

June 4, 2018

Sierra Club Florida Phosphate Committee c/o Bev Griffiths 1109 Royal Troon Court Tarpon Springs, FL 34688 bevgriffiths@verizon.net

DeSoto County Planning Commission 201 E. Oak Street Arcadia, FL 34266

RE: Rezoning of 14,053.40+ of land from Agriculture 10 (A10) to Phosphate Mining-Industrial (PM-I)

Dear Planning Commissioners,

We are writing on behalf of the Sierra Club Florida Phosphate Committee to oppose the approval of the Mosaic DeSoto phosphate strip mine. In addition to the problems presented by strip mining in general, the DeSoto mine poses additional issues which should lead to your denial.

We note before beginning that the Mosaic rezoning application appears to include land in addition to that covered by current mining applications. This is inappropriate for several reasons, including the fact that there is not adequate information about this additional land to justify rezoning action. The DeSoto comprehensive plan relies extensively (and inappropriately) on approvals by state and federal authorities for its decision making on mining. Where those approvals don't yet exist, there is no basis for County action. The rezoning application should also be limited to land covered by current mining applications. Even as limited that application should be denied.

Agriculture is the life blood and economic engine of DeSoto County. On the other hand,
mining creates far fewer jobs than it displaces and cannot offer the long term viability
agricultural uses do. Professor Richard Weisskoff gave a presentation on this topic to both the
DeSoto County Planning Commission and the BOCC, demonstrating that mining does not
provide the jobs and other economic benefits due to agriculture, and that mining jobs in the
County of mining are short lived and often filled by workers from out of county who commute
from their former mine areas, e.g. in Polk County. (Attachment A)

There are "direct agricultural jobs" which are lost with mining, but just as important are the ancillary services required such as farm equipment, irrigation systems, parts and repairs as

well as products such as herbicides, pesticides, soil amendments and shade materials. There are downstream jobs as well, such as food packing, food processing and transportation. Trading mining for agricultural jobs does not benefit the County.

- Mining creates huge profits for shareholders but not for the public. Mosaic reaps enormous
 profits while counties where mining occurs receive minimal financial benefits compared to the
 value of the ore that is extracted and the long term economic losses and risks which remain.
- Few activities can compare to phosphate strip mining when it comes to the landscape-scale disruption of native ecosystems. And the ecosystems can never be restored to pre-mining conditions. DeSoto County has chosen in its comprehensive plan to give great deference to permits issued at the state and federal levels, but there remain provisions which require independent consideration, by the County, of the impacts on environmentally sensitive areas. See e.g. FLU Policy 1.12.6 (1) (requiring protection and preservation of the natural functions of the resource); FLU Policy 1.12.10 (prohibiting mining in certain areas and requiring restoration, mitigation or reclamation in accord with FLU Policy 1.12b); FLU Policy 1.12b3 (setting minimum criteria and prohibiting extraction in the wetlands of Horse Creek, the direct tributaries to Horse Creek, including Brandy Branch and Buzzard Roost Branch). State mining regulations have not been updated for years and federal enforcement is problematic and rainfall increases can lead to unexpected issues with assumptions about the sufficiency of impoundments. The consequence has been major environmental incidents such as the recent sinkhole in a Mosaic gypstack at New Wales, discussed below. In the past seasonal rainfall has threatened to overflow gypstacks, leading to consent orders with the State. Again, see below. DeSoto County cannot and should not leave environmental issues to the state and feds.
- Through negotiation with Mosaic the County has apparently amended its Comprehensive Plan provisions to attempt to defer the County's duty to protect its resources, including its wetlands and streams, to the State and to map the Mosaic mine as its area for such deferred protections. But the County comp plan continues to require independent County protection of its resources. See e.g. FLU Policy 1.12b3 (mentioned above), Conservation Policies 1.7.10 and 1.7.11 (referring back to requiring compliance with FLU 1.12b3), and 1.9.7 (duty to protect environmentally sensitive areas from dumping, filling, grading, alteration of habitat, changing of drainage, etc.).
- Reclamation is still not good enough. More research is needed especially on the ability to improve the restoration of the hydrologic and ecological functionality of reclaimed lands to better mimic natural environments. Even the techniques used on lands reclaimed for agricultural use need improvement. The LAND USE SUITABILITY INDEX FOR USE IN HARDEE COUNTY prepared by Central Florida Regional Planning Council, submitted June 6, 2002, indicated that future land use patterns, in particular the ability to support various types of commercial agriculture and urban development, may be substantially altered as a result of large-scale phosphate mining in Hardee County. The same will be true for DeSoto County.

http://itech.fgcu.edu/faculty/ndemers/mining/Hardee%20County%20CFRPC%20LAND%20USE%20SUITABILITY%20INDEX.pdf

Clay settling areas as big as 80 acres and surrounded by berms as tall as 60 feet will
permanently scar 40% or more of the mine site. Such areas take decades to de-water and
stabilize and even after the surface level has dried and crusted, the interior clay remains wet

and unstable. The surface can eventually become hard, but the soft interior makes them unsuitable for any kind of intense development.

