Rural Fringe Mixed-Use District Restudy White Paper

Prepared by the Growth Management Department,
Community Planning Section Staff

August 8, 2016

MEMORANDUM

TO: COLLIER COUNTY PLANNING COMMISSION

FROM: COMMUNITY PLANNING SECTION, ZONING DIVISION, GROWTH MANAGEMENT DEPARTMENT

DATE: AUGUST 18, 2016

RE: A PRESENTATION OF THE RURAL FRINGE MIXED USE DISTRICT (RFMUD) RESTUDY "WHITE PAPER" TO PROVIDE BACKGROUND, FINDINGS AND INITIAL RECOMMENDATIONS FOR THE RFMUD AS DIRECTED BY THE BOARD OF COUNTY COMMISSIONERS

This White Paper provides a conceptual framework to address elements of the Rural Fringe Mixed Use District (RFMUD) restudy. The RFMUD restudy is the first of four restudies focused on eastern Collier County, as directed by the Board of County Commissioners (BCC) on February 10, 2015.

The Community Planning staff in the Zoning Division of the Growth Management Department provides this document as a first point of direct contact with County officials to describe the history and status of the RFMUD (Section 2), the planning process including outreach and sources of data and analysis (Section 3), and initial recommendations (Section 4). The paper is supplemented by appendices of importance at this point in the restudy process.

This presentation is somewhat analogous to an Evaluation and Appraisal Report in that there are no statutory guidelines directing the Planning Commission as Land Planning Agency or the governing body in its review. Moreover, staff views the procession through the White Paper and eventual Public Hearings as an evolution of ideas and values as expressed by the public and its representatives. The White Paper review process, following the series of public workshops earlier in the year, provides an opportunity to further our shared understanding into the complexities and subtleties of the RFMUD and move in the direction of opportunities that are presented.

In light of the 2016 local elections and the inevitability of 3 new members serving on the BCC beginning in first quarter, FY 2017, staff anticipates bringing this paper back a second time to the CCPC and BCC, in the same or similar format. However, it will be important for current members of the BCC, as well as the members of the Planning Commission to provide comment and direction as appropriate, so that the 2017 BCC gains perspective from all possible quarters. Within a similar timeframe, staff will continue its public involvement phase for the Golden Gate Area Master Plan (GGAMP), the second restudy, which involves many overlapping and related elements, concerns and opportunities.

The attached report provides a groundwork of information relating to the RFMUD, the Transfer of Development Rights (TDR) program and the ideas and perceptions of its stakeholders. It is, by design, more conceptual than quantitative. Many elements or ideas for change are complex and many are related to other program elements. Often, a change in one aspect of the program echoes in other program elements. By considering the breadth and scope of potential changes together, a better understanding of these interrelationships emerges. Put another way, it is helpful in a

program area of this complexity to move from more general concepts at first to more specific proposals later.

As understood by staff at the beginning of this restudy in 2015, the original goals of the program should be maintained, deriving from the Final Order in 1999, through the assessment period and adoption of elements and regulations from 2002 to 2004. With these program goals in mind, the restudy aims to improve the TDR credit system, secure appropriate means and methods to achieve long term maintenance of protected Sending areas, and improve the development outcomes and potentials in Receiving areas.

Note that the Initial Observations and Recommendations in Section 4 are conceptual and contain changes that would be suitable for the Growth Management Plan (GMP), the Land Development Code (LDC) or both. Following feedback and direction from White Paper presentations and any additional restudy efforts, staff will arrange regulatory changes in appropriate locations for proposed program changes, and return first with specific amendment proposals for the Growth Management Plan.

For convenience, the list of conceptual changes in Section 4 is provided below without explanation. Please see White Paper, Sections 1 through 4 for background, analysis and explanation of these initial recommendations:

Summarized List of Initial Recommendations

Sending Lands

1. Eliminate the minimum $25,000 price per base TDR.
2. Provide additional TDR credits to Sending owners. Where possible, additional TDR credits should be apportioned equally to all Sending owners regardless of location or property attributes.
3. Make TDR credits available to Sending owners who wish to begin or expand a bone fide agricultural operation. In NRPA locations, only passive agricultural operations, excluding aquiculture, would qualify. Passive agricultural uses may be considered for Restoration and Maintenance TDRs through an approved Restoration and Maintenance Plan**.**
4. Allow TDR participation for illegal non-conforming properties based on public policy goals, and waive requirements related to proof of LNC status if greater than 4.5 acres in size.
5. Allow landowner's who have generated TDRs but have not conveyed their land to participate in any applicable program changes.
6. Replace the reference to Early Entry Bonus TDRs and simply provide 2 TDRs for base severance of dwelling unit rights, subject to any additional credits assigned.
7. Allow TDRs to be generated from Receiving Lands for agriculture preservation, or native vegetation and habitat protection beyond minimum requirements.
8. Eliminate the one mile boundary from which TDRs must be derived for Urban Rural Fringe
9. Eliminate the requirement to purchase a TDR in the Urban Residential Infill bonus provision.
10. Accommodate implementation measures recommended by the CWIP committee and the Watershed Management Plan that are consistent with TDR program success.
11. At a minimum, an improved exchange program should be designed with input from potential buyers and sellers.

12. Application fees should be reduced or eliminated for Sending owners; work product required for TDRs should be evaluated for cost effectiveness and in limited instances, provided by County staff.
13. The County should consider the appeal of a publicly funded TDR bank through polling or otherwise, to determine the likelihood of voter approval to support a dedicated assessment and bonding for the program. Board direction will allow a focused analysis including projected costs.
14. Continue to the next stage of a Feasibility Analysis to develop a Regional Offsite Mitigation Area/In-lieu Fee program (ROMA/ILF) with FDEP and ACOE in North Belle Meade. Explore options involving Permittee Responsible Mitigation (PRM) parcels to achieve coordinated or umbrella management options for greater overall land management efficiency.
15. Establish a special TDR for the benefit of the County where no other entity has been established to take ownership.

16. Study the idea of a Green Utility Fee and consider whether it should be the subject of a County-wide referendum.
17. Provide a standard or model Land Management Plan for adoption by owners who wish to provide Restoration and Maintenance activities in return for TDR credits.
18. Staff should provide any data needed to the Property Appraiser's Office in support of its efforts to review tax assessments based on appraised land values and resulting tax assessments in Sending Lands.
19. County-owned land in North Belle Meade should qualify for conditional use approval for expanded recreational uses, if compatible with environmental goals. Definitions of "active" and "passive" recreation will require further vetting.

Neutral Lands

1. Allow TDR credits for agriculture and conservation uses where the uses are secured by perpetual easements.
2. Remove the 40 acre minimum project size for clustered development.

Receiving Lands

1. Promote economic vitality in the RFMUD by allowing employment uses outside of Villages as defined in the industrial and business park zoning district (with exceptions) in locations with access to major collector or arterial roads.
2. Within a Village, remove the maximum acres and leasable floor area limitation of the Village Center and the Research and Technology Park.
3. Explore designating Receiving areas as Innovation Zones.
4. Eliminate the maximum size of a Village.
5. Modify residential density standards:
    - Clustering – remove 40 acre minimum, increase density to 2 units per acre
    - Village – increase density to 7 units per acre
    - Change minimum Village density to 4 units per acre
6. Development over 300 acres shall use the Village option.
7. Modify the TDR requirements:
        a. Change from 1 TDR to .75 TDR for multifamily unit.

b. Change from .5 to 0 TDR for affordable housing.
c. Density over 4 units per acre require 0 TDRs.
d. New - 0 TDR for industrial/business park uses.

8. Analyze arterial roadway and utility capacity issues surrounding Receiving Lands.
9. Review roadway design standards and suggest changes if necessary to support Complete Streets and low speed.
10. Add provisions for transit stops and park and ride facilities within Villages and business parks.
11. Develop a methodology for a Mobility Analysis including a standard of measuring a development's level of interconnectivity such as a "link-node" ratio, and the transit, bicycle and pedestrian coverage and connectivity with a project and surrounding destinations.
12. Consider adoption of zoning overlays, or separate area design standards to provide greater certainty for developers
13. Allow BCC simple majority approval when complying with zoning overlays.
14. Allow industrial/business park uses (with exceptions) by right, and Hearing Examiner approval for proposals compatible with surrounding land uses and complying with industrial/business park zoning standards.
15. Initiate study to create an impact fee index for mixed-use.
16. Explore with Collier County Health Department the creation of Health Assessment Index.
17. Review and modify design standards within the Growth Management Plan and Land Development Code for greater flexibility while supporting the intent of employment zones and mixed-use development, suggest modifications to standards i.e., remove greenbelt.
18. Develop further incentives for innovate features such as solar power, zero net water use, aquifer recovery and storage systems.

REQUESTED ACTION:

The purpose of this item is to provide information, suggest ideas for change and continue dialogue related to the RFMUD and the TDR program. Planning Commission comments and suggestions will accompany the White Paper to the BCC presentation, if desired by the Planning Commission.

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August 8, 2016

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Section 1: Introduction

This White Paper provides a conceptual framework to address elements of the Rural Fringe Mixed Use District (RFMUD) restudy. The RFMUD restudy is the first of four restudies focused on eastern Collier County, as directed by the Board of County Commissioners (BCC) on February 10, 2015. Focus areas of all four restudies include complementary land uses, transportation and mobility, environmental stewardship and economic vitality. As the restudies unfold, relationships and synergies between the study areas are identified and maximized.

The Community Planning staff in the Zoning Division of the Growth Management Department provides this document as a first point of direct contact with elected officials to describe the history and status of the RFMUD (Section 2), the planning process, including outreach and sources of data and analysis (Section 3), and findings and initial recommendations (Section 4).

This paper is supplemented by appendices of importance at this juncture, final quarter of FY 2016. Appendix A contains summaries of public workshops as well as communications from stakeholders with their remarks subsequent to our distribution of a first draft of initial recommendations on July 13, 2016. Appendix B contains a memo from a TDR consultant on the provision of a County sponsored TDR Bank. Appendix C is the Phase 1 Feasibility Report for a Mitigation Bank in North Belle Meade.

One reason to bring the RFMUD restudy forward in report form is to lay the groundwork of information relating to the RFMUD, the Transfer of Development Rights (TDR) program and the ideas and perceptions of its stakeholders. Another important reason is that, given the complexity of the elements within the RFMUD and TDR program, a conceptual approach should be a preferred way to begin. Many elements or ideas for change are related to many other program elements. Often, a change in one aspect of the program echoes in other program elements. By considering the breadth and scope of potential changes together, a better understanding of these interrelationships emerges. Put another way, it is helpful in a program of this complexity to move from more general concepts at first to more specific proposals later.

As understood by staff at the beginning of this restudy in 2015, the original goals of the program should be maintained, deriving from the Final Order in 1999, through the assessment period and adoption of elements and regulations from 2002 to 2004. These include:

- Protect wetlands, wildlife and habitat from unrestrained growth

- Protect agricultural land from premature conversion to other uses
- Direct growth potential to appropriate locations
- Utilize creative land use planning techniques, including new towns, satellite communities, clustering, mixed use and open space

Along with retention of the original goals and the geographic (Sending/Neutral/Receiving) designations that were made, restudy goals also include:

- Improve the TDR credit system
    - Achieve proper balance of credits (optimize supply and demand)
    - Incentivize preservation and stewardship
    - Ensure reasonable demand for and availability of credits in Receiving areas
- Identify agencies or entities for long term ownership and maintenance
- Review and improve development uses, regulations and standards, based on:
    - Community values
    - Sustainability
    - Economic development
    - Consistency with area needs, other sub-area needs and County policies

Some of the coordination called for in the course of the restudy requires close collaboration with other County Departments or outside agencies, often at the expense of a strict adoption or implementation timetable. For example, planning for affordable housing, mobility, watershed and infrastructure require knowledge and recognition of parallel efforts, each moving along its own trajectory and timetable. Staff is mindful that interdepartmental and intergovernmental coordination help yield the optimal result.

The RFMUD contains approximately 77,000 acres; lands designated RFMUD are not contiguous. One of the interesting observations that emerged early on in the restudy is that there are significant differences in the character and status of the four main Sending areas and the four main Receiving areas.

For consistency, we have labeled the RFMUD sub-areas as follows (see Figure 1-1):
Sending:

- North
- North Belle Meade- NRPA
- North Belle Meade-West
- South Belle Meade

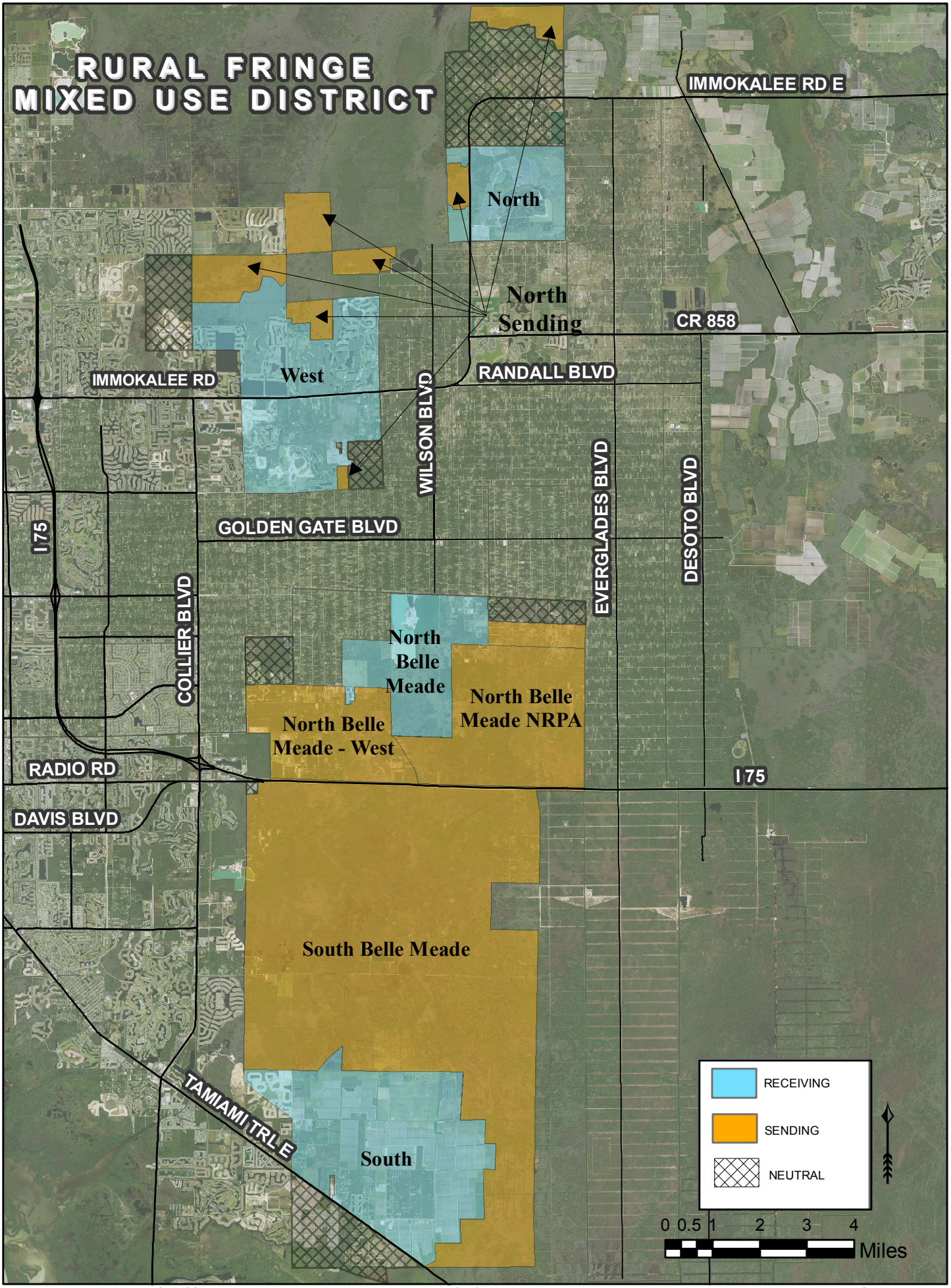
Receiving:

- North

- West
- North Belle Meade
- South

Note that the Findings and Initial Recommendations in Section 4 are conceptual and contain changes that would be suitable for the Growth Management Plan (GMP), the Land Development Code (LDC) or both. Following feedback and direction from White Paper presentations, staff, with consultation from the County Attorney's Office, will sort through the appropriate regulatory locations for proposed program changes, and return with specific amendment proposals for the Growth Management Plan first.

Figure 1-1 RFMUD Sending and Receiving Areas



Collier County

Rural Fringe Mixed-Use District White Paper
Section 2: Background

In June 1999, the State of Florida Final Order, Case ACC-99-002, found the County's Growth Management Plan lacking in protection for environmentally sensitive areas, failing to adequately discourage urban sprawl and failing to prevent the premature conversion of agricultural land. The Final Order required the following modifications to the GMP to address the issues within three specified areas.

1. Identify and propose measures to protect prime agricultural areas.

2. Direct incompatible uses away from wetlands and upland habitat in order to protect water quality and quantity and maintain the natural water regime as well as to protect listed animal species and their habitats.

3. Assess the growth potential of the Area by assessing the potential conversion of rural lands to other uses, in appropriate locations, while discouraging urban sprawl, directing incompatible land uses away from critical habitat and encouraging development that utilizes creative land use planning techniques including, but not limited to, public and private schools, urban villages, new towns, satellite communities, area-based allocations, clustering and open space provisions and mixed use development.

In order to address these concerns, the County created the Rural Fringe Mixed Use District. The Growth Management Plan was amended in 2002 to include the majority of today's RFMUD provisions and the basic structure of the TDR program. It was amended soon thereafter, to include bonus TDR provisions and provisions incorporating an intervener agreement known as the North Belle Meade Overlay. The implementing Land Development Code (LDC) provisions, reflecting and implementing all of these GMP amendments were adopted in 2004. Only miscellaneous amendments have been made since that time.

The RFMUD contains approximately 77,000 acres. It provides a transition between the Urban and Estates Designated lands, between the Urban and Rural Lands Stewardship Area (RLSA), and Conservation designated lands farther to the east.

The Rural Fringe Mixed Use District is separated into three specific areas, Sending Lands, Neutral Lands, and Receiving Lands. Sending Lands are those lands that have the highest degree of environmental value and sensitivity. These sending lands generally include significant wetlands, uplands, and habitat for listed species. The uses within the Sending Lands are limited

to a narrow list of permitted and conditional uses. The current regulations allow for the maximum density of one (1) dwelling unit per 40 acres or, one (1) dwelling unit per lot or parcel of less than 40 acres, which was recorded on or before June 22, 1999 (and non-conforming lots <5 acres which existed as of October 15, 1974 or January 5, 1982, depending upon location).

Receiving Lands are those lands within the Rural Fringe Mixed Use District that have been identified as being most appropriate for development and to which residential development units may be transferred from Sending Lands. These lands have a lesser degree of environmental or listed species habitat value than areas designated as Sending and generally have been disturbed through development, or previous or existing agricultural operations. Within the Receiving Lands the base residential density allowable is one (1) unit per five (5) gross acres (0.2 dwelling units per acre). The maximum (non-village) density achievable in Receiving Lands through the TDR process is one (1) dwelling unit per acre, with a minimum project size of 40 contiguous acres.

The RFMUD also allows Rural Villages in the Receiving areas. Rural Villages must be located where public infrastructure exists or is planned, including direct access to an arterial or collector roadway. With the creation a Rural Village, the sense of community and convenience can be increased, emphasizing mixed use, social and civic interaction and walkability. However, the current development standards for Rural Villages do not easily accommodate neighboring communities and Districts.

Neutral Lands have been identified for limited semi-rural residential development. Assessment data indicated that Neutral Lands have a higher ratio of native vegetation, and thus higher habitat values, than lands designated as Receiving Lands, but these values do not approach those of Sending Lands. Therefore, these lands are appropriate for limited development, if such development is directed away from existing native vegetation and habitat. A lower maximum gross density is prescribed for Neutral Lands when compared to Receiving Lands: 1 dwelling unit per 5 gross acres (0.2 units per acre).

The TDR program is a major component of the RFMUD, as it allows the transfer of development units from Sending parcels to Receiving parcels. The Collier program is somewhat unique in its structure, using a series of TDR credit types that can be sold and used for Receiving development. From a 5 acre area, an Owner might achieve 4 TDRs: Base credit; Early Entry credit; Restoration and Maintenance credit; and Conveyance credit.

As noted in the Table 2.1, the RFMUD Sending land is comprised of thousands of parcels, mostly 5 and 10 acres in size. Sending Land acreage, although 40,973 in total, yields only 16,643 privately held acreage, capable of earning and selling TDR credits.

Table 2.1 RFMUD Sending Parcel and Acreage Totals by Area

Sending Area	# of Parcels	# of Owners	Acres
South Belle Meade	353	227	5,905
North Belle Meade -NRPA	760	340	6,451
North Belle Meade-West	373	271	3,074
North	60	45	1,213
Private Owned Total	**1,546**	**883**	**16,643**
Government Owned	606	1	24,330
Private and Government Owned Total	**2,152**	**884**	**40,973**

Source: GIS rev. March 2016

Note: Government owned parcels stated separately; purchase or prior TDR Conveyance

The program set a minimum price point for the Base TDRs at $25,000. The Early Entry expiration date was extended several times over the years, most recently to 2019. Although the concept of "conveyance TDRs" was intended to boost the number of TDR credits and transfer the property ownership into government hands, no governmental agency has been willing to accept Sending lands in North Belle Meade, or in Section 11 (T 48S; R 26 E) in the North Sending area.

Despite these issues and the intervening economic downturn, there have been TDR transfers and redemptions in both the West Receiving area and in the Urban Residential Fringe. To date, several developments have used the cluster residential development option in the form of gated communities. In the RFMUD, non-village density is capped at 1 unit per acre and includes the communities of Twin Eagles South, Lamorada, Mockingbird Crossing, and the Golf Club of the Everglades.

In the Urban Fringe, densities are generally capped at 2.5 units per acre and include entitled communities such as Naples Reserve, Hacienda Lakes, Lords Way, San Marino, Lido Isles and Rockledge. These developments have an approved total of 6,786 units; the majority of units are detached single family.

As shown in Table 2-2, approximately 3,953 TDR credits have been processed. These TDR credits were generated from approximately 6,532 acres.

Table 2-2 RFMUD TDR Credits Processed or Pending Process

	TDRs
Base Credits Processed	1,326.10
Early Entry Bonus Credits Processed	1,326.10
R&M Bonus TDR Credits Processed	905.32
Conveyance Bonus Credits Processed	395.82
TDRs Pending Process	658.40
Total	**4,611.74**

As shown in Table 2-3, under the current system, approximately 10,947 TDRs remain to be processed. These TDR credits are associated with approximately 16,363 acres of Sending Land. The theoretical credits under the present system both processed and outstanding, total approximately 15,558. Of this total, approximately 25% have been issued.

Table 2-3 Outstanding TDR Credits

	Outstanding TDR Credits
Base TDR Credits	2,403.67
Early Entry Bonus TDR Credits	2,403.67
R&M Bonus TDR Credits	2,804.67
Conveyance Bonus Credits	3,335.02
Total	**10,947.03**

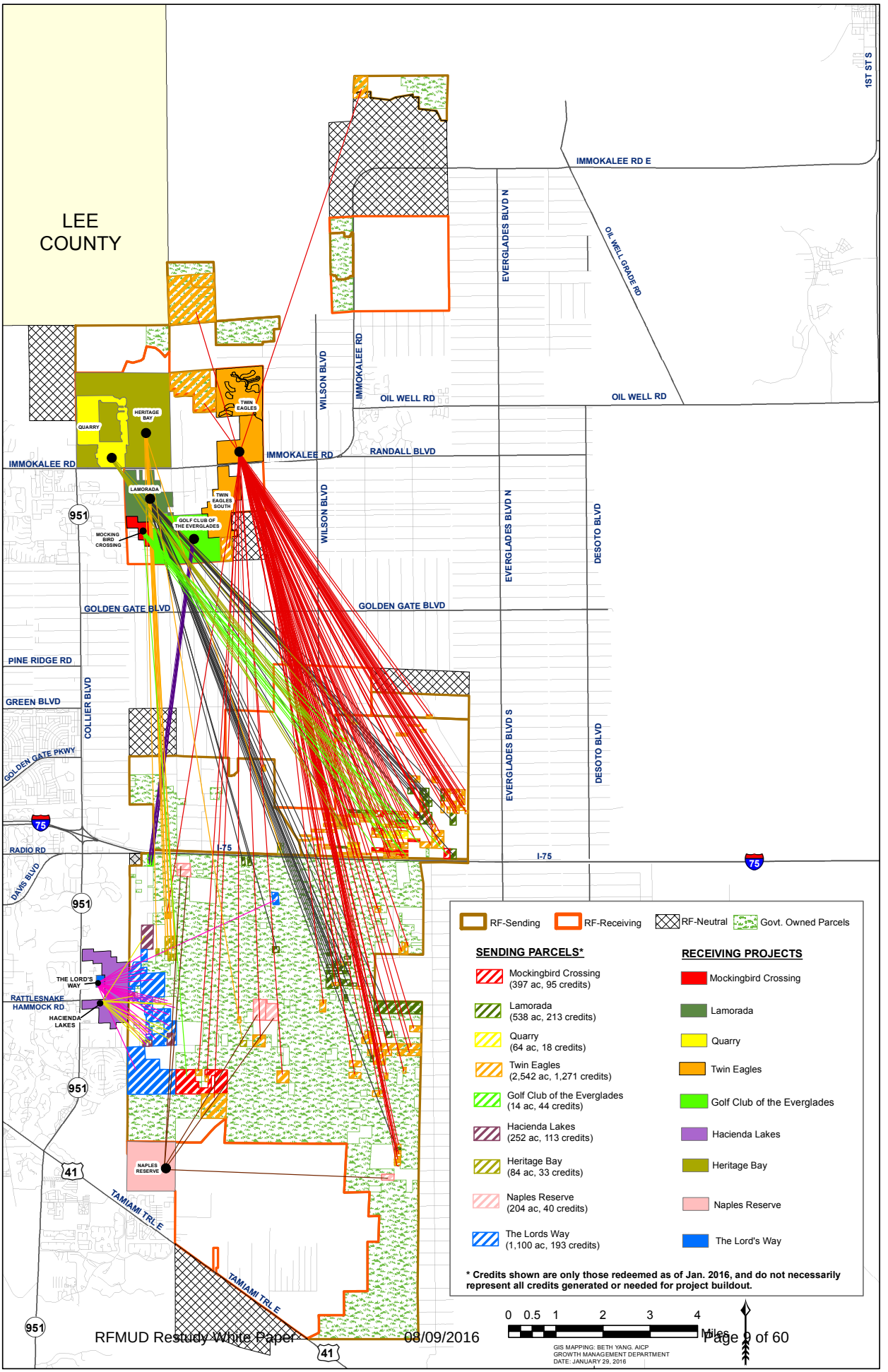
To date, approximately 2,129 TDRs have been redeemed to support the increased density found in the Receiving area development projects. These transactions between Sending Lands and Receiving Lands are shown on Figure 2-1.

Given the activity that has occurred to date, the greatest development potential in Receiving Lands will be the North, North Belle Meade and South Receiving areas, where the majority of the changes adopted as part of the RFMUD restudy will occur.

Based on the difficulty for Sending owners to generate the restoration and maintenance credit, or the conveyance credit, TDR supply under the current system is estimated to be far less than shown in Table 2-3. Staff's assessment estimates a more realistic credit supply of approximately 5,500 TDRs. The demand assessment prepared by staff assumes one village each in the North Receiving area, the North Belle Meade Receiving area, and the South receiving area, along with about 60 percent of the remaining vacant property using the cluster provisions. This scenario would require approximately 13,443 TDR credits. This significant difference between the TDR supply and likely demand demonstrates an imbalance in the program.

Figure 2-1

TRANSFER OF DEVELOPMENT RIGHTS (TDR) TRANSACTIONS SENDING PARCELS TO RECEIVING PROJECTS



Rural Fringe Mixed-Use District White Paper
Section 3: The Planning Process

In early 2015, the Board of County Commissioners (BCC) directed staff to initiate a restudy of the Rural Fringe Mixed-Use District (RFMUD), along with three other master plans east of County Road 951: Golden Gate Area Master Plan (GGAMP); Rural Land Stewardship Area (RLSA); and the Immokalee Area Master Plan (IAMP).

To support the RFMUD planning effort, the BCC initiated the public participation process through the adoption Resolution 2015-111 establishing a 7 member Growth Management Oversight Committee (GMOC). The functions, powers, and duties of the GMOC are to aid and assist the public participation phase of the regulatory review. This includes:

1. Assist in determining the most effective venues and dates to hold the public presentations:
2. Assist in composing the information materials to be presented to the public at community meeting at various locations throughout the study area.
3. Assist in determining the agendas for public meetings;
4. Assist in providing consistency between the planning efforts.

In reviewing proposals for program change, the GMOC scope will be “high level and non-granular, emphasizing consistency, sustainability and economic vitality.”

The GMOC set their schedule to meet quarterly throughout the restudies planning timeframe. They met three times through June, 2016 providing input to staff on community outreach schedule and presentation materials. With the guidance of the GMOC, this restudy process was a focused, stakeholder effort. All interested parties were encouraged to participate in public workshops, on-line surveys and in direct communication with staff.

Public Outreach

To engage landowner participation in the RFMUD restudy, letters were mailed to over 800 RFMUD property owners informing them of the restudy and the public workshop schedule. A total of six public workshops were held from January, 2016 through May, 2016. A summary of each meeting is attached as Appendix A, Public Outreach Summary.

The first three public workshops were held during evening hours at the IFAS Center and focused on the RFMUD Sending Lands. Fifty to sixty people attended each workshop. During the first workshop there was strong sentiment among Sending Land owners that the program should

not have been devised in the way it was; many thought that the RFMUD governing provisions should be abandoned altogether. Through the public workshop process, some came to understand that the program was created as a result of litigation and the State's Final Order; that the program has been in place for over ten years; that TDR credits have been redeemed and converted to density; and that the County needs to move forward and not back. The public workshops for the Sending Lands focused on the important issues to the landowners including improving the economic viability of the program, promoting smarter development patterns and protecting natural resources. Staff continuously encouraged owner input on how to improve the program. Several techniques were used for this outreach: public presentations; comment cards; breakout group exercises; on-line surveys; telephone calls; and individual meetings. The public was encouraged to explore resources on the website, including a library of materials and video-taped meetings.

The first public meeting was introductory in nature. Staff summarized the history and current status of the RFMUD and the TDR program. Participants were encouraged to express opinions on the rules adopted over a decade earlier, and staff outlined the anticipated progression of the study and the public involvement phase going forward. The meeting summary can be found in Appendix A, Public Workshop #1.

The second public workshop focused on issues related to the Sending Lands in North Belle Meade. A panel of local experts was seated to discuss possible solutions for the Sending Lands long-term ownership and maintenance. The full discussion, questions and responses are found in Appendix A, Public Workshop #2.

The third and final public workshop focusing on Sending Lands topics included two major components. First, staff provided an overview of the economic considerations involved in TDR transfers; and second, a list of changes suggested by the public was vetted using breakout group approach. Each group discussed the potential changes, ranked their agreement and reported back to the entire group. The full discussion, questions and responses are found in Appendix A, Public Workshop #3.

In summary, through the public workshop process, Sending Land participants agreed upon the following:

- Add TDR credits to all sending lands regardless of location or attributes, such as higher natural resource values or watershed improvement potential.
- Eliminate the $25,000 minimum price for a base TDR credit.
- Allow TDR Credits to be used outside of the RFMUD, but agreement to where to use the credits was not defined.
- Reduce or eliminate TDR application fees.

- County staff should offer free workshop assistance to complete TDR application process.
- Improve the link between buyers and sellers through an improved listing or a TDR bank.
- Create a TDR bank.
- Allow TDR credits for agriculture preservation.
- Allow additional family home if agricultural land owner has over 20 acres.
- Collier County should be managing entity of Sending Lands.
- Long term maintenance cost should be paid for by a County mitigation program.

Following the Sending Lands workshops, staff focused on the Neutral and Receiving Lands. Approximately sixty residents attended the workshops, of which about half had not attended the Sending Lands workshops. Staff presented the future development potential allowed under the current program, including vacant land, allowed land uses, density and intensity. Break out groups were invited to provide feedback on several key questions including: specific issues and concerns about future development; improvements or changes for the Receiving Lands; what is liked best about the Receiving Lands; and opinions about the Neutral Lands. All responses to the questions are included in Appendix A, Public Workshop #4. Members of Collier County's consultant team, AECOM, wrapped up this workshop with a primer on different kinds of development models with a focus on sustainability. This presentation was well received by participants with many asking for copies of the PowerPoint slides.

The fifth workshop built on the previous workshop discussion of development potential and patterns. Participants were invited to vision future development through a "framework mapping" exercise. Two of the RFMUD Receiving areas were used as examples for participants. The exercise allowed participants to experience how these areas might be planned by identifying destinations, development areas, street networks and green infrastructure. The results demonstrated the values expressed in previous workshops: more village mixed-use development and less single-use gated community development. The mapping exercises are included in Appendix A, Public Workshop #5.

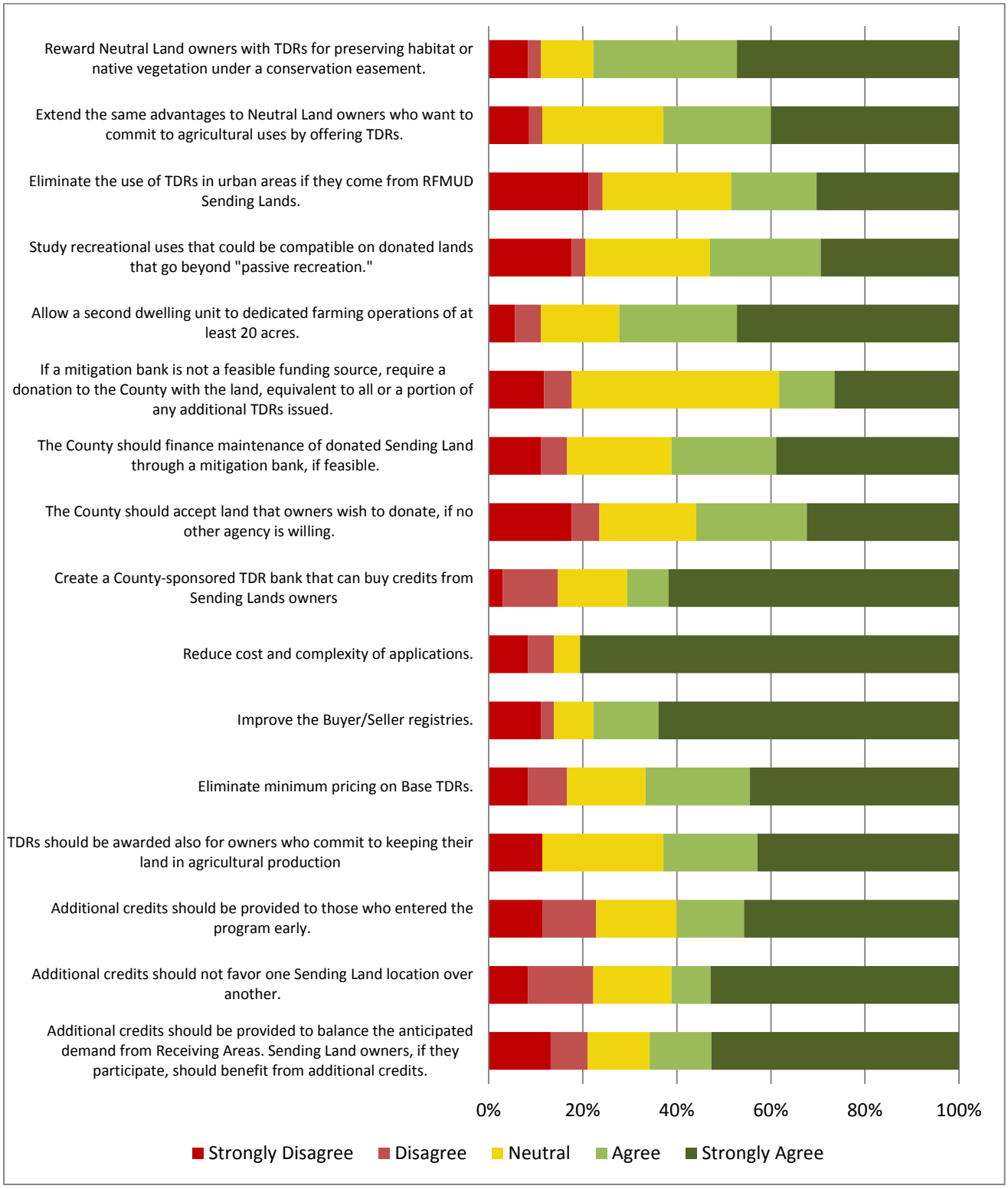
The final workshop provided a forum for residents and stakeholders to review ideas provided by the public through previous workshops, surveys, and correspondence, which were incorporated into the staff's initial recommendations. Each initial recommendation was presented and discussed. Participants were then asked to rank each one from strongly disagree to strongly agree. The survey results are shown in Figure 3-1.

In conclusion, the public workshops were dynamic and well attended. Participants were fully engaged in identifying issues, concerns and potential solutions. Many of the initial recommendations included in this white paper stemmed from public input. The survey results

Figure 3-1

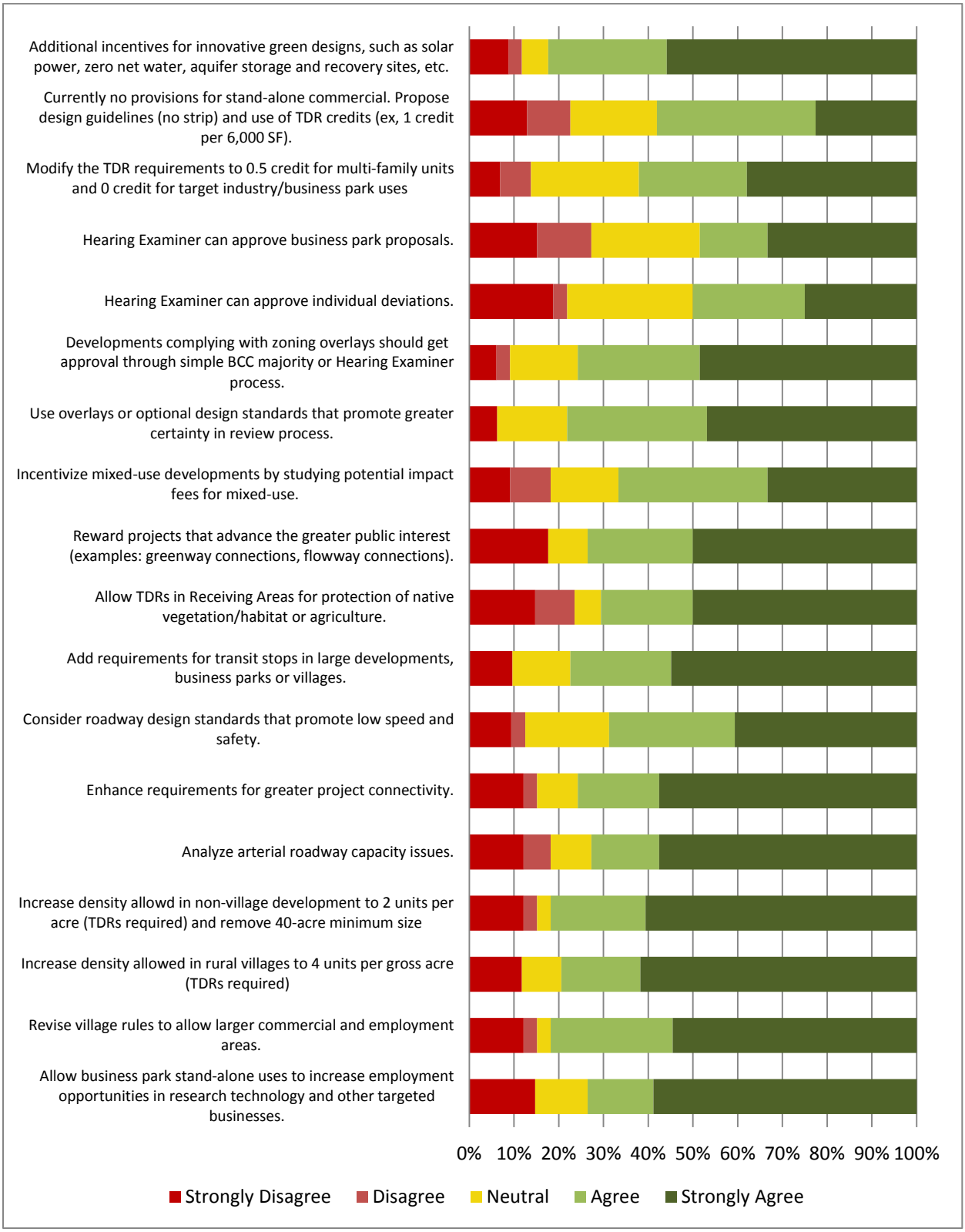
Sending and Neutral Lands Recommendations Survey Results

26-May, 2016



Receiving Lands Recommendations Survey Results

26-May, 2016



show, through the public outreach process, that consensus was reached on the initial recommendations put forward in the final workshop.

