



# Maintenance of Dams

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# Aging Infrastructure

- Most dams in MN over 50 years old
- Challenging to fund repairs
- Innovative funding – fish passage, habitat, Federal
- Maintenance needed



# Responsibility to Maintain

- MN Rule 6115.0380 – “The owner shall operate and maintain the dam. Regulation....is vested with the commissioner.”
- Operation and Maintenance plans
  - Describes owner responsibilities
  - Maintains a safe dam
  - Informs stakeholders about operations
- [ASDSO Dam Owner Academy](#) – free!

# Operation and Maintenance Plans- Content

## Maintenance

- Mow
- Repair minor erosion
- Remove debris
- Mechanical functions

## Inspections/Monitoring

- Who, what, when, how
- Pool levels, river gages, instrumentation

# Trees – Hide problems



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# Trees – Hide more problems



# Trees – Fall over



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# Trees – Roots act as seepage paths, local erosion



# Trees – Structural damage



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# Willow River Dam – Pine County

- Failure, rebuilt with rock rapids



# Lake Zumbro Confined Disposal Facility - Olmsted

- Placement of dredged materials, failed on final filling



# High Island Lake – Sibley County

- Undermined spillway



# Hallock – Kittson County

- Modified for fish passage, damaged in flood



# Thank You!

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## END OF PRESENTATION SLIDES

We apologize, but the slides for the Rapidan Dam failure presentation are not available at this time.