

SAND STORIES

North 40 Resources, is a sand mine located in the Polk County region of Wisconsin, along the border between the Village of Osceola and the Township of Farmington. It is only a ten-minute drive from Franconia Sculpture Park.

To visit the site, drive south on St. Croix Trail N. Or if you're exiting the Sculpture Park, turn right.

Drive passed the blue barn, passed the maple syrup farm, passed the farm with the silo, barn, tractors and hay bales laid out front, and passed that sign that says "POTTERY" with an arrow pointing left.

Once you see a four-way intersection that crosses the St. Croix Trail N with Osceola Rd, turn left on Osceola Rd.

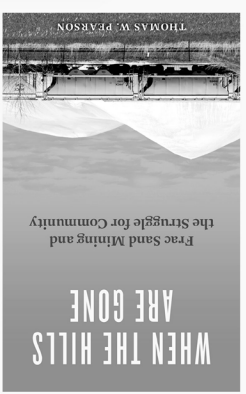
Follow this road with its twists and turns. Cross the bridge and look down to see the river. That is the St. Croix River, which flows all the way down to the Mississippi River.

At the bridge you will see a sign welcoming you into the state of Wisconsin, through Osceola.

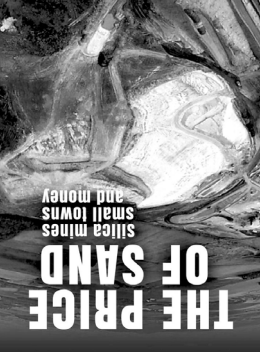
North 40 Resources Sand Mine

NOTABLE RESOURCES

BOOK
When the Hills Are Gone: Frac Sand Mining and the Struggle for Community
 Thomas W. Pearson
 University of Minnesota Press
 2017



FILM
The Price of Sand
 Jim Tittle
 Documentary
 57 minutes
 2013



Conclusion – Is there frac sand in Franconia Sculpture Park?...

After several email exchanges, DM's, phone calls and in-person conversations with Osceola activists, ceramicists, clay foragers, and geologists from the University of Minnesota, my investigation on frac sand in Franconia eventually came to a close. It was confirmed through these series of ongoing conversations and their expertise on geologic formations that the sand at Franconia is actually *till*.

A very common form of dirt, till is a mixture of sand, silt, clay, and pebbles. It's often used in soil for gardening plants. Till is also the left-over sediments that were formed from glaciers that melted from the end of the Ice Age. Although, it is possible to say that there are bits of frac sand in till since the sand in it, like all sand, contain small amounts of rounded grains of pure quartz. However, this is not enough for mining and therefore would not be regarded as true frac quality sand.

FRAC SAND – Frac sand is the sand used in the hydraulic fracturing process. Also known as “fracking,” hydraulic fracturing is when a mixture of water, chemicals and sand, is pumped into a well several thousand feet into the ground that then releases natural gases that has been buried there for millions of years. The sand used in this water and chemical mixture is frac sand. When it's pumped into the ground, it creates cracks and fractures at the very end of the well. It's from these cracks and fractures that the gases are released, extracted, and used for energy.

Frac sand is essentially, rounded grains of pure quartz, that are extremely durable and resistant to high pressure. These are the kinds of characteristics and qualities that make it ideal for fracking. Once the fractures are made from pumping the water-chemical mixture into the ground, the sand grains push into them to keep them open and allows the gases to release through the fractures. Frac sand are also called, proppants, because they “prop” the fractures open.

Minnesota and Wisconsin are known to have many sand mines that mine for frac sand because of the unique geological formations that exist in this part of the world. Layers of bedrock contain abundant amounts of the coveted pure quartz sand grains within them.

Sometime around the first week of my Emerging Artist Residency there was an event happening in the Commons. It was the Annual General Meeting for 2021 and everyone who was anyone was invited to attend. This was the first time I got to meet Franconia's local community from the area, including its supporters and patrons. One of them was the founder of the park and I got to talk to him about Franconia and the wild clay. I asked him what knew about the wild clay in the park's grounds. Although our conversation was brief, the part of it that interested me the most was that there were also a lot of sand deposits in the Park's grounds. This explained the large amounts of sand I found in the wild clay I was foraging. I also learned the sand deposits in the Minnesota and Wisconsin area had certain qualities that made them ideal for hydraulic fracturing. Evidence of this can be seen in the nearby sand-mining site in Osceola, Wisconsin. This eventually prompted the beginnings of a theory that the land Franconia Sculpture Park sits on contains frac sand.

BIBLIOGRAPHY

Websites

The St. Croix River Communities Against Expanded Mining. Founded May 2019. <https://www.facebook.com/stcroixrivercommunitiesagainstepandedmining>.

Online Articles

Growing gravel and frac sand mine near river alarms Osceola neighbours. St. Croix 360. June 11, 2019. <https://www.stcroix360.com/2019/06/growing-gravel-and-frac-sand-mine-near-river-alarms-osceola-neighbors/>.

Is the mine the bed we've made for ourselves?. Dave Anderson. Letters to the Editors. The Osceola Sun. August 12, 2019. https://www.osceolasun.com/opinion/letters_to_the_editor/is-the-mine-the-bed-we-ve-made-for-ourselves/article_a47778fe-b869-11e9-a3c1-b7016f196655.html.

St. Croix Valley citizens fight for quiet and clean water as mine expands. Greg Seitz. St. Croix 360. May 22, 2020. <https://www.stcroix360.com/2020/05/st-croix-valley-citizens-fight-for-quiet-and-clean-water-as-mine-expands/>.