In addition to public workshops, public outreach included numerous interviews, meetings and telephone calls with citizens, agency representatives, stakeholders and media. In fact, prior to public workshops, at least 15 one on one interviews were conducted to obtain factual information and initial opinion. Ultimately, staff met 3 times with the Rural Fringe Coalition (development group), and twice with representatives from Conservancy, Florida Wildlife Federation, Greater Naples Chamber of Commerce and Collier Citizens Council. Necessarily, horizontal communication within the County Managers agency was frequent.

Data Analysis

Staff was directed to address four major topic areas through this planning effort:

1) Environment;
2) Land Use;
3) Transportation and Mobility; and
4) Economic Vitality.

Through the first several months of the planning process, staff gathered and analyzed data relative to the major topics from several sources with the intent to understand and coordinate major planning efforts, recent or on-going, in the County including, but not limited to:

- Current RFMUD Comprehensive Plan and Land Development Code sections
- The Master Mobility Plan (2012)
- MPO Long Range Transportation Plan (2015)
- TDR Activity Log and Comprehensive Planning data (2016)
- East of CR 951 Final Report (2008)
- Collier Interactive Growth Model (2008)
- Picayune Restoration Plan (2008)
- Watershed Management Plan (2011)
- North Golden Gate Estates Flowway Restoration Study (2013)
- Utility Master Plans (2008, 2015)
- Towards Better Places: Collier County Community Character Plan (2001)
- Wellfield Protection Zones; Aquifer Recharge Areas
- Greater Naples Chamber of Commerce “Opportunity Naples” (2014)
- Current national planning studies

During the past decade, many studies and efforts have addressed Collier County’s environment, transportation, land use, and economic vitality. Many of the recommendations found in previous studies relate to and can be implemented in the RFMUD. National planning studies,

like those conducted in Collier County, continue to focus on implementing planning policy toward sustainability, smart growth and multi-modal principles.

Environment

The seminal documents relating to environmental issues are the very subject of this restudy: the *Growth Management Plan RFMUD provisions and related LDC provisions*. The RFMUD, as indicated in Section 2, Background, was designed following challenges to the County's existing and proposed plans for eastern Collier County, and was necessitated due to State action.

Specifically with respect to Sending Lands downzoning and TDR incentives, environmental goals were intended to fulfill the directives of the *Final Order*: "Direct incompatible uses away from wetlands and upland habitat in order to protect water quality and quantity and maintain the natural water regime as well as to protect listed animal and plant species and their habitats." The core RFMUD provisions, now nearly 15 years old, are a major area of focus in this restudy.

In 2015 and 2016, Collier's RFMUD regulations were vetted through public meetings with residents and stakeholders, as described above. Feedback from staff and public resulted in the need to bring quantitative and technical analysis to bear on environmental issues.

As watershed planning is one of the major components of environmental restoration in Sending Lands, the County's *Watershed Management Plan (2011)* emerges as a key source of data and analysis for environmental aspects of the RFMUD. In turn, that plan resulted in the appointment of the *Golden Gate Watershed Improvement Plan (GGWIP) Technical Ad Hoc Advisory Committee* and its successor, the current *Comprehensive Watershed Management Plan (CWIP) Technical Ad Hoc Advisory Committee*. RFMUD restudy staff has attended and participated in those committee meetings since September, 2015.

There are many important issues centric to both RFMUD regulations and watershed improvement programs. For example, the *RESTORE grant funding initiative* presents a specific opportunity to balance water surplus and water deficits within the watersheds in RFMUD and Golden Gate Estates planning areas; staff has attended and participated in numerous meetings with Project Managers, state and federal agency officials and consultants. The RESTORE initiative informs priorities and coordination of effort within RFMUD Sending areas.

In order to further incentivize TDR program participation and at the same time recommend sustainable long-term management and protection of environmentally important Sending Lands, a *Phase 1 North Belle Meade Mitigation Bank Feasibility Study* was commissioned. If feasible, adoption of a ROMA or similar program could allow a means for County ownership with long term funding that could favor transportation budgeting, and incentivize Sending owner participation.

Collier County has had success in the past in mitigating its own impacts. The Caracara Prairie Preserve Conservation Bank (and successor Trust Fund) saved the County $346,100 (26%) in Panther Habitat Unit (PHU) costs, as compared to a private mitigation bank, in permitting its Resource Recovery Business Park in 2014. A discussion of the North Belle Meade mitigation bank concept is included in Section 4 and the Phase 1 Report is attached as Appendix B. Staff will look to the BCC for direction in carrying this study forward to its next phase.

Related to all aspects of the major topic areas is the *ongoing economic modelling* that addresses the balance of credits from Sending Lands to Receiving Lands. Scenario modelling is applied to assure appropriate credit supply and demand so that additional credits can incentivize Sending participation and allow adequate credit resourcing for future development. It is understood by our consultant that additional credits will be recommended, but that the number of credits and their distribution rely on a myriad of factors, making scenario modelling an important tool in restudy data and analysis. These scenarios will become a part of the CCPC and BCC presentations and will ultimately help answer the quantitative question regarding additional credits within the system.

Finally, additional consultation is underway with respect to TDR banks. *TDR bank analysis* will provide the pros and cons of entering into a banking system for the purpose of assuring confidence and liquidity in the TDR transfer system. The first deliverable is attached as Appendix C. The concepts are further discussed in this paper in Section 4, (C.3).

<u>Transportation</u>

Every day more than 116,000 auto work trips are completed within Collier County. Many of these trips are generated in eastern Collier County as residents make the commute to jobs in the coastal area.

The *Collier 2040 Long Range Transportation Plan* (LRTP) is Collier County's guiding transportation document. The purpose of the LRTP is to assist Collier County in cultivating its transportation vision through the next 20 years. It identifies needed improvements to the network, and provides a long-term investment framework that addresses current and future transportation challenges.

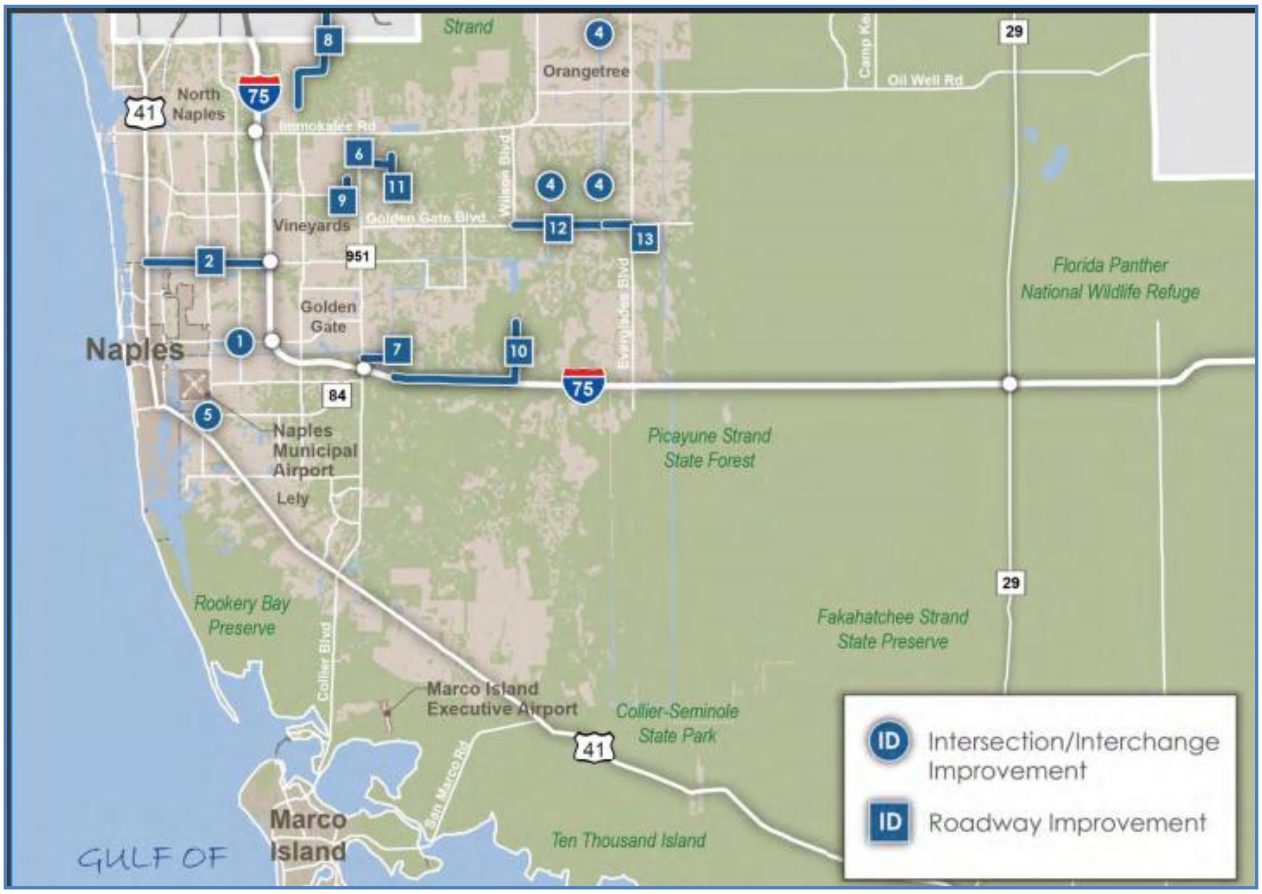
LRTP goals are:

- Ensure the Security of Transportation System for Users
- Protect Environmental Resources
- Improve System Continuity and Connectivity
- Reduce Roadway Congestion
- Promote Freight Movement

- Increase the Safety of the Transportation System for Users
- Promote Multi-modal Solutions
- Promote the Integrated Planning of Transportation and Land Use

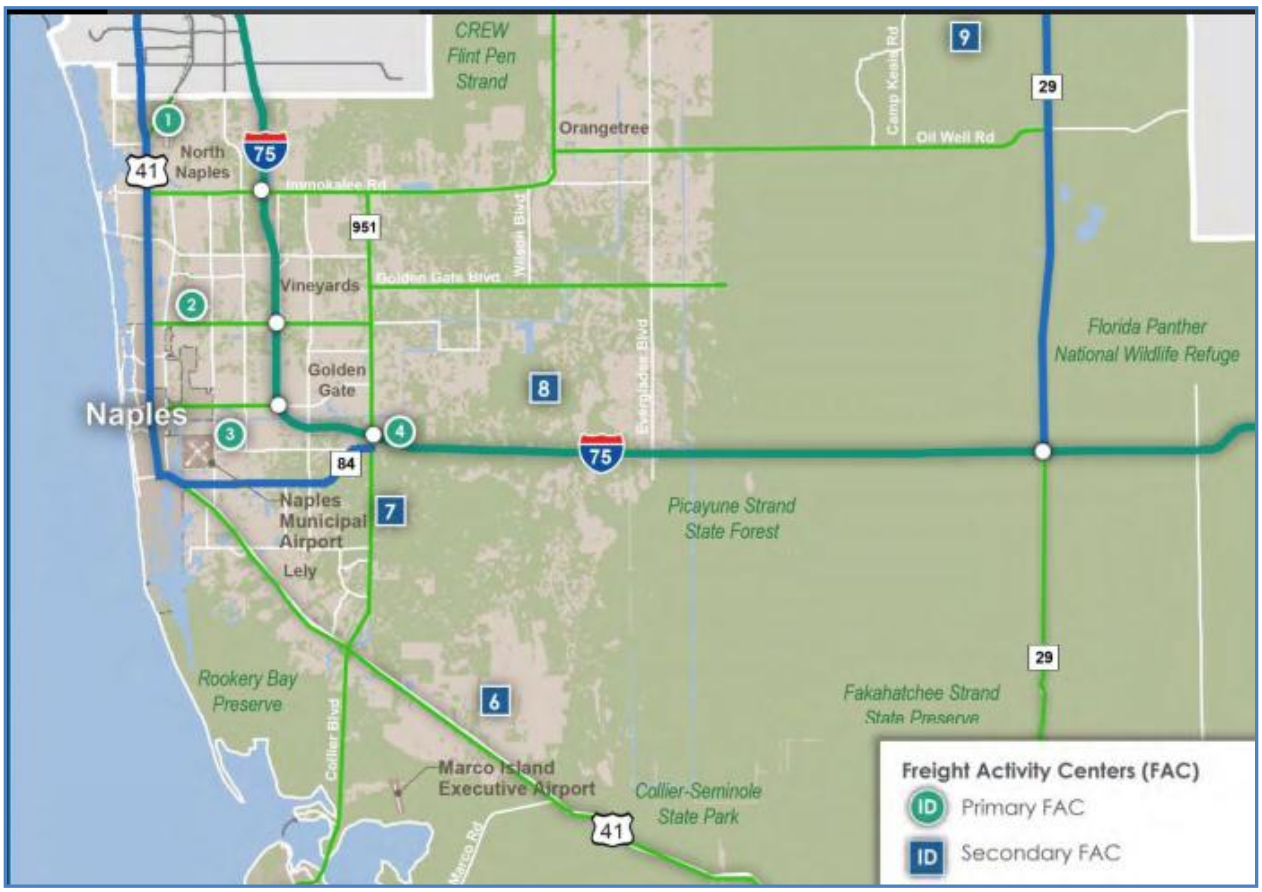
The LRTP stresses, the key to enhancing mobility for users of the transportation system is to improve connectivity and continuity through the system, and especially across all modes. The MPO recognized the importance of prioritizing projects that enhance connectivity by including system continuity and connectivity as two of the several project selection criteria. Connectivity and continuity are also important for bicycle, pedestrian and transit modes. Users of the transit system rely on bicycle, pedestrian or park-and-ride facilities in order to "make the connection." Connectivity and system continuity is about advancing an interconnected multi-modal transportation system. The LRTP committed highway projects for construction by 2020 are nearly all located in eastern Collier County, and several are within Receiving Lands (Figure 3-2).

Figure 3-2 Committed Highway Projects for Construction by 2020



Freight Activity Centers (FACs) and Network are also identified in the LRTP. The growing importance of freight movement has been reflected in the latest federal transportation authorizing legislation, MAP-21. Recognizing the contribution that the movement of freight makes to the State's economy, the Florida Department of Transportation (FDOT) created the Office of Freight Logistics and Passenger Operations to establish policies and plans investments that enhance Florida's economic development efforts. As a result, special attention was given to freight movement and is reflected in the needs assessment. These FACs contribute to the economic well-being of Collier County. As shown on Figure 3-3, two Receiving Areas, which include significant mining and agricultural operations, are designated as secondary freight activity centers numbers 6 and 8.

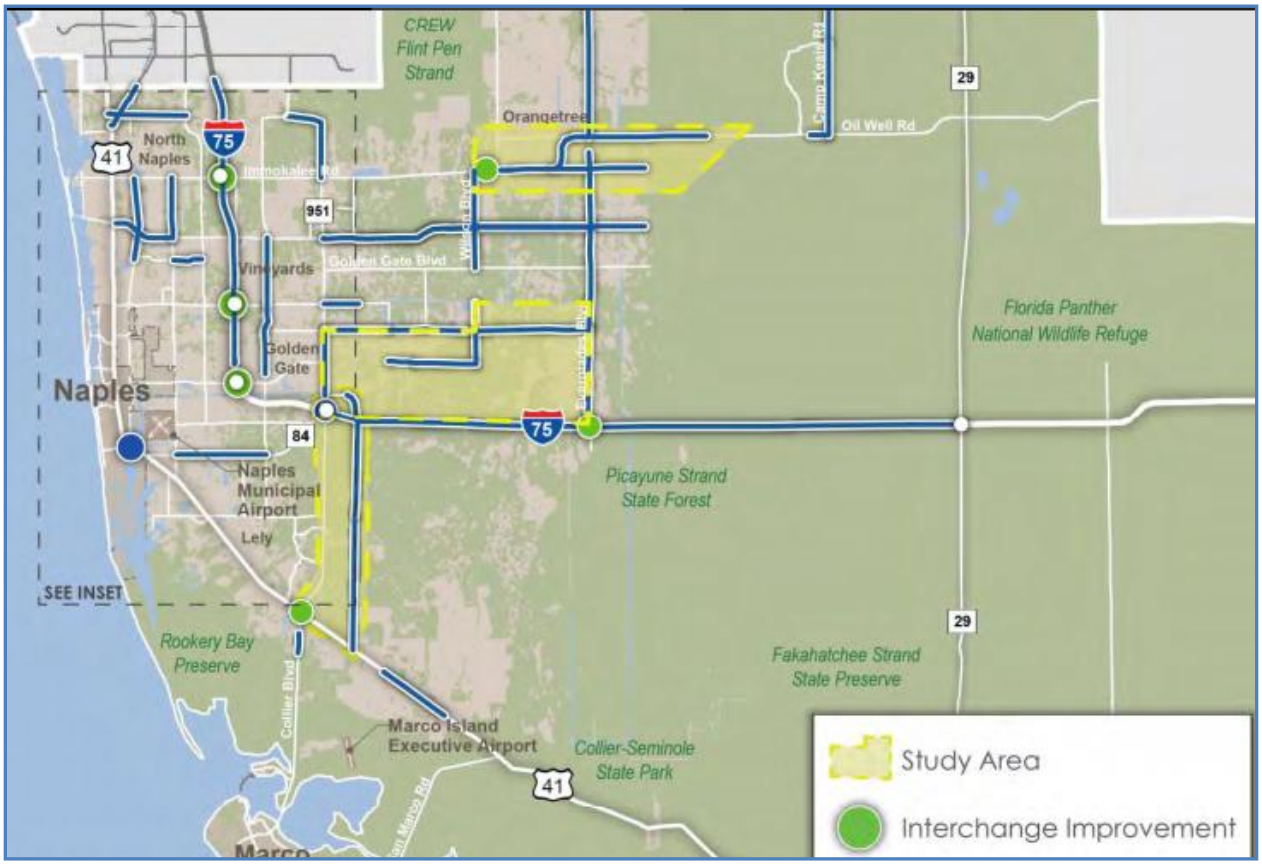
Figure 3-3 Freight Activity Centers



The LRTP also identifies future study areas to further define and clarify the scope of improvements needed in the area. Three study areas were identified, and one serves the RFMUD. The Green Boulevard Extension/North Belle Meade Study Area extends eastward from CR-951 to surround the North Belle Meade Area from Golden Gate Estates to I-75 and eastward

to Everglades Boulevard. The purpose of the study is to define future collector road network in this area. A number of corridors that would enhance circulation throughout the area have been identified, as illustrated on Figure 3-4. The study effort would determine the feasibility and preferred alignment for the identified corridors or alternatives that may be developed during the course of the study.

Figure 3-4 Transportation Study Areas



Additionally, in the North Belle Meade Receiving area, following the recommendations of the East of 951 Bridge Study, Collier County has programmed several bridges. Two bridges within the North Belle Meade Receiving Area are identified for construction.

Bicycle, pedestrian and transit needs are identified within the LRTP, however these are specific to existing network infrastructure. Planning for multi-modal needs within the RFMUD will be guided by the Receiving Area development standards, along with the Collier County *Master Mobility Plan* (MMP).

A major effort in understanding Collier County's mobility was the *Master Mobility Plan* (2011). The MMP considered six planning sub-areas, including the RFMUD. The MMP developed a long-term vision to aid in planning for the county's mobility, land use, and infrastructure needs

at population buildout. The primary goal of the MMP is to reduce greenhouse gas emissions and traffic demands specifically by reducing Vehicle Miles Traveled and Vehicle Hours Traveled while at the same time protecting habitats, environmentally sensitive lands and agriculture.

The Board of County Commissioners on January 24, 2012, reviewed and accepted the MMP strategies developed in cooperation with the Collier County Planning Commission through an enhanced public involvement process. Related to the RFMUD, the MMP recommends a new multi-modal Mobility Analysis, done at the time of development application, to create the needed linkage between land use and transportation policy.

A Mobility Analysis would expand the current methodology found in a Transportation Impact Statement (TIS) by addressing not only the automobile, but also including analysis of transit, bicycle and pedestrian mobility. Components of a Mobility Analysis measure the reduction in number or length of external automobile trips.

Mobility Analysis Components
Mixed Use Trip Generation Model (or similar technique) to calculate external trips (internal capture), external walk trips, external transit trips, etc.
For single-use development, a demonstration of what VMT-reduction strategies/techniques are to be used
An analysis of current and proposed transit access
An analysis of local street connectivity
An analysis of non-motorized travel suitability

Further addressing the need for a multi-modal network, in 2014, the Florida Department of Transportation adopted a *Complete Streets* policy. The goal is to implement policy that promotes safety, quality of life, and economic development. FDOT specifically recognized that Complete Streets are context-sensitive and requires design that considers local land development patterns and built form.

The overall intent of a *Complete Streets* policy is to provide safe access for all road users—pedestrians, cyclists, public transit users, and motorists—of all ages and abilities. Although design features vary based on local context, basic elements should include wide sidewalks, well-marked or raised crosswalks, traffic calming measures, protected bike lanes, and pedestrian safety islands. Complete Streets can help reduce costs and improve health by significantly reducing crash rates, injuries, and fatalities.

Congested transportation networks are generally caused by low density, single-use development with sparse connectivity and the majority of users on the network during the same peak hours. Collier County's transportation planning efforts and FDOT are in agreement- to enhance mobility it is critical to plan for a multi-modal system that serves all users of all ages, is interconnected, and with continuity.

Transportation planning efforts have identified several efforts within the RFMUD including new corridors, bridges, FAC designations, and areas for further study. This signifies considerable attention is being given to the transportation network surrounding the RFMUD.

Land Use

Growth is sustainable when it diversifies our economy, provides a more affordable lifestyle through housing and transportation choices, fosters design that encourages social, civic, and physical activity, and preserves a thriving natural environment and agriculture lands. The RFMUD land use policies support guiding sustainable principles, but as identified through the public outreach process and this restudy, there is room for improvement.

There are three land use designations in the RFMUD; Sending, Receiving, and Neutral. The overall goal of the program is to protect the natural resources within Sending Lands by directing future growth to the Receiving Lands. Upon the full realization of the program, the Sending Lands will remain substantially undeveloped, supporting quality habitat for listed species and functioning to improve the watershed and quality of surrounding estuaries and bays. Neutral Lands will remain low density as large estates lots able to support some agriculture uses, open space and habitat. Receiving Lands, determined to be those most suitable to accommodate future growth, will be developed.

The current RFMUD development standards, summarized in Table 3-1, allows for three development options: 1) base rights development; 2) clustering; and 3) mixed-use village.

To date, several developments have occurred in the western Receiving area. Each of these developments, Golf Club of the Everglades, Mockingbird Crossings, Lamarado, Heritage Bay and Twin Eagle used the clustering option with 1 unit per acre. These developments are marketed as "active adult communities" or "private gated communities." Each development is generally single-family residential, was planned independently of the other, and has little or no connection to neighboring development.

Table 3-1 RFMUD Development Characteristics

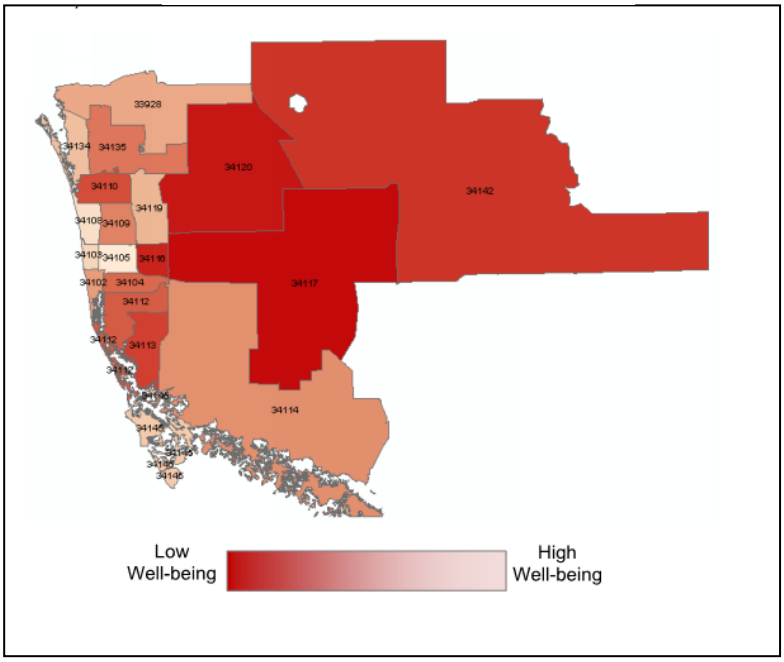
Typical Characteristics	RFMUD Base Rights	RFMUD Clustering	RFMUD Village
Size **Residential Gross Density**	**Minimum 5 acres** 1 unit per 5 acres	**Minimum 40 acres** 1 unit per acre	**300-2,500 acres** Minimum 2 Maximum 3 units per acre
Land Use*	• Ag • SF and MF • Staff housing • Family Care Facilities • Farm labor housing • Sporting and Recreation camps • Essential Services • Golf Courses	• Ag • SF and MF • Staff housing • Family Care Facilities • Farm labor housing • Sporting and Recreation camps • Essential Services Golf Courses	• **Diversity of SF and MF with a minimum of 2 neighborhoods** • Neighborhood Center max 10 acres, 8,500 SF leasable floor area/ac • **Village Center max 10% total village area, 10,000 SF leasable floor area/ac** • Research & Technology park max 4% total village acreage • **Civic and public parks min 10% total village acreage**
Recreation and Open Space	N/A	Min 70% of gross acres	• 40% open space • Green belt 300' average width
Transportation	N/A	N/A	• Formal grid design • Pedestrian paths and bikeways for access and connectivity

***Bold denotes required**

During the public workshops, participants stated they prefer that the RFMUD develop with more mixed-use development and less gated communities as has been occurring in the RFMUD. *Towards Better Places*, *The Community Character Plan for Collier County, Florida* (2001) states, "creating new neighborhoods with interconnectivity and greater density is the only way to avoid the worst-case scenario presented by the sprawl approach. New neighborhoods should be based on a sound pattern of streets and lots. A wider variety of housing choices should be made available by reintroducing traditional neighborhood concepts as an alternative to balance the many gated subdivisions that have been built over the past 20 years."

The body of national research on negative impacts of sprawl continues to grow. Studies have expanded beyond the interest of transportation and land use professionals to the Community Health Departments across the nation. A growing body of research indicates mixed-use, appropriate placement of buildings, easy-to-reach parks, multi-modal transportation have an extraordinary impact on community health. "One of the strongest health/land use correlations is between obesity and the automobile: one California study showed each additional hour spent in a car per day is associated with a 6 percent increase in body weight, whereas every kilometer (0.6miles) walked each day is associated with a 5 percent decrease, according to a study in British Columbia."[1]

Figure 3-5 Collier Well-Being Index



This correlates with the local Blue Zones well-being assessment of Collier County where the lowest well-being indicators were found in areas east of CR-951 surrounding the RFMUD including, Golden Gate Estates, areas of low density and longer commutes (Figure 3-5).

The Urban Land Institute, (ULI) has been using health studies to promote healthy communities through design. Physical design affects human behavior at all scales—buildings, neighborhoods, communities, and regions. The places in which we live, work, and play can affect both our mental and physical well-being. Our built environment offers both opportunities for and barriers to improving public health and increasing active living.[1]

The Florida Department of Health in Collier County is also advocating healthy communities principles, striving to educate the community on the link between health and the built environment. They are working to promote community design that will increase active living and healthy lifestyles by advocating for a network of connected bike and pedestrian pathways, accessible transit and places where people can age in place.

In ULI's *Ten Principles for Building Healthy Places*, they advocate "All comprehensive plans should incorporate health. It provides the opportunity to make explicit the connection between development and health, to elevate health among planning considerations, and to lay the groundwork for a healthy community for generations to come. A tool to use as a guide to measuring health impacts is the health impact assessment (HIA). An HIA helps evaluate the potential health effects of a plan, project, or policy before it is built or implemented. HIAs bring potential public health impacts and considerations to the decision-making process for plans, projects, and policies that fall outside the traditional public health arenas, such as transportation and land use. It is a "health lens" that can help increase positive health outcomes and minimize adverse health outcomes. San Francisco has been an early adopter of HIAs, using the tool on diverse projects, such as neighborhood plans, affordable housing, and highway projects. The development community, local government, or both in cooperation can develop HIAs. This guidance helps communities make informed choices about improving public health through community design." Collier County may consider the HIA as an option in measuring the effectiveness of developments increasing positive health outcomes.

Mixed-use development has dimensions beyond land use. Healthy places are also found to provide for mix incomes, generations, and housing type. This relates directly to affordable housing. The RFMUD currently requires approximately 10 percent of residential units in villages to be affordable. The issue of the need for affordable housing within the RFMUD was clearly stated in Mr. William Poteet's letter to staff dated June 6, 2016, "The future Rural Fringe plans must include specific opportunities for affordable housing for our entire workforce, not just first time responders or those classified as "work force housing." Affordable housing must include a mix of apartments, multi-family and possibly single family opportunities." While, Collier County's current comprehensive affordable housing study may provide greater guidance on principles to include in the RFMUD, the program can be improved through this process through greater density and removing the TDR credits currently required for affordable housing.

To meet the public's ideals of more mixed-use villages, the RFMUD should incentivize mixed-use development and villages using a variety of tools to entice desired mixes and densities. Incentives that are currently used include higher density, more intense uses, and bonus TDRs, however these incentives have not yet produced a village within the RFMUD. Current density

for a village is now limited to 3 units per acre. Density is arguably the most powerful tool controlled by Collier County to create a more sustainable development. Density that is well designed and assembled makes transit and retail more viable, and supports more services close to homes. Studies agree, density needed to support viable transit is 7 units per acre.[2] Higher densities also make walkability possible, and great design makes it enjoyable. Density necessarily requires a high percentage of multifamily homes in a neighborhood thereby providing a greater range of residential units, increasing affordable housing opportunities. For example, the image from the Lincoln Institute of Land Policy, Visualizing Density, shows a new project in Huntersville, NC. This new neighborhood is 6.3 units per acre and will offer a robust mix of residential units.

Well-designed density is vital to a strong economic foundation in any neighborhood as it brings a critical mass of local employees and customers to support a variety of community needs. Increasing density in the RFMUD was well supported through the public outreach process. By strategically increasing the number of dwelling units per acre, Collier County will go a long way toward meeting the sustainable housing and transportation objectives within the RFMUD.

In addition to higher density, incentives being used in other areas include a mixed-use impact fee index. The County's transportation impact fee consultants from Tindall Oliver shared with staff that this type of impact fee has been found to encourage mixed-use by lowering overall project impact fees by 10 to 30 percent.

The measure for mixed-use villages is found to be different in Collier County's eastern lands. The RFMUD and the Rural Lands Stewardship Area (RLSA) have different standards for measuring the mix. Table 3-2 shows the RFMUD establishes guidance for maximum village center and leasable square feet, and a minimum size for civic and public parks. The RLSA measures the mix of uses with direct correlation of residential unit, such as goods and services minimum 25 square feet per residential unit. Another difference between the RFMUD and the

RLSA is allowed development patterns. The RLSA policies provide only for the village or town option, with the exception of a small 40 acre hamlet. The RFMUD has no such requirement so single-use, residential development can consume 40 acres or 4,000 acres. The RFMUD guidelines for measuring mixed-use and village size could be improved by bringing consistency between the standards found in these two TDR plans.

Table 3-2: Measuring the Mix in the RFMUD Village and RLSA Village

Typical Characteristics	RFMUD Village	RLSA Village
Size	300-2,500 acres	100-1,000 acres
Density	2-3 UPA	1-4 UPA
Land Use*	• **Diversity of SF and MF with a minimum of 2 neighborhoods** • Neighborhood Center max 10 acres, 8,500 SF leasable floor area/ac • **Village Center max 10% total village area, 10,000 SF leasable floor area/ac** • Research & Technology park max 4% total village acreage • **Civic and public parks min 10% total village acreage**	• **Diversity of SF and MF** • **Goods and Services Minimum 25 SF/DU. Max FAR .5** • **Civic/Institutional Min 10 SF/DU Max FAR .6** • Group Housing FAR .45 • Lodging 26 UPA net

***bold is required**

The village option, over the sprawl option, will be far more beneficial to Collier County, including Golden Gate Estates. Villages will increase tax revenue, support jobs, goods and services needed in eastern Collier County, and reduce commute times for some now traveling to the coastal area. Research shows, "mixed-use, walkable downtown developments generate ten times as much tax revenue per acre, save almost 40 percent on up front infrastructure costs, and result in about 10 percent lower costs for service delivery than sprawl development.[3]

Economic Vitality

Achieving prosperity in eastern Collier County challenges consideration for land use and transportation strategies to balance environmental, social and economic interests. Guidance for the RFMUD is found in *Opportunity Naples* (2014), an economic development strategy that will advance economic opportunity for all residents of Greater Naples. The process for *Opportunity Naples* leveraged the thoughts and opinions of Greater Naples residents and leaders. Public input and stakeholder perspectives, along with a thorough analysis of the Collier

County's competitive position, directly informed the process. Several identified challenges can be directly related to the RFMUD:

- Workforce growth trends;
- Site availability; and
- Impact fees.

Opportunity Naples found, "growth trends in Collier County's age dynamics risk the future sustainability of the local workforce. Collier County's 25 to 44 year old population is proportionally smaller than every comparison area except Sarasota County, as is Collier's percentage of 0 to 19 year old residents. Without an influx of younger workers migrating to the County or a spike in birth rates, Greater Naples could face a significant shortfall of replacement workers for future retirees. Likewise there will be an occupational shortage in Collier County if qualified workers aged 24 to 44 are not recruited to the area to replace retirees."

This age group, and most specifically the millennials, is one of the most sought-after market segments. So how can Collier County's RFMUD land use policy support the attraction and retention of this demographic? Study after study shows millennials are increasingly choosing vibrant, healthy, walkable communities and rejecting the automobile-centric land use patterns of the generations before them. Further supporting mixed-use and integrating health into planning and development policy can become an economic development strategy—a tool to attract a skilled workforce and to build a sustainable economic base. Incentivizing mixed-use, healthy communities within the RFMUD is critical to attract the workforce needed to diversify and sustain eastern Collier County's economy.

A mixed-use, healthy community can provide economic advantage by appealing to millennials who, as a generation, place more value on active lifestyles. In fact, The Rockefeller Foundation and Transportation for America commissioned a survey in 2014, through which 80 percent of millennials reported that they wanted to live in a walkable neighborhoods.[4] Similarly, a 2011 AARP survey found that the vast majority of seniors want to live within a half mile of common daily goods and services such a grocery stores, drug stores and doctor's offices.[5] Developers can create enduring value by meeting these demands.

Mixed-use places will gain a competitive advantage, using healthy community design as a way to attract investment in the community, foster growth, and increase revenues. This point of view is backed up by serious research. Today, prospective office tenants prefer amenity-rich mixed-use centers (also known as "live-work-play" locations) over single-use office parks by a margin of 83 to 17 percent, according to a 2014 study by the NAIOP Research Foundation, which represents the commercial real estate industry in the US. The report's bottom line: "…

any company wanting to attract and retain young educated workers who prefer live, work, play locations needs to locate in a compact, mixed-use, walkable place, either downtown or in the suburbs."

Countless other studies have explored how physical design and walkability impact the economic prosperity and growth of a community. For example, in Asheville, NC, it was found that property taxes for downtown mixed-use development projects yield an 800 percent greater return on a per-acre basis than large, single use projects near city limits.[6] And, In the 30 largest metro regions in the U.S., office space located within the more walkable urban parts of the metro commands and average of 74 percent more rent-per square-foot than elsewhere in the metro.[7]

Collier County has a limited supply of land available for new development and there is high competition for residential land uses. The development trend in the RFMUD has been gated residential communities. In fact, nearly all of the "West" Receiving area has built out in this pattern, leaving little room for future business uses. This is one of the largest challenges *Opportunity Naples* found to Collier County's economic diversity - "suitable, large-scale, pad-ready development sites."

Under the current RFMU policies, businesses would only be allowed within the Village option. Therefore, at this time, any business willing to locate within the RFMUD would need to find residential partners to go through a rezoning process to create a Village in order for the business to locate within the RFMUD. For Collier County's competitive edge, land use policies within the RFMUD need to provide greater flexibility for business development. Allowing stand-alone business parks and light industrial uses that are designated in zoning overlays would provide more sites readily available for development. This would directly address the business community's identified barrier, a lack of certain in the rezone process. At the same time, by allowing businesses as permitted uses, shorten approval times may be realized. This can be accomplished through business park zoning overlays or by establishing criteria similar to the conditional use process where compatibility can be determined by the Hearing Examiner.

The last item, impact fees, is always up for debate in Collier County. There are processes in place that can provide businesses impact fee credits or waivers and other incentives to address this issue. At the same time, as discussed under the land use incentives, a new mixed-use impact fee has the potential to reduce development impact fees within a mixed-use project by 10 to 30 percent. This type of impact fee may provide the reduced fees sought by the business community.

To support economic vitality in the RFMUD Collier County needs to leverage the mixed-use, healthy community advantage to stay competitive and relevant to the new generations needed for the workforce. This means supporting land use policy that incentivizes mixed-use development and villages within the RFMUD. “Many businesses are increasingly making their expansion, relocation, and new business development decisions based on which communities are most walkable.”[8] The villages within the RFMUD should be designed to accommodate the desires of both businesses and their workforce – a focus on vibrant, mixed-use communities that support transportation choices and health lifestyles. While villages may take years to come to fruition in RFMUD, land use policy should also be able to rapidly respond to business opportunities that are ready to locate in the RFMUD. This is accomplished by allowing business uses outside of a village in appropriate locations, with approvals as promptly as possible. These steps will support the economic diversification of eastern Collier County.

Footnotes

[1]ULI. 2013. *Ten Principles for Building Healthy Places.* *http://www.uli.org/wp-content/uploads/ULI-Documents/10-Principles-for-Building-Healthy-Places.pdf*

[2] Peter Newman and Jeffrey Kenworthy. 2006. *" Urban Design to Reduce Automobile Dependence."* Opolis: An International Journal of Suburban and Metropolitan Studies. Vol. 2, Issue 1, Article 3.

[3] Mariel Alfonzo. 2015. *"Making the Economic Case for More Walkability."* Urban Land. Urban Land Institute. http://urbanland.uli.org/sustainability/houston-economic-case-walkability/

[4] Global Strategy Group. 2014. *Rockefeller Millennials Survey. Transportation for America.* https://www.rockefellerfoundation.org/about-us/news-media/access-public-transportation-top/

[5] AARP. 2012. *2011 Boomer Housing Survey.* http://www.aarp.org/content/dam/aarp/research/surveys_statistics/il/2012/2011-Boomer-Housing-Survey-AARP.pdf

[6] Badger, Emily. 2010. "The Simple Math that can Save Cities from Bankruptcy." The Atlantic: City Lab. http://www.citylab.com/work/2012/03/simple-math-can-save-cities-bankruptcy/1629/

[7] Gary Pivo and Jeffrey D. Fisher. 2001. "*The Walkability Premium in Commercial Real Estate Investments".* Real Estate Economics 39.2. 185-219. http://www.u.arizona.edu/~gpivo/Walkability%20Paper%208_4%20draft.pdf

[8] Public Sector Consultants. 2016. *Creating 21st Century Communities: Making the economic case for place.* http://smartgrowth.org/creating-21st-century-communities-making-economic-case-place/

Rural Fringe Mixed-Use District White Paper
Section 4: Findings and Initial Recommendations

The findings and initial recommendation below emerged from the public engagement, data and analysis discussed in Section 3. These are initial recommendations and reflect an approach that begins with general principles. Once settled in broad concept, more specificity will be brought forward as the process moves to Growth Management Plan amendments and Land Development Code amendment processes. The issue topics discussed herein are organized under the areas of:

SENDING LANDS:

A. TDR Credit System
B. Credits and Areas Outside of the RFMUD
C. TDR Program Management
D. Sending Land Management
E. Other Program Suggestions

NEUTRAL LANDS

RECEIVING LANDS:

A. Land Use and Economic Vitality
B. Transportation and Mobility
C. Development Standards and Process

For ease of use, this Section includes different ink color. The different ink colors reflect:

Issue identification and background
Bold narrative is public input
Staff's initial recommendations
Impacts to stakeholder interests

For simplicity, throughout this section, owners of parcels within RFMUD Sending Lands will be denoted as "Sending owners"; owners of parcels within RFMUD Neutral Lands will be denoted as "Neutral owners"; owners of parcels within RFMUD Receiving Lands will be denoted as "Receiving owners".

