

# Montana's TMDL Implementation Evaluation Process

National Training Workshop on Water Quality Data, Assessment, & Plans

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# What is a TIE?

- In watersheds with approved TMDLs, DEQ periodically reviews the progress of restoration efforts toward meeting TMDL goals & documents this in a TIE
- TMDL Implementation Evaluation (TIE)
  - DEQ-developed term
  - State law requirement (75-5-703(9), Montana Code Annotated)
- Evaluation of progress in restoring water quality since the TMDL was developed



## Kennedy Creek Watershed TMDL Implementation Evaluation



March 2023

Greg Gianforte, Governor  
Christopher Dorrington, Director DEQ



# Possible TIE Conclusions

1. Implementation of new best management practices is necessary,
2. All practices in place; more time is needed,
3. TMDL revisions are necessary to achieve applicable water quality standards

Waterbody	Pollutant	BMP Status	Data Summary	TIE Conclusion
LAKE HELENA AUID MT41I007_010	Nitrogen, Total	Some good BMPs implemented. Significant more BMPs are still needed.	Insufficient data for establishing water quality trends, estimating current conditions, or impairment reassessment.	More BMPs are needed given the likelihood of excess nutrient loading impacts to a relatively small lake.
	Phosphorus, Total	Some good BMPs implemented. Significant more BMPs are still needed.	Insufficient data for establishing water quality trends, estimating current conditions, or impairment reassessment.	More BMPs are needed given the likelihood of excess nutrient loading impacts to a relatively small lake.

# Audience of a TIE

- Conservation districts
- Federal and state organizations
  - Fish, Wildlife & Parks
  - USFS
  - BLM
- Local watershed groups
- Volunteer monitoring organizations



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# What goes into a TIE?

- Watershed description
- Impairments being addressed
- TMDL recommendations
- Indicators of progress
  - Planning
  - Implementation/restoration
  - Monitoring
- Data evaluation
- Conclusions & recommendations
  - Justifications

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# Goals of a TIE

- Constructive feedback for stakeholders,
- Suggest additional monitoring, if needed,
- Identify TMDL document updates, if applicable,
- Document conditions where an updated beneficial use assessment may be needed
- Evaluate whether sources have been addressed
- Note: TIEs  $\neq$  impairment assessment

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Pre-restoration



Post-restoration



# TIE Process

## Review TMDL Documents



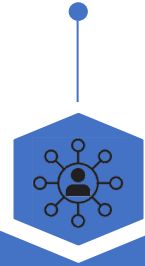
- TMDL watersheds
- Applicable pollutants

## Compile Data



- Internal databases
- 319 NPS Projects
- Stakeholders

## Stakeholder Outreach



- Restoration
- Monitoring
- Planning
- Pictures
- Reports
- GIS files
- Contacts

## Data Analysis



- Comparison
- TMDL targets
- Photos
- Trends

## Conclusions and Recommendations



- New practices necessary
- More time is needed
- TMDL revisions

## Review



- Internal
- Stakeholder
- Finalization

## Publish



- Montana DEQ TMDL webpage



# Pros to TIEs



Detect and measure improvements in water quality



Creates a plan and identifies subsequent actions



Targets monitoring resources more effectively



Assists in developing and implementing monitoring programs



Improves communication, coordination, and collaboration



Supports efforts to report on water quality improvements



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# Cons to TIEs



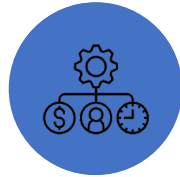
Difficulty getting stakeholders to participate



