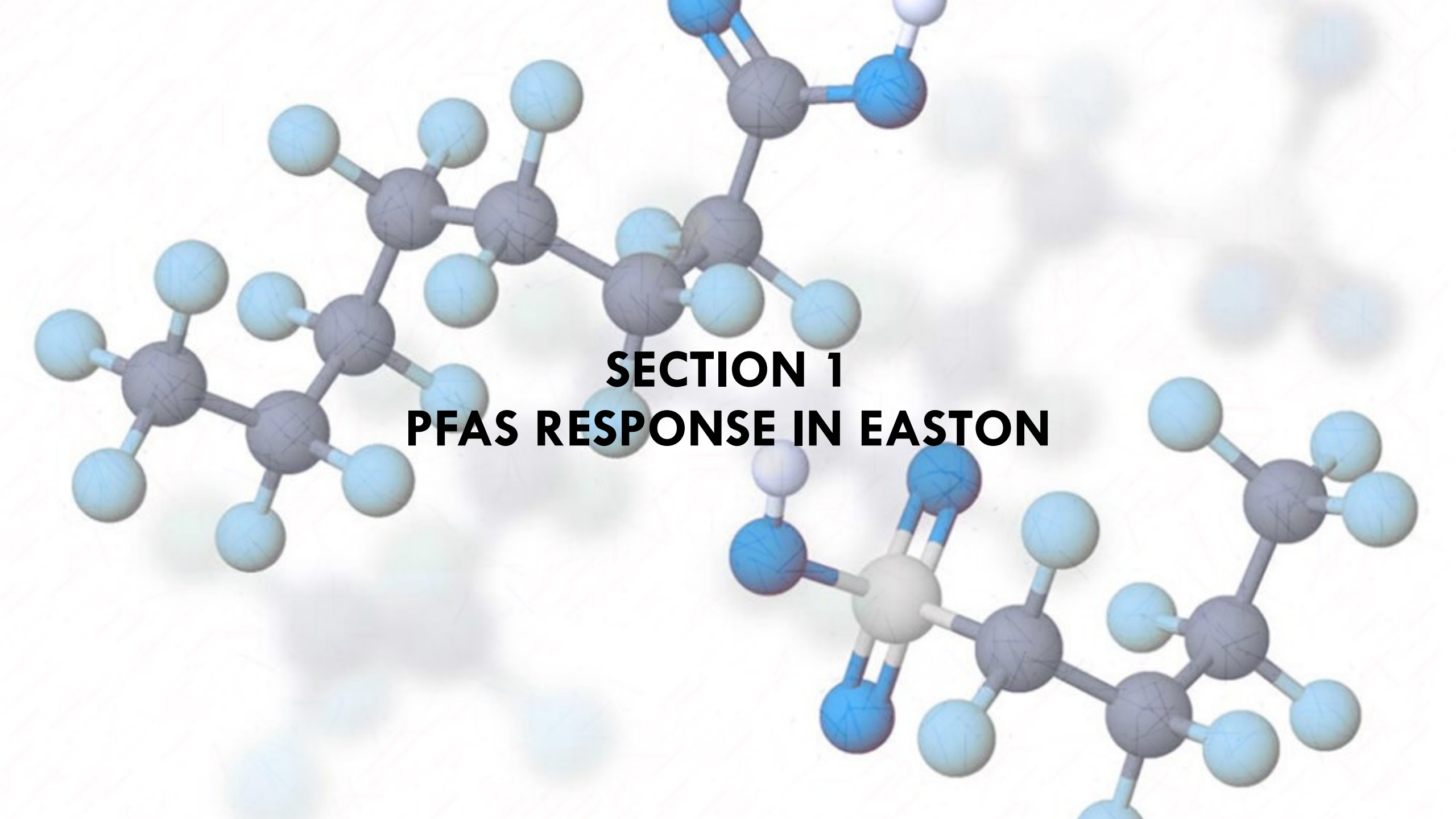




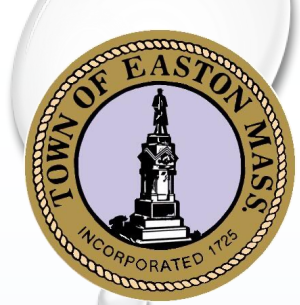
**DRAFT**  
**PFAS RESPONSE**  
**ON THE LOCAL LEVEL**

CONNOR READ, EASTON TOWN ADMINISTRATOR  
MASSACHUSETTS PFAS INTERAGENCY TASKFORCE MEMBER

JULY 20, 2021

The image features several ball-and-stick molecular models of PFAS (perfluoroalkyl substances) compounds. The molecules are composed of dark grey carbon atoms, light blue hydrogen atoms, and bright blue fluorine atoms. Some models show long, branched hydrocarbon chains, while others show shorter, more complex structures with multiple fluorine atoms. The background is a light, textured surface with faint, repeating molecular patterns.

