

**St. Lucie County Rural Land Stewardship Area Overlay
Supplemental Explanation, Data and Analysis Summary**

**St. Lucie County Comprehensive Plan Amendment 06-RLSA-1
(Adams Ranch / Cloud Grove)**

August 7, 2006

This supplemental explanation, data and analysis, along with the revised Goals Objectives and Policies dated August 7, 2006, data and analysis previously provided and referenced herein, address all of the objections, recommendations and comments included in the Department of Community Affairs' December 30, 2005 Objections, Recommendations and Comments Report.

The supplemental data and analysis are listed in the following order:

Adams Ranch and Cloud Grove as a Pilot Program

RLSA Process and Implementation in St. Lucie County

Stewardship Credit Calculations

Projected Population of RLSA

Facility needs summary:

- Potable Water
- Sanitary Sewer
- Transportation
- Solid Waste
- Drainage

Natural Resources and Stewardship Factors

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Adams Ranch and Cloud Grove as a Pilot Program

As a result of recommendations made by the Rural Lands Committee of the Governor's Growth Management Study Commission, the 2001 Florida Legislature enacted the Rural Land Stewardship Program, codified at Section 163.3177(11)(d) of the Florida Statutes. During that same time, Collier County was conducting a detailed study and assessment of approximately 195,000 acres of rural lands, in and around Immokalee, pursuant to a Final Order of the Governor and Cabinet sitting as the Administration Commission. Ultimately, Collier County adopted into its Comprehensive Plan a rural land stewardship area overlay, following the guidance of Section 163.3177(11)(d), however, it was not enacted pursuant to the Statute. The St. Lucie County Rural Land Stewardship is the first program in the State pursuant to Section 163.3177(11)(d).

In May of 2005, Family Lands Remembered LLLP submitted an application to create a "pilot program" rural land stewardship area (RLSA) overlay in St. Lucie County on approximately 22,384 acres of rural lands in accordance with Section 163.3177(11)(d) of the Florida Statutes. The basic concept is that the most valuable lands, from an environmental, agricultural and/or cultural perspective, would generate the highest number of stewardship credits per acre when included in stewardship sending areas (SSAs), which would then be transferred to eligible receiving areas where mixed-use sustainable communities would be established in stewardship receiving areas (SRAs).

The Family Lands application is being considered as a "pilot program" in that it provides an opportunity for St. Lucie County to create an RLSA, in accordance with state law, on a discrete portion of the rural lands in the county. This proposed St. Lucie County Stewardship includes a total of approximately 22,384 acres, consisting of approximately 16,466 acres of cattle ranch and citrus grove, known as Adams Ranch, and 5,918 acres of citrus grove, known as Cloud Grove (together, RLSA Overlay). This proposed overlay includes a representative sampling of the different types of rural lands that exist in St. Lucie County, useful for testing a "pilot program." Additionally, all owners within the proposed overlay have agreed to participate and enthusiastically support the program.

The Adams Ranch portion of the RLSA Overlay, approximately 16,466 acres, is a working cattle ranch that has been in operation since 1937, having originally been founded by Alto Adams, Sr. Under the leadership of his son Alto "Bud" Adams, Jr., Adams Ranch has become one of the premier cow-calf operations in the United States. Currently managed by Bud's son Mike Adams, the Adams Ranch is a shining example of sustainable agriculture in an environmentally conscious and symbiotic relationship with nature. As stated by Bud Adams, "we've been good to the wildlife and the wildlife's been good to us". In addition to the working cattle ranch, current operations on the Adams Ranch portion of the proposed RLSA Overlay also include citrus operations, some pasture sod farming, some occasional row crop farming, hunting and recreational leases. Significantly, and primarily because of the way the Adams Ranch is managed,

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the property is home to abundant wildlife including a number of endangered species. The property has long been desired by various governments for permanent protection, however the owners have not been interested in selling the property to the public, nor has there been sufficient funding available.¹

The Cloud Grove portion of the RLSA Overlay, approximately 5,918 acres, has been a citrus grove for at least the past forty years, consisting of citrus and a large above-ground reservoir (covering an entire section – 640 acres). Currently, approximately 2,000 acres of the citrus grove has been impacted by citrus canker, and those trees have been removed.

The RLSA provides an opportunity to facilitate permanent protection and conservation of Adams Ranch through an incentive-based voluntary program, at no cost to the public for either acquisition or management.

Although the RLSA Overlay will only apply to this 22,384 acre portion of the County, with the boundaries identified on the Future Land Use Map, the program has been crafted so that it could be expanded in the future through further comprehensive plan amendments, with supporting data and analysis, if St. Lucie County and other rural landowners determine that it would be mutually advantageous to do so. Any such proposed amendments would require a large scale Comprehensive Plan Amendment Application, through review by County Staff and DCA, and required public hearings. Additional policies have been added to guide any such expansion proposal that might be considered.

RLSA Process and Implementation in St. Lucie County

The RLSA program creates an overlay to the Future Land Use Map, with specific goals, objectives, policies and figures for use within the RLSA boundary. The RLSA Overlay itself does not change the underlying comprehensive plan designation or zoning, but is a voluntary set of rules and regulations which provides incentives to property owners to use the program through the establishment of stewardship sending areas (SSAs) and stewardship receiving areas (SRA), as an alternative to the existing land uses.

