



## 2019 Statewide Mercury TMDL Implementation Plan Oversight Committee Meeting

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# Introductions

- A quick round of introductions:
  - Your name
  - Your organization
  - Your area of interest/expertise
  - What brought you here today?

# Agenda

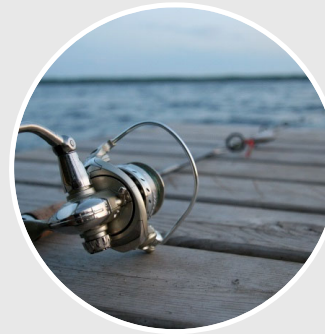
- Welcome and Introductions
- 2019 State of the Knowledge on Mercury
- Minnesota Department of Health Updates
- Taconite Industry Mercury Research, Testing, and Technology Evaluation
- Mercury and Wastewater Treatment
- Mercury TMDL Emissions Inventory Update
- Meeting Follow up & Open Discussion

# What is the problem we are trying to solve



## Mercury Impaired Waters

Mercury impairments in Minnesota are mainly based on fish tissue concentration



## Mercury Exposure

Mercury emissions eventually move into our ecosystem and bodies



## Fish Consumption Advisories

Minnesota Department of Health safe eating guidelines



## Mercury Reductions

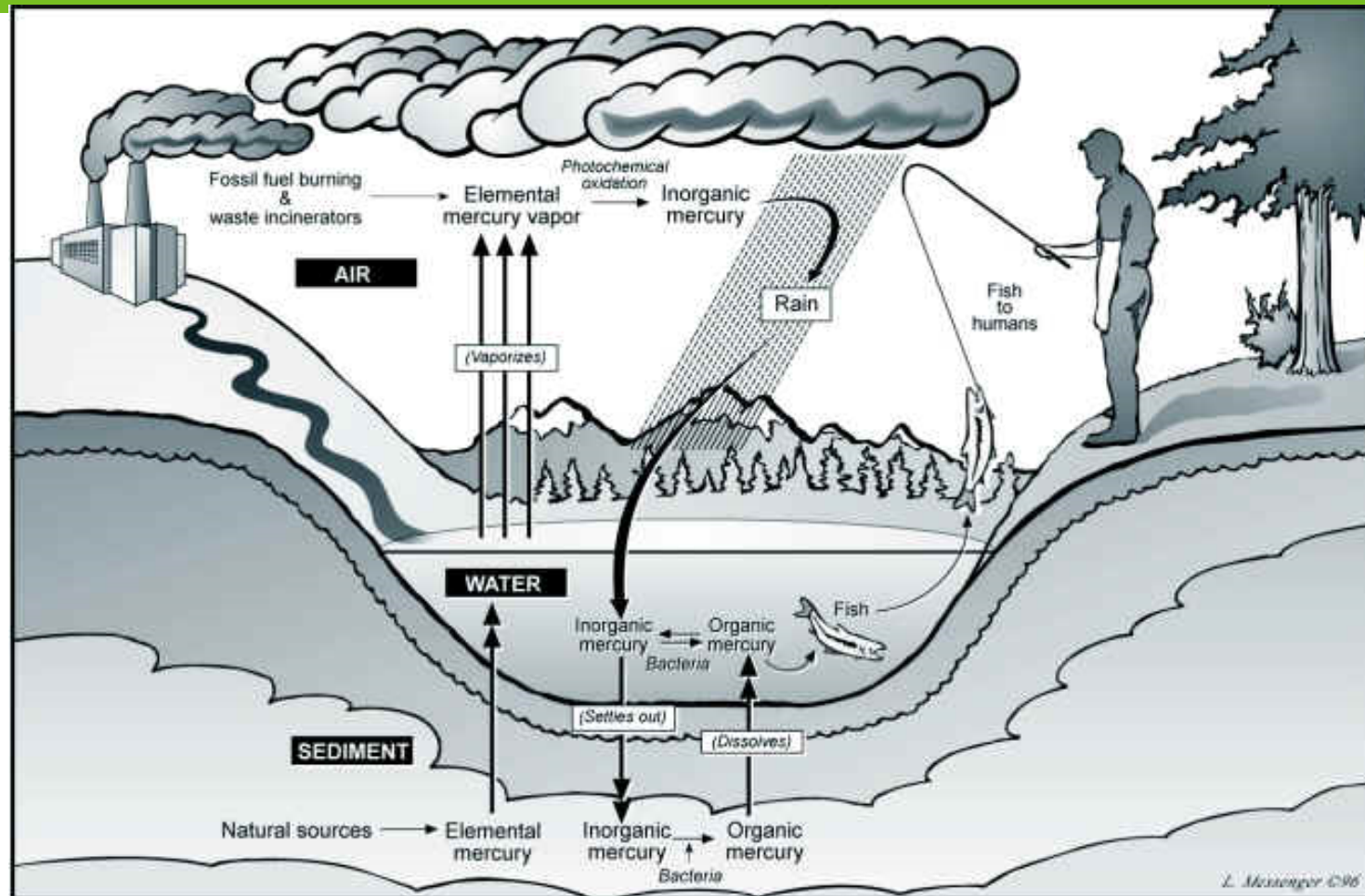
Minnesota's goals to reduce the amount of mercury that ends up in our waters

# Minnesota's 2018 Impaired Waters List

Minnesota has 1,654 water bodies that are impaired due to mercury in 2018. 38 new water bodies were added to this list in 2018.



