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**DESOTO COUNTY  
COMPREHENSIVE  
PLAN CONSISTENCY**

## DESOTO COUNTY COMPREHENSIVE PLAN CONSISTENCY

### I. FUTURE LAND USE ELEMENT

FLUE Policy 1.3.8: Phosphate mining/extraction and related land uses are allowed in the Rural/Agriculture land use category only when the area is included in the Generalized Phosphate Mining Overlay Designation and in accordance with the Generalized Phosphate Mining Overlay Designation objective and policies, as well as other policies within the Future Land Use Element and Conservation Element which apply to phosphate mining activity.

**Response: The DeSoto Mine and adjacent lands subject to the rezoning request are located within the Generalized Phosphate Mining Overlay Designation (“GPMOD”). Consistency with the GPMOD objectives and policies, as well as other policies within the Future Land Use Element and Conservation Element which apply to phosphate mining activity, is addressed on an objective-by-objective and policy-by-policy basis herein. The proposed DeSoto Mine is consistent with FLUE Policy 1.3.8.**

FLUE Objective 1.12: Conservation Overlay Designation (COD). The Interim 2040 Conservation Overlay Map (FLUEMS-4) identifies public and private lands that may possess environmental limitations, such as floodplain, wetland, and other environmentally sensitive areas, including but not limited to, sloping topography subject to soil erosion, wildlife habitat areas, hydric soils, and special vegetative communities, but have not been confirmed as such and shall be protected to the greatest extent possible. Modifications of the boundaries are permitted upon submittal of data and analysis, or field inspection by qualified personnel who support the establishment of a more appropriate boundary.

**Response: Portions of the property proposed to comprise the DeSoto Mine falls within the Conservation Overlay Designation (COD). However, this overlap does not disqualify the subject property from rezoning. As stated in Policy 1.12.2, the COD is “not intended to prevent development, but rather to identify sensitive areas ... that need to be reviewed carefully during the development review process to determine whether mitigation or conservation protection is needed. If the areas are determined not to be environmentally sensitive, then the underlying land use development density and/or intensity is applicable.”**

**Mosaic has undergone the type of rigorous environmental analysis required for the modification of the COD pursuant to FLUE Objective 1.12. Experts have examined all aspects of the subject property including the soils, vegetation, wildlife, wetlands, surface waters, floodplains, topography, and much more. Each phase of this analysis was conducted with the guidance, oversight, and approval of the relevant state authorities, including the Florida Fish and Wildlife Conservation Commission (FFWCC) and Florida Department of Environmental Protection (FDEP). In addition to studying these features independently, they were also reviewed holistically in the**

**context of creating a project plan that minimized environmental impacts. Multiple alternatives were examined before the current proposal was chosen.**

**As a result of that analysis, the proposed DeSoto Mine will avoid all perennial and most undisturbed naturally intermittent streams, including the main channels of Horse Creek, Buzzard's Roost Branch, Brandy Branch, and an unnamed tributary of Buzzard's Roost Branch. In addition, the largest contiguous landscapes of high-quality wetlands and high-quality upland habitats within the mine boundary have been avoided. Wetland impacts for mining are restricted to lower quality wetlands that have been impacted by previous agricultural activities.**

**FDEP approved of the elimination, reduction, and mitigation strategies proposed by Mosaic by granting an Environmental Resource Permit on April 7, 2017. A Clean Water Act Section 404 dredge and fill permit application for proposed wetland impacts has been submitted to the U.S. Army Corps of Engineers, though will now be processed by the FDEP as the Environmental Protection Agency approved FDEP's assumption of the Clean Water Act Section 404 program in December 2020. Before a Clean Water Act Section 404 permit is issued, the relevant agency must determine that the required avoidance, minimization, and mitigation requirements have been met. Both of these permits undergo exacting scrutiny by experienced biologists, ecologists, engineers, and other experts, and will be in place before any disturbance occurs on the site.**

**In addition to preserving the most valuable areas for conservation on the property, Mosaic will reclaim all jurisdictional wetlands, surface waters, and floodplains on site on at least an acre-for-acre, type-for-type basis that provides for no net loss of function. This restoration is mandated by state law and will be subject to a government-supervised monitoring program to ensure success. Details on reclamation are provided in the Phosphate Mining Master Plan and Operating Permit ("MMP/OP") applications consistent with the Land Development Regulations ("LDRs").**

**For all of these reasons, Mosaic has complied with the intent of the COD and has fulfilled Objective 1.12.**

FLUE Policy 1.12.2: Conservation Overlay Designation Uses. This designation is not intended to prevent development, but rather to identify environmentally sensitive areas (i.e. floodplains and wetlands) that need to be reviewed carefully during the development review process to determine whether mitigation or conservation protection are needed. If the areas are determined not to be environmentally sensitive, then the underlying future land use category is applicable. The following uses are specifically prohibited from being located within Conservation Areas:

- (1) Junkyards, gas station, and vehicle repair facilities.



**No junkyards, gas stations, or vehicle repair facilities are proposed within Conservation Areas.**

- (2) The use or storage of hazardous materials or wastes on the Florida Substance List shall be restricted in the 100-year floodplain, except that such use or storage pursuant to phosphate mining within the Generalized Phosphate Mining Overlay Designation shall be restricted within that portion of the 100-year floodplain shown on **Map I-7** and as regulated by the Florida Department of Environmental Protection.

**All use of hazardous materials or wastes will be in accordance with FDEP regulation and will not occur within the 100-year floodplain outside of the GPMOD as shown on Map I-7.**

- (3) New underground fuel and other hazardous chemicals within these areas. Existing facilities are required to demonstrate that adequate technology is being employed on-site to isolate the facilities from the water supply.

**No underground fuel or other hazardous chemicals are proposed within the area requested for rezoning. There are no known existing facilities within the same area.**

- (4) Residential Development greater than a density of 1 unit per 10 gross acres and non-residential development greater than a FAR of 0.10 unless stated herein. All development shall be clustered to non-wetland portions of any site and buffered from the wetland appropriately.

**No residential development is proposed for the property requested for rezoning. Mining operations proposed for the property take care to cluster on non-wetland portions of the site and avoid contiguous areas of high-quality wetlands and other surface waters. Multiple alternatives were examined before the current proposal was chosen. Buffers will be provided from the avoided wetland areas, and best management practices including a ditch and berm system will be used to protect the hydrology of avoided wetlands.**

- (5) Agricultural uses shall utilize “Best Management Practices” published in conjunction with the US Department of Agriculture.

**Agricultural activities are not proposed for the property requested for rezoning. Mining Best Management Practices (“BMPs”) will be implemented.**

FLUE Policy 1.12.3: Conservation Overlay Designation Development Standards.

- (1) A final determination of the suitability for development of any individual parcel, as it relates to a Conservation Overlay area on the Future Land Use Map, shall be determined prior to issuance of any development approval.

**Response:** As discussed in the response to Objective 1.12, the property proposed for disturbance is suitable. First, this property is known to contain commercially significant amounts of mineable phosphate, as acknowledged by its inclusion in the GPMOD. Second, the environmentally sensitive areas of this property have undergone comprehensive evaluation as is detailed in the MMP/OP applications. Specifically, see Map Series 2-1-B – land uses and covers; Map Series 2-2-B, and Map 2-4-B – wetlands and surface waters; Map 2-5 – soils; Map 2-9-A – existing site drainage and streams; Map Series 2-8 – floodplains; Map Series 2-6 – wildlife; and Map Series 2-10 – historic and cultural resources. This evaluation has led to the avoidance and minimization of impacts to sensitive areas, and provided the data needed to reclaim any areas that are disturbed to at least their original function. Detailed site evaluations and details on the reclamation plan can be found in the MMP/OP applications, in accordance with the LDRs. In light of the above facts, the property proposed for rezoning is suitable for development.

- (2) The Conservation Overlay Designation area on the Future Land Use Map is not to be considered the exact boundary of the conservation area, but to act as an indicator of a potential conservation area. The exact boundary shall be determined by an environmental site study by a qualified professional at the expense of the Developer and submitted for a determination to the South West Florida Water Management District or other agency with jurisdiction.

**Response:** Qualified professional determinations have been approved by and/or submitted to the FDEP. These boundary determinations can be seen at Map Series 2-2-B-I – wetland delineations, Map Series 2-2-B-ii -- stream delineations, Map 2-4-B -- Uniform Mitigation Assessment Method (UMAM) wetland scores, and Map Series 2-6 -- listed species surveys as illustrated in the MMP/OP applications.

- (3) The Conservation Overlay Designation area is not all inclusive and other areas that do not fall within the COD boundaries that meet the definition of being environmentally sensitive areas are also subject to the regulations affecting them. These areas include protected plant and animal habitat.

**Response:** Qualified professional evaluations have been approved by and/or submitted to the FDEP and USFWS or to the applicable agency with jurisdiction. These evaluations are not limited to the COD boundaries but assess the entirety of the DeSoto Mine property. The results of these evaluations can be seen in the maps cited above in the response to FLUE Policy 1.12.3(2) and are further discussed in the MMP/OP applications.

- (4) Development proposals shall require the submittal of an Environmental Site Study indicating as to the extent of the impact of development or redevelopment for any lands within Conservation Overlay Designation areas and other environmental concerns.

**Response: Mosaic has prepared and submitted several Environmental Site Studies indicating the extent of proposed impacts to lands within the COD and other environmental concerns. These studies are provided and discussed at length in the MMP/OP applications, as required by the LDRs.**

- (5) Environmental Site Studies shall provide evidence and an inventory of wetlands; soils posing severe limitations to construction; unique habitat; endangered species of wildlife and plants; significant historic structures and/or sites; and areas prone to periodic flooding (areas within the 100-year floodplain).

**Response: Mosaic has prepared and submitted several Environmental Site Studies providing evidence and an inventory of wetlands, soils posing severe limitations to construction, unique habitat, endangered species of wildlife and plants, significant historic structures and/or sites, and areas prone to periodic flooding (areas within the 100-year floodplain). Please refer to the maps cited in response to FLUE Policy 1.12.3(2), along with detailed discussion in the MMP/OP applications.**

- (6) DeSoto County shall require identification of proposed impacts to the natural functions of any resources by any development or redevelopment that proposes to be placed in/on, to disturb, or to alter identified areas. Compensation and Mitigation plans shall also be provided.

**Response: Mosaic has identified the DeSoto Mine's proposed impacts to the natural functions of resources. Said impacts have been mapped and tabulated in the MMP/OP applications. The application further contains a detailed discussion of how those impacts will be mitigated through reclamation and compensatory mitigation. As discussed in the response to FLUE Objective 1.12, mining is a temporary land use and environmentally sensitive areas including wetlands, surface waters, and floodplains must be replaced acre-for-acre, type-for-type, and ensure there is no lasting loss of function. The data and analysis presented in the applications demonstrate the sufficiency of the proposed mitigation.**

- (7) Such identification shall occur during the development review process and provide the opportunity for DeSoto County to review the proposed project so that direct and irreversible impacts on the identified resources are avoided, minimized, or in the extreme, mitigated.

**Response: The MMP/OP applications provide DeSoto County with the information necessary to review the DeSoto Mine during the development review process. They provide documentation to support a finding that impacts**

**have been avoided and minimized to the extent practicable and provide documentation to support a finding that all proposed impacts to identified resources will be fully mitigated. Also see the response to FLUE Objective 1.12 for a discussion of how Mosaic's review of the land led to the comparison of various alternatives to reduce environmental impacts, and the response to FLUE Policy 1.12.3(6) for a discussion about the requirements and assurances that adverse impacts to environmentally sensitive areas will be sufficiently mitigated.**

- (8) Natural resources discovered as a result of the required Environmental Site Study will be protected in accordance with state and federal law. The Environmental Site Study will require that a qualified professional analyze the natural functions of eco-systems and connectivity of resource corridors. A conservation easement, or other protective measure, may be required to protect the functions of natural resources. Mitigation may be allowed on a case-by-case basis through the appropriate reviewing agencies.

**Response: Mosaic will protect natural resources in accordance with state and federal law. Mosaic has prepared and submitted several Environmental Site Studies analyzing the natural functions of eco-systems and connectivity of resource corridors, including but not limited to highly functional habitats warranting avoidance and preservation under a conservation easement. Mitigation is proposed to expand the avoided functional habitats and increase connectivity. The areas to be avoided and protected via conservation easements are depicted on Map 4-8-C and also identified in ERP No. MMR\_331292-001 (ERP), which FDEP issued to Mosaic on April 7, 2017.**

- (9) If an area is determined to be developable and not within the Conservation Overlay Designation, then the underlying future land use category shall apply.

**Response: The MMP/OP applications provide the information necessary for the County to determine which areas are developable and should not be within the COD. Mosaic has undergone extensive environmental research to determine the conditions that exist on the site, prepared a mine plan that avoids and preserves the most valuable natural functions on the site, and designed a reclamation plan that assures all environmentally sensitive areas where impacts that are unavoidable will be reclaimed and restored to the same or better natural function. The information provided supports the rezoning of this property consistent with the GPMOD, and the adjustment of the COD boundaries to permit mining and development as proposed.**

- (10) The Conservation Overlay District is comprised of data collected from other sources and utilized as a tool to assist in development decisions. As this data is modified, updated or altered, the County will update the Conservation Overlay District boundaries upon data being published to reflect the most accurate data and analysis available. Should other recognized professional sources or technology also provide for updates and improved accuracy, that data shall be reflected in updates to the DeSoto County Conservation

Overlay District when made available. Staff shall review and update available data semi-annually.

**Response: The MMP/OP applications include data and analysis from other recognized professional sources and technology, which the County may use to update the COD on and adjacent to the De Soto Mine.**

**The proposed DeSoto Mine is consistent with FLUE Policy 1.12.3(1)-(10).**

FLUE Policy 1.12.4: Any development of a site which includes property determined to be in a Conservation Overlay Designation area, is required to submit a site-specific plan for approval. The plan shall include the clustering of density away from the protected areas and resources. Developments that include Conservation Overlay Designations, but cluster all development activities outside of the Overlay, may be reviewed via a Site Plan Approval process. The following restrictions shall apply to areas determined to be in the COD:

(1) Density transfers out of areas determined to be within the Conservation Area may occur on-site with the following density transfer allowed:

- (a) Rural/Agricultural Land Uses shall be consistent with the underlying zoning
- (b) Low Density Residential Land Uses shall be 1 unit per 4 acres.
- (c) Medium Density Residential, Neighborhood Mixed Use, and General Mixed Use Districts shall be 1 unit per 2 acres.
- (d) Urban Center Mixed Use Mixed Use shall be 1 unit per 1 acre. In the future, density transfers out of the Conservation Area may be able to occur off-site from Rural/Agricultural Future Land Uses to Non- Rural/Agricultural Future Land Uses as part of a Transfer of Development Rights Program.

(2) Development within the Conservation Overlay area shall be restricted to 1 unit per 10 acres and a FAR of 0.1, unless otherwise provided for herein. All development shall be directed away from wetlands.

**Response: Mosaic has submitted site-specific plans in conjunction with its MMP and OP applications. These plans also form part of the ERP. To the extent FLUE Policy 1.12.4 applies to residential development, no residential development is proposed as part of the DeSoto Mine. With respect to development intensities, the beneficiation plant and other facilities combined will not exceed a FAR of 0.1. Finally, with respect to the direction of development away from wetlands, please refer to Mosaic's response to FLUE Policy 1.12.6 below. The proposed DeSoto Mine is consistent with FLUE Policy 1.12.4(1)-(2).**

FLUE Policy 1.12.6: The County shall prohibit all development within, and direct development away from, wetlands, unless otherwise approved by the appropriate reviewing agency. Site enhancement for conservation purposes and Best Management Practices including, without limitation, the use of isolation berms to protect water quality and prevent wildlife from migrating into developed areas shall not be deemed "development" for the purposes of this policy, when used pursuant to phosphate mining.



- (1) When wetland impacts cannot be avoided, DeSoto County shall require a specific management plan to be prepared by the developer, which results in no net loss of wetlands or wetland functions and which includes necessary modifications to the proposed development, specific setback and buffers, and the location of development away from site resources, to protect and preserve the natural functions of the resource.

**Response:**

**No practicable alternative allows preservation of all existing onsite wetlands and recovery of crucial phosphate reserves. However, with the guidance and approval of FDEP, Mosaic has compared various mine plan alternatives and instituted design modifications to reduce adverse impacts. Mosaic has proposed, and FDEP has approved, the wetland impacts currently proposed for the DeSoto Mine and a mitigation plan that will not only replace impacted wetlands type-for-type and acre-for-acre, but will also result in a net gain of wetland function.**

- (2) The minimum setback shall be 15 feet and the average of all setbacks from the wetland resource shall be 25 feet, unless otherwise permitted by the appropriate reviewing agency. Best Management Practices, including, without limitation, the use of isolation berms to protect water quality and prevent wildlife from migrating into developed areas shall be permitted within the setback areas, when used pursuant to phosphate mining.

**Response: Mosaic will implement a minimum setback of 15 feet and an average (or greater) setback of 25 feet or more from avoided wetlands. It will be accomplished by the BMP isolation ditch and berm system, which will be constructed (and grassed) around the perimeter of the areas to be mined or disturbed. The ditch and berm system is a structural BMP that has proven effective in the elimination of offsite turbid runoff and soil erosion, while helping to prevent wildlife from migrating into development areas during the mining and reclamation stages of operation.**

- (3) Areas designated as natural buffers shall preserve all-natural vegetative cover, except where drainage ways, access ways or phosphate mining corridors are approved to cross the buffer, or when contrary to Best Management Practices. Buffers may be supplemented only with native trees, shrubs and ground covers.

**Response: Natural vegetation will be preserved in setback/natural buffer areas and buffer crossings will be limited to the extent feasible. Proposed crossings are depicted on Map 3-2 within the MMP/OP applications. Please see response to Policy 1.12.6(2) above regarding use of the ditch and berm system as a BMP.**

**The proposed DeSoto Mine is consistent with FLUE Policy 1.12.6(1)-(3).**

FLUE Policy 1.12.7: Water resources (Rivers and Creeks) of the County are recognized as valuable to the residents of the County, and shall continue to be protected by disapproving

development activities which will result in any measurable decrease in surface and ground water quality.

**Response: The DeSoto Mine will not result in any measurable decrease in surface and ground water quality.**

**Under Chapter 62-330, F.A.C., issuance of the ERP is based on a finding by the FDEP that the proposed activity (DeSoto Mine) will meet Class III surface water quality standards, as published in Rule 62-302.530, F.A.C. Mine-generated process water is subject to National Pollutant Discharge Elimination System (“NPDES”) rules (see Specific Condition 11 of the ERP). All discharges must meet numerical effluent standards, which for phosphate mines are promulgated as 40 CFR § 436.180. These numerical effluent limitations are technology-based water quality limitations developed specifically for the phosphate rock mining category.**

**The quality of the discharged water must meet two additional sets of standards: 1) Water quality based effluent limitations, or WQBELs, which means that the discharges of water from a phosphate mine cannot cause the quality of the water in the receiving stream to violate the adopted state water quality standards; and 2) The discharged water cannot be toxic to aquatic organisms that inhabit the receiving streams.**

**In addition to meeting surface water quality standards, discharges from the groundwater must meet FDEP groundwater quality standards. Given these high standards that must be met, the DeSoto Mine’s proposed activities will not result in any adverse surface or ground water quality impacts.**

**Mosaic understands the importance of the region’s water resources. The Horse Creek Stewardship Program (HCSP) began monitoring in April of 2003 in response to a legal challenge filed by the Peace River/Manasota Regional Water Supply Authority (PRMRWSA) and others to the Manson Jenkins Tract (Manatee County) ERP application. See FDEP ERP # 0142476-003; see also *Manasota-88, Inc., et. al. v. IMC Phosphates & DEP*, DOAH Case No. 01-1080 -1081 (FDEP Final Order Nov. 25, 2002). The program is funded by Mosaic and managed by the PRMRWSA and has two purposes: 1) providing a protocol for collection of information on the physical, chemical, and biological characteristics of Horse Creek during Mosaic’s mining activities in the watershed to detect any adverse conditions or significant trends that may occur as a result of mining, and 2) providing mechanisms for further evaluation and corrective action in the event detrimental changes or trends are found. Notably, since 2003, the program has never detected any adverse conditions or significant trends caused by mining in general or at the Manson Jenkins Tract in particular. Mining at the Manson Jenkins Tract is complete.**

**Given these high standards and existing and proposed monitoring, the DeSoto Mine's activities will not result in any adverse surface or ground water quality impacts.**

**The proposed DeSoto Mine is consistent with FLUE Policy 1.12.7.**

FLUE Policy 1.12.8: On all existing parcels of land, development shall be located away from wetlands and floodplains on the upland portion of the site, unless otherwise permitted by an authorized agency and permissible within this Plan. Where no upland exists, development may occur so long as all applicable environmental permitting requirements can be satisfied. All future subdivision of land shall contain adequate uplands for the permitted use.

**Response: As noted in response to FLUE Policy 1.12.6(1), wetland and floodplain impacts on the DeSoto mine site have been avoided and minimized to the extent practicable. The remaining proposed impacts are unavoidable, and have been approved by FDEP through ERP No. MMR\_331292-001 issued to Mosaic on April 7, 2017. Issuance of the ERP by FDEP constitutes a finding that all practicable design modifications have been made to avoid wetland impacts. Comprehensive Plan Map I-7 establishes the floodplain areas where mining is prohibited; all development proposed for the DeSoto Mine would be located outside of these prohibited areas. Accordingly, development will be located away from wetlands and floodplains on the upland portion of the site, unless otherwise permitted by an authorized agency and permissible within the Comprehensive Plan. The proposed DeSoto Mine is consistent with FLUE Policy 1.12.8.**

FLUE Policy 1.12.9: Resource extraction which will result in an adverse effect on environmentally sensitive areas which cannot be restored or mitigated for shall be prohibited.

