - 9:51AM

\*Please note that this update contains new information and does not repeat information already provided in previous updates\*

The Drought Management Crisis Team met on Tuesday, November 15th

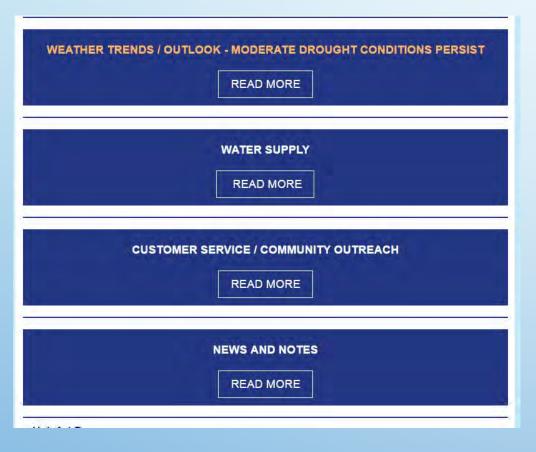
Water Supply

· Supply: The Water Department continues to supply all of the Town's water exclusively from the wells.

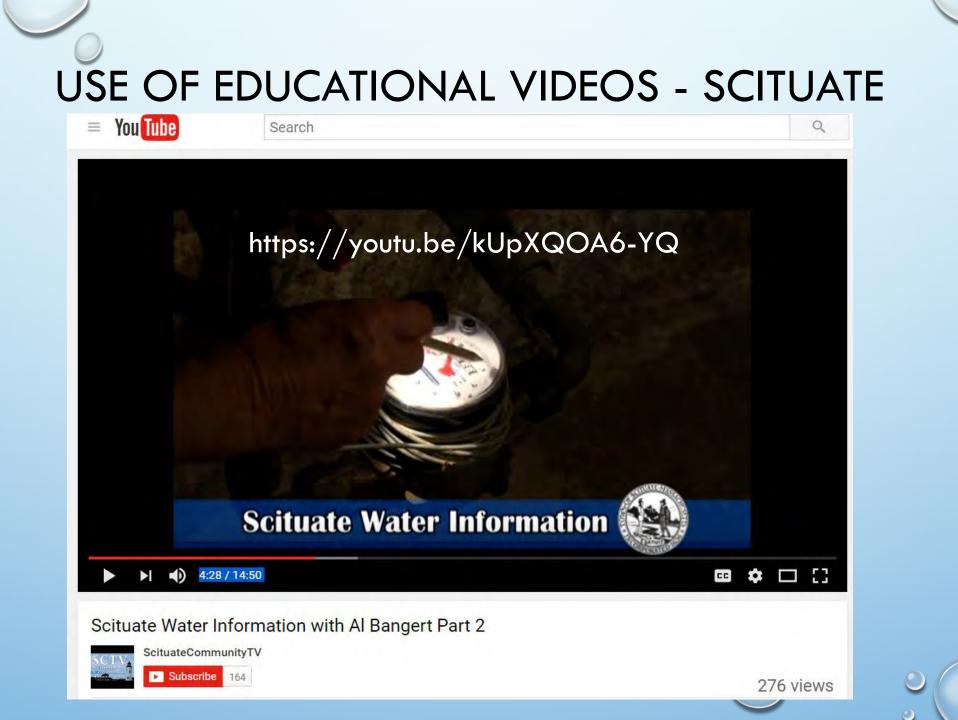
- Rainfall and Reservoir level: As a result of 0.8 inches of rainfall over the past 14 days, the Reservoir level has increased by 7 inches to 43% full. While this is very encouraging, we are still far below the 62% level we typically see this time of year. This indicates that the watershed is becoming saturated so that rain that falls in the forest flows into the streams that feed the Reservoir. We still have a long way to go before we reach normal fall levels. Secretary Mathew Beaton of the Office of Energy and Environmental Affairs recently declared a "Drought Warning" condition for large portions of the Commonwealth including the South Shore. This means the restrictions on outdoor water use must remain in effect.
- Forecast: NECN meteorologist Tim Kelley provided this weather outlook: "The weather turns dry and pleasant for the most part into the weekend. We will witness the merging of two systems, one from the east, and another one coming out of the Midwest. It may not be all that rainy, probably less than an inch, but the rain may turn to snow here on Monday. It looks cold and windy for Tuesday before Thanksgiving. Then a series of fast moving systems could bring more rain, possibly ending as snow on Thanksgiving Day."



### MONTHLY UPDATES AND REBATE PROGRAM



We are also planning to kick off our water conservation and rebate program in March 2017. Customers will be able to sign up to have their toilets, showerheads, and faucet aerators replaced for free. We will also be offering a \$250 rebate towards the replacement of a top-loading, agitator clothes washer with a front-loaded, high efficiency model. In addition, we will be offering a \$2,500 rebate for eligible landscaping costs if customers are interested in eliminating their outdoor irrigation systems. More details will be provided on our website when the program officially launches.







#### CREATE A WATER CONSERVATION ETHIC (DON'T WAIT FOR A DROUGHT!)



## NEED TO CHANGE OUR RELATIONSHIP TO WATER AND CREATE A WATER ETHIC THAT...\*

- VALUES WATER, FROM APPRECIATING LOCAL STREAMS TO PRICING WATER RIGHT.
- WE WORK TOGETHER TO USE LESS AND LESS—RATHER THAN FIGHT EACH OTHER TO GRAB MORE AND MORE.
- WE TRY TO KEEP WATER LOCAL
- WE AVOID : OVERTAPPING AQUIFERS AND SURFACE WATERS AND OVERRELYING ON COSTLY FIXES THAT HAVE UNINTENDED CONSEQUENCES
- WE LEAVE AS MUCH AS PRUDENTLY POSSIBLE IN NATURE
- USES THE RIGHT WATER FOR RIGHT USE!
  - FLUSH TOILETS WITH GRAY WATER
  - HARVEST RAINWATER TO IRRIGATE OUR GARDENS AND EVEN TO DRINK
  - USE NATIVE PLANTS AND REDUCE LAWNS
  - REUSE WASTEWATER FOR IRRIGATION AND (GASP) RECYCLE IT BACK INTO THE WATERSHED FOR DRINKING
  - \* BARNETT, CYNTHIA, BLUE REVOLUTION, UNMAKING AMERICA'S WATER CRISIS, 2011