# Mercury Exposure Pathway



10/01/2019

# Fish Consumption Advisories

- Children 15 and under: one walleye or Northern pike per month
- Minnesota Department of Health's Statewide Safe-Eating Guidelines

<https://www.health.state.mn.us/communities/environment/fish/eating/safeeating.html>

# Oversight Group Charge

- Meet during fall each year from 2009 - 2025
  - (at least once every 3 years after 2013)
- Review and evaluate progress toward achieving the Mercury TMDL goals
- Determine if additional measures are needed to meet these goals
- Provide advice to the MPCA on implementing the Mercury TMDL
- Review changes to the mercury emissions inventory
- Review other actions and scientific information that could affect implementation of the Mercury TMDL



# Mercury Reduction Rule Efforts

- Mercury reduction plans
  - Industrial, Commercial, Institutional Boilers
  - Iron and Steel Melters
  - Ferrous Mining and Processing
  - Other Sources
- Performance Standards
- Emissions Inventories for Mercury

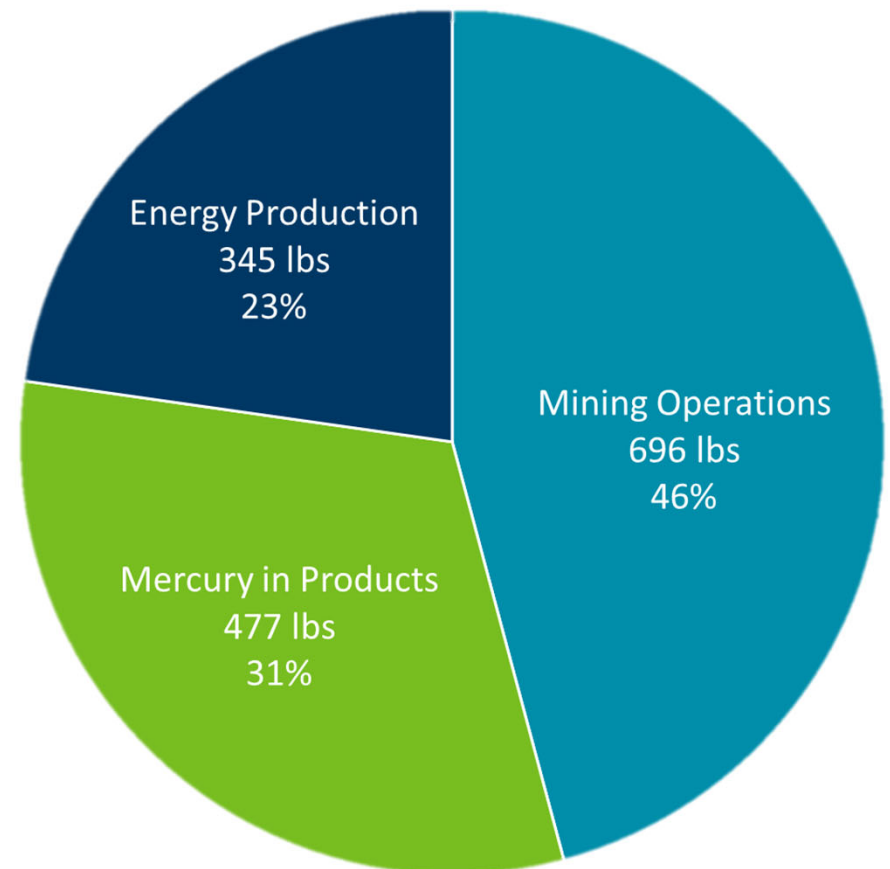
# Ferrous Mining/Processing Mercury Reduction Plan

