Capacity Development

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Drinking Water Program Stats

- DEQ is a primacy agency for federal drinking water standards via EPA, via the Michigan Safe Drinking Water Act, PA 399.
- Primary Mission of the DEQ:
 - Conduct Sanitary Survey Inspections
 - Conduct Surveillance Visits
 - Oversee Required Monitoring
 - Review/Issue Construction Permits
 - Conduct Training and Operator Certification Exams
 - Implement elements of PA 399
 - 1400 community water supplies divided into surface water and ground water supplies.

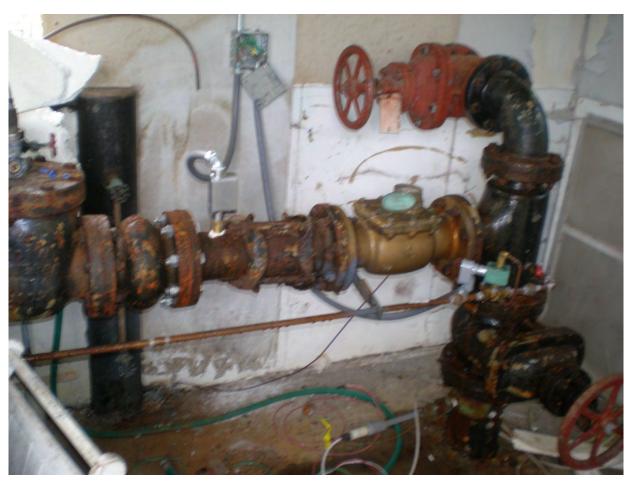


Typical Northern Michigan Pump House Ground Water Supply





Neglected Waterworks Piping





Heavy Corrosion Problems





Aging Treatment Appurtenances





Aging storage tank from 1930's





Typical Pump Conditions





Water Main Condition





Local Official's Infrastructure Management Plan





What is capacity development?

Acquiring and maintaining knowledge, tools, and resources to provide safe, reliable and affordable drinking water

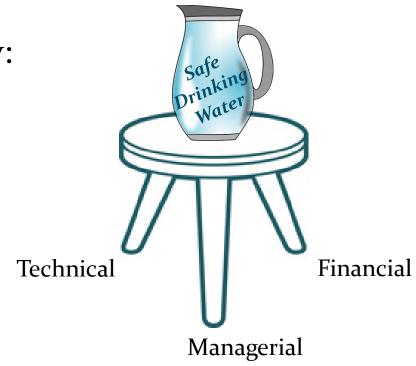
- The 1996 Amendments to the federal SDWA required each state to develop a capacity assessment program
- In April of 1998, Act 399 was amended to include new statutory authority for DEQ to implement a capacity development program



What is capacity?

Ability to plan for, achieve, and maintain compliance with applicable drinking water standards.

- 3 levels of capacity:
 - Technical
 - Managerial
 - Financial





Technical Capacity

 Physical and operational ability of the water system to meet SDWA requirements



- Examples:
 - System Operations
 - Adequacy of infrastructure
 - Adequacy of source water
 - Capability of personnel

Financial Capacity

 Ability of a water system to acquire and manage sufficient financial resources to achieve and maintain compliance with SDWA requirements.



- Examples:
 - Revenue sufficiency
 - Fiscal management and controls
 - Reserve accounts for O&M funds and emergencies

Managerial Capacity

- Ability of the water system to conduct its affairs in the manner enabling it to meet SDWA requirements
 - Examples:
 - Ownership accountability
 - Implementation of a Cross Connection Control Program Program/ordinance
 - User Rate Schedule/ordinance.



Existing System Capacity Development

 Requires a water supply to demonstrate adequate Technical, Financial and Managerial capacity under the Act.



What is Asset Management?

