

# North Central Massachusetts Private Well Program Logic Model

## RCAP Solutions

**Problem:** Relatively high rates of well-water contaminants and low rates of testing and remediation in Central Massachusetts

Contributing Factors	Activities	Outputs	Short-Term Outcomes	Long-Term Outcomes
Low perceived risk; lack of awareness about importance of testing or what to test for	Education that includes: <ul style="list-style-type: none"> <li>• Online curriculum and educational materials for homeowners/renters about sound wellhead protection and well remediation</li> <li>• Staff training on outreach and well water assessment</li> </ul>	<ul style="list-style-type: none"> <li>• Number of educational materials distributed</li> <li>• Number of homeowners, buyers, realtors and renters participating</li> <li>• Number of staff trained to conduct outreach and assessments</li> </ul>	<ul style="list-style-type: none"> <li>• Changes in resident perceptions about importance of water testing</li> <li>• Changes in staff efficacy to conduct outreach and assessments</li> </ul>	More educated private well owners in the state  ↕
Sporadic testing done by private companies and mainly at request of homeowner	Adopt state model well regulations which includes well testing guidelines	<ul style="list-style-type: none"> <li>• Number and location of well's tested</li> <li>• Number of refusals</li> </ul>	<ul style="list-style-type: none"> <li>• Increase in number of wells tested for MASS-DEP-advised contaminants</li> <li>• Increase in number of positive tests for contaminants</li> </ul>	Increase in regular well-water testing by private well owners  ↕
Many are unable to afford remediation when well tests indicate contaminants are present	Interest-free loans to cover remediation	<ul style="list-style-type: none"> <li>• Collect data on remediation costs</li> <li>• Type of remediation required</li> </ul>	<ul style="list-style-type: none"> <li>• Increase in number and percent of remediated wells</li> </ul>	Decrease in contaminants found in private drinking water wells in the region  ↕
Regulations vary by town; no statewide regulations requiring universal testing	Assist local BOH to adopt new private well regulations based on model regulations.	Written policy (common base regulation) that communities are likely to adopt to present to state legislature (with input of DEP)	Stricter state-wide regulation requiring domestic wells to be tested for multiple contaminants during real estate transactions and new construction.	Less variation in private well-water testing policies by towns in Central MA

### External Factors (affecting implementation and outcomes)

- MA DEP statewide testing for PFAS (discussed piggy-backing on to/coordinating with the DEP activities rather than “competing” with or “duplicating” such testing)
- Variation in regulations by town (for evaluation, may be able to assign communities with stricter regulations to intervention condition and those with “looser” regulations to another or we can “control for” this variation in analyses)