the Lee Plan's treatment of environmental issues

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LEE PLAN EVALUATION OF ENVIRONMENTAL ISSUES

The contents of this evaluation are subject to revision upon completion of the environmental mapping and hydrologic modeling that are also being conducted as part of this study.

Lee Plan Vision

The Lee Plan is Lee County's state-mandated comprehensive growth plan, which sets forth parameters for appropriate development patterns that also serve to protect the citizens and environment. One goal within the vision statement is to maintain the clear distinction between urban and rural areas. This aim is achieved by the promotion of viable agricultural uses and acquisition of publicly-owned lands in the outlying areas. Additionally, the plan recognizes the importance of protecting Lee County's natural resource base as a way of maintaining a high quality of life for residents and visitors. Aggressive public land acquisition, cost-effective land use, and environmental regulations supplementing federal, state, and regional regulatory programs will all aid in this endeavor.

The Southeast Lee County Community Planning Area described in the Lee Plan encompasses the same area as the southeast Lee County Density Reduction/Ground Water Resource study area. This area contains DR/GR, Wetlands, and Public Facilities land use categories, and a low-density residential community use for very large lots (1 dwelling unit per 10 acres), mining operations, and agricultural uses.

This portion of the study evaluates the details of the Lee Plan goals, objectives and policies to insure that the environmental quality is protected within the southeast DR/GR. Environmental protection is of high importance in the DR/GR, as the study area contains the majority of Lee County's unincorporated public water supply wells as well as other natural resources including limerock, wetlands, and wildlife. This evaluation addresses Lee Plan Goals pertinent to environmental protection within the southeast Lee County DR/GR.

Future Land Use Map – Goal 1

The DR/GR land use category is often misidentified as the "Density Reduction/Ground Water Recharge" area. It is important to understand that the land use category is the "Density Reduction/Ground Water *Resource"* area. The Lee Plan description of the land use category begins with the discussion of the public water supply and ground water recharge aspects of this area, noting that "Land uses in these areas must be compatible with maintaining surface and ground water levels at their historic levels." The currently-proposed, staff-initiated amendment through Smart Growth changes "historic levels" to "pre-development" levels, and while both terms may have the same intent, neither is defined within the Lee Plan. "Historic levels" have been interpreted by staff to mean ecological conditions prior to land alterations that were constructed to alter the surface and ground water levels. Except for the removal of pine and cypress trees through logging operations, the DR/GR area's "historic" natural state can be evaluated through historic aerial photographs from the 1940's and 1950's. The 1950's aerials are readily available at the Natural Resource Conservation Services (previously known as the USDA Soil Service) in North Fort Myers. (Policy 1.4.5)

The DR/GR land use category also establishes the density of 1 dwelling unit per 10 acres of land with up to 2 acres of the land area consisting of wetlands if no wetland alteration is proposed. All other wetlands on the property are available for 1 dwelling unit per 20 acres. (Policies 1.4.5 & 1.5.1) The application of these policies allows for future lakes produced by mining to be counted as upland, resulting in an allowed 1 dwelling unit per 10 acres of lakes.

The Wetland land use category limits permitted land uses to very low density residential uses and recreational uses that will not adversely affect the ecological functions of the wetlands. Mining is usually not included in the permitted uses within the Wetland land use category. The Lee County Future Land Use map (FLUM) delineates some portions of the DR/GR as Wetland. However, these are general locations and the actual field-verified, state-jurisdictional wetlands are considered to be within the Wetland land use category by staff. There is a policy differentiating between Wetland land use category and Conservation Wetlands land use category. All public lands required to be used for conservation purposes by some type

of legal mechanism include wildlife preserves, and wetland and upland mitigation areas. The FLUM is to depict the Wetlands and Conservation Wetlands land use categories separately. (Objective 1.5; Policies 1.5.1 & 1.5.3)

Lee County's DR/GR designation originated from desires to protect valuable groundwater resources and limit suburban sprawl. It may be useful to clarify the meaning of the phrase "historic levels" in Policy 1.4.5. In similar contexts, the term historic is sometimes used interchangeably with "pre-development," yet some agencies regrettably have interpreted "pre-development" to mean before the particular development under review, rather than before development of the site affected historic conditions, for instance through agricultural conversion and drainage. That interpretation would run directly counter to the plain meaning of Policy 1.4.5.