**SECTION 1**  
**PFAS RESPONSE IN EASTON**



# PFAS RESPONSE ON LOCAL LEVEL: TOWN OF EASTON – WATER DIVISION



Easton Water Division supplies water to 7,500+ customers.

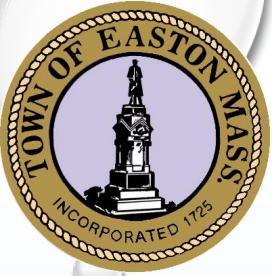


95% + of service for 25,000 residents is via PWS.



Easton water is sourced from seven (7) ground water wells.





# PFAS RESPONSE ON LOCAL LEVEL: TOWN OF EASTON – TESTING FOR PFAS

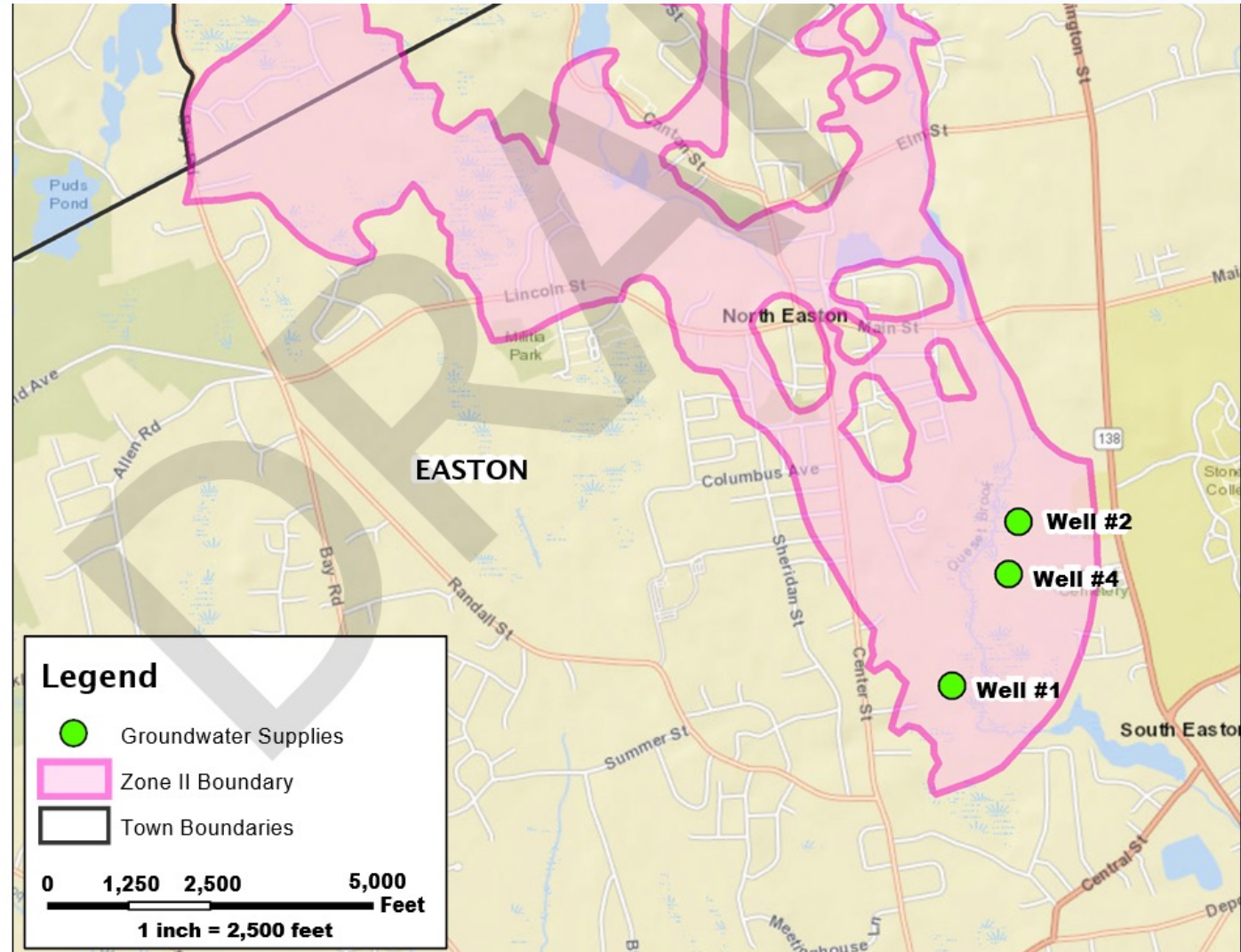
Tested for PFAS under USEPA UCMR3 in 2014 (ppb scale) and received NDs.

