Water Conservation Best Management Practices

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Driven to Discover℠

Industrial Water Efficiency Project Partnership

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- Groundwater availability and community water efficiency research
- Financial support
- Goal of preserving our water resources, promoting conservation and sustainable consumption

- Technical staff and intern resources
- 35+ years of experience
- Mission to help industries in MN find cost-effective solutions for waste prevention, water and energy conservation

Project Overview

- **Understand industrial water use**
- **More savings per recommendation**
- **Utilize existing data**
- **Make general recommendations**
- **Share conclusions**

Implemented: MCES Funded Projects

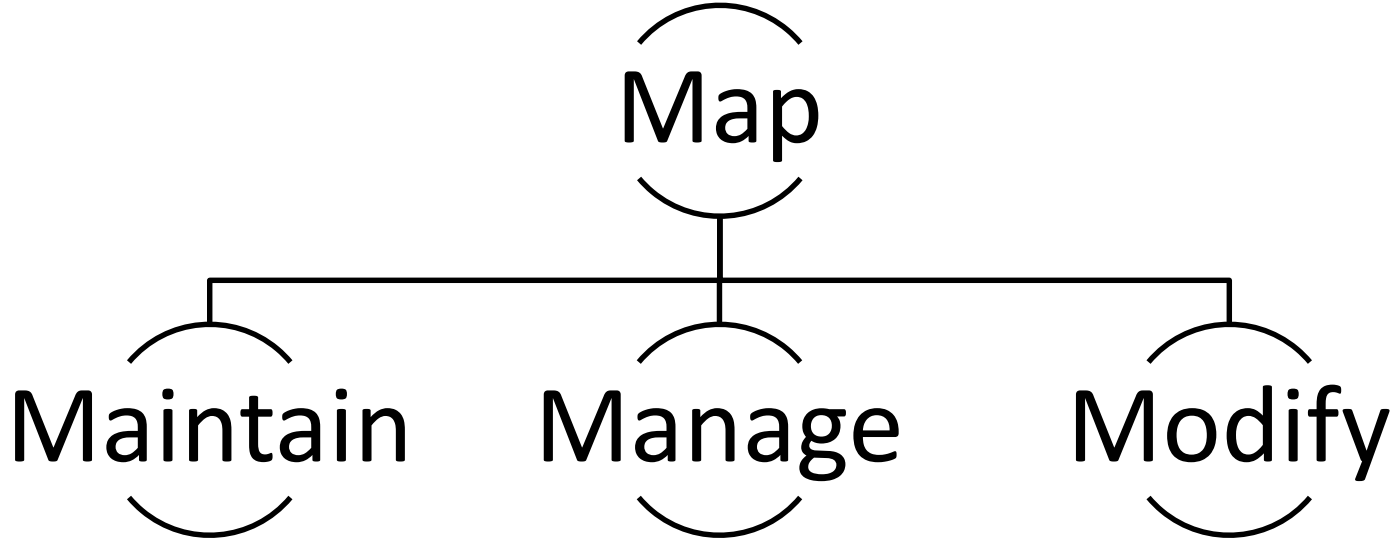
- $1.3 million
- 135 million gallons

All Recommendations (1342)