A suggested definition for "historic surface and groundwater levels" is as follows:

> *The surface and ground water levels needed to sustain native plant communities present prior to land alterations that resulted in the artificial lowering of the surface and ground water. The accepted standard for water levels is based on available information and scientifically-based assumptions of 1953 historic aerials, which are made available at the local Natural Resources Conservation Service office or electronically through Lee County. Pre-development aerial photography prior to and after 1953 may be utilized to clarify native land cover and hydrology.*

Currently, density calculations accept open water (including mining pits) as the same as land when determining how many residential lots could be created around former mine pits, not even taking into account any wetlands that may have been destroyed by mining. The typical agricultural zoning in the DR/GR is AG-2, which would allow lots to be as small as 39,500 square feet. Lots of this size usually rely on individual wells and septic systems, which have potential impacts on water quality and water levels in nearby mine pits. Lots around mine pits become a particular issue when public drinking water supply wells are located near the mine pit.

The residential lots created after the completion of mining would only need to meet the minimum AG-2 lot size of 39,500 square feet for typical lots and 33,600 square feet for corner lots, or whatever lot size was adopted through a residential planned development zoning. While this may be an acceptable planning calculation within urban areas, such density calculations within the DR/GR have ecological implications. One ecological issue is the potential impact on maintaining the water quality and water level of large, deep mine lakes that rely on private potable wells and septic systems to service these residential lots. This kind of density calculation also poses a public health and safety issue, considering the public drinking water supply wells are located within the DR/GR. The county should require the use of sewer systems for any new residential subdivisions as a means of protecting the DR/GR water resources and native habitats. Sewering, however, can not be allowed to result in sprawl development as often follows the extension of public utilities. One benefit of utilizing sewer in place of septic is a reduction in the amount of fill required on individual lots, which also preserves native vegetation and protects water quality. Additionally, a fill-reduction requirement would maintain more of the natural soil conditions for ground water recharge and decrease storm water runoff.

The majority of existing mines within Lee County are now regulated under an industrial planned development (IPD) resolution. To gain the residential use upon completion of the mining, the property would need to be rezoned either back to AG-2 or to a residential planned development. The Lee Plan should be revised to clarify the density calculation for lands that have been mined for fill dirt and limerock. The density should be based on existing upland and wetland areas, not including the mine lake, though residential use of a property containing a reclaimed mine lake may be appropriate. This clarification supports the intent of the Lee Plan, which is to protect the water resources within the DR/GR and maintain very low-density residential uses while also allowing for natural resource extraction. Additionally, amending the Lee Plan to include an objective about the future use of natural resource extraction properties, as well as actual implementation policies, would insure the protection of

water resources in this critical area of the county while providing reasonable assurance to property owners as to their expected post-mining uses.

The following objective and policies are recommended. Note that the ** is a placeholder for the appropriate place these items are to be located in the Comprehensive Plan as determined by Planning Staff.

Objective 10.**: Future Uses of Natural Resource Extraction Developments.

The future uses of any new or renewed natural resource extraction project must be evaluated at the time the property undergoes planned development review.

*Policy 10.**: Natural resource extraction operations must be designed to incorporate any proposed future uses, so as to insure the protection of surface and ground water resources, wildlife, and native plant communities.*

*Policy 10.**: New residential developments must utilize a central sewer system to protect water quality and reduce the amount of fill required on individual lots. This policy will maintain more natural soil conditions for ground water recharge and reduce stormwater runoff.*

*Policy 10.**: Natural resource extraction operations must be designed to provide open space appropriate for the proposed future uses.*

*Policy 10.**: Buffers, indigenous preservation, and reclaimed littoral shelves required for the natural resource extraction must be placed under a Conservation Easement in order to maintain these areas in perpetuity regardless of future land uses.*

If natural resource extraction continues as an allowable use within the Wetland future land use category, the Lee Plan should be amended to include mining as an allowable use.

