

Deep Pit Quarries Near Homes and Schools are **SAFETY** Concerns

Example Limestone Quarry

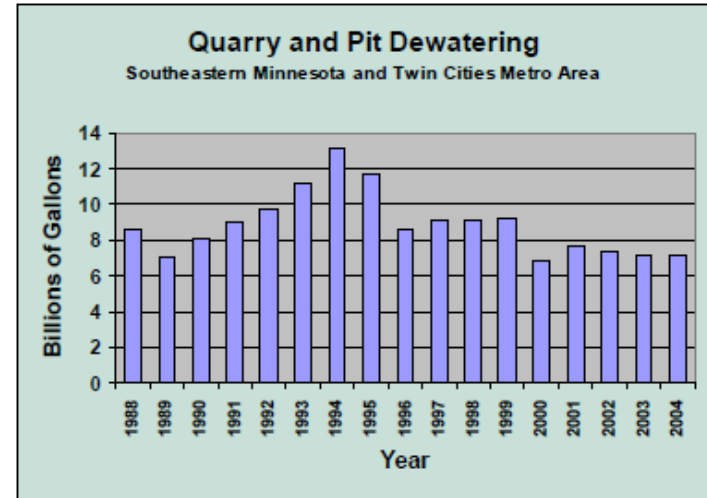


Fountain Quarry – Fillmore County, Minnesota

Source: Hydraulic Impacts of Quarries and Gravel Pits, Minnesota Dept of Natural Resources, Div of Waters, 2005; Study for the Legislative Commission on Minnesota Resources

Quarry and Pit Dewatering Impacts

- Industrial materials and aggregate mining is an extensive use of resources which alters landscape and hydrology
- Operation of quarries and pits has impacts on ground and surface water systems, these are hydrological impacts
- Quarries are often located in an aquifer with direct and unmitigated impacts on water quality
- Ground water levels surrounding quarries and pits are pumped down to allow dry quarry operations
- Pumping down of ground water converts billions of gallons of ground water into surface water annually
- Increased surface water contributes to flooding, waterway contamination and pollution
- Reduced tolerance due to drought on crops, livestock, wildlife, habitats, trees and plants



Source: Hydraulic Impacts of Quarries and Gravel Pits, Minnesota Dept of Natural Resources, Div of Waters, 2005; Study for the Legislative Commission on Minnesota Resources

IMPACT – Dewatering reduces ground water available for nearby wells, wetlands, springs, streams, and lakes

Enon Sand & Gravel Application for Industrial Materials Mining

Phase II Area – Located Between Hagan Rd, Rebert Pike, Fairfield Pike, S. Tecumseh Rd

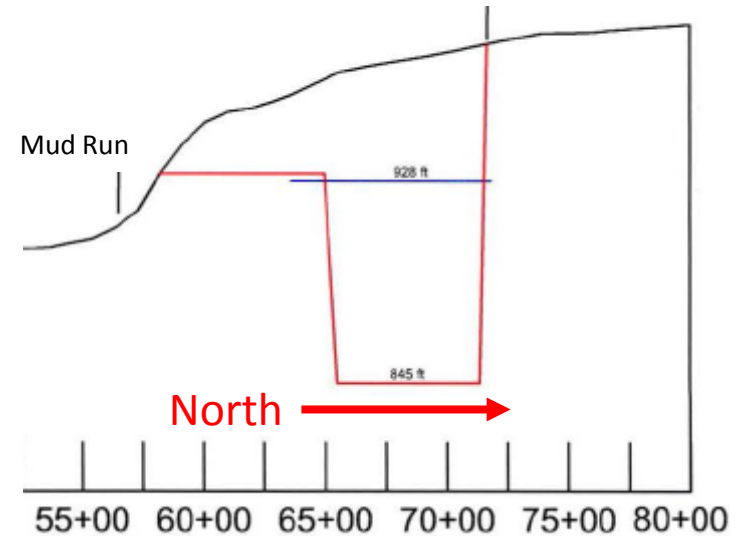
Dewatering Impacts:

- Buried Valley Aquifer, Mad River, Mud Run, Streams, Creeks, Springs, Foodplain, Wells
- Wildlife, Habitats, Recreation, Farming, Livestock, Businesses, Schools, Homes

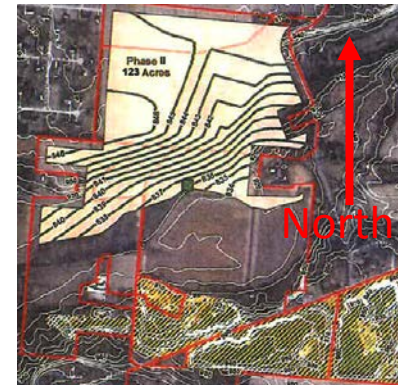
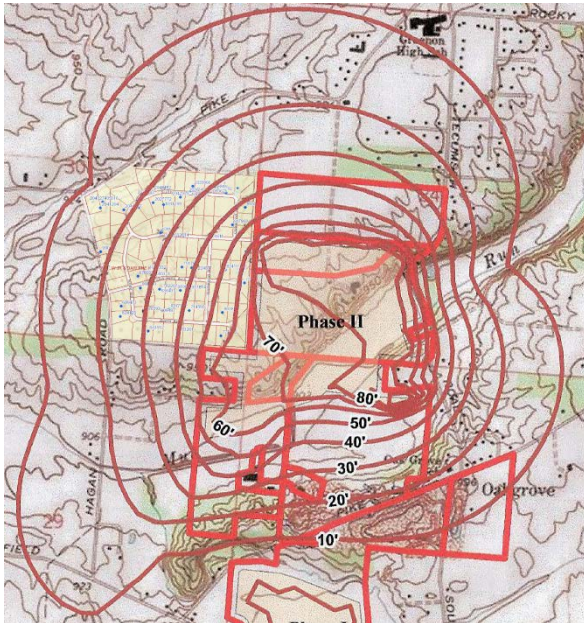
Source: IM-340 Permit - Phase II