**Response: Mosaic will not engage in resource extraction which will result in adverse effects on environmentally sensitive areas that cannot be restored or mitigated for. This policy must be considered together with CE Policy 1.7.10, which states:**

*Resource extraction which will result in a reduction of ecological value of the area subject to such resource extraction, which cannot be mitigated, reclaimed or restored to environmentally sound condition, shall be prohibited. For phosphate mining, a permit authorizing mitigation, reclamation or restoration of environmentally sensitive areas obtained from the Southwest Florida Water Management District, the Florida Department of Environmental Protection, and/or the U.S. Army Corps of Engineers, as applicable, and is consistent with standards and criteria of the Generalized Phosphate Mining Overlay Designation of the Comprehensive Plan (Objective 1.12b and its related policies), shall evidence that the resource extraction will not result*

*in a reduction of ecological value of the area subject to such resource extraction.*

**FDEP issued the ERP to Mosaic on April 7, 2017. The proposed wetland impacts, avoidance and minimization plans have undergone multidisciplinary expert scrutiny. The ERP was issued based upon input from experts concerning the existing site wetland quality and functions, existing site upland habitat, threatened and endangered species, practicability and logistics of mining practices, and Mosaic's demonstrated capabilities to create wetland mitigation. Issuance of state and federal permits will confirm that the resource extraction will not result in adverse effects/reduction of ecological value.**

**Mosaic's applications demonstrate that the proposed DeSoto Mine will avoid all perennial and most undisturbed naturally intermittent streams, including the main channels of Horse Creek, Buzzard's Roost Branch, Brandy Branch, and an unnamed tributary of Buzzard's Roost Branch. In addition, the largest contiguous landscapes of high-quality wetlands and high-quality upland habitats within the mine boundary in Sections 4 and 9 have been avoided. Wetland impacts for mining are restricted to lower quality wetlands that have been impacted by previous agricultural activities.**

**Mosaic's proposal to restore and reclaim the DeSoto Mine relies upon practical and demonstrated engineering approaches and current practices in ecological restoration. The outcome of this restoration will be monitored in accordance with permitting conditions aimed at assuring mitigation success. Please refer to MMP/OP Supplemental Information Document §§ 5, 8, 9, and 10 for details.**

**The proposed DeSoto Mine is consistent with FLUE Policy 1.12.9.**

FLUE Policy 1.12.10: Wetlands, rivers, streams, floodplains, habitat of threatened or endangered species and species of special concern, prime agricultural lands, prime groundwater recharge areas, historically significant sites or other environmentally sensitive areas which cannot be restored or mitigated shall be identified by a property owner or developer prior to any development approval, and protected by a prohibition on mining activities within those areas and the establishment of buffer zones around them. Properties within the Generalized Phosphate Mining Overlay Designation as shown in **Map I-7**, shall restore, mitigate, or reclaim such areas consistent with the requirements of the Generalized Phosphate Mining Designation (Future Land Use Element Objective 1.12b and its related policies) and the County's Phosphate Mining Ordinance.

**Response: Mosaic has conducted a thorough investigation of the site and identified environmentally sensitive areas that would be more difficult to restore. Those areas have been avoided by the proposed mining plan and adequate buffers of such resources have been built into the mine design. With respect to wetlands, rivers, streams, floodplains, habitat of threatened or endangered species and species of special concern, prime agricultural lands,**

**and prime groundwater recharge areas, please refer to Mosaic's responses to FLUE Policies 1.12.3, 1.12.6, and 1.12.9 above. With respect to historical sites, the DeSoto Mine has been the subject of multiple historical and archaeological surveys to determine the potential for significant resources to be located on site. All known historical resources have been evaluated and the State Historic Preservation Officer (SHPO) has issued letters releasing the site for mining impact. The details of the surveys and SHPO letters are contained in the MMP/OP applications. Archaeological study areas and site locations are provided in Map Series 2-10. The proposed DeSoto Mine is consistent with FLUE Policy 1.12.10.**

FLUE Objective 1.12b: Generalized Phosphate Mining Overlay Designation (GPMOD). The Interim 2040 Generalized Phosphate Mining Overlay Designation Map (FLUEMS-5) consists of private lands that are likely to contain phosphate minerals located within the Rural/Agriculture Future Land Use District and the Phosphate Mineral Type as depicted on the Generalized Surface Minerals Map. Establishment of the Generalized Phosphate Mining Overlay Designation will ensure the orderly development of phosphate mining activity, including the extraction of mineral resources and reclamation of mined land in a manner compatible with the overall development of the County and the protection of environmental resources as further prescribed in the policies listed below and Phosphate Mining Regulations set forth in the land Development Regulations.

**Response: The lands that would comprise Mosaic's DeSoto Mine are entirely located within the GPMOD. With respect to ensuring the orderly development of phosphate mining activity, please refer to Mosaic's responses below to this objective's implementing policies. The proposed DeSoto Mine is consistent with FLUE Objective 1.12b.**

FLUE Policy 1.12b.1: Generalized Phosphate Mining Overlay Designation Location. The Phosphate Mining Overlay area on the Future Land Use Map consists of those lands that are identified as containing phosphate minerals within Rural Agriculture Future Land Use classification and where phosphate is planned and is likely to occur.

**Response: The lands that would comprise Mosaic's DeSoto Mine are entirely located within the GPMOD. The proposed DeSoto Mine is consistent with FLUE Policy 1.12b.1.**

FLUE Policy 1.12b.2: Generalized Phosphate mining Overlay Designation Uses. The following activities shall be permitted within the Generalized Phosphate Mining Overlay Designation upon the approval of a Phosphate Mining Operating Permit or Operating Permit or Operating Permits as required by the DeSoto County Land Development Regulations:

- (1) Phosphate mining/extraction;
- (2) Phosphate rock and slurry processing, transfer;
- (3) Beneficiation plant including but not limited to water treatment facilities, railroad spur, storage, mine administration offices, and similar uses;
- (4) Clay settling areas and recirculation systems, NPDES outfalls, and other drainage uses;

- (5) Heavy machinery, vehicles and equipment, including but not limited to draglines, dredges, bull dozers, pumps, trucks, and similar equipment necessary for mining and reclamation;
- (6) Land reclamation;
- (7) Agriculture; and
- (8) Phosphate mining allied industries

**Response: The lands that would comprise Mosaic's DeSoto Mine are entirely located within the GPMOD. The DeSoto Mine applications (Rezoning, MMP and OP) have been submitted to the County along with the appropriate fees. These applications identify the mining-related activities proposed by Mosaic all of which are specifically identified as permitted uses within the GPMOD. Ultimately, no phosphate mining or related activities will occur unless and until DeSoto County approves the submitted Rezoning, MMP, and OP. The proposed DeSoto Mine is consistent with FLUE Policy 1.12b.2.**

FLUE Policy 1.12b.3: Generalized Phosphate Mining Overlay Designation development standards. Phosphate mining activity must comply with the following minimum criteria and the applicable County Ordinances and the Land Development Regulations:

- (1) Submit and receive approval of an Operating Permit for a Phosphate Mining Master Plan in conjunction with a zoning approval;

**Response: With the submission of this Rezoning application, all three DeSoto Mine applications (Rezoning, MMP, and OP) have been submitted to the County along with the appropriate fees. No phosphate mining will occur unless and until DeSoto County approves the submitted MMP and OP, accordingly.**

- (2) Be appropriately buffered from agriculture and residential uses;

**Response: The DeSoto Mine will comply with the setbacks and buffers established by the LDRs. See Maps 7-2 through 7-6 in the MMP/OP applications which provide a graphic depiction of the referenced setbacks and proposal for compliance. The MMP further documents compliance with the setback requirements provided in the LDRs.**

- (3) Reclaim all wetlands impacted by mining as required by the Conservation Element;

**Response: FDEP issued the ERP to Mosaic on April 7, 2017. Issuance of the ERP documents that all wetland impacts will be mitigated in accordance with the results of a UMAM functional analysis. Adherence to Mosaic's approved reclamation plan will ensure that wetland impacts are reclaimed at a ratio of acre-for-acre or more. Specific reclamation requirements identified in the Conservation Element are addressed on an objective-by-objective and policy-by-policy basis herein.**



(4) Prohibit extraction in those portions of Horse Creek which are classified as wetlands in areas identified on **Map I-7** of the Future Land Use Series;

**Response: The applicable portions of Horse Creek are identified on Map I-7 and will be avoided/preserved consistent with this policy.**

(5) Establish a buffer zone from preserved wetlands and other surface waters as determined through the state environmental resource permitting process of Chapter 373 F.S., or through the development of regional impact process of Section 380.06 F.S. and in accordance with the Future Land Use Element and Conservation Element;

**Response: Mosaic has proposed appropriate preservation areas, setbacks, and buffers from preserved wetlands and other surface waters, which have been incorporated into the approved ERP.**

(6) Mining extraction shall be prohibited from the historically unaltered portions of the direct tributaries to Horse Creek (including, but not limited to, Brandy Branch and Buzzard Roost Branch), which lie within the Generalized Phosphate Mining Overlay Designation and are identified on **Map I-7** of the Future Land Use Series;

**Response: Mosaic will avoid and preserve those portions of Horse Creek, and the historically unaltered portions of its direct tributaries including Brandy Branch and Buzzard Roost Branch as identified and depicted on Map I-7.**

(7) Seepage wetland area located outside of the 100-year floodplain shall be identified and evaluated through the state environmental resource permitting process of Chapter 373 F.S. to determine the level of protection provided to them;

**Response: All seepage wetlands located outside of the 100-year floodplain have been identified and evaluated. The ERP issued to Mosaic in 2017 determines the appropriate level of protection for seepage wetlands. ERP Specific Conditions 15 and 31 address seepage wetland monitoring and mitigation release requirements. Issuance of the ERP demonstrates consistency with this policy.**

(8) A minimum setback of 50 feet from the 100-year floodplain of Horse Creek and its direct tributaries as identified on **Map I-7** of the Future Land Use Map Series shall be required for mining activities unless otherwise permitted by the appropriate reviewing agency through the environmental permitting process of Chapter 373 F.S. and in accordance with the Future Land Use Element and Conservation Element;

**Response: A minimum buffer / setback of 50 feet from the 100-year floodplain of Horse Creek and its direct tributaries will be applied by utilization of the BMP berm and ditch protection system.**

(9) The use of Best Management Practices such as berms and monitoring wells shall be implemented within the 50-foot setback area referenced in (8) above in order to ensure that the direct tributaries and floodplains of Horse Creek and the Peace River, natural functions of soils, fisheries, wildlife habitat and listed species are protected and maintained;

**Response: BMP berms and ditches, along with monitoring wells, will be installed within the 50-foot buffer/setback area along the tributaries and floodplains (preservation area) in keeping with Mosaic's IWUP Permit No. 20011400. The Environmental Monitoring Program (EMP) detailed in the MMP provides further monitoring plan details.**

(10) Phosphate mining corridor crossings and encroachments of the 100-year floodplain of Horse Creek and its direct tributaries and other identified floodplains as identified on **Map I-7** of the Future Land Use Map Series shall be limited to those crossing(s) and encroachments approved by the Florida Department of Environmental Protection through the Environmental Resource Permit for the mine;

**Response: The ERP issued to Mosaic in 2017 identifies and approves all of the mining corridors and corridor stream crossings needed for the DeSoto Mine, including the encroachments/crossings of the 100-year floodplain of Horse Creek and its direct tributaries.**

(11) Exceptions to these policies may be allowed on a case-by-case basis, when it is determined through the state environmental resource permitting process of Chapter 373 F.S. that the exception would result in improving water quality and habitat protection or would otherwise meet the public interest test implemented under Part IV of Chapter 373 F.S.; and

**Response: To date Mosaic has not identified, and does not require, any exceptions to these policies for the DeSoto Mine.**

(12) All mining activity shall be consistent with all other policies of this Plan, specifically including but not limited to all mining policies contained within the Conservation Element.

**Response: Please refer to the responses in this document that address all applicable policies within the DeSoto County Comprehensive Plan, including but not limited to Mosaic's responses to applicable Conservation Element policies below.**

FLUE Policy 1.12b.4: All applications for mining activity shall include documentation of Best Management Practices and the use of technology to minimize the adverse effects of phosphate mining activities.

**Response: Mosaic's MMP and OP applications include documentation of BMPs and the use of technology to minimize the adverse effects of phosphate mining activities. BMPs and state of the art technologies (standard practices) as detailed in those applications are used by Mosaic to avoid and/or minimize**

**the adverse effects of mining. The DeSoto Mine is consistent with FLUE Policy 1.12b.4.**

FLUE Policy 1.12b.5: DeSoto County shall promote and ensure that phosphate mining activities and reclamation will not preclude future beneficial uses of mined land.

**Response: The DeSoto Mine's mining activities and reclamation will not preclude future beneficial uses of mined land. The post-reclamation land use and revegetation plan for the DeSoto Mine is similar to existing conditions in terms of types and proportions of land uses and vegetative communities, including land areas appropriate for agriculture consistent with historic and current land uses. The proposed DeSoto Mine is consistent with FLUE Policy 1.12b.5.**

FLUE Policy 1.12b.6: Generalized Phosphate Mining Overlay Designation implementation criteria. The following criteria shall apply to area within the mining overlay designation prior to authorization to develop a mining operation.

(1) DeSoto County shall continue to enforce its mining regulations through the Land Development Regulations regarding permitting, mining and reclamation of areas of mineral resources as determined by the Generalized Phosphate Mining Overlay Designation.

(2) All mining activity allowed within the Generalized Phosphate Mining Overlay Designation shall require approval through the County's development review procedures. This review will require the submission of an application for a Phosphate Mining Master Plan and approval of an Operating Permit in accordance with the provisions of the Land Development Regulations.

(3) Land use authorization in the form of a zoning designation, which permits phosphate mining and related uses as authorized by the Land Development Regulations, shall be obtained prior to approval of a Phosphate Mining Master Plan.

**Response: With respect to FLUE Policy 1.12b.6(1), (2), and (3), the DeSoto Mine applications (Rezoning, MMP and OP) have been submitted to the County along with the appropriate fees. No phosphate mining will occur unless and until DeSoto County enforces its mining regulations and approves the submitted rezoning, MMP and OP applications.**

(4) DeSoto County shall continue to regulate the location and operation of phosphate mining activities to minimize negative impacts on surrounding properties, ensure that areas are appropriately reclaimed and encourage the productive reuse of such areas.

**Response: Mosaic will minimize negative impacts on surrounding properties, ensure that such areas are appropriately reclaimed, and encourage the productive reuse of such areas.**

**Mosaic will employ structural and operational best management practices (BMPs) (e.g. setbacks, water trucks and wind breaks) to avoid or minimize any negative effects on its DeSoto County neighbors. See MMP/OP Supplemental Information Document § 6 for more information.**

**Mosaic will appropriately reclaim the DeSoto Mine following the cessation of mining/excavation activities. Mosaic's reclamation plan design relies on practical and demonstrated engineering approaches and practices in ecological restoration for habitat creation. The plan is well-grounded in proven techniques and is state-of-the-art with contingency measures built into the monitoring plans. The reclamation plan has already been approved by FDEP, which issued an ERP to Mosaic in 2017.**

**Mosaic will encourage the productive use of reclaimed areas. The entire site has been used for decades for cattle grazing and farming (i.e., row crops, sod, citrus, etc.). Mosaic has determined that due to the historic disturbance/ditching that has occurred within the project area, mining and reclaiming these types of systems in accordance with the local and state requirements would provide greater ecological value than leaving them in their existing conditions.**

(5) The DeSoto County Land Development Regulations shall specify criteria by which mining activity may be permitted, including appropriate setbacks and buffering from adjacent land uses and to specifically identify land use activity associated with phosphate mining, such as mineral extraction, clay settling area, land reclamation, etc.; and industrial land use activities, such as beneficiation plants, allied industries, and mining related activities.

**Response: The County's LDRs identify criteria by which mining activity may be permitted, including appropriate setbacks and buffering from adjacent land uses. The DeSoto Mine will comply with these setbacks and buffers. Additionally, the MMP and OP applications generally identify and describe the land use activities proposed for the DeSoto Mine, including mineral extraction, clay settling area, land reclamation, and industrial land use activities (such as beneficiation plants, allied industries, and mining-related activities).**

**The proposed DeSoto Mine is consistent with FLUE Policy 1.12b.6(1)-(5).**

FLUE Policy 1.14.6: Nuisances. The County's Land Development Regulations shall maintain or establish guidelines for noise, light and vibration to minimize the impacts of those on residential properties.

**Response: Mosaic will employ structural and operational BMPs (e.g. setbacks, water trucks and wind breaks) to avoid or minimize any negative effects from noise, light, and vibration on surrounding properties. Further, Mosaic will comply with Desoto County LDR setback and buffering requirements**

**including those applicable to residential dwelling units and other civic and recreational uses. Please refer to Mosaic's response to FLUE Policy 1.12b.6(4) for details. The proposed DeSoto Mine is consistent with FLUE Policy 1.14.6.**

FLUE Policy 1.14.8: Buffers. Increased buffering and landscape standards shall be maintained or expanded in the County's Land Development Regulations to protect various types of development from the impact of others.

**Response: The DeSoto Mine will comply with the setbacks and buffers established by the LDRs. See Mosaic's responses to FLUE Policies 1.12b.3 and 1.12b.6 above for details. The proposed DeSoto Mine is consistent with FLUE Policy 1.14.8.**

FLUE Policy 1.17.3: The County shall require an adequate quantity of on-site parking to accommodate land uses, and encourage shared parking facilities for multiple uses.

**Response: Mosaic will comply with all on-site parking requirements. There is sufficient land to ensure that the mine, specifically the beneficiation plant and administrative offices will have enough on-site parking to satisfy the LDRs. The proposed DeSoto Mine is consistent with FLUE Policy 1.17.3.**

FLUE Policy 1.17.4: The County shall require new developments to provide safe and convenient on-site pedestrian and vehicular traffic flow.

**Response: Mosaic will comply with all on-site pedestrian and vehicular traffic flow requirements. There is sufficient land to ensure that the mine, specifically the beneficiation plant and administrative offices will have safe and convenient on-site pedestrian and vehicular traffic flow to satisfy the LDRs. The proposed DeSoto Mine is consistent with FLUE Policy 1.17.4.**

FLUE Policy 1.22.1: General. DeSoto County shall adopt and implement a concurrency management system and regulations which meet the following minimum standards:

(1) Public facility and service capacity, consistent with public health and safety standards, shall be in place and available to serve new development no later than the issuance of a certificate of occupancy. The process for concurrency determinations shall be performed in accordance with all applicable policies of the Comprehensive Plan, and with the procedures described in the Land Development Regulations.

(2) Concurrency determinations of sufficient capacity of public facilities to maintain adopted LOS standards for new development, shall account for existing population and for reservations of approved development orders in addition to the needs of the new development proposed.

(3) DeSoto County shall integrate its concurrency management system, land use planning, and decisions with its plans for public facility capital improvement by using the Capital Improvements Element. The Capital Improvements Program shall maintain adopted levels-of-service standards

for all development consistent with the Future Land Use Element and any subsequent development orders issued.

FLUE Policy 1.22.3: Intermediate and Final Development Orders. Prior to the issuance of an intermediate or final development order, which establish binding densities and intensities of development, the County shall require the availability of sufficient capacity of public facilities to maintain adopted LOS standards for the existing population, for reservations of approved development orders, and lastly for the needs of the new development proposed, concurrent with the timing of the new development proposed.

(1) Intermediate Development Orders. These shall be site plans (development plans and special exceptions), preliminary plats, construction plan approvals (notice to proceed), and similar development orders that reflect a specific development proposal, that does not yet include vertical construction or the final division of property. These shall be orders for which a specific concurrency evaluation is required in evaluating whether or not to approve the order and for which capacity is reserved and may be held through the final development order process if the project proceeds according to the timelines of such approvals. The lack of concurrency may be the sole reason for denial of an intermediate development order.

(2) Final Development Orders. These shall be variances, building permits, and final plats and similar development orders that reflect a specific development proposal that includes vertical construction or the final division of property. These shall be orders for which a specific concurrency evaluation is required in evaluating whether or not to approve the order and for which capacity is reserved, unless such evaluation was done as an Intermediate Development Order and has not yet expired according to the timelines for such approvals. The lack of concurrency may be the sole reason for denial of a final development order.

FLUE Policy 1.22.4: Final Development Order Determination. A final development order (final concurrency determination), which establishes specific density and intensity of development shall not be issued, unless the following conditions for the provision of facilities are met (excluding approved intermediate development orders that have proceeded according to the timelines of such approvals):

- (1) Are currently in place or will be in place when the final development order is issued;
- (2) The development order is issued with the condition that the necessary facilities and services will be in place when the impacts of the development occur;
- (3) Are under construction at the time of the final development order; or
- (4) Are guaranteed by an enforceable agreement to be in place concurrent with the impacts of the development.
- (5) Are included in the 3-year funding portion of the DeSoto County Capital Improvements Program, including any adopted therein from outside agency three or five year plans (i.e. FDOT).