SENDING LANDS

A: TDR CREDIT SYSTEM

1. *Minimum Sales Price, Buyer and Seller*

One of the most frequently heard recommendations related to TDR credits is **the elimination of the minimum $25,000 sales price for Base TDR credits**. Since the adoption of the Bonus credit system in late 2004, there have been two classes of credits in the system: Base TDR credits, which are subject to the minimum sales price, and Bonus TDR credits, which are not.

The TDR system was designed to be "market driven;" however, minimum pricing requirements interferes with willing buyer/willing seller free market principles. A true market rate should be maintained so that credit sale prices reflect actual market conditions. With the possible exception of a County TDR bank, market price should be left solely to market forces.

The present requirement creates distortion in the market price of bonus credits compared to base credits, frequently selling for just a fraction of the base price. The Rural Fringe Coalition reports combining a base TDR with a bonus TDR results in a current market average price of $13,500 per TDR. A single market price for all credit types requires the elimination of separate treatment for base credits compared to bonus credits.

A corollary of a unified TDR value is the elimination of any use restriction (based on TDR credit type) as presently interpreted in village development. (See staff recommendations: Receiving/Village).

Staff initial recommendation:

Eliminate the minimum $25,000 price per base TDR.

All groups generally support this provision: the Coalition, Sending owners, interested citizen groups and environmental advocates have supported this elimination. In the opinion of staff, no interest group would be adversely affected by this change.

2. *Additional Credits to Sending Owners*

An analysis of likely credit availability and likely (long term) credit demand reveals an imbalance between supply and demand. Under its "likely case" scenario, County staff estimated that demand would ultimately be more than double the supply under the current program structure. An economic analysis in underway that will provide scenario planning to address proper balance and suggest additional credits for Sending owners. Alternatives need to be considered because changes in Receiving Lands rules will also affect the balance. Use of credits

for incentivized development and increase in allowed density in Receiving Lands must be factored into the equation.

It was suggested by some individuals that **credit balance could be achieved by allowing the same credits to count more favorably in the hands of Receiving owners for development purposes.** It is true that a mathematical application could result in the same economic balance by using this approach. On the other hand, by using a combination of approaches, a more tailored result is possible. Thus, TDRs can be used both as compensation to Sending owners and as incentives to Receiving owners.

With respect to the application of additional credits for the benefit of Sending Land owners, a number of recommendations have been made by stakeholders, including **prioritization (more bonus credits) for: NRPA lands; parcels that are 10 or 20 acres or greater; lands that require higher level of restoration; lands that remain in private ownership with agreements with Forestry Service for controlled burns; lands that remain in private ownership with agreements for flow ways across property; lands that retain agriculture activity; lands that are donated to accommodate flow ways; lands that are donated where habitat value is highest; or, all sending lands regardless of attributes.** Many of these recommendations were made in the Rural Fringe Coalition's "White Paper" (January, 2015); many were echoed in correspondence, surveys and public meetings.

Meeting participants were more favorable to the "all Sending Lands equally" approach than to all others listed above. Staff is highly supportive of this approach due to simplicity and equity in application. Staff also anticipates that this general preference may yield to some limited exceptions, such as a scenario in which no governmental or other entity can be established to own and maintain environmentally sensitive properties (see D.2, below).

Additional TDR credits to add liquidity to the supply/demand balance is a central and fundamental change to the existing TDR program. By providing more potential credits to Sending owners, they will derive more compensation through the program than presently possible. At the same time, the additional liquidity will place downward pressure on TDR price, thus making credits slightly less expensive for development.

The number of additional bonus credits will depend on adopted TDR incentives in the Receiving Lands, the minimum and maximum densities applicable to Receiving villages and non-village development, and additional or contingent incentives applied to specific areas within Sending Lands. A final true-up of the credit system, and therefore additional credit needs in Sending Lands, must necessarily await consideration of density scenarios in Receiving Lands. A "what if" scenario tool has been completed by a consulting economist, and will help inform the discussion.

Staff is confident that overall credit demand from Sending Lands will not diminish due to adopted changes following the restudy. Therefore, staff is confident that at least two (2) additional TDR credits per 5 acres should be anticipated for Sending program activity; and that more may be possible, depending on support for recommended changes in the Receiving Lands.

Staff initial recommendation:

Provide additional TDR credits to Sending owners. Where possible, additional TDR credits should be apportioned equally to all Sending owners regardless of location or property attributes.

The addition of 2 or possibly more credits available for Sending owner TDR participation will result in more affordable credits for development and a greater overall return to Sending owners. This was a fundamental tenant suggested by the Rural Fringe Coalition and well received by Sending owners in meetings and by survey. To the extent that a greater financial return incentivizes Sending owners to enter the program, conservation groups have been enthusiastic. All groups benefit from this proposed change.

Sending owners had many different points of view on distribution of additional credits; the notion that all sending area owners would be subject to the same TDR availabilities was favored by five out of six groups in the Public Workshop break-out table exercise. Because of the nature of the various options, it is clear that "equity" is favored over parochial interests of owners. Thus, all Sending owners would benefit equally.

Ultimately, it may prove beneficial to award a greater number of potential TDRs where Sending Land is not in an area with present availability for the conveyance TDR, that is, no governmental entity to take ownership. (See D.2, Land Management section, below). If that is the case, the allowance of one or more additional TDRs would be used to equalize Sending owner opportunity, rather than to enhance the return of one type of parcel attribute over another.

3. Agricultural Uses

Under current rules, parcels located in Sending Lands are eligible for TDR severance credits. However, TDR severance is abated for 25 years "from any parcel, or portion thereof…cleared for agricultural purposes after June 19, 2002".

The Final Order, dated June 22, 1999, directed the County to conduct assessments that included, at a minimum, provisions to "protect prime agricultural areas" and to "prevent the premature conversion of agricultural lands to other uses" (p.11). In addition, uses remaining in NRPA areas were limited to single family dwellings per parcel and agricultural uses (p. 14).

There is no specific directive in the Final Order to encourage new agricultural uses other than the protection of "prime agricultural land" in general. The extent to which this language applies to RFMUD Sending Lands could be debated. On the other hand, nothing in the Final order would prohibit the County from removing disincentives, or in incentivizing appropriate agricultural activity.

The RFMUD rules adopted in 2003 and 2004 discourage agriculture on Sending Lands by eliminating the possibility of creating TDR credits for any land put in agricultural use after 2002. The rationale for this provision may have been based on the concept that agricultural operations were more widespread and established in the RLSA; by comparison, a relatively small amount of agricultural activity was found in RFMUD Sending areas. However, there may be agricultural activities that are consistent and compatible with environmental goals. For example, land managers in the area have maintained that passive agriculture, specifically grazing, is a cost-effective way to reduce invasive plants.

The suitability of the environment for agricultural activity beyond grazing is limited. It is possible that an owner will find that a non-NRPA property is suitable for growing certain crops or landscape materials given the specific location. Further reduction of density in western North Belle Meade may be a desirable trade-off for the allowance of more active agricultural uses in that location. However, an administrative or conditional use review may be appropriate to avoid conflicts with large scale land management practices such as prescribed burns or with water management initiatives.

When asked about views concerning agricultural incentives, five of six groups at break-out table exercises (Public Workshop #2) concluded that TDR credits should be provided to incentivize agricultural activity in Sending Lands. Our first on-line survey indicated that a majority of respondents had plans to continue or commence agriculture on their properties. 76% of persons attending the final Public Workshop #6 agreed that TDRs should be awarded for owners who keep property in agricultural production.

Staff initial recommendation:

Make TDR credits available to Sending owners who wish to begin or expand a bone fide agricultural operation. In NRPA locations, only passive agricultural operations, excluding aquiculture, would qualify. Passive agricultural uses may be considered for Restoration and Maintenance TDRs through an approved Restoration and Maintenance Plan.

Incentivized agricultural use of Sending Land provides a viable alternative to owners who wish to retain a beneficial interest in their properties. If compatible with environmental interests, including water quality, there do not appear to be negative consequences for any stakeholder interest group, so long as a review process is established to assure compatibility.

4. Parcels smaller than 5 acres

RFMUD properties smaller than 5 acres are eligible for the TDR program today if legally non-conforming (LNC). That is, a property less than 5 acres created before October 14, 1974, the establishment of the Agricultural Zoning District, Coastal Area, enjoys development rights and, as provided in the GMP, TDR incentives. For example, a full base TDR is available regardless of the size of the LNC lot. Conversely, illegal non-conforming lots enjoy no development rights and no TDR availability.

In response to an individual petition in 2008, the Comprehensive Planning Department researched the extent of illegal lots and brought various options to the BCC for consideration. It found 189 non-conforming lots in Sending areas, of which 126 were deemed LNC; 51 were found to be illegal non-conforming and 12 inconclusive, due to lack of available data from Property Appraiser's Office.

An integral part of the analysis concerning non-conforming parcels relates strictly to parcel size. Parcels slightly less than 5 acres can be determined to be legal lots, regardless of date of creation, if the owner can prove that a portion is attributed to ROW taking at some point in time. Of the 51 illegal non-conforming lots and the 12 inconclusive determinations, 24 exceed 4.5 acres in size.

Illegal non-conforming parcels enjoy no development rights and this principle should continue. However, a cornerstone RFMUD program goal is the accumulation of parcels and ultimate ownership in a governmental (or other qualified) agency for long term environmental, unified stewardship. Proportional TDR availability would foster that result and provide a reasonable exit strategy for owners of such parcels. Documents associated with this transaction would clearly reflect the lack of current development rights and the public purpose for creating the TDR availability. For example, an owner of a 2 acre illegal non-conforming parcel would be eligible for 40% of the TDR credits otherwise available to a 5 acre parcel. When drafting the GMP amendment, a requirement of conveyance would be applied in order to achieve any TDR value from Legal non-conforming lots.

Further, any property in excess of 4.5 acres should be deemed to be a 5 acre parcel for purposes of this program. Again, actual development rights to be exercised outside of the TDR program would require an LNC determination, as is presently the case. However, as an incentive to enter the program by eliminating a sometimes onerous or inconclusive determination, such parcel would be granted 1 full credit for each base and bonus TDR.

Staff initial recommendation:

Allow TDR participation for illegal non-conforming properties based on public policy goals, and waive requirements related to proof of LNC status if greater than 4.5 acres in size.

This change benefits owners who do not have access or means to achieve proof of LNC status where the property is greater than 4.5 acres in size. It also benefits owners of non-conforming properties created after 1974, by allowing them an exit strategy. There are no known stakeholders who are adversely affected.

5. *Retroactivity of Suggested Program Changes*

As discussed under A-2, *Additional Credits to Sending Owners*, 2 or more additional TDRs may be provided to further incentivize participation and balance supply with anticipated demand. Approximately one quarter of all Sending acreage has previously entered the program at the Base and Early Entry levels. Of the 6,532 acres where base rights have been severed, 1,979 acres (30%) have been conveyed to a governmental agency.

Land owners who have previously entered into a Limitation of Development Rights agreement should be allowed to apply for any additional TDR credits made available as a result of program changes. This would provide an equitable solution to owners who entered the program earlier in time and have not transferred ownership.

The supply side of the TDR credit system will be impacted to a significant degree: (1,376 credits times the number of additional bonus credits approved). This additional supply is added to the dynamic analysis at a macro level.

Staff initial recommendations:

Allow landowner's who have generated TDRs but have not conveyed their land to participate in any applicable program changes.

The proposition benefits owners who faithfully earned Base TDR credits prior to the current restudy and economic analysis of overall credit needs. One possible inequity could be perceived by prior Sending owners who transferred properties to a governmental agency or third party in the past; they no longer have a nexus to the land. No other stakeholder group would be adversely affected.

6. *Early Entry TDR Credits*

Early Entry TDR credits were adopted as part of the 2004 RFMUD Amendments providing bonus credits to help balance the system. At the time, the Early Entry Bonus was seen as a means to

jump-start the program: Sending owners who severed TDRs in the early years would be rewarded for their trust in the program and belief in the likelihood of a successful negotiation and sale.

The Early Entry Bonus TDR, when first enacted, was set to expire in three years (2007). It has since been extended several times and is now set for expiration in 2019, 15 years after the start of the program.

The time period associated with early participation expired a number of times. Incentives for participation should be monetary, and can fairly reflect the fact that the reference to "early" has become *de facto* permanent.

Staff initial recommendation:

Replace the reference to Early Entry Bonus TDRs and simply provide 2 TDRs for base severance of dwelling unit rights, subject to any additional credits assigned as discussed in A.2, above.

No stakeholders will be adversely impacted; this change provides more clarity to the program. The BCC would abandon one potential program "tool"- the potential of non-extension of the Early Entry Bonus credit that exists today.

7. *TDR Credits from Receiving Land*

Within the Receiving Land there are opportunities to further the goals of environmental protection and agriculture preservation. In fact, some of the most valuable agriculture land in Collier County is located in the RFMUD Receiving Land. Collier County has had success in preserving agriculture lands through a system of TDR incentives in the Rural Lands Stewardship Area. Additionally, there are some limited natural resources found in Receiving areas that are valuable for preservation. Recognizing this, and the need for greater incentives in the RFMUD, stakeholders support the ideas to **allow Receiving Lands to generate TDR credits** for the purpose of **retaining agricultural uses/rights and where greater environmental protection is demonstrated.**

Staff initial recommendation:

Allow TDRs to be generated from Receiving Lands for agriculture preservation, or native vegetation and habitat protection beyond minimum requirements.

Preserving agriculture in Collier County will benefit the overall agriculture economy, and the stakeholders involved in agriculture operations.

B: TDR CREDITS AND AREAS OUTSIDE THE RFMUD

1. *Urban Residential Fringe and the One Mile Rule*

Development within the Urban Residential Fringe (URF), mile-wide buffer between the urban area and the RFMUD, has a base density for development of 1.5 units per acre. Given its location, the GMP describes its purpose: "to provide transitional densities between the Urban Designated Area and the Agricultural/Rural Area" to the east. Additional density can be added through the purchase of TDRs from Sending Lands located within one mile of the URF. Up to 1 unit per acre can be added in this way, although specific properties were granted slightly higher allocations through private plan amendment petitions. Also as a result of private plan amendment petitions, the requirement of obtaining TDRs from Sending Lands within one mile, in order to increase density, was modified for the Naples Reserve PUD and the San Marino PUD.

Private GMP Amendments have established the precedent to derive TDRs from the Sending Lands beyond 1 mile, reflecting Board direction. The vast majority of URF acreage is now entitled for Planned Unit Developments. Of the total 5,500 acres, only 371 acres remains undeveloped (agricultural zoning).

Regardless of policy considerations for or against this geographical allowance, a change to the Urban Residential Fringe rules to reflect this Board direction would provide consistency for the remaining areas that have not been entitled and may wish to increase density through the TDR mechanism.

Staff initial recommendation:

Eliminate the one mile boundary from which TDRs must be derived for Urban Rural Fringe.

This change favors the majority of Sending owners whose holdings are outside the one mile band, although the additional demand is very small. It negatively impacts Sending owners whose holdings are within the one mile band, and may have purchased such property in expectation of higher return for sale of those TDRs. Again, looking forward, this potential demand is very small.

2. *The Urban Residential Infill Bonus Provision*

The Residential Infill Bonus (Density Rating System, Future Land Use Element) encourages infill within urban areas, outside of the Coastal High Hazard Area. Parcels less than 20 acres are

eligible, under certain conditions, for 3 additional dwelling units. The first of these must be derived from the purchase of a TDR from the RFMUD.

This density bonus provision is intended to incentivize compatible in-fill development in the Urban Mixed Use District, but has been seldom used. Removal of the TDR component would eliminate a barrier to what is intended as an incentive to foster in-fill development; likewise, it would eliminate a minor demand uncertainty in calculating the supply/demand ratio in the RFMUD.

Staff initial recommendation:

Eliminate the requirement to purchase a TDR in the Urban Residential Infill bonus provision.

The community at large would benefit from urban infill development at appropriate locations; no other stakeholders are significantly affected.

3. *Golden Gate Estates TDRs for Environmental Protection*

Unlike allowable *uses* of TDRs outside of the RFMUD, no locations outside of the RFMUD currently provide additional *sources* of TDRs for use within RFMUD. The Comprehensive Watershed Improvement Plan (CWIP) Ad Hoc Advisory Committee (CWIP Committee) is currently studying the technical implications of various goals and strategies associated with wetland areas in Northern Golden Gate Estates. The Watershed Management Plan (2011) identifies an area within Golden Gate Estates as North Golden Gate Estates Flowway Restoration Area. This area, as well other low-lying areas in Golden Gate Estates could be considered as additional Sending locations related to the RFMUD TDR program. In-holdings within Red Maple Swamp and Winchester Head (managed by Conservation Collier) or other important areas could also be considered.

The Ordinance creating the Growth Management Oversight Committee included within the Committee's scope an evaluation of consistency among restudies. Watershed issues are one of the topic areas where consistency and coordination have been frequently mentioned. Historically, the Rookery Bay watershed started in the North Golden Gate Estates area, sheetflowed through North Belle Meade and South Belle Meade, then outflowed into the Rookery Bay estuaries.

The historic Rookery Bay watershed has been heavily influenced by the Golden Gate canal, and various stormwater projects have been identified by the Watershed Management Plan, accepted by the BCC in 2011, to address the problem. Diversion or attenuation of stormwater before it reaches the Golden Gate canal is one of those projects, and continues to be the subject of discussion at the CWIP Ad Hoc Advisory Committee.

Any extension of TDR Sending credits to an area outside of the RFMUD must be cautiously considered. Additional Sending areas should be limited in acreage and prioritized for wetland or flowway preservation, as determined by the BCC. Staff recommends coordination and accommodation of this concept through various incentives and programs, including the TDR program, only for select and high value (wetland/flowway) parcels. By allowing a number of parcels to receive TDR credit allowance under the program, watershed goals can be more easily met.

One important consideration is the volume of donations made possible through the TDR program within Golden Gate Estates. The RFMUD and its TDR program has been a relatively "closed" program, particularly from the Sending or supply side. It is important to consider the effect on value if additional supply is added. Staff believes, for example, that a program yielding 150 TDRs, or 188 acres in total, derived from property owners in the most valuable (from a watershed attenuation perspective) would be appropriate. It would be a roughly 3% impact in total supply, and could be considered de minims, according to an economic consultant for this restudy.

It is important to note that this concept will be vetted in the context of the Golden Gate Area Master Plan Restudy as well. The TDR concept is related to, and will be affected by, a parallel initiative that would provide incentives for combining smaller lots into larger lots in North Golden Gate Estates- an initiative that will reduce some of the floodplain impacts of smaller lots and aid in aquifer recharge.

Staff initial recommendation:

Accommodate implementation measures recommended by the CWIP committee and the Watershed Management Plan that are consistent with TDR program success.

C: TDR PROGRAM MANAGEMENT

1. General Administration

Under the current program, the Comprehensive Planning Section, Zoning Division administers the TDR program. Administration includes the intake of applications and related requirements for severance of development rights (Base and Early Entry TDRs), Restoration and Maintenance TDRs, Conveyance TDRs, transfers of credits, redemptions of credits and lost certificates. Administration reflects the private sector basis of the program- willing sellers and willing buyers who plan and arrange their purchase and sale transactions. At the same time, it is designed to protect integrity and accuracy through a carefully maintained Activity Log, tracking each parcel

and related credits through time, including final use during the platting process where redemption of identified credits are recorded.

In addition to these functions, the Division maintains both a Buyers List and a Sellers list, to facilitate identification for interested parties. While some new listings have occurred recently, the County understands that these lists have not worked well in the past.

The Buyer and Seller lists have provided names, phone numbers and numbers of credits sought or available for sale. However, the listings typically lack an offering price by either buyer or seller. In addition, these lists have been difficult for some parties to easily locate on the County's website. There is room for improvement based on the needs of the parties.

Staff initial recommendation:

At a minimum, an improved exchange program should be designed with input from potential buyers and sellers.

County staff would not incur additional expense in improving communications for the benefit of all parties. No stakeholders are negatively affected.

2. ***Cost Components for Sending Owners***

Cost components for Sending owners include application fees as well as other out of pocket costs associated with obtaining Base and Bonus TDRs.

- Application fees for Base TDR severance with early Entry Bonus: $250 plus $25 per TDR issued
- Application fee for Restoration and Maintenance TDR: $250
- Application fee for Transfer of TDRs: $250
- Application fee for redemption of TDRs: $250
- Restoration and Maintenance TDR: Private Land Management Plan (LMP) requires surety bond
- Professional work product:
    - Legal sketch and description (Base TDR)
    - Title search for CEs or other land use restrictions (Base TDRs)
    - Preparation of LMP, qualified biologist (Private R&M plan)
    - Title work, preparation of deed, doc stamps (Conveyance TDRs)
    - Title insurance (Conveyance TDRs)
    - Negotiation with Governmental agency (Conveyance TDRs)

- Potential brokerage fees for sale of the TDRs
- "The County recommends that you consult with an attorney" (Base TDR application form)

Application fees fall disproportionately on small Sending owners. An owner of a 5 acre tract would pay $775 in application fees for 5 acres, in order to obtain all 4 TDRs. This fee is in addition to professional fees associated with the work.

To obtain Base and Early Entry TDRs, a title search is required, along with sketch and description. Legal advice is recommended in the process. More substantial work is involved in a private Land Management Plan for the Restoration and Maintenance TDR. Professional real estate services are typically required for the conveyance TDR, since the receiving entity will require a standard title search and documentary stamps will be required.

There are limited possibilities for additional County staff assistance with some processes, in the future. For example, staff could supply a legal sketch and description through its GIS Section or other appropriate Division. A standard or model Land Management Plan could be developed by the Environmental Planning Section to reduce professional fees.

Collier County devised a sophisticated and important program to protect environmentally sensitive lands in the RFMUD Sending areas, allowing Sending owners to "choose" to participate, but providing TDRs as an incentive and as just compensation for the change in FLUE designation and zoning. Costs and complexity to Sending owners cannot be eliminated; however, where possible, these should be reduced. The recommendation regarding a TDR Bank, below, would take this concept further.

Staff initial recommendation:

Application fees should be reduced or eliminated for Sending owners; work product required for TDRs should be evaluated for cost effectiveness and in limited instances, provided by County staff.

The reduction or elimination of application fees would result in an impact to taxpayers, since the administration would not have an enterprise fund component. Likewise, additional work assignments for County staff would be borne by County taxpayers. Sending owners would benefit from these changes by reducing cost and complexity in the process of obtaining TDR credits. All stakeholders would benefit from increased participation by Sending owners.

3. TDR Bank

The recommendation for a TDR Bank may be the single-most powerful recommendation made by staff. As many important community members have expressed the concern that **"the TDR system is broken,"** a bank would provide confidence in the system on many levels. It would demonstrate that the County is committed to the program and its success. It would provide assurance to small Sending owners that TDR severance will result in a monetary return within a reasonable timeframe, thus spurring program participation. It would provide assurance to the development community that TDRs will be available when needed, so that locating, structuring and executing numerous small transactions can be avoided.

The current GMP provisions covering the TDR process state "…the County shall consider the feasibility of establishing a 'TDR Bank', to be administered by the County or some other not-for-profit governmental or quasi-governmental public agency established for this purpose" (FLUE, Designation Description Section: B.1 (D)(2)). In its White Paper dated January, 2015, the Rural Fringe Coalition included **the recommendation to consider a TDR bank to help foster the program. Its rationale included the high cost to developers to aggregate smaller parcels to derive TDRs or to purchase from many uncertain sellers. Likewise, the Golden Gate Estates Area Civic Association recommends its use to facilitate the process.**

A TDR bank is an intermediary between seller and buyer, which can be designed in many different ways. Either a division within the County Manager's agency or a non-profit organization can serve in this role. It typically requires a substantial fund to allow purchase of land or purchase of credits from Sending owners. The fund becomes replenished through the sale of credits to Receiving entities at time of redemption in order to obtain a development order (plat or SDP).

The creation of the initial fund may come from dedicated tax revenue, general revenue, sale of credits derived from County-owned property, TDRs provided to the County through the program, or other means.

In his memo dated July 31, 2016, Rick Pruetz, FAICP, a nationally recognized TDR program expert, outlined the many possible ways to create a TDR bank in Collier County. His memo is included as Appendix C. In it he covers the advantages and disadvantages of using a bank in the context of the RFMUD program, noting that its chief importance lies in the fact that the County wishes to promote significant Sending land severance in the short term while expecting demand over a lengthy period of time. This "time lag" points to the importance of a bank in

achieving environmental success and Sending owner fairness; at the same time, it requires a significant holding period before the County could sell its inventory, costing taxpayer dollars.

Pricing of Banked TDRs would support a separate market-driven (direct Sending/Receiving) exchange and price point. The bank would not purchase TDRs for more than the market rate, and should consider a higher resale rate so as not to frustrate non-bank sales.

For reasons stated in his analysis, Mr. Pruetz favors a capitalization approach using bonded dedicated millage to create an account of sufficient size to purchase TDRs, holding them until demanded. Once a point of equilibrium is reached, the fund becomes self-sustaining- TDRs sold to the development community provide funds to purchase more.

Other funding means are available, and could be supported without the use of public dollars for capitalization; however, none of these options addresses the "time lag" issues. These options include the use of County owned land to derive initial TDRs for the bank or the issuance of TDRs to the County as a component of the severance process (see related, D.2).

Community support for a bank is vital. A fund created for its purpose may serve related purposes, such as funding restoration and management of lands that are not within a state acquisition or potential ROMA mitigation area. The community would need to recognize and appreciate the value of the conservation involved, opportunities for recreation and the value of publicly-owned preserves as a legacy for grandchildren.

Staff initial recommendation:

The County should consider the appeal of a publicly funded TDR bank through polling or otherwise, to determine the likelihood of voter approval to support a dedicated assessment and bonding for the program. Board direction will allow a focused analysis including projected costs.

As an indication of stakeholder impact, there was broad support for the TDR bank concept among Sending owners and the development community. A bank would shift some of the administrative burden to the County, and administration cost must be considered in addition to capitalization costs.

D. SENDING LAND MANAGEMENT:

Land management strategies for environmentally sensitive areas, including preserves and open spaces, can take several different forms. One point of agreement among environmentalists,

land managers and planners is that management does not happen by itself. As discussed by a panel of experts at Public Workshop #2**, the prospect of a "do nothing" scenario following Restriction of Development Rights agreement and the issuance of TDRs, would result in much more extensive infestation of exotic plants and a compromise of viable habitat for important species. Ultimately, the cost to restore lands unattended for a long period of time can increase significantly**. Private Land Management Plans are possible, but very difficult because of small and fragmented ownership patterns that do not support a coordinated effort.

At the present time, the 4th TDR (bonus credit), "donation to a public agency", cannot be obtained in several locations, including North Belle Meade and Section 11 (T48S/R26E). For those locations, there are no public agencies that have stated an intention to accept donations.

Staff had previously made inquiry to the Division of State Lands, FDEP, to determine whether the State could take title to, and responsibility for, donated parcels in North Belle Meade. **The agency described the fact that this area was outside of its acquisition authority under the Florida Forever (Picayune Strand) acquisition program, even if the parcels were donated.**

In contrast, the South Belle Meade area is situated within the Picayune Stand State Forest acquisition area, where donated lands can be held by The Internal Improvement Trust Fund (TIITF) and managed by Florida Forestry Service and Florida Fish and Wildlife Conservation Commission. Here, Sending owners obtain the Restoration and Maintenance bonus credit along with the Conveyance bonus credit by donating the parcel(s) to the state along with a modest fee for restoration and perpetual maintenance. This serves the interests of the State because it is much easier to restore and manage large contiguous land areas than individual parcels.

The fragmented pattern of ownership in North Belle Meade and Section 11 is similar to the pattern in South Belle Meade, prior to State acquisition. Again, the most effective means of long term management would be under a unified plan administered by a single agency (or coordinated agencies) for each geographic area. It is not practical or effective to encourage numerous small owners to create or implement plans to maintain or even restore 5, 10 and 20 acre tracts individually, particularly because plans may not be implemented in the same timeframe as neighboring properties. Eradicating and managing nuisance and exotic vegetation requires large scale coordination and timing.

For this reason, coupling the Restoration and Maintenance TDR with the Conveyance TDR results in a more effective framework and a simplification for Sending owners. As presently structured in South Belle Meade, two TDRs can be provided for these dual purposes, simply by conveying the property along with an appropriate endowment sum.

Finally, rehydration of parts of North Belle Meade has been on the list of priorities listed in the Watershed Management Plan (2011). The potential projects in North Belle Meade for wetland restoration or rehydration should be coordinated with restudy recommendations. Accommodation of such activity would be clearly demonstrated by maximizing the transfers of private parcels into public or quasi-public ownership, thus minimizing the potential for conflict with an otherwise successful watershed program in the future.

Options to address this problem, by order of priority; also consider the *combination* of two or more options in concert:

1. ***Option One- North Belle Meade Mitigation Bank:***

During Public Workshop #2, a panel of subject matter experts was convened to discuss North Belle Meade land management in particular, given the lack of interest from State agencies and given the fragmented ownership pattern. The panelists indicated **a preference for coordinated ownership and management by a single entity, and agreed that Collier County should take direct responsibility, if no other state or federal agency would accept ownership or management responsibility.** Public-private partnerships were also discussed. It was noted that **County ownership would provide some County benefits, such as potential recreational opportunities.**

More specifically, panelists discussed **the advantage of creating a mitigation bank option in order to finance the restoration and long term maintenance.** The same concept had been suggested previously by an informal scoping meeting with agency peers.

In April, 2016, staff launched an initial feasibility study to determine the viability of creating a mitigation bank of any kind. The idea of using mitigation funds from the County's own transportation or other capital projects was part of the conceptual framework. If the County could act as project manager for a mitigation bank while saving money over an extended time period, this option would be feasible and program design could be recommended. The advantage of such a program would be threefold: (1) aid Sending owners in their efforts to obtain all available TDRs, including Conveyance; (2) provide a cost-effective means to County ownership of parcels; (3) provide a more cost-effective and coordinated long term approach for mitigation of County projects.

The initial "Phase 1" Feasibility Study for the creation of a mitigation area is attached as Appendix B. Conceptually, such a plan would complement the existing mitigation activities in

this area under private ownership. The plan would be adopted by agreement of both state (FDEP) and federal (ACOE) permitting agencies, encompassing the necessary requirements of each. At this time there is a reasonable expectation of approval and financial viability of a ROMA/ILF program in North Belle Meade.

Funding to provide restoration, maintenance and management of the ROMA area would come from required mitigation of County-owned infrastructure projects. Notably, the 2040 LRTP cost-feasible plan estimates approximately $11 million and $7 million for wetland mitigation and panther compensation units respectively, associated with construction of new or expanded roadways. The ROMA plan would allow for a competitive use of these mitigation dollars, in turn fostering the preservation and maintenance of parcels within the North Belle Meade Area. The threefold benefits are listed above.

The Phase 1 study of the North Belle Meade area for potential use as wetland mitigation or habitat compensation indicates the area will not likely yield sufficient cost-effective wetland credits or habitat compensation to be competitive on an open market (sales to private interests). However, it concludes that a combined Regional Offsite Mitigation Area and In-lieu Fee Program (ROMA/ILF) "is potentially feasible and cost-effective, based on broad characterizations of North Belle Meade and a range of reasonable assumptions." Background data, for example, was derived from National Wetlands Inventory (NWI) and Florida Land Use, Cover and Forms Classification System (FLUCFCS).

In short, the Phase 1 Feasibility report concludes that: "A Collier County single-user ROMA/ILF project within North Belle Meade appears to be a cost-feasible generator of wetland mitigation credits and panther habitat compensation if the ROMA/ILF is of sufficient size and properly located to assure long-term support for the Florida panther."

Additional study is recommended that utilizes a site-specific evaluation tool as applied to specific parcels and select locations. Data derived from this "Phase 2" feasibility study will allow higher degree of certainty for purposes of: selection of all or portions of North Belle Meade for inclusion in the ROMA; further review and conceptual approval from federal and state permitting and review agencies; and, present-value financial analysis comparing all costs associated with the ROMA/ILF to costs of private mitigation banking as practiced over recent years.

The ultimate viability of a ROMA/ILF project will depend on approval and support from the Florida Department of Environmental Protection, The U.S. Army Corps of Engineers, U.S. Fish & Wildlife Service, and Florida Fish and Wildlife Conservation Commission. Among other

important considerations, the agencies will need assurance of carefully controlled recreational uses that are consistent with restoration goals.

Staff initial recommendation:

Continue to the next stage of a Feasibility Analysis to develop a Regional Offsite Mitigation Area/In-lieu Fee program (ROMA/ILF) with FDEP and ACOE in North Belle Meade. Explore options involving Permittee Responsible Mitigation (PRM) parcels to achieve coordinated or umbrella management options for greater overall land management efficiency.

County government would assume responsibilities inherent in a ROMA agreement, although the operation and administrative functions could be assigned under contract. County taxpayers could anticipate some cost savings in the use of a ROMA over more conventional mitigation banking approaches. Taxpayers would also be gaining an asset: ownership of large land areas, ecologically stable, that could be used for passive recreational purposes. Residents and visitors would gain from improved hydrological functionality, providing watershed gains and balances between sheds and in associated groundwater and aquifers. Sending owners in that area would be on equal footing with counterparts in South Belle Meade so as to enjoy the better availability of the Restoration/Maintenance and Conveyance TDR credits. The environmental community would gain assurance that this valuable resource is managed and protected, both for watershed and for important plant and animal species. Receiving owners would know that the number of TDRs necessary for future projects can be made more readily available, both through the additional credits and through increased Sending owner participation. To the extent that grant funding becomes available for structural rehydration projects in North Belle Meade, additional credits could be realized, resulting in further taxpayer benefits.

2. *Option 2- Additional TDR for funding in North Belle Meade and Section 11:*

It is possible to design an additional TDR only for those properties intended for County ownership. This “County TDR” could supplement other funding. It could be used for “seed money” for purposes of the ROMA engagement, or could form a portion of the funds necessary to create an endowment for County owned and managed areas without a ROMA. Additional contributions should be required, similar to the program in South Belle Meade.

For example, if the program changes include two additional TDRs for each 5 acres of Sending Lands, a third additional TDR could be assigned where other (non-County) governmental agencies will not take ownership. Instead, the County would assume ownership of the last TDR or equivalent, as part of the conveyance application to the County. Proceeds from the additional TDR would go to the County to partially fund the restoration and long term

maintenance of the property, to provide seed money for a ROMA/ILF bank and/or to provide seed money for a TDR bank.

Along with the value of the last TDR, the County could assess a fee for donation roughly equivalent to that amount required, on average, in South Belle Meade by the Florida Forestry Service. In this way, there would be rough parity between owners in North Belle Meade, South Belle Mead and Section 11.

Staff initial recommendation:

Establish a special TDR for the benefit of the County where no other entity has been established to take ownership.

This concept would be an exception to issuing additional TDRs to all Sending owners pro rata. North Belle Meade and Section 11 Sending land could be thought of as "favored". However, the end goal would be to put equal numbers of TDRs in Sending owners' pockets at the same expense. When considering the opportunity provided to South Belle Meade Sending owners by State acquisition, this provision would be in line with equitable treatment or rough equivalence. Sending Owners would benefit from knowing that the conveyance TDR is available to them, along with any other bonus TDRs. Receiving owners would benefit from the availability of TDRs in general, based on added market liquidity. Financial return to participating Sending owners would be equivalent regardless of location.

3. Option 3- Green Utility Fee

An idea presented by a panelist at Public Workshop #2 was a **"Green Utility Fee." This could be a fee determined on the basis of land use and applied Countywide.** No doubt, it could be designed in many different ways. Its purpose, like the two Options listed above, is **to provide a fund from which properties donated to the County could be restored and maintained.**

Staff initial recommendation:

Study the idea of a Green Utility Fee and consider whether it should be the subject of a County-wide referendum.

Given its close association with hydrology issues, the concept might simply be part of the Stormwater Utility Fee currently under study; revenue could apply to green infrastructure that benefits water quantity, quality, recharge or flood control. Alternatively, the green utility fee

might encompass a dedicated millage for both County-wide "green" initiatives and the TDR bank capitalization discussed at Sending (C.3).

4. ***Option 4- Model Land Management Plan and Private Ownership***

There are circumstances where a private Land Management Plan would be optimal. Some owners **do not wish to give up ownership of their land, although they wish to engage in the TDR process up to that point**. For example, land holdings are planned as natural amenities of nearby development areas in the western part of South Belle Meade, adjacent to the Urban Residential Fringe. Another example is land maintained for a hunting lodge, where TDRs have been severed from all but 5 acres to make it possible, but no conveyance TDRs are issued.

Although applicants for Restoration and Maintenance TDR credits would be required to submit or commission an environmental consultant, the basics of the Land Management Plan and required elements would be in place, eliminating uncertainty and reducing costs to the applicant.

Staff initial recommendation:

Provide a standard or model Land Management Plan for adoption by owners who wish to provide Restoration and Maintenance activities in return for TDR credits.

Private owners would save time, cost and uncertainty in instances where they wish to maintain ownership in their Sending land and also participate in the TDR process.

E. OTHER PROGRAM SUGGESTIONS

1. ***Adjust property appraisal for tax benefit on TDR severed lands.***

Staff reviewed the taxable values associated with Sending Lands where TDRs have been severed. It was found that the land use code assigned to these lands, and the associated value, varies greatly. Collier County Property Appraiser's Office, a Constitutional branch of County Government, agrees in principle to review market value appraisals where base TDRs are severed. Given the limitation of development rights on such privately maintained land, its lower market value may result in lower tax assessments.

Staff has discussed this issue with the Property Appraisers Offices and stands ready to assist with any data needed by that agency.

Staff initial recommendation:

Staff should provide any data needed to the Property Appraiser's Office in support of its efforts to review tax assessments based on appraised land values and resulting tax assessments in Sending Lands.

Improved assessment outcomes are favorable to Sending owners who have severed development rights but have not transferred ownership. No parties are adversely affected.

2. ***Allow County-owned (post-conveyance) Sending land to be used for recreational uses.***

Currently, approved Land Management Plans include only passive recreational uses, consistent with the permitted uses after severance in Sending Lands. The GMP could conceivably contain conditional uses that expand the range of recreational uses, where the County takes ownership, such as North Belle Meade.

In general, permitted uses limit recreation to "passive parks and passive recreation uses". By definition, passive recreation is "characterized by natural resource emphasis and non-motorized activities". There may be appropriate instances where motorized uses are consistent with environmental preservation. For example, the County may wish to create a modest eco-tourism site for residents and visitors, allowing some off-road transport to and from different locations, or accommodating persons with disabilities to visit some locations.

Staff initial recommendation:

County-owned land in North Belle Meade should qualify for conditional use approval for expanded recreational uses, if compatible with environmental goals. Definitions of "active" and "passive" recreation will require further vetting.

County residents may enjoy greater use of and access to natural areas. No known negative impacts on stakeholder groups.

NEUTRAL LANDS:

1. ***Allow for some participation in the TDR program as allowed in Sending area.***

Neutral Lands typically enjoy the same uses and restrictions under the RFMUD as were enjoyed under the base agricultural zoning prior to TDR program and RFMUD adoption. However, unlike Sending owners, Neutral owners have no ability to generate and sell TDR credits.

Parcels in the Neutral lands can be subdivided into 5 acre parcels, allowing for greater residential density than would be allowed in the Sending Lands. Other non-residential uses are allowed, including agriculture and conservation.

Permanent agricultural use or permanent conservation easements are appropriate in Neutral Lands where the quality of the conserved use is demonstrated. In fact, these additional reservations should be encouraged.

County staff could make administrative review and approval of applications based on environmental criteria in the Land Development Code. Conservation areas would remain in private ownership and would require conservation easements. Likewise, agricultural uses can be encouraged on Neutral Lands by generating TDRs for permanent agricultural easements, as was suggested for Sending areas.

Staff initial recommendation:

Allow TDR credits for agriculture and conservation uses where the uses are secured by perpetual easements.

Neutral owners of larger parcels would be provided with a viable choice in preservation or 5 acre development. The total additional TDRs generated from this change would be very small in comparison to all likely Sending TDRs, and so would not impact Sending owner expectations to any significant degree.

2. ***Minimum Project Size***

One additional right provided to Neutral owners within the RFMUD is the ability to "cluster" development. For example, a 40 acre parcel could be subdivided into eight 5 acre parcels; or, using the clustering rules, could place 8 dwelling units on the parcel in closer proximity to one another, fostering the possibility of greater efficiency in infrastructure, among other advantages.

Like the recommended change within Receiving Lands, advantages to clustered development would appear to apply to parcels smaller than 40 acres. Efficiency in shared resources as well as social advantages are possible. No increase in overall density would result.

Staff initial recommendation:

Remove the 40 acre minimum project size for clustered development.

