

Geologic Resources Management Division

Overview

Adam Wygant, Director





Geologic Resources Management Division

MISSION

To Foster The Best Use And
Understanding Of Michigan's
Geologic Resources For Their
Social And Economic Benefits
While Protecting Associated
Resource Values, Property Rights,
The Environment, And Public
Health And Safety

Geologic Resources Management Division

People (76 FTEs)

- 40 Lansing Staff (Shared Administration Section)
- 36 Field Staff Plus 2 Limited Term
- Geologists, Engineers, Scientists, Support Team

Training

- Hydrogen Sulfide
- TENORM
- HAZWOPR
- Wild Well Control
- TOPCORP
- Gas Storage
- FEMA Emergency Management



Regulatory Programs and Authorizations

Administered Regulatory Programs

Oil, Gas, and Class II Injection Wells (Part 615) Groundwater Data Management, Water Withdrawal (Part 327) Groundwater
Inventory and Water
Use Assessment
(Part 328)

Groundwater Dispute Resolution (Part 317)

Gas Storage Wells (Part 615) Orphan Well (Part 616) Unitization (Part 617)

Mineral Wells (Part 625)

Ferrous Mineral Mining (Part 631) Non-Ferrous Metallic Mining (Part 632) Small Native Copper Mines (Part 634)

Sand Dune Mining (Part 637)

Tax on Low Grade Iron Ore (Act 77 of 1951) Nonferrous Metallic Minerals Extraction Severance Tax Act (Act 410 of 2012)

State Geologist (Part 601) Surface and Underground Coal Mine Reclamation (Part 635)

Authorizations

Nearly 60 Different Authorizations Plus Other Miner Approvals

- Extractive Industry Permits
- Large Quantity Water Withdrawal Registrations
 And Permits
- Applications For Change Of Well Status
- Records Of Change Of Well Status
- Plugging Instructions
- Transfer Reviews



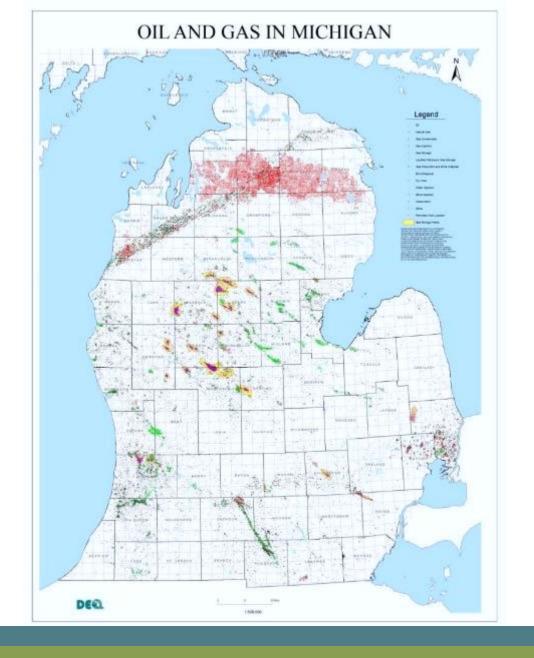
Part 615: Supervisor of Wells

Oil And Gas Regulatory Authority

- Well Location And Spacing
- Drilling And Construction
- Well Completion
- Production Operations And Records
- Plugging And Restoration

Active Wells

- 3,700+ Oil
- 9,100+ Gas
- 1,000+ Water Injection & Disposal
- 2,000+ Gas Storage





Orphan Well Response

Part 616 Orphan Well Program

- Division Staff Plug An Average Of 5 To 10 Wells Per Year
- Overall, Almost 400 Wells Have Been Plugged And Sites Restored Under This Program
- Funded Via Severance Tax On Produced Oil/Gas

IIJA Federal Orphan Well Plugging Program (2022 -2031)

- 2023 –2024 Approximately 250 Wells/Sites Addressed
- \$25M Initial Grant
- \$5.8M Formula Grant
- Performance Grant Matching Fund \$5M State \$5M Federal/Year (Award Expected Soon)
- Performance Grant Regulatory Improvement Grant (\$20-\$40M Grant Not Open Yet)





NEW - Groundwater And Geologic Services Section



Water Use Advisory Council (Part 328)

