Original document is over 50 pages-Copy of item can be viewed at County Administration.

Agenda Item #: 6A-1

PALM BEACH COUNTY
BOARD OF COUNTY COMMISSIONERS

TIME CERTAIN 2:15pm

AGENDA ITEM SUMMARY

Meeting Date:	**September 11, 2007**	**[ ]**	**Consent**	**[X]**	**Regular**
		[ ]	**Ordinance**	**[ ]**	**Public Hearing**

Department: **Administration, Environmental Resources Management, Planning, Zoning, and Building**

Submitted By: **Administration**

Submitted For: **Administration, Environmental Resources Management Planning, Zoning and Building**

I. EXECUTIVE BRIEF

Motion and Title: **Staff recommends motion to:** Accept the study "Permitting Process Regarding Mining Impacts within the EAA", dated September 2007 and have staff implement the improvements listed in the Conclusions section of the aforementioned report that would provide improved regulation and intergovernmental coordination during the permitting process dealing with mining.

Summary:

On February 6, 2007, the Palm Beach County Board of County Commissioners (BCC) approved staff's recommendation to perform a study that was to evaluate whether or not the existing permitting process addresses the concerns raised about the impacts of large scale mining within the EAA. Meetings were held with the permitting agencies to discuss the current permitting processes and determine whether or not the current process was sufficient to adequately address the issues that have been raised about mining impacts. Additional comments were received and considered from other public interests. The study presented today is the culmination of those meetings and discussions. Countywide/District 6 (MJ)

Background and Policy Issues : Continued on Page 3

Attachments: Executive Summary and Conclusions
(Full report sent separately by e-mail)

Recommended by: Kenneth S. Todd, Jr. 8/30/07
Water Resources Manager **Date**

Approved By: 9/6/07
County Administrator **Date**

II. FISCAL IMPACT ANALYSIS

A. Five Year Summary of Fiscal Impact: N/A

Fiscal Years	20____	20____	20____	20____	20 ____
Capital Expenditures					
Operating Costs					
External Revenues					
Program Income (County)					
In-Kind Match (County)					
NET FISCAL IMPACT					
No. ADDITIONAL FTE POSITIONS (Cumulative)					

Is Item Included In Current Budget? Yes _____ No
Budget Account No.: Fund _____ Department_____ Unit
Object _____ Reporting Category

B. Recommended Sources of Funds/Summary of Fiscal Impact: N/A

C. Departmental Fiscal Review:

III. REVIEW COMMENTS

A. OFMB Fiscal and/or Contract Dev. and Control Comments:
There is no fiscal impact associated with this agenda item

9-4-07
8/31/07 **OFMB** 8/31/07

Contract Dev. and Control 9/5/07
9/4/07

B. Legal Sufficiency:

9/6/07
Assistant County Attorney

C. Other Department Review:

_____
Department Director

REVISED 9/03
ADM FORM 01
(THIS SUMMARY IS NOT TO BE USED AS A BASIS FOR PAYMENT.)

Background and Policy Issues:

At the July 19, 2006 Comprehensive Plan (Plan) Amendment Transmittal Hearing, the BCC transmitted to the state proposed mining amendments to the Plan that included a 2-year period of limited mining within the EAA until completion of a study addressing the impacts of mining within the EAA. At the hearing the BCC directed staff to initiate the study that would take no more than two years to complete.

On November 13, 2006, after State agency review with no comments, the BCC adopted the mining amendments and directed staff to explore options to conduct the study, including reducing the timeframe from two years to one or less. Staff was further directed to bring back to the Board a proposal with a reduced timeframe and costs to conduct the study by February of the following year. In the meantime, the mining amendments adopted by the BCC were challenged by the mining industry. Therefore, the mining amendments have not taken effect. Nevertheless, staff continued working on the mining study.