The RLSA Overlay establishes the methodology for the creation, conveyance and use of stewardship credits. It is important to understand that the establishment of the overlay does not by itself increase density or intensity and does not affect the underlying density or intensity of land uses within the overlay unless and until an application to designate an SSA or SRA is approved by the Board of County Commissioners. To create and implement the program, in accordance with Section 163.3177(11)(d), the following primary actions must occur:

¹ St. Lucie County has a successful land acquisition program, through which approximately 6,000 acres have been purchased. The total cost of these lands, including County bond proceeds and matching funds, was approximately \$60,000,000.

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1. Adoption of the RLSA Overlay to the Future Land Use Element and the placing of the RLSA Overlay on the Future Land Use Map of the St. Lucie County Comprehensive Plan for the 22,384 acres within the RLSA Overlay boundary.
2. Adoption of specific land development regulations applicable to the RLSA Overlay and the placing of the RLSA Overlay Zone on the St. Lucie County Zoning Map for the 22,384 acres within the RLSA Overlay boundary.
3. Review and approval of SSA application(s).
4. Review and approval of SRA application(s).

The RLSA Overlay includes 4 designations, based upon on the natural resources located on the property, consideration of listed species, habitat and detailed data accumulated through extensive field work and other sources. These designations within the RLSA Overlay include habitat stewardship areas, hydrological stewardship areas, water retention areas, and open areas.

The total acreage within the RLSA Overlay by designation is as follows:

- Water Retention Areas (WRAs) 1,004.76 acres ±
- Hydrologic Stewardship Areas (HYSAs) 2,842.53 acres ±
- Habitat Stewardship Areas (HSAs) 9,314.18 acres ±
- Open Area (Open) 9,222.24 acres ±

Upon approval of the comprehensive plan amendments establishing the RLSA Overlay and the implementing land development regulations, the program can be utilized. The creation of the RLSA Overlay and the inclusion of property within it includes the ability to create stewardship credits through the SSA application process and using the formulas established through the overlay map (RLSA Figure 1), the index map (RLSA Figure 2), the credit worksheet (RLSA Figure 3) and the stewardship sending area matrix (RLSA Figure 4), however, at this point they are only potential stewardship credits. An approved SSA application actually creates the stewardship credits, which then become effective upon recordation of the corresponding Stewardship Easement Agreement.

All lands within the RLSA Overlay can be eligible sending areas and used to create stewardship credits, whether designated as a HYSAs, HSA, WRA, or “open” areas within the RLSA Overlay. The SSA application process and approval will determine the specific number of stewardship credits to be created within each SSA, based upon the land use layers removed (RLSA Figure 4) and the values of the land as determined by the Stewardship Credit Matrix (RLSA Figure 2) and the Natural Resource Index (RLSA Figure 3).

The only lands within the RLSA Overlay that are eligible receiving areas where stewardship credits can be used for stewardship receiving area development are those

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designated as “open” on the overlay map (RLSA Figure 1), and which have a natural resource index of 1.4 or below. These are the only areas within RLSA Overlay which are suitable for SRA development. It is important to understand that although all of these areas may be suitable for SRA development, they cannot all be developed as some may be needed as SSAs to create credits for SRAs.

Through the SSA application process, the landowner will voluntarily remove land use layers as set forth in RLSA Figure 4 in return for the creation of stewardship credits. The operative documents which actually establish the stewardship credits are the SSA Credit Agreement and corresponding Stewardship Easement Agreement, which require approval by the Board of County Commissioners. The Stewardship Easement Agreement will then be recorded on the SSA property and constitutes a permanent restriction and covenant running with the land on the property within that particular SSA boundary.

A landowner within the RLSA Overlay can choose to submit no SSA application, to submit an SSA application for a portion of the property or to submit an SSA application for the entire property. The owner of the land on which the SSA is approved can then transfer those credits to an eligible receiving area within the RLSA Overlay or can simply hold those credits for future transfer.

The SRA approval process provides a mechanism for the use of stewardship credits to create mixed-use sustainable development on suitable lands within the RLSA Overlay. The forms of SRA development are limited to towns, villages, hamlets and compact rural developments, all in accordance with the goals, objectives and policies, and meeting the required characteristics for each form (RLSA Figure 5). Through the SRA process, the County shall confirm that the proposed SRA has obtained or will obtain sufficient stewardship credits to entitle the number of acres to be included in the SRA.

It is important to note that stewardship credits entitle a specific number of acres of mixed-use development, rather than a specific number of residential units or non-residential square footage. The acres entitled within a hypothetical SRA could be an acre of housing, an acre of retail, an acre of office or warehouse, an acre of water retention, an acre of parks, or other allowable use in accordance with the required characteristics for SRA development (RLSA Figure 5). Through the SRA review process, all infrastructure must be analyzed and addressed, including transportation, potable water, wastewater, irrigation water, storm water management, solid waste, schools, parks and recreation. Additionally, the SRA must be fiscally neutral or positive to St. Lucie County.