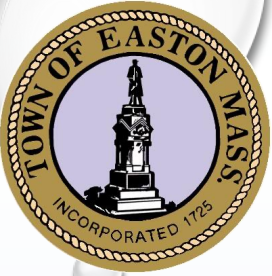
During well replacement in 2019, dep required Easton test at ppt scale.

To our surprise, PFAS was detected (15.6 ppt).

This surprise was repeated at other wells tested throughout that summer / fall.

Like many administrators, directors and water superintendents since – we had to get up to speed on pfas – fast.





# DEVELOPING A PFAS RESPONSE STRATEGY

- IN FALL 2019, DEP SUGGESTED THE TOWN PUBLISH A NOTICE ON WEBSITE ABOUT TEST RESULTS DESPITE LACK OF MCL.
- TOWN WORKED WITH DEP TO EXPAND ON THAT EFFORT TO BE AS FORTHRIGHT WITH PUBLIC AS POSSIBLE
- PUBLIC MEETINGS, INFORMATION SHARING, EDUCATION AND PUBLIC RESPONSE PLANNING PLANNING.
- EARLY EFFORTS ESTABLISHED THE FRAMEWORK FOR ONGOING RESPONSE THROUGH TODAY.....





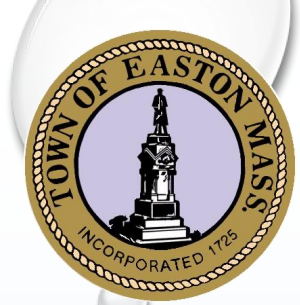
# DEVELOPING A PFAS RESPONSE STRATEGY

**Communicate**

**Educate**

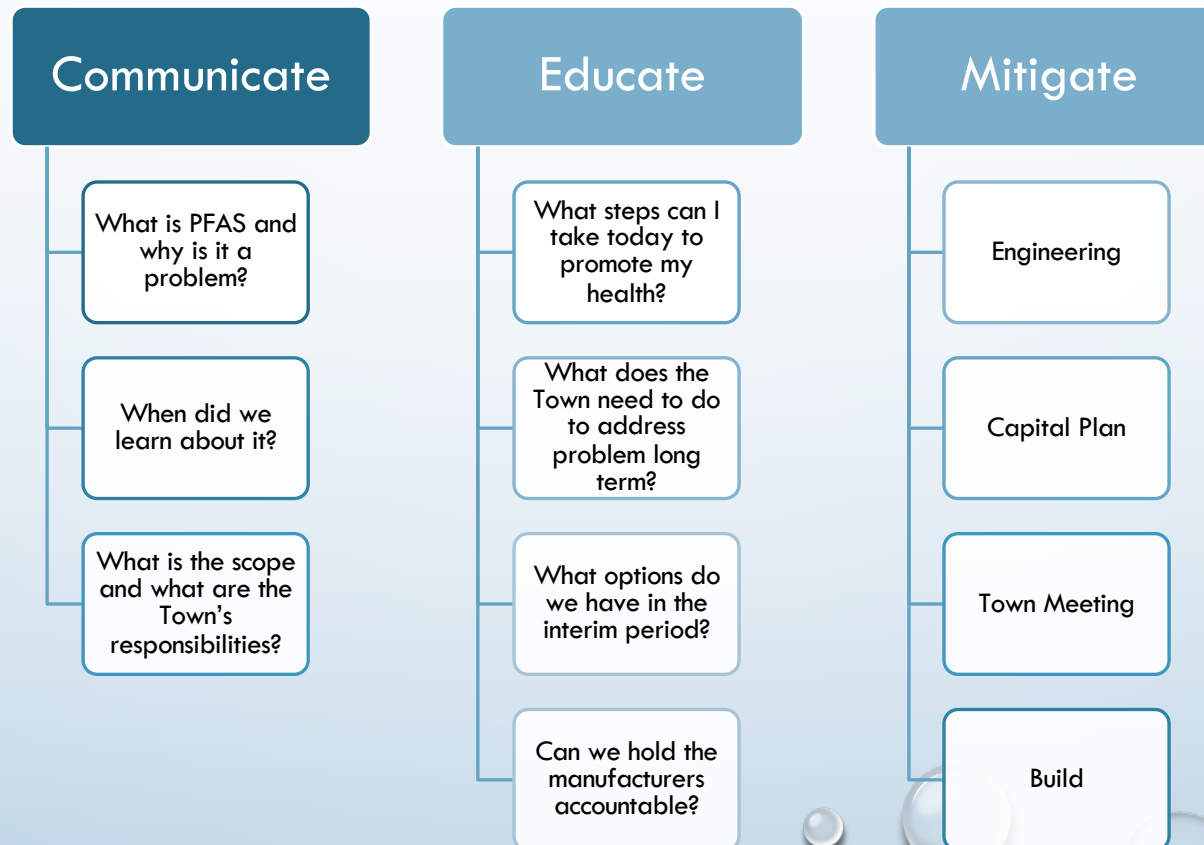
**Mitigate**

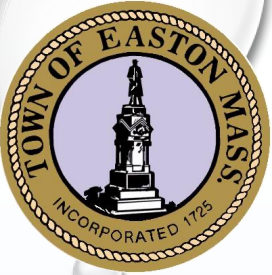




# PFAS RESPONSE ON LOCAL LEVEL: COMMUNICATION AND EDUCATION

- EARLY COMMUNICATION AND EDUCATION CHALLENGING AS THE SCALE OF THE PROBLEM HAD NOT BEEN DEFINED YET (NO MCL SET) WHEN WE BROUGHT IT PUBLIC IN NOVEMBER 2019.





# PFAS MITIGATION IN PUBLIC WATER SUPPLY:



## WHAT IS EASTON DOING IN ANTICIPATION OF THE DEP PROPOSED PFAS DRINKING WATER STANDARD? [FEB. 2020]

Immediate Term  
Options Available to Sensitive Subgroups Right Now

- ✓ Easton Water Division PFAS Home Filter Rebate Program