Impoundment #2 Pit Cross Section

Average Depth ~ 133 ft below surface

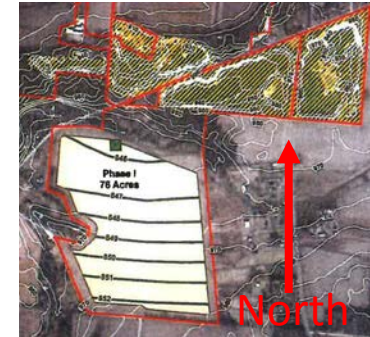
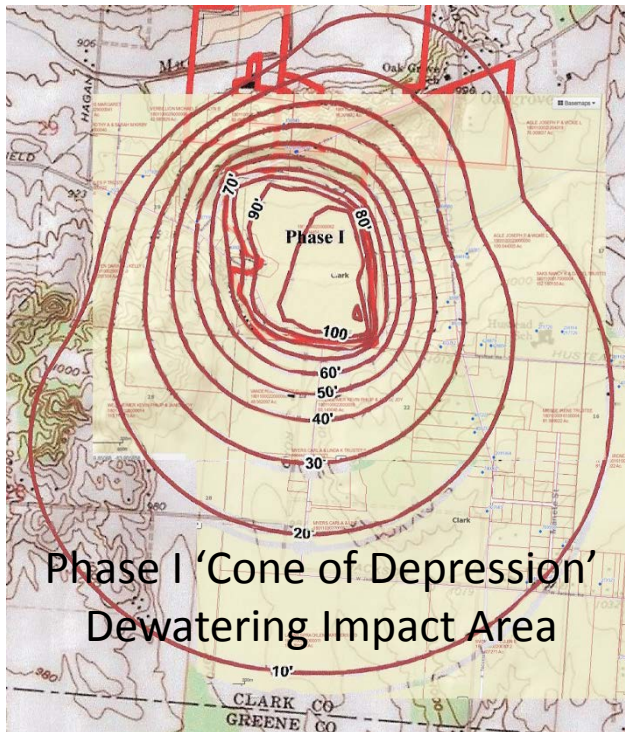


Phase II 'Cone of Depression' Dewatering Impact Area

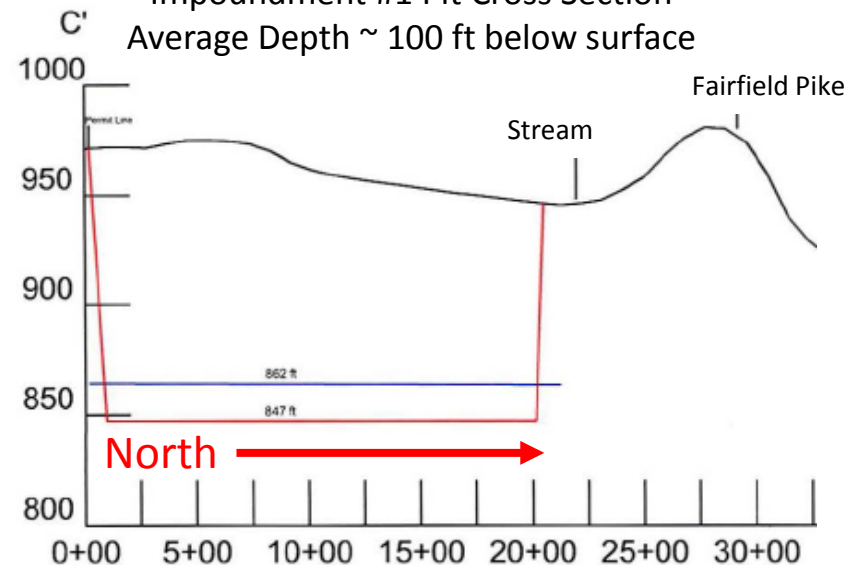


Enon Sand & Gravel Application for Industrial Materials Mining

Phase I Area – Located Between Garrison Rd, Fairfield Pike, S. Tecumseh Rd



Source: IM-340 Permit - Phase I
Impoundment #1 Pit Cross Section
Average Depth ~ 100 ft below surface



Dewatering Impacts:

- Buried Valley Aquifer, Mad River, Mud Run, Streams, Creeks, Springs, Foodplain, Wells
- Wildlife, Habitats, Recreation, Farming, Livestock, Businesses, Schools, Homes