**Response: With respect to FLUE Policies 1.22.1, 1.22.3, and 1.22.4 and their subparts, the DeSoto Mine will satisfy all LOS and concurrency standards. Please refer to Mosaic's responses to CIE Policy 1.2.1 for more information. With respect to future concurrency determinations, Mosaic will ensure that required capacities will be in place and available to serve the mine no later**



**than the issuance of a certificate of occupancy. The proposed DeSoto Mine is consistent with FLUE Policies 1.22.1, 1.22.3, 1.22.4, and their subparts.**

FLUE Objective 2.1: Natural Resource Protection. The County shall maintain land development regulations that seek to protect natural resources (such as, groundwater, surface water, floodplains, wildlife habitat, wetlands and other vegetative communities) from the impact of development. Additionally, the County will limit development in areas that have inadequate soils, topography or other constraints to protect public health and welfare.

**Response: Mosaic will protect natural resources (such as, groundwater, surface water, floodplains, wildlife habitat and other vegetative communities) from the impact of development. Please refer to Mosaic's response below to this objective's implementing policy. The proposed DeSoto Mine is consistent with FLUE Objective 2.1.**

FLUE Policy 2.1.1: This will be done in accordance with the applicable elements within this document that address aquifer recharge, wellfields, water, sewer, floodplains, stormwater, wetlands, and soils and topography.

**Response: Please refer to Mosaic's responses to policies addressing aquifer recharge, wellfields, water, sewer, floodplains, stormwater, wetlands, soils and topography throughout this comprehensive plan consistency analysis, in particular those policies identified in the Aquifer Protection Element, Potable Water Element, Drainage Element, and Conservation Element. The proposed DeSoto Mine is consistent with FLUE Policy 2.1.1.**

FLUE Objective 2.2: Historic Resource Protection. The County shall continue to encourage the preservation and protection of the historic resources in the County.

**Response: Mosaic will preserve and protect the historic resources on its property. The DeSoto Mine site has been subject to multiple historic and archaeological surveys to determine the potential of significant resources on site. All known resources have been evaluated and the State Historic Preservation Officer (SHPO) has issued letters releasing the site for mining, as proposed by the final mine plan. The details of the surveys and SHPO letters are contained in the MMP and OP applications. The proposed DeSoto Mine is consistent with FLUE Objective 2.2.**

## **II. TRANSPORTATION ELEMENT**

TE Objective 1.1: Level of Service. The County shall adopt and adhere to level of service standards for arterial and collector streets.

**Response: Traffic generated by the mine will not cause the County to fail to adhere to LOS standards for arterial and collector streets. Please refer to Mosaic's responses below to this objective's implementing policies. The proposed DeSoto Mine is consistent with TE Objective 1.1.**

TE Policy 1.1.1: Service Standards. The County establishes the following peak hour /peak directional level of service standards for collector, arterial, local, and limited access facilities in the County.

ROADWAY TYPE	STATE ROAD URBANIZED AREA	STATE ROAD OUTSIDE URBANIZED AREA	COUNTY ROAD
Limited Access Facilities	D	C	D
Controlled Access Highway	D	C	D
Other Multi-lane Roads	D	C	D
Two-lane Roads	D	C	D

**Response: Mosaic commissioned a transportation analysis for the DeSoto Mine (see Tab 8) consistent with these LOS standards, the DeSoto County LDRs, and the criteria outlined in Florida Statutes, and the Florida Administrative Code. The analysis assumed the following facts regarding the proposed mine:**

- At full capacity the mine will have approximately 300 employees.
- The product from the mine will be shipped via rail.
- The access to the main plant area will be via SR 70.

Because the standard traffic engineering publication containing trip generation numbers (The Institute of Transportation Engineers' (ITE) Trip Generation, 10th Edition, 2017) does not contain trip generation data for mines, the trip generation data utilized in the analysis was estimated based upon data from the Four Corners Mine. The Desoto Mine is proposed to operate similarly to the Four Corners Mine, except the product from the Desoto Mine will be shipped via rail, whereas the product from the Four Corners Mine is shipped via truck.

Mosaic's traffic consultant utilized the following methodology to estimate the traffic associated with the Desoto Mine:

1. AM and PM peak hour counts were conducted at the Four Corners Mine entrance road to the plant
2. During the counts in # 1, above, the number of product trucks was documented
3. As of the date of the counts, there were 567 employees at the Four Corners Mine of which approximately 300 employees report to work at the Four Corners plant
4. These trip rates were applied to the projected mine employees to estimate the traffic associated with the proposed Desoto Mine

Based on this information, the Desoto Mine is estimated to attract approximately 36 trip ends during the AM street peak hour and 55 trip ends during the PM street peak hour.

Considering development in the vicinity of the mine, Mosaic's traffic consultant estimated that 50% of project traffic was going to or coming from the east via SR 70, and 50% was going to or coming from the west via SR 70. SR 70 is currently a two-lane, undivided facility in the vicinity of the mine with a posted speed limit of 60 MPH. The consultant anticipated that mining activities would start by 2025 and continue for 15 years (through 2040).

Ultimately, the transportation analysis determined the percentage of the adopted LOS consumed by DeSoto Mine-related traffic. It concluded that mine-related traffic would consume less than five percent (5%) of the adopted LOS of SR 70 in the vicinity of the project. The analysis also concluded that there will be surplus capacity within the vicinity of the mine. Because the traffic generated by the proposed DeSoto Mine will be less than five percent of roadway capacities, the roadways servicing the mine will continue to operate within the adopted LOS.

Finally, in connection with its proposed shipment of product via rail, Mosaic also commissioned a separate traffic analysis to evaluate the potential traffic impacts from a new rail crossing of SR 70. Mosaic's traffic consultant estimated that there will be up to eight (8) trains per day entering and exiting the mine and crossing SR 70, and that these trains will take approximately ten (10) minutes to cross SR 70. To evaluate the impact the proposed railroad crossing would have on the operation of SR 70, the crossing was treated as if it were a signal. The characteristics were then input into traffic analysis software to evaluate the operation. With the 2036 background plus project traffic, SR 70 will operate at an acceptable LOS with the addition of the proposed railroad crossing. Traffic will flow freely on SR 70 94% of the day.

**The proposed DeSoto Mine is consistent with TE Policy 1.1.1.**

TE Policy 1.1.3: Level of Service SIS and FISH Facilities. Level of Service for rural two-lane roadways which are recognized as SIS and FISH facilities, such as State Road 70 and US Highway

17, are designated as “C” pursuant with F.A.C. 14-94.003. All two-lane rural roadways shall also be considered “C.”

**Response: As explained in Mosaic’s response to TE Policy 1.1.1, the traffic generated by the mine will not cause the LOS for SR 70 to fall below its adopted LOS, i.e. “C.” The proposed DeSoto Mine is consistent with TE Policy 1.1.3.**

TE Policy 1.2.13: Mandated Arterial Access. DeSoto County shall require high-traffic generating development and certain zoning districts and uses generally associated with such developments, to have direct access to the arterial or collector network. High-traffic generators and zoning districts and uses shall be defined in the LDR’s (see policy 1.2.14, below for additional clarification).

**Response: Because the mine will transport its product via rail, the mine is not expected to generate a significant amount of traffic. Please see Mosaic’s response to TE Policy 1.1.1. Nevertheless, the mine will have direct access to SR 70, which is an arterial highway. The proposed DeSoto Mine is consistent with TE Policy 1.1.3.**

TE Policy 1.2.14: Traffic Study. High traffic generators shall require a project-specific traffic study. The study will include methodology accepted by the County and will evaluate, at a minimum, existing traffic conditions and LOS, determine project traffic generation, cumulative traffic conditions, mitigation of traffic impacts for on- and off-site, and evaluate LOS for transportation linkages to collector and arterial roadways, if appropriate.

**Response: Because the mine will transport its product via rail, the mine is not expected to generate a significant amount of traffic. Nevertheless, the transportation analysis commissioned by Mosaic included a methodology accepted by the County. It evaluated existing traffic conditions and LOS; determined project traffic generation, cumulative traffic conditions, and mitigation of traffic impacts for on- and off-site; and evaluated LOS for transportation linkages to collector and arterial roadways. Please refer to Mosaic’s response to TE Policy 1.1.1 for details. The proposed DeSoto Mine is consistent with TE Policy 1.2.14.**

TE Policy 1.2.15: Additional Studies. Additional traffic studies and specific segment analysis may be required if a segment is at or below acceptable LOS.

**Response: Noted. However, Mosaic does not anticipate having to commission any additional studies because the mine will not cause any relevant roadway segment to fall below the established LOS standard. Please refer to Mosaic’s response to TE Policy 1.1.1 for details. The proposed DeSoto Mine is consistent with TE Policy 1.2.15.**

TE Policy 1.3.3: Consistency. All development shall be consistent with the adopted Long-Range Transportation Plan and Concurrency Management System

**Response: The mine will be consistent with the adopted Long-Range Transportation Plan and Concurrency Management System. Please refer to Mosaic's response to TE Policy 1.1.1 for details. The proposed DeSoto Mine is consistent with TE Policy 1.3.3.**

TE Objective 1.4: Long-Range Concurrency Management. DeSoto County shall initiate and maintain a 15-year concurrency management system to address backlogged facilities. Two transportation facilities are designated as backlogged. These facilities are SR 70 west of the City of Arcadia and US 17 immediately south of the City of Arcadia.

**Response: In accordance with this objective, it is Mosaic's understanding that the County has initiated and is maintaining a 15-year concurrency management system to address backlogged facilities. Please refer to Mosaic's responses below to this objective's implementing policies. The proposed DeSoto Mine is consistent with TE Objective 1.4.**

TE Policy 1.4.3: Impact on Backlogged Facility. Any applicant for development shall provide evidence that their project or phase is not creating a significant impact. If a significant impact is expected, a detailed segment analysis of the appropriate backlogged facility shall be provided to the County.

**Response: The mine will not create a significant impact on a backlogged facility. As evidence, please refer to Mosaic's response to TE Policy 1.1.1 for details. The proposed DeSoto Mine is consistent with TE Policy 1.4.3.**

TE Policy 1.5.3: Analysis of FLUM and Zoning Amendments. The County shall consider the potential maximum impacts of all Future Land Use map and zoning amendments on the LOS for all roadways directly and indirectly affected by the amendment when making such decisions. However, specific impacts and any required roadway improvements shall only be determined based on the submittal of a defined development proposal as part of the County's overall concurrency system.

**Response: The mine will not adversely impact any roadways directly or indirectly. Therefore, roadway improvements will not be necessary. Please refer to Mosaic's response to TE Policy 1.1.1 for details. The proposed DeSoto Mine is consistent with TE Policy 1.5.3.**

TE Policy 2.2.2: New development shall pay a share of transportation improvement costs through impact fee assessments, construction of roadway facilities, donations of needed rights-of-way or other appropriate means.

**Response: The mine will not require any transportation improvements thus Mosaic will not need to pay a share of these costs. Please refer to Mosaic's response to TE Policy 1.1.1 for details. The proposed DeSoto Mine is consistent with TE Policy 2.2.2.**



### **III. HOUSING ELEMENT**

HE Objective 1.7: Historic Preservation. The County shall preserve and protect historically and archeologically significant structures and sites.

**Response: Mosaic will preserve and protect historically and archaeologically significant structures and sites. Please refer to Mosaic's response below to this objective's implementing policy. The proposed DeSoto Mine is consistent with HE Objective 1.7.**

HE Policy 1.7.4: Developer shall be required to provide a historical resource assessment as part of the development approval process. Where found, the development of such property shall include protection and/or proper treatment of such historic/ archeological assets.

**Response: Mosaic has provided a historical resource assessment as part of the development approval process. The DeSoto Mine site has been subject to multiple historic and archaeological surveys to determine the potential of significant resources on site. All known resources have been evaluated and coordinated with the Seminole Tribe of Florida. The State Historic Preservation Officer (SHPO) has issued letters releasing the site for mining, as proposed by the final mine plan. The details of the surveys, coordination efforts, and SHPO letters are contained in Appendix 8-7 within the MMP/OP applications. The proposed DeSoto Mine is consistent with HE Objective 1.7.**

#### **IV. RECREATION AND OPEN SPACE ELEMENT**

ROSE Policy 1.1.1: The recommended planning level of service (LOS) standard for parks shall be twenty (20) acres of parkland per 1,000 residents. This standard includes both passive and active County parks and recreational facilities, and includes Regional, Community, Neighborhood, and Mini-parks.

**Response: The County's LOS methodology for recreation and open spaces is based on population. According to the Bureau of Economic and Business Research (available online at <https://www.bebr.ufl.edu/population/data>), as of April 1, 2018, the population of unincorporated DeSoto County was estimated to be 27,847.**

**Although Mosaic anticipates that the DeSoto Mine will create employment opportunities, both directly with the mine and in related service industries, this does not mean that the mine will increase the residential demand for recreation and open space services. The underlying maximum residential density established by the Rural/Agriculture designation will remain the same, and in any case the proposed mine will not include a residential component of any kind. Consequently, the DeSoto Mine will have no impact on the adopted LOS standards for parks and recreation facilities.**

**The proposed DeSoto Mine is consistent with ROSE Policy 1.1.1.**

## **V. AQUIFER PROTECTION ELEMENT**

APE Objective 1.1: Natural Recharge Protection and Conservation. The County shall coordinate with other agencies and adopt measures in the Land Development Regulations that will ensure preservation of natural recharge to the County's groundwater resources, as well as conservation of potable water sources.

**Response: Mosaic will ensure preservation of natural recharge to the County's groundwater resources and conserve potable water resources. Please refer to Mosaic's responses below to this objective's implementing policies. The proposed DeSoto Mine is consistent with APE Objective 1.1.**

APE Policy 1.1.1: The County shall adhere to regulations established by Southwest Florida Water Management District to protect any areas of high recharge.

**Response: Mosaic will adhere to all regulations established by SWFWMD governing the protection of any areas of high recharge. Please refer to Mosaic's responses to APE Objective 1.3 and its implementing policies below, and CE Objectives 1.2 and 1.3 and their implementing policies below. The proposed DeSoto Mine is consistent with APE Policy 1.1.1.**

APE Policy 1.1.5: The County shall continue to cooperate with the Water Management District in monitoring of groundwater supply conditions and consumptive use.

**Response: Mosaic will cooperate with the SWFWMD in monitoring groundwater supply conditions and consumptive use in connection with the DeSoto Mine.**

**The SWFWMD has issued an Individual Water Use Permit (IWUP) authorizing the use of existing Ft. Green production wells to facilitate mining and beneficiation plant operations, which includes the DeSoto Mine. Permitting conditions ensure that SWFWMD's criteria for groundwater withdrawals are met, and the impacts, if any, are mitigated.**

**A major component of the IWUP is the expansive environmental monitoring program, the Environmental Management Plan (EMP), which outlines the processes and procedures Mosaic must implement to ensure that groundwater withdrawals associated with mine dewatering do not result in adverse impacts to environmental features adjacent to and in areas surrounding the mine project boundaries.**

**During the operation of the mine, various measures will be utilized to prevent negative impacts to groundwater hydrology. The maintenance of surficial aquifer groundwater levels within their historical range of fluctuation adjacent to active mining areas is one of the primary groundwater objectives for the DeSoto Mine. This objective will be accomplished primarily through**

**the construction and operation of recharge ditches as part of proposed perimeter ditch and berm systems. In certain areas, other types of recharge systems such as recharge wells may be utilized based on site-specific conditions. The MMP and OP contain Mosaic's preliminary design(s) for the recharge systems that will be utilized at the DeSoto Mine.**

**The proposed DeSoto Mine is consistent with APE Policy 1.1.5.**

APE Objective 1.2: Best Management. The County will recognize that the underlying aquifer as a finite and delicate resource thereby necessitating the best management practices to promote conservation.

**Response: Mosaic recognizes that the underlying aquifer is a finite and delicate resource necessitating best management practices to promote conservation. Please refer to Mosaic's responses below to this objective's implementing policies. The proposed DeSoto Mine is consistent with APE Objective 1.2.**

APE Policy 1.2.3: The County shall require detention of stormwater runoff to maximize groundwater recharge.

**Response: Mosaic will detain stormwater runoff to maximize groundwater recharge. The primary objective of the proposed ditch and berm system(s) is to capture surface water runoff that originates within disturbed areas of the mine and to prevent it from leaving the site, so as to not allow surface water quality impacts from non-point source stormwater runoff. As explained in Mosaic's response to APE Policy 1.1.5 above, Mosaic will construct and operate recharge ditches as part of proposed perimeter ditch and berm systems. In certain areas, other types of recharge systems such as recharge wells may be utilized based on-site specific conditions. The MMP and OP applications contain Mosaic's preliminary design(s) for the recharge systems that will be utilized at the DeSoto Mine. The proposed DeSoto Mine is consistent with APE Policy 1.2.3.**

APE Objective 1.3: The quality of DeSoto County's groundwater resources shall not be degraded, either directly or indirectly, by human influences below the minimum criteria for groundwater provided in Chapter 62-520.400 F.A.C., and shall be maintained or as necessary improved to ensure the availability of this resource for present and future generations.

**Response: Baseline groundwater quality monitoring locations have been established to provide spatially-distributed groundwater quality information for the project site to account for geologic variability, watershed characteristics, and surface boundaries and features. A total of nine groundwater wells grouped in clusters of three were established in the 1990s to obtain baseline groundwater quality, aquifer characteristics, and**

**hydrogeologic characteristics across the project site. Each of the three clusters represents a unique hydrologic setting within the project site.**

- **Cluster PNL-GW-1, 2, 3 is located near State Road 72 near the southern extent of the project site.**
- **Cluster PNL-GW-7, 8, 9 is located near State Road 70 in the northwestern corner of the project site in the Buzzard Roost Branch Tributary watershed.**
- **Cluster PNL-GW-10, 11, 12 is located in the northeastern corner of the project site in the Oak Hill Branch watershed.**

**The nine PNL well locations have been and will continue to be monitored quarterly/monthly to determine water elevations. Those wells will also be used to monitor a subset of field measured water quality parameters. Groundwater quality sampling results will be provided to the County annually following the commencement of mining on the property.**

**The proposed DeSoto Mine is consistent with APE Objective 1.3.**

APE Policy 1.3.1: Except for bona fide agricultural operations and incidental domestic uses, land use activities which utilize, store, or generate hazardous materials, or which involve the bulk storage or continuous transmission of petroleum products or other hazardous substances, shall be prohibited within recharge areas for the intermediate aquifer system, and or within cones of influence and watershed areas for public water supply wells. The agricultural and domestic exemptions shall not be construed to relieve these activities from compliance with applicable State and Federal regulations pertaining to the installation and use of above- or below- ground storage tanks, or other structures or improvements intended for the use, storage, or generation of petroleum products or other hazardous substances.

**Response: The mine will not utilize, store, or generate hazardous materials that would involve the bulk storage or continuous transmission of petroleum products or other hazardous substances, within recharge areas for the immediate aquifer system, or within cones of influence and watershed areas for public water supply wells.**

**First, with respect to protecting recharge areas for the intermediate aquifer system, CE Policy 1.2.15 provides that “DeSoto County shall protect groundwater recharge areas throughout the County by requiring properly functioning stormwater management systems meeting drainage LOS standards and a minimum percentage of 15% pervious open space for all non-residential development projects and a minimum of 25% pervious open space for residential development projects.” Mosaic will observe a minimum percentage of 15% pervious open space at the proposed DeSoto Mine. And as explained in connection with the Drainage Element and Capital Improvements Element policies governing drainage level of service (LOS), the proposed DeSoto Mine will conform to all applicable drainage LOS standards.**

**Second, with respect to protecting cones of influence and watershed areas for public water supply wells, pending the Southwest Florida Water Management District's (SWFWMD's) development of a comprehensive wellhead protection program identifying cones of influence and water recharge areas (see CE Policy 1.3.1), Mosaic will not engage in any mining activities within 1,000 feet from the base of a public supply potable water wellfield. This distance is well beyond the 400-foot radius "interim measure" established in CE Policy 1.3.2. as a cone of influence and wellhead protection area.**

**Ultimately, no junkyards, gas stations, vehicle repair facilities, or underground storage tanks are proposed within these 1,000 feet, and Mosaic does not seek nor request approval for the storage or use of hazardous materials or wastes, as regulated by the FDEP, within these areas.**

**The proposed DeSoto Mine is consistent with APE Policy 1.3.1.**

## **VI. DRAINAGE ELEMENT**

DE Objective 1.1: Maintain Level of Service. Based upon adopted level of service standards, the County shall annually adopt programs and activities to facilitate implementation of stormwater programs (and in the future stormwater utility) to serve future development as well as areas where stormwater systems are failing, stormwater problems are presented to the Board, or environmental concerns exist.

**Response: Mosaic will implement a stormwater management plan that will maintain the adopted LOS for drainage and avoid stormwater problems or environmental issues. Please refer to Mosaic's responses below to this objective's implementing policies. The proposed DeSoto Mine is consistent with DE Objective 1.1.**

DE Policy 1.1.1: The LOS standard for stormwater drainage facilities shall be designed to accommodate the 25-year, 24-hour design storm to meet the water quality and quantity standards.

**Response: Mosaic designed its proposed stormwater management system for the mine to accommodate the 25-year, 24-hour design storm and to meet water quality and quantity standards.**

**The primary objective of the proposed ditch and berm system(s) is to capture surface water runoff that originates within disturbed areas of the mine and to prevent it from leaving the site, to prevent surface water quality impacts from non-point source stormwater runoff. This surface water management practice is required under the NPDES permit program (see Specific Condition 11 of the ERP).**

**The design of individual ditch and berm segments is conducted in accordance with standard engineering practices considering the size and characteristics of the capture area that will report to the system. The systems are designed to safely contain and convey the runoff generated by a 25-year, 24-hour storm event to the mine water recirculation system. The captured water is subsequently routed to be treated (clarified) for re-use within the mine operation or discharged through permitted NPDES outfalls. In essence, the ditch and berm system serves to both protect water quality as well as provide an alternate water supply that offsets groundwater pumping needs.**

**The Stormwater Management Plan for the proposed railroad spur is provided in the MMP and OP applications. It details the methodology used in the design of the Stormwater Management Plan, including stormwater routing along the alignment, location and sizing of treatment ponds, outflow details from detention ponds and design of all crossings (RR crossing and road crossings). It also provides the calculations used in sizing the stormwater treatment facilities, and treatment of stormwater from bridge crossings. The system is**

**designed to safely contain and convey the runoff generated by a 25-year, 24-hour storm event.**

**The proposed DeSoto Mine is consistent with DE Policy 1.1.1.**

DE Policy 1.1.2: To control water quantity, peak post-development runoff shall not exceed peak pre-development runoff rates.