This recommendation would benefit Neutral owners of properties 10 acres or greater by providing alternative design possibilities. No other stakeholder group is affected.

RECEIVING LANDS

A: LAND USE AND ECONOMIC VITALITY

Growth presents a tremendous opportunity for progress. It also presents many challenges. What, where and how we build have major impacts to our community and resident's quality of life. The Receiving lands within the RFMUD totals 28,054 acres, of which, 14,531 acres remain vacant and undeveloped. This is where growth will occur in the RFMUD.

Currently, the RFMUD provides for an increase in development rights with the use of TDRs within Receiving lands. Density can be increased using two forms of development, 1) cluster residential, and 2) villages. To date, the only development pattern occurring in the Fringe is cluster residential development in the form of gated communities such as Naples Reserve, Hacienda Lakes, Lords Way, San Marino, Lido Isles, Rockledge (in Urban Fringe at 2.5 units per acre), Twin Eagles South, Lamorada, Mockingbird Crossing, and the Golf Club of the Everglades (in RFMUD at 1 unit per acre). These developments have an approved total of 6,786 units, the majority single family. While these communities are attractive, this single-dimensional development pattern furthers Collier County's challenges of diversifying the economy, providing affordable housing and financing an overburdened roadway network.

During the public workshops participants were clear; **the preference for new development in the limited available land in the Receiving area is something different than gated communities.** Participants were more favorable towards standalone business/commercial, and mixed-use development. They want to see employment, goods and services, and a mix of housing types in the Receiving areas.

One of the most common suggestions for program improvement was to allow employment and goods and services outside of the Village concept. Currently, commercial uses in Receiving lands are limited to locations within approved Villages with a maximum of 10% of the total village area and 10,000 SF leasable floor area per acre. Consensus was found in the need to change the requirements to promote commercial uses within the Receiving lands, not only to support the residents within the Receiving lands, but also for the surrounding area. It was suggested that **Rural villages envisioned within receiving areas don't provide sufficient commercial capacity, and the design and criteria for commercial locations within the villages isolate them from major transportation corridors making them infeasible. There should be greater incentives for employment, industrial uses, agriculture research, and technology development.**

While consensus demonstrated the RFMUD should better support commercial uses, it was also suggested by one commenter that the **RFMUD plan is not compatible with the Golden Gate**

Area Master Plan; it eliminates functionality because it creates lost commercial opportunities for the Estates in the RFMUD Plan. The members of the Golden Gate Estates Area Civic Association expressed their thoughts by letter dated April 19, 2016 saying, **it is imperative that changes in land use in the RFMUD which borders the Estates be permitted to provide services and employment to compliment the build out of the Estates. The RFMUD can also provide opportunities for employment economic development, and needed recreational activities to Collier County as a whole.**

In addition to the suggested changes to commercial uses, many participants expressed desired adjustments to residential uses. The RFMUD clustering provisions the currently requires a minimum of 40 acres to allow a density increase from 1 unit per 5 acres, to 1 unit per acre. It was suggested to **increase base rights for properties less than 40 acres,** or to all together **eliminate the 40 acre minimum.** Some participants thought base rights should i**ncrease to 1 unit per 2.5 acres for 5 acre tracts,** others thought **is should go up to 2 units per acre.**

Changes in Village density were also suggested and highly supported by the data and analysis referenced in Section 3 of this white paper. "Smart growth" principles support sustainable development patterns that are multi-dimensional, provide for a demographic mix, and support transportation choices; density should be a minimum of 7 units per acre. Increasing the density in the RFMUD will allow greater diversity in residential product, greater efficiency in providing infrastructure and services and lower development costs.

Participants were supportive of increased density, and they were passionate about the need to address affordable housing saying, **it needs to be a much higher priority in the discussion [of the RFMUD). The Rural Fringe Mixed-Use District plan must have a dynamic affordable housing component built into the plan to avoid both the affordable housing and future workforce crisis. Without it our community will suffer.** Currently, the RFMUD addresses affordable housing only in the village concept; "A minimum of 0.2 units per acre in a village shall be affordable housing, which at least 0.1 units per acres shall be workforce housing." These units are required to use 0.5 TDR credits. Affordable and workforce housing is an on-going challenge for Collier County. Collier County has just initiated the first comprehensive housing plan to address the needs for affordable housing. This plan is reported to be completed by September, 2017. Community Planning staff will closely follow this planning effort and bring forward recommendations implementable through the Comprehensive Plan.

Robert Hickey, Senior Research Associate at the Center for Housing Policy, suggested a few methods currently being utilized to work towards broadening housing affordability during a workshop sponsored by United Way. One of the suggested methods can be implemented in the RFMUD and that is "allowing mixed housing such as apartments/condos, manufactured homes, cottage housing and micro homes. This widens the diversity in housing markets, allowing

residents to have more affordable alternative options when looking for housing." Participants in the RFMUD restudy have supported the idea of a mix of housing with particular focus on **reducing the required size of units.** With the positive national trend in "tiny" or micro homes, the RFMUD can support affordable housing by promoting the acceptance of the size limitations of 600 sq ft. found in the residential zoning districts. Additional recommendations addressing affordable housing may be incorporated into the RFMUD amendments as influenced by the comprehensive affordable housing plan.

Staff initial recommendations

1. Promote economic vitality in the RFMUD by allowing employment uses outside of Villages as defined in the industrial and business park zoning district (with exceptions) in locations with access to major collector or arterial roads.
2. Within a Village, remove the maximum acres and leasable floor area limitation of the Village Center and the Research and Technology Park.
3. Explore designating Receiving areas as Innovation Zones.
4. Eliminate the maximum size of a Village.
5. Consider new measures for mixed-use standards, such those found in RLSA
6. Modify residential density standards:
   - Clustering – remove 40 acre minimum, increase density to 2 units per acre
   - Village – increase density to 7 units per acre
   - Change minimum Village density to 4 units per acre
7. Development over 300 acres shall use the Village option.
8. Modify the TDR requirements:
   a. Change from 1 TDR to .75 TDR for multifamily unit.
   b. Change from .5 to 0 TDR for affordable housing
   c. Density over 4 units per acre require 0 TDRs.
   d. New - 0 TDR for industrial/business park uses.

"Opportunity Naples" is a report that heightens the awareness for the need to diversify the economy, particularly in eastern Collier County. The report found that Collier County needs more suitable, large-scale, pad-ready development sites. Collier County as a whole will benefit from recommended changes allowing business uses in the RFMUD.

Increasing density, improving mixed-use requirements and adjusting the TDR credits will promote a diverse and more affordable community, expand mobility choices and engage a healthy and active lifestyle – the development trends sought after by employers, employees and baby boomers.

B: TRANSPORTATION AND MOBILITY

The RFMUD is served by a congested arterial network with limited funding for improvements. While development will help pay for impacts to the network, promoting a mix of land uses that shorten trips into the urban area, and is served by transit, will help offset the ever increasing roadway needs.

A majority of public comments on transportation emphasized the need to **increase roadway network connectivity surrounding the Receiving areas, at the same time keep speed low (< 36 mph). Low speed along with additional wildlife crossings is essential for wildlife preservation**. Connectivity is important not only within the Receiving lands, but also connecting surrounding areas to destinations within the Receiving areas such as future employment, goods and services. Other transportation comments support **including transportation alternatives such as bus transit.**

There is considerable attention given to transportation planning in eastern Collier County. The transportation study surrounding North Belle Meade will further inform the transportation network needed to support the RFMUD. Further consideration and implementation of the techniques identified in the Master Mobility Study will advance Collier County's goals to achieve a multi-modal community.

Staff initial recommendations

1. Analyze arterial roadway and utility capacity issues surrounding Receiving Lands.
2. Review roadway design standards and suggest changes if necessary to support Complete Streets and low speed.
3. Add provisions for transit stops and park and ride facilities within Villages and business parks.
4. Develop a methodology for a Mobility Analysis including a standard of measuring a development's level of interconnectivity such as a "link-node" ratio, and the transit, bicycle and pedestrian coverage and connectivity with a project and surrounding destinations.

The community as a whole will benefit from a multi-modal system that provides for all users, reduces trip lengths and supports greater efficiency in our transportation network. Stakeholders with development interests in the RFMUD should participate in the development of any new methodology created for a Mobility Analysis.

C: DEVELOPMENT STANDARDS AND PROCESS

During the public workshops participants were clear; within the Receiving lands they want to **create more than houses, a defined place, a live, work, play approach to promote thoughtful community design.** Some were so specific to say **limit gated communities.** The finding of this report and the community input supports greater incentives for village development to promote mixed-use in the RFMUD.

To incentivize mixed-use development and business park uses, the development community shared ideas that are process related. Overall, the idea is to find ways to reduce the risk associated with mixed-use development while also providing greater flexibility. Suggestions included, **maximize opportunities to develop in Receiving lands through the mostly administrative SDP or Planning processes (subject to compliance with adopted design and development standards). Establish maximum flexibility and administrative or hearing examiner approval process for LDC deviations, and modify the process to follow the SRA designation process where an application for a Receiving Area Village is approved by simple majority vote by BCC.** Other participants support the idea to **ensure that the current public hearing process for approval of new development within the RFMUD is retained**.

Specific design standards should be kept to a minimum and should be placed in the LDC, only as guidelines or in some cases as baseline standards. Wherever possible, provide for incentives rather than regulations to achieve design objectives. Create opportunities for additional flexibility in designing mixed-use projects within receiving lands.

Recognizing the distinct differences and potential for each of the Receiving Areas, participants support the idea to **establish separate overlays for each of the four distinct Rural Fringe development areas, similar to the North Belle Meade Overlay which has its own set of development standards.** This could be accomplished through Land Development Code amendments. At a minimum, specific design standards found in the Growth Management Plan should be moved to the implementing LDC, and the LDC standards should be carefully reviewed and amended to support the design concepts identified herein.

Developers and industry leaders report that a hurdle to more intense, mixed-use development design is the added cost of impact fees. As stated in Section 3 of this white paper, other communities' successful implementation of a mixed-use impact fee has shown a ten to thirty percent reduction in impact fees. This reduction could be another strategy to incentivize the type of development desired in eastern Collier County.

Staff initial recommendations

1. Consider adoption of zoning overlays, or separate area design standards to provide greater certainty for developers
2. Allow BCC simple majority approval when complying with zoning overlays.
3. Allow industrial/business park uses (with exceptions) by right, and Hearing Examiner approval for proposals compatible with surrounding land uses and complying with industrial/business park zoning standards.
4. Initiate study to create an impact fee index for mixed-use.
5. Explore with Collier County Health Department the creation of Health Assessment Index.
6. Review and modify design standards within the Growth Management Plan and Land Development Code for greater flexibility while supporting the intent of employment zones and mixed-use development, suggest modifications to standards e.g., remove greenbelt requirement.
7. Develop further incentives for innovate features such as solar power, zero net water use, aquifer recovery and storage systems.

The adoption of zoning overlays could allow both the developer and the public greater certainty in the development standards for Receiving Areas. Modifying some approval processes could allow complying projects to proceed with minimal delay. The intent of the modifications is to diversify the mix of uses including residential product, provide greater certainty, and to support economic development in eastern Collier County.

Appendix A

Rural Fringe Mixed-Use District Restudy
Public Outreach
January – May, 2016

Rural Fringe Mixed-Use District Restudy
Public Workshop #1
Introduction to Sending Land
January 6, 2016

Introduction:

With the purpose to inform the public and become more informed by the public, Collier Community Planning staff, along with consulting partner AECOM, began a series of six public workshops, the first three centered primarily on the Rural Fringe Mixed-Use District (RFMUD). This series preceded the workshops intended to discuss Receiving and Neutral Land uses, densities, development standards and the like.

Letters were mailed to over 800 individual land owners informing them of the Restudy and upcoming meetings. Many owners live in other cities and states. Therefore, program specifics and opinions for this target segment were shared by telephone and email.

Our first outreach meeting drew over 65 attendees. These included individuals and families who have unimproved property in Sending areas, families who currently live or conduct

agriculture operations on Sending land, and other stakeholders such as environmental interests, developers and consultants. The agenda included on overview of the RFMUD, TDR concepts and basics, history of the program and current issues as identified by staff. The public was invited to identify additional issues, either through the meeting format, through a dedicated e-mail address, or via website survey.

Overall, there was strong sentiment from Sending land owners that the program should not have been devised in the way it was, and many thought that the RFMUD governing provisions should be abandoned altogether. Some came to understand that the program was created as a result of litigation and the State's Final Order, and given that compact, the County needed to move forward and not back.

At the same time, most were grateful for a thorough discussion of how the program works today, so that they could add suggestions for improvement during the Restudy. Some initial concerns expressed by smaller land owners were the lack of a viable marketplace to sell TDR credits and the uncertainty of sale or sale price.

Meeting Summary:

1. Welcome and Meeting Objectives

Greg Ault, AECOM, consultant for the County addressed the attendees noting the Board of County Commissioners has directed Staff to develop changes to the Growth Management Plan including the Rural Fringe Mixed Use District (RFMUD). The purpose of the meeting is to obtain public input on the areas designated as Sending Lands under the Program.

2. Overview and History of the Rural Fringe (RFMUD) TDR Program

Mr. Van Lengen presented a Power Point *"Rural Fringe Mixed Use District – Introduction for Sending Land Owners*" and provided an overview and history of the Program noting:

- The RFMUD was developed as a result of a 1999 Final Order stemming from litigation (by the Collier County Audubon Society, Inc. and the Florida Wildlife Federation) that addressed County land use planning issues including establishing the RFMUD.
- The goals of the Order were for the County to adequately preserve wetlands, protect critical species and wildlife habitat from unrestrained growth by directing it to appropriate locations within the County.
- One avenue implemented within the RFMUD District was a Transfer of Development Rights (TDR) program which identifies sending and receiving lands administered through a program of density credits.
- The restudy of the area will focus on the Program's goal of establishing smarter development patterns, economic viability for those affected and optimal protection of sensitive areas and species.

3. Introduction to Sending Land Issues

Mr. Van Lengen noted the sending program encompasses the "North and South Belle Meade" areas of the County, in addition to other smaller sending areas farther north.
The density credits available for transfer include base credits (1 credit for a 5 acre parcel or 8 for a 40 acre parcel), an early entry bonus, credit for restoration/maintenance and conveyance to a governmental entity (each on the basis of 1 per 5 acres). The differences in program specifics between North Belle Meade and South Belle Meade were covered in some detail. It was also noted that watershed planning and transportation planning both need to be considered in arriving at program changes.

4. Current Status of the Program

Mr. Van Lengen reported:

- The Board of County Commissioners established an Oversight Committee to review specific areas of the Growth Management Plan including the RFMUD.

- The Committee will be meeting on a quarterly basis.
- Staff will be holding a series of public meetings to garner input on the issues so deficiencies in the Program may be addressed to ensure it functions as originally intended.
- The endeavor is anticipated to last approximately 2 years, with a status report delivered to the BCC by the end of 2016, prior to the formal public hearing process.
- A website has been developed by the County to facilitate the endeavor which will provide information on the Committee, ongoing activities, questionnaires for the public and contact information for Staff.
- Owners are encouraged to provide input in any format they desire including writing letters and/or emails, calling Staff directly, participating in questionnaires and public meetings, etc.

5. Importance of TDR Program to Owners

The restudy of the area will focus on important issues to the landowners including improving the economic viability of the program, ensuring smarter development patterns and protecting sensitive areas and species. Compensation to owners who elect to participate must be addressed. It is important to keep in mind that the TDR program is optional; staff if available to help explain the program so that individual owners can best satisfy their own interests. Aas a restudy, staff is interested in owner input on how to improve the program.

During presentation and Question/Answer period, the following items were raised:

- There may be increases to the density allowed in the Receiving Lands, however that concept requires additional stakeholder input.
- Along with base and early entry density credits, the Program allows credits for restoration of sending lands with the owner developing and implementing a restoration plan, participating in mitigation through a State or Federal Government program, or linking to an existing approved restoration plan.
- The Florida Fish and Wildlife Conservation Commission and other agencies participated in the original development of the Program and will be providing input on any proposed revisions to the Program. They also currently participate in the permit process.
- Once an owner's density credits in the Sending Areas are transferred to a party, the sending land owner is free and clear of their use, with the receiving party bearing all responsibilities for use (or non-use) of the credits. Credits can be held for an indefinite period of time.
- One option under consideration is developing a land bank for the credits to facilitate the owner's ability to transfer sending land credits to an outside party.

- The boundaries originally approved for the areas in question will remain unchanged; however the County is seeking to improve the Program with the assistance of the landowners affected by the land use requirements.
- Consideration will be given to expanding the allowed uses in the receiving areas and increasing the number of credits made available from sending areas to help balance the program, given that there is likely a larger demand for credits than those available under the Program.
- The County will be examining the land values and economic parameters of the Program with the recognition the current system does not reflect market values or a balance between supply and demand. Economists at AECOM will be assisting in this part of the endeavor.
- Another aspect the County will be reviewing is the "exchange process" as they recognize under the current format it is a cumbersome endeavor for those involved in the Program.
- The program will accommodate the principles adopted by the BCC in the Watershed master Plan. Interested citizens are reminded that they may wish to attend or monitor the Comprehensive Watershed Improvement Program (CWIP) ad hoc committee meetings to learn more.

Commissioner Nance addressed the attendees noting he has owned property in the Program area since the 1980's and was not in favor of the settlement given the means the landowners rights were compromised. He is advocating the restudy and recognizes the Program is not functioning as intended.

Commissioner Nance noted the Program was State Mandated and the County recognizes, at this point it is not feasible to propose eliminating the Program or changing the boundaries established. The goal is to increase equity in the Program and allow the owners with sending lands to obtain fair values for their properties.

6. Interactive Discussion/Activity and Questions

Mr. Ault encouraged attendees to provide written comments on the cards provided at the meeting or communicate with Staff through any other means they feel comfortable.
A questionnaire has been developed and available on the website which aid Staff in addressing concerns identified by interested parties. He requested the owners participate in this endeavor. It can be found at the interactive content button, via website:
https://www.colliergov.net/GMPrestudies.

7. Wrap-up and Next Steps

Mr. Van Lengen noted the next public meeting is scheduled for January 27, 2016 at 6:30pm. The agenda will center on North Belle Meade and the need for long term ownership and maintenance for properties that use the TDR program.

STAFF PRESENT: Commissioner Tim Nance
Kris Van Lengen, Community Planning Manager (Staff Liaison)
Mike Bosi, Director, Planning and Zoning
Anita Jenkins, Principal Planner, Community Planning
Greg Ault, AECOM, consultant

Rural Fringe Mixed Use District Restudy
Public Workshop #2
Focus on North Belle Meade Sending Land
January 27, 2016

Introduction:

This public workshop focused on the topic of the Rural Fringe Mixed Use District Master Plan (Plan) North Belle Meade Sending area, the associated issues, and generating ideas for potential solutions. Despite a heavy rain event through the afternoon and evening, over 50 people attended.

Staff presented a brief overview of the Plan and highlighted the issues unique to the North Belle Meade Sending area (see panel questions, below), with explanations of each issue. The presentation also featured a summary of the public comments provided at the first workshop, and the comments provided from the on-line Sending area survey.

Following the staff presentation, a panel was seated to discuss possible solutions to the North Belle Mead issues. The panelists were Bob Mulhere – Planning Director for Hole Montes, Nancy Payton – SW Florida Representative for Florida Wildlife Association, and Tim Durham – Senior Ecologist for Passarella & Associates. Five questions were asked for each panelist's response.

Panel Summary:

Five questions posed to panelists and their responses.

<u>In Sending areas (where development rights have been removed), what should the fulfillment of conservation goals as conceived in the Plan look like, say, in 20 years?</u>

Panelist 1. Natural Resource Protection Area (NRPA) will be under Collier ownership through conveyance/willing sellers and managed by Conservation Collier. NRPA will be rehydrated via Golden Gate Canal diversion, no reservoir. Wildlife crossings or land bridge to connect NRPA and Picayune Strand Forest. Currently listed species such as the red-cockaded woodpecker will be thriving. Collier County will be implementing a North Belle Meade Habitat Conservation Plan for public infrastructure (roads). NRPA becomes destination for passive nature-based recreation

Panelist 2. There is a single management entity for Sending Lands, maybe best option Conservation Collier. There is hydrologic sheet flow. Public access for passive recreation. There is significant land connectivity.

Panelist 3. Lands are available to public for active recreation such as horseback riding, camping, fishing, and biking. Landowners in Sending area received fair deal and were made whole.

<u>If the current pattern of fragmented ownership and maintenance continues, what issues would persist?</u>

Panelist 1. With lack of connectivity the same issues today will continue with hydrology and listed species. Exotics will continue to be a problem. If lands are fragments the Plan hasn't been successfully completed with fair compensation to land owners.

Panelist 2. The issues continue with hydrology, economics of land management, and exotics.

Panelist 3. Plan goals will not be met – Final Order settlement in question. Inability to manage – remove exotics, restore habitat, enforcement. Natural resource values and wildlife use will diminish

<u>What alternatives can you suggest to achieve the vision you first described? (e.g., ownership alternatives; management alternatives?)</u>

Panelist 1. Make sure adequate compensation is provided. Simplify the Plan; err on making the landowners whole.

Panelist 2. Collier County must step forward to accept the Transfer of Development Rights (TDR) conveyance lands. Accept land and bank TDR restoration/endowment money until management can be "conservation of scale;" in the interim, possibly a land trust. Swap program between NRPA and isolated western sending lands. North Belle Meade Habitat Conservation Plan - county mitigates infrastructure impacts in North Belle Meade to help secure large blocks of conservation land.

Panelist 3. Increase the TDRs that Sending can generate. There are issues with the cost of restoration and what a landowner gets in return. The process for TDRs must be simple.

Consider allowing the use of TDRs to mitigate for urban area infill native vegetation requirements. Make it easier for landowners to sell credits.

What funding mechanisms can you envision that might be feasible to allow consolidation of responsibility for restoration and maintenance? (e.g., more TDR credits, grants, mitigation banking, etc.)

Panelist 1. Mitigation bank, or ROMA, may be relevant, but can have challenges. Need to put together the numbers for maintenance cost so it can be better understood what is feasible.

Panelist 2. Revive Conservation Collier. Maybe a "green utility fee." Use mitigation for wetland and wildlife. Partner with downstream communities and agencies that benefit from North Belle Meade rehydration. Panther Refuge is interested in expansion. There are other plans and programs that could coordinate to get results.

Panelist 3. Use TDRs in urban area for native vegetation mitigation.

Do you have a preferred alternative for ownership and long term maintenance, among the ideas that have been suggested?

Panelist 1. Ownership Collier County, and long term maintenance Conservation Collier.

Panelist 2. Collier County is best alternative.

Panelist 3. Preference is Collier County, would like to see State park with active recreation.

Following the panel discussion, the audience provided their comments.

Public Discussion
Consider increasing TDR demand by decreasing the Receiving area minimum of 40 acres.
Make Receiving areas more attractive to worldwide developers, like Celebration, FL.
Concerns that the program is the big guy vs. little guy, and animals vs. people.
Concerns that eminent domain is coming.
Assessed value of land is more than the value of a TDR. No incentive to create TDR.
To increase land connectivity and management efficiency, consider working with landowners that have established mitigation lands to convey them to Collier County, with their funds for maintenance.
Big developers have their own Sending lands and credits so don't need to buy others.
A non-regulatory R&M should be considered as part of the feasibility for mitigation- i.e. non-mitigation might be simpler and less costly overall.

STAFF PRESENT: Commissioner Tim Nance

Kris Van Lengen, Community Planning Manager (Staff Liaison)
Mike Bosi, Director, Planning and Zoning
Anita Jenkins, Principal Planner, Community Planning
Greg Ault, AECOM, consultant

Panel Biographies

Tim Durham – Senior Ecologist for Passarella & Associates
Tim Durham has over 30 years experience as the lead environmental consultant for a variety of projects in Florida and the southeast U.S. He has extensive experience preparing local, state and federal permitting documents, providing listed species evaluations, and designing and permitting wetland mitigation and habitat conservation banking. Tim has a Bachelor of Science degree in civil engineering for the University of Florida and is a member of the Association of Environmental Professionals and Society of Wetland Scientists.

Nancy Payton - Florida Wildlife Federation
Nancy Payton joined the Florida Wildlife Federation (Federation) in 1994, the same year the Federation opened its Southwest Florida Office in Naples. The Federation was founded in 1936 and is the state affiliate of National Wildlife Federation. As the Southwest Florida Field Representative, she coordinates the Federation's Western Everglades rural lands and wildlife protection campaigns. These campaigns include growth management, native wildlife protection, land conservation, and habitat preservation.

Bob Mulhere - Director of Planning for Hole Montes, Inc.
Bob has more than 27 years of professional planning experience. Prior to employment at Hole Montes, Mr. Mulhere operated his own consulting firm. Between 1989 and 2001, Bob was employed by Collier County Government and was the Director of Planning from 1996 through 2001. Mr. Mulhere holds a B.A. in Political Science from St. Michael's College and a master's degree in Public Administration from Florida Gulf Coast University. In 2010 Bob was named a "Fellow" of the American Institute of Certified Planners (FAICP).

Rural Fringe Mixed Use District Restudy
Public Workshop #3
Sending Land: Economics and Ideas for Change
February 16, 2016

Introduction:

The third of three initial public workshops, all focused on Sending issues, included two major components. First, staff provided an overview of the economic considerations involved in TDR transfers from a Sending Land owner's point of view. Second, a list of changes suggested by the public was vetted using a table-top group approach; results were shared with all attendees. Again, over 50 people attended; most had attended at least one previous meeting; for eight individuals it was first exposure to the Sending Land meeting series.

Meeting Summary:

After a refresher on some basic TDR rules as they exist, staff presented a number of facts and observations concerning the economics of transfer. First, the likely supply and demand under current regulations and under potential changed regulations was examined. Next, data derived from arm's length TDR credit sales (past three years) were compared with land sales over the same period of time, noting significant differences depending on location. The public noted that, depending on the geographic area of a Sending parcel, motivation to enter the program could be significantly different. Finally, staff introduced the concept of a TDR bank: types of

banks created in various TDR programs nationally, and the pros and cons of doing so. Suggestions, questions and answers followed.

Mr. Van Lengen presented a Power Point *"Sending Economics and Ideas for Change"* noting:

- The RFMUD was developed as a result of a 1999 Final Order stemming from litigation (by the Collier County Audubon Society, Inc. and the Florida Wildlife Federation) that addressed County land use planning issues including establishing the RFMUD.
- The goals of the Order were for the County to adequately preserve wetlands, protect critical species and wildlife habitat from unrestrained growth by directing it to appropriate locations within the County.
- One avenue implemented within the RFMUD District was a Transfer of Development Rights (TDR) program which identifies sending and receiving lands administered through a program of density credits.
- The credits for a parcel 5 acres in size are 1 base credit, 1 early entry credit, 1 Restoration and Maintenance credit, 1 conveyance credit, total potential = 4 credits.
- The credits for a parcel 40 acres in size are 8 base credits, 8 early entry credits, 8 Restoration and Maintenance credits, 8 conveyance credits, total potential = 32 credits.
- The restudy of the area will focus on the Program's goal of establishing smarter development patterns, economic viability for those affected and protection of sensitive areas and species.
- If you own a parcel platted prior to 1999 in the sending areas you may either hold the parcel, enter the TDR program, build a home, sell the parcel to someone else to build a home or use it agricultural purposes.
- An owner is not required to participate in the TDR Program. There are many legitimate reasons not to participate.
- Those in the program may sell their credits to willing buyers for a pre-established rate of $25,000 per base credit; a typical arm's length sale bundles a bonus credit at $3,000 for a total of $28,000.
- Additional credits are available for restoration, maintenance and conveyance.
- Arm's length transaction analysis (staff) shows that the true value of TDRs between willing sellers and willing buyers is approximately $13,500 per credit; the Coalition estimated an approximate value at $14,000.

1. Economics:
Your rights; supply and demand; recent data; banking concepts

Mr. Van Lengen reported a study has completed in the Belle Meade area identifying the following fair market land values:

South - $6,000 per acre

North East - $3,500 per acre

North West - $12,500 per acre

He outlined the following examples to determine the funds a sending land owner may derive from the sale of their land or entering the Program. The analysis is based on a 5 acre parcel. It was emphasized that these values represent median sale prices within the past 3 years; they do not predict the value of any individual parcel, as parcel values *within* these sub-areas vary considerably based on a great number of factors.

South

Fair market value - $6,000 per acre x 5 acres = $30,000 market value

TDR Program - $27,000 per acre (base/early entry credit) + $27,000 restoration maintenance (- $10,000 restoration and maintenance costs) = $44,000 net proceeds.

Economically viable/advantageous to participate in the TDR Program.

North East

Fair market value - $3,500 per acre x 5 acres = $17,500 market value.

TDR Program - $27,000 per acre (base/early entry credit) + $27,000 restoration maintenance (-$30,000) for restoration and maintenance costs) = $24,000 net proceeds.

Not economically feasible to participate in restoration maintenance aspect of the Program.

North West

Fair market value - $12,500 per acre x 5 acres = $62,500 market value.

TDR Program - $27,000 per acre (base/early entry credit) + $27,000 restoration maintenance (-$30,000 restoration and maintenance costs) = $24,000 net proceeds.

Not economically feasible to participate in Program.

Mr. Van Lengen noted the following:

- The means currently available for transfer is through a "Commodity Exchange."
- The Exchange consists of Certificates issued by the County which may be held by the owner indefinitely and redeemed at platting.
- The County does provide technical assistance to the owners.
- One concept under consideration is a TDR bank where the banking entity would buy and sell the credits.
  - The bank would have the same attributes as the Commodity Exchange and would directly or indirectly set prices for credits.
  - It could be operated by the County or an outside agency.
  - The advantages would include ready buyer for the sending lands owner and stabilize the market prices.
  - The disadvantages include the upfront costs to develop and ongoing operating costs, economic risk to banking entity.
- Property taxes are required by the landowner until the credits are conveyed.
- Currently there is a registry list of sellers however the concept is not performing well.
- Credits can be resold with no limit on the number of transfers.

Under public comments the following was noted:

- Concern the developer is being asked to protect lands under the concept and the current cost of a unit is not worth paying for given the return on investment.
- Concern there is not a large enough quantity of receiving area for use of the credits – *Staff believes there is large future demand. Timing may be an issue.*
- Concern on maintaining restored lands until conveyance - *Staff reported the goal is to make the program more appealing by aligning the supply and demand for the credits.*

Following the economics portion, attendees participated in a review and ranking exercise, looking at several suggestions made by various stakeholders.

Break Out Group Findings

A: Credit Systems

1. (RANK) If additional TDR credits can be generated to enhance the returns of Sending Land Owners and make more credits available to buyers, rank the following in order of preference (1-6) as a basis for awarding more credits:

   a. Land where habitat value is highest

b. Land that can accommodate a flow way
c. Land that retains agricultural uses for a period of time
d. Land that requires a higher level of restoration
e. Land located in the NRPA overlay (excludes North Belle Meade- West)
f. All Sending Land regardless of location or attributes

- Five groups found F to be the most important o It incorporates all enhancements

- There was no general consensus amongst groups regarding second and third credit priorities.
- One group thought location/access/value of land should be an option

2. Should the $25,000 minimum price for a Base TDR Credit be eliminated? Why/Why not?

- Yes because the price is average
- No it limits sales, remove the set price
- Yes because it is a minimum starting point for negotiation. However it should be per acre not per 5 acres.
- No
- Yes because it creates a free market. Assessment should be in sync with TDR value. Value needs a starting point.
- No it's arbitrary.
- Yes/No tie

3. Should credits be used outside of the Receiving Areas for any purpose? Where? Why?

- No
- Yes but only in urban areas
- Yes to anywhere in Collier County deemed suitable for development. This will allow for an increase in TDR value.
- Yes for existing urban areas. Credits should also be able to come from other areas.
- Yes dependent on population growth. Perhaps Collier Blvd.
- Yes at the Golden Gate Golf Course.

B: Program Management

1. (Y/N) Should application fees be reduced?

    - Yes
    - Defer cost until TDR is sold
    - Fees should be eliminated
    - Yes Eliminate fees
    - Yes, cheaper is easier
    - The TDR bank should be responsible

2. (Y/N) Should the County offer free workshop assistance to owners to complete the severance process?

    - Yes
    - Yes it is beneficial to everyone
    - Yes
    - Yes
    - Yes
    - Yes. Need to know the process/rights/values/benefits/risks. Also would like to be informed of the allowances prior to the TDR program as well as the intention of the program.

3. What should be done to link Sellers with Buyers of TDRs?

    - List is sufficient
    - List of buyers
    - Create a bank
    - Committee with decision makers
    - County acts as the facilitator
    - Improve the information website
    - Create a bank
    - Establish a County bank
    - There is an obligation by Collier County
    - Perhaps a website with multiple listings
    - Let buyers find sellers
    - County advisors should know who to call/contact
    - County facilitation through education and public outreach

4. Should a TDR "Bank" be established? Who/what agency?

- Yes by a third party to ensure easy purchase of large quantities of TDR credits.
- Yes by Collier County
- Yes if the TDR bank is free and acts solely as a meditation/facilitation process. Collier County should be involved but there should also be a third party option.
- Perhaps a not for profit bank
- Yes because sender should not have the burden of cost
- It would be easier if a TDR "Bank" were established
- Developer
- County
- Who benefits? Profit/Non-Profit

C: Sending Land Management

1. Where owners decide to use land for agriculture (with agricultural easement):

a. (Y/N) Should the owner earn TDR credits? • Yes
- No it seems to be a conflict of program
- Yes because land is not being used for development
- Yes under the condition that land has already been cleared or has no current habitat value.
- Yes
- Yes although depends on the location and type of agriculture

b. (Y/N) If contiguous land exceeds 20+ acres, should owner also qualify for one additional family home? • No, then seems no longer agriculture
- Yes
- Yes
- Yes
- Yes but should be on 5 acres instead of 20

2. Should Sending Land in TDR program be owned and maintained by numerous private owners, or by very few larger managing entities? (participating land owners)
- The County should be NBM receivers
- Program should be flexible enough to accommodate both
- Yes
- Coalition? Who maintains? To what extent of maintenance?
- Numerous smaller entities

3. If larger managing entities, do you prefer the County, a State agency or a private agency coordinate management?
   • Collier County
   - Property owner should be responsible for management
   - Collier County
   - One entity

4. (RANK) Should long term maintenance costs be paid for by:

   a. Donated land through a required contribution (from sale of credits)
   b. A County mitigation program (fees that come from road building, for example)
   c. A "green utility fee" paid by all County land owners (real estate tax)

   - All six groups identified B as the desired designee

Additional comments received during break out session:

- Additional use in Sending Lands, Full restudy of program
- MSTU
- Property owners on 5 acres with existing homestead structure should be entitled to some sort of TDR credit for promoting native habitat on those parcels- even if they continue to occupy homestead

Rural Fringe Mixed-Use District Restudy
Public Workshop #4
Receiving and Neutral Lands: Future Development Potential
March 31, 2016

Introduction:

Following three public workshops with the focus of the Sending Areas and the Transfer of Development Rights Credits within the Rural Fringe Mixed-Use District, the objective of the forth workshop was to engage the public in a discussion of the Receiving and Neutral Areas and the development potential within these lands. Approximately 60 residents attended the workshop; about half had not attended any of the previous RFMUD workshops.

To open the meeting, staff presented an overview of the RFMUD plan and process including how development rights are transferred from Sending land to Receiving land. Information was then provided about the development potential of the Neutral and Receiving Areas including how much vacant land was in the different areas, and the allowed land uses, density and intensity. The participants were asked to discuss the information and provide feedback on several questions about the development potential.

Meeting Summary:

Kris Van Lengen, Collier County Planning Manager**,** addressed the attendees, noting the Board of County Commissioners has directed Staff to develop changes to the Growth Management Plan including the Rural Fringe Mixed Use District (RFMUD). The purpose of the meeting, the first of at least two Receiving focused meetings, is to look at the current rules and regulations of areas where TDR credits can be sent. Particular emphasis is on design and functionality of these areas in the context of the greater geographic area, including neutral and sending areas, as well as Golden Gate Estates and the Rural Lands Stewardship Areas.

Mr. Van Lengen reviewed the scope of all four upcoming restudies, the process diagram indicating steps necessary to complete Comprehensive Plan changes, the role of the Growth Management Oversight Committee, historic goals of the Rural Fringe Mixed Use District, the outcomes of the first three meetings in 2016 involving Sending Land Issues and a timeline indicating a goal for September submission of conceptual changes to the Board of County Commissioners in advance of the formal Hearing process during 2017.

Anita Jenkins, Collier County Principle Planner, presented a Power Point on Future Development Potential in Neutral and Receiving areas under current rules:

- A review of the TDR exchange program
- Density allowed before and after the program was first adopted over 10 years ago, when only agricultural zoning was in place.
- 40 acres in Receiving areas are required prior to any increase in density via TDRs.
- Uses allowed within the new designation of neutral, receiving and Village were illustrated- some uses are voluntary; some encouraged, some required.
- Open space and transportation components of development were discussed.
- An illustration of nine developments that have redeemed TDRs for increased density was presented.
- Acreage and number of parcels for un-entitled land was presented to provide a sense of scale and potential for future development scenarios in Receiving areas.
- Similar background was provided to show the quantities of Neutral Land in the program.

Following Ms. Jenkins presentation, general remarks were made by attendees and scribed as follows:

- Open space integration
- How to regulate policy
- Is there enough land to make a village? 100-200 Acres more ideal?
- Village Regulation: Economic vitality
- Opportunity to do something different
- Private development dedication
- Demographic and economic inclusion
- Job creation

- Village Acreage: 200acres
- Mix-use development
- Proximity to urban area

Greg Ault, Collier County consultant with AECOM, introduced a visioning session intended to engage workshop participants in discussing potential development and it's form and function. Participants were invited to discuss four questions with small groups, approximately 6 to 12 persons each. The majority of participants were land owners within the RFMUD Receiving areas.

Break out questions with reports from the six groups resulted in the tabulation of responses below:

1. **What are the specific issues and/or concerns about the future growth and development of the Receiving Lands Area?**
    - Not liking it at all
    - Feel that support services and goods are close enough
    - Economics job creators outside of the Village to include scarce parcels
    - Availability of the TDRs and difficulty of acquiring-TDR Bank
    - Not much receiving land
    - Are we at capacity now? Ten years to build out?
    - 70% of land dedication to open space seems excessive
    - Travel commute times are increasing
    - Additional wildlife crossings are needed
    - Fear the minimum of 40 acres will increase to 60 acres
        - Prefer that the acreage minimum decrease instead of increase
    - Density increase
    - TDR limits development
    - No workforce or low-income housing available
    - No balance/variety in community design
    - The existing program caters to large developments, not to owners with small amounts of acreage
    - This program is not meeting the base unit development for Collier County
    - There is currently no benefit for properties in the base rights category of 1-5 acres
    - Process for public input: essential services such as utilities, fire, schools, shopping
    - Roadway capacity: concerns (increase network "connectivity")
    - Utility access
    - Quality of Life amenities
    - More than houses
    - Transition Areas
    - Increased population
    - Compatible uses
    - 6L's area potentially appropriate location for mixed use, business parks, non-residential

- TDR required purchase makes process non-voluntary
- Pricing mechanism: more expensive as time goes on
- Not enough credits or sending areas to purchase
- Retain agricultural uses/rights
- Property appraiser impacts
- Do developers want to buy in the RFMUD

2. **What are the improvements/changes you would like to see happen in the Receiving Lands study area?**
    - Limit gated communities
    - TDR bank
    - Village regulation re-examined for economic viability
    - More density in concentrated area
    - Incentives with receiving area development for enviro protection
    - New definition of open space for public benefit
    - Develop some commercial uses in the east
    - Villages would be good but are there 300 acre parcels
    - Need more density per parcel
    - Villages should be 100 acres or 200 acres
    - 20 acre parcels for clustering
    - Mixed-use, balance development
    - Live, work, play approach
    - Private development dedications: parks, streets, etc
    - Lack of starter homes, would like workforce housing
    - Smart growth- bike/pedestrian community, interconnectivity
    - Research/tech development, i.e. ag
    - Standalone commercial development
    - A defined place or urban core
    - Amenities: placement/ integrated
    - Walking;/biking safety
    - Demographic mix
    - Senses/experiences
    - Sense of arrival connectivity
    - Re-evaluate size of villages using economic modeling/evaluation to determine appropriate village size
    - Smaller landowners need to be able to participate in the process, it is currently not happening as well as it should
    - More flexibility within the same public hearing process
    - Look at “visioning” for larger receiving areas and plan at the larger scale
    - Are cost credits appropriate/viable to utilization in receiving lands? If the credits don’t work, we want to be able to get the development we want and need in receiving

- Reducing minimum acreage size to increase density. i.e. 1 unit per 2.5 acres for 5 acre tracts
- Transportation alternatives such as bus/transit
- More thoughtful community design
- TDR bank
- Allow some sending/receiving flexibility to allow worthwhile regional goals
- Bridge access- North Belle Meade (NBM)

3. **What do you like best about the Receiving Lands area?**
    - Existing natural conditions
    - Low density
    - Close community
    - Concept of TDRs and trade off of open space versus development
    - Chance to do something different than current urban style of development
    - Do we increase size limits of village or multiple villages
    - Define types of development allowed in each village
    - Has the ability to be developed reasonably
    - Nothing
    - Lower lands have a subtropical climate which provides a better quality of life
    - Accessibility on the south end to Miami/Naples (mixed opinion)
    - Flexibility: land acreage
    - Concentration of development
    - Reducing sprawl
    - Buffer area
    - Keep development (new) to receiving
    - Most appropriate area for development
    - Opportunity because of proximity to coastal urban area
    - Transportation corridor in place

4. **Do your same opinions about the Receiving Lands apply to the Neutral Lands?**
    - Allow for incentives to develop
    - Re-evaluate neutral lands on a periodic basis
    - No- neutral and receiving lands must stay separate
    - Yes, in reference to “nothing” comment received for question three
    - No response for question four, no knowledge of neutral lands
    - No, concentrate development to receiving
    - Concerned how much sprawl may impact development
    - Neutral lands were designed to be a rural area/lifestyle
    - Leave neutral as is and allow for discussion later

Andrew **Sheppard, Collier County consultant with AECOM,** wrapped up the workshop with a primer on different kinds of development models that are possible in the sub-urban environment. He discussed the

economic, environmental and social elements that must be balanced to create sustainable communities. Development must provide a return on investment, but also can allow some job creation through a mix of uses. Environmental factors must balance the natural would and basic resources with human needs of the inhabitants. Social factors start first with health and safety, but include associations through families, churches, businesses and organizations. He defined neighborhoods as a ¼ mile or five minute walk from a center point, noting that Villages can accommodate a number of neighborhoods within. Typically a central space with a unique feature(s) provide identity, structure and meaning. He also highlighted the advantages of a road network, rather than a single main corridor, for preserving walkable and enjoyable places that are more efficient for transportation. Compared to conventional models of development, these newer models provide more open space, social interaction, and health benefits. The attendees were asked to consider how they would like to live in a community, rather than simply asking what it would look like.