  - ✓ Massachusetts DEP PFAS-Tested Bottled Water Company Information
- July 2020 - Ongoing / Available Now

Medium Term  
Responsive and Proactive Planning for Permanent Treatment [6-12 months]

- ✓ Ongoing Quarterly Testing and Publication of Results
  - ✓ \$100,000 Capital Funding Program for FY2021 (July 1, 2020) to fund PFAS Preparedness Engineering Study
  - ✓ Policy and Financial Planning / Advocacy with State Regulatory and Legislative Partners
- July 2020 - Ongoing / NEW – NWRA Class Action Complaint vs. PFAS Manufacturers

Long Term  
Financing and Construction, if necessary, of Public Treatment Solutions [1 year – permanent]

- Publication and Public Review of PFAS Preparedness Study Outcomes and Recommendations
- Capital Planning and Funding for Possible Study Recommendations – such as Treatment Plant(s)
- Possible Water Rate Increases to Finance Bonds for Construction

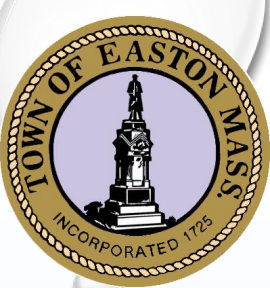
VISIT [www.easton.ma.us/departments/dpw/water\\_division/pfas\\_information.php](http://www.easton.ma.us/departments/dpw/water_division/pfas_information.php) FOR MORE INFORMATION, QUESTIONS OR COMMENTS

## FY22 Capital Budget – Water

PFAS Treatment Plant(s) – up to three - \$9.2M

- PFAS treatment will respond to new MassDEP regulation on PFAS6 to remove PFAS from wells testing over 20 parts-per-trillion (1,2 and 4).
- Design is ongoing – funding will finish design and advance to bid / construction with target of 18-24 months for buildout.

