

# Department of Natural Resources

## Industrial Sand Mining

### Strategic Analysis

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05/12/2017

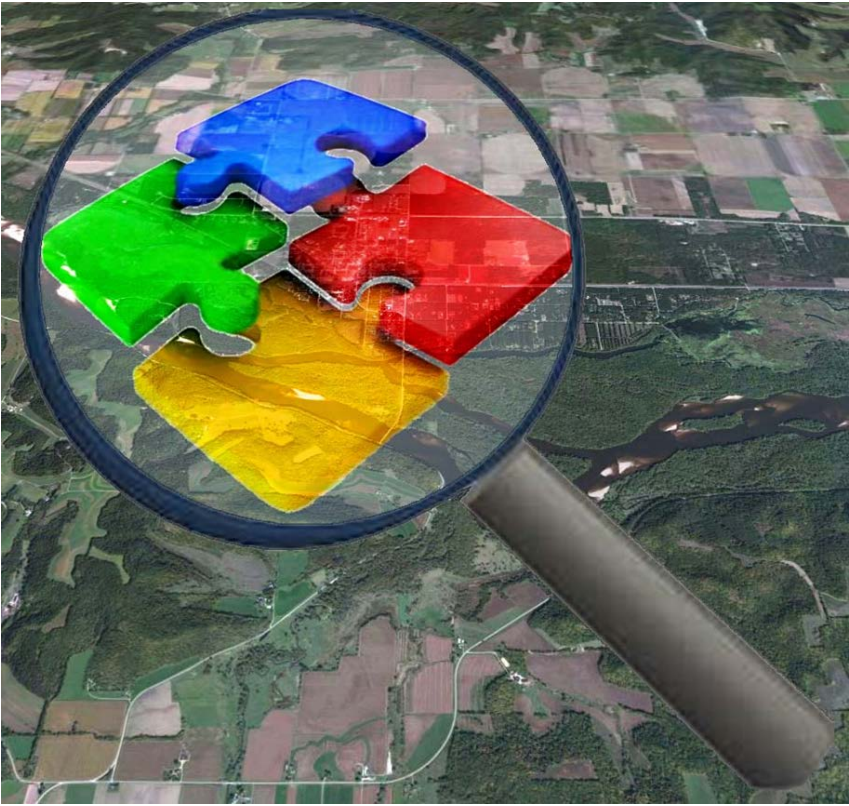




# DNR information on sand mining

- Web-page with map of facilities and data
- 2011 *Silica Study* for the NRB
- Since 2010, DNR has: attended numerous town hall style meetings; presented to State and National Realtors Association, Federation of Env. Technologists and the Wisconsin Bar Association; and co-hosted several day-long formal training sessions for industry and local gov't officials.
- 2012 *Silica Sand Mining in Wisconsin*
- 2016 *Industrial Sand Mining Strategic Analysis*

# NR 150 "Strategic Analysis"



- Analysis of an issue or policy versus the project level
- Facts for decision makers and public



# Steps for Strategic Analysis

1. Scoping - defining the topics and information sources to be considered and the analytical methods to be employed. This step includes public input.
2. Information gathering and analysis.
3. Document preparation.
4. Public review - at least 45 days will be allotted for public review of the analysis, and a hearing may be held
5. Comment response - the department will consider all comments received, and may revise the analysis if warranted. **<We are Here>**
6. The final version of the analysis document and all comments and supporting information will be made available to the public and press, universities, the governor and legislature, and state, local, federal and tribal agencies.



# Topics

- **Permits and Enforcement**
- **Air Quality**
- **Groundwater**
- **Surface Water**
- **Wetlands**
- **Wildlife and Endangered Resources**
- **Agriculture**
- **Local and State Economy**
- **Property Values**
- **Archaeological, Cultural, Tribal and Historic Resources**
- **Safety**
- **Visual and Auditory**



# General

- As of May 2016
  - 128 total sites
    - 92 Active
    - 32 Inactive
    - 4 Reclaimed
- Size
  - 25% less than 100 acres
  - 51% 100-499 acres
  - 15% 500-999 acres
  - 9% (6) 1000+ acres
- Top Counties
  - Barron County
    - 17 Facilities
  - Trempealeau County
    - 12 Facilities
  - Jackson County
    - 11 Facilities
  - Wood County
    - 9 Facilities
  - Chippewa County
    - 8 Facilities



# Permits and Enforcement

- Permits

- Local
  - Land Use
- County
  - Reclamation
  - Shoreland Zoning
- State
  - Construction
  - Operation
- Federal
  - Mine Safety
  - Army Corps