 Identifying the true costs to maintain a desired level of service

 Accomplished by generating adequate revenues to repair and replace components as they age

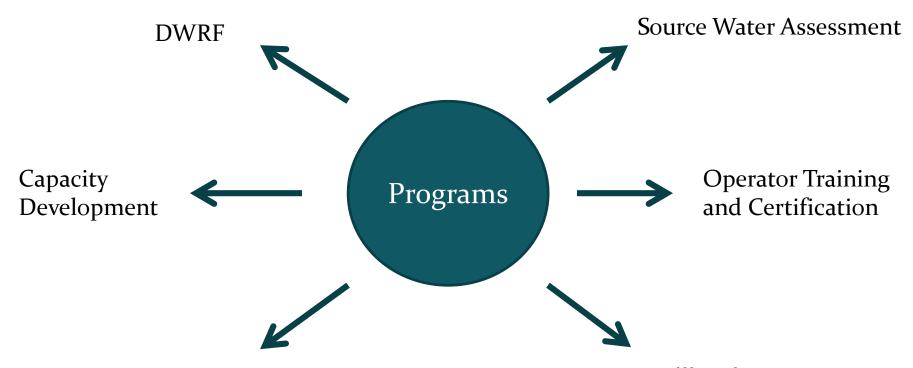
 Implemented by developing an Asset Management Plan (AMP)



 To use various programs, tools, and activities <u>to</u> <u>help systems acquire and</u> <u>maintain capacity</u>.



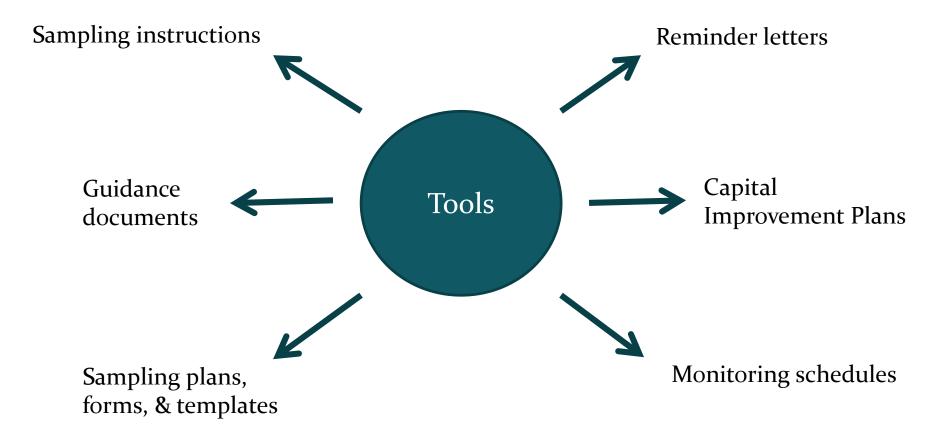




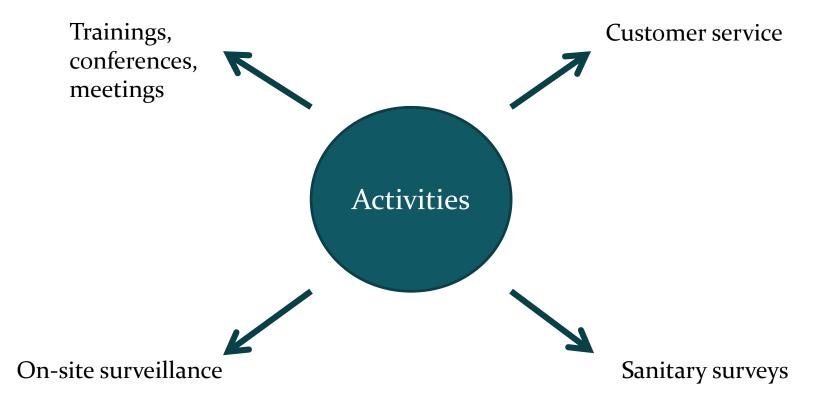
Surface Water Intake Protection

Wellhead Protection











Capacity Development Summary

Capacity has 3 levels:

technical managerial financial

Asset management is crucial

MDEQ's role





Questions?