Water Use Assessment Unit

- Water Withdrawal Assessment Tool, Water Withdrawal Permit (Part 327)
- Water Use Reporting (International Charters)
- Groundwater Dispute Resolution (Part 317)

Groundwater Data Unit

- EGLE Groundwater Data Management System
- State And National Groundwater Monitoring Network



Water Withdrawal Assessment Process

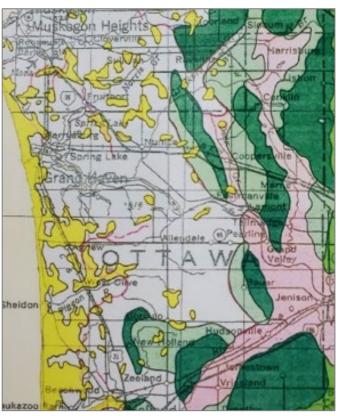
Assessment Process Tools/Steps

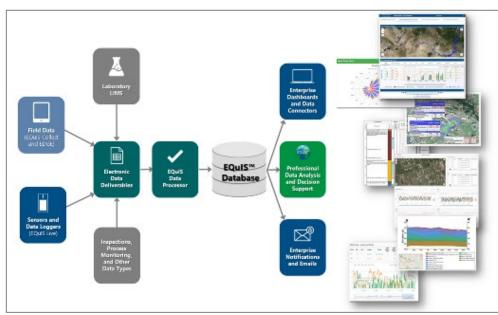
- Water Withdrawal Assessment Tool
- Site Specific Reviews
- Part 327 Permitting
- Issue Resolution

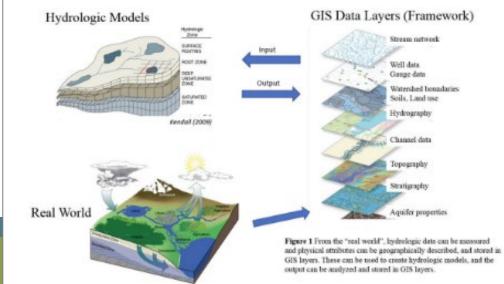


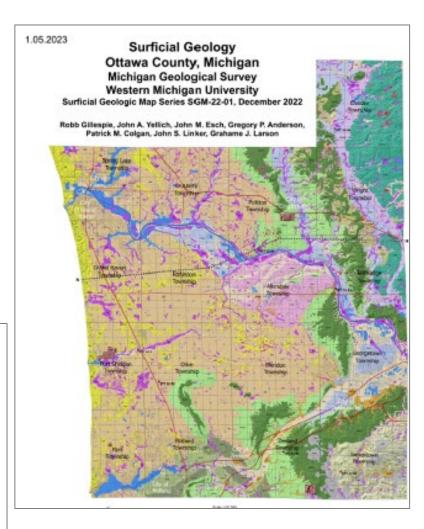


Groundwater Management

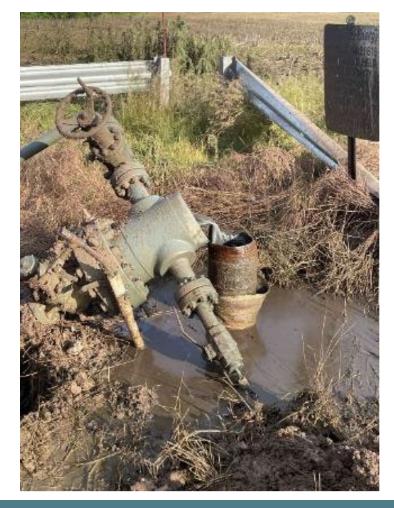








Underground Injection, Storage, And Carbon Management Section





Changing Workload –

CCUS, Hydrogen, Compressed Air Energy Storage, Pumped Underground Storage Hydropower, Geothermal