It is the creation of SSAs and SRAs that result in a sustainable form of development, whereby large areas of environmentally, agriculturally and culturally valuable lands are permanently protected, conserved and managed through SSAs, and sustainable, mixed-use development is accommodated through SRAs, thus facilitating the use of

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innovative planning and flexible development strategies as described by the Florida Statutes and the Florida Administrative Code.

Stewardship Credit Calculations

There are a total of 22,384 acres within the proposed RLSA for St. Lucie County. Of this total, 16,466 acres are located on the Adams Ranch and 5,918 acres are located on the property known as Cloud Grove.

The methodology for stewardship credit generation has been established in the goals, objectives and policies and in the Stewardship Credit Worksheet (RLSA Figure 2). The number of stewardship credits generated through designation of an SSA is based upon: 1) the acres within the proposed SSA, 2) the corresponding Natural Resource Index Factor for each acre; and 3) the number of Sending Area Land Use Layers being eliminated. The formula for the Natural Resource Value calculation is:

- Stewardship Index Factor Value X Acreage X Percentage of Base Value of Land Use Layers Being Removed = Number of Stewardship Credits

Incentive Credits are also established to enable the vision of St. Lucie County. These Credits are to encourage conservation of agriculture, protection of cultural heritage, and potential restoration of natural resources in areas that have been impacted.

- The Agriculture Index Credit requires the removal of all land use layers down to the Ag 1 or Ag 2 layer, so that none of the uses in the land use layers above Ag 1 or Ag 2 layers could be utilized in the property. The formula for the Agriculture Index Value is:

Agriculture Index Value (1) X Acreage X Percentage of Base Value of Land use Layers Being Removed (80% or 90% depending on use remaining in Ag 1 or Ag 2 land use layer) = Number of Stewardship Credits.

- Cultural Heritage Credits may be applied with a finding of the Board of County Commissioners that the land has cultural significance to St. Lucie County. Each acre of land that is found to have cultural significance may be granted .5 Credits per Acre.
- Restoration Credits may be applied to lands that have a Natural Index Value of 1.4 or less. If through a complete application and corresponding process, a landowner can demonstrate a successful restoration plan, the Board of County Commissioners may approve 3 Stewardship Credits per acre of restoration. These Restoration Credits would then be authorized at the time of SSA approval, but would only be awarded when the restoration work has been completed in accordance with the approved plans and specifications. Restoration Credits would require submittal of an SSA Application and detailed plans and specifications for the restoration work to be undertaken. Restoration can only

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occur on lands having an NRI of 1.4 or below. Restoration Credits are not available within SRAs.

As mentioned, stewardship credits are created through the designation by the BOCC of SSAs and become effective upon the recording of the applicable Stewardship Easement Agreement. These credits can then be used in SRAs as approved by the BOCC. As the Adams Ranch Stewardship is a “pilot program” for St. Lucie County, and in recognition of the significant environmental, cultural and agricultural resources found on the Adams Ranch, the total SRA development potential has been limited in accordance with the long-term vision and goals for this pilot program, namely Adams Ranch and Cloud Grove.

Specifically, Policy 1.18 limits the maximum potential SRA development of the 22,384 acre RLSA Overlay to a maximum of 13,428 residential units and the corresponding non-residential uses required by RLSA Figure 5. As described in more detail in the public facilities analysis section, the corresponding total square footage of non-residential uses is limited to 5,168,000.

Based upon the data collected and an application of the program, the great majority of this development potential will be accommodated in a 5,000 acre Town SRA on Cloud Grove. This Town is being planned for 12,000 homes and approximately 3,200,000 sf of non-residential uses including retail, office, light manufacturing, civic, etc., although the maximum could be 12,500 homes and 5,000,000 sf, based upon the maximums set forth in RLSA Figure 5. Because the Cloud Grove reservoir will be used as part of the open space for the Cloud Grove SRA, it will not generate stewardship credits. The Cloud Grove Town of 5,000 acres will require 35,000 stewardship credits, which will be transferred from an SSA over the most valuable (environmental, agricultural and historical) portions of the Adams Ranch, expected to cover approximately 12,000 acres.

After the initial SSA to be used for Cloud Grove is created, there would remain approximately 4,446 acres of Adams Ranch within the RLSA Overlay, but not in an SSA or SRA. Adams Ranch Inc. is currently contemplating an approximate 100 acre CRD to be used as an ecotourism center, small lodge and office. This CRD would also house the Adams Ranch foundation, which will be funded with some of the proceeds from the approximate 12,000 acre SSA for Cloud Grove and which will assist with the perpetual maintenance obligations to be set forth in the SSA credit agreement. This CRD would have no permanent residential housing.