Line in the sand: Hearing offers opposition to quarry on river bluff. Greg Seitz. St. Croix 360. August 7, 2020. <https://www.stcroix360.com/2020/08/line-in-the-sand-hearing-offers-opposition-to-quarry-on-river-bluff/>.

Residents get a chance to speak their mind about the mine expansion. Jason Schulte. The Osceola Sun. August 12, 2020. https://www.osceolasun.com/news/residents-get-a-chance-to-speak-their-mind-about-the-mine-expansion/article_52cda4e2-dbe5-11ea-b557-17393c093620.html.

Continue to drive further down until you hit the end of the road and facing a Dairy Queen. When the light is green, turn left and continue to drive along S Cascade St.

Do not be tempted to make a sudden right and go to the Dairy Queen. But if you do, order a blizzard cake and ask to have something written on it. They will write it with exclamation points at both ends of the phrase, off-center, and at an angle. This happened to me once, and I loved it!

As you drive along S Cascade St. it may start feeling like you've entered a long road of rural Wisconsin abyss, but then you will see a sign for canoe and kayak rentals and then a Kwik Trip stop. Continue to drive pass those.

You are almost at the North 40 sand mine site. Suddenly, you will see more signs of life like an autobody and florist shop. Drive pass those, as well.

Once you've reached a four-way intersection for 68th Ave and see a sign that says "Federated Co-Ops Country Store," turn right.

From this point, you can already see the pointed mounds of gravel and sand in the distance. At the end of this road is the entrance to the North 40 Resources sand mine.

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In January 2019, a new permit was made which allowed the sand mine to drill eight feet below the surface and operate for extended hours throughout the week. This permit was issued without community consent and had no expiration.

In June 2019, the first meeting to discuss the mine took place at the Discovery Center in Osceola with majority of the people in attendance opposed to the mine. Owners of the North 40 Resources mine were also in attendance and had mentioned purchasing two-hundred more acres of land south of the quarry, raising even more concerns about the future of the mine.

In September 2019, Farmington's board of supervisors enacted a six-month moratorium to temporarily prohibit the mine's activities from expanding south of its location. The purpose of the moratorium would allow the community to create a new ordinance that would regulate the mine's activities.

In May 2020, the supervisors met with their attorney to discuss the draft of a new ordinance with provisions that included reduced operating hours and monitoring the water wells to detect contamination. Since the mine

The mine's hours of operations would begin at 6:00am and end at 9:00pm every weekday. It then continued into the weekend on Saturdays from 6:00am to 3:00pm. The residents of Osceola that were most affected by the sounds of drilling and blasting live on Ridge Road, which is located between the sand mine and the St. Croix River. However, due to the open air and heavy winds in the area, the noise would amplify out to wider radius and even travel down the St. Croix River. The North 40 Resources mine also sits a quarter mile from a major area of community activities. These include the Eagle Ridge Memory Care Center, a home for the elderly, and the Osceola Medical Center. Due to the noise and especially the vibrations from the blasts, both centers would be restricted from performing certain medical procedures and working in their own facilities.

Protesting...

NOISE

is technically in Farmington and had greater say, residents of Osceola were considering extraterritorial zoning, which would allow them to halt development for up to two years. With extraterritorial zoning, Osceola residents could also use the two years to develop zoning recommendations for the area. Unfortunately, they were not able to find enough support to even be able to pursue the process.

In August 2020, an outdoor meeting was held in Farmington with the town's board of supervisors to discuss the new ordinance. At least one hundred people were in attendance, which again included the mine owners. The meeting became an open forum for residents to share personal experiences on the noise affecting their daily lives. They also expressed the environmental dangers of the mine's operations if they pursue an expansion. Residents demanded for stricter regulations on the mine since the latest ordinance was "too weak" and had been "watered down," and made little difference to the noise and environmental pollution they were regularly dealing with. It also gave the board the ability to waive the standards and even withdraw from the ordinance if they wanted to. The owners of the North 40 Resources mine had a chance to speak at the meeting and tried to explain that they wouldn't be using

Environmental Issues...

WATER CONTAMINATION

Many of the nearby homes in both Osceola and Farmington get their clean drinking water through private wells. These wells are connected to the aquifer, which is like an invisible riverway that's also connected to the St. Croix River. The aquifer flows throughout the land surrounding the river. Since the sand mine is located less than half a mile from the St. Croix River, there is a possibility that the sand mine drilling could break into the aquifer and affect the drinking water. Additionally, with the chemicals used in the sand cleaning process, which happens on site, and the combination of drilling into the ground, chances of severe water contamination were even higher. There was also concerns that drilling can disrupt the natural filtering of ground-water and even cause the minerals in the rock formations to dissolve and leave concentrations of metals such as aluminum, lead and manganese in the water.

the sand mine for frac sand for at least two years. This was due to the COVID pandemic reducing the demand for gas and oil. Since the events of 2020, residents of Osceola and Farmington have continued to petition against the mine's operations from noise and water contamination. The biggest threat to the community is still the two-hundred-acre expansion of the mine, which they have also continued to campaign against. In a Facebook group called, The St. Croix River Communities Against Expanded Mining, the public can find the latest stories on the sand mining situation and related governmental activities in Osceola and Farmington. As an environmental conservation organization page, members of the group have posted educational articles on fracking, upcoming events, and other articles related to land conservation and protection.

What Does It Mine?
The North 40 Resources sand mine was more commonly known as the Rybak quarry. It has existed for over a decade and was used for mining gravel and limestone. In 2019, Rybak was acquired by new owners and was mining for frac sand. Residents from Osceola and Farmington, where the sand mine was located, raised concerns about the damages and harm that the mine's new frac sand mining activities may cause to their community. These concerns centered primarily on the environmental pollution affecting the natural landscape and quality of life in the area.