

The Wisconsin Approach to Mercury Reduction

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Environmental Circumstances

- Fish consumption advisory
- USEPA adopts 1.3 ng/L limit for Great Lakes
- Wisconsin adopts 1.3 ng/L state-wide
- Water reclamation facility discharges likely to be greater than 1.3 ng/L

State Goals

- Work within existing regulatory framework of discharge permits
- Cooperate rather than command and control
- Decentralize expertise and action
- Iterate and improve incrementally

Permit Strategy

- Sampling starts before limit
- Ultimate limit in abeyance
- Pro-active source reduction
- Interim Limit
 - Site specific
 - Based upon sample results
 - Limit steps down each permit cycle
- Requirements implemented according to discharge magnitude and permit cycle

State Coordination

- Facilitates diverse state-wide municipal group
- Strategically exploits grant funding



Local Action

- Collection programs
- Medical
 - Hospital workshops
 - Thermometer exchanges
- Schools
 - Rewards
 - Curriculum
- Thermostats
- Dental offices



State Guidance

- *Wisconsin Mercury Sourcebook (1997)*
- *Mercury Pollutant Minimization Program Guidance Manual for Municipalities (2006)*
 - Based upon pilot work
 - Detailed instructions for each sector
 - Scoring system to evaluate progress

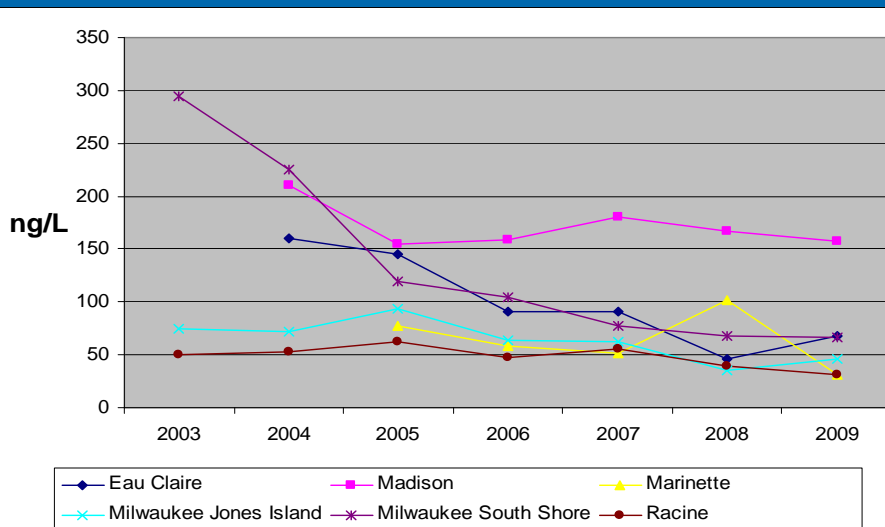
Program Expansion

- Contract with municipalities
- Municipalities get
 - Guidance
 - Positive recognition
 - Ultimate limit in abeyance
- State gets
 - Earlier reduction
 - Cooperation

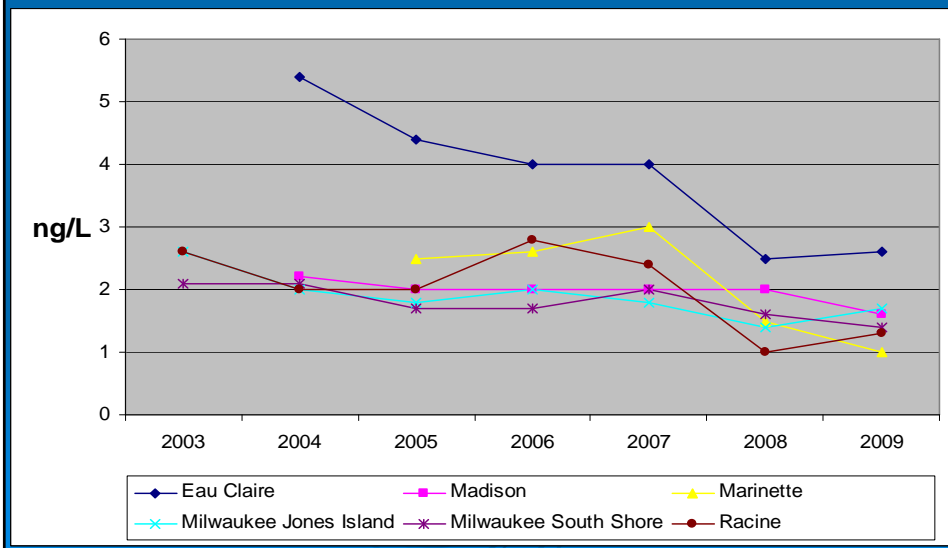
Other programs

- Emission limits for coal combustion
- Dairy manometer replacement
- Vehicle switch removal
 - Used storm water pollution prevention authority
 - Disposal
 - Initially supported with grant funding
 - Now supported by End-of-Life Vehicle Solutions

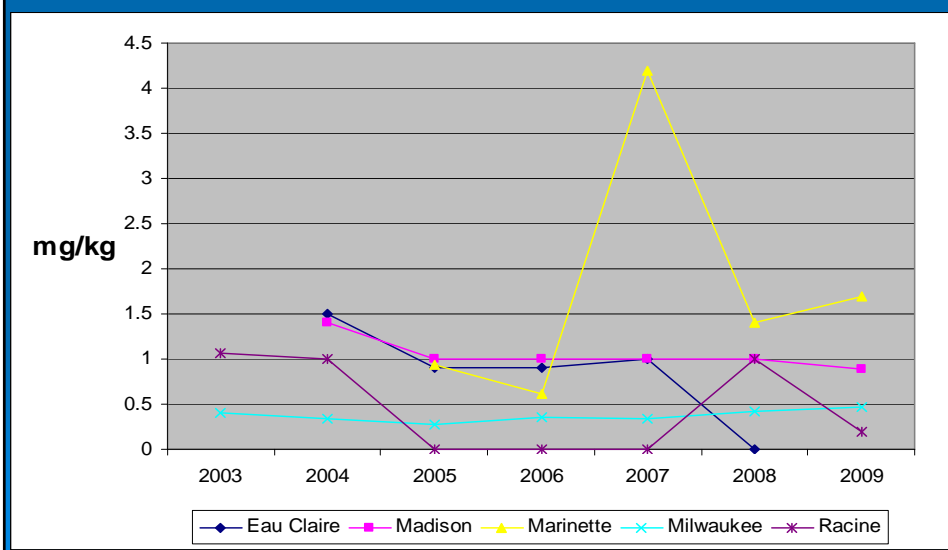
Annual Median Influent Concentrations



Annual Median Effluent Concentrations



Annual Median Biosolids Concentrations



Conclusions

- Source reduction can occur despite political inaction at the state level
- A little grant funding can produce big results
- An incremental cooperative approach directs energy into progress instead of conflict
- A collaborative decentralized approach produces an effective network of experts

Water Reclamation Facility Status

- Conditions are variable
- Influent and effluent are going down
- Whether 1.3 ng/L is achievable is still unknown

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