Adams Ranch has no current plans for additional SRAs or SSAs but will retain the right to use the balance of its lands not covered by the SSA for Cloud Grove. Depending upon location and resource value, those lands could be used as SSAs (potentially all of the lands) or as limited SRAs (only those designated as “open” and having an NRI of 1.4 or less). Based upon Policy 1.18 and the maximum Town on Cloud Grove of 12,500

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homes, the remaining maximum is 928 dwelling units that potentially could be built in SRAs on Adams Ranch. This maximum limitation for potential residential units on Adams Ranch can be further described. The Ag 2 land use layer allows for limited homestead sites in SSAs where all layers above agriculture are removed, at a rate of one homestead per each 500 acres. If 16,000 acres of Adams Ranch were to be placed into an SSA, leaving 466 acres for potential SRA development, then there could be a maximum of 32 individual homesteads on those 16,000 acres. The remaining maximum potential residential units would be 896 (928 – 32 homesteads). If all of these potential residential units were to be placed in one Village on a suitable receiving area on Adams Ranch (i.e., open designation and NRI values of 1.4 or below), that Village could be 448 acres at 2 units per acre. This 448 acre theoretical Village would require 3,248 stewardship credits, to be created by another appropriate SSA.

Based upon the data and analysis, sufficient stewardship credits can be created to accommodate the SRA development described above.

Maximum Potential Population of the RLSA Overlay

The long-term vision and goals for the initial 22,384 acre RLSA Overlay include the permanent protection and conservation of the highest quality environmental agricultural and cultural resources on the Adams Ranch. This protection and conservation will result from the establishment of stewardship sending areas on the Ranch. The maximum potential development within the 22,384 acre RLSA Overlay will be 13,428 residential dwelling units and a corresponding 5.18 million square feet of nonresidential goods and services, not including civic, governmental or schools (taking the absolute maximum allowed by RLSA Figure 5, based upon the 13,428 residential dwelling units). The maximum potential population of the 22,384 acre RLSA Overlay assumes that the absolute maximum number of dwelling units is constructed within the RLSA. Based upon the goals, objectives and policies, using stewardship credits that could be created within the RLSA, the 25 year or greater projected population of the RLSA is 33,167 people, based upon the county's rate of 2.47 persons per dwelling unit.

The total amount of available potential stewardship credits will accommodate this projected population. The public facilities analysis will use these figures as the maximum, even though it is likely that final development figures will be lower. As well, there is more than sufficient suitable land meeting the "open" designation and NRI requirements to accommodate this population.

The St. Lucie RLSA is not sprawl

Rule 9J-5.006(2)(a) F.A.C., 9J-5.0006(2)(b) F.A.C., and Rule 9J-5.006(6)(c) 1 through 3, F.A.C., s. 163.3177(11)d.4 and 6., F.S. describe the 13 "primary indicators" of urban sprawl and direct local governments to discourage development which exhibits characteristics of urban sprawl. However, Florida law also appropriately recognizes that innovative planning and development strategies are necessary to accommodate the

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State's anticipated future population, in a manner that is not urban sprawl. Florida law provides:

The Legislature recognizes the need for innovative planning and development strategies which will address the anticipated demands of continued urbanization of Florida's coastal and other environmentally sensitive areas, and which will accommodate the development of less populated regions of the state which seek economic development and which have suitable land and water resources to accommodate growth in an environmentally acceptable manner. The Legislature further recognizes the substantial advantages of innovative approaches to development which may better serve to protect environmentally sensitive areas, maintain the economic viability of agricultural and other predominantly rural land uses, and provide for the cost-efficient delivery of public facilities and services.

It is the intent of the Legislature that the local government comprehensive plans and plan amendments adopted pursuant to this part provide for a planning process which allows for land use efficiencies within existing urban areas and which also allows for the conversion of rural lands to other uses, where appropriate and consistent with the other provisions of this part and the affected local comprehensive plans, through the application of innovative and flexible planning and development strategies and creative land use planning techniques, which may include, but not be limited to, urban villages, new towns, satellite communities, area-based allocations, clustering and open space provisions, mixed-use development, and sector planning.

Section 163.3177(11)(a) & (b), Fla. Stat. (2005). The Rural Land Stewardship Program builds upon this statutory directive and is codified in subsection (d) of this same statute.

The Florida Administrative Code further provides:

Notwithstanding and as a means of addressing any provisions contained in Rules 9J-5.006(3)(b)8., 9J-5.011(2)(b)3., 9J-5.003(140), F.A.C., and this subsection, the Department encourages innovative and flexible planning and development strategies and creative land use planning techniques in local plans. Planning strategies and techniques such as urban villages, new towns, satellite communities, area-based allocations, clustering and open space provisions, mixed-use development and sector planning that allow the conversion of rural and agricultural lands to other uses while protecting environmentally sensitive areas, maintaining the economic viability of agricultural and other predominantly rural land uses, and providing for the cost-efficient delivery of public facilities and services, will be recognized as methods of discouraging urban sprawl and will be determined consistent with the provisions of the state comprehensive plan, regional policy plans, Chapter 163, Part II, and this chapter regarding discouraging the proliferation of urban sprawl.

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Section 9J-5.006(5)(l), F.A.C. (2005).

The required characteristics of the various SRAs are prescribed in RLSA Figure 5. These minimums and maximums for non-residential square footage, including retail, office, manufacturing, light industrial and transient lodging were based upon projections of the needs of projected residents so that a sustainable mixed use community could be created through the SRA design and review process.

