

Excavation Damage Prevention Strategies

October 6, 2022

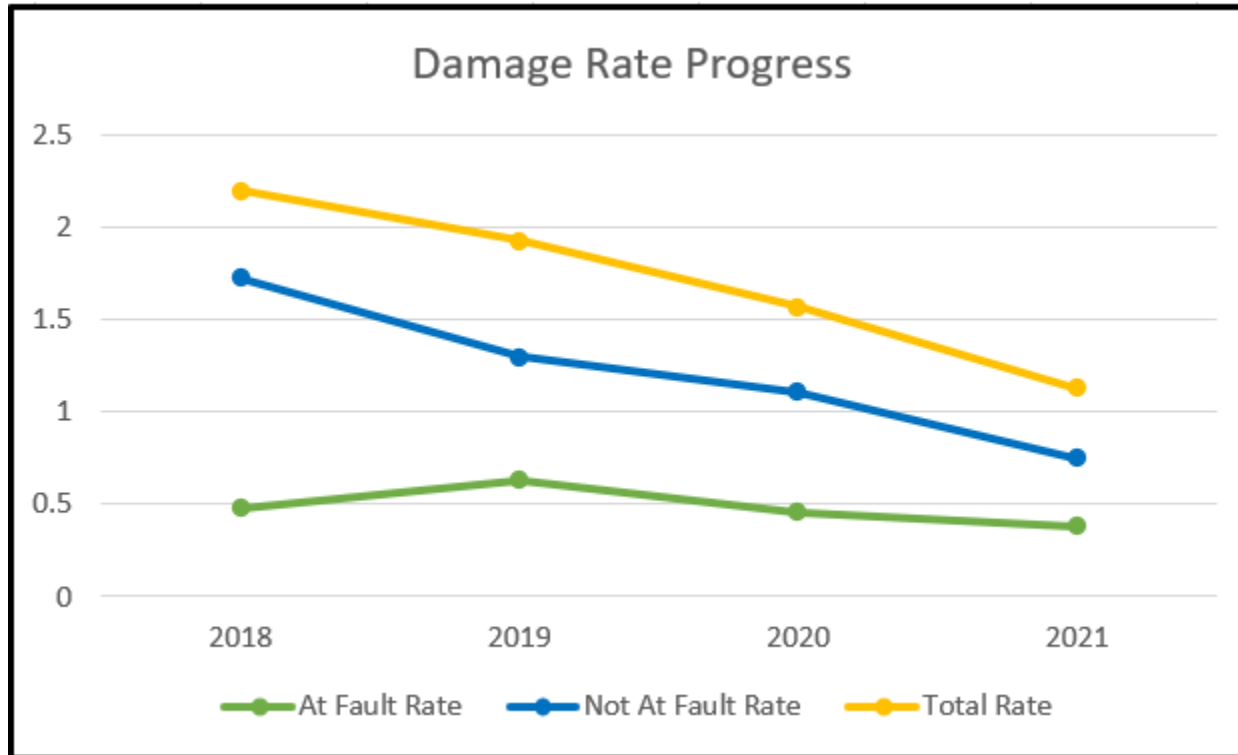
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Agenda

- Program Effectiveness
- Key Aspects to Damage Prevention Program Success
 - Positive Outreach
 - Policies and Procedures
 - Operator Qualification & Education
 - QA/QC Audit Program (ES Department)
 - Risk Mitigation
 - Problem Locate Process
 - Closing Thoughts / Questions

Damage Prevention Program Performance Data

Program Effectiveness



Eversource Damage Prevention is committed to continuous improvement efforts. The team regularly reviews and re-evaluates the effectiveness of the program, making adjustments as needed. The progress we have made is evident in the chart above.

Key Aspects to Damage Prevention Program Success

Positive Outreach

- Committee involvement:
 - MUST participation and events
 - Dig Safe board member
 - Dig Safe events
 - CBYD board member
 - CBYD events
 - NGA conferences

- Positive Outreach
 - The Damage Prevention team regularly review the effectiveness of how we are meeting with excavators and educating them about gas safety, Dig Safe, and CBYD
 - Formal presentations and informal field meetings/tailgates are conducted to engage and BUILD RELATIONSHIPS with the excavating community
 - Informal field visits allow us to reach more excavators as ticket volume continues to rise
 - Excavators have been quicker to reach out to a Damage Prevention representative and the positive results have been evident

Positive Outreach



- Safe Excavation Presentations
 - Formal presentations set up to promote safe excavating practices in front of larger audience
 - Mostly scheduled proactively during company safety days or orientation sessions
 - Scheduled reactively after a damage or multiple damages

