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
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/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)
MDEQ’s Role

- To use various programs, tools, and activities to help systems acquire and maintain capacity.
MDEQ’s Role

Programs

- DWRF
- Source Water Assessment
- Operator Training and Certification
- Wellhead Protection
- Surface Water Intake Protection
- Capacity Development
MDEQ’s Role

Sampling instructions

Guidance documents

Sampling plans, forms, & templates

Tools

Reminder letters

Capital Improvement Plans

Monitoring schedules
MDEQ’s Role

- Trainings, conferences, meetings
- On-site surveillance
- Sanitary surveys
- Customer service

Activities
Capacity Development Summary

- Capacity has 3 levels: 
  technical
  managerial
  financial

- Asset management is crucial

- MDEQ’s role
Questions?

"AND IT'S HERE, WHERE WE FEEL THE BULK OF OUR LIQUID ASSETS ARE GOING."