**Response: Mosaic has confirmed that peak post-development runoff will not exceed peak pre-development runoff rates. Mosaic conducted a hydrology analysis. The hydrology analysis shows that peak flows at offsite critical points following a 25-year 24-hour rainfall event will be slightly lower in the post-reclamation conditions than they are in the pre-mining conditions, which was approved as part of the ERP. Refer to the response to Policy 1.1.1 above and the MMP and OP applications for more information. The proposed DeSoto Mine is consistent with DE Policy 1.1.2.**

DE Policy 1.1.3: To control water quality, treatment of stormwater runoff shall be required for all development, redevelopment, and infill areas. The stormwater treatment system, or systems, can be project specific or serve sub-areas within the County, regardless of the area served. Stormwater discharge facilities shall be designed so as to not lower the receiving water quality or degrade the receiving water body below the minimum conditions necessary to maintain their classifications as established in, but not limited to, Chapter 62-302, F.A.C. It is intended that all standards in these citations are to apply to all development and redevelopment and that any exemptions or exceptions in these citations, including project size thresholds, do not apply for concurrency determinations.

**Response: Mosaic's stormwater system has been designed to not lower the water quality within receiving waters or degrade them below the minimum conditions necessary to maintain their classifications as established in, but not limited to, Chapter 62-302, F.A.C. Water quality treatment of stormwater runoff will be managed as required by the project's NPDES Permit (see Specific Condition 11 of the ERP) and the post-reclamation plan once completed. Please refer to Mosaic's responses to FLUE Policies 1.12.7 and 1.12.9, CE Policies 1.2.10 and 1.7.3, and DE Policies 1.1.1 and 1.1.2 above. The proposed DeSoto Mine is consistent with DE Policy 1.1.3.**

DE Objective 1.2: Development Impacts. The County shall protect natural drainage features and the existing stormwater network from the impacts of development and construction.

**Response: Mosaic will protect natural drainage features and the existing stormwater network from the impacts of developing the DeSoto Mine. Please refer to Mosaic's responses below to this objective's implementing policies. The proposed DeSoto Mine is consistent with DE Objective 1.2.**

DE Policy 1.2.1: The County shall require development applicants to submit detailed calculations, prepared by a registered professional engineer, showing how retention and detention will be



accomplished to meet the adopted level of service, and demonstrating that there will be no negative impacts to downstream water quality or quantity.

**Response: Mosaic has submitted detailed calculations, prepared by a registered professional engineer, showing how retention and detention will be accomplished to meet the adopted level of service, and demonstrating that there will be no negative impacts to downstream water quality or quantity.**

**The DeSoto Mine hydrology plans, reports and analyses were prepared by registered professional engineers (i.e. Ardaman and Associates, Inc. and others) and are signed and sealed. These plans are located in the appendices of the MMP/OP applications and include, but are not limited to the following: Hydrogeology and Geotechnical Studies; Stream Reroute Designs; Mine Water Balance; Hydrologic and Hydraulic Evaluation for the DeSoto Mine; and Streamflow/Baseflow Modeling Analysis.**

**These analyses document and demonstrate that there will be no adverse impacts to downstream water quality or quantity from the proposed mining. Please refer to responses to CE Policies 1.2.10 and 1.7.3, FLUE Policies 1.12.7 and 1.12.9, and DE Policies 1.1.1 and 1.1.2 for more information.**

**The proposed DeSoto Mine is consistent with DE Policy 1.2.1.**

DE Policy 1.2.2: The County shall review the characteristics and limitations of soil types for new projects with regard to percolation and infiltration.

**Response: Refer to Appendix 1-5 (DeSoto Mine Hydrogeology of Aquifers Report) covering percolation/infiltration data (i.e. soil borings, test data, etc.) within the MMP/OP applications. The proposed DeSoto Mine is consistent with DE Policy 1.2.2.**

DE Policy 1.2.3: The County shall review the impact proposed stormwater systems will have on adjacent native vegetation and/or wetlands.

**Response: Mosaic's proposed stormwater systems for the mine will not have negative impacts on adjacent native vegetation and/or wetlands. Ardaman's hydrology analysis shows that the anticipated peak flow at the critical point in response to design storm events will be slightly lower in the post-reclamation condition than they are in the pre-mining condition. Therefore, mining and reclamation activities will not cause any adverse impact to adjacent or downstream wetlands or to native vegetation. The proposed DeSoto Mine is consistent with DE Policy 1.2.3.**

DE Policy 1.2.4: The County shall require that Best Management Practices be utilized to protect water bodies, wetlands, and watercourses from contamination before, during, and after construction activities.

**Response: Mosaic will employ BMPs to protect water bodies, wetlands, and watercourses from contamination before, during, and after construction activities. For example, Mosaic will implement a minimum setback of 15 feet and an average (or greater) setback of 25 feet or more from wetlands. It will be accomplished by the BMP isolation ditch and berm system, which will be constructed (and grassed) around the perimeter of areas to be mined or disturbed. The ditch and berm system is a structural BMP that has proven effective in the elimination of offsite turbid runoff and soil erosion, while helping to prevent wildlife from migrating into development areas during the mining and reclamation stages of operation. Please refer to responses to FLUE Policies 1.12.7 and 1.12.9, CE Policies 1.2.10 and 1.7.3, DE Policies 1.1.1 and 1.1.2 above for more information. The proposed DeSoto Mine is consistent with DE Policy 1.2.4.**

DE Policy 1.2.5: The County shall require adequate easements for stormwater system maintenance and conveyance.

**Response: Noted. However, no easements for stormwater maintenance and conveyance are required. The proposed DeSoto Mine is consistent with DE Policy 1.2.5.**

DE Policy 1.2.6: New development and redevelopment shall be required to accommodate existing upland flows that presently discharge through the site.

**Response: Existing upland flows that presently discharge through the site are accommodated by the stormwater management design. Please refer to responses to FLUE Policies 1.12.7 and 1.12.9, CE Policies 1.2.10 and 1.7.3, and DE Policies 1.1.1 and 1.1.2 above for more information. The proposed DeSoto Mine is consistent with DE Policy 1.2.5.**

DE Policy 1.2.7: The cumulative effects of drainage from development, as it affects the overall drainage system, will be addressed during the development review process.

**Response: With respect to the cumulative effects of drainage from development, as it affects the overall drainage system, a Pre-Post Hydrology is provided in the MMP and OP application. See Appendix 3-3 for the Pre-Post Hydrology Report and Appendix 3-8 for the Streamflow Analysis. Also refer to responses to FLUE Policies 1.12.7 and 1.12.9, CE Policies 1.2.10 and 1.7.3, and DE Policies 1.1.1 and 1.1.2 above for more information. The proposed DeSoto Mine is consistent with DE Policy 1.2.7.**

DE Policy 1.2.8: Drainage from new developments shall not adversely impact the natural drainage features within the County.

**Response:** As discussed above drainage from the DeSoto Mine will not adversely affect natural drainage features within the County. Please refer to responses to FLUE Policies 1.12.7 and 1.12.9, CE Policies 1.2.10 and 1.7.3, and DE Policies 1.1.1 and 1.1.2 above. The proposed DeSoto Mine is consistent with DE Policy 1.2.8.

DE Policy 1.2.10(2): The discharge of runoff, wastewater, or other potential sources of contamination into surface waters resulting in the degradation of the quality of the receiving body below the standards set forth in Chapters 62-3, 62-4, 62-302, 62-520, 62-522 and 62- 550, F.A.C., (including anti-degradation provisions of section 62-4.242 (1)(a) and (b), 62-4.242(2) and (3) and 62-302.300, F.A.C.), and any special standards for Outstanding Florida Waters and Outstanding Natural Resources Waters set forth in Sections 62-4.242(2) and (3), F.A.C. (as required environmental resources permitting process) will be prohibited.

**Response:** Mosaic will not discharge runoff, wastewater, or other potential sources of contamination into surface waters resulting in a degradation of water quality below the standards referenced in the policy.

FDEP issued the ERP to Mosaic in 2017. Under Chapter 62-330, F.A.C., issuance of the ERP is based on a finding by the FDEP that the proposed activity (DeSoto Mine) will meet Class III surface water quality standards, as published in Rule 62-302.530, F.A.C.

Mine generated process water is subject to NPDES rules. All discharges must meet numerical effluent standards, which for phosphate mines are promulgated as Title 40 of the Code of Federal Regulations Part 436.180. These numerical effluent limitations are technology-based water quality limitations developed specifically for the phosphate rock mining category.

The quality of the discharged water must meet two additional sets of standards. The first set of these are water quality based effluent limitations, or WQBELs, which means that the discharges of water from a phosphate mine cannot cause the quality of the water in the receiving stream to violate the adopted state water quality standards. The second set of standards is that the discharged water cannot be toxic to aquatic organisms that inhabit the receiving streams. In addition to meeting surface water quality standards, discharges from the groundwater must meet FDEP groundwater quality standards. Given these high standards that must be met, the DeSoto Mine's proposed activities will not result in any adverse surface or ground water quality impacts below the standards referenced in the policy.

Mosaic understands the importance of the region's water resources. The Horse Creek Stewardship Program (HCSP) began monitoring in April of 2003 in response to a legal challenge filed by the Peace River/Manasota Regional Water Supply Authority (PRMRWSA) and others to the Manson Jenkins Tract (Manatee County) ERP application. See FDEP ERP # 0142476-003; see

**also *Manasota-88, Inc., et. al. v. IMC Phosphates & DEP*, DOAH Case No. 01-1080 -1081 (FDEP Final Order Nov. 25, 2002). The program is funded by Mosaic and managed by the PRMRWSA and has two purposes: 1) providing a protocol for collection of information on the physical, chemical, and biological characteristics of Horse Creek during Mosaic's mining activities in the watershed to detect any adverse conditions or significant trends that may occur as a result of mining, and 2) providing mechanisms for further evaluation and corrective action in the event detrimental changes or trends are found. Notably, since 2003, the program has never detected any adverse conditions or significant trends caused by mining in general or at the Manson Jenkins Tract in particular. Mining at the Manson Jenkins Tract is complete.**

**Given these high standards and existing and proposed monitoring, the DeSoto Mine's activities will not result in any adverse surface or ground water quality impact.**

**The proposed DeSoto Mine is consistent with DE Policy 1.2.10(2).**

DE Policy 1.2.10(3): The most current best management practices identified in the Handbook, Urban Runoff Pollution Prevention and Control Planning, EPA/625/R-93/004, September 1993 which control erosion and limit the amount of sediment reaching surface waters shall be used during all development activities.

**Response: Mosaic developed its phosphate mining BMPs for stormwater runoff and pollution prevention using the Handbook on Urban Runoff Pollution Prevention and Control Planning as its basis. These BMPs are provided in Appendix 2-6 (Mosaic's Stormwater Management Plan) of the MMP/OP applications. The proposed DeSoto Mine is consistent with DE Policy 1.2.10(3).**

DE Policy 1.2.10(6): Withdrawals from, or discharges to, surface waters which alter hydroperiods shall require the appropriate permits through the Florida Department of Environmental Protection, Southwest Florida Water Management District, or the U.S. Army Corp of Engineers, and shall not reduce the quality or productive capability of water dependent ecosystems.

**Response: Mosaic is obtaining the appropriate permits from state and federal agencies to engage in phosphate mining activities, including temporary alterations to hydroperiods. FDEP issued ERP No. MMR\_331292-001 to Mosaic on April 7, 2017. The SWFWMD has issued an IWUP to Mosaic authorizing the use of the Ft. Green production wells to facilitate mining and beneficiation plant operations at the DeSoto Mine. The proposed DeSoto Mine is consistent with DE Policy 1.2.10(6).**

DE Policy 1.2.10(7): Development proposals must demonstrate that post development discharges into surface waters, or diversion of freshwater inflow into surface waters, will not lower the quality or productive capability of the receiving water body. All development proposals which require

Environmental Resource Permits as provided by Chapter 40D-4 and 62-330, F.A.C., will be reviewed for consistency with the Goals, Objectives, and Policies of the Future Land Use and Sanitary Sewer, Solid Waste, Drainage, Potable Water, and Natural Groundwater Aquifer Recharge Elements of the DeSoto County Comprehensive Plan. All development proposals must demonstrate post development discharges into marine and estuarine systems, or waters which flow into estuarine systems will not adversely affect the aquatic system in questions. Such discharge must not exceed the legal limit for established surface water quality parameters to including, but not limited to, biological oxygen demand, dissolved oxygen, nutrients, bacteriological quality and turbidity, for the appropriate class water, as outlined in 62-302, F.A.C.

**Response: Mosaic's proposal will not result in post-development discharges that will lower the quality or productive capability of the receiving water body. Ardaman's hydrology analysis shows that peak flows at offsite critical points in response to the 25-year 24-hour rainfall event will be slightly lower in the post-reclamation conditions than in the pre-mining conditions. With respect to potential degradations of water quality, there will be none, consistent with Mosaic's response to DE Policy 1.2.10(2). The proposed DeSoto Mine is consistent with DE Policy 1.2.10(7).**

DE Policy 1.2.11: All development shall adhere to the National Flood Insurance Program Model Ordinance as adopted in the Land Development Regulations and all SWFWMD standards.

**Response: Mosaic's proposed mine will adhere to all National Flood Insurance Program provisions in the County's LDRs as well as all SWFWMD standards.**

**No mining or construction of permanent buildings or other permanent structures will be conducted within the 25-year floodplain as established through flood elevation mapping by the County, the SWFWMD, and/or the U.S. Geological Survey. Additionally, no mining, placement of permanent fill, construction of buildings or other permanent structures inside the 100-year floodplain are proposed as part of DeSoto Mine except as noted in association with the construction of the rail spur and mine access corridor crossings.**

**All rail spur and mine access corridor structures that fall within the 100-year floodplain adopted by DeSoto County (Map I-7) are designed to result in no net encroachment of the floodplain or adverse impacts to conveyance, storage, water quality, or adjacent lands. Dragline crossings and other temporary crossings to access mine infrastructure are proposed for the DeSoto Mine and will be constructed in accordance with the approved MMP/OP and state and federal permits. See also the responses to DE Policies 1.7.1 and 1.7.2 below.**

**The proposed DeSoto Mine is consistent with DE Policy 1.2.11.**

DE Policy 1.3.6: The County will develop a digital map of the drainage facilities within the County and require new developments to provide copies of their stormwater design for incorporation into the County's digital map.

**Response: Mosaic's Stormwater Management Plan for the mine has been provided to the County and may be found in the Appendix 2-6 of the MMP/OP applications. Also, please refer to Mosaic's response to DE Policy 1.1.1. The proposed DeSoto Mine is consistent with DE Policy 1.3.6.**

Objective 1.4: Correcting Facility Deficiencies. The County shall work to correct surface water management system deficiencies and to protect natural drainage features.

**Response: Mosaic will ensure that there will be no surface water management system deficiencies in connection with mine activities. Mosaic will also ensure that natural drainage features are protected. Specific Condition 17 of the ERP issued to Mosaic in 2017 requires Mosaic to maintain the Stormwater Management Plan ("SMP") attached to the ERP for the mine in accordance with the NPDES permit conditions. The SMP prescribes control measures to prevent or minimize the generation and potential for release of pollutants (i.e. waste materials, fuels, and chemicals) from the facility to waters of the state. It also ensures that there will be no net encroachment of the floodplain or adverse impacts to conveyance, storage, water quality, or adjacent lands. Please refer to Mosaic's responses below to this objective's implementing policies. The proposed DeSoto Mine is consistent with DE Objective 1.4.**

DE Policy 1.4.2: The County shall periodically request SWFWMD hydraulic maintenance reports for existing facilities and shall request a hydraulic report from the developer for all new developments upon completion of construction as a condition of the County's development review process.

**Response: Specific Condition 9 of the ERP issued to Mosaic requires Mosaic to submit hydrology, water quality, and vegetative monitoring reports to FDEP each year. Mosaic will also supply copies of these reports to the County each year. The proposed DeSoto Mine is consistent with DE Policy 1.4.2.**

DE Objective 1.5: Flood Control Level of Service. The County shall achieve and maintain the following adopted stormwater management level of service standards that shall meet or exceed state and federal regulations for stormwater quality and quantity.

**Response: Mosaic's proposed mine will achieve and maintain all applicable stormwater management level of service standards and meet or exceed state and federal regulations for stormwater quality and quantity. Please refer to Mosaic's responses below to this objective's implementing policies. The proposed DeSoto Mine is consistent with DE Objective 1.5.**

DE Policy 1.5.1: All new development and redevelopment shall provide stormwater retention and/or detention systems for peak attenuation and treatment.

**Response: Mosaic's proposed mine will include stormwater retention and detention for peak attenuation and treatment. Ardaman's hydrology analysis shows that peak flows at offsite critical points in response to the 25-year 24-hour rainfall event will be slightly lower in the post-reclamation conditions than in the pre-mining conditions. With respect to potential degradations of water quality, there will be none, consistent with Mosaic's response to DE Policy 1.2.10(2). Please refer to MMP/OP Supplemental Information Document §§ 2, 3, 4, 5 and 10 for more information. The proposed DeSoto Mine is consistent with DE Policy 1.5.1.**

DE Policy 1.5.2: At a minimum, the peak post-development runoff rate for stormwater management system shall not exceed the peak pre-development runoff rate for a 25-year/24-hour storm event.

**Response: The peak post-development runoff rate for stormwater will not exceed the peak pre-development runoff rate for a 25-year/24-hour storm event. Ardaman's hydrology analysis shows that peak flows at offsite critical points in response to the 25-year 24-hour rainfall event will be slightly lower in the post-reclamation conditions than in the pre-mining conditions. Please refer to the responses to FLUE Policies 1.12.7 and 1.12.9, CE Policies 1.2.10 and 1.7.3, DE Policies 1.1.1 and 1.1.2 above. The proposed DeSoto Mine is consistent with DE Policy 1.5.2.**

DE Policy 1.5.3: Until specific county standards are developed all structures shall be constructed per SWFWMD standards.

**Response: All mine-related stormwater management system structures will be constructed in accordance with the criteria of the SWFWMD ERP Basis of Review. The DeSoto Mine is consistent with DE Policy 1.5.3.**

DE Policy 1.5.4: At a minimum, the existing stormwater management systems and current levels of service shall be maintained.

**Response: Existing stormwater systems and the current levels of service will be maintained or improved upon by the DeSoto Mine's proposed plans. The DeSoto Mine is consistent with DE Policy 1.5.4.**

DE Policy 1.5.5: When appropriate stormwater treatment shall be required to serve the development through a stormwater treatment system, which is site-specific. Regardless of the area served, the stormwater treatment system must provide a level of treatment, which meets the requirements of the County's Land Development Regulations and the criteria of the Southwest Florida Water Management District.

**Response: Mosaic's proposed stormwater treatment systems will provide a level of treatment that meets the requirements of the County's LDRs and the criteria of the SWFWMD ERP Basis of Review. These systems are detailed in**

**the ERP issued to Mosaic in 2017 (see Specific Conditions 10 and 17), as well as the MMP and OP applications. The DeSoto Mine is consistent with DE Policy 1.5.5.**

DE Policy 1.5.6: Pollutant retardant structures that separate oils and greases from runoff shall be designed for all new applicable developments.

**Response: NPDES pollutant standards will apply (see Specific Condition 11 of the ERP) and any retardant structures for oil and grease, if required by FDEP, will be incorporated into the mine's design plans. The proposed DeSoto Mine is consistent with DE Policy 1.5.6.**

DE Policy 1.5.7: Whenever possible, natural conveyance systems shall be protected and used in lieu of man-made treatment and conveyance systems.

**Response: Where feasible, Mosaic's current plans, which allow balanced resource protection and recovery, have incorporated preserved and/or avoided natural conveyance systems. The ERP issued to Mosaic in 2017 demonstrates mined lands will result in a diverse mosaic of uplands and wetland natural systems using native vegetation indigenous to DeSoto County. Also refer to Mosaic's responses to FLUE Policies 1.3.8, 1.12.6(1) and 1.12.9 above. The proposed DeSoto Mine is consistent with DE Policy 1.5.7.**

DE Objective 1.7: Floodplain. The County shall protect the natural functions of the floodplain by restricting development within the 100-year floodplain as identified by the FEMA Floodplain Map to those uses which will not adversely affect the drainage function of the floodplain.

**Response: Mosaic will protect the natural functions of the 100-year floodplain by restricting development within the floodplain. Please refer to Mosaic's responses below to this objective's implementing policies. The proposed DeSoto Mine is consistent with DE Objective 1.7.**

DE Policy 1.7.1: The County's Land Development Regulations shall require compensating storage volumes for floodwater displaced by development.