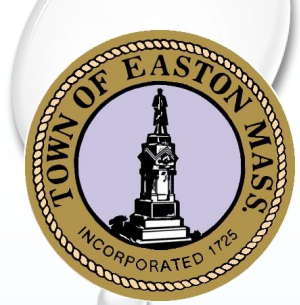




# PFAS MITIGATION IN PUBLIC WATER SUPPLY: MITIGATION – IMMEDIATE / MEDIUM TERM

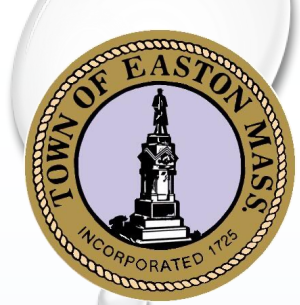
- THERE IS NO ONE-SIZE-FITS-ALL-PWS MITIGATION – THIS IS TRUE FOR IMMEDIATE INTERIM STEPS AND LONG TERM PERMANENT TREATMENT.
- IMMEDIATE TERM:
  - EASTON COULD NOT OFF-LINE THE CONTAMINATED WELLS IN QUESTION BASED ON LOCATION AND DEMAND OR GUARANTEE THAT BLENDED YIELD WOULD ALWAYS <20 PPT.
  - INNOVATIVE 2019 MITIGATION – AT-HOME-FILTER REBATE PROGRAM – NO LONGER COMPLIED WITH 2021 MASSDEP MCL.
  - PE/PN NOT SUFFICIENT – *NEW* IMMEDIATE TERM OFFERING REQUIRED.
  - BLUE DROP WATER FILTER SITE FREE FOR RESIDENTS INSTALLED. EST. ANNUAL COST - \$44,000.
  - 24/7 HOTLINE AND EMAIL ESTABLISHED. EST ANNUAL COST - \$42,000





# PFAS MITIGATION IN PUBLIC WATER SUPPLY: MITIGATION – LONG TERM

- THERE IS NO ONE-SIZE-FITS-ALL-PWS MITIGATION – THIS IS TRUE FOR IMMEDIATE INTERIM STEPS AND LONG TERM PERMANENT TREATMENT.
- LONG TERM:
  - PERMANENT TREATMENT VIA 3 WTPS NECESSARY – ESTIMATED AT \$9.2M
    - WELLS 1, 2 AND 4
    - WTP LIKELY TO BE GAC – FINAL DESIGN IS ONGOING
    - ETA IS BIDDING THIS FALL, CONSTRUCTION TO COMMENCE AND WRAP BY JUNE 2023
  - FUTURE PROOFING OTHER WTPS
    - WELLS 3,5, 7 WILL HAVE GREEN SAND PLANT BUILT FOR IRON / MAG.
    - UNRELATED TO CURRENT PFAS MITIGATION, BUT DESIGNS WILL MAKE PLANT “PFAS READY” WITH SUFFICIENT SPACE FOR GAC / OTHER TREATMENT MEDIA SHOULD CONTAMINATION BE DETECTED AT LATER DATE.
  - PAYING FOR IT
    - FINANCING VIA BOND ISSUANCE WITH DEBT SERVICE FUNDED BY WATER USER FEES.
    - ESTIMATED IMPACT TO WATER RATE IS AN INCREASE OF 10 % EACH YEAR FOR THE NEXT 3/5 YEARS.
    - BY YEAR FIVE, THIS WILL TRANSLATE TO AN INCREASE OF ANNUAL WATER COST OF APPROX. \$250 PER FAMILY.



# PFAS MITIGATION IN PUBLIC WATER SUPPLY: MITIGATION – ONGOING

- ONGOING ACTION, WHICH IS RESOURCE INTENSIVE, IS ALSO REQUIRED.
- RECURRING ACTION:
  - QUARTERLY NOTICES TO ALL CONSUMERS – 8,000 MAILINGS PER QUARTER
  - QUARTERLY/MONTHLY TESTING OF WELLS AND REPORTING TO DEP
  - ONGOING Q&A WITH PUBLIC VIA HOTLINE
  - REGULAR PRESENTATIONS TO PUBLIC BOARDS
  - SOCIAL MEDIA INFORMATION CAMPAIGNS