Facility Needs

In accordance with section 163.3177(11)(d), F.S., the Rural land Stewardship Area (RLSA) program creates an overlay to the Future Land Use Map and does not increase density or intensity unless and until applications to create specific Stewardship Sending Areas (SSAs) and Stewardship Receiving Areas (SRAs) are filed, reviewed and approved by the Board of County Commissioners (BOCC). Pursuant to the statute and the Goals, Objectives and Policies of the St. Lucie County Comprehensive Plan, applications to create SRAs must include detailed infrastructure analysis of facility needs for transportation, potable water, wastewater, irrigation water, stormwater management, solid waste, schools, and parks and recreation, as well as a fiscally neutral or positive plan to provide for such needs.

The SRA application must also be reviewed by the Department of Community Affairs 30 days prior to consideration of the SRA by the BOCC. If this SRA application identifies a need for public facilities beyond that which is at that time included in the County's Future Transportation Map, Capital Improvements Element or Capital improvements Plan, then such amendments to the Comprehensive Plan shall be processed concurrently with the SRA Application or any related Development of Regional Impact (DRI) application for any SRA that exceeds the applicable DRI threshold.

It is also important to note that the establishment of SRAs within a RLSA Overlay may take place over time. In this circumstance, we expect the Application for the Cloud Grove SRA to be submitted in the near future, at which time the detailed analysis of all facilities and concurrency requirements will be done. We believe that Adams Ranch may submit an SSA and SRA Application for a small Research and Ecotourism Facility in the relatively near future, however there are no present plans for any further establishment of SSAs or SRAs.

In accordance with Section 163.3177(d)(11) and the St. Lucie County's RLSA Overlay, detailed analysis and review will be required as part of the application process for any SRA, including the Cloud Grove SRA. As noted above, a detailed infrastructure analysis is required in each application for SRA designation, and that application may recognize that any SRA development would take place over time, as contemplated by the Rural land Stewardship Program (RLSP) statutes. Regardless, a general overview of the maximum public facility needs that could result, if the maximum theoretical SRA development were to actually take place in summary fashion is set forth below.

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If developed at its maximum potential, the St. Lucie County RLSA (pilot program of 22,384 acres) would result in the development of a "Town" having 12,500 residential units and 5,000,000 sf of non-residential uses (maximum of 2.5 units per gross acre and maximum of 400 sf per residential unit, both from RLSA Figure 5) and a "Village" having 928 residential units and 185,600 sf of non-residential uses (maximum of 2.0 units per gross acre and maximum of 200 sf per residential unit, both from RLSA Figure 5). The combined total potential maximum would be 13,428 residential units and 5,185,600 sf of non-residential goods and services.

The following general data & analysis summary by facility type, for reference purposes given the RLSP program and SRA application process, assumes the maximum development potential, and sets forth the facilities that would be necessary if SRA applications allowing the maximum potential development were approved over time.

Potable Water and Sanitary Sewer

The current Water Use Permits for both Adams Ranch and Cloud Grove utilize a combination of wells from the Floridan aquifer and surface water from reservoirs and surrounding canals including the C-23, C-24 and C-25. Copies of these Water Use Permits have been provided as part of the initial data & analysis. As SRA development may take place over time, the water use for agriculture on those particular SRA lands would end. It is anticipated that no changes will occur in the near future with respect to the Adams Ranch portion of the RLSA Overlay. In the event that Adams Ranch were to move forward with development of any SRAs, it is likely that needed water supply would be drawn from the Floridan aquifer.

The development of water and wastewater facilities for the SRA for Cloud Grove (which will be a Town as set forth in the RLSA Overlay and RLSA Figure 5) shall involve the installation of new water supply, treatment, distribution, and storage systems as well as new wastewater collection, transmission, and treatment systems. These water and wastewater systems shall support only that development in a designated SRA within the RLSA Overlay and meeting the criteria for a "Town".

Any new water and wastewater systems shall be designed and constructed to the latest applicable standards pursuant to the Florida Administrative Code (F.A.C.) and its applicable referenced standard manuals and technical publications. These facilities shall also be designed and constructed to meet the specifications and conditions designated by local, state and other regulatory agencies with jurisdiction, such as St. Lucie County, Florida Department of Environmental Protection (FDEP), Department of Health and Rehabilitation Services, South Florida Water Management District (SFWMD) and contained within applicable energy, plumbing, electrical, building, and fire codes.

Water Supply

Well water drawn from the deep Floridan Aquifer shall support the selected water

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treatment process. Sufficient raw water wells, including spares, shall be provided to support the consumptive use needs dictated by the projected population and usage. The raw water wells shall be designed and permitted to meet SFWMD requirements for groundwater withdrawal and FDEP requirements for well design and construction.

The raw water supply to the treatment process shall be from the Floridan Aquifer. The deep Floridan Aquifer is not hydraulically interconnected with the Surficial Aquifer and it does not impact the surficial groundwater table. The Floridan Aquifer is generally not susceptible to contamination from the land surface and therefore offers a high level of water quality. Sufficient pumping units and flow monitoring shall be provided to transfer the raw water to the water treatment facility.