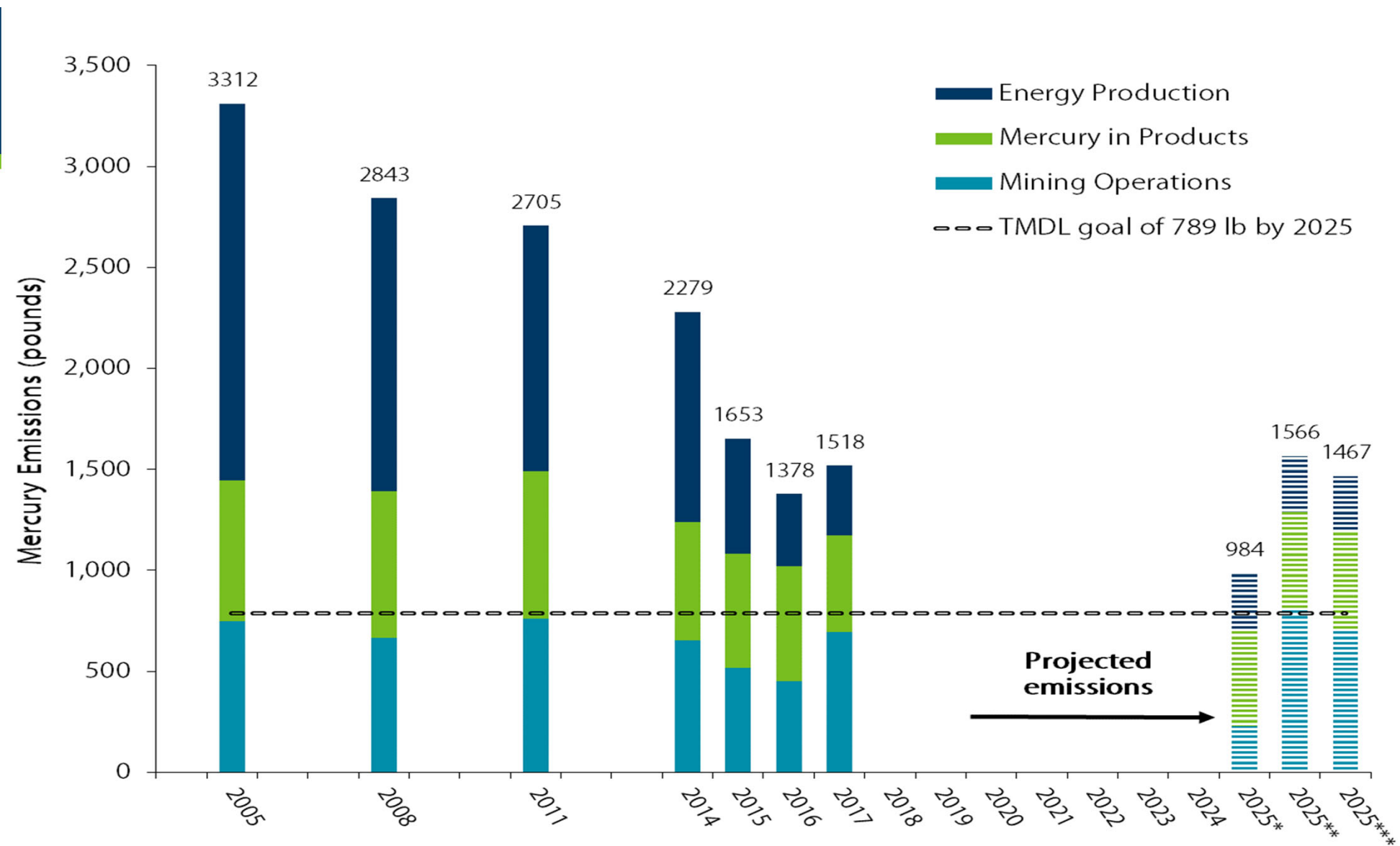
## MPCA Staff Review Update

- Each facility submitted a timely reduction plan and they are available online here:
  - <https://www.pca.state.mn.us/air/plan-reduce-mercury-releases-2025>
- Reduction Plan Overview:
  - Facilities included additional information regarding baseline emissions.
  - Two facilities proposed reductions meeting the 72% reduction specified in the rule.
  - Two facilities submitted alternatives plans with less than a 72% reduction.
  - Four facilities submitted alternative plans with no proposed reductions with further evaluation beginning in mid-2020.
- MPCA staff are currently reviewing each plan.

# Minnesota's 2017 Mercury Emissions

- The 2017 Hg Inventory includes:
  - 2017 point source emissions
  - 2014 non-point source emissions
- Notable takeaways:
  - Mercury from energy production continues to decline
  - Mercury in products saw a decrease based on new ash test data
  - Mercury from mining operations increased due to production increases





# Moving Forward

- Greater emissions reductions are needed to meet the goal of the statewide mercury TMDL.
- The MPCA continues to promote mercury emission reductions within the state as well as regionally, nationally and globally
- MPCA will be in communication with the ferrous mining and processing facilities regarding their reduction plans
- Following review completion, MPCA staff provide comments to facilities and request resubmittal of portions found deficient