On February 6, 2007, staff brought to the BCC a Study Proposal for a phased approach of studying the potential impacts associated with large scale mining within the EAA. Staff recommended a Scope of Work for the study that included evaluating whether or not the existing permitting process addresses concerns raised at previous public meetings concerning the impacts of large scale mining within the EAA. These mainly technical issues are listed below:

Issues Raised

1. What are the environmental impacts associated with mining?
2. What are the economic impacts associated with limiting mining?
3. What are the impacts of blasting associated with mining?
4. What are the groundwater contamination /water quality issues associated with mining?
5. Should there be long term monitoring of mines for water quality purposes?
6. What areas of the EAA may be beneficial for existing CERP projects or other future restoration projects? Evaluate interference between mining and these projects.
7. How should the mining areas be reclaimed?
8. Should there be additional criteria used for future mining operations?

This study approach was recommended because a detailed analysis which included modeling and soil borings/data collection would have taken several years to accomplish. The recommended study approach did not require additional funding and could be done in about six months. The BCC approved this approach and requested the study be done as quickly as possible.

Recently, the State legislature passed a bill that was signed into law by the Governor dealing with rock mining within the State of Florida. This law requires the formation of a 15 member Statewide Mining Task Force to develop recommendations for mining within the state. The law also requires all local governments to take into account information provided by the FDOT about the sources of aggregate when evaluating mining operations during the local review and approval process. The law also limits mining moratoria by a local government to one year. This report should be beneficial to the Statewide Mining Task Force as they develop recommendations to provide sufficient aggregate for the state's future needs.

EXECUTIVE SUMMARY

On February 6, 2007 the Palm Beach County Board of County Commissioners (BCC) approved Staff's recommendation to perform a study that would provide decisional information to the BCC concerning the impacts of large scale mining in the Everglades Agricultural Area (EAA). This study is generally intended to characterize the issues, review the existing permitting process, identify any additional data needs, and identify any needs for better permitting requirements or coordination. If gaps in the current permitting process exist amongst the agencies that require additional coordination and regulatory requirements at the County level, then staff is to identify those gaps.

Recently, the State legislature passed a bill that was signed into law by the Governor dealing with rock mining within the State of Florida. This law requires the formation of a 15 member Statewide Mining Task Force to develop recommendations for mining within the state. The law also requires all local governments to take into account information provided by the FDOT about the sources of aggregate when evaluating mining operations during the local review and approval process. The law also limits mining moratoria by a local government to one year. This report should be beneficial to the Statewide Mining Task Force as they develop recommendations to provide sufficient aggregate for the state's future needs.

The issues were characterized based on meetings with stakeholders. There were several issues raised at an EAA Stakeholders meeting conducted on November 2, 2006 and at the Comprehensive Plan Amendment public meetings held on July 19, 2006 and November 13, 2006. These mainly technical issues are listed below:

Issues Raised

1. What are the environmental impacts associated with mining?
2. What are the economic impacts associated with limiting mining?
3. What are the impacts of blasting associated with mining?
4. What are the groundwater contamination /water quality issues associated with mining?
5. Should there be long term monitoring of mines for water quality purposes?
6. What areas of the EAA may be beneficial for existing CERP projects or other future restoration projects? Evaluate interference between mining and these projects.
7. How should the mining areas be reclaimed?
8. Should there be additional criteria used for future mining operations?

This report attempts to address whether or not these main issues are adequately addressed during the permitting process of a mining operation. When a mine is proposed in a particular area, there are numerous agencies involved in the review of the permit application. Each agency involved addresses specific criteria to ensure the protection of surrounding surface waters, groundwater and other public interests.

This study describes the hydrogeology, drainage, and mining resources of the EAA to provide the BCC with sufficient background for decision making. This study provides a list of identified issues/concerns, an explanation of those issues/concerns, and descriptions of how those issues/concerns have been addressed by the existing permitting process during review by the responsible agency or agencies.