**SECTION 2**  
**CONSIDERATIONS FOR MASSACHUSETTS PFAS**  
**INTERAGENCY TASK FORCE**

# LESSONS LEARNED SO FAR AND WHAT LIES AHEAD

- THERE IS CURRENTLY A MISMATCH OF UNDERSTANDING, RESOURCES, AND ACTION BETWEEN REGULATORS (DEP AND STATE AGENCIES), LEGISLATORS, AND IMPLEMENTERS (MUNICIPALITIES / WATER DISTRICTS)
  - NO UNIFYING LEGISLATIVE FRAMEWORK TO COMPREHENSIVELY ADDRESS PFAS CONTAMINATION BY “TURNING OFF THE TAP” (I.E. MANUFACTURING OF PFAS)
  - PATCHWORK REGULATORY FRAMEWORK LIMITS SCOPE OF CONTROL TO AGENCY-BASED SILOS THAT MAY NOT BE ABLE TO ADEQUATELY RESPONDS TO SUCH A WIDESPREAD PROBLEM
    - (NO FEDERAL DRINKING WATER STANDARD ; DIFFERING STATE STANDARDS THAT SEEM LARGELY FOCUSED ON DRINKING WATER WHILE OTHER AREAS [MAKEUP, FOOD] REMAIN UNREGULATED)
  - THERE IS NO AGREED UPON CLASSIFICATION OF WHICH PFAS ARE THE PROBLEM - DIFFERENT CHEMICALS FALL UNDER DIFFERENT PFAS REGULATIONS (MASS. DEP = PFAS6; USEPA = PFOA & PFOS)
  - MISMATCH OF LEVEL OF URGENCY AND ACTION REQUIRED BASED ON AGENCY – DRINKING WATER PROGRAM TREATING PFAS AS A CRISIS WARRANTING HUNDREDS OF MILLIONS (IF NOT BILLIONS) IN MUNICIPAL / DISTRICT SPENDING TO MITIGATE WATER CONTAMINATION IN MASSACHUSETTS ALONE – YET MANUFACTURING AND USING PFAS IS ALLOWED?
    - THIS SENDS CONFUSING MESSAGE TO IMPLEMENTERS AND TO THE PUBLIC AT LARGE. IS THIS A CRISIS OR IS IT NOT? IF IT IS – WHY CAN THESE CHEMICALS CONTINUE TO BE MANUFACTURED AND SOLD?
  - FUNDING AVAILABLE FOR MITIGATION IS LIMITED AND MEANS FOR RAISING FUNDS (I.E. WATER USER FEES) ARE REGRESSIVE AND HAVE A DISPROPORTIONATE NEGATIVE ECONOMIC IMPACT ON INDIVIDUALS AND FAMILIES OF LESSER ECONOMIC MEANS.

# LESSONS LEARNED SO FAR AND WHAT LIES AHEAD

- IN ORDER TO ADDRESS THE DISCONNECT BETWEEN REGULATORS, LEGISLATORS AND IMPLEMENTERS – WE HAVE TO DEFINE THE SCOPE OF THE PROBLEM BEFORE WE CAN EFFECTIVELY FUND AND FIX IT.
  - DISINCENTIVE STRUCTURE CURRENTLY IN PLACE – PROACTIVITY ON THE LOCAL LEVEL IS RISKY WHEN SO MUCH ON THE STATE AND FEDERAL LEVEL IS IN FLUX – OTHERS MAY WANT TO WAIT AND SEE WHETHER LEGISLATIVE ACTION WILL FIX IT AND PAY FOR IT RATHER THAN GO FIRST AND BECOME OBSOLETE (THINK HOME FILTER PROGRAM)
    - DEFINE THE PROBLEM – PERHAPS THE MOST IMPORTANT DECISION THE COMMITTEE WILL MAKE. ARE WE GOING BROAD (ALL PFAS TYPE CHEMICALS) OR GOING PRECISE (ONLY THOSE PFAS WITH DECADES OF DATA TO CONFIRM TOXICITY?). DO WE ALLOW EXCLUSIONS TO BAN BASED ON UTILITY FOR HEALTH AND COMMERCE?
    - IDENTIFYING RESPONSIBLE PARTIES FOR *EXISTING DAMAGE* – NICE IN THEORY – DIFFICULT IN PRACTICE (PFAS IS IN EVERYTHING)
    - FUNDING MECHANISMS – NO EASY ANSWERS. EXCISE TAXES ON MANUFACTURES? STATE BONDS? SRF AND ENGINEERING GRANTS ARE NOT ENOUGH. ABSENT STATE ACTION – THE ANSWER TO “HOW DO WE PAY FOR THIS” IS BY RAISING THE COST OF WATER FOR RESIDENTS OF MASSACHUSETTS TO PAY FOR THE CONTAMINATION OF THEIR PUBLIC WATER BY CHEMICAL MANUFACTURES.





# OTHER IMPACTS ON MUNICIPAL OPERATIONS AND POLICY

- AERIAL MOSQUITO CONTROL SPRAYING
  - AFFF USE FOR FIRE CONTROL
  - UNKNOWNNS (FOOD REGULATION, LANDFILLS, WASTEWATER PLANT PERMITTING, ETC.)
- 

END