At the end of the workshop Mr. Van Lengen noted the next public meeting is scheduled for April 26, 2016 at 6:30pm at the same location. A follow up for participation will be provided, so that viewpoints on the most important elements for community design can be provided by participants.

Wrap-up and Next Steps

Ms. Jenkins noted the next public meeting is scheduled for April 26, 2016 at 6:30pm. The agenda will center on Receiving lands potential development and form

STAFF PRESENT:
Kris Van Lengen, Community Planning Manager (Staff Liaison)
Mike Bosi, Director, Planning and Zoning
Anita Jenkins, Principal Planner, Community Planning
Greg Ault, AECOM, consultant

Rural Fringe Mixed-Use District Restudy
Public Workshop #5
Receiving Lands Potential Development and Form
April 26, 2016

Introduction:
The purpose of this workshop was to engage the participants in visioning the future growth potential of the Receiving Areas. Participants gathered around six tables to work on illustrating a development pattern in one of two Receiving Areas, the northern area, or the North Belle Meade area.

Meeting Summary: Community Planning staff together with the County's consultant, AECOM, provided a second meeting for residents and interested stakeholders to review and explore considerations specifically related to the neutral and receiving land uses in the RFMUD. A review of concepts related to currently allowed land uses was followed by a description of "smart growth" principles, leading to a visioning exercise by attendees. Approximately 65 interested persons attended.

Anita Jenkins, Principal Planner, Community Planning Section, opened the meeting. She greeted the attendees, previewed the agenda, and reviewed the concepts and feedback from the prior meeting.

Specifically, she covered citizen and stakeholder feedback on several high level questions that had been presented. At the last meeting, attendees provided their perceptions related to:

- Concerns about future growth in the area
- Improvements to the Receiving Land area rules
- What they like best about Receiving Lands areas
- Neutral Land issues and improvements

Andrew Sheppard, AECOM, reviewed economic, environmental and social components of sustainable communities, comparing those values with the allowed uses under today's Receiving and Neutral regulations. He continued his observations with a focus on "smart" village attributes- 5 minute walk from clustered development area center to neighborhood center, diversity of housing styles and types, cluster of neighborhoods to create a village, and attributes of a village center. Aesthetics, function and mobility were key factors.

Mr. Sheppard introduced the featured "table exercise" for attendees, called framework mapping. The purpose was to experience how a development might plan a large area by identifying destinations, development areas, street networks and green/environmental areas. The task involved group cooperation in identifying edges, landmarks, nodes, centers and connections, both green and roadway.

Two of the RFMUD Receiving areas were used as examples- the Northern receiving area and the North Belle Meade receiving area. It was explained that this was hypothetical in the sense that presenters do not have information supporting actual Village boundaries due to multiple ownerships and assemblage considerations. Results of the group exercise are attached.

Rural Fringe Mixed-Use District Restudy
Public Workshop #6
Initial Recommendations and Feedback
May 26, 2016

Meeting Summary: Community Planning staff together with the County's consultant, AECOM, provided a meeting for residents and interested stakeholders to review ideas provided by the public through previous workshops, surveys, correspondence, interviews and telephone calls and to provide a list of initial staff recommendations. Approximately 39 interested persons attended.

Kris Van Lengen, Community Planning Manager reviewed the growth management study, amendment process and timetable. He provided an overview of the research, data and analysis still ongoing: economic analysis (scenario planning) and mitigation bank feasibility analysis for North Belle Meade. Initial recommendations were explained and grouped under the following headings:

- TDR credit ideas affecting Sending owners
- TDR program management
- Sending Land management
- Miscellaneous ideas

The community asked and discussed whether increasing the value of credits in the hands of developers would be an alternative to increasing the number of credits issued to Sending owners. Comments were also made in support of agricultural preservation and to express the ongoing concern in the development community that the incremental cost represented by TDRs makes it difficult for adequate return on investment. The point was also made that TDRs should be considered for Northern GG Estates where watershed coordination can be effected.

Individual surveys were distributed to and completed by the public, covering each of 15 program topics related to the Sending and neutral lands. A numerical representation of the results, ranging from strongly agree to strongly disagree, is shown below.

Anita Jenkins, Principal Planner, Community Planning Section, reviewed the concepts previously discussed in the Receiving Land meetings, and provided explanations for the series of initial recommendations made by staff. These were included under the following categories:

- Land use, density/intensity and economic vitality
- Transportation and infrastructure
- Environment
- Development standards and process

Discussion ensued regarding the process of allowing deviations to a zoning overlay, allowable locations for schools, Property Appraiser's Office valuations, the appropriate number of TDRs granted for excess native vegetation or habitat preserve on Receiving land, water and sewer availability, the relationship of Affordable Housing to affordable living concepts, and the need for the County to own the economic analytical tool under development.

Again, individual surveys were distributed to and completed by the public, covering each of 18 program topics related to Receiving lands. A numerical representation of the results, ranging from strongly agree to strongly disagree, is shown below.

Workshop Survey Results:

Survey questions asked respondents to rank each initial recommendation as strongly agree, agree, neutral, disagree and strongly disagree. The percentages indicated below provide a percentage of agreement (agree or strongly disagree) to those who responded, without regard to "neutral" responses.

Sending and Neutral Issues

Additional credits should be provided to balance the anticipated demand from Receiving Areas. Sending Land owners, if they participate, should benefit from additional credits.
Agree: 69%

Additional credits should not favor one Sending Land location over another.
Agree 70%

Additional credits should be provided to those who entered the program early.
Agree: 72%

TDRs should be awarded also for owners who commit to keeping their land in agricultural production
Agree: 76%

Eliminate minimum pricing on Base TDRs.
Agree: 75%

Improve the Buyer/Seller registries.
Agree: 81%

Reduce cost and complexity of applications.
Agree: 87%

Create a County-sponsored TDR bank that can buy credits from Sending Lands owners
Agree: 82%

The County should accept land that owners wish to donate, if no other agency is willing.
Agree: 63%

The County should finance maintenance of donated Sending Land through a mitigation bank, if feasible.
Agree: 75%

If a mitigation bank is not a feasible funding source, require a donation to the County with the land, equivalent to all or a portion of any additional TDRs issued.
Agree: 65%

Allow a second dwelling unit to dedicated farming operations of at least 20 acres.
Agree: 79%

Study recreational uses that could be compatible on donated lands that go beyond "passive recreation."
Agree: 63%

Eliminate the use of TDRs in urban areas if they come from RFMUD Sending Lands.
Agree: 60%

Extend the same advantages to Neutral Land owners who want to commit to agricultural uses by offering TDRs.
Agree: 76%

Receiving Issues

Allow business park stand-alone uses to increase employment opportunities in research technology and other targeted businesses.
Agree: 78%

Revise village rules to allow larger commercial and employment areas.
Agree: 76%

Increase density allowed in rural villages to 4 units per gross acre (TDRs required)
Agree: 81%

Increase density allowed in non-village development to 2 units per acre (TDRs required) and remove 40-acre minimum size
Agree: 78%

Analyze arterial roadway capacity issues.
Agree: 77%

Enhance requirements for greater project connectivity.
Agree: 78%

Consider roadway design standards that promote low speed and safety.
Agree: 75%

Add requirements for transit stops in large developments, business parks or villages.
Agree: 75%

Allow TDRs in Receiving Areas for protection of native vegetation/habitat or agriculture.
Agree: 71%

Reward projects that advance the greater public interest (examples: greenway connections, flowway connections).
Agree: 72%

Incentivize mixed-use developments by studying potential impact fees for mixed-use.
Agree: 70%

Use overlays or optional design standards that promote greater certainty in review process.
Agree: 81%

Developments complying with zoning overlays should get approval through simple BCC majority or Hearing Examiner process.
Agree: 80%

Hearing Examiner can approve individual deviations.
Agree: 60%

Hearing Examiner can approve business park proposals.
Agree: 62%

Modify the TDR requirements to 0.5 credit for multi-family units and 0 credit for target industry/business park uses
Agree: 75%

Allow stand-alone commercial. Propose design guidelines (no strip) and use of TDR credits (ex, 1 credit per 6,000 SF).
Agree: 62%

Additional incentives for innovative green designs, such as solar power, zero net water, aquifer storage and recovery sites, etc.
Agree: 80%

Rural Fringe Mixed-Use District Restudy
Public Comments on
First Draft of Initial Recommendations
Distributed July 13, 2016

JenkinsAnita

From: JenkinsAnita
Sent: Thursday, July 14, 2016 8:06 AM
To: VanLengenKris; RuralFringeRestudy
Subject: FW: Rural Fringe Mixed-Use District Draft Findings and Recommendations

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From: Barry Wood [mailto:b1wood@hotmail.com]
Sent: Wednesday, July 13, 2016 8:58 PM
To: JenkinsAnita
Cc: Barry Wood; Pete Wood
Subject: RE: Rural Fringe Mixed-Use District Draft Findings and Recommendations

Dear Anita,

Thank you for allowing me to respond to the draft findings and recommendations of the Rural Fringe Mixed-Use District White Paper.

My son and I own a parcel in the receiving area described in your White Paper, Collier Parcel #00755800005. Unfortunately, we were unable to appear at your public meetings and provide input because we presently live outside of Florida.

My comments are primarily directed to the top of page 24 of your draft.

Specifically at the very top of that page, there is a discussion on allowing "mixed housing, manufactured homes, cottage homes and micro homes." Immediately following this discussion is the Staff Recommendations highlighted in red lettering. However, Staff makes no recommendation or other comment regarding whether to allow these alternative forms of housing.

My family and I would like to place a residence on our 2 1/2 acre parcel (which was established as a lot in 1961, or well before the October 1974 date). We intend to begin this process as early as next year. However, we do not want or need a large, expensive "footprint" dwelling. We would be well satisfied with manufactured housing or possibly micro housing. We would be most satisfied with the least intrusive, least environmentally impactful method of all; namely allow placement of a small pad upon which to place an RV for 5 or 6 months of the year and we take the RV with us when we leave each year. I respectfully urge the Policy Makers of Collier County to please not keep regulations in place which force us and others to build large, expensive, excessive energy consuming structures.

I therefore respectfully ask that your staff consider my input and include a recommendation which supports the placement of alternative forms of low cost affordable housing in the lands designated as receiving. I also urge the Policy Makers to consider allowing removable housing.

Secondly, your draft just briefly mentions solar. I would respectfully ask you to consider a robust proposal which incentives the use of modern solar technology.

Please contact me with any questions or if you would like more information.

Sincerely,

Barry Wood

From: AnitaJenkins@colliergov.net
To: RuralFringeRestudy@colliergov.net
Date: Wed, 13 Jul 2016 14:09:23 -0400
Subject: Rural Fringe Mixed-Use District Draft Findings and Recommendations

To all interested:

Thank you for your continued participation in the Rural Fringe Mixed-Use District restudy. Attached hereto is a memo outlining the draft findings and recommendations of the Rural Fringe Mixed-Use District White Paper. We value your input and welcome your suggestions. This is an open, on-going collaborative effort. Final copies of the White Paper will be distributed prior to our first public hearing.

We anticipate a presentation to the Collier County Planning Commission August 18, 2016, and the Board of County Commissioners September 27, 2016.

We look forward to hearing from you.

Sincerely,
Anita Jenkins, AICP
Community Planning Section
Collier County Growth Management Department
2800 N. Horseshoe Dr.
Naples, FL 34104
(239) 252-8288
www.colliergov.net/GMPrestudies

JenkinsAnita

From: JenkinsAnita
Sent: Monday, July 25, 2016 7:48 AM
To: VanLengenKris; RuralFringeRestudy
Subject: FW: Rural Fringe Mixed-Use District Draft Findings and Recommendations

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From: Ron Inge [mailto:ron@ingeandassociates.com]
Sent: Saturday, July 23, 2016 10:23 AM
To: JenkinsAnita
Subject: RE: Rural Fringe Mixed-Use District Draft Findings and Recommendations

Thank you for the report summary, it is an excellent summary.

I have the following comments:

1. Item 7-the language should be clear that it is not just agriculture preservation that is being encouraged, but also habitat protection.
2. Item 7-consider the addition of the ability to generate more than 2 TDR per 5 acres if the habitat preserved becomes part of a system or if there is a mechanism in place to encourage its maintenance.

Thank you, Kris and staff for all the work on this.

Ronald E. Inge
5571 Halifax Ave.
Fort Myers, FL 33912
Phone 239-454-4999
Fax 239-454-2773
email: ron@ingeandassociates.com

From: JenkinsAnita [mailto:AnitaJenkins@colliergov.net]
Sent: Wednesday, July 20, 2016 1:31 PM
To: RuralFringeRestudy <RuralFringeRestudy@colliergov.net>
Subject: FW: Rural Fringe Mixed-Use District Draft Findings and Recommendations

This is being resent to ensure everyone interested receives a copy.

From: JenkinsAnita
Sent: Wednesday, July 13, 2016 2:09 PM
To: RuralFringeRestudy
Subject: Rural Fringe Mixed-Use District Draft Findings and Recommendations

JenkinsAnita

From: Dennis P. Vasey [00215@embarqmail.com]
Sent: Tuesday, July 19, 2016 5:35 PM
To: VanLengenKris
Cc: Mark Siverling - NRCS, Naples, FL
Subject: Long-term Stewardship Calculator

Follow Up Flag: Follow up
Flag Status: Flagged

Kris,

Collier Soil and Water Conservation District has about 25 parcels. Among the issues we grappled with were the long-term financial assurances required to perform initial treatment and then following a Best Management Practice without removing mitigation credits. The Nature Conservancy's (TNC) Long-term Stewardship Calculator was very helpful getting to real costs to accept a land donation.

Costs associated with long-term stewardship are inherently difficult to predict and often underestimated. To help tackle this problem, TNC convened national experts to develop a calculator to estimate stewardship costs and to determine the amount that should be set aside to provide a secure source of future funding.

Without sour grapes, when we respond to an offer, and there have been several, we always hear: "We're giving you the land! What do you mean we need to pay for accepting it?" When a businessman/woman offers you anything, they have already decided that it costs an arm and a leg to maintain property that doesn't generate revenue for their investors. In perpetuity is a long time and the taxpayer shouldn't have to bear that burden unless there is a cost-benefit and real return on the investment. Conservation and preservation land is a cost leader and it will run you out of money in a hurry. If the parcels can't be used to mitigate public buildings or civil works projects they're worthless.

TNC has developed several products, including a spreadsheet for calculating stewardship costs, an accompanying handbook and quick reference guide, and a web-based portal for these resources. This accessible tool helps consolidate and highlight common expenses to improve the ease and accuracy of calculating costs.

The calculator was designed to be used for both conservation easements and fee land, and is particularly valuable for use in calculating long-term management costs for mitigation projects to ensure that the full cost of all the mitigation requirements is appropriately covered by permittee.

It’s available at no cost through www.nature.org/stewardshipcalculator.

If the county is really serious about land ownership it should pursue a land trust that can function as a non profit and accept large and small donations.

Duke

CONSERVANCY of Southwest Florida
OUR WATER, LAND, WILDLIFE, FUTURE.

Protecting Southwest Florida's unique natural environment and quality of life ... now and forever.

July 25, 2016 *Sent via Email*

Mr. Kris VanLengen
Planning Manager, Growth Management Plan Restudy
Growth Management Department
Comprehensive Planning
2800 North Horseshoe Drive
Naples, FL 34104

RE: Comments on Staff's RFMUD Draft Recommendations

Dear Mr. VanLengen: Kris

The Conservancy of Southwest Florida appreciates the outstanding job you and your staff continue to do in stakeholder engagement, public meeting coordination and data collection and analysis. Attached, please find the Conservancy's initial comments on County staff's Rural Fringe Mixed-Use District (RFMUD) draft recommendations dated July 12, 2016. We hope you will find our feedback helpful as you finalize your recommendations to present at the CCPC, and we look forward to refining our comments as more discussion and information becomes available.

In order to (hopefully) simplify your review of our comments, we are maintaining the same order in which the topic areas were presented in your memo.

I look forward to meeting with you later this week to discuss the Conservancy's input. As always, please feel free to contact me at 239-403-4220 if you have any questions.

Sincerely,

Nicole Johnson
Director of Growth Management and Planning

1495 Smith Preserve Way ! Naples, Florida 34102 ! 239.262.0304 ! Fax 239.262.0672 ! www.conservancy.org

SENDING LANDS

A: TDR CREDIT SYSTEM

1. *Minimum Sales Price, Buyer and Seller*

Staff Draft Recommendation:
Eliminate the minimum $25,000 price per base TDR.

Conservancy Comments:
The Conservancy supports the elimination of the $25,000 price for the base TDR. Allowing the market to determine TDR value will likely result in additional TDR sales.

2. *Additional Credits to Sending Owners*

County Staff Recommendation:
Provide additional TDR credits to Sending Owners. Where possible, additional TDR credits should be apportioned equally to all Sending owners regardless of location or property attributes.

Conservancy Comments:
The Conservancy is not opposed to the creation of additional credits for the Sending Lands, if it can be documented that such an increase will further the goals of the RFMUD, incentivize additional lands to participate in the program, and redirect development to Receiving Lands. The key is to ensure this availability of additional credits will have the intended result. During the RFMUD Transmittal Hearing before the CCPC, Robert Mulhere, acting as consultant to the County, stated,

> If we just go to the basics, supply and demand, you want to have more demand than you have supply[1].

Fourteen years later, the Conservancy is still in agreement with this statement. The County needs to ensure that an increase in credits will still maintain the appropriate balance between supply and demand. Because the feasibility of additional credits, and how many credits should be added to the system must be supported by your scenario analysis tool, we believe it is premature to assume that at least 2 additional credits will be recommended for implementation. The County cannot know the appropriateness of this recommendation until the "what if" scenarios are run and the results shared and vetted through the public process.

[1] Minutes. Collier County Planning Commission. February 7, 2002. Page 40.

Within the Receiving Lands, the benefit of additional credits is perhaps less complicated – more credits equates to more development opportunity. However, on the Sending Lands side, the Conservancy believes additional credits are designed to serve a two-fold purpose. The first is to incentivize more landowners to participate and sever credits. The second is to encourage owners who have partially severed their credits to sever the remainder of credits attached to their land.

In order to entitle a number of existing or already approved projects in Receiving Lands and the Urban Residential Fringe, development interests have purchased significant acreage within the Sending Lands, and severed between 2 and 4 TDR credits. What the Conservancy needs to better understand is what the result will be from increasing available credits to all Sending Lands, including those parcels with existing or pending credit severance.

In addition, it is unclear what landowners would be required to do in order to gain these additional TDRs. Would these TDRs simply be added to the base TDRs? Would they only be available after the Restoration or Conveyance TDRs were generated? The County should be thinking strategically about what value added benefits could be tied to these additional credits. This concept requires additional clarification.

Finally, the Conservancy sees merit in the idea of applying any new TDR policies across the board, versus targeting additional TDRs to specific areas. As we have witnessed in the Rural Lands Stewardship Area (RLSA) program, the more complicated the system, the more chance for the unintended consequence of significantly more credits in the system than anticipated. In the case of the RLSA, this has resulted in more potential development that originally identified. In the case of the RFMUD, we are concerned it could result in an imbalance of credits supply and demand.

3. ***Agricultural Use***

County Recommendation:
Make TDR credits available to Sending owners who wish to begin, expand or increase intensity of a bona fide agricultural operation. Only passive agricultural uses may be considered for Restoration and Maintenance TDRs through an approved Restoration and Maintenance Plan.

Conservancy Comments:
The Conservancy adamantly objects to this recommendation, as it is inconsistent and incompatible with the intent of the RFMUD.

In many instances, agricultural activities can be compatible with environmental protection goals, especially with regard to the use of agricultural fields by listed species, such as the endangered Florida panther. However, it is imperative that staff understand the context in which the County determined, at adoption in 2002, that agricultural clearing was not consistent with the intent of the RFMUD and the program's environmental goals.

The Final Order first and foremost required Collier County to direct incompatible uses away from wetland and upland habitats, and to protect listed species. While preservation of prime agricultural lands was also addressed, the County was very careful to ensure that the RFMUD policies were designed with ecological protection as the primary objective. As such, agricultural activities in Sending Lands were a central topic of discussion during the creation of the RFMUD, and were clearly documented in the transcripts of the CCPC and Board of County Commissioners during both the Transmittal and Adoption Hearings in 2002.

Under staff discussion in your memo, it states,

> The RFMUD rules adopted in 2003 and 2004 discourage agriculture on Sending Lands by eliminating the possibility of creating TDR credits for any land put in agricultural use after 2002. Staff is unaware of any clear rationale for the provision, other than the possibility that agriculture was considered incompatible with environmental goals.[2]

A summary of the clear and unambiguous rationale for the 25 year prohibition of TDR severance for lands cleared for agricultural purposes can be better understood by reviewing the RFMUD 2002 Transmittal and Adoption Hearings transcripts.

During the February 7, 2002 CCPC Transmittal Hearing, County consultant Bob Mulhere summarized the matter by stating,

> One of the major issues raised by some of the environmental groups, as well as the EAC in their deliberations, was this issue of whether or not the county could regulate agriculture in the sending lands.[3]

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[2] Van Lengen, Kris. Memo. Draft Rural Fringe Mixed-Use District Restudy White Paper Section 4: Findings and Recommendations. July 12, 2006. P. 6.
[3] Transcript of Collier County Planning Commission RFMUD Transmittal Hearing. February 7, 2002. P. 43.

At the time, the environmental groups wanted agricultural activities regulated within the RFMUD Sending Lands, regardless of whether a property owner voluntarily participated in the program. However, based on County outside counsel's legal opinion that such regulation would violate the federal Right-to-Farm Act, the County chose to focus on policies in the RFMUD designed to disincentivize land clearing by prohibiting TDR severance on those lands for a period of time (ultimately 25 years was the timeframe adopted).

Later in the Transmittal Hearing, Mr. Mulhere, in response to a point made during public comment regarding the fact that the Final Order included direction to the County to discourage premature conversion of agriculture responded by stating,

> I think Dr. Woodruff raises a very legitimate issue relative to the final order also talking about preventing the premature conversion of agriculture and, also, in a sense, trying to develop some concepts that would enhance or protect the economic viability of agriculture, a very important business in Collier County.
>
> As I've said to you earlier, there is a relatively small percentage of agricultural activities, when you look at the overall scale. And, in fact we have chosen to defer much of that to the eastern lands portion where there is extremely large agricultural operations going on.
>
> Having said that, when we identify the ecological value of the sending lands, we think that out, and given the constraints in the final order and trying to find balance, we think that outweighs in those areas the need to continue to allow those agricultural operations.
>
> So I understand his point; it's a very good point. We just would say that, looking at everything, in our opinion, it's more important to protect those ecological areas intact.[4]

The CCPC made their position know when they voted to convey to the BCC that they did not believe,

> The sending lands ought to be used for agricultural purposes once the TDR process is complete.[5]

---

[4] Ibid. P. 59.
[5] Transcript of Collier County Planning Commission Transmittal Hearing. P. 95.

The CCPC also voted in favor of the 25 year prohibition on utilizing TDRs if agricultural clearing occurred after the implementation of the program.[6]

This is a partial history on the origin of the 25 year prohibition policy. The Conservancy believed at the time such a policy was the proper thing to do in order to secure the ecological protection of the RFMUD Sending Lands, and we support maintaining this policy as it is currently written.

While we understand that the County wants to explore additional options designed to maximize participation in the TDR program, we can't lose site of the overarching goal to protect and restore the ecological integrity of the Sending Lands. The Conservancy believes that rewarding land clearing for agricultural purposes within those same Sending Lands would be counterproductive. Agriculture is an important segment of our economy, and there are significant agricultural areas in both the RFMUD Receiving Lands and the RLSA that should be the focus of agricultural retention policies.

4. ***Parcels smaller than 5 acres***

County Draft Recommendation:
Allow TDR participation for illegal non-conforming properties based on public policy goals, and waive requirements related to proof of LNC status if greater than 4.5 acres in size.

Conservancy Comments:
The Conservancy does not object to the further consideration of such a modification. However, as the goal is to ultimately get these parcels into public ownership, the County may want to consider requiring severance of all credits at once, including the transfer credit, in order to ensure these parcels will be available for landscape level restoration projects in the future.

5. ***Retroactivity of Suggested Program Changes***

County Draft Recommendation:
Allow landowner's who have generated TDRs but have not conveyed their land to participate in any applicable program changes.

Conservancy Comments:
County staff has not provided sufficient information on the ecological value added by this provision to make a determination about this concept. The only quantifiable benefit

[6] Ibid. p. 96.

discussed in your memo is the fact that this will increase the supply of credits available to Receiving Land owners by 1,376 X the number of bonus credits allowed. The Conservancy needs to better understand how these bonuses will provide ecological benefits and ensure their creation will not result in a majority of the Receiving Lands being developed utilizing just these credits.

The Conservancy is not averse to considering such a policy. However, we need to understand what additional benefits are anticipated from retroactive credits applied to these Sending Lands. In addition, see our comments under A-2 regarding additional credits.

6. ***Early Entry TDR Credits***

County Draft Recommendation:
Replace the reference to Early Entry Bonus TDRs and simply provide 2 TDRs for base severance of dwelling unit rights.

Conservancy Comments:
Implementation of the RFMUD was over a decade ago. The Conservancy concurs that the terminology of "Early Entry Bonus" credits is no longer appropriate. However, as the County intends to evaluate the credit system as a whole, the concept of the bonus second base credit should be included in the discussion. For example, if additional credits can be granted which correspond to additional value added elements, is the second base, or Early Entry, credit still necessary?

7. ***TDR Credits from Receiving Land***

Staff Draft Recommendation:
Allow TDRs to be generated at 2 TDR credits per 5 acres from Receiving Lands for agricultural preservation, or native vegetation and habitat protection.

Conservancy Comments:
The Conservancy supports agricultural activities in the Receiving Lands, as many of these properties have lower ecological value and are currently being utilized for agricultural purposes. Agriculture was allowed in these areas prior to the RFMUD and the RFMUD in no way limits agricultural uses on these lands. Due to the fact that agriculture is allowed in the Receiving Land, it is unclear why the County would be awarding credits for an existing, allowed activity. We need to better understand staff's rationale prior to taking a position on this concept.

We also support protection of native habitat within the Receiving Lands. However, it is unclear how this proposed policy would impact existing Receiving Land requirements, which already mandate retention of 40% of onsite native vegetation, not to exceed 25% of the entire site as part of a development project. As protection of native vegetation is already required, additional TDR credits should not be awarded for simply following existing regulations. Additional clarification as to the intent and applicability of this concept is necessary.

B: TDR CREDITS AND AREAS OUTSIDE THE RFMUD

1. *Urban Residential Fringe and the One Mile Rule*

Staff Draft Recommendation:
Eliminate the one mile boundary from which TDRs must be derived for Urban Rural Fringe.

Conservancy Comments:
The Conservancy does not object to this proposed change.

2. *The Urban Residential Infill Bonus Provision*

Staff Draft Recommendation:
Eliminate the requirement to purchase a TDR in the Urban Residential Infill bonus provision.

Conservancy Comments:
The Conservancy does not object to this proposed change.

3. *Golden Gate Estates TDRs for Environmental Protection*

Staff Draft Recommendation:
Hold for recommendation from CWIP Committee

Conservancy Comments:
Consideration of how the different planning areas overlap and impact each other is an important component of the County's Eastern Planning Area study process. The connection between the Estates and the RFMUD as it relates to hydrology and restoration potential is a key area meriting further review.

The Conservancy appreciates that staff is deferring any recommendation until there is further coordination with CWIP. We recommend that this section be modified to acknowledge the opportunity for mutually beneficial collaboration between these two planning areas, but we do not encourage highlighting any specific potential policy change. At this point, it seems premature to single out the concept of TDRs to incentivize hydrologic projects within the Estates.

C: TDR PROGRAM MANAGEMENT

1. ***General Administration***

Staff Draft Recommendation:
At a minimum, an improved exchange program should be designed with input from potential buyers and sellers.

Conservancy Comments:
The Conservancy supports design of an improved County system for connecting TDR buyers and sellers.

2. ***Cost Components for Sending Owners***

Staff Draft Recommendation:
Application fees should be reduced or eliminated for Sending owners; work product required for TDRs should be evaluated for cost effectiveness and in limited instances, provided by County staff.

Conservancy Comments:
The Conservancy supports making the TDR program more user-friendly and cost-effective for Sending Land owners. These proposed recommendations are a good starting point.

3. ***TDR Bank***

County Staff Recommendation:
Follow consultant deliverable

Conservancy Comments:
The Conservancy supports the concept of a TDR bank and believes the County should be the governmental entity to create and administer this bank. Regarding the actual establishment of the TDR bank, we appreciate staff's recommendation to follow the

consultant's deliverables. However, as budgeting for 2016-17 is currently underway, now is the time to secure seed money for a bank. Therefore, we encourage the County to include funding in the upcoming budget year, understanding the particulars will be forthcoming after the consultant finishes deliverables.

In addition, it is unclear what is meant by funding a TDR bank through an 'in lieu' fee program. However, if this would result in the sale of TDR futures (where payment is received and TDRs are conveyed before they are actually in the bank), the Conservancy would object.

D. SENDING LAND MANAGEMENT:

1. ***Option One – North Belle Meade Mitigation Bank***

County Staff Draft Recommendation:
Develop a Regional Offsite Mitigation Agreement (ROMA) with FDEP and ACOE in North Belle Meade where financially feasible. Explore adjoining private mitigation banks conveying to Collier County with maintenance funds for greater maintenance efficiency.

Conservancy Comments:
The concept of a North Belle Meade ROMA merits consideration. Once additional details are available, the Conservancy will review and comment further on this concept.

As an aside, it is ironic that the ROMA would likely be located in the very area the County proposes incompatible environmental impacts associated with the extension of Wilson Boulevard. Any mitigation value available through the creation of a ROMA would certainly be diminished by a major road bisecting the very ecological areas targeted for restoration and maintenance.

2. ***Option 2 – Additional TDR for funding in North Belle Meade and Section 11***

Staff Draft Recommendation:
Establish a special TDR for the benefit of the County where no other entity has been established to take ownership

Conservancy Comments:
This seems to be a novel idea that the Conservancy needs more information on in order to provide substantive feedback. Additionally, it would need to be included in the County's scenario model to determine the effect of these additional TDRs on the delicate supply vs. demand balance.

3. ***Option 3 – Green Utility Fee***

Staff Draft Recommendation:
Study the idea of a Green Utility Fee and consider whether it should be the subject of a County-wide referendum.

Conservancy Comments:
The Conservancy supports further study of the idea of a Green Utility Fee.

4. ***Option 4 – Model Land Management Plan and Private Ownership***

Staff Draft Recommendation:
Provide a standard or model Land Management Plan for adoption by owners who wish to provide Restoration and Maintenance activities in return for TDR credits.

Conservancy Comments:
The Conservancy supports the concept of creating a standardized format for Land Management Plans.

E. OTHER PROGRAM SUGGESTIONS

1. ***Adjust property appraisal for tax benefit on TDR severed lands***

Staff Draft Recommendation:
Staff should provide any data needed to the Property Appraiser's Office in support of its efforts to review tax assessments based on appraised land values and resulting tax assessments in Sending Lands.

Conservancy Comments:
The Conservancy supports this recommendation.

2. ***Allow additional family home(s) on parcels over 20 acres with agriculture operation and easement***

Staff Draft Recommendation:
Allow an additional family home on a parcel at least 20 acres in size, where bone fide agricultural activities results in TDR severance for the agricultural portions of the property (see recommendation A-3).

Conservancy Comments:
As stated in our comments for Recommendation A-3, the Conservancy believes clearing for agricultural purposes is not appropriate for incentivization in the Sending Lands. Therefore, allowing a second dwelling to further incentivize agricultural activities in Sending Lands would also be problematic. Additionally, it is unclear how staff is defining the terminology "agricultural parcels with restrictive perpetual easement".

3. ***Allow County-owned (post conveyance) Sending land to be used for recreational uses***

Staff Draft Recommendation:
County-owned land in North Belle Meade should qualify for conditional use approval for expanded recreational uses, if compatible with environmental goals. Definitions of "active" and "passive" recreation will require further vetting.

Conservancy Comments:
While the Conservancy supports the concept of providing additional **passive** recreational opportunities where appropriate, we do not find the County's recommendation that such uses expand to include active recreation to be compelling. If deemed consistent with restoration and management plans, uses included under the definition of passive recreation could offer a plethora of natural resources based opportunities, including hiking, mountain biking and potentially horseback riding. The Conservancy opposes the concept of allowing active recreation on County-owned Sending Lands where TDRs have been removed.

NEUTRAL LANDS:

1. **Allow for some participation in the TDR program as allowed in Sending area.**

Staff Draft Recommendation:
Allow TDR credits for agriculture and conservation uses where the uses are secured by perpetual easements.

Conservancy Comments:
The RFMUD Neutral Lands classification was created in acknowledgement that certain areas did not exhibit sufficient ecological value for classification as Sending, but neither were they appropriate for designation as Receiving. Thus, Neutral Lands were essentially allowed to retain their pre-RFMUD uses, with some modifications.

The concept of incentivizing agricultural retention in Neutral Lands through the ability to generate TDRs may be a concept worth exploring. However, the Conservancy cautions against including such a provision in any initial RFMUD amendments. There are already a number of considerations associated with increasing the available TDRs within existing Sending Lands, such as ensuring the increase in credits will maximize the amount of additional land participating in the program. The reliability of such analysis and modeling is increased when the credit system is essentially a closed system (i.e. it only includes RFMUD Sending Lands). The analysis may lose reliability if it now has to anticipate use by Neutral Land owners.

With regard to opening up Neutral Lands to TDR generation for ecological purposes, such a concept creates a number of questions that the County needs to more thoroughly examine before taking this recommendation to the CCPC and BCC. It appears that implementation of this concept could result in a checkerboard pattern of participants and non-participants. ' It is unclear how such an outcome would provide meaningful ecological benefits.

The diminished ecological benefits associated with sporadic landowner participation on the part of Sending Land owners has been a topic of considerable discussion. Until this issue is resolved, it seems unwise to be expanding TDR incentives into Neutral Lands.

2. ***Minimum project size***

Staff Draft Recommendation:
Remove the 40 acre minimum project size for clustered development

Conservancy Comments:
The Conservancy is not opposed to the concept of removing the 40 acre minimum.

RECEIVING LANDS

A. LAND USE

Staff Draft Recommendation:

1. Promote economic vitality in the RFMUD by allowing employment uses outside of Villages as defined in the industrial and business park zoning district (with exceptions) in locations with access to major collector roads.

Conservancy Comments:
The Conservancy has no objection to this concept.

Staff Draft Recommendation:

2. Within a Village, remove the maximum acres and leasable floor area limitations of the Village Center and the Research and Technology Park.

Conservancy Comments:
The Conservancy has no objection to this concept.

Staff Draft Recommendation:

3. Designate Receiving areas as Innovation Zones.

Conservancy Comments:
The Conservancy will need to research Innovation Zones before commenting on this recommendation.

Staff Draft Recommendation:

4. Eliminate the maximum size of a Village.

Conservancy Comments:
The Conservancy has no objection to the concept.

Staff Draft Recommendation:

5. Modify residential density standards:
    a. Clustering – remove 40 acre minimum, increase density to 2 units per acre
    b. Village – increase density to 7 units per acre

Conservancy Comments:
The Conservancy is supportive of increasing the allowed density if such density is gained through use of TDR credits.

B: TRANSPORTATION AND PUBLIC INFRASTRUCTURE

Staff Draft Recommendations:

1. Analyze arterial roadway and utility capacity issues surrounding Receiving Lands.
2. Review roadway design standards and suggest changes if necessary to support low speed.
3. Add provisions for transit stops and park and ride facilities within Villages and business parks.

4. Develop a methodology for a Mobility Analysis including a standard of measuring a development's level of interconnectivity such as a "link-node" ratio, and the transit, bicycle and pedestrian coverage and connectivity with a project and surrounding destinations.

Conservancy Comments:
The Conservancy supports the incorporation of transit and other alternative transportation concepts to decrease the demand on our roadway network. We are supportive of a multi-modal Mobility Analysis to expand the County's understanding of the future mobility needs within the RFMUD's Receiving Lands. However, transit and other non-automobile mobility options can only work if the Receiving Lands build out with a mix of development products. All of the existing and approved developments in the Receiving Lands have opted for intensification without creating a Village. If the remainder of the Receiving Lands builds out in a similar way, the transportation needs of this area will be vastly different than those of well-designed mixed-use projects and will be much more dependent on automobiles.

Density Standards and Process

Staff Draft Recommendations:
Incentivize mixed-use development and economic diversity:

1. Consider adoption of zoning overlays, or separate area design standards to provide greater certainty for developers.
2. Allow BCC simple majority approval when complying with zoning overlay.

Conservancy Comments:
There are two distinct ideas contained in Recommendation 1. One idea is to create design standards specific to the each of the Receiving Lands geographic areas. The Conservancy believes this concept has merit, since the various Receiving Lands have differing needs and opportunities.

The second idea contained in Recommendation 1 ties to Recommendation 2 and seems to imply that the actual rezone should occur during the overlay adoption, instead of at the individual project approval. This is what was done, albeit the County did not understand it at the time, within the RLSA. The Conservancy is opposed to such a consideration. Within the RFMUD, the rezone occurs at the time a project within the Receiving Lands is brought before the Commission. As such, the approval as a rezone requires a supermajority vote, just as would be required for every other rezone project in the County. There is no reason to change the rules and lessen the current approval standard for the RFMUD.

Staff Draft Recommendation:

3. Allow industrial/business park uses (with exceptions) by right, and Hearing Examiner approval for proposals complying with industrial/business park zoning standards.

Conservancy Comments:

Based on Recommendation 4, it appears the County is recommending that no TDRs be required for the construction of an industrial/business park. However, no data and analysis has been provided to demonstrate how allowing these uses in the absence of TDR conveyance will further the goal of the RFMUD restudy to increase Sending Lands participating. It is too much to assume that if an industrial/business park is approved, then a TDR-using project will necessarily follow. Therefore, Conservancy objects to this portion of staff's recommendation.

Further, we have concerns about the approval of such potentially large, intensive and traffic-generating uses bypassing a full public hearing process. It is the public hearing process that allows the community the opportunity to provide input and for the applicant to work with the community on project improvements that may alleviate concerns and result in a better outcome for all stakeholders.

Staff Draft Recommendation:

4. Modify the TDR requirements:
    a. From 1 TDR to .5 TDR for multifamily unit or workforce housing
    b. From .5 to 0 TDR for affordable housing
    c. New – 1 credit for each 3,000 SF of retail goods and services outside of a Village, and
    d. New – 0 TDR for industrial/business park uses.