**Response: Mosaic's proposed mine will not produce off-site flooding or require compensating storage volumes for floodwater because of the storage provided by the BMP Ditch and Berm Systems that will be installed, maintained and monitored throughout the life of the mine. The BMPs will isolate all mining and reclamation areas to prevent offsite discharges of process water except through monitored NPDES outfalls. The perimeter system is designed to contain a 25 year, 24 hour storm event, with collected storm water runoff routed into the DeSoto Mine's recirculation system for storage or discharge through permitted NPDES outfalls (see Specific Condition 11 of the ERP).**



**Thus, all active mine and reclamation areas that have not been reconnected by removal of the isolation BMP berm will serve as flood storage areas. As documented by Ardaman's hydrology modeling of the pre-mining and post reclamation hydrologic conditions of the DeSoto Mine, there are no adverse flooding impacts from the proposed development. Refer to MMP/OP Supplemental Information Document §§ 2, 3, and 5 for more information.**

**The proposed DeSoto Mine is consistent with DE Policy 1.7.1.**

DE Policy 1.7.2: Compensating storage volumes shall be provided between the seasonal high water level and the 100-year flood level to allow storage function during all lesser flood events.

**Response: Mining will not produce off-site flooding or require compensating storage volumes for floodwater because of the storage that will be provided by the BMP Ditch and Berm Systems that will be installed, maintained and monitored over the life of the mine. Refer to response to DE Policy Objective 1.7.1 above for more details. The proposed DeSoto Mine is consistent with DE Policy 1.7.2.**

DE Policy 1.7.3: The County shall require the developer to identify and certify by a qualified professional the limits of the 100-year floodplain on the development plans.

**Response: A qualified professional, Ardaman and Associates, Inc., has identified and certified the limits of the 100-year floodplain on the development plans as shown on Map 1-7. The proposed DeSoto Mine is consistent with DE Policy 1.7.3.**

DE Policy 1.7.4: The floodplain shall be protected by prohibiting uses determined to be incompatible, such as, industrial uses, sanitary landfills, wastewater treatment facilities, incinerators, animal feed lots, petroleum or pesticide storage facilities, above-ground or below-ground pipes (such as gas/petroleum lines) for pollutants or contaminants, any land use that stores, handles, or generates hazardous material or waste.

**Response: Mosaic will protect the floodplain by prohibiting incompatible uses within the floodplain. Map I-7 establishes the wetland and floodplain areas where mining is prohibited; all development proposed for the DeSoto Mine is outside of these prohibited areas. Additionally, Mosaic is not proposing any of the specified incompatible uses (industrial uses, sanitary landfills, wastewater treatment facilities, incinerators, animal feed lots, petroleum or pesticide storage facilities, above-ground or below-ground pipes (such as gas/petroleum lines) for pollutants or contaminants, or land uses that store, handle, or generate hazardous material or waste) within the 100-year floodplain identified in Map I-7. The proposed DeSoto Mine is consistent with DE Policy 1.7.4.**

## **VII. POTABLE WATER ELEMENT**

PWE Policy 1.1.1: The County's Level of Service for potable water supply shall be 102 gallons per person per day.

**Response:** The County's LOS methodology for potable water is based on population. According to the Bureau of Economic and Business Research (available online at <https://www.bebr.ufl.edu/population/data>), as of April 1, 2020, the population of unincorporated DeSoto County was estimated to be 29,096.

Although Mosaic anticipates that the DeSoto Mine will create employment opportunities, both directly with the mine and in related service industries, this does not mean that the mine will increase the residential demand for potable water services. The underlying maximum residential density established by the Rural/Agriculture designation will remain the same, and in any case the proposed mine will not include a residential component of any kind. Consequently, the DeSoto Mine will have no impact on the adopted LOS standards for potable water.

With respect to domestic and other ancillary water uses, the DeSoto Mine's beneficiation plant facility will include office space with bathrooms and kitchens. These bathrooms and kitchens will include several toilets and sinks that rely upon potable water, but there are currently no potable water services available in the area. Instead, Mosaic will rely upon an IWUP from the SWFWMD to meet these needs.

With respect to water supply sources for mine operations, they will include rainfall captured within the active footprint of the mine and beneficiation plant, groundwater contained in the overburden sands and the ore matrix materials, and groundwater withdrawn from the mine production wells at the Ft. Green Mine. Rainfall captured by the perimeter berms and onto active mining and reclamation areas will be the predominant source of water and the most variable. However, since the volume, frequency, and patterns of rainfall are highly variable and unpredictable, other sources of water will be required to provide a consistent and reliable source of water to the DeSoto Mine. Groundwater contained in the overburden sands and the ore matrix (i.e., interstitial water) will be a consistent and sizeable source of water. Groundwater volumes withdrawn from the Floridan aquifer will be highly variable and inversely related to rainfall. Water from the wells at the Ft. Green Mine will be transported via a pipeline originating at the well site(s) and extending for a distance of approximately 40 miles through Polk, Hardee, and DeSoto Counties to the DeSoto Mine.

**The proposed DeSoto Mine is consistent with PWE Policy 1.1.1.**

PWE Policy 1.2.3: The County will prohibit new development from utilizing wells and on- site treatment plants where central water service is available.

**Response: Currently, no centralized potable water services are available in the area. Mosaic will therefore rely upon an IWUP from the SWFWMD to meet domestic and other ancillary water uses at the beneficiation plant facility. Water supply sources for mine operations will include rainfall captured within the active footprint of the mine and beneficiation plant, groundwater contained in the overburden sands and the ore matrix materials, and groundwater withdrawn from the mine production wells at the Ft. Green Mine. The proposed DeSoto Mine is consistent with PWE Policy 1.2.3.**

PWE Objective 1.7: Wellhead Protection. The County shall enforce standards for the protection of public water supply wells and corresponding cones of influence.

**Response: Mosaic will protect public water supply wells and corresponding cones of influence. Please refer to Mosaic's responses below to this objective's implementing policies. The proposed DeSoto Mine is consistent with PWE Objective 1.7.**

PWE Policy 1.7.1: The County shall restrict all development activity within 200 feet of a public drinking water supply well.

**Response: No public drinking water supply wells are located within 1,000 feet of the proposed DeSoto Mine. The proposed DeSoto Mine is consistent with PWE Policy 1.7.1.**

PWE Policy 1.7.2: The County shall prohibit the following land uses within 1,000 feet of a public drinking water supply well:

- (1) Landfills
- (2) Facilities for the bulk storage, handling, or processing of materials on the Florida Substance List (ch. 442, F.S.)
- (3) Activities that require the storage, use, handling, production or transportation of restricted substances: i.e. agricultural chemicals, petroleum products (not including fuel pumps), hazardous/toxic wastes, industrial chemicals, medical wastes, etc.
- (4) Feedlots or other concentrated animal facilities
- (5) Wastewater treatment plants, percolation ponds, and similar facilities
- (6) Mines
- (7) Excavation of waterways or drainage facilities which intersect the water table

**Response: No public drinking water supply wells are located within 1,000 feet of the proposed DeSoto Mine. The proposed DeSoto Mine is consistent with PWE Policy 1.7.2.**

## **VIII. SANITARY SEWER ELEMENT**

SSE Policy 1.1.1: The County's adopted level of service for sanitary sewer capacity shall be 80 gallons per capita per day.

**Response: The County's LOS methodology for sanitary sewer is based on population. According to the Bureau of Economic and Business Research (available online at <https://www.bebr.ufl.edu/population/data>), as of April 1, 2020, the population of unincorporated DeSoto County was estimated to be 29,096.**

**Although Mosaic anticipates that the DeSoto Mine will create employment opportunities, both directly with the mine and in related service industries, this does not mean that the mine will increase the residential demand for sanitary sewer services. The underlying maximum residential density established by the Rural/Agriculture designation will remain the same, and in any case the proposed mine will not include a residential component of any kind. Consequently, the DeSoto Mine will have no impact on the adopted LOS standards for sanitary sewer.**

**The management of domestic sewage will be conducted through properly designed, constructed, and managed septic systems that will be permitted and installed in accordance with DeSoto County building codes and applicable state rules. Small amounts of detergents and solvents will be used in the offices and shops of the plant area for personal hygiene and plant maintenance. These materials will be treated within the onsite domestic wastewater treatment system or managed as solid wastes.**

**The proposed DeSoto Mine is consistent with SSE Policy 1.1.1.**

SSE Policy 1.2.3: The County will prohibit new development from utilizing septic tanks and prohibit the use of package wastewater treatment plants where central sewer service is available.

**Response: Central sewer service is not available in the area of the DeSoto Mine. Therefore, as indicated in the response to SSE Policy 1.1.1, the management of domestic sewage will be conducted through properly designed, construction, and managed septic systems that will be permitted and installed in accordance with DeSoto County building codes and applicable state rules. The proposed DeSoto Mine is consistent with SSE Policy 1.2.3.**

SSE Policy 1.4.4: For proposed new development, the County shall require either connection to the County's central sewer system to serve the development, or if central sewer is unavailable, septic tanks and dry sewer lines shall be installed, with said dry lines being utilized when sewer service has been extended to the development. Such system shall be at the developer's expense and shall not count towards any financial credit with the County's system.

**Response: Central sewer service is not available in the area of the DeSoto Mine. Therefore, as indicated in the response to SSE Policy 1.1.1, the management of domestic sewage will be conducted through properly designed, construction, and managed septic systems that will be permitted and installed in accordance with DeSoto County building codes and applicable state rules. The proposed DeSoto Mine is consistent with SSE Policy 1.4.4.**

SSE Objective 1.5: Septic Tanks. The County shall discourage and limit the use of septic tanks in areas with soils not suited to support septic tank discharge and where development densities support central sewer connection.

**Response: As indicated in the response to SSE Policy 1.1.1, the management of domestic sewage will be conducted through properly designed, construction, and managed septic systems that will be permitted and installed in accordance with DeSoto County building codes and applicable state rules. The permitting process will require confirmation that soils are suitable to support septic tank discharges. The proposed DeSoto Mine is consistent with SSE Objective 1.5.**

## **IX. SOLID WASTE ELEMENT**

SWE Objective 1.1: Solid Waste Disposal. The County shall coordinate the disposal of solid waste throughout the planning horizon in a safe and efficient manner.

**Response: Mosaic will coordinate the disposal of solid waste in a safe and efficient manner. Please refer to Mosaic's responses below to this objective's implementing policies. The proposed DeSoto Mine is consistent with SWE Objective 1.1.**

SWE Policy 1.1.1: The County's minimum level of service for solid waste will be 2.75 pounds per person per day, which will be utilized to plan for future demand.

**Response: The County's LOS methodology for solid waste is based on population. According to the Bureau of Economic and Business Research (available online at <https://www.bebr.ufl.edu/population/data>), as of April 1, 2020, the population of unincorporated DeSoto County was estimated to be 29,096.**

**Although Mosaic anticipates that the DeSoto Mine will create employment opportunities, both directly with the mine and in related service industries, this does not mean that the mine will increase the residential demand for solid waste services. The underlying maximum residential density established by the Rural/Agriculture designation will remain the same, and in any case the proposed mine will not include a residential component of any kind. Consequently, the DeSoto Mine will have no impact on the adopted LOS standards for solid waste.**

**Mosaic intends to rely upon the Section 16 Landfill to provide for offsite disposal of construction and demolition waste, as well as non-hazardous solid waste while the proposed beneficiation plant is in operation. The Section 16 Landfill has adequate capacity to serve the solid waste needs of the mine. Small amounts of detergents, solvents, oils, and greases used in the offices and shops of the plant area will be managed as provided below:**

- **Used oil filters will be collected in drums and picked up by vendor for off-site crushing and disposal in accordance with appropriate waste regulations**
- **Waste grease will be collected and stored at onsite-designated locations in approved containers and disposed of or recycled by appropriate methods**
- **Batteries will be collected in approved locations throughout the facility and picked up for recycling by an appropriate vendor**
- **Vehicle tires will be exchanged by tire distributor. Tires that are found or dumped on mine property will be collected and transported to a landfill permitted to handle this class of wastes**

- **Trash will be collected in dumpsters located throughout the plant site and will be picked up and emptied by vendor for disposal at the County landfill**
- **Additional roll-off containers will be used for construction debris and emptied on an as-needed basis**
- **Spent solvents will be collected and recycled by an appropriate vendor**
- **Used oil generated in various locations throughout the plant and mine will be stored in above ground storage tanks or drums**
- **Tanks and drums will be pumped out by vendor for recycling at their facility**

**Offices, warehouses, and labs will also produce typical administrative solid wastes, primarily paper. This material will be collected and transported to the nearest County landfill or recycled as available.**

**The proposed DeSoto Mine is consistent with SWE Policy 1.1.1.**

SWE Policy 1.3.2: Solid waste collection shall be mandatory for all commercial and industrial land uses within the County limits through the use of franchised haulers or self-hauling.

**Response: As indicated in the response to SWE Policy 1.1.1, Mosaic intends to rely upon the Section 16 Landfill to provide for offsite disposal of construction and demolition waste, as well as non-hazardous solid waste while the proposed beneficiation plant is in operation. Mosaic will utilize either franchised haulers or self-haul these solid wastes to the landfill. The proposed DeSoto Mine is consistent with SWE Policy 1.3.2.**

## **X. CONSERVATION ELEMENT**

CE Objective 1.1: Air Quality. DeSoto County shall prevent degradation of air quality in the County through development regulations and coordination with appropriate agencies and shall continue to meet acceptable ambient air quality standards set by the Florida Department of Environmental Protection.

**Response: Mosaic will prevent the degradation of air quality in the County by coordinating with appropriate agencies and will continue to meet acceptable ambient air quality standards set by the FDEP. Please refer to Mosaic's response below to this objective's implementing policy. The proposed DeSoto Mine is consistent with CE Objective 1.1.**

CE Policy 1.1.2: DeSoto County shall require new developments that discharges gases or particulates into the air to meet the minimum air quality standards as defined in Chapter 62.024, F.A.C., as amended from time to time.

**Response: The proposed DeSoto Mine will meet the minimum air quality standards as defined in Chapter 62-024, F.A.C. Air quality impacts from phosphate mining are very similar to agricultural activities. This similarity is due to the fact that the majority of the heavy equipment / machinery used for phosphate mining and material transportation (i.e. dragline, pumps, pipelines, etc.) are electrically powered and is accomplished by creating a slurry from the ore with water (wet process). Fugitive dust will be minimized through the implementation of BMPs including vegetated berms. There will be minimal emission from vehicles and mobile equipment. Consequently, ambient air quality will continue to meet acceptable air quality standards. The MMP and OP applications provide additional information of compliance with the requirements of the LDRs. The proposed DeSoto Mine is consistent with CE Policy 1.1.2.**

CE Objective 1.2: Groundwater Resources. The quality of DeSoto County's groundwater resources shall not be degraded, either directly or indirectly, by human influences below the minimum criteria for groundwater provided in Chapter 62-520-400 F.A.C., and shall be maintained, or as necessary improved, in a responsible and sustainable manner, to ensure the availability or quality of this resource for present and future generations.

**Response: The quality of DeSoto County's groundwater resources will not be degraded, either directly or indirectly, below the minimum criteria for groundwater provided in Chapter 62-520.400 F.A.C., and will be maintained, or as necessary improved, in a responsible and sustainable manner, to ensure the availability of quality of this resource for present and future generations.**

**Mosaic will implement a groundwater quality monitoring program. Baseline groundwater quality monitoring locations have been established to provide spatially-distributed groundwater quality information for the project site to**



account for geologic variability, watershed characteristics, and surface boundaries and features. A total of nine groundwater wells grouped in clusters of three were established in the 1990s to obtain baseline groundwater quality, aquifer characteristics, and hydrogeologic characteristics across the project site. Those monitoring wells are designated with a prefix of “PNL”. Each of the three clusters represents a unique hydrologic setting within the project site.

- Cluster PNL-GW-1, 2, 3 is located near State Road 72 near the southern extent of the project site.
- Cluster PNL-GW-7, 8, 9 is located near State Road 70 in the northwestern corner of the project site in the Buzzard Roost Branch Tributary watershed.
- Cluster PNL-GW-10, 11, 12 is located in the northeastern corner of the project site in the Oak Hill Branch watershed.

The nine PNL well locations have been and will continue to be monitored quarterly/monthly to determine water elevations. Those wells will also be used to monitor a subset of field measured water quality parameters. Groundwater quality sampling results will be provided to the County annually following the commencement of mining on the property.

**The proposed DeSoto Mine is consistent with CE Objective 1.2.**

CE Policy 1.2.1: Except for bona fide agricultural operations and incidental domestic uses, land use activities which utilize, store, or generate hazardous materials, or which involve the bulk storage or continuous transmission or petroleum products or other hazardous substances, shall be prohibited within recharge areas for the immediate [sic] aquifer system, and within cones of influence and watershed areas for public water supply wells. The agricultural and domestic exemptions shall not be construed to relieve those activities from compliance with applicable State and Federal regulations pertaining to the installation and use of above- or below-ground storage tanks, or other structures or improvements intended for the use, storage, or generation of petroleum products or other hazardous substances. These land use activities shall be required to design [sic] be designed consistent with Chapter 3-5, Article XV, Surface Water and Wetland Protection.

**Response: The proposed DeSoto Mine will not utilize, store, or generate hazardous materials, or involve the bulk storage or continuous transmission of petroleum products or other hazardous substances, within recharge areas for the immediate aquifer system, or within cones of influence and watershed areas for public water supply wells.**

**First, with respect to protecting recharge areas for the intermediate aquifer system, CE Policy 1.2.15 provides that “DeSoto County shall protect groundwater recharge areas throughout the County by requiring properly functioning stormwater management systems meeting drainage LOS standards and a minimum percentage of 15% pervious open space for all non-residential development projects and a minimum of 25% pervious open space**

for residential development projects.” Mosaic will observe a minimum percentage of 15% pervious open space at the proposed DeSoto Mine. And as explained in connection with the Drainage Element and Capital Improvements Element policies governing drainage level of service (LOS), the proposed DeSoto Mine will conform to all applicable drainage LOS standards.

Second, with respect to protecting cones of influence and watershed areas for public water supply wells, pending the SWFWMD’s development of a comprehensive wellhead protection program identifying cones of influence and water recharge areas (see CE Policy 1.3.1), Mosaic will not engage in any mining activities within 1,000 feet from the base of a public supply potable water wellfield. This distance is well beyond the 400-foot radius “interim measure” established in CE Policy 1.3.2. as a cone of influence and wellhead protection area.

Ultimately, no junkyards, gas stations, vehicle repair facilities, or underground storage tanks are proposed within these 1,000 feet, and Mosaic does not seek nor request approval for the storage or use of hazardous materials or wastes, as regulated by the FDEP, within these areas.

**The proposed DeSoto Mine is consistent with CE Policy 1.2.1.**

CE Policy 1.2.10: All requests for development shall be reviewed to ensure that potential impacts of the proposed development do not degrade the water quality and quantity of groundwater resources.

**Response: The proposed DeSoto Mine will not degrade the water quality and quantity of groundwater resources. An Industrial Wastewater (IW) Facility Permit must be issued by FDEP prior to construction of the Mine. The IW permit will require groundwater quality standards to be met. Nonetheless, in compliance with the DeSoto County Phosphate Mining Ordinance 2012-06, an Environmental Monitoring Program will be implemented, as described in the MMP and OP applications. The monitoring program consists of ground and surface water quantity and water quality sampling prior to mining, during mining and after reclamation is completed to insure the quality and quantity of groundwater resources are not degraded. Please refer to Specific Condition 11 of the ERP and MMP/OP Supplemental Information Document §§ 1 through 5 for additional information. The proposed DeSoto Mine is consistent with CE Policy 1.2.10.**

CE Policy 1.2.11: To promote the conservation of groundwater, DeSoto County shall encourage the use of Best Management Techniques, which include landscaping that requires less irrigation, the use of solid waste compost, efficient irrigation systems, and the prohibition of exotic plant species.

**Response: Mosaic will employ the use of chemical, mechanical, fire, hydrologic, and manual techniques to control and remove nuisance and exotic species within mitigation sites, which should promote the conservation of groundwater consistent with this policy. The proposed DeSoto Mine is consistent with CE Policy 1.2.11.**

CE Objective 1.3: Wellfield Protection. The County shall enforce provisions in its land development regulations for the conservation and protection of the quality and quantity of current and projected water sources, high natural aquifer recharge areas and public supply potable water wells.

**Response: Mosaic will comply with all provisions in the County's LDRs regarding the conservation and protection of the quality and quantity of current and projected water sources, high natural recharge areas and public supply potable water wells. No public drinking water supply wells are located within 1,000 feet of the proposed DeSoto Mine. The proposed DeSoto Mine is consistent with CE Objective 1.3.**

CE Objective 1.4: Surface Water. DeSoto County shall pursue identification, conservation, protection, and restoration of surface waters from known and identifiable pollution sources. The surface waters of DeSoto County shall be protected to ensure that their quality is maintained or improved to, at a minimum meet the standards established by Chapter 62-302, F.A.C. and the Clean Water Act, 3 USC 1251.

**Response: Mosaic will protect the surface waters of DeSoto County to ensure that their quality is maintained or improved to, at a minimum, meet the standards established by Chapter 62-302, F.A.C. Please refer to Mosaic's responses below to this objective's implementing policies. The proposed DeSoto Mine is consistent with CE Objective 1.4.**

CE Policy 1.4.1: Except for bona fide agricultural operations and incidental domestic uses, land use activities which utilize, store, or generate hazardous materials, or which involve the bulk storage or continuous transmission or petroleum products or other hazardous substances, shall be prohibited within any area included within the Special Surface Water Protection Overlay District or within any Conservation Overlay District. The agricultural and domestic exemptions, all which are reviewed prior to the issuance of the approved exemption, shall not be construed to relieve these activities from compliance with applicable State and Federal regulations pertaining to the installation and use of above- or below-ground storage tanks, or other structures or improvements intended for the use [sic], storage, or generation of petroleum products or other hazardous substances.