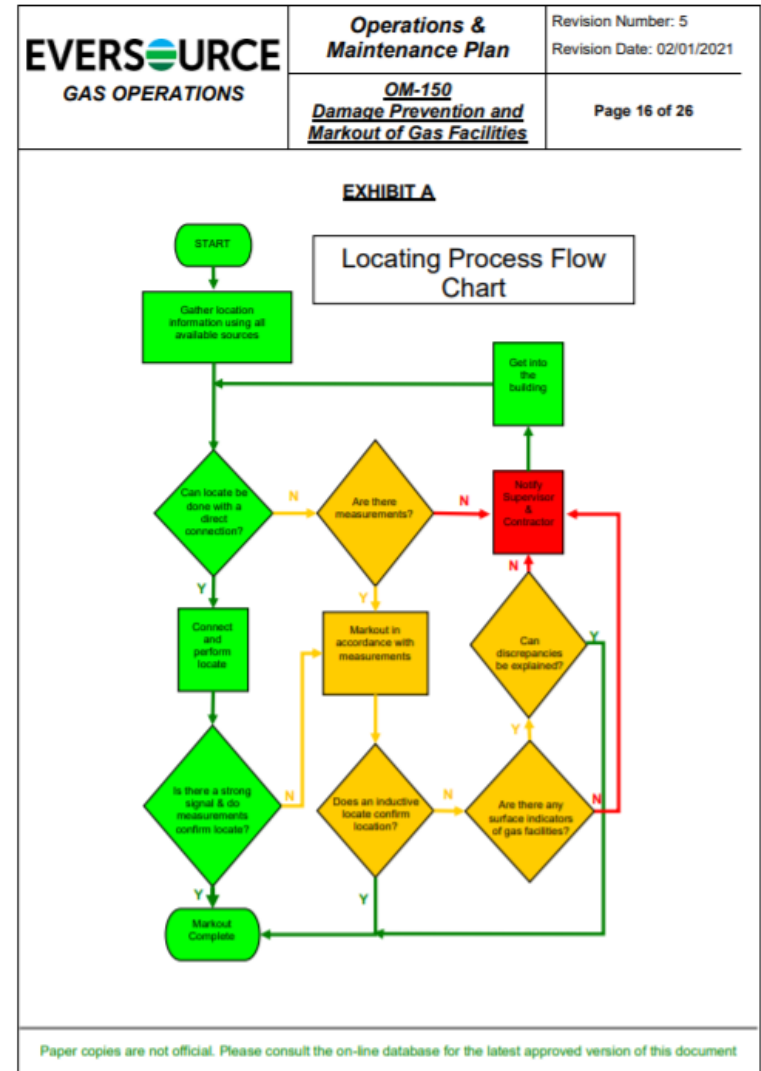
Positive Outreach

- Field Visits
 - Informal, quicker, intended for smaller audience
 - Can happen at any time
 - Able to see the work habits of contractor
 - Ability to answer specific questions on facilities at work site



Policies & Procedures

- OM-150
 - Locate response
 - Locate method
 - Locating Process Flow Chart
 - Markout requirements
 - Guidance for markout and excavation near critical facilities
- OM-150-ADM
 - Participation in One Call Centers
 - Qualification of employees
 - Guidance for damage investigations
 - At fault damage response and follow-up actions