Growth Management – Goal 2

The Lee Plan requires any revisions to the FLUM only be approved when the Board of County Commissioners makes a formal finding that no significant impacts on present or future water resources will result from the change. (Policy 2.4.2)

FLUM amendments to the existing DR/GR areas south of SR 82 and east of I-75, which propose to increase the current allowable density of intensity of land use, will be discouraged by the county. (Policy 2.4.3).

Development Design – Goal 4

The Development Design section of the Lee Plan states the importance of the current planned development rezoning process, which combines site planning flexibility for the land owner with rigorous review by County staff as a means of insuring that all aspects of the Lee Plan are met. Part of the staff review includes evaluation of the proposed project's design as it relates to the topographic and natural features of the site. (Objective 4.1 & Policy 4.1.1)

The Development Design portion of the Lee Plan adequately addresses the DR/GR at this time.

Industrial Land Uses – Goal 7

Natural resource extraction projects commonly referred to as "fill dirt" or "limerock mines" are considered industrial operations. Although the Lee Plan Industrial Land Use category was established for typical urban area industrial developments, the provisions of this section of the Lee Plan have been integrated into the Land Development Code (LDC) mining standards with regard to environmental assessment (Policy 7.7.1). However, revisions to LDC Section 34-1675(b)(3) are needed to clarify the information necessary to evaluate the impact and effect on environmental and natural resources. Revisions to the entire Chapter 34, Division 15 are also needed to clarify the information required for zoning and at development order level. This would help reduce staff review time and provide for consistent, scientifically-based decisions.

In addition, industrial uses located within the DR/GR should have different standards than urban areas, given the environmental sensitivity and importance of protecting the public water resources. The LDC development standards for open space, indigenous preservation, wildlife protection, littoral zones and buffering should be evaluated with consideration of mining within the DR/GR, as this use has very different impacts than urban industrial uses and is allocated for rural areas.

Agricultural Land Uses – Goal 9

The provisions of this section of the Lee Plan address the needed protection of existing agricultural lands from the following: conversion to other land uses; impacts from new natural resource extraction operations; new recreational uses; and new residential developments (Policies 9.1.1 & 9.1.4). Additionally, the County is directed to work with the agricultural community to establish incentives that encourage the continuation of existing agricultural operations (Policy 9.1.7).

The importance of agricultural operations as way of protecting the environmental integrity of an area is often overlooked. It is critical to include the agricultural community and provide protection to their livelihood when addressing the surface and ground water and wildlife issues within the southeast Lee County DR/GR. Many agricultural lands may be maintained and enhanced with best management practices (BMPS) while protecting, restoring, and enhancing the surface and ground water storage capacity and flows. Additionally, agricultural lands can provide critical links between various publicly-owned conservation areas, which allows for wildlife movement and interconnection. Agricultural operations do impact the natural systems, but it is possible to manage these lands in a way that not only conserves natural resources but also readily restores the historic hydrology. This is true even if the agricultural use is no longer viable - whether that be today or 50 years from now. Sustainable agricultural operations that maintain the hydrology and water quality may require retrofitting some existing agricultural operations in order to store and treat water. The implementation of Policy 9.1.7 should involve an ongoing, active interaction between the County and agricultural interests to insure that the integrity of the DR/GR is maintained through a mixture of land uses.

Policy 9.1.7 directed the county to investigate the feasibility of a Purchase of Development Rights (PDR) program no later than 1995. This study was not conducted (Pers. Comm.). A PDR program should still be investigated.