**Response: Notwithstanding the reference in the policy, it is unclear whether DeSoto County has adopted a Special Surface Water Protection Overlay District. Said map does not form part of the adopted Plan and Mosaic could not otherwise locate it.**

**Nevertheless, Mosaic does not propose any mining within the Peace River, Joshua Creek, or Prairie Creek, or those portions of Horse Creek shown on Map I-7. Consequently, Mosaic also does not propose utilizing, storing, or generating hazardous materials, or engaging in the bulk storage of continuous transmission of petroleum products or other hazardous substances within these surface waters.**

**The proposed DeSoto Mine is consistent with CE Policy 1.4.1.**

CE Policy 1.4.2: DeSoto County shall protect its surface waters through implementation of the following standards and guidelines:

(1) On-site sewage disposal systems, including their associated drain fields, will be located as far landward as feasible on waterfront properties so as to reduce or prevent unnecessary nutrient and pathogen loading into surface waters.

**Response: Any sewage disposal systems submitted with the building permits for the plant or administrative offices will adhere to this policy. The proposed DeSoto Mine is consistent with CE Policy 1.4.2(1).**

(2) The discharge of runoff, wastewater, or other potential sources of contamination into surface water resulting in the degradation of the quality of the receiving body below the standards set forth in, but not limited to, Chapter 62-, 62-4, 62-302, 626-520, 62-522, and 62-550, F.A.C., (including any anti-degradation provisions of section 62-4.242 (1)(a) and (b), 612-4.242(2) and (3) and 62-302.300, F.A.C.), and any special standards for Outstanding Florida Waters and Outstanding Natural Resources Waters set forth in Section 62-4.242(2) (3), F.A.C. (as required for environmental resources permitting process) will be prohibited.

**Response: Under Chapter 62-330, F.A.C., issuance of the ERP is based on a finding by the FDEP that the proposed activity (DeSoto Mine) will meet Class III surface water quality standards, as published in Rule 62-302.530, F.A.C. The Florida Department of Environmental Protection issued ERP No. MMR\_331292-001 to Mosaic on April 7, 2017.**

**Mine generated process water is subject to NPDES rules (see Specific Condition 11 of the ERP). All discharges must meet numerical effluent standards, which for phosphate mines are promulgated as Title 40 of the Code of Federal Regulations Part 436.180. These numerical effluent limitations are technology-based water quality limitations developed specifically for the phosphate rock mining category.**

**The quality of the discharged water must meet two additional sets of standards. The first set of these are water quality based effluent limitations, or WQBELs, which means that the discharges of water from a phosphate mine cannot cause the quality of the water in the receiving stream to violate the adopted state water quality standards. The second set of standards is that the**

discharged water cannot be toxic to aquatic organisms that inhabit the receiving streams. In addition to meeting surface water quality standards, discharges from the groundwater must meet FDEP groundwater quality standards. Given these high standards that must be met, the DeSoto Mine's proposed activities will not result in any adverse surface or ground water quality impacts.

Mosaic understands the importance of the region's water resources. The Horse Creek Stewardship Program (HCSP) began monitoring in April of 2003 in response to a legal challenge filed by the Peace River/Manasota Regional Water Supply Authority (PRMRWSA) and others to the Manson Jenkins Tract (Manatee County) ERP application. See FDEP ERP # 0142476-003; see also *Manasota-88, Inc., et. al. v. IMC Phosphates & DEP*, DOAH Case No. 01-1080 -1081 (FDEP Final Order Nov. 25, 2002). The program is funded by Mosaic and managed by the PRMRWSA and has two purposes: 1) providing a protocol for collection of information on the physical, chemical, and biological characteristics of Horse Creek during Mosaic's mining activities in the watershed to detect any adverse conditions or significant trends that may occur as a result of mining, and 2) providing mechanisms for further evaluation and corrective action in the event detrimental changes or trends are found. Notably, since 2003, the program has never detected any adverse conditions or significant trends caused by mining in general or at the Manson Jenkins Tract in particular. Mining at the Manson Jenkins Tract is complete.

Given these high standards and existing and proposed monitoring, the DeSoto Mine's activities will not result in any adverse surface or ground water quality impact.

**The proposed DeSoto Mine is consistent with CE Policy 1.4.2(2).**

(3) The most current best management practices identified in the Handbook, Urban Runoff Pollution Prevention and Control Planning, EPA/625/R-93/004, September 1993 which control erosion and limit the amount of sediment reaching surface waters shall be used during all development activities.

**Response: Best management practices for stormwater runoff and pollution prevention and control have been developed for phosphate mining using the Handbook on Urban Runoff Pollution Prevention as its basis. These BMPs are provided in the MMP/OP applications (Mosaic's Stormwater Management Plan). The proposed DeSoto Mine is consistent with CE Policy 1.4.2(3).**

(4) Removal or control of submerged, emergent, or floating vegetation shall be limited to that necessary to provide reasonable access to aquatic weed control and conducted according to the guidelines provided in Chapter 62C-20 F.A.C., as permitted by the Florida Department Environmental Protection and in compliance with control standards outlined in Environmental

Control, F.S. 403 and 369. This policy shall not apply to the removal of nuisance species such as hydrilla, water hyacinth, or water lettuce.

**Response: The ERP issued to Mosaic in 2017 will limit the removal or control of submerged, emergent, or floating vegetation and thus ensure compliance with this policy. The proposed DeSoto Mine is consistent with CE Policy 1.4.2(4).**

(5) DeSoto County will continue to provide treatment for the control of aquatic weeds and mosquitoes as governed by Chapter 388 F.S. and where feasible, use non-chemical means and best management practices as alternatives to insecticides and herbicides.

**Response: Noted.**

(6) Withdrawal from, or discharges to, surface waters which alter hydroperiods shall require the appropriate permits through the Florida Department of Environmental Protection, Southwest Florida Water Management District, or the Army Corps of Engineers, and shall not reduce the quality or productive capability of water dependent ecosystems.

**Response: Mosaic will obtain all required permits for proposed withdrawals from, or discharges to, surface waters, and said withdrawals will not cause a reduction in the quality or productive capability of water dependent ecosystems. Consistent with the ERP issued to Mosaic in 2017, surface and groundwater modeling will be conducted to verify that the final post-reclamation topography and lithology will maintain the existing range of hydroperiods and provide adequate groundwater seepage to preserved wetlands and other surface waters. Data from the existing monitoring wells and others installed as a requirement of other required permits will be used to help determine the appropriate hydroperiods that should be maintained. Modeling results will be submitted to FDEP for approval. In addition to the modeling reports, Mosaic will provide FDEP waste disposal and reclamation plans, if modifications are required to these plans that ensure reclaimed subsurface flows will maintain the existing range of hydroperiods of the preserved wetland and other surface waters. The plans will include an analysis of post-reclamation topography, mine cut directions, sand tailings, and overburden depths and locations, the locations of any overburden saddles and overburden composition. Only FDEP approved modeling and disposal/reclamation plans will permit Mosaic to proceed with contouring of areas adjacent to preserved wetlands. See also Specific Conditions 15, 18, 24, 26, 28, and 31 of the ERP. The proposed DeSoto Mine is consistent with CE Policy 1.4.2(6).**

(7) Development proposals must demonstrate the post development discharges into surface waters, or diversion of freshwater inflow into surface waters, will not lower the quality or productive capability of the receiving water body. All development proposals which require Environmental

Resource Permits as provided by Chapter 40D-4 and 62-330, F.A.C., will be reviewed for consistency with the other Elements of the Comprehensive Plan.

**Response: Post development discharges into surface waters, or diversion of freshwater inflow into surface waters, will not lower the quality or productive capability of the receiving water body.**

Under Chapter 62-330, F.A.C., issuance of an ERP documents that the proposed activity (DeSoto Mine) will meet Class III surface water quality standards, as published in Rule 62-302.530, F.A.C. FDEP issued ERP No. MMR\_331292-001 to Mosaic on April 7, 2017.

Mine generated process water also is subject to NPDES rules (see Specific Condition 11 of the ERP). These discharges must meet numerical effluent standards, which for phosphate mines are promulgated as Title 40 of the Code of Federal Regulations Part 436.180 and Rule 62-302.530, F.A.C. These numerical effluent limitations are technology-based water quality limitations developed specifically for the phosphate rock mining category.

The quality of the discharged water must meet two additional sets of standards. The first set of these are water quality based effluent limitations, or WQBELs, which means that the discharges of water from a phosphate mine cannot cause the quality of the water in the receiving stream to violate the adopted state water quality standards. The second set of standards is that the discharged water cannot be toxic to aquatic organisms that inhabit the receiving streams. Given these high standards, the DeSoto Mine's proposed activities will not result in any adverse surface or ground water quality impacts.

**The proposed DeSoto Mine is consistent with CE Policy 1.4.2(7).**

(8) All development proposals must demonstrate post development discharges into marine and estuarine systems, or waters which flow into estuarine systems will not adversely affect the aquatic system in question. Such discharge must not exceed the legal limit for established surface water quality parameters, including but not limited to, biological oxygen demand, dissolved oxygen, nutrients, bacteriological quality and turbidity, for the appropriate class water, as outlined in 62-302, F.A.C.

**Response: Post development discharges into marine and estuarine systems, or waters which flow into estuarine systems, will not adversely affect aquatic systems.**

Under Chapter 62-330, F.A.C., issuance of an ERP documents that the proposed activity (DeSoto Mine) will meet Class III surface water quality standards, as published in Rule 62-302.530, F.A.C. FDEP issued ERP No. MMR\_331292-001 to Mosaic on April 7, 2017.

**Mine generated process water is also subject to NPDES rules (see Specific Condition 11 of the ERP). These discharges must meet numerical effluent standards, which for phosphate mines are promulgated as Title 40 of the Code of Federal Regulations Part 436.180 and Rule 62-302.530, F.A.C. These numerical effluent limitations are technology-based water quality limitations developed specifically for the phosphate rock mining category.**

**The quality of the discharged water must meet two additional sets of standards. The first set of these are water quality based effluent limitations, or WQBELs, which means that the discharges of water from a phosphate mine cannot cause the quality of the water in the receiving stream to violate the adopted state water quality standards. The second set of standards is that the discharged water cannot be toxic to aquatic organisms that inhabit the receiving streams.**

**Given these high standards, the DeSoto Mine's proposed activities will not result in any adverse surface or ground water quality impacts.**

**The proposed DeSoto Mine is consistent with CE Policy 1.4.2(8).**

CE Policy 1.4.3: The County shall identify and require the creation of upland buffer zones, in accordance with the regulations of the water management districts, between development and surface water, environmentally sensitive areas, and wetlands in order to protect these natural resources from the activities and impacts of development.

CE Policy 1.4.5: Buffer zones shall serve as protection to surface water from intrusive activities and impacts of development.

**Response: With respect to both CE Policies 1.4.3 and 1.4.5, Mosaic will create upland buffer zones between the DeSoto Mine and surface waters, environmentally sensitive areas, and wetlands in or order to protect these natural resources from the activities and impacts of development.**

**Mosaic will implement a minimum setback of 25 feet from avoided wetlands, which will be accomplished by the BMP ditch and berm system that Mosaic will construct (and grass) around the perimeter areas to be mined and/or disturbed. The ditch and berm system is a structural BMP that has proven effective in the elimination of offsite turbid runoff and soil erosion, while helping to prevent wildlife from migrating into development areas during the mining and reclamation stages of operation.**

**The proposed DeSoto Mine is consistent with CE Policies 1.4.3 and 1.4.5.**



CE Policy 1.4.7: DeSoto County shall require all new development within the County to conform to the drainage level of service standards and design criteria of Southwest Florida Water Management District.

**Response:** As explained in connection with the Drainage Element and Capital Improvements Element policies governing drainage level of service (LOS), the proposed DeSoto Mine will conform to all applicable drainage LOS standards. Please refer to Mosaic's responses to DE Policy 1.1.1 and CIE Policy 1.2.1 for more information. Additionally, pursuant to an interlocal agreement between the FDEP and the SWFWMD, the FDEP – not the SWFWMD – reviews mine proposals against applicable design criteria. In 2017, the FDEP issued an ERP for the DeSoto Mine, thereby ensuring that the applicable design criteria have been satisfied. The proposed DeSoto Mine is consistent with CE Policy 1.4.7.

CE Policy 1.4.8: DeSoto County shall strive to restore degraded wetlands and floodplains adjacent to surface waters in order to improve the quality of runoff into these surface waters.

**Response:** In connection with post-mining and reclamation activities, Mosaic will restore degraded wetlands and floodplains adjacent to surface waters in order to improve the quality of runoff into these surface waters.

Approximately 62% percent of the DeSoto Site has been converted into agriculture (i.e., pasture and crops), single-family and industrial units, upland cut ditches, and livestock watering ponds. This land conversion has fragmented the native cover communities, including portions of the Horse Creek, Brandy Branch, Buzzard Roost Branch, and tributaries to these systems' riparian corridors. Historical aerial photographs and site reviews confirm this conversion to various agricultural uses. With respect to use of the land, the entire site has been used for decades for cattle grazing and farming (i.e., row crops, sod, citrus, etc.).

Most of the marsh systems onsite have been ditched and the surrounding land has been converted to pasture or row crop fields. Mosaic has determined that due to the historic disturbance/ditching that has occurred onsite, mining and reclaiming these types of systems would provide greater ecological value than leaving them in the existing condition. As is the case with the freshwater marshes, many of the forested wetlands are surrounded by pasture and row crops fields. By providing forested upland buffers to these wetland types in the post reclamation condition will result in improved functional values and the width of the forested habitat corridor will be expanded.

**The proposed DeSoto Mine is consistent with CE Policy 1.4.8.**

CE Objective 1.5: Wetland Protection. Wetlands and the natural functions of wetlands shall be conserved, protected, and restored from activities which alter their physical and hydrological nature to ensure the filtration of water to enhance water quality, provide flood control, maintain

wildlife habitat, and offer recreational opportunities, which enhance the quality of life in DeSoto County.

**Response: Mosaic will conserve, protect, and restore wetlands and their natural functions. Mosaic will also ensure that wetlands continue to enhance water quality, provide flood control, maintain wildlife, and offer recreational opportunities. Please refer to Mosaic's responses below to this objective's implementing policies. The proposed DeSoto Mine is consistent with CE Objective 1.5.**

CE Policy 1.5.1: The County, as part of its development review process, shall require the coordination of development plans with the Florida Department of Environmental Protection, the Southwest Florida Water Management District or other appropriate regulatory agency, to assist in monitoring land uses which may impact potential wetlands as shown on the National Wetlands Inventory (shown as part of the Conservation Overlay Area on the FLUM).

**Response: With respect to potential wetland impacts (including those shown on the National Wetlands Inventory), Mosaic is coordinating its development plans with the appropriate state and federal regulatory agencies. FDEP approved of the elimination, reduction, and mitigation strategies proposed by Mosaic by granting an Environmental Resource Permit on April 7, 2017. A Clean Water Act Section 404 dredge and fill permit application for proposed wetland impacts has been submitted to the U.S. Army Corps of Engineers, though will now be processed by the FDEP as the Environmental Protection Agency approved FDEP's assumption of the Clean Water Act Section 404 program in December 2020. Before a Clean Water Act Section 404 permit is issued, the relevant agency must determine that the required avoidance, minimization, and mitigation requirements have been met. Both of these permits undergo exacting scrutiny by experienced biologists, ecologists, engineers, and other experts, and will be in place before any disturbance occurs on the site. Copies of the ERP and additional information responses have been provided to the County for a coordinated review of the development plans. The proposed DeSoto Mine is consistent with CE Policy 1.5.1.**

CE Policy 1.5.2: The County shall require that all development proposals be accompanied by evidence that an inventory of wetlands; soils posing severe limitations to construction; unique habitat; endangered species of wildlife and plants; significant historic structures and/or sites; has been conducted.

**Response: Mosaic has submitted evidence that an inventory of wetlands, soils posing severe limitations to construction, unique habitat, endangered species of wildlife and plants, and significant historic structures and/or sites has been conducted. Qualified professional determinations regarding environmental limitations within the DeSoto Mine have been approved and/or submitted to the FDEP and or to the applicable agency with jurisdiction. The wetland delineations, stream delineations, UMAM wetland scores and listed species**

**surveys have been field-verified by FDEP. The ERP, MMP and OP applications contain and generally reference applicable inventories, reports, and surveys addressing wetlands and surface waters, soils, floodplains, wildlife and wildlife habitat, and historical and cultural resources as well as additional information regarding the existing and proposed post reclamation soils. The proposed DeSoto Mine is consistent with CE Policy 1.5.2.**

CE Policy 1.5.4: The County shall prohibit all development within wetlands that upon completion of construction, including mitigation and/or reclamation, and within acceptable time frame, as designated within an approved permit, does not maintain or improve the function of biological systems at the site. Functions that may be considered include, but are not limited to:

- (1) Provision of wildlife and fisheries habitat;
- (2) Maintenance of in-stream flows and lake levels during periods of high and/or low rainfall;
- (3) Erosion control;
- (4) Water quality enhancement; and
- (5) Natural vegetative communities

**Response: The proposed DeSoto Mine will, upon completion of construction (including mitigation and/or reclamation), and within an acceptable timeframe as designated within an approved permit, maintain or improve the function of biological systems at the site, including but not limited to the functions identified in the policy. FDEP issued the ERP to Mosaic in 2017. The Uniform Mitigation Assessment Method (UMAM) was utilized to determine the mitigation needed to offset the wetland impacts of the proposed project and to provide a net environmental benefit. The ERP contains timeframes for beginning and completing mitigation, as well as seeking the release of mitigation sites post-reclamation. See Specific Conditions 21, 29, and 31 to the ERP. Please also refer to the responses to FLUE Policies 1.3.8, 1.12.6(1) and 1.12.9 above. The proposed DeSoto Mine is consistent with CE Policy 1.5.4.**

CE Policy 1.5.5: Development within wetlands shall conform to the following criteria:

- (1) All permits from an agency with jurisdiction shall be approved prior to issuance of a final development order;
- (2) All new development or redevelopment shall be designed to avoid impacts to wetlands. Where impacts cannot be avoided, impacts shall be minimized and shall be mitigated by wetland compensation or wetland enhancement. Wetland impacts, where unavoidable and where properly mitigated, as determined by state or federal agencies having jurisdiction, shall be permitted for:
  - (a) Access to the site
  - (b) Internal traffic circulation, where other alternatives do not exist, or for purposes of public safety;
  - (c) Utility transmission lines;
  - (d) Pre-treated stormwater management;

- (e) Preventing all beneficial use of the property from being precluded. If a site is such that all beneficial use of the property will be precluded due to wetland restrictions, the property shall be developed at a density of one dwelling unit per 20 acres;
- (f) If buildable uplands are available, residential development shall be clustered away from wetlands such that wetlands and their functions are protected;
- (g) If buildable uplands are available on site, but the proposed development will cause or result in a disturbance of wetlands, residential development shall be transferred from the wetland portions of the site to the non-wetland portions at a density of one dwelling unit per 10 acres, unless otherwise listed within this Plan, and the unavoidable impact to wetlands be mitigated; and
- (h) Development activities subject to state or federal mining reclamation requirements that ensure the maintenance or improvement of biological systems at the site.

**Response: With respect to CE Policy 1.5.5(1), all applicable permits will be obtained prior to issuance of a final Development Order. With respect to CE Policy 1.5.5(2), the DeSoto Mine has been designed to avoid impacts to the greatest extent practicable. The phosphate ore beneath the proposed DeSoto Mine is of sufficient volume and quality that all of the land as proposed is economically mineable. Phosphate is a primary ingredient in fertilizer, which is a necessary soil supplement for commercial agriculture, thus providing a substantial public benefit in the production of the world food supply. Restrictions on mining any of the land results in failure to maximize recovery of this unique natural phosphate resource. There are no practical alternatives that both preserve existing onsite wetlands and permit recovery of the otherwise mineable phosphate reserves, thus the wetland impacts proposed for the DeSoto Mine are unavoidable. Issuance of the ERP by the FDEP documents design modifications that either eliminate or reduce adverse impacts with compensatory mitigation to achieve a net gain of wetland functions have been incorporated into the design. It also constitutes a finding that all practicable design modifications have been made to avoid wetland impacts. The ERP ensures that the DeSoto Mine avoids impacts to wetlands to the greatest extent practicable. The proposed DeSoto Mine is consistent with CE Policy 1.5.5.**

CE Policy 1.5.6: Mitigation activities for impacting wetland areas will be permitted when the mitigation activities are intended and designed to restore wetland areas to their natural conditions, including water flows, hydroperiods, and native vegetative communities. Mitigation of wetland impacts will be allowed when permits authorizing the mitigation have been obtained from the Southwest Florida Water Management District, the Florida Department of Environmental Protection, and/or the U.S. Army Corps of Engineers, as applicable. The rate of mitigation shall be one-to-one, or as specified by the permitting authorities, whichever is more restrictive. However, if approved by the permitting authorities, it shall be acceptable to reclaim wetland impacted by phosphate mining with smaller, higher-quality wetland systems or to remove isolated wetlands if the mitigation plan improves the overall wetland system.

**Response: Mosaic's proposed mitigation activities are intended and designed to restore wetland areas to their natural conditions, including water flows,**

**hydroperiods, and native vegetation communities. As noted in the ERP, Mosaic will conduct phosphate mining activities on 16,181 acres of uplands, wetlands, and other surface waters within an approximately 18,287-acre area, and will reclaim approximately 16,181 acres of uplands, wetlands, and other surface waters following the completion of mining activities. The proposed DeSoto Mine is consistent with CE Policy 1.5.5.**

CE Policy 1.5.7: The minimum setback shall be 15 feet and the average of all setbacks from the resource shall be 25 feet, or as permitted by an authorized agency. Areas designated as buffers shall preserve all natural vegetative cover, except where drainage-ways and access ways are approved to cross the buffer. Buffers may be supplemented only with native trees, shrubs, and ground covers.