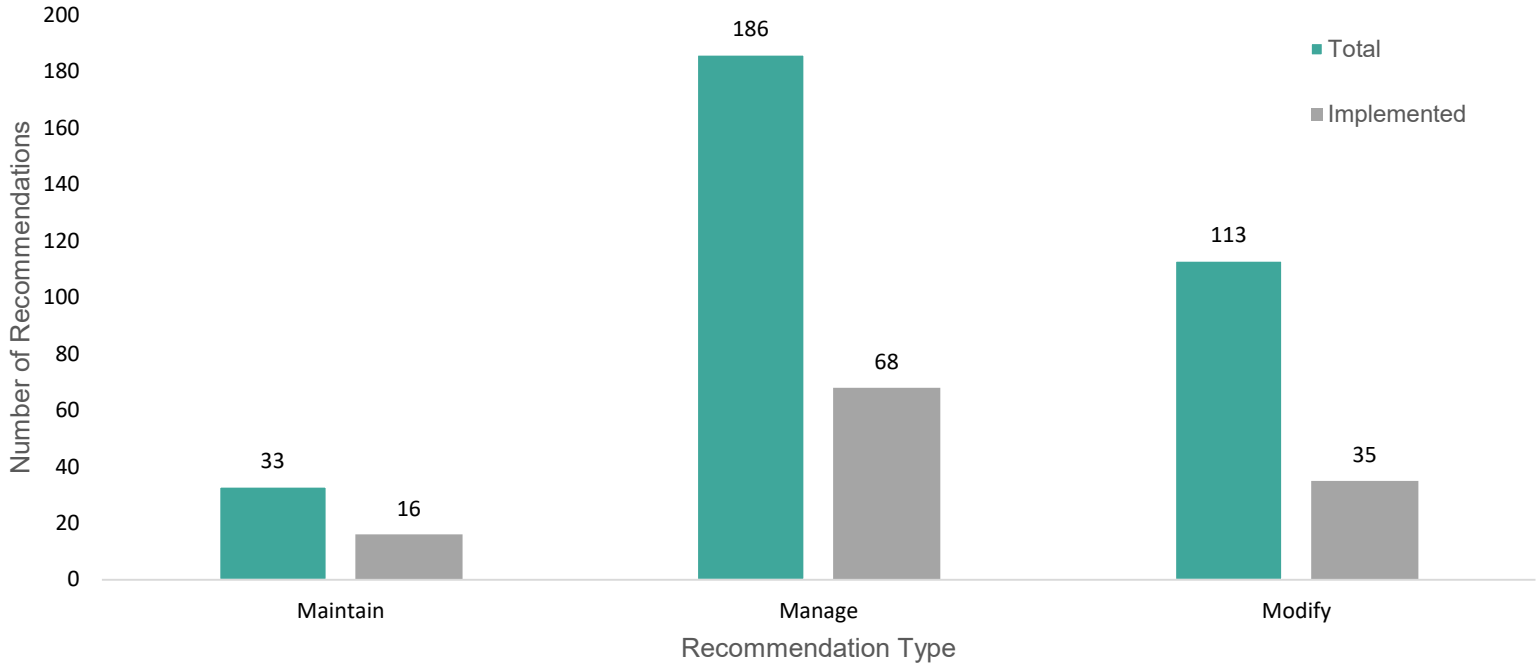
Water Conservation Recommendations (341)