Conservancy Comments:

The Conservancy does not have the necessary data and analysis to be able to fully understand how staff determined these new TDR ratios. We are not opposed to adjustments in the TDR requirements, but we need staff to share the background information upon which their recommendations are based. (Regarding Recommendation 4.d., see comments above under Recommendation 3.)

Staff Draft Recommendation:

5. Initiate study to create an impact fee index for mixed-use

Conservancy Comments:
The Conservancy does not object to such a study.

Staff Draft Recommendation:

6. Review and modify design standards within the Growth Management Plan (GMP) and Land Development Code (LDC) for greater flexibility while supporting the intent of employments zones and mixed-use development.

Conservancy Comments:
The Conservancy supports revisiting the design and development standards as contained in both the GMP and LDC. Review of the GMP demonstrates some unnecessarily specific policies that are better suited for the LDC. In addition, there are good opportunities to remove some of the specific regulatory language and replace it with greater flexibility, in order to incentivize a mix of development opportunities.

Staff Draft Recommendation:

7. Develop further incentives for innovative features such as solar power, zero net water use, aquifer recovery and storage systems.

Conservancy Comments:
The Conservancy supports further exploration of these concepts.

August 4, 2016

Kris Van Lengen, JD, AICP
Community Planning Manager
Zoning Division, Collier County
2800 N. Horseshoe Dr.
Naples, FL 34104

Re: Staff Recommendations Regarding the Reassessment of the RFMUD

Dear Mr. Van Lengen:

We are very appreciative of your efforts to engage all stakeholders in this restudy process and to develop a list of improvements to the RFMUD that will result in furthering the original policy intent by creating a balanced market driven approach. We fully understand that the issues of this reassessment are complicated and applaud the broad approach you have used in addressing the Reassessment and the prudent but necessary utilization of experts on various components.

With respect to the preliminary draft of the staff recommendations set forth in the July 12, 2016 staff Memorandum, we offer the following comments for your consideration:

SENDING LANDS:

A: TDR CREDIT SYSTEM:

1. Eliminate the $25,000 minimum sale price per base TDR credit. **RFC supports this recommendation.**
2. Provide additional TDR credits to Sending owners. Where possible, additional TDR credits should be apportioned equally to all Sending owners regardless of location or property attributes. **RFC supports this recommendation.**
3. Make TDR credits available to Sending owners for new or expanded bone fide agricultural uses. Only passive agricultural uses may be considered for Restoration and Maintenance TDRs through an approved Restoration and Maintenance Plan. **RFC supports this recommendation.**
4. Allow TDR participation for illegal non-conforming properties based on public policy goals, and waive requirements related to proof of LNC status if greater than 4.5 acres in size. **RFC supports this recommendation.**
5. Allow landowner's who have generated TDRs but have not conveyed their land to participate in any applicable program changes. **RFC supports this recommendation.**
6. Replace the reference to Early Entry Bonus TDRs and simply provide 2 TDRs for base severance of dwelling unit rights. **RFC supports this recommendation.**
7. Allow TDRs to be generated at 2 TDR credits per 5 acres from Receiving Lands for agriculture preservation, or native vegetation and habitat protection. **RFC supports this recommendation and its application on Neutrals lands as well.**

B: TDR CREDITS OUTSIDE THE RFMUD:

1. Eliminate the one mile boundary from which TDRs must be derived for Urban Rural Fringe. **RFC supports this recommendation.**

2. Eliminate the requirement to purchase a TDR in the Urban Residential Infill Bonus provision. **RFC supports this recommendation.**
3. Golden Gate Estates TDRs for Environmental Protection. **The RFC supports, in concept, allowing for TDR generation (and transfer to Receiving lands) in limited locations within Golden Gate Estates. Locations would presumably be identified as part of the GGAMP Restudy or may be identified by the CWIP Ad Hoc Advisory Committee. Staff analysis indicate the impacts to the RFMUD TDR program de minimis, the additional TDRs will also enhance availability and market cost per TDR, and Collier County will benefit through perpetual protection of such areas through watershed protection, flood control enhancement, and wetland and habitat protection. The number of credits and/or ratio to be generated per acre may differ from that in the RFMUD Sending Lands.**

C: TDR PROGRAM MANAGEMENT:

1. At a minimum, an improved exchange program should be designed with input from potential buyers and sellers. **RFC supports this recommendation**.
2. Application fees should be reduced or eliminated for Sending owners; work product required for TDRs should be evaluated for cost effectiveness and in limited instances, provided by County staff. **RFC supports this recommendation**.
3. County-run or County-sponsored TDR bank. **RFC supports this concept. This was a recommendation of Dr. James Nicholas (the County's original TDR expert) and it would be a significant benefit to RFMUD Sending and Receiving Landowners to be able to purchase and sell TDRS using such a bank. If structured properly the bureaucracy can be minimized.**

D: SENDING LAND MANAGEMENT:

1. Develop a Regional Offsite Mitigation Agreement (ROMA) with FDEP and ACOE in North Belle Meade where financially feasible. Explore adjoining private mitigation banks conveying to Collier County with maintenance funds for greater maintenance efficiency. **RFC supports this recommendation. This could be a significant benefit to the County in terms of mitigating for environmental impacts associated with County Roadway projects.**
2. Establish one additional TDR for the benefit of the County, where no other public agency is willing to accept donation of land or land management. **RFC supports this recommendation but suggests there should be some consideration as to whether 1 TDR is sufficient to offset perpetual land management costs.**
3. Study the idea of a Green Utility Fee and consider whether it should be the subject of a County-wide referendum. **The RFC cannot support this recommendation at this time without additional information as to the estimated costs of such a fee.**
4. Provide a standard or model Land Management Plan for adoption by owners who wish to provide Restoration and Maintenance activities in return for TDR credits. **RFC supports this recommendation.**

E: OTHER PROGRAM SUGGESTIONS:

1. Staff should provide any data needed to the Property Appraiser's Office in support of its efforts to review tax assessments based on appraised land values and resulting tax assessments in Sending

Lands. **RFC supports this recommendation. It is critical that taxable values be adjusted to reflect the reduced or limited uses that may be applied to Sending lands in general and more specifically where such lands have severed all or a portion of the development rights. There may also be application on Receiving or Neutral designated lands, where the use of such property is significantly restricted as a result of agriculture preservation, or native vegetation and habitat protection.**

2. Allow an additional family home on a parcel at least 20 acres in size, where bone fide agricultural activity results in TDR severance for the agricultural portions of the property (see recommendation A-3). **RFC supports this recommendation.**
3. County-owned land in North Belle Meade should qualify for conditional use approval for expanded recreational uses, if compatible with environmental goals. Definitions of "active" and "passive" recreation will require further vetting. **RFC generally supports this recommendation, subject to understand what those additional uses might be.**

NEUTRAL LANDS:

1. Allow TDR credits for agriculture and conservation uses where the uses are secured by perpetual easements. **RFC supports this recommendation.**
2. Remove the 40 acre minimum parcel or assemblage size for clustering development. **RFC supports this recommendation.**

RECEIVING LANDS:

A: LAND USE

1. Promote economic vitality in the RFMUD by allowing employment uses outside of Villages as defined in the industrial and business park zoning district (with exceptions) in locations with access to major collector or arterial roads. **RFC supports this recommendation.**
2. Within a Village, remove the maximum acres and leasable floor area limitation of the Village Center and the Research and Technology Park. **RFC supports this recommendation.**
3. Designate Receiving areas as Innovation Zones. **RFC supports this recommendation.**
4. Eliminate the maximum size of a Village. **RFC supports this recommendation.**
5. Modify residential density standards:
    a. Clustering – remove 40 acre minimum, increase density to 2 units per acre;
    RFC suggests additional density in Non-Village (or non mixed-use) Receiving areas, especially related to: (1) clustering which results in increased preservation of native vegetation and habitat (perhaps in the form of bonus units); and (2) higher density for multi-family development (perhaps allowing a higher maximum density (i.e. 3.0 DUs per acres) and a higher base density (i.e. 1 DU per acre) for multifamily. This would still require the same number of TDRS for multi-family to achieve 3.0 DUs per acre as would be required for single-family to achieve the 2.0 unit per acre maximum.
    b. Village – increase density to 7 units per acre.
    RFC supports this recommendation.

B: TRANSPORTATION AND UTILITIES

1. Analyze arterial roadway and utility capacity issues surrounding Receiving Lands. **RFC supports this recommendation.**
2. Review roadway design standards and suggest changes if necessary to support low speed. **RFC supports this recommendation assuming this refers to slow speeds within the development or on adjacent local roadways.**
3. Add provisions for transit stops and park and ride facilities within Villages and business parks. **RFC supports this recommendation.**
4. Develop a methodology for a Mobility Analysis including a standard of measuring a development's level of interconnectivity such as a "link-node" ratio, and the transit, bicycle and pedestrian coverage and connectivity with a project and surrounding destinations. **Perhaps some form of incentive could be developed for employing a design that results in a reduction in vehicle miles traveled. Examples include a one or two DU bonus on top of the base density (effectively reducing the number of TDRs that would need to be purchased), or adopting a discounted impact fee for projects that, through a mobility analysis, demonstrate a reduction in vehicle miles traveled.**

C: ENVIRONMENT

1. Allow TDRs to be generated at 2 TDR (or more) per 5 acres from Receiving and Neutral Lands for agriculture preservation, or native vegetation and habitat protection. **RFC supports this recommendation, but would suggest including flow ways or other hydrologic restoration or enhancements that have regional benefits or provide for greater capacity or connectivity.**

D: DESIGN STANDARDS AND PROCESS

1. Consider adoption of zoning overlays, or separate area design standards to provide greater certainty for developers. **RFC supports this recommendation.**
2. Allow BCC simple majority approval when complying with zoning overlays. **RFC supports this recommendation.**
3. Allow industrial/business park uses (with exceptions) by right, and Hearing Examiner approval for proposals complying with industrial/business park zoning standards. **RFC supports this recommendation.**
4. Modify the TDR requirements:
   a. From 1 TDR to .5 TDR for multifamily unit or workforce housing
   b. From .5 to 0 TDR for affordable housing
   c. New - 1 credit for each 3,000 SF of retail goods and services outside of a Village, and
   d. New - 0 TDR for industrial/business park uses.

   RFC supports recommendations a., b. and d, but is concerned that c., which would require TDRs for retail goods and services, will work against the goal of reducing vehicle miles traveled from outside the urban to the urban area for necessary goods and services and will discourage mixed-use development.
5. Initiate study to create an impact fee index for mixed-use **RFC supports this recommendation.**

6. Review and modify design standards within the Growth Management Plan and Land Development Code for greater flexibility while supporting the intent of employment zones and mixed-use development. **RFC supports this recommendation.**
7. Develop further incentives for innovate features such as solar power, zero net water use, aquifer recovery and storage systems. **RFC supports this recommendation.**

Additional RFC recommendations:

1. **RFC recommendation** Eliminate or significantly revise the greenbelt that is required around a Rural Village or provide TDR generation or bonus density for retaining the greenbelt in preserve or for bone fide agricultural uses.
2. Golden Gate Estates: The RFC supports, in concept, allowing for TDR generation (and transfer to Receiving lands) in limited locations within Golden Gate Estates. Locations would presumably be identified as part of the GGAMP Restudy or may be identified by the CWIP Ad Hoc Advisory Committee. Staff analysis indicate the impacts to the RFMUD TDR program de minimis, the additional TDRs will also enhance availability and market cost per TDR, and Collier County will benefit through perpetual protection of such areas through watershed protection, flood control enhancement, and wetland and habitat protection. The number of credits and/or ratio to be generated per acre may differ from that in the RFMUD Sending Lands.

Please note that we may have additional comments pending receipt of the economic analysis and recommendations. Again, we appreciate the opportunity to work with staff and to comment on these recommendations and we look forward to continued collaborative efforts as this process moves towards completion.

Sincerely

David Torres, RFC Steering Committee Chair

cc: Anita Jenkins, AICP, Collier County Community Planning Section
David Wilkison, P.E. Administrator, Collier County Growth Management Division
Nick Casalanguida, Collier County Assistant County Manager
RFC Steering Committee
Bruce Anderson, Cheffy Passidomo, P.A.
Tim Hancock, AICP Stantec
Bob Mulhere, FAICP, Hole Montes
Mike Timmerman, CRE, FRICS, SRA MJT Realty Economic Advisors

August 2, 2016

Kris Van Lengen
Planning Manager, Growth Management Plan Restudy
Collier County Growth Management Division
2800 N. Horseshoe Drive
Naples, FL 34104

Re: Comments on Staff's RFMUD Draft Recommendations

Dear Mr. Van Lengen:

Thank you for your outreach to the public on this important endeavor to study and recommend changes to the Rural Fringe Mixed-Use District. Please consider the comments below on some of the Collier County Planning Division (CCPD) draft recommendations, as you finalize the white paper.

SENDING LANDS

A. TDR Credit System

1. Additional Credits to Sending Owners

Here and throughout the paper, there are many recommendations for increasing TDR credits. How do you know that there is a need for so many additional credits to incentivize owners to participate in the program? There isn't an analysis of what the result will be from increasing credits to all sending lands.

How do you prevent excess credits from being awarded, so that supply and demand is balanced? Also, what happens to excess credits? Once rights are given in terms of TDR credits, landowners will demand a return. If they can't sell or trade credits—who is on the hook?

There needs to be more analysis and justification for awarding all the additional credits discussed here and throughout the paper.

3. Agriculture Use

The CCPD staff recommends that TDR credits be made available to Sending owners who wish to begin, expand or increase intensity of a bona fide agricultural operation. The County should not adopt this recommendation.

The RFMUD rules currently eliminate TDR credits for any land put in agricultural use after 2002. The purpose was to disincentivize clearing of these environmentally sensitive lands. These rules and policy should remain in place. The Sending lands are so designated because their ecological value for such things as water quality, protecting water flow-way, and preserving wildlife and wildlife habitat. A goal of the TDR program as established was to protect and restore the ecological integrity of the Sending lands. Expanding agriculture uses to begin or expand row crops, or to intensify agriculture use are incompatible uses for the environmental goals for these lands. Intensifying agricultural uses could adversely affect Picayune Strand State Forest downstream of the RFMUD area.

In Agricultural use areas, wetlands are often destroyed. Agricultural lands are not conservation lands. In the RLSA, developers are claiming that areas where there are Ag uses such as row crops are disturbed land, of less value to wildlife. Therefore developers claim that there should be no problem developing such land because of their lower ecological value. To grant credits for beginning, expanding or intensifying agriculture uses is to start a downward path beginning by reducing the ecological value of the Sending lands.

5. Retroactivity of Suggested Program Changes

CCPD staff recommends allowing landowners who have generated TDRs but not yet conveyed their land to participate in any applicable program changes.

The CCPD has not articulated what additional benefits are anticipated from retroactive credits. As discussed above, there needs to be an analysis or explanation on the effect of granting so many additional credits.

7. TDR Credits from Receiving Lands

CCPD staff recommends allowing the generation of 2 TDR credits per 5 acres from Receiving Lands for agriculture preservation, or native vegetation and habitat protection.

It is not clear why this change is needed. There should be an articulation of what "agriculture preservation" and "habitat protection" entails. What would the criteria be for each of these concepts?

D. **Sending Lands Management**

There isn't sufficient information for me to understand fully how the different options put forth will work. The idea of a green utility fee appears to be worth considering.

E. **Other Program Recommendations**

3. Allow County-owned Sending land to be use for recreational uses.

CCPD staff recommends that County-owned land in North Belle Meade should qualify for expanded recreational uses, if compatible with environmental goals. Please reject this idea, other than perhaps to consider expanding passive recreational opportunities where appropriate.

Sending lands are environmentally sensitive lands, important for water quality, water flow-way, preservation of wildlife and wildlife habitat. Passive recreational uses are currently allowed where appropriate; these uses can be compatible with the environmental goals. I urge you to reject expansion of the range of allowed recreational uses, especially reject any motorized activities. Once you open the door to motorized use, the county may want to allow a golf course, or may be pressured into allowing ORV use—a use clearly incompatible with wildlife and water resources. Allowing expansion of recreational uses could have a negative impact to the ecological integrity of these lands and especially make the land unsuitable for the wildlife it is meant to sustain.

RECEIVING LANDS

B. **Transportation and Public Infrastructure**

Density Standards and Process

CCPD staff recommends considering adoption of zoning overlays so as to give developers more certainty and to allow a simple BCC majority to approve a project when complying with the overlay. The only benefit appears to be to allow development to proceed faster. The County should not adopt this approach.

Given the rapid development of Collier County at this time, there is a lot of public concern now by many residents about growth occurring too rapidly and degradation of the quality of life. For this reason, the County should continue the practice of requiring a supermajority vote for a rezone, just as is required for every other rezone project in the County.

Sincerely,

Gaylene Vasaturo

Naples, FL

Appendix B

Rural Fringe Mixed-Use District Restudy
North Belle Meade Mitigation Feasibility Study

NORTH BELLE MEADE
MITIGATION FEASIBILITY STUDY

July 2016

Prepared For:

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Naples, Florida 34104
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Prepared By:

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EXECUTIVE SUMMARY

An analysis of the potential mitigation values versus costs of utilizing the North Belle Meade for wetland and species mitigation was performed.

In the absence of sufficiently detailed data regarding site-specific characteristics (hydrologic conditions, levels and locations of infestations by exotic vegetation, and wetland versus upland acreages) for most of the 1,133 individual parcels comprising the North Belle Meade, this analysis was based on generalized land characteristics.

The numerical analysis of the value of potential wetland credits, potential values of uplands for species mitigation (habitat compensation), and the costs associated with the generation of these values were calculated for several hypothetical situations with various combinations of the results presented in graphic form.

Without a significant effort to improve the existing hydrologic conditions for more than small areas, analysis data indicates that a particular type of wetland mitigation program known as a single-user Regional Off-Site Mitigation Area (ROMA)/In-Lieu Fee (ILF) provides the most positive cost-benefit ratio.

Sufficient wetland credit and habitat compensation demand to warrant consideration of the ROMA/ILF concept is found in Collier County's 2040 Needs Assessment for future road projects where the projected money needed for wetland mitigation and panther habitat units for Cost-Feasible Roads is $11,058,000 and $6,932,000, respectively. The actual cost to Collier County of the projected transportation-related mitigation/compensation needs could be significantly lower on a per unit basis by using a ROMA/ILF project to generate all or a portion of the needed credits and habitat compensation. Additionally, the funds spent internally purchasing the mitigation/compensation could be used to expand and operate the ROMA/ILF program.

A Collier County single-user ROMA/ILF project within the North Belle Meade appears to be a cost-feasible generator of wetland mitigation credits and panther habitat compensation if the ROMA/ILF is of sufficient size and properly located to assure long-term support for the Florida panther.

This initial feasibility study concludes that a ROMA/ILF program is potentially feasible and cost-effective, based on broad characterizations of North Belle Meade and a range of reasonable assumptions. To further refine the analysis results and increase the level of certainty regarding the feasibility of portions of North Belle Meade to serve as cost-effective mitigation, further steps are recommended. A more site-specific mitigation evaluation tool, based on the methodology used in this analysis, is currently being developed to allow for efficient evaluations of specific areas within North Belle Meade. This site-specific evaluation tool will allow the input of data gained from limited site reconnaissance of particular parcels or areas to generate site-specific data regarding potential mitigation values and associated costs. The results of this type of analysis, based on more site-specific data, will result in a higher degree of accuracy and allow

for a higher degree of certainty regarding the potential for a specific area or areas to serve as feasible mitigation value generators.

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1.0 INTRODUCTION

Under Collier County Contract No. 15-6397/Purchase Order No. 4500167795, Passarella & Associates, Inc. (PAI) has been requested to perform an analysis of the North Belle Meade – Natural Resource Protection Area (NRPA) for the potential to generate wetland credits and/or wildlife habitat compensation units. The project includes the areas designated as the North Belle Meade West area at approximately 3,100 acres in size and the North Belle Meade NRPA area at approximately 6,500 acres in size. The overall North Belle Meade is comprised of a variety of upland and wetland habitat types. While much of the area is relatively undeveloped, areas of agriculture, pasture, residential, and other land uses exist within the overall North Belle Meade boundary and in the Belle Meade West area in particular.

Portions of the North Belle Meade are known to be used by red-cockaded woodpecker (*Picoides borealis*), Florida panther (*Puma concolor coryi*), and other species under the protection of state and/or federal laws. The long-term use and value of lands within the North Belle Meade for listed wildlife species is highly dependent on future development patterns and land conservation programs.

A Transfer of Development Rights (TDR) program with areas eligible to send development rights from and areas eligible to receive additional development rights is currently in place for significant portions of the North Belle Meade. This TDR program awards sending unit credits for various limitations on land use with the greatest number of units awarded for removal of all development rights and habitat restoration with the restored lands placed under some form of governmental ownership.

2.0 ANALYSIS PURPOSE/GOAL

The purpose of this analysis is to evaluate the potential values of lands within the North Belle Meade for wetland mitigation and/or wildlife habitat compensation versus the costs associate with generating any wetland mitigation or habitat compensation values. The primary goal of this analysis is to provide useful information to decision-makers regarding the potential options for long-term management of conveyed or acquired lands within the North Belle Meade.

3.0 ANALYSIS CONSTRAINTS

At a combined size of 9,600± acres with 1,133 distinct parcels, parcel-specific habitat evaluations within the North Belle Meade are not possible within the scope of this analysis.

The primary available land cover/land use mapping and data sources are the National Wetlands Inventory (NWI) and the South Florida Water Management District (SFWMD). Of the two sources, the SFWMD Florida Land Use, Cover and Forms Classification System (FLUCFCS) mapping provides more accurate and current mapping identifications of existing land uses and land cover. Both the NWI and the SFWMD mapping rely on photointerpretation of high level aerial photography. A limitation of this methodology is the limited ability to identify levels of

infestation by exotic and invasive vegetation species unless the infestation is clearly visible at vegetation canopy height. Without more specific data regarding the extent, type, and locations of exotic vegetation infestation levels, this analysis must rely on hypothetical exotic infestation scenarios as explained in the Mitigation Analysis Framework section.

Another constraint of NWI and FLUCFCS mapping is their limited ability to ascertain the hydrologic conditions on sites where the presence or absence of hydrology is not easily discernable from aerial photography. Many areas within North Belle Meade have been subject to hydrologic impacts, primarily from interruption of surface flows or drainage resulting from the Golden Gate canal system. The mapping of over-drained areas that register as wetland based on a mapping of canopy cover types may not accurately capture the fact the area no longer has sufficient hydrology to qualify as wetland. Because the available land use/land cover mapping may not accurately identify wetland versus upland areas, a range of possible upland versus wetland habitat percentages is used in this analysis as more fully explained in the Mitigation Analysis Framework section.

4.0 OVERVIEW OF WETLAND MITIGATION PROGRAMS

The concept of wetland mitigation is derived from existing state and federal regulatory programs that protect wetlands and replace lost wetland functions through the restoration, enhancement, and protection of existing wetlands or through the creation of new wetlands. Both the state and federal programs contain regulatory language regarding each type of mitigation programs. Wetland mitigation is primarily used to offset the loss of wetland functions resulting from the direct or indirect impacts of projects on state and/or federal jurisdictional wetlands.

Elements common to current state and federal wetland mitigation programs include:

1) Goal of no net loss of wetland functions
2) Clearly defined ecological goals and mitigation plan
3) Use of an acceptable wetland functional assessment methodology to assess wetland functions lost by impacts and the replacement wetland functions gained through mitigation
4) The landscape context of any mitigation should be relevant to the wetlands impacted
5) Mitigation must have clearly defined and verifiable success criteria tied to wetland functionality
6) A conservation easement that limits land uses and activities inconsistent with wetland and habitat preservation goals
7) Financial assurances are required to assure mitigation plan implementation
8) Financial assurances are required to assure sufficient funding for perpetual mitigation site management and protection
9) Monitoring and reporting to regulatory agencies

This analysis does not provide a detailed breakdown of each program but rather focuses on the key components of each program relative to the North Belle Meade (credit generation and constraining elements of each program).

4.1 Permittee Responsible Mitigation

The approach of Permittee Responsible Mitigation (PRM) was once the main form of mitigation, where the applicant proposing a wetland impact would also propose project-specific mitigation to offset any wetland functional loss. The success of PRM was highly variable and PRM is now much less common than the use of mitigation banks or other large scale mitigation programs under both the state and federal wetland regulatory programs. Some parcels within the North Belle Meade have been used for PRM, but the PRM concept involves a case-by-case permitting decision and is not applicable to this analysis.

4.2 Wetland Mitigation Banking

Wetland mitigation banking has gained widespread support throughout the country and is now the preferred form of mitigation for both the state and federal regulatory programs.

To permit and operate a wetland mitigation bank, the bank site must be clearly defined under the ownership or control of the project sponsor. Wetland mitigation banks are typically large enough to benefit the environment on a landscape scale and are run as businesses with the wetland mitigation credits being the commodity to be sold on the open market. Following a detailed and thorough permitting process, wetland mitigation banks implement a mitigation plan and earn credits for various levels of implementation completion and for verifiable levels of ecological success. Wetland credits can be sold to offset wetland impacts from projects within a prescribed "service area," typically a defined watershed of combination of watershed. Ideally, the wetland functional assessment methodology used to evaluate project impacts must be the same as the methodology used to assess the wetland functional gains at the wetland mitigation bank site.

The State of Florida and the federal government each have their own mitigation banking requirements and regulations, which are similar in many ways. One primary difference is the application of the wetland functional assessment methodology, whereby Florida's application tends to yield more credits than the federal application. For the purposes of this analysis, the more conservative number of credits likely to be generated under the federal mitigation banking program is used for credit generation calculations. Projects proposing impacts to wetlands in Southwest Florida typically require permit approval under both the state and federal regulatory programs and, therefore, require wetland credits acceptable under both the both state and federal regulatory programs.

Local governments or state agencies can establish and operate a wetland mitigation bank. However, to maintain a level playing field with private commercial mitigation banking for credit pricing, government mitigation banking is required to use a "full cost accounting" methodology when calculating the cost of generating credits. Among other things, full cost accounting requires that the fair market value of land be included as a credit generation cost. The end concept and relevance of full cost accounting is explained in more detail later in this document.

4.3 Regional Off-Site Mitigation Area

Regional Off-Site Mitigation Area (ROMA) is a defined program under the state of Florida regulatory program for wetlands. The ROMA program is currently available to local governments and some qualified non-profit organizations. ROMA projects (typically referred to as "ROMAs") have been initiated in several locations around Florida, with varying levels of ecological success. The concept of ROMAs was born out of the desire to consolidate the efforts and funds expended on minor, smaller, and/or disjointed mitigation projects into more cohesive and meaningful mitigation efforts with benefits on a landscape sale. ROMAs have been used to collect funds in a type of early credit sale basis with the defined goal of using the funds to purchase/acquire land and implement a mitigation plan. The sale of these early or "prospective" wetland credits has become an area of regulatory concern because some ROMA projects can take many years to actually implement any mitigation plan elements that produce actual "lift" to existing wetland functions. Credits generated by ROMAs may be sold on the open market, subject to full cost accounting of credit generation costs.

4.4 In-Lieu Fee

The federal In-Lieu Fee (ILF) program is similar to Florida's ROMA program with many of the same benefits and constraints. The ILF program allows for early credits, the collection of fees for land purchases and planned work, and does not always require that the entire proposed ILF area be under the ownership of the applicant. As in wetland mitigation banking, a permit separate and distinct from the state's permit is required under the federal program.

Both ROMA and ILF project areas can include land not yet under a single ownership or control. In addition, ROMAs and ILF projects may be composed of multiple, distinct, and even widely separated parcels, provided the various parcels share an ecological commonality in a landscape context.

While both ROMA and ILF programs are primarily for wetland mitigation credit generation, upland areas may be included and their value to listed species can be accounted for within a ROMA/ILF using the same principles discussed under the Habitat Conservation Bank section below.

5.0 HABITAT CONSERVATION BANKS

Habitat Conservation Banking involves the long-term management and preservation of existing wildlife habitats for the benefit of specific protected species. Unlike wetland mitigation, which is intended to replace wetland losses (no net loss of wetland function as its goal), habitat conservation is used to protect existing habitat values, where no such protection currently exists as compensation for direct or indirect habitat impacts elsewhere. The terms "compensation" and "habitat compensation" are used throughout this analysis to differentiate units and values derived

from benefits to listed species habitat versus “mitigation” which is used for increases in wetland function.

Habitat conservation banks typically provide species-specific compensation units that can be used to offset impacts to other habitat used by a given protected species. Habitat Conservation Banks can be used for more than one species when the bank site has appropriate habitat types and when the required land management and habitat goals of the different species are not in conflict. As with wetland mitigation banking, a habitat conservation bank has a defined service area, specific ecological goals, and requirements for financial assurances for implementation and long-term management.

6.0 REGULATORY AGENCIES

For permitting of wetland impacts and associated mitigation requirements in Southwest Florida, the State’s wetlands protection program is administered by the Florida Department of Environmental Protection (FDEP), the SFWMD, and the federal program by the U.S. Army Corps of Engineers (COE). The program for permitting of habitat conservation banks is administered by the U.S. Fish and Wildlife Service (USFWS).

6.1 FDEP/SFWMD

The FDEP typically permits wetland mitigation banks where a given state water management district has an operational role, financial interest, or other potential conflict. The FDEP solicits and considers input from the Florida Fish and Wildlife Conservation Commission (FWCC) regarding wildlife issues. The SFWMD typically permits all other wetland mitigation banks and also utilizes comments and input from the FWCC. ROMAs are typically reviewed by the FDEP with FWCC input.

6.2 COE

Federal review of wetland mitigation or ILF applications involves multiple federal agencies with COE typically taking the role of lead agency. The assigned COE project manager leads a multi-agency team known as an Interagency Review Team (IRT). For a proposed wetland mitigation bank or ILF in the North Belle Meade, the primary IRT participants are most likely to be the COE, the U.S. Environmental Protection Agency (EPA), and the USFWS.

6.3 USFWS

Federal review of habitat compensation banks involves the USFWS with input from the FWCC.

7.0 MITIGATION PROGRAMS - APPLICABILITY TO NORTH BELLE MEADE

7.1 PRM

PRM is project and parcel-specific and not currently encourage by regulatory agencies. As such, a PRM project is not considered in this analysis.

7.2 Wetland Mitigation Bank

The establishment of a wetland mitigation bank within the North Belle Meade is compared as an alternative within this analysis. Challenges inherent with wetland mitigation banking include the need for property ownership or control from the onset of permitting, and a well-defined time schedule for implementation and full success.

7.3 ROMA/ILF

For the purposes of this analysis, ROMA and ILF project requirements are considered jointly with the most restrictive element of each program dictating for specific requirements or criteria. A ROMA/ILF project could only be proposed by Collier County or by a qualified non-profit entity for the North Belle Meade. A ROMA/ILF project appears to be a closer fit to the current conditions, opportunities, and constraints of using the North Belle Meade for possible wetland credit and habitat compensation units based on the following elements common to both programs.

The proposed project area does not need to be in single ownership or control at the time of project permitting or at the time of initial implementation on areas or phases under permittee's ownership or control. Early credit sales can be used to acquire land and/or fund implementation of mitigation plan/activities.

Required time frames for mitigation implementation and project phases tend to be more flexible with ROMA/ILF projects than with wetland mitigation banking. Open Market ROMA/ILF wetland credits generated by a ROMA/ILF project could be permitted as available to be sold on the open market if the full cost accounting method for credit generation cost is used as the basis for the pricing of credits (explained in more detail in Numerical Analysis Section of this report).

Single User ROMA/ILF- An alternative to an open market ROMA/ILF is the single-user ROMA/ILF project. This approach would identify Collier County as the user of the wetland mitigation credits and habitat compensation units from a ROMA/ILF sponsored and supported by Collier County. Under this approach, the hypothetical costs of generating the credits (the full cost accounting methodology) are not required as a basis for credit pricing.

This analysis provides the costs to generate credits with and without land costs to differentiate between an open market ROMA/ILF (or wetland mitigation bank) and the single-user ROMA/ILF alternative.

7.4 Habitat Conservation Bank

The use of appropriate lands within the North Belle Meade for habitat compensation, as either a separate distinct habitat conservation bank or as a component of a ROMA/ILF project would add a valuable component to a ROMA/ILF project.

The North Belle Meade is home to, or used by, a number of state and federally-listed wildlife species including the Florida panther, wood stork (*Mycteria americana*), and red-cockaded woodpeckers. For the purposes of this analysis, habitat compensation needs and habitat compensation units for the Florida panther are used to represent the potential value of uplands. A more detailed breakdown of other species compensation opportunities is possible but beyond the scope of this analysis. The use of panther as the driver of habitat compensation needs/values is reasonable given the prevalence of panther in the North Belle Meade and the prevalence of panther compensation needs throughout significant portions of Collier County.

The permitting of habitat compensation banks for panthers falls primarily under the jurisdiction of the USFWS with concurrence from the FWCC. For lands to be acceptable as compensation they must typically be either reasonably contiguous with a large area of existing conservation lands or large enough to provide a significant percentage of an adult panther home range habitat needs; not located where proximate or regional impacts may occur that would diminish the lands functionality for, or availability, to panther; and able to be actively managed to enhance and protect habitat values important to panther in perpetuity.

In the past, the USFWS has expressed reservations regarding the use of smaller and/or disjointed parcels in the North Belle Meade as for panther compensation. Also, concern exists over County road alternatives under consideration and the potential long-term land use patterns. The establishment of wetland mitigation bank or ROMA/ILF project area could potentially allay USFWS concerns.

8.0 MITIGATION ANALYSIS FRAMEWORK

The following analysis is based on evaluating the potential value of wetland mitigation and upland habitat compensation versus the potential costs to generate those values for a given area.

In this analysis, *Wetland Mitigation Value* is used as the number of wetland credits generated times the current market per-credit price. Similarly, *Upland Mitigation Value* is used in this analysis as the number of habitat compensation units generated times the current market price per unit. The concept of *Combined Mitigation Value* is used to represent the combined values of wetland credits generated (based on market value) plus the value of panther compensation units (based on market value). This can be equated as:

Mitigation Value ($) = (# of credits x credit market price) + (# of panther compensation units x compensation unit market price)

Wetland credits are primarily awarded for verifiable increases in wetland functionality and the long-term management and protection of wetlands. The increase in wetland functions is often referred to as "lift." The primary drivers for ecological lift of wetlands in the North Belle Meade are will likely be the removal and ongoing control of exotic and nuisance vegetation plus the placement of lands into a single, cohesive program for long-term protection and management. Lands with exotic infestations levels too high to reasonably expect wetland revitalization following exotic removal will be cleared and subject to a wetland replanting program.

The potential does exist for significant ecological lift if hydrological enhancements can be made to improve the duration and/or depth of water within the hydroperiod wetlands. Much of the North Belle Meade has experienced hydroperiod alterations/impacts from past surface flow and ground flow alterations. Meaningful hydrologic enhancements would involve large scale water routing alterations that would require significant studies and permitting. This analysis includes results for wetland benefits both with and without hydrological enhancements, not to show that hydrological enhancement are probable, but to show the benefits of hydrological enhancements relative to credit/value generation should they occur as coincidental to any large scale hydrology improvement projects in the North Belle Meade.

The state's methodology for assessing wetland functions and wetland functional lift directly credits uplands for wetland functional lift. The methodology accepted by the COE only does so indirectly, consequently the federal program typically assigns lower lift scores than the state for a given area when uplands are present. Because most wetland impacts in Southwest Florida require mitigation under both the state and federal regulatory programs, only wetland lift generated by wetland areas (credits acceptable to both the state and the COE) are considered in this analysis.

Upland areas are valued in this analysis based on a key assumption that a given area will be determined to be acceptable for panther habitat compensation by the USFWS and the FWCC. Panther habitat compensation units are given as Panther Habitat Units (PHUs) and the number of PHU a given acre can provide is determined by a USFWS-approved methodology whereby habitat scores ranging from 1 to 10 are assigned based on habitat types (tied to preference of use by panther). For a given area, the total PHUs are the sum of each habitat's score times the acreage of that habitat type. For the purposes of this analysis, a conservative PHU habitat score of 7 units per acre is assigned to each upland acre. Wetland acreages also provide PHUs in the USFWS methodology and wetland mitigation credits often carry a number of PHUs with them. However, because this analysis is evaluating the potential combined mitigation value of areas, the market price of wetland credits is assumed to include the imbedded PHU value associated with wetland credits. In other words, the value of PHUs from wetland areas is treated as covered in the wetland credit prices.

The numbers of wetlands credits that can be generated in many areas within North Belle Meade, absent any hydrologic restoration, are primarily driven by the amount of exotic vegetation present. Currently, available mapping of land cover types in North Belle Meade (National Wetlands Inventory Mapping and SFWMD FLUCFCS mapping) do not including mapping of exotics or their levels of infestation. Without mapping of the location, extent, and relative levels of exotic infestations, an overall analysis of potential credit generation must rely on generalized characteristics of the area.

Should a specific portion(s) or area(s) of the North Belle Meade be defined for mitigation use, site reconnaissance could be performed to estimate exotic levels, and a more detailed site-specific analysis of credit generation potential and credit generation costs could be performed. Absent a clearly defined discrete area(s) for evaluation, the following analysis utilizes four potential scenarios for levels of exotic vegetation typical for the North Belle Meade. Numerical and graphed results in this analysis are normalized to a hypothetical 100-acre parcel size to facilitate visualization and understanding.

Fundamentally, the mitigation analysis framework can be given as:

- Determination of potential wetland credits generated by wetlands (without hydrologic enhancement) on a hypothetical 100-acre parcel for various levels of exotic vegetation infestation levels and varying percentages of wetland versus upland.

- Determination of potential wetland credits generated by wetlands (with hydrologic enhancement) on a hypothetical 100-acre parcel for various levels of exotic vegetation infestation levels and varying percentages of wetland versus upland.

- Determination of potential wetland credit generation costs for a hypothetical 100-acre parcel for various levels of exotic vegetation infestation levels and varying percentages of wetland versus upland.

- Determination of potential upland habitat (compensation) value for a hypothetical 100-acre parcel for varying percentages of wetland versus upland.

- Determination of *Combined Mitigation Value* as the value of wetland credits plus the value of upland compensation for a hypothetical 100-acre parcel for various levels of exotic vegetation infestation levels and varying percentages of wetland versus upland.

- Determination of the costs to generate the above, both with and without land costs.

- Comparison of Cost of Mitigation Generation versus value of:

  Wetland Mitigation (without hydrologic enhancement)
  Wetland Mitigation (with hydrologic enhancement)
  Wetland Mitigation (without hydrologic enhancement) plus *Upland Mitigation*
  Wetland Mitigation (with hydrologic enhancement) plus *Upland Mitigation*

9.0 MITIGATION NUMERICAL ANALYSIS AND RESULTS

9.1 Wetland Credit Generation

As indicated in the Mitigation Analysis Framework section, four representative scenarios for exotic vegetation infestation levels are used to approximate a range of habitat conditions typical of the North Belle Meade. These same infestation level scenarios are

used consistently throughout this analysis, including the analysis of costs. The four scenarios used are presented below in tabular form.

Table 1. **Exotic Infestation Scenarios***

Scenario 1 - Generally low levels of exotic vegetation infestation

Exotic Infestation Level	Percentage of a Given Area
Minimal	80
Minor 0-25% (E1)	20
Moderate 25-50% (E2)	0
High 50-75% (E3)	0
Severe 75-100% (E4)	0
Total	**100**

Scenario 2 - Generally moderate levels of exotic vegetation infestation

Exotic Infestation Level	Percentage of a Given Area
Minimal	30
Minor 0-25% (E1)	30
Moderate 25-50% (E2)	20
High 50-75% (E3)	20
Severe 75-100%	0
Total	**100**

Scenario 3 - Generally moderate to high levels of exotic vegetation infestation

Exotic Infestation Level	Percentage of a Given Area
Minimal	20
Minor 0-25% (E1)	15
Moderate 25-50% (E2)	20
High 50-75% (E3)	35
Severe 75-100% (E4)	10
Total	**100**

Scenario 4 - Generally very high levels of exotic vegetation infestation

Exotic Infestation Level	Percentage of a Given Area
Minimal	0
Minor 0-25% (E1)	10
Moderate 25-50% (E2)	15
High 50-75% (E3)	35

Scenario 4 (Continued)

Exotic Infestation Level	Percentage of a Given Area
Severe 75-100% (E4)	40
Total	**100**

*Note: Using a weighted average approach for each infestation scenario with E1 acreages weighted by 1, E2 acreages by 2, E3 acreages by 3, and E4 acreages by 4, and the resultant sum divided by 10 (1+2+3+4) yields a weighted average of 2, 13, 20, 30, indicating a reasonable distribution of infestation scenarios

The wetland functional assessment methodology required by the state and primarily used for permitting through COE is the Uniform Mitigation Assessment Methodology (UMAM).