Knowing this, Mosaic has been experimenting with different types of crops with an eye to what could be grown on CSA's at a commercial-scale level. Currently the majority of Mosaic's reclaimed land is in cattle lease while it evaluates whether there are alternative uses that provide better returns for investors.

- Although Mosaic plans to use existing gypstacks for their processing waste, we hope you share our concern with plans to transport it to neighboring counties where it will be stacked for eternity because the USEPA has deemed it unsafe for any use due to low level radioactivity. In addition, process water is stored both in ponds maintained on top of the gyp stacks and in below-ground level cooling ponds. Process water is acidic, with a low pH and contains a dilute mixture of phosphoric, sulfuric, and fluosilicic acids. It is saturated with calcium sulfate and contains numerous other ions found in phosphate rock, as well as ammonia from the fertilizer manufacturing process. Years when rainfall is significantly above average can create conditions ripe for uncontrolled discharges of the untreated process water into nearby waterbodies. Another concern is the risk of additional sinkholes forming in gypstacks like the one at New Wales in 2016. Mosaic just completed repairs of that sinkhole last month.
- Phosphate mining uses massive amounts of ground water, which in this case will be from Polk County. The USGS has documented that phosphate mining is a leading cause of flow loss in the Peace River, which is linked to the formation of sink holes as well as the loss of springs and seeps in the upper river. Using Polk County groundwater creates an ongoing burden on that water supply long after the mines that are local to Polk County are closed. In addition, the counties where mining occurs are in the Southern Water Use Caution Area, plus Polk is in the Central Florida Water Initiative area. Once mining related activities are complete, this water supply should be retired to Polk County for the benefit of the environment.
- We have significant concern regarding the fate of the Mosaic-owned gap between the mine boundaries south of Highway 72 which abuts the Myakka Ranchlands Florida Forever project area to the west (identified as Candy Bar Ranch on the attached Mosaic DeSoto Gap map). If mining is approved, a conservation easement on this land would provide contiguity of habitat south of Highway 72 which is a prime concern for conservation interests seeking to preserve significant wildlife corridors in southwest Florida, especially for Florida panthers. An easement over this site would be a highly desirable conservation effort.
- Adequate bonding is not yet required to ensure that Mosaic is held accountable for protective mine closure and reclamation and to prevent the degradation of the current health of Charlotte Harbor by an environmental catastrophe of their making. The CHNEP area includes the entire 4,400 mile shoreline of the Charlotte Harbor watershed area. To maintain its health and productivity, it requires an adequate seasonal supply of freshwater from the Peace River, Horse Creek and the Myakka River, all of which are directly impacted by the mines originating in the Central Florida Phosphate District. If Mosaic's operations, infrastructure, CSA's or gypstacks are found to be responsible for the degradation of these resources, including the fisheries, then the company must be held fully and financially accountable even if an Act of God caused the windstorm, hurricane or sinkhole that damaged a gypstack or resulted in a CSA dam breach. Taxpayers must not be expected to cover the costs for an industry that leaves behind billions of tons of waste products that can threaten our environment forever.

Current bonding requirements are woefully inadequate, covering merely the cost of regrading and planting. Several years ago this led to claimed reclamation costs of only about

\$8000/acre, not nearly enough to actually reclaim a landscape or fix an environmental problem.

- Mosaic is at the end of its phosphate mining in Florida. South of DeSoto the ore values are
 less. While Mosaic, in the past, has always had "one more mine" it could use to provide
 topsoil, or space for CSAs or fill, it is coming to the end of that game. The need to get water
 from Polk County is already the first sign that mining in the future will involve robbing Peter to
 pay Paul, and eventually leaving Peter in a lurch. When Mosaic is done, and the reclamation
 bonds are insufficient, and the Mosaic stockholders have been rewarded with the profits,
 DeSoto County will be left holding the bag.
- And this is an additional reason why DeSoto County officials should care about what happens
 with Mosaic facilities, mines and gypstacks in other counties. When the income flow from
 mining stops, and all that is left is the expense of closure and reclamation and gypstack
 remediation, what problem will be first in line for Mosaic's available funds: the leaking
 gypstacks or the CSAs and mining pits in DeSoto with not enough funds in the inadequate
 bonds to close and reclaim them?