The following revision to Policy 9.1.7 is recommended:

> **POLICY 9.1.7:** *Lee County will work with an agricultural advisory committee and landowner farmers to establish incentives to encourage the continuation of existing agricultural operations, and the improvements to existing agricultural operations as needed to store and treat water and improve ecological values. The county, with the assistance of the committee, will investigate the feasibility of a Purchase of Development Rights (PDR) program for agricultural property by ~~1995~~ 2010. (Added by Ordinance No. 94-30, Amended by Ordinance No. 00-22)*

Natural Resource Extraction – Goal 10

This section of the Lee Plan was evaluated by the Smart Growth Committee and resulted in a staff-initiated amendment through Wayne Daltry, Smart Growth Director. The proposed amendment was approved for transmittal to the State Department of Community Affairs (DCA) by the BOCC on February 25, 2008. Both the proposed amendment and existing language for Goal 10 have been evaluated for this study.

The current and proposed language is presented in its entirety for this portion of the Lee Plan as it directly addresses Natural Resource Extraction:

GOAL 10: NATURAL RESOURCE EXTRACTION. To protect areas containing identified natural resources from incompatible urban development, while insuring that natural resource extraction operations minimize or eliminate adverse effects on surrounding land use and natural resources. (Amended by Ordinance No. 02-02)

OBJECTIVE 10.1: Designate through the rezoning process sufficient lands suitable for providing fill material, limerock, and other natural resource extraction materials to meet the county's needs and to export to other communities, while providing adequate protection for the county's natural resources. (Amended by Ordinance No. 94-30, 02-02)

POLICY 10.1.1: Natural resource extraction operations intending to withdraw groundwater for any purpose must provide a monitoring system to measure groundwater impacts. (Amended by Ordinance No. 02-02)

This policy needs to be revised to insure protection of ground water levels and quality as follows:

Natural resource extraction operations ~~intending to withdraw ground water for any purpose~~ must provide a monitoring system to measure surface and ground water levels and quality to insure there is no degradation to the ground water resources ~~impacts.~~

POLICY 10.1.2: Applications for natural resource extraction permits for new or expanding areas must include an environmental assessment. The assessment will include (but not be limited to) consideration of air emissions, impact on environmental and natural resources, effect on nearby land uses, degradation of water quality, depletion of water quantity, drainage, fire and safety, noise, odor, visual impacts, transportation including access roads, sewage disposal, and solid waste disposal. (Amended by Ordinance No. 00-22, 02-02)

LDC Section 34-1675(b)(3) needs to be revised to provide more detailed requirements to adequately address the potential impacts on the environment, especially in relation to surface and ground water resources.

POLICY 10.1.3: Applications for natural resource extraction permits for new or expanding sites must include a reclamation plan which provides assurance of implementation. Reclamation plans in or near important groundwater resource areas must be designed to minimize the possibility of contamination of the groundwater during mining and after completion of the reclamation. (Amended by Ordinance No. 00-22, 02-02)

LDC Sections 34-1675(b)(8) & 34-1681(c) need to be revised to include a comprehensive reclamation plan that addresses both the finished lake and the land surrounding the mine to insure protection of the surface water in the lake and the ground water levels of the surrounding lands.

POLICY 10.1.4: Natural resource extraction activities (and industrial uses which are ancillary to natural resource extraction) may be permitted in areas indicated on the Future Land Use Map as Rural, Open Lands, and Density Reduction/Groundwater Resources, provided they have adequate fire protection, transportation facilities, wastewater treatment and water supply, and provided further that they have no significant adverse effects such as dust and noise on surrounding land uses and natural resources. In order to reduce transport costs and minimize wear on the county's roadways, the extraction and transport of fill material may also be permitted as an interim use in the Future Urban Areas provided that the above requirements are met; however, special restrictions may also be applied to protect other land uses. These determinations will be made during the rezoning process. (Amended by Ordinance No. 94-30, 00-22, 02-02)

~~**POLICY 10.1.5:** Lee County will support efforts by government, community leaders, and the extractive industry owners and businesses to seek incentives that will help to facilitate the connection of natural resource extraction borrow lake excavations into a system of interconnected lakes and flowways that will enhance wildlife habitat values, provide for human recreation, educational and other appropriate uses, and/or strengthen community environmental benefits. (Amended by Ordinance No. 99-15, 02-02)~~

Policy 10.1.5 should be stricken from the Lee Plan because interconnecting the mining lakes would have detrimental ecological impacts. The difference in the topography of the land results in the excavated lake leveling off at the lowest elevation of the excavation area and drawing down ground water at the higher elevation side of the excavation area. The expanse of the ground water drawn down both vertically and laterally outside of the mined land is not known due to the lack of monitoring requirements. Additional draw down in ground water will affect the adjacent ecosystems, which in turn affects the wildlife habitat.