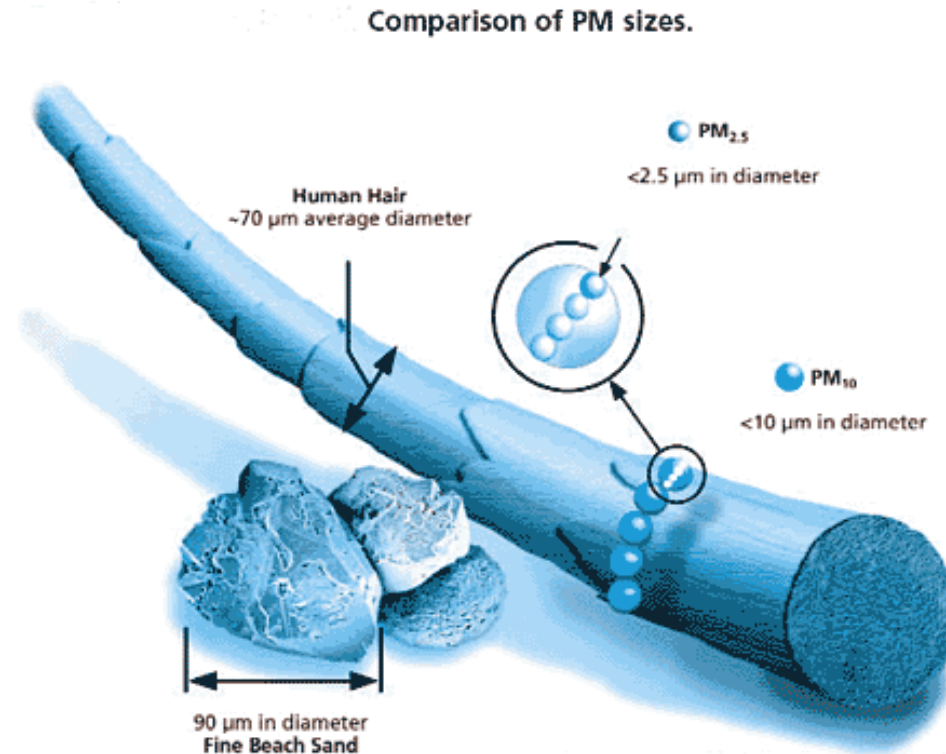
- Enforcement

- Stepped Enforcement
- Since 2012 29 Cases
  - 5 Air related
  - 23 Water related
  - 1 combined air and water
- Most common
  - Erosion Control
  - Obtaining Permits



# Air Quality

- Air Pollutants
  - Particulate Matter
    - PM10
  - Sources
    - Fugitive Emissions
      - Mining and Processing
    - Point Source Emissions
      - Stacks
    - Mobile Sources
      - Trucks and Trains
  - Regulation
    - Control of Particulates
    - Control of Fugitive Dust







# Groundwater

- Water Use
  - High Capacity Wells
    - 63 registered sites
  - Public Water Supply
- Discharges
  - Stormwater Ponds
  - Process Ponds
- Borehole Abandonment





# Surface water

- Discharges
  - Stormwater
  - Dewatering
  - Process water
- Construction
  - Crossings
  - Grading
- Proximity
  - No mining in water
  - Ponds nearby



# Wetlands



- Infrastructure
  - Facility and Rail
- Permits since 2008
  - 41 Individual
  - 18 General
  - 31 Companies
- Mitigation
  - 26 acres impacted
  - 18 Acres in Bank Credit or In-Lieu-Fee



# Endangered Resources

- Habitat
  - Loss
  - Change
- Upland
  - Stormwater triggers
- Wetland
  - Waterway and wetland permit triggers
- Incidental Take
  - Avoidance
    - Time of year restrictions
    - Exclusion methods
  - Minimization
    - Leaving habitat intact as much as possible
  - Mitigation
    - Restoring habitat





# Transportation

- Rail Lines
  - Upgrading
  - Trails to Rails?
- Truck Transport
  - Road Damages
  - Traffic Safety
    - WDOT
    - Local Authority





# Agriculture



- Comparison
  - USDA 2014
    - 14.5 M Acres in Ag
    - Top ISM Counties – 1.48M Acres
  - WDNR 2016
    - 34,000 Acres in ISM
    - Top ISM Counties – 19,825 Acres



# Socioeconomics

- Economy
  - Jobs
  - Taxes
  - Tourism
- Property Values
  - Facility assessments
  - Neighbors
- Quality of Life
  - Audio
  - Visual
- Population
  - Change in Top 5 Counties by 2014  
US Census Data
  - Rural vs Urban





# Cultural

- Archaeological
  - Wisconsin Historical Society
  - Protection by Avoidance
  - Protected Information
- Tribal
  - Ability to regulate
  - Off Tribal land, Government to Government consultation
- National Heritage
  - Threatened and Endangered Species
  - Protection by Avoidance and Mitigation
  - Protected Information





# Safety

- Mine Safety and Health Administration
  - Worker Safety at Mines
- Occupational Safety and Health Administration
  - Worker Safety at Processing sites
- Wisconsin Dept. of Professional Services





- The draft strategic analysis is available at:  
<http://dnr.wi.gov/topic/EIA/documents/ISMSA/ISMSA.pdf>
- Public comment period closed August 22, 2016
- Document being finalized