In addressing the hydrogeology of the EAA, it is noted that the EAA covers approximately 700,000 acres of which about 500,000 acres (over 750 square miles) are cultivated. See Figure 1 for a location map of the EAA. The geology of the EAA is heterogeneous meaning that it varies substantially throughout the EAA. However, all sediment borings (sediment borings are shallow holes penetrating only the depth of the rock formation expected to be mined) done to date have not shown rock formations with as great a porosity as would be found in Miami-Dade County. This tighter geological formation and more importantly the lower water elevation of the EAA compared to surrounding lands tend to severely restrict water flow out of the EAA. Nothing has occurred over the last 50 years that would have caused the geology or hydrogeology to change from it current existing condition. These conclusions are borne out in several geological studies done in the EAA throughout the years starting with the Garald Parker study on the water resources of south Florida in 1955. Additionally, the material contained in this current study has been reviewed by the Assistant State Geologist for FDEP, a consulting geologist working for the mining industry, the geological consultant for FDOT who recently completed the FDOT aggregates study, and the SFWMD's chief engineer from the Watershed Management Department.

Permeabilities of the transmissive sediment layers within the EAA are generally several magnitudes lower than those in Eastern Palm Beach County due to the limited occurrence of highly permeable sediments. In addition, the water levels in the EAA that are usually maintained only slightly below ground surface are several feet below the water levels maintained in the surrounding areas (Conservation Areas to the south and east, ranch lands to the west and Lake Okeechobee to the north). The lower transmissivity and water levels make the hydrogeology and resulting interactions completely different than those of the Miami-Dade County Lake Belt Area. What this means from a hydraulic standpoint is the flow gradient tends to be from the perimeter of EAA toward the middle of the EAA. This information provides the technical reasoning why the movement of high chloride water from the EAA is not likely. Additionally, the permitting process currently in place provides an opportunity to evaluate all mines (by applying specific criteria) to determine if adverse water quality impacts are possible.

Several meetings were held with the permitting agencies to discuss the permitting process as related to mining activities within the EAA. It was determined that current permitting criteria exist to address groundwater and surface water movement of water containing high chlorides, impacts to wetlands, impacts to surrounding lands due to blasting, and impacts to CERP projects.

However, the conclusion among the agencies was that while the current permitting process was generally sufficient to adequately address the issues that have been raised, there were some improvements that could be made to the permitting process that would provide an improved coordinated review. It was obvious to all that better coordination was needed among the agencies. Certain improvements were identified (discussed in detail in the Conclusion section of this report) that would make for an improved coordinated review during the permitting process.

Additionally, it was agreed by the Agencies involved in CERP process that the existing regulatory programs provide reasonable assurance that future mining operations will not impact the performance of proposed CERP projects. Based on the flexibility of the existing water resources system, it is apparent that future mining operations could be incorporated into the regional water resource alternatives. Those alternatives could include additional storage, conveyance systems, sedimentation basins, etc. Therefore, mining within the EAA should not be an impediment to the CERP projects.

Conclusions

This report attempts to address whether or not main issues raised by stakeholder groups are adequately addressed during the permitting process of a mining operation. There are numerous agencies involved in the review of the permit application. Each agency involved addresses specific criteria to ensure the protection of surrounding surface waters, groundwater and other public interests. Permitting criteria currently exists to address potential groundwater and surface water movement of water containing high chlorides, potential impacts to wetlands, potential impacts to surrounding lands due to blasting, and potential impacts to CERP projects. Table 1 shows which agencies address which issues in their review process. **After holding several meetings with the permitting agencies, the conclusion among the agencies was that while the current permitting process was generally sufficient to adequately address the issues that have been raised (shown below), there were some improvements that could be made to the permitting process that would provide an improved coordinated review.**

Issues Raised

1. What are the environmental impacts associated with mining?
2. What are the economic impacts associated with limiting mining?
3. What are the impacts of blasting associated with mining?
4. What are the groundwater contamination /water quality issues associated with mining?
5. Should there be long term monitoring of mines for water quality purposes?
6. What areas of the EAA may be beneficial for existing CERP projects or other future restoration projects? Evaluate interference between mining and these projects.
7. How should the mining areas be reclaimed?
8. Should there be additional criteria used for future mining operations?