OBJECTIVE 10.2: Determine and maintain a balance between the County's petroleum resources and the health, safety and welfare of the residents of its Future Urban Areas. (Added by Ordinance No. 98-09)

POLICY 10.2.1: By 2000, the county will conduct a study to determine the appropriateness of oil exploration, drilling, or production. The study will address the issues of the compatibility of oil-related activities with the environment and urban uses. This study will include recommendations regarding the appropriateness of such activities within Lee County as well as guidelines under which such activities should be regulated under the Lee County Land Development Code. (Added by Ordinance No. 98-09, Amended by Ordinance No. 00-22)

Proposed New Objective And Policies Under Element II – Future Land Use, Goal 10: Natural Resource Extraction
by Smart Growth Committee/Wayne Daltry; LPA approved transmittal to BOCC 2/25/2008

OBJECTIVE 10.3: Coordinate mining activities, evaluation, monitoring, restoration and redevelopment plans with water supply planning activities, surface water management, wetland protection, wildlife conservation and future and existing residential activities, and review the cumulative regional and watershed impacts.

POLICY 10.3.1. Mining applications areas will include design features and supporting data to maintain or enhance the pre-development surface and groundwater levels, hydroperiods and flows for the appropriate watersheds and sub-basins and surrounding properties.

The term pre-development should be changed to historic to be consistent with the DR/GR Future Land Use Category under Goal 1 with the definition of "historic surface and ground water levels" added to the Glossary of the Lee Plan as noted above.

POLICY 10.3.2. Mining applications in *pre-designated areas* will *include a minimum of three years* baseline monitoring, onsite and regional assessments of the change in flow, timing of travel, and direction of surface and groundwater systems in the impacted area. Particular attention will be given to connectivity and the potential travel time to wellfields and concentrations of domestic, self-supplied users and protection for single residential wells.

The proposed language for Policy 10.3.2 should be revised to include a minimum of 3 years of baseline monitoring as noted by the italicized language above.

POLICY 10.3.3. Mining applications will include assessments of the potential impact on the aquatic ecology and water quality of the quarry pits, which result from quarry pit design and post mining impacts such as runoff or groundwater flow. This also includes likely land uses surrounding the site and consideration of the primary and secondary impacts *at the local and watershed levels.*

A clarifying phrase is recommended by the italicized language above.

POLICY 10.3.4. The depth of mining for any proposed excavation will be limited to that necessary to prevent the breach of aquicludes or change in water quality within the aquiclude, and separating the aquifer that the mining is within from any other aquifer. Other limita-

tions on mining setbacks or depths will be determined on a case-by-case basis, tied to existing neighboring uses, specific hydrogeologic, wetlands *and watershed* protection, and wildlife conservation issues. This will also take into consideration transportation routes and the impacts mining will have on those routes.
This policy should be revised to include watershed protection as noted by the italicized language above.

POLICY 10.3.5 Annual reports on mining will be required in any permit approval. Reports will include a continuation of the staff recommended baseline monitoring, the areas under active mining, depths being mined, the quantity and type of mined materials, estimated reserves left for mining, and the annual volume, direction and destination of the material being transported.

The following revision is recommended:
Annual reports on mining will be required in any permit approval, which will include a continuation of the staff recommended ~~baseline~~ surface and ground water monitoring of water quality and quantity, the areas under active mining, the areas where reclamation is completed, the areas where invasive exotic removal is completed, depths being mined, the quantity and type of mined materials, estimated reserves left for mining, and the annual volume, direction and destination of the material being transported.

POLICY 10.3.6 Any significant adverse mining impacts identified during mining or post-mining will be subject to adaptive management and corrective measures.