Policies & Procedures



TOWN _____

**MARKOUT FORM
MULTIPLE LOCATIONS**

CBYD _____

STREET _____

MARKED OUT BY _____

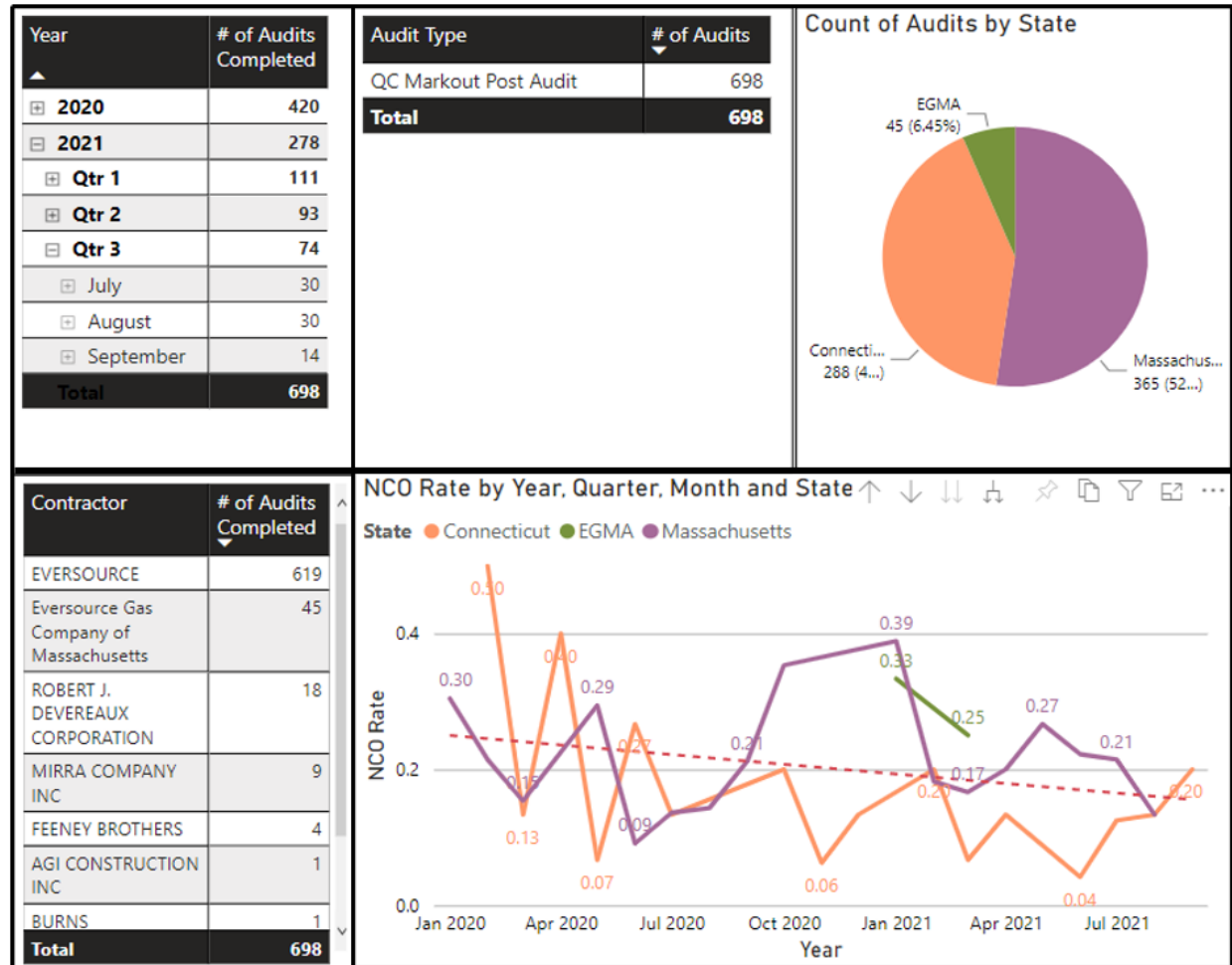
HOUSE #	LOCATED BY		MEASUREMENTS USED / FROM				MEASUREMENTS MATCH SIGNAL		HOW WAS AREA MARKED		PRE - MARKED		MAIN			SVC			DATE MARKED	COMMENTS
	DIRECT	INDIRECT	NO	YES	GIS	CARD	YES	NO	PAINT	STAKES	YES	NO	ST	PS	CI	ST	PS	CI		

Operator Qualification & Education

- Decision made to develop an Eversource OQ Plan in 2017, implemented in mid-2018
 - Better control over testing and qualifications
 - Allows for training and testing to be completed to Eversource-specific standards and policies
- Second Party Contractor on-boarding and refresher meetings
 - Includes locating, use of records, safe excavation practices
 - As often as needed
 - Discuss trends, best practices, metrics and expectations
- Bi-weekly internal and Second Party PSMS & QC calls
 - Review of current trends, damages and lessons learned with all stakeholders

QA/QC Independent Audit Program

- Individual and crew performance review
- “Live” Random inspection from QA/QC group
- “Post” Construction Re-Digs and Post Audits



Risk Mitigation

- Pre-screening/data capture in ticket management systems
 - Cast iron, high pressure, critical facilities, blasting, etc.
- Automated workflows
 - Communication with internal and external stakeholders
- Addressing identified gaps by implementing a new unified ticket management system
 - Enhanced risk management capabilities
 - Interface with GIS
 - Enforcement of locator accountability
- Tooling for problem locates
 - Ground Penetrating Radar, Jameson Tracer Kit, Pipeline Camera



Problem Locate Process

- Driven by field employees who notice discrepancies
- Tools
 - GPR
 - Jameson Tracer Kit
 - Pipeline camera
- Increased awareness and engagement from all stakeholders
- Measure program effectiveness by capturing actual at fault damages vs. successful problem locates
 - Successful problem locate is situation where efforts produced a different result than original markings and facilities fall within scope of work. Assumption is that without problem locate efforts facility would have been damaged.
 - 2022 YTD at fault damage rate would be 43% greater absent the problem locate process

Communication

- Answer the call
- Don't be afraid to reach out to contractors
- Stay in touch, jobs not done after the paint's down

Questions?