

PHOSPHATE MINING – LAND RECLAMATION

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The mining process is done once we [? shift ?] the fertilizer out. But we're not finished because we actually have to put the land back acre for acre and type for type. So if we mine up 10 acres of wetlands, we have to put back 10 acres of wetlands. And it's all based on the connectivity and how it functions as a system.

So in several areas, you can see the integrated habitat network-- how we've planned our reclamation to correspond with that-- with what the state has. And there's a lot of different considerations when it comes our reclamation. So the intent studies done before the mining process are important to the reclamation process after mining.

Sand is one of the byproducts. So we return that to the [? minecuts. ?] That overburden-- we actually build dam walls sometimes with it and sometimes we just contour back to fill in the cuts. And then the clay, we'll actually dispose of in clay settling areas.

And those clay settling areas will be able to be reclaimed in several years, but the clay has to consolidate first. So you'll drain out the water and let the clay consolidate and it can be used for farming. But if you were to build a house on it, it wouldn't be as stable. So you would want to build a house on the overburden or sand areas after.

You can use reclaimed land for many things. Land and lakes-- different types of habitats. Because a lot of our stuff, after we mine it, is put into conservation easements. So it all depends on what our arrangement is for the permitting process and how we have to put it back.

Wetlands-- which is one of the most challenging things to reclaim because stream channels, especially, are very dynamic. So we have ways that the technology's improved exponentially over the last 10 and 15 years, even, to get the streams back to what they were before. At this site, we actually had a project where in six months, we had a valley, we call it. And we introduced woody debris-- it was one of the projects by Dr. John [? Keefer-- ?] and he introduced high flow water to simulate hurricane type situations that carve those systems. And we just pumped water through there for several months and it made the sinuosity of the stream that you really need.

And then in another case, he did another project where we took the oldest aerials we could find and mapped out the exact curves and the topography. And so you actually mechanically carved it and stabilized the base with coconut fibers and planted the different vegetation and watered that system. So that was a new way that came back, also. So every foot of stream that we disturb, we have to put back. And so that's really important.

OK. I've been talking about permitting this entire time because it's very important our process because you can't move forward without permitting. And there are so many agencies they have their hand in the permitting process.

We have federal agencies, Florida agencies, regional authorities that consider our mining permits, and then county approvals-- local county. Up to five commissioners or seven commissioners can stop the mining process completely if they want to. So it's very important to make sure that all parties are on the same page with the future of the mining process.

But it's a major asset to this area because in Hardy County, there's agriculture. There's cattle and farming operations. And really, the mines provide a big economic base for this area-- they provide jobs.

[MUSIC PLAYING]