Based upon the potential maximums, it is estimated that 4,050,000 gallons per day would be needed for the 13,428 homes and 5.18 million sf of non-residential uses.

Detailed hydrological information shall be developed to locate the wells and to identify sufficient water quantity that is obtainable to support the consumptive demands of the water supply system. Based on the results of the hydrological analysis, the raw water supply wells shall be sited to provide the maximum amount of production with the least amount of impact. The siting of the wells shall meet SFWMD requirements for consumptive use along with the Wellhead Protection Standards established by FDEP, as outlined in F.A.C. Chapter 62-555 entitled, "Permitting, Construction, Operation and Maintenance of Public Water Systems", and Ordinance No. I-330, providing for the interim protection of potable water supply wells, where applicable.

Water Treatment

The treatment process(es) for the water supply system shall be selected to meet or exceed State of Florida primary and secondary drinking water standards as established pursuant to F.A.C. Chapter 62-555. Standby power shall be provided to sustain the treatment process during temporary loss of electric power. The final design of the treatment processes shall also be based on the well water quality obtained during the hydrological investigation, described above, and the required consumptive demand.

Water Distribution and Storage

The water distribution system and finished water storage shall be designed and constructed to meet domestic water and fire suppression needs. The water distribution system shall be designed to meet maximum daily domestic water demands plus fire suppression demands established pursuant to the Insurance Service Office (ISO). The water distribution system will be designed to sustain water distribution system pressures of not less than 20-psi under all conditions of service.

The water distribution system shall meet the requirements of F.A.C. Chapter 62-555 as well as applicable local, state and other applicable regulatory requirements.

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The use of the potable water supply system for the purpose of landscape irrigation shall be discouraged. Its use shall be dedicated to meet domestic and fire suppression needs only. The use of reclaimed water for such purposes as landscape irrigation shall be provided when available.

Wastewater Collection and Transmission

The collection and transmission system shall consist of conventional gravity sewers, lift stations, pressurized force mains and other facilities to convey raw sewage to the wastewater treatment facility where it shall be treated prior to discharge or reuse. The design of the wastewater collection and transmission system shall meet F.A.C. Chapter 62-604 entitled, "Collection Systems and Transmission Facilities", as well as applicable local, state and other applicable regulatory requirements.

Wastewater Treatment

The wastewater treatment facility shall be designed and constructed to F.A.C. Chapter 62-600 entitled, "Domestic Wastewater Facilities" and to applicable local, state and other applicable regulatory requirements. The facility shall be of a municipal-type design capable of supporting the wastewater demands of the development. The design of the wastewater treatment facility may include treatment processes such as solids screening, aeration, clarification, digestion, filtration, disinfection, and bio-solids management to allow effluent discharge and reuse limitations to be met. Standby power shall be provided to sustain the treatment process during temporary loss of electric power. In addition, the facility shall be designed and located to be neighborhood friendly and to minimize adverse effects to the immediate area surrounding the facility.

Based upon the potential maximums, it is estimated that 3,441,150 gallons per day would be needed for the 13,428 homes and 5.18 million sf of non-residential uses.

The effluent from the wastewater treatment facility shall be suitable for reuse in applications, when available, such as irrigation of common area, open space, parks, golf courses and residential yards. This aspect of effluent management will reduce the water demands required of the domestic water supply. The reclaimed water system shall be designed and constructed to F.A.C. Chapter 62-610 entitled, "Reuse of Reclaimed Water and Land Application".

Transportation

It is important to estimate and understand the potential facility needs of the RLSA Overlay with both the 25-year or greater planning period and the 5-year CIP timeframes. Within the 25-year or greater planning period for the RLSA Overlay, the maximum number of new residential dwellings is limited to 13,428, to be supported by a maximum of 5.17 million square feet of non-residential development, if all maximums were utilized (400 sf/du for Town SRA). The Town SRA on Cloud Grove is actually expected to have

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12,000 new residential dwellings and 3.2 million square feet of non-residential development (less than the maximum potential of 12,500 du and 5,000,000 sf).

A preliminary transportation facilities assessment of the RLSA indicates that the transportation network would include a regional connectivity expansion, anchored by a extension of Indrio Road westward from I-95 to Minute Maid Road, a new Florida Turnpike Interchange at Minute Maid Road, and the extension of a paved Minute Maid Road through Cloud Grove to connect with the extended Indrio Road. These improvements may be followed by a northern extension of Minute Maid Road to Oslo Road in Indian River County, to connect with the proposed I-95 interchange at Oslo Road, currently in the Interchange Justification Report and study phase. Any of these improvements to the regional network will be carefully evaluated as part of the Cloud Grove SRA impact assessment.

Due to planning, entitlement and permitting regulations, the amount of potential development that might be expected with the 5-year CIE timeframe is substantially less, perhaps in the range of 1,500 dwellings with 65,000 square feet of non-residential, all of which is expected to occur on the Cloud Grove portion of the RLSA Overlay. In the near term, this amount of development would require a 2-lane rural roadway corridor extending Indrio Road from the existing I-95 interchange to the Cloud Grove SRA. This roadway corridor will be funded by the developer, a Community Development District, Independent Special District or similar vehicle.