General lack of data after TMDL completion



Data comparability



Resource and time consuming



Not a one size fits all approach



Assessment methods may have changed



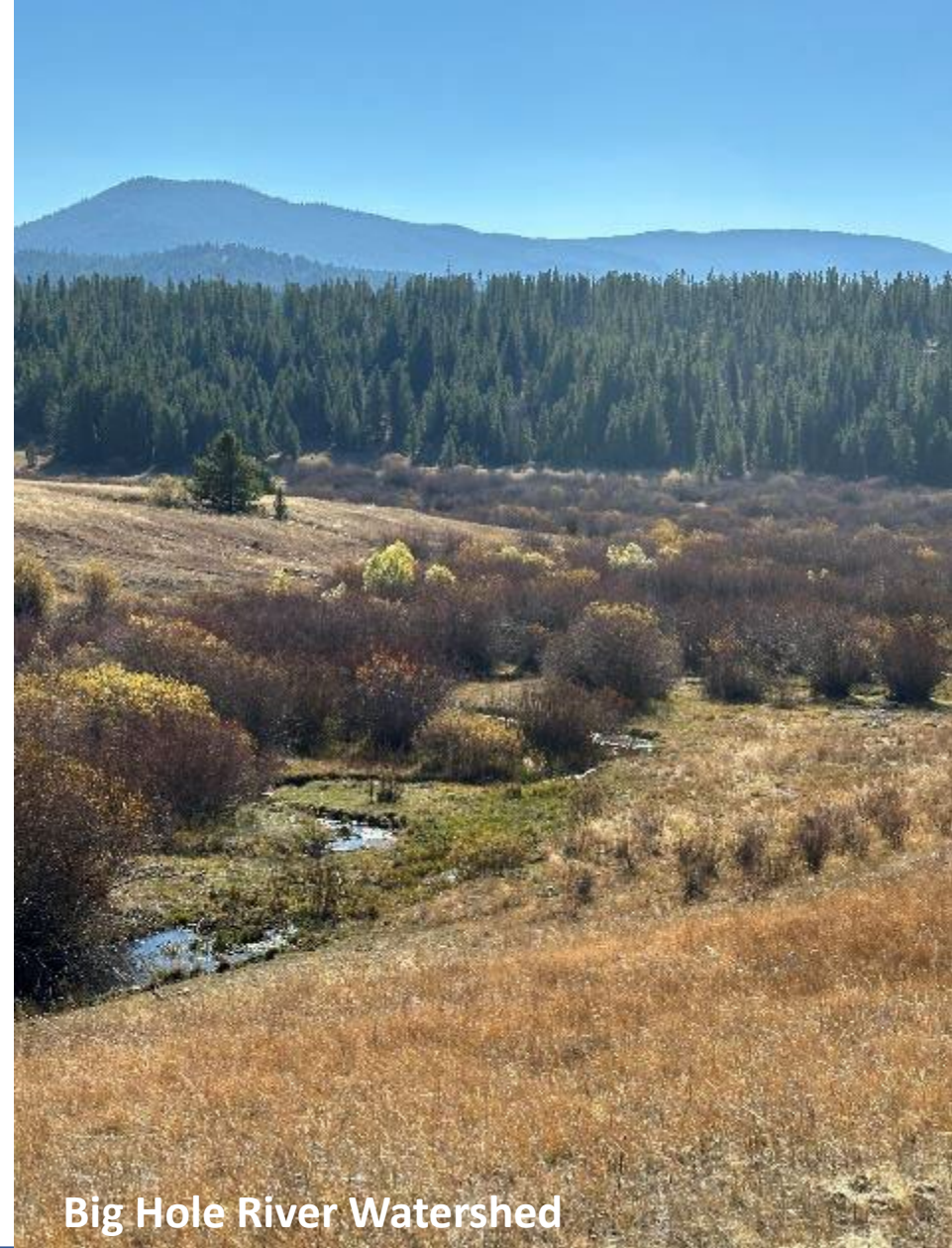
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# Conclusions

TIEs are...

- An evaluation of progress in attaining water quality standards since TMDL development
- Resource for organizations when conducting planning/restoration/monitoring
- Not a one size fits all approach

Let us know if you are interested in adopting this approach



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