Type of Recommendation, Water Use, Industry

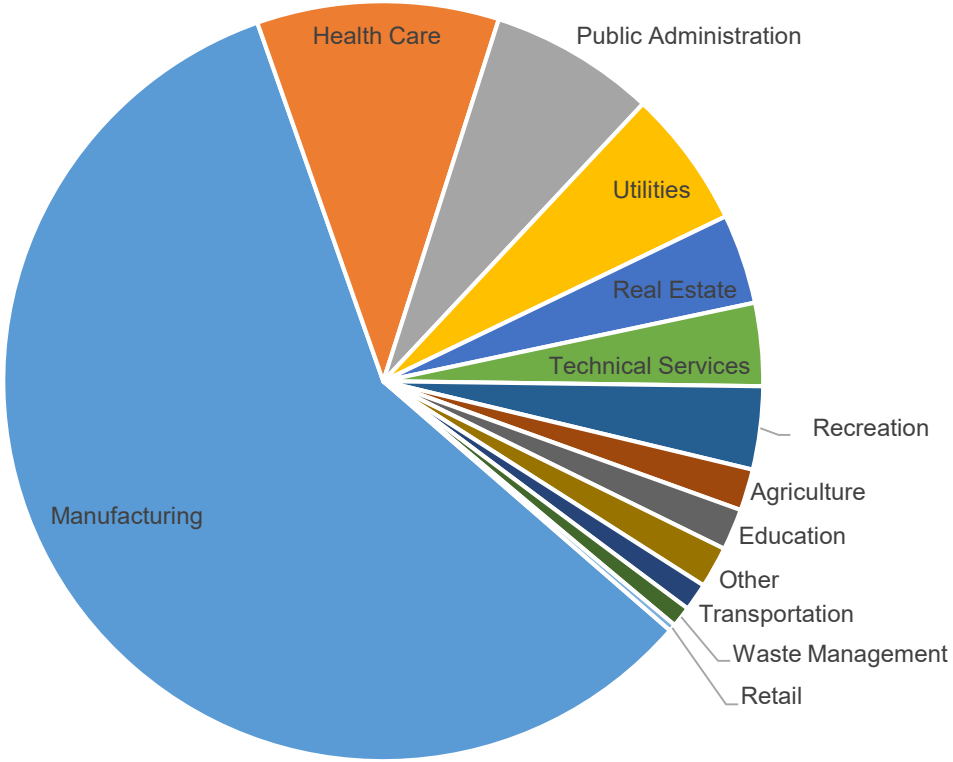
Type of Recommendation



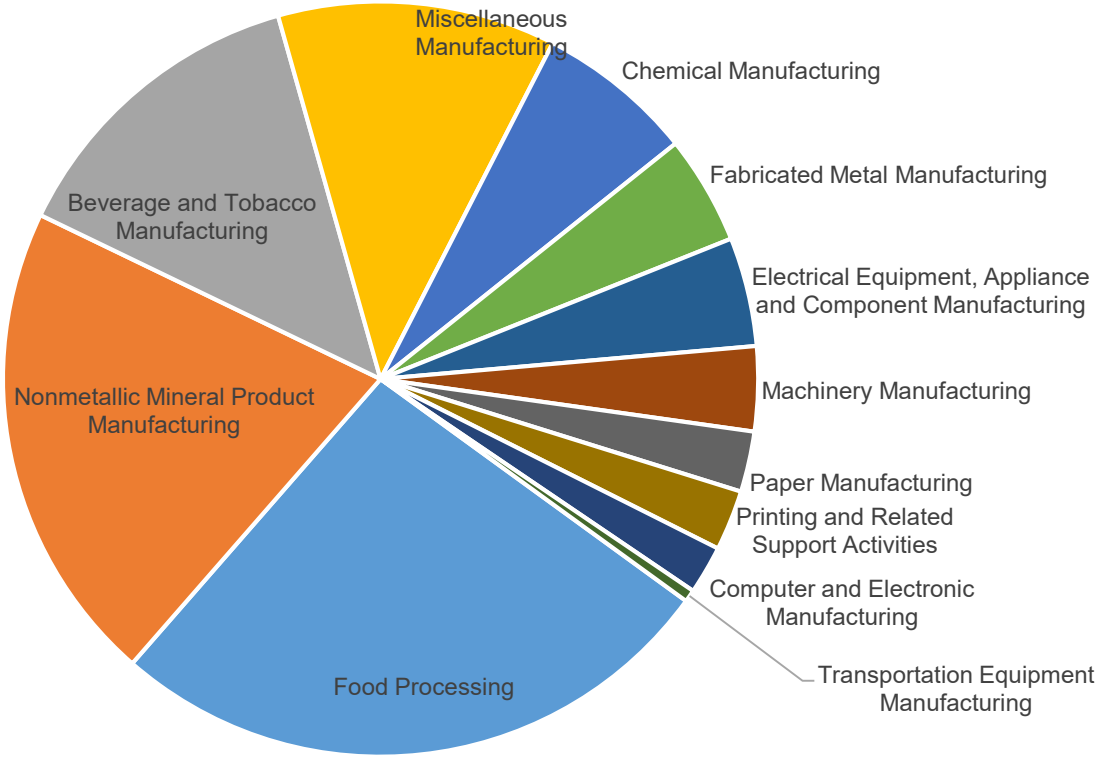
Classification: Type of Recommendation



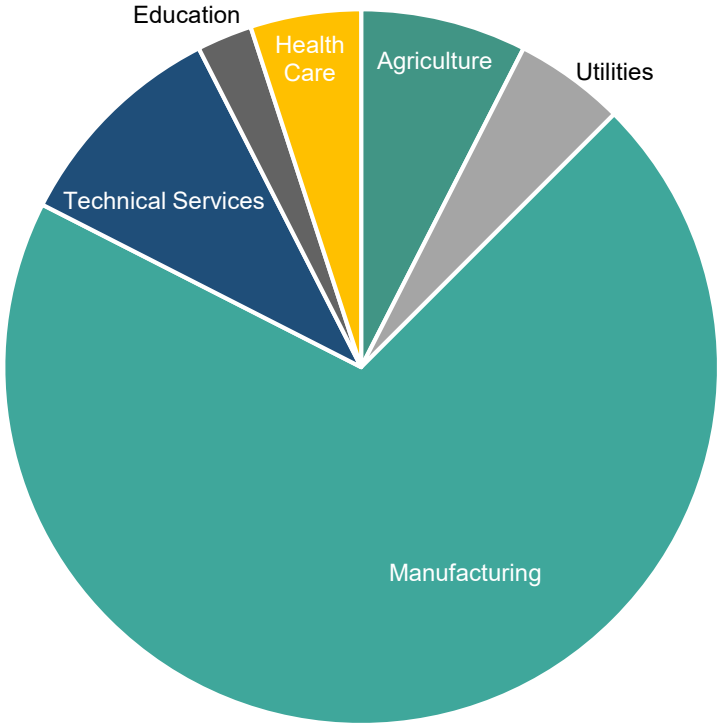
Classifications: Industries



Classifications: Industries

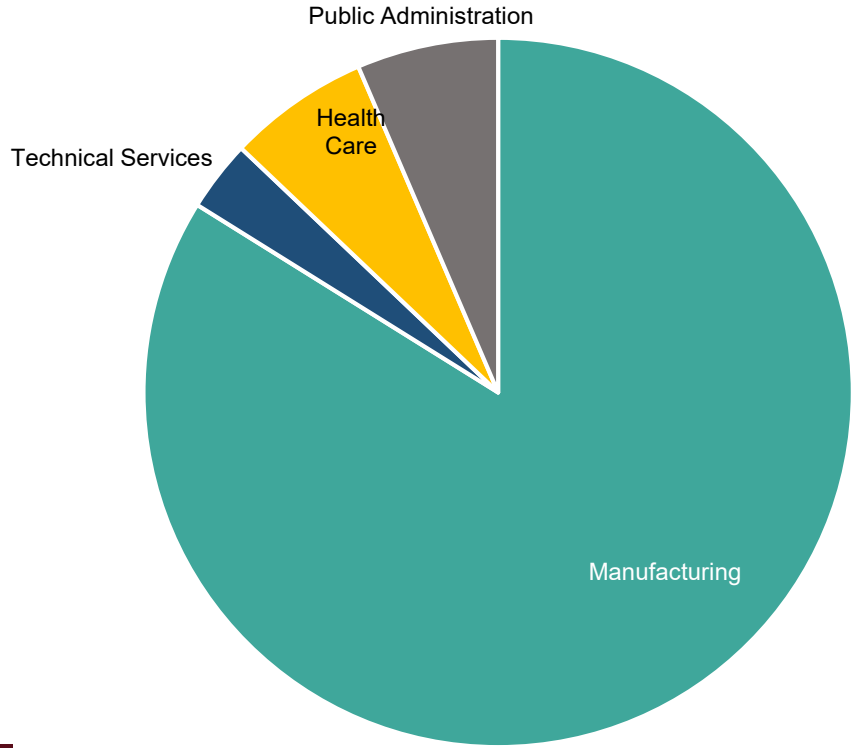


High-Value: Proposed Reduction



- 46 recommendations
- 2.5 – 200 million gallons
- 50% modifications
- 89 days to implement

High-Value: Economic Savings



- 31 recommendations
- $27,000 - $340,000
- 58% modifications
- 39% concurrent waste and/or energy savings

Conclusions

- **Modifications yield the highest-value recommendations**
  - 88% equipment
  - 12% procedure
- **Non-process water use should be considered**
- **Next Steps: Industrial water use**
  - Cleaning & sanitation have most recommendations
  - Cooling has highest value recommendations

Anecdote

- Breaking down a large project into smaller ones
- Being able to investigate interesting findings
- Fun Fact: lived 3 different places, 10 roommates/family members