**Response: Mosaic will implement a minimum 15 foot (or more) setback from protected wetlands. It will be accomplished by the BMP isolation ditch and berm system, which will be constructed (and grassed) around the perimeter of areas to be mined or disturbed. Reference Map 3-1 depicted in the MMP/OP applications. The ditch and berm system is a structural BMP that has proven effective in the elimination of offsite turbid runoff and soil erosion during the mining and reclamation. Where applicable, only native trees, shrubs, and groundcover will be used to supplement buffers. The proposed DeSoto Mine is consistent with CE Policy 1.5.7.**

CE Policy 1.5.9: Phosphate mining shall be prohibited in those portions of the Peace River, Horse Creek, Joshua Creek and Prairie Creek, which are identified in **Map I-7**.

**Response: The DeSoto Mine does not propose mining within the Peace River, Horse Creek, Joshua Creek, or Prairie Creek. It also proposes avoiding certain additional direct tributary and floodplain areas connected with Horse Creek as shown on Map I-7 . The proposed DeSoto Mine is consistent with CE Policy 1.5.9.**

CE Policy 1.5.10: Phosphate mining-related activity, such as dragline, and pipeline crossings and vehicle access, may be allowed under DRI or County mining permit conditions, if also approved by the permitting authority.

**Response: FDEP issued the ERP to Mosaic in 2017. The ERP allows dragline and pipeline crossings and vehicle crossings. Please refer to ERP Specific Condition 20 for more information. The proposed DeSoto Mine is consistent with CE Policy 1.5.10.**

CE Policy 1.5.11: The use or storage of hazardous materials or wastes on the Florida Substance List shall be prohibited within wetland and wetland buffer areas. The landowner/developer shall be given an opportunity to define the jurisdictional wetland boundary and where it relates to the storage of substances.

**Response: Mosaic will not use or store hazardous materials or wastes within wetlands or wetland buffer areas. The storage of regulated substances, hazardous materials or wastes on the Florida Substance List is detailed in the MMP and OP applications. See MMP/OP Supplemental Information Document § 6. The proposed DeSoto Mine is consistent with CE Policy 1.5.11.**

CE Policy 1.5.13: Existing isolated wetlands may be incorporated into development projects in conjunction with SWFWMD criteria and any future County development regulations.

(1) No net loss of wetlands and functions shall be allowed. On-site design of a development shall: Comply with the wetland protection standards of federal, state, regional and local agencies.

(2) Minimize impacts through innovative design layouts;

(3) Compensate for impact by enhancing or restoring other degraded wetlands on the site, restore natural functions of other wetlands on- site, create new wetlands on-site, preserve significant upland areas, or off-site mitigation.

(4) Mitigation through restoration of degraded wetlands on-site or preservation or restoration, if needed, of significant upland areas on- site will be encouraged rather than new wetland creation.

**Response: Consistent with this policy, Mosaic proposes no net loss of wetland functions and is implementing a design that both complies with local, state, and federal wetland protection standards and minimizes impacts through innovative design layouts. Mosaic will also provide compensatory mitigation both on-site and off-site. Please refer to responses to FLUE Policies 1.3.8, 1.12.6(1), and 1.12.9 and CE Policy 1.5.5 above, and MMP/OP Supplemental Information Document § 10. FDEP issued the ERP to Mosaic in 2017, which approved of Mosaic's proposed impacts and mitigation for same. Copies of the ERP and additional information responses have been provided to the County. The proposed DeSoto Mine is consistent with CE Policy 1.5.13.**

CE Policy 1.5.14: In case of inclusion of wetlands into the surface water management systems, the stormwater shall be pre-treated per the Water Management District' [sic]

**Response: Mosaic will not include wetlands in its proposed stormwater management systems. The proposed DeSoto Mine is consistent with CE Policy 1.5.14.**

CE Policy 1.5.16: The County shall require the developer to have a qualified professional to identify and certify the limits of all wetlands on the development plan to identify and certify the limits of all wetlands on the development plans.

**Response: Qualified professional determinations have been approved and/or submitted to the FDEP or to the applicable agency with jurisdiction. The wetland delineations, stream delineations, UMAM wetland scores and listed species surveys have been field-verified by FDEP. The proposed DeSoto Mine is consistent with CE Policy 1.5.16.**

CE Objective 1.6: Floodplains and Floodways. DeSoto County shall ensure long-range protection and restoration of functions of the remaining floodplains.

**Response: Mosaic will ensure the long-range protection and restoration of functions of the remaining floodplains. Please refer to Mosaic's responses below to this objective's implementing policies. The proposed DeSoto Mine is consistent with CE Objective 1.6.**

CE Policy 1.6.1: The County as part of its development review process shall require the coordination of development plans with the Florida Department of Environmental Protection and the Southwest Florida Water Management District to assist in monitoring land uses which may impact potential floodplains as shown on FEMA Flood Insurance Rate Maps (FIRM) (shown as part of the Conservation Overlay on the FLUM).

**Response: With respect to potential floodplain impacts (including those shown on FEMA Flood Insurance Rate Maps (FIRM), shown as part of the Conservation Overlay on the FLUM), Mosaic is coordinating its development plans with the appropriate state and federal regulatory agencies. FDEP issued the ERP to Mosaic in 2017. Copies of the ERP and additional information responses have been provided to the County for a coordinated review of the development plans. The proposed DeSoto Mine is consistent with CE Policy 1.6.1.**

CE Policy 1.6.2: The County shall require that all development proposals be accompanied by evidence that an inventory of soils posing severe limitations to construction; unique habitat; endangered species of wildlife and plants; significant historic structures and/or sites; and areas prone to periodic flooding (areas within the 100-year floodplain) has been conducted.

**Response: Mosaic has submitted evidence that an inventory of soils posing severe limitations to construction, unique habitat, endangered species of wildlife and plants, significant historic structures and/or sites, and areas prone to periodic flooding (areas within the 100-year floodplain) has been conducted. Qualified professional determinations have been approved and/or submitted to the FDEP and DeSoto County. These studies, reports and inventories (including 100 year floodplain) are provided in the MMP and OP applications and include, but are not limited to, the following: mapping the pre-mining and post reclamation soil types, wetland delineations, stream delineations, UAMM wetland scores and listed species surveys, including unique habitats and cultural resources. The MMP and OP applications provide a comprehensive evaluation of environmentally sensitive areas, including land covers and uses, wetland and surface waters, soils, existing site drainage and streams, floodplains, wildlife, and historical and cultural resources as well as suitability of the site for mining activities, including land use considerations, impacts to environmentally sensitive areas, and mining activities. The proposed DeSoto Mine is consistent with CE Policy 1.6.2.**

CE Policy 1.6.3: DeSoto County shall require that the extent to which any development or redevelopment is proposed to be placed in/on, to disturb, or to alter the natural functions of any of these resources be identified. Such identification shall occur at a phase in the development review process that provides the opportunity for DeSoto County to review the proposed project so that direct and irreversible impacts on the identified resources are avoided. Development other than phosphate mining shall be located away from the 100-year floodplain on the upland portion of the site. Where no upland exists, development may occur so long as all applicable environmental permitting requirements can be satisfied. All future subdivision of land shall contain adequate uplands for the permitted use.

**Response: Mosaic has identified the extent to which the DeSoto Mine will impact the natural resources of functions as noted in CE Policy 1.6.2, development will occur consistent with all applicable environmental permitting requirements. FDEP issued the ERP to Mosaic in 2017. Copies of the ERP and additional information responses have been provided to the County. Please also refer to the responses to FLUE Policies 1.3.8, 1.12.6(1) and 1.12.9 above. The proposed DeSoto Mine is consistent with CE Policy 1.6.3.**

CE Policy 1.6.4: Phosphate mining shall be prohibited in those portions of the 100-year floodplain of the Peace River, Horse Creek, Joshua Creek and Prairie Creek, which are shown in **Map I-7**.

**Response: The DeSoto Mine does not propose mining within the 100-year floodplain of the Peace River, Joshua Creek, or Prairie Creek. It also proposes avoiding certain additional direct tributary and floodplain areas connected with Horse Creek as shown on Map I-7. The proposed DeSoto Mine is consistent with CE Policy 1.6.4.**

CE Policy 1.6.5: Phosphate mining-related activity such as dragline and pipeline crossings and vehicle access may be allowed under DRI or County phosphate mining permit conditions. The use or storage of hazardous materials or wastes on the Florida Substance List shall be restricted in the 100-year floodplain or within wetland buffer areas. The landowner/developer shall be given an opportunity to define the exact location of the 100-year floodplain or wetland boundary, where it relates to the storage of substances. Where such substances are otherwise regulated.

**Response: Specific Condition 20 of the ERP issued to Mosaic in 2017 allows dragline and pipeline crossings and vehicle crossings. All proposed mining corridors and corridor stream crossings including encroachments / crossings of the 100-year floodplain of Horse Creek and its direct tributaries as identified on Map I-7 of the Future Land Use Map Series are the same as those approved in the ERP for the DeSoto Mine. No storage of hazardous materials or wastes on Florida Substances List is proposed in the 100-year floodplains as identified by Map I-7 (consistent with Future Land Use Policy 1.12.2(2), or within wetland buffer areas. The proposed DeSoto Mine is consistent with CE Policy 1.6.5.**



CE Policy 1.6.7: The County shall require the developer to have a qualified professional identify and certify the limits of the 100-year floodplain on the development plans.

**Response: Ardaman and Associates, Inc., a qualified professional, has identified and certified the limits of the 100-year floodplain on the development plans as depicted on Map 2-8-A in the MMP/OP applications. The proposed DeSoto Mine is consistent with CE Policy 1.6.7.**

CE Objective 1.7: Mining/Excavation. The County shall establish and maintain in its Land Development Regulations, procedures to appropriately protect the quality of air, water, land and wildlife resources from mining/excavation.

**Response: Mosaic will protect the quality of air, water, land and wildlife resources from its mining and excavation activities. Please refer to Mosaic's responses below to this objective's implementing policies. The proposed DeSoto Mine is consistent with CE Objective 1.7.**

CE Policy 1.7.1: Phosphate mining operations, like all other development, shall be subject to the development review process. The following minimum standards shall apply to all phosphate mining in DeSoto County:

- (1) Revegetation proposals for reclamation shall be based on the requirements of Chapter 62C-16 F.A.C., as amended from time to time.
- (2) Finished slopes for reclaimed areas shall not be greater than one foot vertical to four feet horizontal. Where high surface flow velocities can be expected, suitable erosion protection shall be proposed.
- (3) Provision shall be made to protect watercourses and wetlands in or near reclamation areas against siltation until vegetation is well established.

**Response: Mosaic's revegetation proposals for reclamation will be based on the requirements of Chapter 62C-16 F.A.C. The post reclamation slopes will be less than one foot vertical to four feet horizontal and surface flow velocities are expected to be non-erosive as shown on Map 4-5 in the MMP/OP applications. Mosaic's Storm Water Management Plan details provisions and protective measures for avoiding impacts to adjacent lands (i.e. watercourses, wetlands). The proposed DeSoto Mine is consistent with CE Policy 1.7.1**

CE Policy 1.7.2: Reclamation proposals for mines shall provide for the perpetuation and accessibility of monitoring stations.

**Response: Mosaic will ensure that environmental monitoring stations will be accessible over the project life. The proposed DeSoto Mine is consistent with CE Policy 1.7.2.**

CE Policy 1.7.3: Relocations or increases in the flow of water coursed leaving the mine property shall not adversely affect downstream property owners or the environment.

**Response: Water leaving the proposed DeSoto Mine will not adversely affect downstream property owners or the environment.**

**Mining will not produce off-site flooding because offsite drainage / flows will be re-routed around mining areas into BMP ditch and berm systems that will be installed around the perimeter of proposed mining and reclamation areas. The BMP ditch and berm system installation isolates all mining and reclamation areas to prevent offsite discharges of process water except through monitored NPDES outfalls. This BMP system is designed to contain a 25- year storm event, where the collected storm water runoff is collected or directed into the DeSoto Mine's recirculation system for storage or discharge through the permitted NPDES outfalls.**

**Thus, all active mine and reclamation areas that have not been reconnected by removal of the isolation berm serve as flood storage areas; the capacity of these areas to store floodwaters exceeds the limited portions of the proposed development that lie within the limits of FEMA designated flood hazard areas and floodways to be disturbed.**

**In addition, Mosaic is proposing to construct temporary bypass channels to convey water (re-route) around mining areas during mining and reclamation. Appendix 3-1 of the MMP/OP applications presents hydrologic modeling documenting that the channels will be sufficiently sized to convey the full range of flows anticipated without causing an increase in offsite flooding or erosion.**

**After reclamation, Mosaic is proposing to create a network of first and second order streams as part of the DeSoto Mitigation Plan. The MMP and OP applications, Appendix 8-3 documents the stream channel designs would experience a range of bankfull events without experiencing velocities that would be erosive or cause shoaling.**

**In summary, Ardaman's hydrology analysis shows that the anticipated peak flows at offsite critical points in response to design storm events (i.e. 25/100 year 24-hour rainfall events) will be slightly lower in the post-reclamation condition than they are in the pre-mining condition. Therefore, the proposed mining and reclamation activities will not adversely affect downstream property owners or the environment.**

**The proposed DeSoto Mine is consistent with CE Policy 1.7.3.**

CE Policy 1.7.4: Applications for mining developments shall include effective plans for spill emergencies. Such plans shall consist of a Spill Notification, Containment and Safety Plan for the clay settling areas, water recirculation systems, and reagent storage areas addressing such issues as inspection schedules, spill notification procedures, maintenance of warning systems and clean-up responsibilities.

**Response:** Mosaic’s application for mining will include an Emergency Action Plan (“EAP”). The EAP serves as an overarching guidance document for responding to emergencies such as medical, incipient fire, accidental spills, severe weather emergencies (i.e. hurricanes) and hypothetical dam or recirculation system failures. The EAP provides information on roles and responsibilities and a communication framework for managing the notification process. These notifications include communication procedures specific to regulatory agencies; federal, state, county, and local emergency response officials; local residents, businesses, and governments potentially affected; and internal Mosaic departments, crisis teams and EAP Response vendors. The proposed DeSoto Mine is consistent with CE Policy 1.7.4.

CE Policy 1.7.6: DeSoto County shall require surface mines and excavation pits to be reclaimed in an environmentally sound fashion following the cessation of mining/excavation activities.

**Response:** The DeSoto Mine will be reclaimed in an environmentally sound fashion following the cessation of mining/excavation activities. Mosaic’s reclamation plan design relies on practical and demonstrated engineering approaches and practices in ecological restoration for habitat creation. The plan is well-grounded in proven techniques and is state-of-the-art with contingency measures built into the monitoring plans. The reclamation plan has already been approved by FDEP, which issued the ERP to Mosaic in 2017. The proposed DeSoto Mine is consistent with CE Policy 1.7.6.

CE Policy 1.7.7: Mine/Excavation areas converted to pond or lake areas should be designed to resemble a natural pond with littoral zone shelves and contours; a deep open-water limnetic zone (open water where photosynthesis can occur) free of rooted emergent and submersed vegetation; and, where feasible, a buffer of upland vegetation.

**Response:** Mine/excavation areas reclaimed as pond or lake areas will be designed to resemble natural ponds with littoral zone shelves and contours, a deep open-water limnetic zone, and a buffer of upland vegetation where feasible. Lakes proposed within the DeSoto Mine post reclamation landscape will meet these criteria by having littoral zone shelves with areas of open-water (deeper) free of rooted and submersed emergent vegetation. Mosaic is also proposing upland buffers of forests around the lakes where feasible (i.e. 434-hardwood-conifer mixed forests or 425-temperate hardwood forests). The proposed DeSoto Mine is consistent with CE Policy 1.7.7.

CE Policy 1.7.8: Mine/Excavation areas shall be returned to their natural configuration through the replanting of native trees, shrubs, and understory vegetation.

**Response:** Mosaic will return mine/excavation areas to their natural configuration through the replanting of native trees, shrubs, and understory vegetation. For details, please refer to the post reclamation plan in MMP and OP applications. These plans, maps and planting lists document the native

**trees, shrubs, and understory to be planted during reclamation. The proposed DeSoto Mine is consistent with CE Policy 1.7.8.**

CE Policy 1.7.9: Mine/Excavation operators shall be required to demonstrate a workable reclamation plan and proof of financial responsibility before excavation permits are issued.

**Response: Mosaic will demonstrate a workable reclamation plan and proof of financial responsibility before commencing excavation. Please refer to the response to CE Policy 1.7.6 above and to the financial responsibility section in the MMP and OP applications. The proposed DeSoto Mine is consistent with CE Policy 1.7.9.**

CE Policy 1.7.10: Resource extraction which will result in a reduction of ecological value of the area subject to such resource extraction, which cannot be mitigated, reclaimed or restored to environmentally sound condition shall be prohibited. For phosphate mining, a permit authorizing mitigation, reclamation or restoration of environmentally sensitive areas obtained from the Southwest Florida Water Management District, the Florida Department of Environmental Protection, and/or the US Army Corps of Engineers, as applicable, and is consistent with standards and criteria of the Generalized Phosphate Mining Overlay Designation of the Comprehensive Plan (Objective 1.12b and its related policies), shall evidence that the resource extraction will not result in a reduction of ecological value of the area subject to the resource extraction.

**Response: The DeSoto Mine post-reclamation plans will result in a net ecological benefit to the existing landscape. Please see responses to FLUE Policies 1.3.8, 1.12.6(1) and 1.12.9 above. Mosaic will reclaim mined lands to a diverse mosaic of uplands and wetland natural systems using native vegetation indigenous to DeSoto County. FDEP issued the ERP to Mosaic in 2017, confirming that FDEP approves of Mosaic's reclamation plan. Copies of the ERP and additional information responses have been provided to the County. The proposed DeSoto Mine is consistent with CE Policy 1.7.10.**

CE Policy 1.7.11: Wetlands, rivers, streams, floodplains, habitat of threatened or endangered species and species of special concern, prime agricultural lands, prime groundwater recharge areas, historically significant sites or other environmentally sensitive areas which cannot be restored, mitigated or reclaimed shall be identified and protected by a prohibition on mining activities within those areas and the establishment of buffer zones around them. Technological limitations and economic considerations must be recognized in the consideration of appropriate restoration, mitigation, or reclamation activities.

**Response: Mosaic will protect and avoid historically significant sites and environmentally sensitive areas which cannot be restored or mitigated. The proposed mine plan has undergone agency scrutiny from the FDEP. FDEP issued the ERP to Mosaic in 2017. The agency considered technological limitations, existing wetland quality, functions, upland habitats, threatened and endangered species, practicability and logistics of mining practices, as well as Mosaic's demonstrated reclamation capabilities. The areas to be avoided**

**and protected are proposed to be placed into conservation easements and are depicted on Map 4-8-C in the MMP/OP applications. The proposed DeSoto Mine is consistent with CE Policy 1.7.11.**

CE Policy 1.7.12: Mineral extraction reclamation plans shall provide for restoration of pre-mining/pre-excavation pit drainage retention and detention in each affected drainage basin.

**Response: Mosaic's reclamation plans provide for the restoration of pre-mining/pre-excavation pit drainage retention and detention in each affected drainage basin. Refer to the response to CE Policy 1.7.3 for more information. The proposed DeSoto Mine is consistent with CE Policy 1.7.12.**

CE Policy 1.7.13: Reductions or increases in the flow of watercourses leaving the mine/excavation property shall not adversely affect downstream property owners or the environment.

**Response: Mosaic's mining and reclamation plans will not adversely affect downstream property owners or the environment.**

**Where Mosaic is proposing to mine within a drainage feature or a stream that conveys water to or from offsite lands, flows will be re-routed in advance into alternate flow ways. These alternate channels will be constructed in advance of mining. This relocation of the floodplains temporarily into the alternate flow ways will not adversely affect conveyance, storage, water quality, or adjacent lands. In the post-reclamation condition, the affected 100-year floodplains will be re-established in the same locations. For more information, please refer to the responses to FLUE Policies 1.7.3, 1.2.10 and 1.12.7.**

**The proposed DeSoto Mine is consistent with CE Policy 1.7.13.**

CE Policy 1.7.14: Applications for mining developments shall include effective plans for spill Notification, Containment and Safety Plan for the clay settling areas, water re-circulation systems, and reagent storage areas addressing such issues as inspection schedules, spill notification procedures, maintenance of warning systems and clean-up responsibilities.

**Response: Mosaic's application includes effective plans for spill notification and containment. Mosaic's Environment and Health and Safety (EHS) management section (MMP/OP Supplemental Information Document § 6) provides a framework of policies, procedures and standards (i.e. design criteria, inspections, etc.) for managing EHS risks at the DeSoto Mine. The key elements of the EHS program that will be implemented are: (1) managing operations to minimize the impact of the operation on the environment; and (2) requiring employees to assist in pollution identification, minimization and management of EHS risks through conservation, process review and energy efficiency. Mosaic will comply with all legal requirements, including but not limited to Specific Condition 13 of the ERP governing spill notifications, and**

**corporate commitments. The proposed DeSoto Mine is consistent with CE Policy 1.7.14.**

CE Objective 1.8: Soil Management. The County shall appropriately manage soil data and protect against soil erosion and uses inconsistent with soils.