Any additional SRA development subsequently submitted for consideration will likewise include an impact assessment that must demonstrate the viability of the transportation network to handle the additional impacts and any improvements that may be needed as a result. Any SRA development that might occur within the Adams Ranch portion of the RLSA Overlay, depending upon its location, could add traffic to CR 68 (Orange Avenue) or SR 70. Both facilities are currently operating at acceptable levels of service, with CR 68 (Orange Avenue) reporting an annual average daily traffic (2004 AADT) volume of 2,951 and currently operating at LOS "A" (at 2-lanes), while SR 70 on the southern boundary of the Adams Ranch has a 2004 AADT volume of 6,200 and is currently operating at LOS "C". The Florida Department of Transportation is currently acquiring necessary right of way to expand SR 70 to four lanes, with construction identified in the Department's Tentative Work Program. Segments one and two starting at the western County Line traveling east for approximately 10 miles are programmed for construction in 2009. Segments three and four running from the end of segment two to McCarty Road where the existing multi-lane section begins are programmed for construction in 2006 & 2007. Once improved to 4-lanes, SR-70 will have a LOS "C" Service volume (capacity) of 40,800, and will be operating at LOS "A" based upon current traffic volumes, with sufficient capacity remaining to accommodate the potential traffic from any additional SRA development within the RLSA.

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With respect to County roads, both the westward extension of Indrio Road to Minute Maid Road and the southern extension of Minute Maid Road to CR-68 (Orange Avenue) are currently contemplated by the County's Right-of-Way Protection Map, although there are no current plans to construct either of these segments. As mentioned, the Cloud Grove SRA will include the westward extension of Indrio Road to Minute Maid Road and a new Turnpike Interchange at Minute Maid Road, but not any improvements to Minute Maid Road south to the CR 68 (Orange Avenue). The northern extension of Minute Maid road to connect with Oslo Road has been discussed with Indian River County/MPO staff, and while not absolutely necessary to accommodate potential development of Cloud Grove, the facility would provide an important and valuable regional network connection. Further, based upon discussions to date, this connection may be necessary to justify the full I-95 interchange at Oslo Road.

With these improvements, the long-term transportation needs of the RLSA Overlay at the maximum potential development can be accommodated to meet required levels of service. Detailed examination of all of the long-range transportation facility needs will be an integral part of the subsequent traffic analysis required as part of all SRA applications.

Solid Waste Disposal

The RLSA is located in the unincorporated areas of St. Lucie County. The Board of County Commissioners for St. Lucie County is the only entity authorized to regulate the collection of garbage and its subsequent disposal in the unincorporated area of St. Lucie County. Chapter 1-9 of the St. Lucie County Code Ordinances addresses the requirements for the collection of solid waste materials. All solid waste generated within the County is to be disposed of, exclusively, at a solid waste disposal facility which is operated, maintained, or approved by the Board of County Commissioners. Waste collection for all types of development in the county is mandatory. Beginning in 2006, waste collection bills will be a part of the local property tax bills. The solid waste generation from the 13,428 dwelling unit potential maximum SRA development has been estimated at 9.3 pounds per person per day. Using the maximum potential population of the RLSA Overlay of 33,570 people as the maximum buildout number, that would result in 312,201 pounds of solid waste generation per day or 156 tons per day. The residential waste generation assumption is based upon 9.3 pounds per person per day which is the standard used by the St. Lucie County Solid Waste Division. The non-residential total has been estimated at 5.3 pounds per day/1000sf, based upon 5.18 million square feet and used in a blended allocation, based upon an estimated breakdown of the various categories addressed for the St. Lucie County Solid Waste Division, for a total of 27,608 pounds per day.

St. Lucie County has been operating its present landfill since 1978. Recent reviews with St. Lucie County staff indicate that there is sufficient landfill capacity to meet the needs of the Cloud Grove SRA (written confirmation has been requested and will be

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supplied as part of the pending Development of Regional Impact application for the "Adams Ranch Stewardship New Town DRI." Policy 6B.1.1.1 of the St. Lucie County Comprehensive Plan describes the minimum Level of Service Standards for Solid Waste Services in St. Lucie County. It is anticipated that the current St. Lucie County facilities have sufficient capacity to meet the service demands through at least 2030.

Presently, St. Lucie County is exploring alternative disposal methods that, if fully implemented, will result in an indefinite life expectancy for the current County Landfill. While the details are still being completed, it is the objective of the County to implement an energy generation system/ gas production system that will take the bio-mass material being deposited in the landfill and converting it into energy that can then be redistributed back into the market. Expenses for waste removal are borne through user fees.

Drainage

Adams Ranch currently consists of an intricate system of canals, ditches and water control structures through which the irrigation and drainage needs of the agricultural operations are addressed. Water from Adams Ranch exits the southern or eastern boundary to the C-24 canal. We do not anticipate any changes to the drainage on Adams Ranch in the near future. At this point, the Adams Ranch will continue its current operations with respect to irrigation and drainage. The SSA to be established on the 12,000 acres of the highest quality lands on Adams Ranch will not affect the drainage on the property. To the extent that any SRA development is pursued, including the potential 100-acre ecotourism CRD or if in the future the 448-acre village, such development SRA would be required to conduct detailed drainage analysis and address stormwater issues at that time.