The Sierra Club Florida opposes phosphate mining for its environmental impacts which are not offset by economic benefits, except to the Mosaic shareholders. But DeSoto County is an especially egregious case because of its circumstances and the potential for long term loss and risk.

We thank you for your service and ask that you deny approval for the Mosaic DeSoto mine.

On behalf of the Florida Sierra Club Phosphate Committee,

Beverly Griffiths, Chair

Inclusions: Attachment A

Copies to: Mark Walters Earl Hahn, Development Director

Presentation by Professor Richard Weisskopf Regarding the DeSoto County Phosphate Mining Overlay May 4 and May 25, 2010 Before the DeSoto County Planning Commission and Board of County Commissioners

My name is Richard Weisskoff. I reside at 17625 N.E. 8th Place, North Miami Beach, Fl. I am a professor at the University of Miami, teaching economics in the Department of International Studies.

I previously testified before the Hardee County Board of County commissioners on the occasion of their reviewing the permits for a new phosphate mine two years ago. I have made many visits to Hardee and DeSoto Counties, gone fishing and canoeing in the Peace River, and researched the economic conditions of these two counties.

Agriculture is the life-blood of DeSoto County. DeSoto ranks 4th in the State in acreage in oranges, fifth in sod, eighth in watermelons, 23rd in vegetable acreage. DeSoto ranks 6th in the state in number of cattle and calves, 33rd in layers, and 35 in number of horses and ponies.

DeSoto ranks 10th in the State in the value of crops sold and 13th in the value of livestock and poultry sold. The County is an agricultural powerhouse.

Agriculture is the engine that pulls the rest of the economy. There are "direct" jobs in farming; **but** more important are the services needed by agriculture, plus all the material inputs, such as parts for the machinery, herbicides, insecticides, fertilizers, irrigation equipment, etc. "Downstream industries" include food processing, sorting, and manufacturing.

All this depends on the quality of the soil, the water, and the skill of those who farm and raise cattle **and livestock**. Their economic success too depends on the care given the resources so that the yields continue on into the future.

All this gives rise to a unique way of life, once "mainstream" rural USA, but now remaining in a few counties in Florida and elsewhere. The Arcadia All-Florida Championship Rodeo and other Festivals in the County plus the hunting, fishing, boating, wildlife-watching activities are all part of a valued rural life style, that prizes clean air, safety and tranquility and which has economic benefits as well.

Into this setting comes the proposal **for** a large swath of phosphate mining in DeSoto County. Phosphate mining **pretends to** promise jobs, well-paying jobs; it **pretends to** promise industry and progress.

Phosphate mining is incompatible with the agricultural motor of this county. There were a total of **only** 1259 Mosaic jobs in Florida in 2009: 184 at Hookers Prairie Mine, 138 at Wingate Creek, 263 at South Fort Meade, 75 at Hopewell, and 599 at Four Corners. (US Dept of Labor, Mine Safety and Health Administration (MSHA) website, www.msha,gov).

In contrast, I investigated the land use that would be included in the Mining Overlay (Table 1 of the Mosaic proposal). I found that there are at present 131 direct agricultural jobs in ranching, citrus, vegetables, and forestry, plus another 252 jobs in "agricultural services." This sums to 383 jobs, which, when computed with the IMPLAN multipliers, indicates that another 171 jobs are created by the inputs needed for those activities and another 38 jobs result from the spending of their earnings in the county. The total jobs, therefore, currently resulting from farming activity in the area to be covered by mining is 592.

How many jobs would be created by mining? Let us use the Grace Jones' study of the proposed Ona mine done for Hardee County. She found that the mine would work 300 acres per year for 50 years (covering 15,000 acres by end of the mine). Each year would create 81 jobs if there were a beneficiation plant built; if the mine merely mined and sent the phosphate to an existing plant, then 33 jobs would be created.

The down side is that the beneficiation plant **also results in** gypsum stacks and clay slime ponds, which have other external dangers: catastrophic slides, hurricane damage, wind-carried particles, radioactivity, sink-hole dangers.

To make matters worse, as the mines move south from Polk and Hardee counties, the seasoned work force comes with them; there may be very few jobs for local people.

But the point is simply that Mosaic **argues that its mining results in** "job creation." We must look at the existing jobs on that same land. How many **are there now!** And what will happen to those people? The flip side of "job creation" is "job destruction," and I have found that phosphate mining is a net destroyer of jobs and of land, not a creator.

I have a graph that shows the decline of Florida phosphate tonnage. Perhaps the new Peruvian mine (how many tons/year?) will remove the need to mine prime Florida farmland?

I also have a number of maps to show the Commissioners, and some satellite photos of the current mine and the 1988 pristine countryside: farming to phosphates.

Thank you.

Adjacent Florida Forever Parcels

Location Key

HARDEE

ESOTO