POLICY 10.3.7. Any restoration activities required of a mining permit (and any proposed redevelopment of a mined site tied to a mining permit) must consider the restoration and sustainable management of all quarry pits, preserves and buffer areas as well as the timing of development - including mining - of surrounding sites. Residential uses, when deemed appropriate, will be limited in the timing of their placement until surrounding mining operations cease creating groundwater or geological impacts that affect the foundations of structures.

Water, Sewer, Traffic, And Environmental Review Standards – Goal 11

Goal 11 establishes the requirement for an environmental assessment whenever a proposed project is located in an existing or probable environmentally sensitive areas. The assessment must examine existing conditions, address environmental problems, and propose means and mechanisms to protect, conserve, or preserve the environmental and natural resources.

No revision to Goal 11 is needed regarding environmental review standards. However, the implementation of this standard regarding mining applications is located in LDC Section 34-1675(b)(3), which should be reviewed for text revisions that may clarify the specific needs of the environmental assessment report.

Coordinated Surface Water Management And Land Use Planning On A Watershed Basis – Goal 60

The overall goal is to protect or improve surface and ground water at the local and watershed level while also providing flood protection for developments. The implementing objectives and policies emphasize the need to manage water in a way that would utilize and restore natural systems, particularly storage areas and flow ways. The DR/GR is noted as a "critical area for surface water management," for which the County needs to maintain existing regulations to protect its unique environmental and water resource values (Objective 60.4). The County is directed to "maintain the elimination of the exemptions in its development regulations for agricultural uses and small subdivisions within the 'critical areas for surface water management,' and to continue to subject these uses to an appropriate review process" (Policy 60.4.2). LDC regulations implementing Policy 60.4.2 were not located. The LDC should be evaluated further to determine if Policy 60.4.2 has been implemented through development regulations, or if an amendment to the development regulations is necessary.

Protection Of Water Resources – Goal 61

Protection of the county's water resources is discussed through water supply planning, designing surface water management systems that mimic natural systems, and establishment of performance and/or design standards that protect natural drainage system functions (Objectives 61.1, 61.2, 61.3). An important component of water resource management and allocation of water resources is to provide sufficient water to maintain or restore valued natural systems (Policy 61.1.1). Additionally, development in the rural areas is required to integrate areas where soils, vegetation, hydrogeology, topography, and other factors indicate that water flows or ponds into an area-wide coordinated stormwater management scheme (Policy 61.2.1). An important policy regarding mine reclamation states "The county will maintain regulations that require reclamation standards for future excavation that mimic natural systems through the techniques that improve water quality, wildlife utilization, and enhance ground water recharge" (Policy 61.26.).

Goal 61 includes adequate language to protect the water resources in the DR/GR. However, the LDC should be evaluated to insure the appropriate development and zoning standards have been established to implement the objectives and policies of Goal 61.

Ground Water – Goal 63

Goal 63 establishes the means to protect the County's ground water supplies from activities that have the potential to deplete or degrade the ground water supplies. A staff hydrogeologist is required to review all development applications near public utility potable water wellfields with particular attention to proposed land uses within a 10-year travel time from the wellheads (Policy 63.1.2). The well field protection map included in the Lee Plan is out of date and needs to be replaced with the new well field protection zone map adopted December 5, 2007.

The 10-year travel time area does not include the entirety of the DR/GR as shown on the current well field protection map (Fig. 2.6.1A); therefore a revision to Policy 63.1.2 is recommended as follows:

The staff hydrogeologist will review and comment on all development applications near public utility potable water wellfields, with particular attention to proposed land uses within a 10-year travel time from the wellheads and all development applications proposed within the DR/GR.

The 2005 3-dimensional model conducted for the County, as it pertains to updating the well field protection ordinance, did not include the existing mine pits as a parameter of the modeling. The 10-year travel time limits should be re-examined with the 3-dimensional MIKE SHE model that is being compiled as a part of this DR/GR study, where the land use component includes the presence of mine pits. Additionally, the LDC development and zoning standards should be evaluated so that Policy 63.1.2 is adequately implemented.