Carbon Storage

Methane Emission Reduction Program



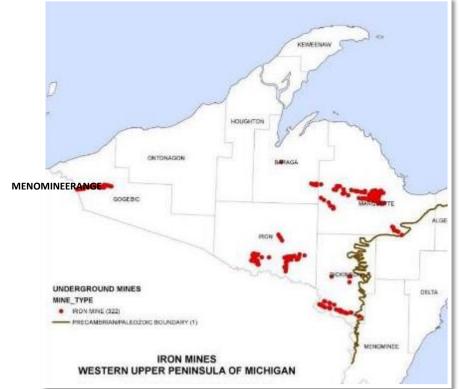
Base Workload -

Underground Injection Control, Mineral Wells, Underground Gas Storage, Hazardous And Nonhazardous Disposal Wells, Solution Mining, Test Holes



Part 631 Ferrous Mineral Mining

- Michigan's Iron Mining Began In The Marquette Range In 1845
- There Are Four Main Iron Ranges In Michigan
- Tax On Low Grade Iron Ore (Act 77 Of 1951)
- State Geologist Must Determine Tax Allocations For Assessment Districts





Part 632 Non-Ferrous Mining

- Industrial Copper Mining Began In The 1860s
- Michigan Produced Up To 90% Of The Nations Copper
- Recent Renewed Interest In Michigan's Nonferrous Metallic Minerals



Part 637: Sand Dune Mining

- 14 Designated Sand Dune Mining Areas
 - 6 Sites Are Active
 - 1 In Reclamation
 - 1 Site Going Through The Permit **Review Process**
 - Areas Are Designated In Rules
 - Includes Sand Dunes Areas That Are Up To 2 Miles Inland From Great **Lakes Shoreline**
 - Statute Establishes Requirements For Permitting, Reporting, And **Reclamation Of Sand Dune Mines**



CTIVE COASTAL SAND DUNE MINING SITI

Walter Bohn Property.

Naciona Pil

DOLERBOA.

OTTERA

ALLEGAN

VAN BUREN

MESCREIN

Upper Peninsula Geologic Repository (UPGR)

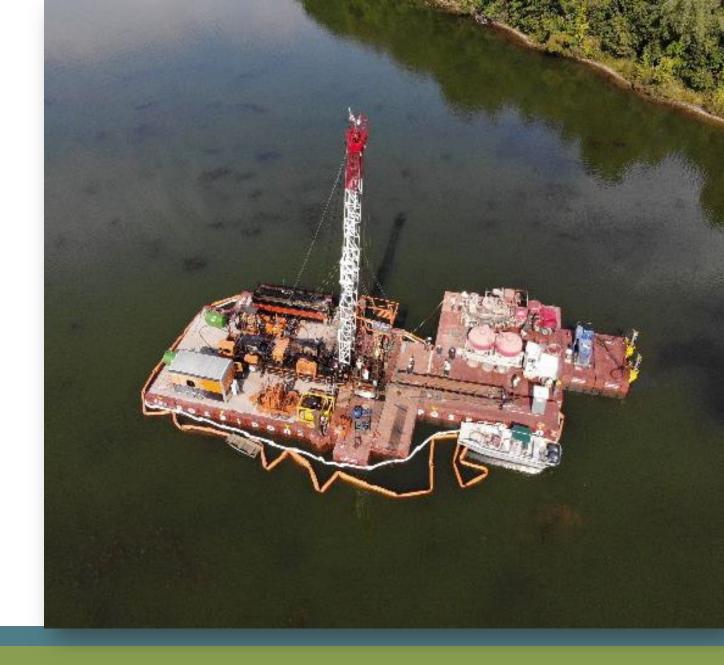
Critical Minerals, Exploration, And Groundwater Value Michigan Geological Survey Co-located Scientists At UPGR Facility Improvements





2024 Accomplishments

- Orphan Well Progress
- Water Use Assessment Improvements
- Active Well Management
- Over 24,000 Well Inspections
- Establishment Of Monitoring Well Network
- Integration Of Groundwater Data Management System And Water Use Assessment Program
- Methane Emission Reduction Program Grant



2025-2026 PRIORITIES

Maintain Current Regulatory Protections Class VI
Underground
Injection Control
Primacy

Water Withdrawal
Assessment Tool
And Program
Improvement

Orphan Well Program Groundwater Data
Management
System
Development

Emerging Needs





Michigan Department of

Environment, Great Lakes, and Energy

800-662-9278 Michigan.gov/EGLE



Thank you!

Michigan.gov/EGLEConnect