**Response: Mosaic will appropriately manage soil data and protect against soil erosion and uses inconsistent with soils. Please refer to Mosaic's responses below to this objective's implementing policies. The proposed DeSoto Mine is consistent with CE Objective 1.8.**

CE Policy 1.8.1: The County's Land Development Regulations shall continue to require that all site developments properly install and maintain erosion and sedimentation control devices, and that developers submit an erosion and sediment control plan before start of construction.

**Response: Mosaic will install and maintain erosion and sedimentation control devices at the DeSoto Mine. In order to ensure compliance with regulatory requirements, the areas proposed for disturbance will be isolated from any streams, tributaries, wetlands, water bodies, drainage features, or watercourses that are not designated for mining before site preparation and construction activities have been initiated. This will be accomplished by constructing a ditch and berm system to separate the area to be disturbed from the protected areas. Any soil erosion resulting from water run-off during site preparation, construction activities, mining, and reclamation operations will be managed through applying appropriate BMPs or through containment within the area encompassed by the ditch and berm system. Stormwater flow will be collected and directed to CSAs and the mine recirculation water system where it will be allowed to clarify. Any discharge from the clarification system must pass through permitted discharge outfalls, which will be monitored according to the requirements of the NPDES permit (see Specific Condition 11 of the ERP). Prior to construction of the ditch and berm system(s), conventional silt fence BMPs will be installed at the boundary of areas to be disturbed to control stormwater runoff and protect offsite water quality. Additionally, the slopes of the newly constructed ditch and berm system will be vegetated with a quick germinating seed mix to stabilize soils against erosion. Additional details regarding Mosaic's stormwater management practices are provided in the MMP and OP applications. The proposed DeSoto Mine is consistent with CE Policy 1.8.1.**

CE Policy 1.8.2: All disturbed soil areas shall be permanently stabilized upon completion of development activities, in order to reduce soil erosion.

**Response: Mosaic's Reclamation plan (MMP/OP Supplemental Information Document § 5) is protective and will properly manage onsite soils. MMP/OP Supplemental Information Document §§ 1 and 5 provide information**

**regarding the existing and proposed post reclamation soils. The proposed DeSoto Mine is consistent with CE Policy 1.8.2.**

CE Policy 1.8.3: Whenever possible, native trees, shrubs and ground cover shall be maintained on development sites to prevent soil erosion.

**Response: Mosaic's Reclamation plan (MMP/OP Supplemental Information Document § 5) is protective and properly manages onsite soils. As detailed in the Mosaic's Planting Lists –native trees, shrubs and ground cover will be planted on reclamation / development sites to prevent soil erosion. The proposed DeSoto Mine is consistent with CE Policy 1.8.3.**

CE Policy 1.8.6: The County shall not allow septic tanks in soils that do not adequately percolate.

**Response: Mosaic will not install septic tanks in soils that do not adequately percolate. The management of domestic sewage will be conducted through properly designed, constructed, and managed septic systems that will be permitted and installed in accordance with DeSoto County building codes and applicable state rules. The proposed DeSoto Mine is consistent with CE Policy 1.8.6.**

CE Objective 1.9: Vegetative and Wildlife Communities. DeSoto County shall promote the protection, conservation, restoration, and appropriate use of wildlife and ecological communities.

**Response: Mosaic will promote the protection, conservation, restoration, and appropriate use of wildlife and ecological communities as part of the proposed DeSoto Mine. Please refer to Mosaic's responses below to this objective's implementing policies. The proposed DeSoto Mine is consistent with CE Objective 1.9.**

CE Policy 1.9.3: DeSoto County shall work with the Florida Fish and Wildlife Conservation Commission and the Soil and Water Conservation District to develop Best Management Practices for the protection of topographic, hydrologic, soil characteristics and vegetative factors in the site plan review process of proposed developments. Best Management Practices will be implemented through the County's Land Development Regulations and are intended to provide for: erosion control on construction sites; retention and detention of stormwater runoff; and proper land use and buffering standards.

**Response: Mosaic will implement BMPs that provide for erosion control, retain and detain stormwater runoff, and proper land use buffering standards. Please refer to Mosaic's responses to FLUE Policy 1.12.6 and CE Policy 1.8.1 for details. The proposed DeSoto Mine is consistent with CE Policy 1.9.3.**

CE Policy 1.9.7: DeSoto County shall continue to regulate and/or prohibit the following activities in areas identified as being environmentally sensitive and in areas containing endangered and/or threatened wildlife, to ensure that such areas are preserved:

- (1) The removal, excavation, or dredging of soil, sand, gravel, minerals, organic matter, or materials of any kind except for phosphate mining within the Generalized Phosphate Mining Overlay Designation, which shall be regulated to ensure that such areas are preserved, mitigated, reclaimed, or restored;
- (2) The changing of existing drainage characteristics, sedimentation patterns, flow patterns, or flood retention characteristics;
- (3) The disturbance of the environmentally sensitive area's water level or water table by drainage, impoundment, or other means;
- (4) The dumping or discharging of material, or the filling of an environmentally sensitive area with material;
- (5) The placing of fill or the grading or removal of material that would alter topography;
- (6) The destruction or removal of plant life that would alter the character of an environmentally sensitive area or wildlife habitat; and
- (7) The conduct of an activity that results in a significant change of water temperature, a significant change of physical or chemical characteristics of environmentally sensitive area water sources, or the introduction of pollutants.

**Response: DeSoto County has adopted the Phosphate Mining Ordinance to address the criteria in CE Policy 1.9.7. The MMP and OP applications all of the requirements of the Phosphate Mining Ordinance, including these requirements. The proposed DeSoto Mine is consistent with CE Policy 1.9.7.**

CE Policy 1.9.8: Native vegetation protection regulations shall mandate fair and equitable restoration and/or compensatory mitigative measures in order to compensate for loss of vegetation and to enhance stabilization of fragile slopes and/or shorelines.

**Response: Mosaic will restore or mitigate for any lost native vegetation. Mosaic will also enhance the stabilization of fragile slopes and/or shorelines. Please refer to Mosaic's responses to DE Policy 1.2.3 and CE Policies 1.7.1, 1.7.7, 1.7.8, and 1.7.10. The proposed DeSoto Mine is consistent with CE Policy 1.9.8.**

CE Policy 1.9.12: Through zoning, site plan, and other local regulations, fisheries, marine habitat, native wildlife and wildlife habitat, including state and federally protected plant and animal species (endangered, threatened and species of special concern), shall be appropriately protected from new development by creating preservation/conservation areas within development areas and referring such issues to the appropriate jurisdiction for further assistance in the protection of this natural resource.

CE Policy 1.9.15: The County shall protect plant and animal species, including marine habitats and fisheries. The Land Development Regulations shall provide for clustering, open space, conservation easements, the use of Best Management Practices and mitigation of, or prohibit, the disturbance of said plant and animal species to accomplish their protection.

**Response: With respect to both CE Policies 1.9.12 and 1.9.15, Mosaic will protect plant and animal species, including marine habitats and fisheries, by**



**implementing conservation easements and BMPs. Please refer to Mosaic's responses to FLUE Policy 1.12.3 and CE Policies 1.4.2 and 1.9.16 for more details. The proposed DeSoto Mine is consistent with CE Policies 1.9.12 and 1.9.15.**

CE Policy 1.9.16: Developers shall be required to identify wildlife habitat, and endangered and threatened species as part of the development review process, and shall be required to submit mitigation measures for review as part of the County's development review process.

**Response: Mosaic has identified wildlife habitat and endangered and threatened species as part of the development review process. The results of vegetation and wildlife surveys conducted to identify the presence of listed species, among other objectives, are provided in Appendix 8-4 of the MMP/OP applications, including the locations of wildlife transects and locations where listed species were observed.**

**Mosaic's Wildlife Habitat Management Plan (WHMP) is provided in Appendix 8-6 located within the MMP/OP applications and includes proven management procedures that have previously been approved/accepted by FDEP. These BMPs that consist of: (1) conducting pre-clearing surveys for various species prior to disturbing the land for mining and relocating immobile species to other suitable habitat; and (2) the isolation of mining areas by the construction of the BMP Ditch and Berm. This BMP is a structural best management practice that has been proven beneficial in preventing wildlife from migrating into active mining areas during the mining and reclamation stages of the operation. Since mining is a staged development, implementation of the WHMP will provide short-term management of the faunal species during mining and reclamation. And, as reclamation is completed across the project suitable habitat will be created to allow repopulation of the reclaimed sites.**

**The proposed DeSoto Mine is consistent with CE Policy 1.9.16.**

CE Policy 1.9.19: DeSoto County shall require that an ecological survey be performed by a qualified environmental consultant prior to the approval of site clearing activities to determine if populations of endangered, threatened, or plant or animal species of special concern occur.

**Response: Ecological surveys have been performed by qualified environmental consultants. Please refer to Appendix 8-4 in the MMP/OP applications. Maps present the locations of wildlife transects and locations where listed species were observed. The proposed DeSoto Mine is consistent with CE Policy 1.9.19.**

CE Policy 1.9.20: DeSoto County shall require that, for private development, in which alteration is unavoidable, the developer shall be responsible for establishing a mitigation plan for critical habitat.

**Response: No critical habitat has been established onsite at this time. Therefore, Mosaic does not propose a mitigation plan specific to critical habitat. Nevertheless, Mosaic has developed a Wildlife Habitat Management Plan, as described in the MMP and OP applications. The proposed DeSoto Mine is consistent with CE Policy 1.9.20.**

CE Policy 1.12.2: The County shall prohibit development activities in or adjacent to historic archaeological sites that depreciate or eliminate their historical value.

**Response: Mosaic will not engage in development activities in or adjacent to historic archaeological sites that depreciate or eliminate their historic value. The DeSoto site has been subject to multiple historic and archaeological surveys to determine the potential of significant resources on site. All known resources have been evaluated and the State Historic Preservation Officer (SHPO) has issued letters releasing the site for mining, as proposed by the final mine plan. The details of the surveys and SHPO letters are contained in the MMP and OP applications. The proposed DeSoto Mine is consistent with CE Policy 1.12.2.**

## **XI. INTERGOVERNMENTAL COORDINATION ELEMENT**

ICE Objective 1.6: Conservation Coordination. The County shall coordinate conservation issues with affected governmental agencies and jurisdictions.

**Response: Mosaic has coordinated, and will continue to coordinate, conservation issues with affected governmental agencies and jurisdictions. Please refer to Mosaic's responses below to this objective's implementing policies. The proposed DeSoto Mine is consistent with ICE Objective 1.6.**

ICE Policy 1.6.1: Continue coordination with Federal, State, Regional, and private environmental agencies to ensure adequate technical support for all environmental issues in which the County requires technical expertise.

**Response: Mosaic is obtaining the appropriate permits from state and federal agencies to engage in phosphate mining activities, including temporary alterations to hydroperiods. FDEP issued ERP No. MMR\_331292-001 to Mosaic on April 7, 2017. Copies of the ERP and additional information responses have been provided to the County. The proposed DeSoto Mine is consistent with ICE Policy 1.6.1.**

ICE Policy 1.6.2: The County shall continue to participate and support programs and projects of State, Regional, and municipal agencies which seek to preserve environmentally sensitive lands, promote usable open space, preserve habitats for endangered species, and protect groundwater supplies, potable water supplies, and surface water quality.

**Response: Mosaic is assisting the County with coordination efforts to ensure the preservation of environmentally sensitive lands, promote usable open space, preserve habitats for endangered species, and protect groundwater supplies, potable water supplies, and surface water quality. Copies of the ERP and additional information responses have been provided to the County for a coordinated review of the development plans. The proposed DeSoto Mine is consistent with ICE Policy 1.6.2.**

## **XII. CAPITAL IMPROVEMENTS ELEMENT**

CIE Objective 1.2: Level of Service (LOS). The County shall utilize level of service criteria defined in the various Elements of this Plan when determining the timing and funding of capital facilities.

**Response: Mosaic has utilized the level of service (LOS) criteria defined in the various Elements of this Plan when determining the timing and funding of capital facilities. Please refer to Mosaic's responses below to this objective's implementing policies. The proposed DeSoto Mine is consistent with CIE Objective 1.2.**

CIE Policy 1.2.1: Adopted level of service standards for facilities and infrastructure shall be as follows:

(1) The following minimum LOS standards for Traffic facilities are:

ROADWAY TYPE	STATE ROAD URBANIZED AREA	STATE ROAD OUTSIDE URBANIZED AREA	COUNTY ROAD
Limited Access Facilities	D	C	D
Controlled Access Highway	D	C	D
Other Multi-lane Roads	D	C	D
Two-lane Roads	D	C	D

**Response: Please refer to Mosaic's response to TE Policy 1.1.1 above.**

(2) The level of service for Sewer is 80 gallons per day per capita.

**Response: Please refer to Mosaic's response to SSE Policy 1.1.1 above.**

(3) The level of service for Solid Waste is 4.62 pounds per day per capita.

**Response: Please refer to Mosaic's response to SWE Policy 1.1.1 above.**

(4) The level of service for Potable Water is 95 gallons per day per capita.

**Response: Please refer to Mosaic's response to PWE Policy 1.1.1 above.**

(5) The level of service for total Park acreage is 10 acres per 1,000 populations.

**Response: Please refer to Mosaic's response to ROSE Policy 1.1.1 above.**

(6) The level of service for Drainage is:

(a) The 25-year, 24-hr design storm event to meet the water quality and quantity standards.

**Response: Please refer to Mosaic's response to DE Policy 1.1.1 above.**

(b) Peak post-development runoff shall not exceed peak pre-development runoff rates.

**Response: Please refer to Mosaic's response to DE Policy 1.1.2 above.**

(c) Stormwater runoff shall be required for all development, redevelopment and, when expansions occur, existing developed areas. The stormwater treatment system or systems can be project specific, or serve sub-areas within the County regardless of the area served and in accordance with the SWFWMD Basis of Review for ERP Applications the stormwater treatment systems must provide a level of treatment for the runoff from the first one (1) inch of rainfall for projects in drainage basins of 10 acres or more, or as an option, for projects or project subunits with drainage basins less than 10 acres, the first one-half (1/2) inch of runoff, from the design storm in accordance with the SWFWMD Basis of Review for ERP Applications in order to meet the receiving water quality standards of Rule 62-302, F.A.C and 40D-4, F.A.C. Stormwater discharge facilities shall be designed so as to not lower the receiving water quality or degrade the receiving water body below the minimum conditions necessary to maintain their classifications as established in Chapter 62-302, F.A.C. It is intended that all standards in these citations are to apply to all development and redevelopment and that any exemptions or exceptions in these citations, including project size thresholds, do not apply for concurrency determinations.

**Response: Please refer to Mosaic's response to DE Policy 1.1.3 above.**

CIE Objective 1.6: New Development. The County shall re-consider whether new developments should share a proportionate share of the costs required to maintain adopted level of service standards, through the assessment of impact fees or developer contributions, dedications, or construction of capital facilities necessary to serve new development as required in other Elements of this Plan.

**Response: The proposed mine will not cause any reductions in LOS standards and therefore will not need to pay a proportionate share of the costs required to maintain LOS standards. Please refer to Mosaic's responses below to this objective's implementing policies. The proposed DeSoto Mine is consistent with CIE Objective 1.6.**

CIE Policy 1.6.1: All development order applications shall be evaluated as to the impact of the development on capital facilities and the operation and maintenance of those facilities. The evaluation shall include, but not be limited to, the following:

- (1) Expected capital costs, including the installation of new facilities required that are related to the development.
- (2) Expected operation and maintenance costs associated with the new facilities required by the development.
- (3) Anticipated revenues the development will contribute, including impact fees, user fees, and future taxes.

**Response: Mosaic has evaluated the potential impact of the mine on capital facilities and maintenance of those facilities, including expected capital costs,**

**operation and maintenance costs, and anticipated revenues. No new facilities will be required. Please refer to Mosaic's responses to CIE Policy 1.2.1 above. The proposed DeSoto Mine is consistent with CIE Policy 1.6.1.**

CIE Policy 1.6.2: When applicable, the County shall utilize developer's agreements to ensure the timely and appropriate installation of needed capital facilities to service new development. Such agreements will be executed under the County's constitutional home rule power and following the procedures set forth in Chapter 163.3220, Florida Statutes.

CIE Policy 1.6.3: To ensure adequate capacity allocations for all developments, the County may require any development to use developer's agreements and/or develop in more than one phase.

**Response: With respect to CIE Policies 1.6.2 and 1.6.3, Mosaic does not anticipate that any new facilities will be necessary to achieve and maintain LOS standards, therefore Mosaic does not expect to enter into a developer's agreement to ensure the timely and appropriate installation of needed capital facilities to service the mine. Nevertheless, if a developer's agreement becomes necessary, Mosaic will enter into one. The proposed DeSoto Mine is consistent with CIE Policies 1.6.2 and 1.6.3.**

CIE Policy 1.6.5: New developments shall be responsible for installing all internal water and sewer systems, traffic circulation systems, and internal recreation/open space facilities within their development. In addition, connections of internal systems to the County's designated major water and sewer trunk systems and traffic circulation network shall be the financial responsibility of the developer.

**Response: Mosaic will be responsible for installing all internal water and sewer systems, traffic circulation systems, and internal recreation/open space facilities within the mine. Mosaic will also assume the financial responsibility of connecting the mine to any external systems maintained by the County. The proposed DeSoto Mine is consistent with CIE Policy 1.6.5.**

CIE Objective 1.7: Concurrency Management. DeSoto County shall implement a development review process to ensure that development occurs where public facilities have sufficient capacity to serve the existing population, the reservations of approved development orders, and the needs of the development proposed, all based on level-of-service standards, as established by the Comprehensive Plan, adopted in accordance with Section 163.3202(1), FS. and implemented thru the specific procedures within the Land Development Regulations.

**Response: Based on LOS standards as established by the Comprehensive Plan, public facilities in the vicinity of the mine have sufficient capacity to serve the existing population as well as reservations of approved development orders and the needs of the proposed mine. Please refer to Mosaic's responses to CIE Policy 1.2.1 above and this objective's implementing policies below. The proposed DeSoto Mine is consistent with CIE Objective 1.7.**

CIE Policy 1.7.2: Preliminary Development Orders. Submittal for approval of preliminary development order, which does not establish binding densities and intensities of development may be reviewed for concurrency as one criteria in the evaluation of the preliminary development order submittal.

(1) The County shall determine the available capacity of public facilities prior to approving a intermediated final development order; and

(2) No rights to obtain intermediate or final development orders, nor any other rights to develop the subject property, will have been granted or implied by the County's approval of the preliminary development order without determining the capacity of public facilities.

(3) Preliminary Development Orders. These shall be Rezoning, Comprehensive Plan Amendments and similar development orders that do not necessarily reflect a specific intensity and density development proposal. They shall be orders for which a preliminary concurrency evaluation may be utilized in evaluating whether or not to approve the order and for which long-term planning implications may be considered, but for which no concurrency is granted and for which the lack of concurrency shall not be the sole reason for denial of the preliminary development order.

**Response: Mosaic has evaluated the capacity of public facilities. See Mosaic's responses to CIE Policy 1.2.1. The proposed DeSoto Mine is consistent with CIE Policy 1.7.2.**

CIE Policy 1.7.3: Intermediate and Final Development Orders. Prior to the issuance of an intermediate or final development order, which establish binding densities and intensities of development, the County shall require the availability of sufficient capacity of public facilities to maintain adopted LOS standards for the existing population, for reservations of approved development orders, and lastly for the needs of the new development proposed, concurrent with the timing of the new development proposed.

(1) Intermediate Development Orders. These shall be site plans (development plans and special exceptions), preliminary plats, construction plan approvals (notice to proceed), and similar development orders that reflect a specific development proposal, that does not yet include vertical construction or the final division of property. These shall be orders for which a specific concurrency evaluation is required in evaluating whether or not to approve the order and for which capacity is reserved and may be held through the final development order process if the project proceeds according to the timelines of such approvals. The lack of concurrency may be the sole reason for denial of an intermediate development order.

(2) Final Development Orders. These shall be variances, building permits, and final plats and similar development orders that reflect a specific development proposal that includes vertical construction or the final division of property. These shall be orders for which a specific concurrency evaluation is required in evaluating whether or not to approve the order and for which capacity is reserved, unless such evaluation was done as an Intermediate Development Order and has not yet expired according to the timelines for such approvals. The lack of concurrency may be the sole reason for denial of an intermediate development order.

**Response: Considering the needs of the mine, reservations of approved development orders, and the existing population, sufficient capacity of public**

**facilities exists and will remain available concurrent with development of the mine. See Mosaic's responses to CIE Policy 1.2.1. The proposed DeSoto Mine is consistent with CIE Policy 1.7.3.**

CIE Policy 1.7.4: Final Development Order Determination. A final development order (final concurrency determination), which establishes specific density and intensity of development shall not be approved, unless the following conditions for the provision of facilities are met (excluding approved intermediate development orders that have proceeded according to the timelines of such approvals):

- (1) Are currently in place or will be in place when the final development order is issued;
- (2) The development order is issued with the condition that the necessary facilities and services will be in place when the impacts of the development occur;
- (3) Are under construction at the time of the final development order; or
- (4) Are guaranteed by an enforceable agreement to be in place concurrent with the impacts of the development.
- (5) Are included in the 3-year funding portion of the DeSoto County Capital Improvements Program, including any adopted therein from outside agency three or five year plans (i.e. FDOT).

**Response: All public facilities needed to develop the mine are currently in place. In the unlikely event that public facility deficiencies are identified at a later date, Mosaic will ensure that the necessary facilities and services will be in place when the impacts of the mine occur. The proposed DeSoto Mine is consistent with CIE Policy 1.7.4.**



**XIII. PUBLIC SCHOOL FACILITIES ELEMENT**

None.