Development Design Requirements – Goal 77

The development design requirement determines that adequate open space, preservation, and landscaping must be included in all new development. The county is directed to continue to review the open space requirements in the LDC within new industrial developments (Policy 77.2.1).

No revisions are recommended to Goal 77. However, the LDC open space requirements for mining projects should be reviewed to determine if the standard industrial open space requirement meets the overall intent of the Lee Plan regarding the DR/GR and protection of the County's resources.

Regional Parks – Goal 84

Goal 84 establishes the importance of regional parks in the preservation of natural habitats, protection of water supply, and preservation of the natural heritage. In addition, regional parks also create passive recreational opportunities to the general public.
No revision is recommended to this language. The County should evaluate the benefits of creating a regional park or other recreational opportunities in the southeast DR/GR area between SR 82 and Corkscrew Road.

Resource Protection – Goal 107

This portion of the Lee Plan establishes the objectives and policies to insure the County's native habitats, diverse wildlife and vegetation, water quality and natural surface water characteristics are maintained or enhanced. No revisions are recommended to Goal 107 or its implementing objectives and policies.

Wetlands – Goal 114

The Wetlands goal establishes that Lee County will maintain and enforce a regulatory program for development in wetlands that is cost-effective, complements federal and state permitting processes, and protects wetland systems. Wetlands include all lands that meet the State of Florida definition [F.S. 373.019(17)]. The Federal jurisdiction over wetlands may include areas that are not covered or claimed by the State agencies.

Policy 114.1.1 states "Development in wetlands is limited to very low density residential uses and uses of a recreational, open space, or conservation nature that are compatible with wetland functions." There is no provision that allows mining as a use within wetlands.

In 1994, the county's wetland definition was changed to the state-adopted definition, and the county staff no longer verified the delineation of jurisdictional wetlands or permitting of wetland impacts. At this same time, the Lee Plan was revised to include Policy 114.1.2(1), which states "In accordance with F.S. 163.3184(6)(c), the county will not undertake an independent review of the impacts to wetlands resulting from development in wetlands that is specifically authorized by a DEP or SFWMD dredge and fill permit or exemption." The Florida Statute that is referenced pertains to processes for the adoption or amendment of a comprehensive plan. It does not limit the county's ability to independently review the impacts to wetlands. However, this policy has been used by applicants to try to limit the ability for County staff to implement other portions of the Lee Plan regarding protection of wetlands. It is important to note that F.S. 373.414(1)(b)(4) does state that mitigation imposed by a local government for surface water and wetland impacts of an activity regulated by the State may not differ from an issued state ERP permit. It appears the Florida Statutes limit the role of local government in mitigating wetland impacts. However, it does not appear the local government is limited as to whether impacts to wetlands are consistent with their comprehensive plan. Policy 114.1.2(1) should be stricken as currently written. The county attorney's office should determine if there are legal limitations within the Florida Statutes in regard to the county's ability to review impacts to wetlands for consistency with the Lee Plan. Additionally, it is recommended that this policy be re-examined due the deficiencies in current FDEP-BMR and SFWMD mining regulations.

Water Quality And Wastewater – Goal 115

Goal 115 adequately addresses the need to maintain high water quality that meets or exceeds water quality standards, and requires new developments and expansions of existing developments to not degrade surface and ground water quality.

This goal allows the LDC requirements to include water quality baseline data and monitoring. Lee County Natural Resources staff has in the past required water quality monitoring of mines (Florida Rock Green Meadows Mines), and are currently recommending water quality base line and monitoring through mining operation permit renewals and zoning applications (Pers. Comm.).

Water Resources – Goal 117

The water resource provisions include objectives and policies to insure the conservation, management, and protection of the natural hydrologic system of Lee County for a continued water resource supply. The importance of maintaining or improving existing surface and ground water levels and flow within drainage basins is included in the subsequent policies.

Goal 117 adequately establishes the policies to insure protection of the County's water resources.

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