The agency representatives agreed that better coordination was needed among the agencies. Certain improvements were identified that would accomplish this. These improvements to the process are listed as follows:

1. Have the County Engineer's Office evaluate the need to have the traffic & transportation analysis extended to greater than 5 miles during reviews.
2. All Agencies, including the County, should work with the newly created Statewide Mining Task Force to develop better terminology and more comprehensive standards for reclamation efforts at mining operations. The County staff should also work with the Statewide Mining Task Force on mining of wetlands/mitigation areas within the EAA, as part of a regional reclamation effort, to eliminate piece meal construction of wetlands that have limited or no value.
3. Establish procedures for improved coordination between Agencies during reviews. The County could develop a white paper on this subject for the Statewide Mining Task Force.

4. Ask ACOE to establish setbacks for excavation and the Herbert Hoover Dike, CERP Projects and the C&SF Flood Control Project.
5. Establish a procedure whereby the County coordinates a Pre-application meeting for all agencies (if requested by the applicant) to identify issues for any mining site.
6. County shall work with the SFWMD to further clarify mechanisms/technical criteria that identify how/when a mine would benefit a CERP project and District ownership.
7. County shall work with the SFWMD to further clarify whether an EAA mining project can be used for water management purposes.
8. County shall work with SFWMD to further clarify the three criteria in the Comp Plan for determination of the allowance of mining in the EAA.
9. County shall work with the SFWMD to establish guidance for bleeding down reservoirs within the EAA during wet seasons and for wind fetch across reservoirs.
10. County shall work with all Agencies involved in hydrologic analysis of mining to evaluate the need for a more detailed analysis of seepage impacts (including cumulative impacts).
11. County shall support having the FDEP and the Statewide Mining Task Force develop a mechanism whereby there is agreement and acceptance of permit conditions by both the owner of the land and lessee (miner).
12. County shall support having the Statewide Mining Task Force develop statewide mine construction BMP's.
13. County shall work with the Statewide Mining Task Force and other agencies to identify specific agency responsibilities to eliminate review overlap.
14. County shall work with the Statewide Mining Task Force to further clarify which Agency is responsible for addressing impacts to roads, railroads, and utilities.
15. County shall establish better time frames for the review process to ensure a timelier permit review.
16. County shall address the need for landscaping in EAA.

The existing regulatory programs provide reasonable assurance that future mining operations will not impact the performance of proposed CERP projects. Based on the flexibility of the existing water resources system, it is apparent that future mining operations could be incorporated into the regional water resource alternatives. Those alternatives could include additional storage, conveyance systems, sedimentation basins, etc. Therefore, mining within the EAA should not be an impediment to the CERP projects.

The geology of the EAA is heterogeneous meaning that it varies substantially throughout the EAA. However, all sediment borings (sediment borings are shallow holes penetrating only the soil horizons) done to date have not shown rock formations with a great porosity as would be found in Miami-Dade County. This tighter geological formation and more importantly the lower water elevation of the EAA compared to surrounding lands tend to severely restrict water flow out of the EAA. Nothing has occurred over the last 50 years that would have caused the geology or hydrogeology to change.

Permeabilities of the transmissive sediment layers within the EAA are generally several magnitudes lower than those in Eastern Palm Beach County due to the limited occurrence of highly permeable sediments. Also, the water levels in the EAA are usually maintained only slightly below ground surface are several feet below the water levels maintained in the surrounding areas (Conservation Areas to the south and east, ranch lands to the west and Lake Okeechobee to the north). The lower transmissivity and water levels make the hydrogeology and resulting interactions completely different than those of the Miami-Dade County Lake Belt Area. What this means from a hydraulic standpoint is the flow gradient tends to be from the perimeter of EAA toward the middle of the EAA. Based on this information, is not likely there will be any movement of high chloride water from the EAA as a result of mining operations. Additionally, the permitting process that is currently in place will provide an opportunity to evaluate the design of all mining activities to determine whether or not adverse water quality impacts are possible and addressing the concerns by applying specific criteria.