For wetland credit calculations for each land cover type and in general terms, UMAM assigns scores on a per acre basis for existing conditions and for the proposed conditions should a proposed mitigation plan be implemented and successful. The difference between scoring of the existing conditions and the scoring of the with-mitigation conditions is calculated as the ecological lift (also called the "delta"). Factors for "Risk" (based on the likelihood the proposed wetland mitigation will ultimately succeed) and "Time Lag" (the anticipated time difference between when a wetland impact occurs and the associated mitigation reaches a high level of functionality) are selected and used to modify the lift number to arrive at the per acre credit number for that land cover type. To get the total wetland credits, each land cover type acreage is multiplied by the per-acre credit number for that land cover and the results are summed.

For this analysis, where the primary credit generation is exotic eradication, the Risk and Time Lag factors are assumed to be negligible because the process of exotic eradication is known to be a successful tool and the ecological benefits begin immediately.

The total number of wetland credits that a given area can generate is a function of the number of wetland acres within the area. For areas comprised of both uplands and wetlands, the total wetland credit number must be adjusted down based on the percentage of the area that is upland.

For this analysis the following hypothetical upland/wetland ratios are used to provide a range of possible condition as the y-axis on graphs:

- 10 Percent Upland/90 Percent Wetland
- 25 Percent Upland/75 Percent Wetland
- 50 Percent Upland/50 Percent Wetland
- 75 Percent Upland/25 Percent Wetland
- 90 Percent Upland/10 Percent Wetland

The total number of credits a given area can generate is a function of the UMAM scoring tables for the four infestation level scenarios based on a hypothetical 100± acre parcel size is given in Exhibit 1.

The results from the UMAM calculations (Exhibit 1) for the representative upland/wetland land percentages are presented below (Figures 1 and 2).

Figure 1 - Wetlands Credits without Hydrologic Enhancement

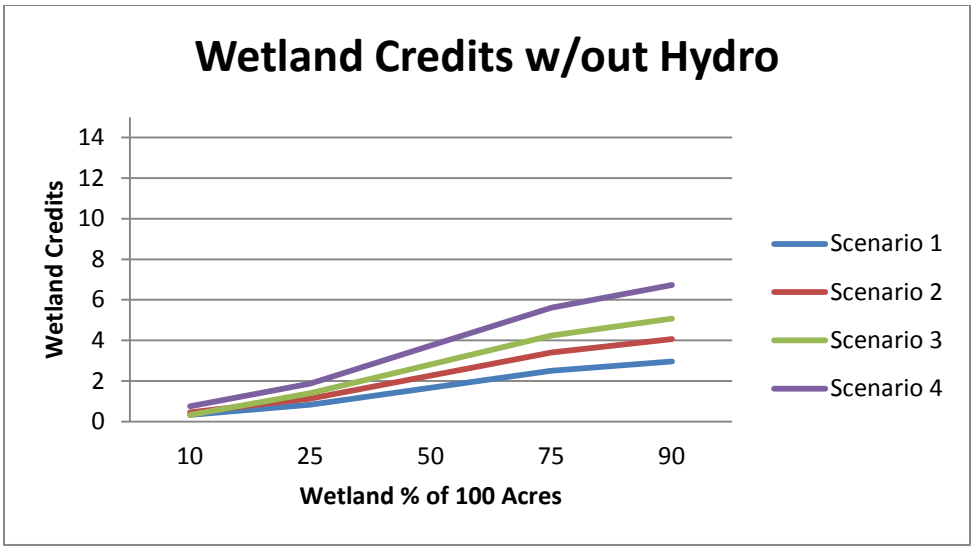
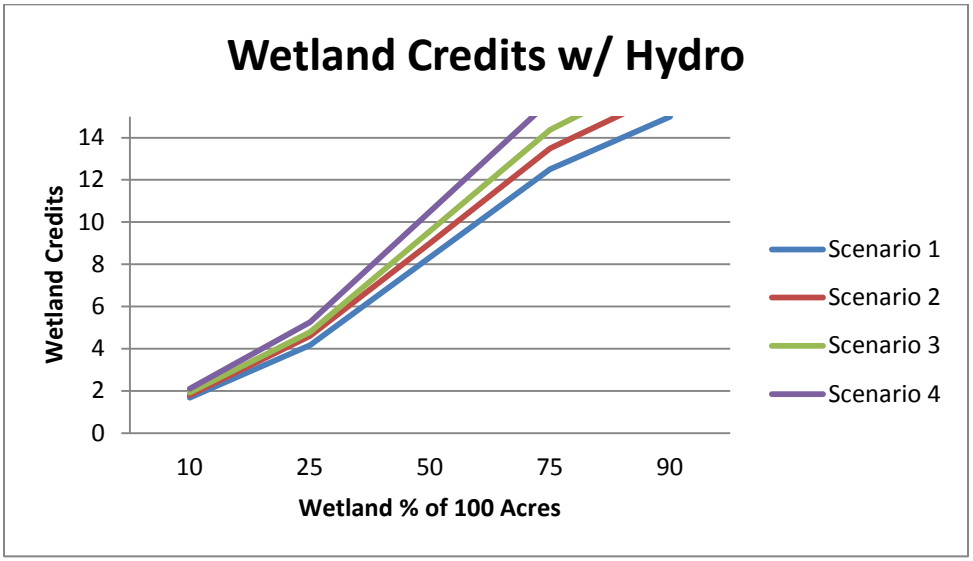


Figure 2 - Wetlands Credits with Hydrologic Enhancement



9.2 Upland Credit Habitat (Compensation) Generation

Upland credit generation is calculated as the acreage of uplands times an assumed average PHU score of 7 per acre.

10.0 MITIGATION VALUES

In order to estimate mitigation values, the following assumptions were used for this analysis:

- Wetland Credit Value (per market) = $75,000.00/credit
- PHU value = $650.00/PHU
- Average PHU Score per acre in North Belle Meade = 7+
- PHU values for wetland credit is already accounted for in wetland credit value
- *Combined Mitigation Value* Equation:
  Combined Mitigation value = *Wetland Mitigation Value + Upland Mitigation Value*
  = (number of wetland credits x credit value) + (number of upland acres x 7 PHU/acre x value per PHU)
  = (number of wetland credits $75,000/credit) + (number of upland acres x $4,500/acre)

Exhibit 2 contains the tabular applications of the *Combined Mitigation Value* equation with the assumed values for the infestation scenarios and representative percentages of wetlands versus uplands for a 100 acre parcel size. Graphing of the resultant data for the mitigation with and without hydrological enhancement is presented below as Figures 3 and 4.

Figure 3 - Mitigation Value without Hydrologic Enhancement

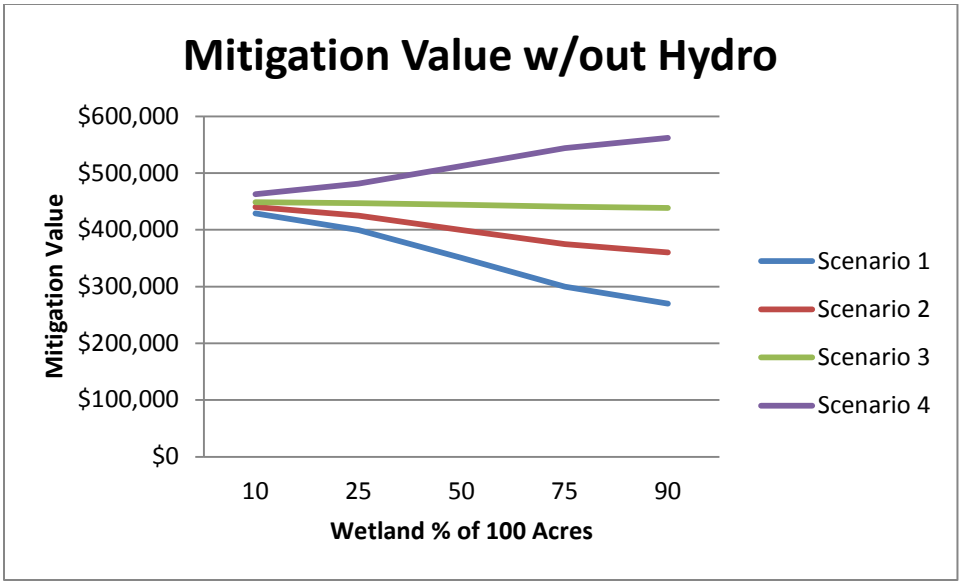
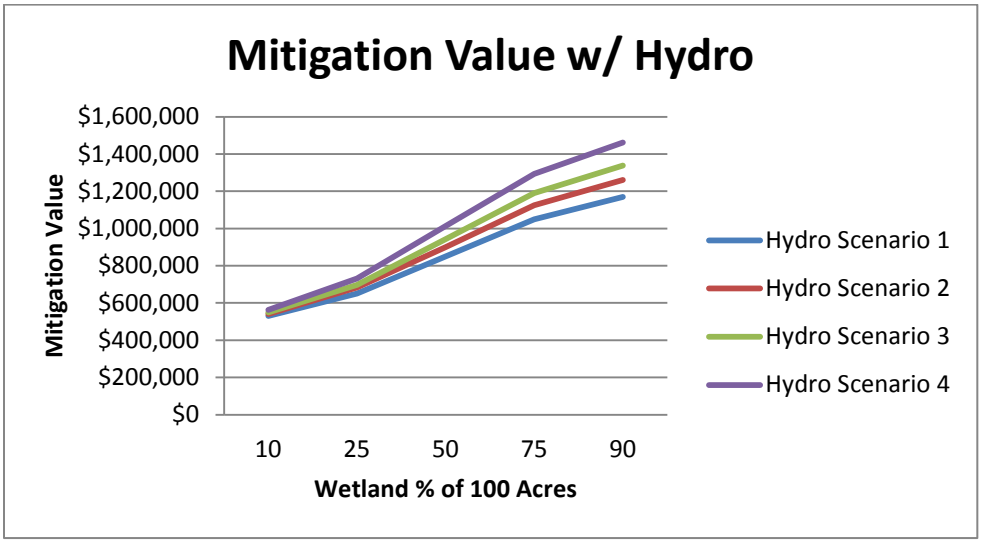


Figure 4 - Mitigation Value with Hydrologic Enhancement



11.0 CREDIT GENERATION COSTS

For the purpose of this analysis and to reduce the number of analytic variables, the costs of generating wetland credits and PHUs are combined as "*Credit Generation Costs*." As such, except when denoted otherwise, the term "*Credit Generation Cost*" can be the considered as the cost to generate a given *Mitigation Value*.

Under the Full Cost Accounting methodology required for mitigation banks selling credits on the open market, the following cost elements must be considered:

- Land cost
- Implementation costs which include:
  - Initial exotic treatments/eradication
  - Five years of ongoing treatment of regrowth
  - Replanting
  - Funding of perpetual management
  - Prescribed burning- where/when appropriate
  - Program administration cost

11.1 Cost Assumptions

For the purpose of this analysis, the following cost assumptions are used.

11.1.1 Land Costs

Although per-acre land prices vary within the North Belle Meade, for the purposes of this analysis, an assumed fair market value of $2,250/acre is used.

11.1.2 Implementation Time Period

The implementation time for mitigation activities is assumed to be five years (typical of most mitigation plans). This analysis uses this five year implementation period to calculate implementation costs for any given phase or discrete area, after which long-term maintenance and management will be funded from the perpetual management account.

11.1.3 Initial Exotic Treatment Eradication

For initial exotic treatment, it is assumed that there will be reasonable access to areas requiring treatment, primary treatment methodology will be treat-in-place with minimal off-site removal of material, and treatment areas will be 50 acres or greater.

11.1.4 Treatment Costs

For areas with less than 25 percent exotic/nuisance infestation - $500 per acre.
For areas of 25 to 50 percent exotic/nuisance infestation - $1,000 per acre.
For areas of 51 to 75 percent exotic/nuisance infestation - $1,500 per acre.
For areas of greater than 75 percent exotic/nuisance infestation - $2,000 per acre.

Ongoing nuisance/exotic treatments (5 Years)
Minimum of 2 treatment events per year will occur for first 5 years.
For areas with less than 25 percent exotic/nuisance infestation - $25 per acre/year.
For areas of 25 to 50 percent exotic/nuisance infestation - $50 per acre/year.
For areas of 51 to 75 percent exotic/nuisance infestation - $75 per acre/year.
For areas of greater than 75 percent exotic/nuisance infestation - $125 per acre/year.
Replanting - assume replanting of areas with initial exotic infestation levels at or greater than 75 percent at $3,500/acre.

11.1.5 Funding of Perpetual Maintenance

Funding of perpetual maintenance will be $1,025 per acre.

11.1.6 Prescribed Burning

$1,500 per 100 acres for initial burn.
$600 per 100 acres for second/follow-up burn.

Program Administration - assume 8 percent of implementation costs per year as is typically required through permitting process.

11.1.7 Program Administrative Cost

Typical administrative costs for ROMA or ILF programs run about 8 percent of implementation costs per year (including land costs) for the implementation period (five years). The actual program costs will be greatly affected by the actual implementation costs.

The current environmental conditions in the North Belle Meade vary greatly. Of the various infestation level scenarios and upland/wetland habitat composition combinations given above, the conditions and resulting implementation number for Scenario 3 (moderate to high levels of infestation on Table Q2 (25 percent uplands and 75 percent wetlands) is chosen as a reasonable expectation of potential mitigation lands. The combined implementation cost for these parameters is shown as $244,863 per 100 acres. By rounding this number to $245,000 and adding in land cost of $225,000 per 100 acres then multiplying the sum by 0.08 yields the administrative cost as:

($245,000 + $225,000) x 0.08 = $37,600 Administrative Cost per 100 acres

This cost is for an assumed 5-year implementation period. On a per-year basis, the cost would $37,600/5 = $7,520 per 100 acres

11.2 Implementation Costs

The implementation costs in wetland areas, for the purpose of this analysis, are considered as the cost of initial treatment of exotic and nuisance vegetation species, five years of ongoing treatment of exotic/nuisance species, clearing and replanting of areas where exotic infestation levels meet or exceed 75 percent, prescribed burning, and funding of the long-term management fund.

The costs for all except the funding element are highly dependent on the levels of exotic infestation and the relative percentages of upland versus wetlands for a given site or area. Any upland within a mitigation bank or ROMA/ILF grogram area must also be managed and maintained. The wetland implementation cost plus upland implementation cost are combined to give the combined implementation cost for each situation. The wetland implementation costs, upland implementation costs, and combined implementation costs for the four infestation scenarios under a range of potential upland/wetland ratio situations is found as Exhibit 3.

11.3 Total Credit Generation Costs

The Total Credit Generation Costs can be generally described as:

Land cost + Combined Implementation Costs + Administration Costs

Using the combined implementation costs from the tables in Exhibit 3, and adding the

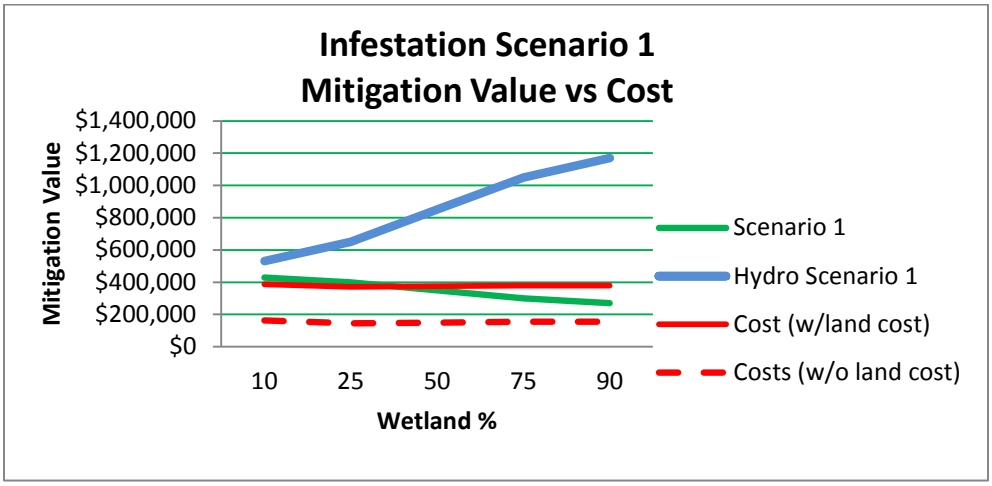
assumed per 100 acre values for land cost ($225,000) and administration costs ($37,600) yields the total credit generation costs to compare against *Mitigation Value*s for each infestation level scenario across a range up upland/wetland land composition ratios. The data for this numerical operation is provided as Exhibit 4.

12.0 MITIGATION VALUE AND COSTS COMPARISONS

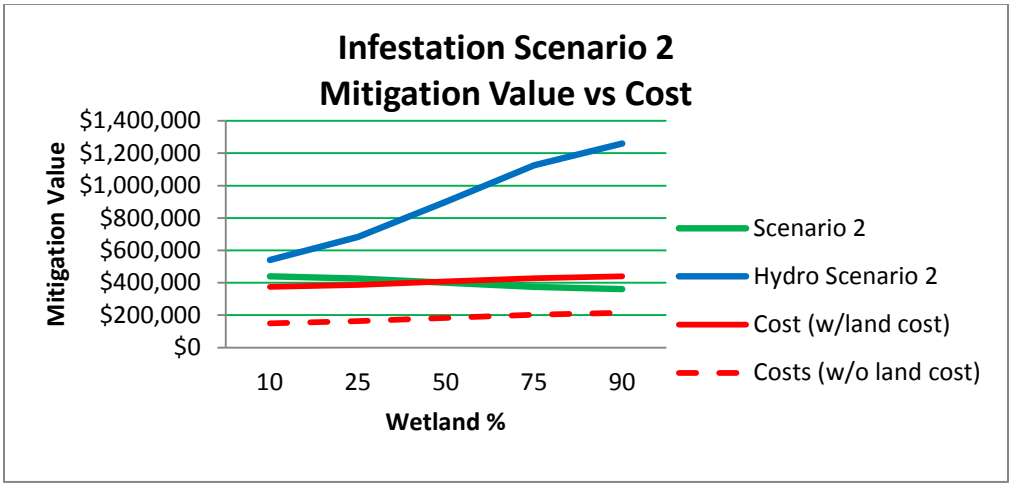
Graphically, the cost results from Exhibit 4 can be added to the results for *Mitigation Value* for each scenario as shown below. The label "hydro scenario" denotes the use of the wetland credit generation scoring used for the "with hydrologic enhancement" condition. The dashed red line indicates to total credit generation cost minus the assumed land value of $2,250/acre.

Figure Series 5 - Mitigation Value versus Cost

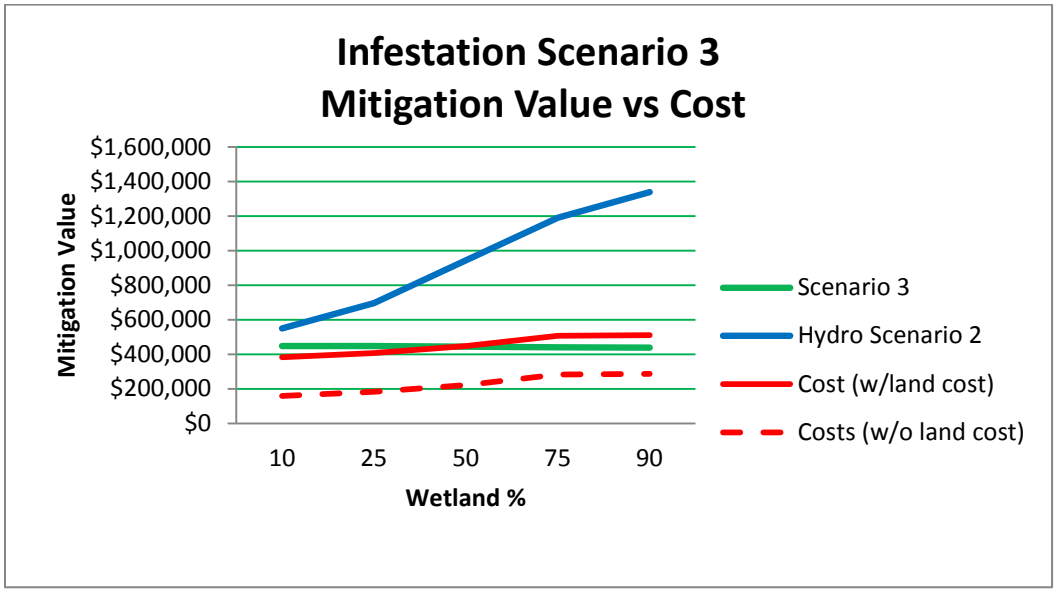
Infestation Scenario 1 - Low Levels of Exotic Infestation



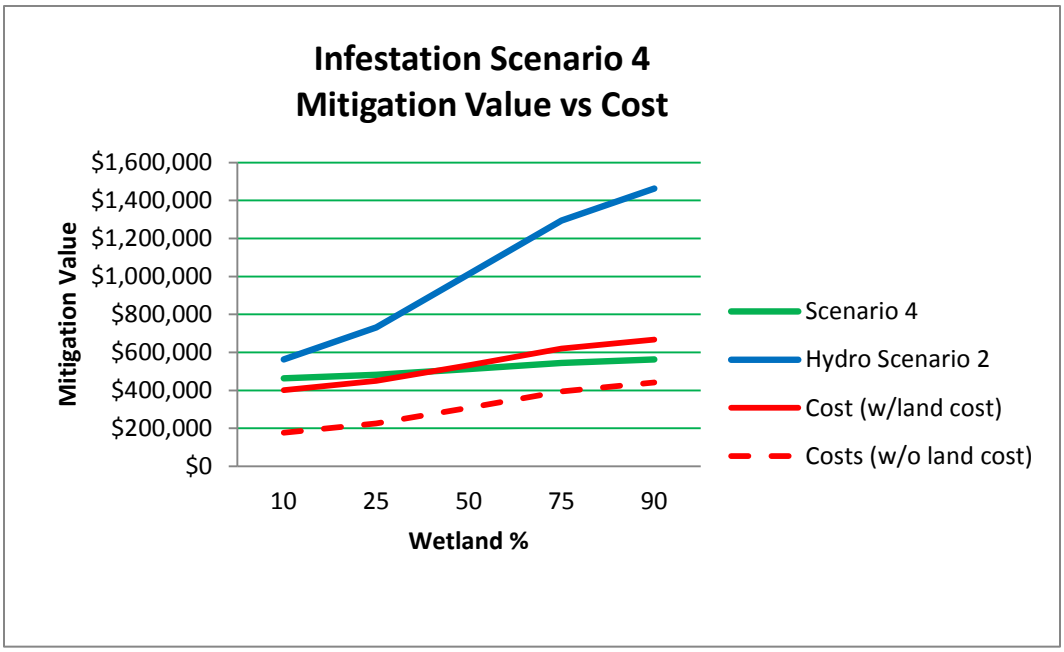
Infestation Scenario 2 - Moderate Levels of Exotic Infestation



Infestation Scenario 3 - Moderate to High Levels of Exotic Infestation



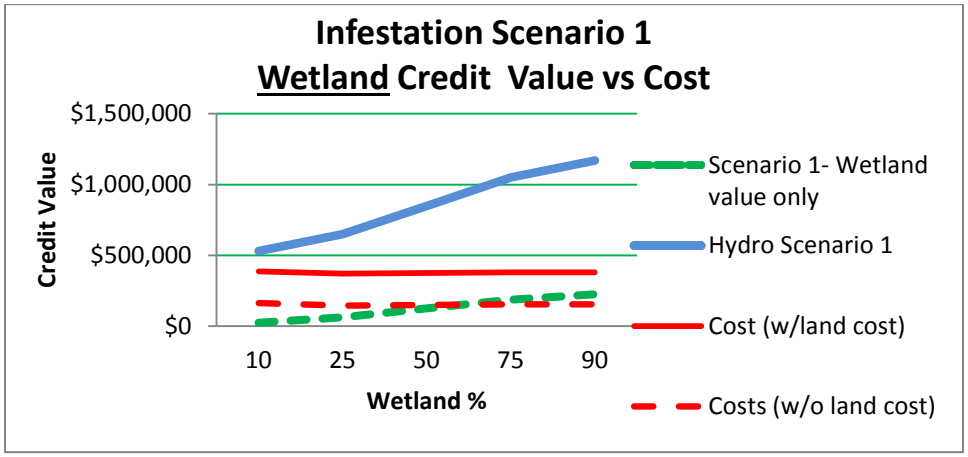
Infestation Scenario 4 - High Levels of Exotic Infestation



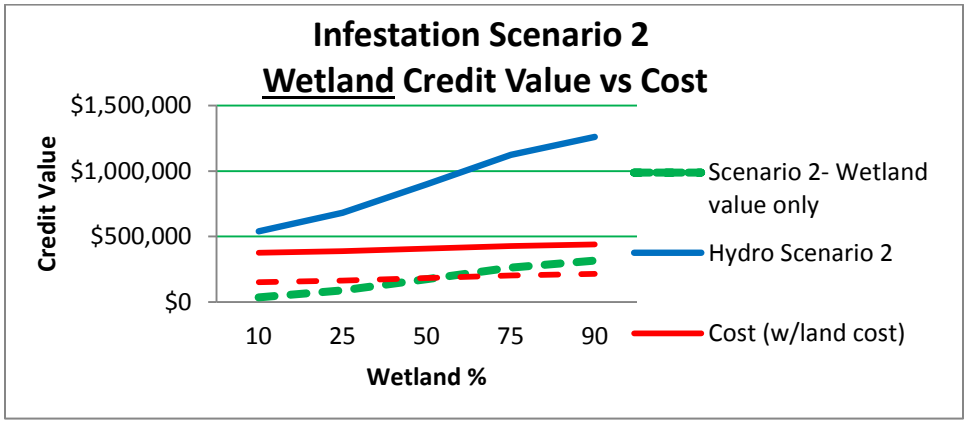
The concept of combined *Mitigation Value* combines the value of wetland credits with the upland values for panther (or other species) habitat compensation. Should a proposed mitigation banking or ROMA/ILF project area not be approved for species compensation or if a sufficient market does not exist for habitat compensation, then the adjusted actual *Mitigation Value* would be the value of the wetland credits alone. Graphing of data for wetland credit values only and their associated cost yields the following:

Figure Series 6 - Wetland Value Only versus Cost

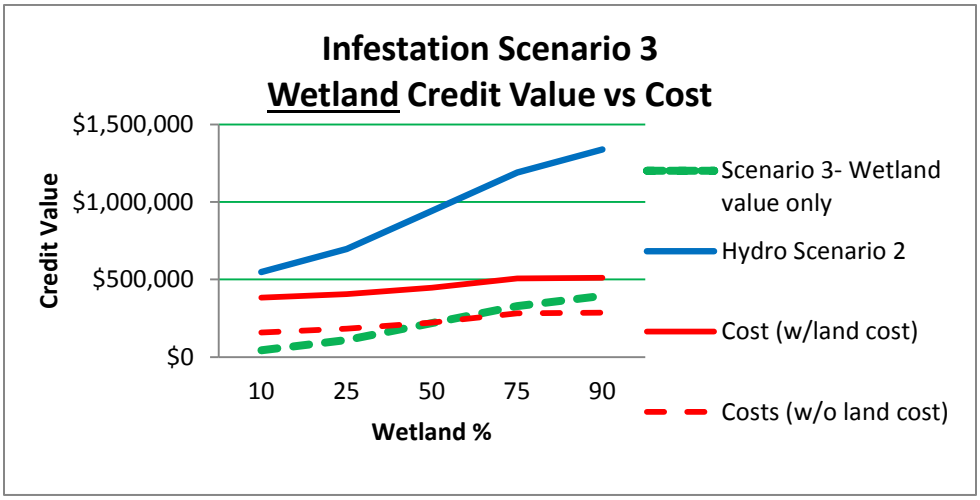
Infestation Scenario 1 - Low Levels of Exotic Infestation



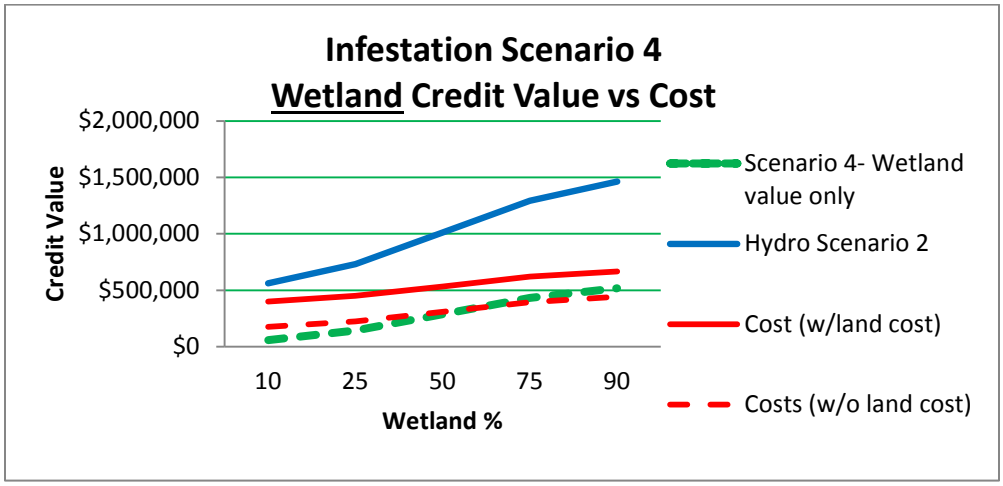
Infestation Scenario 2 - Moderate Levels of Exotic Infestation



Infestation Scenario 3 - Moderate to High Levels of Exotic Infestation



Infestation Scenario 4 - High Levels of Exotic Infestation



13.0 DISCUSSION OF NUMERICAL ANALYSIS RESULTS

With a goal of establishing a mitigation program within the North Belle Meade that is cost-neutral or cost-positive to the Collier County, the following information is reflected in the above results of the numerical analysis:

13.1 Areas of Hydrologic Enhancement, Exotic Eradication, and Land Management

For areas where hydrologic enhancement will occur, the potential M*itigation Value* is significantly higher than costs under all infestation scenarios and all upland versus wetland land composition combinations where at least ten percent of the site is wetland (Figure Series 5, all infestation scenarios). This is due to the more significant increase in wetland function than can be achieved by rehydration than by exotic eradication and land management alone. The projected costs for any hydrologic enhancement are assumed to be part of other drainage basin restoration initiatives and are, therefore, not reflected in the cost numbers.

For the purposes of this analysis, and in particular to remain conservative regarding potential values, the balance of this discussion will focus on analysis data that does not include results from hydrologic enhancements. The benefits and value of any hydrologic enhancements, should they occur, would be additive to the *Mitigation Value*s discusses below.

13.2 Areas with Exotic Eradication and Land Management

For areas that would generate wetland functional increase through exotic vegetation eradication, replanting in certain high infestation areas, and land management only (no

hydrologic restoration), the amount of wetland credit generation and, therefore, the overall *Mitigation Value* is significantly less.

For areas of low and moderate infestation levels (Infestation Scenarios 1 and 2 – Figure Series 5 and 6) the overall mitigation value actually declines with increased percentage of wetlands on a given area, indicating the area has more value as wildlife compensation than wetland mitigation. For areas of moderate to high infestation levels (Scenario 3 – Figure Series 5), the overall *Mitigation Value* is relatively unchanged as a function of wetland percentage indicating such areas have about equal wetland *Mitigation Value* and upland compensation value.

Only in Scenario 4 of Figure Series 5, where high levels of exotic infestation is represented, is the value of the land for wetland mitigation higher than it is upland habitat compensation.

Under the open market concept (Wetland Mitigation Bank) where the full cost accounting approach is required to set credit prices on an open market, the cost sum that includes land cost ("Cost (with land cost)" line on Figure Series 5 and 6) would need to be applied. For minor, moderate, and even moderate to high levels of exotic infestation (Scenarios 1, 2, and 3 – Figure Series 5 and 6) mitigation lands that contained approximately 30 percent or more wetlands would have a negative net value (*Mitigation Value* minus Cost) when land cost is accounted for.

13.3 ROMA/ILF

Unless hydrologic enhancements can be assured for a sufficiently large given area, the above results indicate a commercial wetland mitigation bank is not likely to yield a financially neutral or positive outcome.

Under a single user approach (ROMA/ILF type program) where the land cost does not always need to be a consideration for credit pricing, the numerical analysis shows that a net positive number (for *Mitigation Value* minus cost) is theoretically possible across a broad range of infestation levels and upland/wetland composition levels. For projects proposed by Collier County (i.e., Collier County Transportation Department, Collier County Utilities Department, or Collier County Parks and Recreation Department) that include wetland impact and/or listed species habitat impacts requiring wetland mitigation and/or habitat compensation, the use of ROMA/ILF credits generated from a portion or portions of the North Belle Meade could represent a net cost savings to Collier County.

The County's current 2040 Long Range Transportation Program needs assessment for cost-feasible future roadway projects indicates an anticipated need for 180 wetland mitigation credits and 6,900 units of panther habitat compensation at projected costs of $11,058,000 and $6,932,000, respectively. Per-unit costs used in the Needs Assessment were $70,000 for wetland credits and $1,000 for panther compensation (PHUs). The actual cost to Collier County of the projected mitigation/compensation could be significantly lower on a per unit basis by using a ROMA/ILF project to generate the

needed credits and habitat compensation. Additionally, the funds spent purchasing the mitigation/compensation could be used to expand and operate the ROMA/ILF program.

The concept of establishing and operating a single-user ROMA/ILF project within a portion or portions of the North Belle Meade does appear to be financially feasible based on this analysis.

14.0 ROMA/ILF PROGRAM CONSIDERATIONS

Historically, ROMA and ILF projects have been permitted and operated with highly varying degrees of success. In a number of cases, monies have been collected under such a program with long delays, and even failure, in actual implementation of the mitigation plan measures. As a result, regulatory agencies have legitimate concerns about the mitigation plan implementation and timely success of proposed ecological benefits. A thorough and accurate tracking and accounting of dollars coming into and out of any ROMA/ILF will be important for a proposed ROMA/ILF project.

The concept of a critical mass in terms of land area that can be reasonably - expected to become part of any proposed ROMA/ILF project will be an important consideration. The necessary minimum land area is typically decided with the regulatory agencies on a case-by-case basis. For an area such as North Belle Meade, the FDEP and the COE could conceivable ask for 500± or even 1,000± acres as a minimum project size.

A significant advantage of the ROMA/ILF program is the total of the proposed project area does not need to be in the applicant/permittee's ownership up-front. Ideally, an applicant would own some of the necessary land area and be able to demonstrate a reasonable probability that the balance of the necessary land areas to attain the critical mass can/will be attained in some manner, including the use of collected monies for land purchase.

Within the North Belle Meade are a number of land parcels that have already been used for wetland mitigation and are, therefore, not available for further credit or upland compensation; however, the parcels could be counted towards the critical mass consideration. Also, land management of these parcels could possibly be accomplished by a ROMA/ILF project, under a separate agreement, with the projected funds typically spent by the entities responsible for each of the existing mitigation parcels going to the ROMA/ILF (or related entity) in exchange. Within the NRPA portion of North Belle Meade, lands that have not already been used for some form of mitigation and are available for full credit potential total over 2,000 acres.

For mitigation banking projects, funding assurance is required for the implementation work (minus the funding of the perpetual management account) during the first five years of the project, or a phase/geographic area of the project. Such assurances take the form of performance bounding or a specialized insurance policy. Alternative assurance options may be available for county governments implementing a ROMA/ILF.

Funding of the long-term management fund has been included in the implementation cost calculations in this analysis in order to conservatively simplify the analysis. Typically, long-term management accounts may be funded to a large degree from funds received from ongoing credit sales over time, rather than as an initial expense of mitigation implementation. While project or project phase implementation is typically a five year period, credit sales may occur over a longer than five year period. Funding of the long-term management account may be spread out over more than five years.

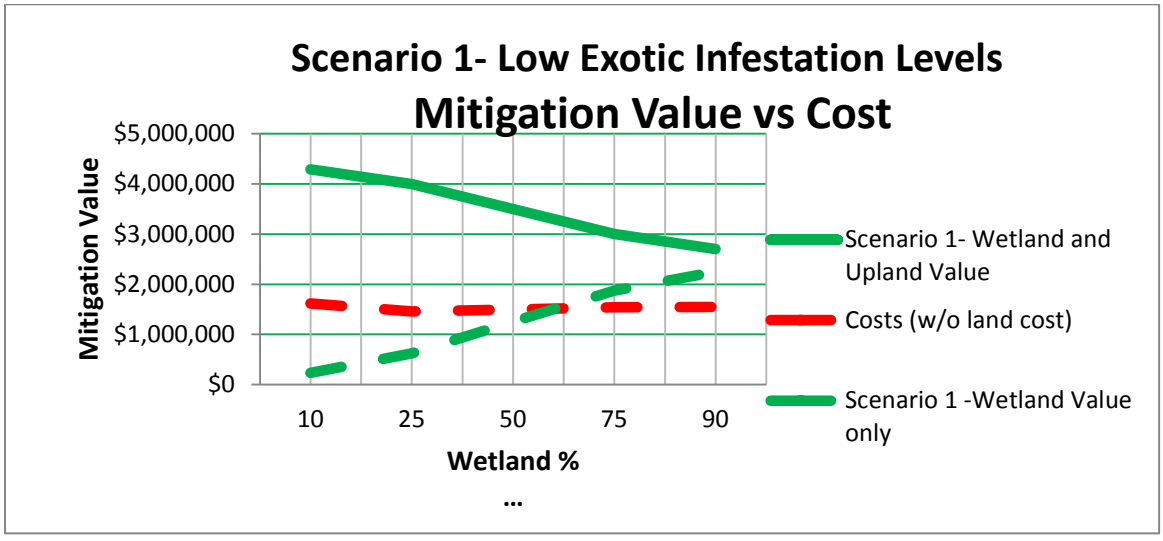
The potential ecological benefits of conservation easements are a critical factor an all forms of wetland mitigation or habitat compensation programs. To the degree conservation easements can be shown to eliminate the potential for alternate, less environmentally beneficial land uses, the placement of conservation easements over project lands is valuable. The existence of the County TDR program and the associated limitation on development potential for lands in the TDR program will need to be addressed with the FDEP and the COE.

The placement of significant areas of land into a ROMA/ILF program can be reasonably expected to make such lands acceptable to the USFWS and the FWCC for habitat compensation, subject to the landscape context of such lands for long-term panther use.

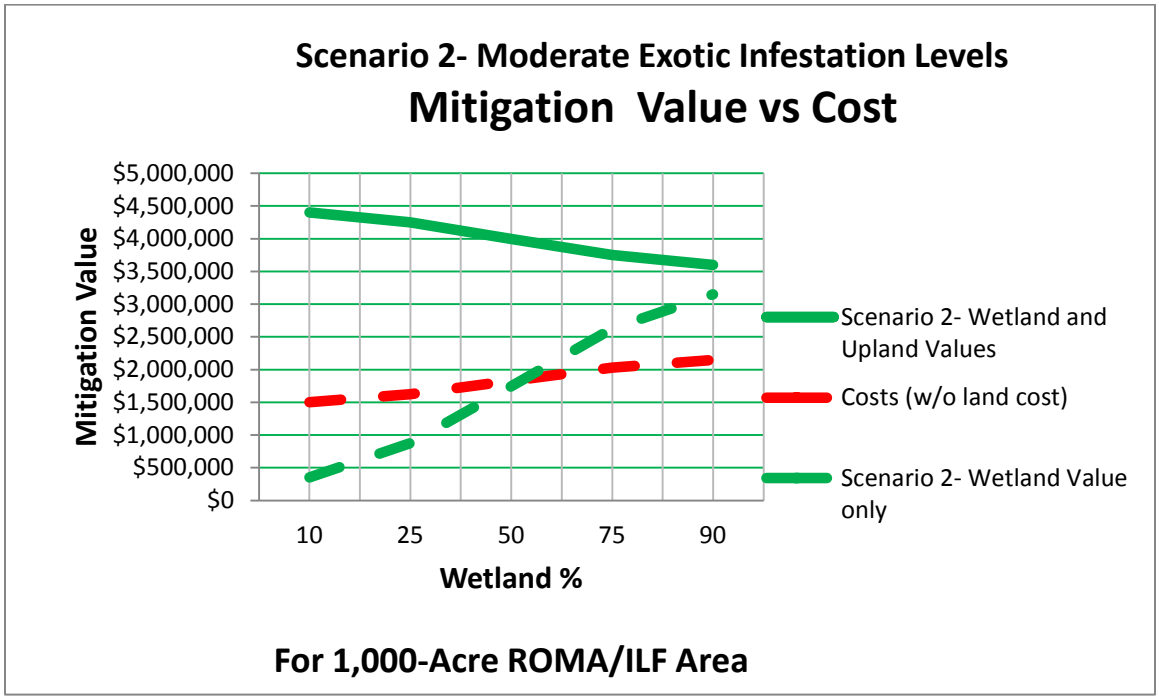
The relative value of upland compensation to the overall (*Combined*) *Mitigation Value* is significant in this analysis. This can be demonstrated by graphing the value of wetlands and uplands and wetland mitigation only, versus costs for each scenario on a 1,000± acre hypothetical project size as shown on the Graph Series 7, below.