With respect to Cloud Grove, currently the property consists of a large over-ground reservoir in a series of canals and ditches which provide irrigation and drainage for citrus and other agricultural operations. The contemplated 5,000-acre SRA town will include a sophisticated stormwater treatment system which will change the drainage, and which will undergo a complete review through the DRI and state and federal permitting processes. This drainage system will meet or exceed all state and federal requirements. A detailed drainage analysis will be conducted as part of the SRA process, in addition to the DRI process and state and federal permitting for the stormwater system.

Natural Resources and Stewardship Factors

Many sources were reviewed and analyzed in the course of creating the RLSA over for St. Lucie County, including both existing data and extensive field work, in ground truthing and creating additional data. All publicly available information was reviewed, including but not limited to South Florida Water Management District mapping, NRCS Soils maps, FEMA Flood Zone mapping, aerial photography including historical

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photography, Florida Native Areas Inventory Data and others. In addition, extensive field work was conducted by EW Consultants and WilsonMiller to create accurate land use cover and classification information as well as to document listed species occurrences. Once the data was collected and assimilated, this was done to determine which species might be considered indicator species, that is, those that if protected would also protect other species. A significant step in the analysis was the determination of appropriate classifications for types of environmental systems located on the Ranch. Based upon extensive field work and analysis of the data, coupled with the professional experience of the scientists employed by both EW Consultants and WilsonMiller, a system of Stewardship Classifications was created, consisting of Habitat Stewardship Areas, Hydrologic Stewardship Areas and Water Retention Areas.

The HSA is the Habitat Stewardship Area on the Adams Ranch. There are no HSAs on the Cloud Grove portion. Its purpose is to define an area that provides significant, manageable habitat. First, the public species-presence data for St. Lucie, Indian River and Okeechobee Counties was used to develop lists of federally and state listed species that are likely to use the site. The owners were also interviewed for knowledge of site-specific species presence. The species were divided into groups of varying importance: Caracara and Snail Kite, federally listed species, and state listed species. Additional field observation were conducted.

Then a two-step procedure was implemented. First, the relative degree of habitat preference (feeding, breeding, nesting/roosting/denning) for each of the individual species for each of the FLUCFCS types on the site were mapped on a scale of 0-5. Second, the relative importance of the groups of species to the region was scored. The Caracara & Snail Kite habitat preferences were mapped at full value; federally listed at 0.70 and state listed species at 0.30 of their value. Using this map, we reviewed the site for blocks of higher vs. lower habitat values. With this information in hand we drafted an HSA based on the relative habitat values on the site and by assessing the relative ease of land management of the designated areas.

The data used to develop the HSA was FLUCFCS data, aerial photography, public species data, information provided by the owners, species-specific research into habitat requirements of the federal and state listed species likely to use the site and intensive on site investigation and observation.

The HYSAs are the Hydrologic Stewardship Areas on the Adams Ranch. There are no HYSAs on the Cloud Grove portion. Their purpose is to identify and to protect portions of the landscape that are important to the local and regional hydrology. The Adams property has a number of artesian wells that, via use of the onsite ditch and weir network, are used to hydrate the property. The HYSAs were developed to protect the wetlands associated with Cow Creek Swamp and the depression wetlands located throughout the property, which are linked via the aforementioned onsite agricultural water system. The HYSAs were developed by reviewing FEMA flood zone, NSLP, 2004

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and historic aerial photography, input from Mike Adams about site hydrology, NWI, FDEP drainage basin boundaries and intensive on site investigation and observation.

The WRAs are the Water Retention Areas in the RLSA Overlay. The WRAs were created on the Adams Ranch and Cloud Grove sites by designating the on-site agricultural water retention areas as the WRA. Some of these systems pre-date CUP permitting and are not permitted. The older systems tend to have relatively natural characteristics and provide significant habitat value. The newer systems tend to be more lake-like with lake-style habitat characteristics.

The Natural Resource Index map (RLSA Figure 3) is a compilation of all of the various RLSA data, with the darker green representing higher value with the lightest brown representing the least value. NRI values above 1.4 shown as green and NRI values of 1.4 or below shown as brown.

The characteristics utilized on the Stewardship Credit worksheet (RLSA figure 2) were established based upon an evaluation of all the data, resulting in a land cover/land use, soil/surface water, listed species and RLSA designations. The fifth category of agriculture was established to recognized the policy direction of St. Lucie County to protect and promote agricultural activities by awarding that index factor where all uses above agriculture were removed (i.e., Sending Area Land Use Layers 1, 2 and 3 including Residential Uses, General and Conditional Uses, and Earth Mining and Processing Uses). These categories were derived as a result of the field work and review of the property, as well as addressing how large areas could best be protected using the Stewardship Program and the professional expertise of the scientists and planners on the team.