Figure Series 7 – (Combined) Mitigation Value versus Cost

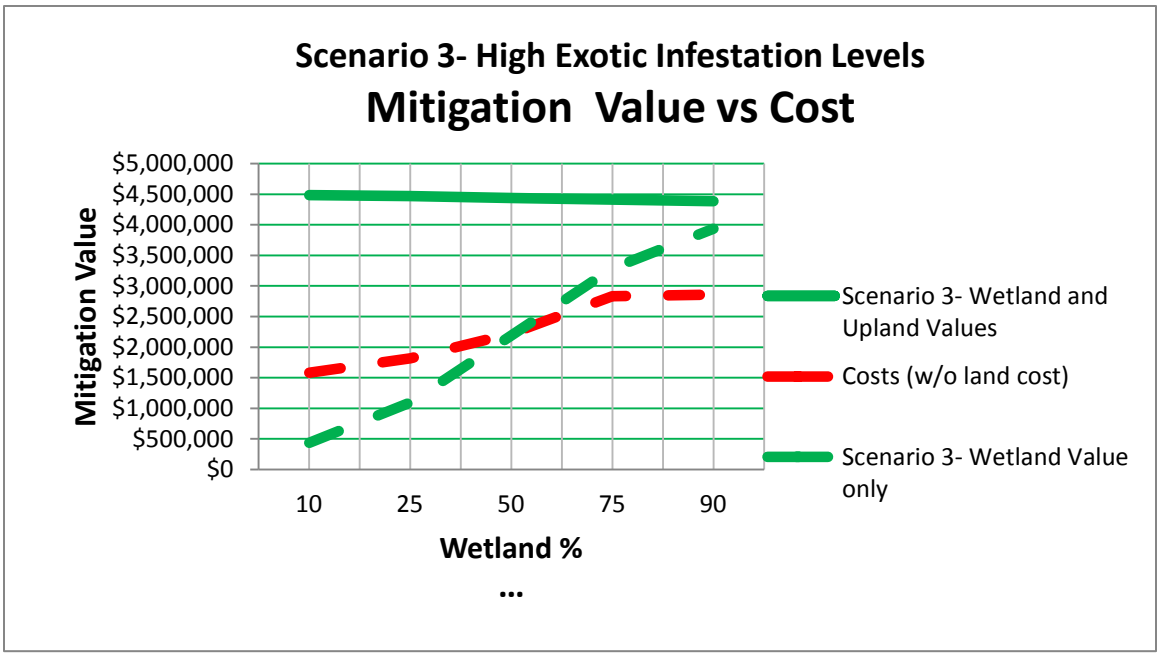
Scenario 1 – Low Exotic Infestation Levels



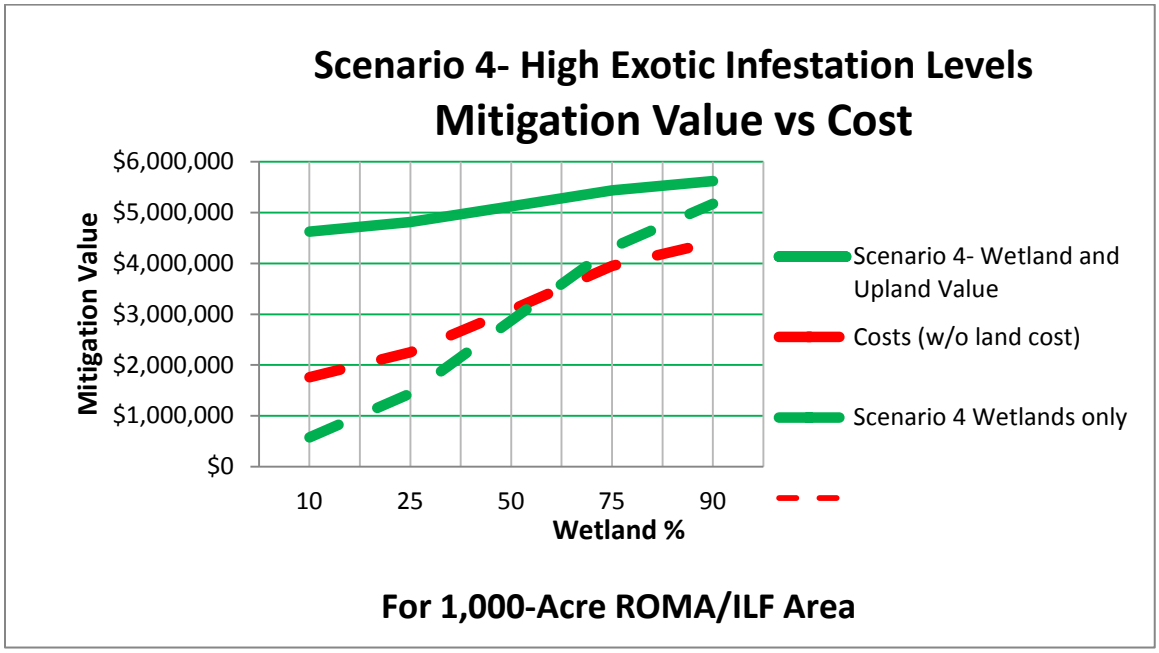
Scenario 2 – Moderate Exotic Infestation Levels



Scenario 3 – High Exotic Infestation Levels



Scenario 4 – High Exotic Infestation Levels



If the use of project uplands for panther habitat compensation is not acceptable to the regulatory agencies, then this analysis suggests ROMA/ILF will only work for:

- Areas of low exotic infestation levels as long as site is at least 70± percent wetlands
- Areas of moderate exotic infestation levels as long as site is at least 55 percent wetlands
- Areas of moderate to high exotic infestation levels as long as site is at least 45 percent wetlands
- Areas of high exotic infestation levels as long as site is at least 60 percent wetlands

15.0 PERMIT PROCESS

The typical process for the permitting of a wetland mitigation bank or ROMA/ILF project basically involves the following steps:

1. Site identification and ecological studies
2. Surveying and preliminary mitigation plan design
3. Pre-application meetings with the FDEP and the COE
4. Prospectus development and submittal
5. Site inspections by regulatory agencies
6. State and federal agencies do, or do not, deem the site and proposed project "appropriate"
7. State and federal application submittals
8. State and federal application reviews
9. Legal reviews
10. Permit issuance

From the time of site identification to permit issuance, the overall process can take two to four years.

16.0 CONCLUSION AND RECOMMENDATIONS

The following conclusions are based on the assumption hydrological enhancement is not an available option.

A Collier County single-user ROMA/ILF project within the North Belle Meade appears to be a cost-feasible generator of wetland mitigation credits and panther habitat compensation if the ROMA/ILF is of sufficient size and properly located to assure long-term support for the Florida panther.

A Collier County single-user ROMA/ILF project within the North Belle Meade appears to be a cost-feasible generator of wetland credits for a site(s) if exotic infestation levels are relatively high and the percentage of wetlands on the site(s) is high.

To further refine the analysis results and increase the level of certainty regarding the feasibility of portions of North Belle Meade to serve as cost-effective mitigation, further steps are recommended. A more site-specific mitigation evaluation tool, based on the methodology used in this analysis, is currently being developed to allow for efficient evaluations of specific areas within North Belle Meade. A selection of potential ROMA/ILF areas should be performed. Then limited site reconnaissance coupled with the use of existing aerials could yield more refined information regarding levels of exotic infestation and the extent of wetlands for each selected area. Information gained from such efforts should be input into the new analysis tool to gain more site-specific results.

This site-specific evaluation will allow the input of data gained from limited site reconnaissance of particular parcels or areas to generate site-specific data regarding potential mitigation values and associated costs. The results of this type of analysis, based on more site-specific data, will result in a higher degree of accuracy and allow for a higher degree of certainty regarding the potential for a specific area or areas to serve as feasible mitigation value generators.

17.0 RECOMMENDED NEXT STEPS - ASSUMING ROMA/ILF OPTION

As indicated previously, this analysis relies on certain assumptions and anticipated regulatory agency positions regarding certain issues, including the use of North Belle Meade lands for panther compensation, the impacts of the County's TDR program on potential credit generation, scoring of wetland functions, and possible alternatives for financial assurances.

Discussions and/or meetings with the FDEP, the COE, and the USFWS with the overall North Belle Meade as the initial focus should occur to discuss and resolve issues related to the TDR program's potential impact on wetland credit generation and the appropriateness of certain portions of North Belle Meade for panther compensation in a ROMA/ILF project. A clear

understanding and agreement on these issues would significantly aid in the selection of appropriate lands for consideration for placement in a conceptual ROMA/ILF.

Sites identified for potential inclusion in a ROMA/ILF conceptual plan could then be assessed on a more site-specific basis and the analysis tools developed by this analysis could be used to evaluate the potential value and costs for each site.

EXHIBIT 1

UMAM WORKSHEETS

NORTH BELLE MEADE
UMAM WORKSHEETS
WETLAND MITIGATION FUNCTIONAL SCORING
July 2016

UMAM WORKSHEET 1 of 2
WETLAND CREDIT GENERATION PER 100 ACRES (WITHOUT HYDROLOGIC LIFT and WITHOUT UPLAND CREDIT GENERATION)

Polygon No.	FLUCFCS TYPE - Exotic Level	UMAM Acres	Phase	Location		Hydrology		Community		Existing w/out UMAM	Proposed w/ UMAM	Delta	T-factor	Risk	Pres. Fact	RFG	Credits
				w/o	with	w/o	with	w/o	with								
SCENARIO 1 at 90% Wetlands/ 10% Uplands																	
a	Wetland - No Exotics	72.00	N/A	8	9	5	5	8	8	0.700	0.733	0.033	1.00	1.00	N/A	0.033	2.40
b	Wetland-E1	18.00	N/A	8	9	5	5	8	8	0.700	0.733	0.033	1.00	1.00	N/A	0.033	0.60
c	Wetland- E2	0.00	N/A	8	9	5	5	7	8	0.667	0.733	0.067	1.00	1.00	N/A	0.067	0.00
d	Wetland- E3	0.00	N/A	8	9	5	5	7	8	0.667	0.733	0.067	1.00	1.00	N/A	0.067	0.00
e	Wetland-E4	0.00	N/A	8	9	5	5	6	8	0.633	0.733	0.100	1.00	1.00	N/A	0.100	0.00
Subtotal		**90.00**															**3.00**
SCENARIO 1 at 75% Wetlands/ 25% Uplands																	
a	Wetland - No Exotics	60.00	N/A	8	9	5	5	8	8	0.700	0.733	0.033	1.00	1.00	N/A	0.033	2.00
b	Wetland-E1	15.00	N/A	8	9	5	5	8	8	0.700	0.733	0.033	1.00	1.00	N/A	0.033	0.50
c	Wetland-E2	0.00	N/A	8	9	5	5	7	8	0.667	0.733	0.067	1.00	1.00	N/A	0.067	0.00
d	Wetland- E3	0.00	N/A	8	9	5	5	7	8	0.667	0.733	0.067	1.00	1.00	N/A	0.067	0.00
e	Wetland-E4	0.00	N/A	8	9	5	5	6	8	0.633	0.733	0.100	1.00	1.00	N/A	0.100	0.00
Subtotal		**75.00**															**2.50**
SCENARIO 1 at 50% Wetlands/ 50% Uplands																	
a	Wetland - No Exotics	40.00	N/A	8	9	5	5	8	8	0.700	0.733	0.033	1.00	1.00	N/A	0.033	1.33
b	Wetland- E1	10.00	N/A	8	9	5	5	8	8	0.700	0.733	0.033	1.00	1.00	N/A	0.033	0.33
c	Wetland-E2	0.00	N/A	8	9	5	5	7	8	0.667	0.733	0.067	1.00	1.00	N/A	0.067	0.00
d	Wetland- E4	0.00	N/A	8	9	5	5	7	8	0.667	0.733	0.067	1.00	1.00	N/A	0.067	0.00
e	Wetland- E4	0.00	N/A	8	9	5	5	6	8	0.633	0.733	0.100	1.00	1.00	N/A	0.100	0.00
Subtotal		**50.00**															**1.67**
SCENARIO 1 at 25% Wetlands/ 75% Uplands																	
a	Wetland - No Exotics	20.00	N/A	8	9	5	5	8	8	0.700	0.733	0.033	1.00	1.00	N/A	0.033	0.67
b	Wetland- E1	5.00	N/A	8	9	5	5	8	8	0.700	0.733	0.033	1.00	1.00	N/A	0.033	0.17
c	Wetland- E2		N/A	8	9	5	5	7	8	0.667	0.733	0.067	1.00	1.00	N/A	0.067	0.00
d	Wetland- E3		N/A	8	9	5	5	7	8	0.667	0.733	0.067	1.00	1.00	N/A	0.067	0.00
e	Wetland- E4		N/A	8	9	5	5	6	8	0.633	0.733	0.100	1.00	1.00	N/A	0.100	0.00
Subtotal		**25.00**															**0.83**
SCENARIO 1 at 10% Wetlands/ 90% Uplands																	
a	Wetland - No Exotics	8.00	N/A	8	9	5	5	8	8	0.700	0.733	0.033	1.00	1.00	N/A	0.033	0.27
b	Wetland- E1	2.00	N/A	8	9	5	5	8	8	0.700	0.733	0.033	1.00	1.00	N/A	0.033	0.07
c	Wetland- E2	0.00	N/A	8	9	5	5	7	8	0.667	0.733	0.067	1.00	1.00	N/A	0.067	0.00
d	Wetland- E3	0.00	N/A	8	9	5	5	7	8	0.667	0.733	0.067	1.00	1.00	N/A	0.067	0.00
e	Wetland- E4	0.00	N/A	8	9	5	5	6	8	0.633	0.733	0.100	1.00	1.00	N/A	0.100	0.00
Subtotal		**10.00**															**0.33**

UMAM Worksheet 1 of 2 (Continued)

Polygon No.	FLUCFCS TYPE - Exotic Level	UMAM Acres	Phase	Location		Hydrology		Community		Existing w/out UMAM	Proposed w/ UMAM	Delta	T-factor	Risk	Pres. Fact	RFG	Credits
				w/o	with	w/o	with	w/o	with								
SCENARIO 2 at 90% Wetlands/ 10% Uplands																	
a	Wetland - No Exotics	27.00	N/A	8	9	5	5	8	8	0.700	0.733	0.033	1.00	1.00	N/A	0.033	0.90
b	Wetland-E1	27.00	N/A	8	9	5	5	8	8	0.700	0.733	0.033	1.00	1.00	N/A	0.033	0.90
c	Wetland- E2	18.00	N/A	8	9	5	5	7	8	0.667	0.733	0.067	1.00	1.00	N/A	0.067	1.20
d	Wetland- E3	18.00	N/A	8	9	5	5	7	8	0.667	0.733	0.067	1.00	1.00	N/A	0.067	1.20
e	Wetland-E4	0.00	N/A	8	9	5	5	6	8	0.633	0.733	0.100	1.00	1.00	N/A	0.100	0.00
Subtotal		**90.00**															**4.20**
SCENARIO 2 at 75% Wetlands/ 25% Uplands																	
a	Wetland - No Exotics	22.50	N/A	8	9	5	5	8	8	0.700	0.733	0.033	1.00	1.00	N/A	0.033	0.75
b	Wetland-E1	22.50	N/A	8	9	5	5	8	8	0.700	0.733	0.033	1.00	1.00	N/A	0.033	0.75
c	Wetland-E2	15.00	N/A	8	9	5	5	7	8	0.667	0.733	0.067	1.00	1.00	N/A	0.067	1.00
d	Wetland- E3	15.00	N/A	8	9	5	5	7	8	0.667	0.733	0.067	1.00	1.00	N/A	0.067	1.00
e	Wetland-E4	0.00	N/A	8	9	55	5	6	8	2.300	0.733	-1.567	1.00	1.00	N/A	-1.567	0.00
Subtotal		**75.00**															**3.50**
SCENARIO 2 at 50% Wetlands/ 50% Uplands																	
a	Wetland - No Exotics	15.00	N/A	8	9	5	5	8	8	0.700	0.733	0.033	1.00	1.00	N/A	0.033	0.50
b	Wetland- E1	15.00	N/A	8	9	5	5	8	8	0.700	0.733	0.033	1.00	1.00	N/A	0.033	0.50
c	Wetland-E2	10.00	N/A	8	9	5	5	7	8	0.667	0.733	0.067	1.00	1.00	N/A	0.067	0.67
d	Wetland- E4	10.00	N/A	8	9	5	5	7	8	0.667	0.733	0.067	1.00	1.00	N/A	0.067	0.67
e	Wetland- E4	0.00	N/A	8	9	5	5	6	8	0.633	0.733	0.100	1.00	1.00	N/A	0.100	0.00
Subtotal		**50.00**															**2.33**
SCENARIO 2 at 25% Wetlands/ 75% Uplands																	
a	Wetland - No Exotics	7.50	N/A	8	9	5	5	8	8	0.700	0.733	0.033	1.00	1.00	N/A	0.033	0.25
b	Wetland- E1	7.50	N/A	8	9	5	5	8	8	0.700	0.733	0.033	1.00	1.00	N/A	0.033	0.25
c	Wetland- E2	5.00	N/A	8	9	5	5	7	8	0.667	0.733	0.067	1.00	1.00	N/A	0.067	0.33
d	Wetland- E3	5.00	N/A	8	9	5	5	7	8	0.667	0.733	0.067	1.00	1.00	N/A	0.067	0.33
e	Wetland- E4	0.00	N/A	8	9	5	5	6	8	0.633	0.733	0.100	1.00	1.00	N/A	0.100	0.00
Subtotal		**25.00**															**1.17**
SCENARIO 2 at 10% Wetlands/ 90% Uplands																	
a	Wetland - No Exotics	3.00	N/A	8	9	5	5	8	8	0.700	0.733	0.033	1.00	1.00	N/A	0.033	0.10
b	Wetland- E1	3.00	N/A	8	9	5	5	8	8	0.700	0.733	0.033	1.00	1.00	N/A	0.033	0.10
c	Wetland- E2	2.00	N/A	8	9	5	5	7	8	0.667	0.733	0.067	1.00	1.00	N/A	0.067	0.13
d	Wetland- E3	2.00	N/A	8	9	5	5	7	8	0.667	0.733	0.067	1.00	1.00	N/A	0.067	0.13
e	Wetland- E4	0.00	N/A	8	9	5	5	8	8	0.700	0.733	0.033	1.00	1.00	N/A	0.033	0.00
Subtotal		**6.00**															**0.47**

UMAM Worksheet 1 of 2 (Continued)

Polygon No.	FLUCFCS TYPE - Exotic Level	UMAM Acres	Phase	Location		Hydrology		Community		Existing w/out UMAM	Proposed w/ UMAM	Delta	T-factor	Risk	Pres. Fact	RFG	Credits
				w/o	with	w/o	with	w/o	with								
SCENARIO 3 at 90% Wetlands/ 10% Uplands																	
a	Wetland - No Exotics	18.00	N/A	8	9	5	5	8	8	0.700	0.733	0.033	1.00	1.00	N/A	0.033	0.60
b	Wetland-E1	13.50	N/A	8	9	5	5	8	8	0.700	0.733	0.033	1.00	1.00	N/A	0.033	0.45
c	Wetland- E2	18.00	N/A	8	9	5	5	7	8	0.667	0.733	0.067	1.00	1.00	N/A	0.067	1.20
d	Wetland- E3	31.50	N/A	8	9	5	5	7	8	0.667	0.733	0.067	1.00	1.00	N/A	0.067	2.10
e	Wetland-E4	9.00	N/A	8	9	5	5	6	8	0.633	0.733	0.100	1.00	1.00	N/A	0.100	0.90
Subtotal		**90.00**															**5.25**
SCENARIO 3 at 75% Wetlands/ 25% Uplands																	
a	Wetland - No Exotics	15.00	N/A	8	9	5	5	8	8	0.700	0.733	0.033	1.00	1.00	N/A	0.033	0.50
b	Wetland-E1	11.25	N/A	8	9	5	5	8	8	0.700	0.733	0.033	1.00	1.00	N/A	0.033	0.38
c	Wetland-E2	15.00	N/A	8	9	5	5	7	8	0.667	0.733	0.067	1.00	1.00	N/A	0.067	1.00
d	Wetland- E3	26.25	N/A	8	9	5	5	7	8	0.667	0.733	0.067	1.00	1.00	N/A	0.067	1.75
e	Wetland-E4	7.50	N/A	8	9	5	5	7	8	0.667	0.733	0.067	1.00	1.00	N/A	0.067	0.50
Subtotal		**75.00**															**4.13**
SCENARIO 3 at 50% Wetlands/ 50% Uplands																	
a	Wetland - No Exotics	10.00	N/A	8	9	5	5	8	8	0.700	0.733	0.033	1.00	1.00	N/A	0.033	0.33
b	Wetland- E1	7.50	N/A	8	9	5	5	8	8	0.700	0.733	0.033	1.00	1.00	N/A	0.033	0.25
c	Wetland-E2	10.00	N/A	8	9	5	5	7	8	0.667	0.733	0.067	1.00	1.00	N/A	0.067	0.67
d	Wetland- E4	17.50	N/A	8	9	5	5	7	8	0.667	0.733	0.067	1.00	1.00	N/A	0.067	1.17
e	Wetland- E4	5.00	N/A	8	9	5	5	6	8	0.633	0.733	0.100	1.00	1.00	N/A	0.100	0.50
Subtotal		**50.00**															**2.92**
SCENARIO 3 at 25% Wetlands/ 75% Uplands																	
a	Wetland - No Exotics	5.00	N/A	8	9	5	5	8	8	0.700	0.733	0.033	1.00	1.00	N/A	0.033	0.17
b	Wetland- E1	3.75	N/A	8	9	5	5	8	8	0.700	0.733	0.033	1.00	1.00	N/A	0.033	0.13
c	Wetland- E2	5.00	N/A	8	9	5	5	7	8	0.667	0.733	0.067	1.00	1.00	N/A	0.067	0.33
d	Wetland- E3	8.75	N/A	8	9	5	5	7	8	0.667	0.733	0.067	1.00	1.00	N/A	0.067	0.58
e	Wetland- E4	2.50	N/A	8	9	5	5	6	8	0.633	0.733	0.100	1.00	1.00	N/A	0.100	0.25
Subtotal		**25.00**															**1.46**
SCENARIO 3 at 10% Wetlands/ 90% Uplands																	
a	Wetland - No Exotics	2.00	N/A	8	9	5	5	8	8	0.700	0.733	0.033	1.00	1.00	N/A	0.033	0.07
b	Wetland- E1	1.50	N/A	8	9	5	5	8	8	0.700	0.733	0.033	1.00	1.00	N/A	0.033	0.05
c	Wetland- E2	2.00	N/A	8	9	5	5	7	8	0.667	0.733	0.067	1.00	1.00	N/A	0.067	0.13
d	Wetland- E3	3.50	N/A	8	9	5	5	7	8	0.667	0.733	0.067	1.00	1.00	N/A	0.067	0.23
e	Wetland- E4	1.00	N/A	8	9	5	5	6	8	0.633	0.733	0.100	1.00	1.00	N/A	0.100	0.10
Subtotal		**3.50**															**0.58**

UMAM Worksheet 1 of 2 (Continued)

Polygon No.	FLUCFCS TYPE - Exotic Level	UMAM Acres	Phase	Location		Hydrology		Community		Existing w/out UMAM	Proposed w/ UMAM	Delta	T-factor	Risk	Pres. Fact	RFG	Credits
				w/o	with	w/o	with	w/o	with								
SCENARIO 4 at 90% Wetlands/ 10% Uplands																	
a	Wetland - No Exotics	0.00	N/A	8	9	5	5	8	8	0.700	0.733	0.033	1.00	1.00	N/A	0.033	0.00
b	Wetland-E1	9.00	N/A	8	9	5	5	8	8	0.700	0.733	0.033	1.00	1.00	N/A	0.033	0.30
c	Wetland- E2	13.50	N/A	8	9	5	5	7	8	0.667	0.733	0.067	1.00	1.00	N/A	0.067	0.90
d	Wetland- E3	31.50	N/A	8	9	5	5	7	8	0.667	0.733	0.067	1.00	1.00	N/A	0.067	2.10
e	Wetland-E4	36.00	N/A	8	9	5	5	6	8	0.633	0.733	0.100	1.00	1.00	N/A	0.100	3.60
Subtotal		**90.00**															**6.90**
SCENARIO 4 at 75% Wetlands/ 25% Uplands																	
a	Wetland - No Exotics	0.00	N/A	8	9	5	5	8	8	0.700	0.733	0.033	1.00	1.00	N/A	0.033	0.00
b	Wetland-E1	7.50	N/A	8	9	5	5	8	8	0.700	0.733	0.033	1.00	1.00	N/A	0.033	0.25
c	Wetland-E2	11.25	N/A	8	9	5	5	7	8	0.667	0.733	0.067	1.00	1.00	N/A	0.067	0.75
d	Wetland- E3	26.25	N/A	8	9	5	5	7	8	0.667	0.733	0.067	1.00	1.00	N/A	0.067	1.75
e	Wetland-E4	30.00	N/A	8	9	5	5	6	8	0.633	0.733	0.100	1.00	1.00	N/A	0.100	3.00
Subtotal		**75.00**															**5.75**
SCENARIO 4 at 50% Wetlands/ 50% Uplands																	
a	Wetland - No Exotics	0.00	N/A	8	9	5	5	8	8	0.700	0.733	0.033	1.00	1.00	N/A	0.033	0.00
b	Wetland- E1	5.00	N/A	8	9	5	5	8	8	0.700	0.733	0.033	1.00	1.00	N/A	0.033	0.17
c	Wetland-E2	7.50	N/A	8	9	5	5	7	8	0.667	0.733	0.067	1.00	1.00	N/A	0.067	0.50
d	Wetland- E4	17.50	N/A	8	9	5	5	7	8	0.667	0.733	0.067	1.00	1.00	N/A	0.067	1.17
e	Wetland- E4	20.00	N/A	8	9	5	5	6	8	0.633	0.733	0.100	1.00	1.00	N/A	0.100	2.00
Subtotal		**50.00**															**3.83**
SCENARIO 4 at 25% Wetlands/ 75% Uplands																	
a	Wetland- No Exotics	0.00	N/A	8	9	5	5	8	8	0.700	0.733	0.033	1.00	1.00	N/A	0.033	0.00
b	Wetland- E1	2.50	N/A	8	9	5	5	8	8	0.700	0.733	0.033	1.00	1.00	N/A	0.033	0.08
c	Wetland- E2	3.75	N/A	8	9	5	5	7	8	0.667	0.733	0.067	1.00	1.00	N/A	0.067	0.25
d	Wetland- E3	8.75	N/A	8	9	5	5	7	8	0.667	0.733	0.067	1.00	1.00	N/A	0.067	0.58
e	Wetland- E4	10.00	N/A	8	9	5	5	6	8	0.633	0.733	0.100	1.00	1.00	N/A	0.100	1.00
Subtotal		**25.00**															**1.92**
SCENARIO 4 at 10% Wetlands/ 90% Uplands																	
a	Wetland- No Exotics	0.00	N/A	8	9	5	5	8	8	0.700	0.733	0.033	1.00	1.00	N/A	0.033	0.00
b	Wetland- E1	1.00	N/A	8	9	5	5	8	8	0.700	0.733	0.033	1.00	1.00	N/A	0.033	0.03
c	Wetland- E2	1.50	N/A	8	9	5	5	7	8	0.667	0.733	0.067	1.00	1.00	N/A	0.067	0.10
d	Wetland- E3	3.50	N/A	8	9	5	5	7	8	0.667	0.733	0.067	1.00	1.00	N/A	0.067	0.23
e	Wetland- E4	4.00	N/A	8	9	5	5	6	8	0.633	0.733	0.100	1.00	1.00	N/A	0.100	0.40
Subtotal		**1.00**															**0.77**

UMAM - Uniform Mitigation Assessment Methodology

Note: Scenarios 1,2,3, and 4 represent succesive increasing levels of infestation by exotic vegetation

NORTH BELLE MEADE UMAM WORKSHEET 2 of 2

WETLAND CREDIT GENERATION PER 100 ACRES (WITH HYDROLOGIC LIFT and WITHOUT UPLAND CREDIT GENERATION)

Polygon No.	FLUCFCS TYPE - Exotic Level	UMAM Acres	Phase	Location		Hydrology		Community		Existing w/out UMAM	Proposed w/ UMAM	Delta	T-factor	Risk	Pres. Fact	RFG	Credits
				w/o	with	w/o	with	w/o	with								
HYDRO SCENARIO* 1 at 90% Wetlands/ 10% Uplands																	
a	Wetland - No Exotics	72.00	N/A	8	9	5	8	8	9	0.700	0.867	0.167	1.00	1.00	N/A	0.167	12.00
b	Wetland-E1	18.00	N/A	8	9	5	8	8	9	0.700	0.867	0.167	1.00	1.00	N/A	0.167	3.00
c	Wetland- E2	0.00	N/A	8	9	5	8	7	9	0.667	0.867	0.200	1.00	1.00	N/A	0.200	0.00
d	Wetland- E3	0.00	N/A	8	9	5	8	7	9	0.667	0.867	0.200	1.00	1.00	N/A	0.200	0.00
e	Wetland-E4	0.00	N/A	8	9	5	8	6	9	0.633	0.867	0.233	1.00	1.00	N/A	0.233	0.00
Subtotal		**90.00**															**15.00**
HYDRO SCENARIO* 1 at 75% Wetlands/ 25% Uplands																	
a	Wetland - No Exotics	60.00	N/A	8	9	5	8	8	9	0.700	0.867	0.167	1.00	1.00	N/A	0.167	10.00
b	Wetland-E1	15.00	N/A	8	9	5	8	8	9	0.700	0.867	0.167	1.00	1.00	N/A	0.167	2.50
c	Wetland-E2	0.00	N/A	8	9	5	8	7	9	0.667	0.867	0.200	1.00	1.00	N/A	0.200	0.00
d	Wetland- E3	0.00	N/A	8	9	5	8	7	9	0.667	0.867	0.200	1.00	1.00	N/A	0.200	0.00
e	Wetland-E4	0.00	N/A	8	9	5	8	6	9	0.633	0.867	0.233	1.00	1.00	N/A	0.233	0.00
Subtotal		**75.00**															**12.50**
HYDRO SCENARIO* 1 at 50% Wetlands/ 50% Uplands																	
a	Wetland - No Exotics	40.00	N/A	8	9	5	8	8	9	0.700	0.867	0.167	1.00	1.00	N/A	0.167	6.67
b	Wetland- E1	10.00	N/A	8	9	5	8	8	9	0.700	0.867	0.167	1.00	1.00	N/A	0.167	1.67
c	Wetland-E2	0.00	N/A	8	9	5	8	7	9	0.667	0.867	0.200	1.00	1.00	N/A	0.200	0.00
d	Wetland- E4	0.00	N/A	8	9	5	8	7	9	0.667	0.867	0.200	1.00	1.00	N/A	0.200	0.00
e	Wetland- E4	0.00	N/A	8	9	5	8	6	9	0.633	0.867	0.233	1.00	1.00	N/A	0.233	0.00
Subtotal		**50.00**															**8.33**
HYDRO SCENARIO* 1 at 25% Wetlands/ 75% Uplands																	
a	Wetland - No Exotics	20.00	N/A	8	9	5	8	8	9	0.700	0.867	0.167	1.00	1.00	N/A	0.167	3.33
b	Wetland- E1	5.00	N/A	8	9	5	8	8	9	0.700	0.867	0.167	1.00	1.00	N/A	0.167	0.83
c	Wetland- E2	0.00	N/A	8	9	5	8	7	9	0.667	0.867	0.200	1.00	1.00	N/A	0.200	0.00
d	Wetland- E3	0.00	N/A	8	9	5	8	7	9	0.667	0.867	0.200	1.00	1.00	N/A	0.200	0.00
e	Wetland- E4	0.00	N/A	8	9	5	8	6	9	0.633	0.867	0.233	1.00	1.00	N/A	0.233	0.00
Subtotal		**25.00**															**4.17**
HYDRO SCENARIO* 1 at 10% Wetlands/ 90% Uplands																	
a	Wetland - No Exotics	8.00	N/A	8	9	5	8	8	9	0.700	0.867	0.167	1.00	1.00	N/A	0.167	1.33
b	Wetland- E1	2.00	N/A	8	9	5	8	8	9	0.700	0.867	0.167	1.00	1.00	N/A	0.167	0.33
c	Wetland- E2	0.00	N/A	8	9	5	8	7	9	0.667	0.867	0.200	1.00	1.00	N/A	0.200	0.00
d	Wetland- E3	0.00	N/A	8	9	5	8	7	9	0.667	0.867	0.200	1.00	1.00	N/A	0.200	0.00
e	Wetland- E4	0.00	N/A	8	9	5	8	6	9	0.633	0.867	0.233	1.00	1.00	N/A	0.233	0.00
Subtotal		**10.00**															**1.67**

UMAM Worksheet 2 of 2 (Continued)

Polygon No.	FLUCFCS TYPE - Exotic Level	UMAM Acres	Phase	Location		Hydrology		Community		Existing w/out UMAM	Proposed w/ UMAM	Delta	T-factor	Risk	Pres. Fact	RFG	Credits
				w/o	with	w/o	with	w/o	with								
HYDRO SCENARIO* 2 at 90% Wetlands/ 10% Uplands																	
a	Wetland - No Exotics	27.00	N/A	8	9	5	8	8	9	0.700	0.867	0.167	1.00	1.00	N/A	0.167	4.50
b	Wetland-E1	27.00	N/A	8	9	5	8	8	9	0.700	0.867	0.167	1.00	1.00	N/A	0.167	4.50
c	Wetland- E2	18.00	N/A	8	9	5	8	7	9	0.667	0.867	0.200	1.00	1.00	N/A	0.200	3.60
d	Wetland- E3	18.00	N/A	8	9	5	8	7	9	0.667	0.867	0.200	1.00	1.00	N/A	0.200	3.60
e	Wetland-E4	0.00	N/A	8	9	5	8	6	9	0.633	0.867	0.233	1.00	1.00	N/A	0.233	0.00
Subtotal		**90.00**															**16.20**
HYDRO SCENARIO* 2 at 75% Wetlands/ 25% Uplands																	
a	Wetland - No Exotics	22.50	N/A	8	9	5	8	8	9	0.700	0.867	0.167	1.00	1.00	N/A	0.167	3.75
b	Wetland-E1	22.50	N/A	8	9	5	8	8	9	0.700	0.867	0.167	1.00	1.00	N/A	0.167	3.75
c	Wetland-E2	15.00	N/A	8	9	5	8	7	9	0.667	0.867	0.200	1.00	1.00	N/A	0.200	3.00
d	Wetland- E3	15.00	N/A	8	9	5	8	7	9	0.667	0.867	0.200	1.00	1.00	N/A	0.200	3.00
e	Wetland-E4	0.00	N/A	8	9	5	8	6	9	0.633	0.867	0.233	1.00	1.00	N/A	0.233	0.00
Subtotal		**75.00**															**13.50**
HYDRO SCENARIO* 2 at 50% Wetlands/ 50% Uplands																	
a	Wetland - No Exotics	15.00	N/A	8	9	5	8	8	9	0.700	0.867	0.167	1.00	1.00	N/A	0.167	2.50
b	Wetland- E1	15.00	N/A	8	9	5	8	8	9	0.700	0.867	0.167	1.00	1.00	N/A	0.167	2.50
c	Wetland-E2	10.00	N/A	8	9	5	8	7	9	0.667	0.867	0.200	1.00	1.00	N/A	0.200	2.00
d	Wetland- E4	10.00	N/A	8	9	5	8	7	9	0.667	0.867	0.200	1.00	1.00	N/A	0.200	2.00
e	Wetland- E4	0.00	N/A	8	9	5	8	6	9	0.633	0.867	0.233	1.00	1.00	N/A	0.233	0.00
Subtotal		**50.00**															**9.00**
HYDRO SCENARIO* 2 at 25% Wetlands/ 75% Uplands																	
a	Wetland - No Exotics	7.50	N/A	8	9	5	8	8	9	0.700	0.867	0.167	1.00	1.00	N/A	0.167	1.25
b	Wetland- E1	7.50	N/A	8	9	5	8	8	9	0.700	0.867	0.167	1.00	1.00	N/A	0.167	1.25
c	Wetland- E2	5.00	N/A	8	9	5	8	7	9	0.667	0.867	0.200	1.00	1.00	N/A	0.200	1.00
d	Wetland- E3	5.00	N/A	8	9	5	8	7	9	0.667	0.867	0.200	1.00	1.00	N/A	0.200	1.00
e	Wetland- E4	0.00	N/A	8	9	5	8	6	9	0.633	0.867	0.233	1.00	1.00	N/A	0.233	0.00
Subtotal		**25.00**															**4.50**
HYDRO SCENARIO* 2 at 10% Wetlands/ 90% Uplands																	
a	Wetland - No Exotics	3.00	N/A	8	9	5	8	8	9	0.700	0.867	0.167	1.00	1.00	N/A	0.167	0.50
b	Wetland- E1	3.00	N/A	8	9	5	8	8	9	0.700	0.867	0.167	1.00	1.00	N/A	0.167	0.50
c	Wetland- E2	2.00	N/A	8	9	5	8	7	9	0.667	0.867	0.200	1.00	1.00	N/A	0.200	0.40
d	Wetland- E3	2.00	N/A	8	9	5	8	7	9	0.667	0.867	0.200	1.00	1.00	N/A	0.200	0.40
e	Wetland- E4	0.00	N/A	8	9	5	8	6	9	0.633	0.867	0.233	1.00	1.00	N/A	0.233	0.00
Subtotal		**6.00**															**1.80**

UMAM Worksheet 2 of 2 (Continued)

Polygon No.	FLUCFCS TYPE - Exotic Level	UMAM Acres	Phase	Location		Hydrology		Community		Existing w/out UMAM	Proposed w/ UMAM	Delta	T-factor	Risk	Pres. Fact	RFG	Credits
				w/o	with	w/o	with	w/o	with								
HYDRO SCENARIO* 3 at 90% Wetlands/ 10% Uplands																	
a	Wetland - No Exotics	18.00	N/A	8	9	5	8	8	9	0.700	0.867	0.167	1.00	1.00	N/A	0.167	3.00
b	Wetland-E1	13.50	N/A	8	9	5	8	8	9	0.700	0.867	0.167	1.00	1.00	N/A	0.167	2.25
c	Wetland- E2	18.00	N/A	8	9	5	8	7	9	0.667	0.867	0.200	1.00	1.00	N/A	0.200	3.60
d	Wetland- E3	31.50	N/A	8	9	5	8	7	9	0.667	0.867	0.200	1.00	1.00	N/A	0.200	6.30
e	Wetland-E4	9.00	N/A	8	9	5	8	6	9	0.633	0.867	0.233	1.00	1.00	N/A	0.233	2.10
Subtotal		**90.00**															**17.25**
HYDRO SCENARIO* 3 at 75% Wetlands/ 25% Uplands																	
a	Wetland - No Exotics	15.00	N/A	8	9	5	8	8	9	0.700	0.867	0.167	1.00	1.00	N/A	0.167	2.50
b	Wetland-E1	11.25	N/A	8	9	5	8	8	9	0.700	0.867	0.167	1.00	1.00	N/A	0.167	1.88
c	Wetland-E2	15.00	N/A	8	9	5	8	7	9	0.667	0.867	0.200	1.00	1.00	N/A	0.200	3.00
d	Wetland- E3	26.25	N/A	8	9	5	8	7	9	0.667	0.867	0.200	1.00	1.00	N/A	0.200	5.25
e	Wetland-E4	7.50	N/A	8	9	5	8	6	9	0.633	0.867	0.233	1.00	1.00	N/A	0.233	1.75
Subtotal		**75.00**															**14.38**
HYDRO SCENARIO* 3 at 50% Wetlands/ 50% Uplands																	
a	Wetland - No Exotics	10.00	N/A	8	9	5	8	8	9	0.700	0.867	0.167	1.00	1.00	N/A	0.167	1.67
b	Wetland- E1	7.50	N/A	8	9	5	8	8	9	0.700	0.867	0.167	1.00	1.00	N/A	0.167	1.25
c	Wetland-E2	10.00	N/A	8	9	5	8	7	9	0.667	0.867	0.200	1.00	1.00	N/A	0.200	2.00
d	Wetland- E4	17.50	N/A	8	9	5	8	7	9	0.667	0.867	0.200	1.00	1.00	N/A	0.200	3.50
e	Wetland- E4	5.00	N/A	8	9	5	8	6	9	0.633	0.867	0.233	1.00	1.00	N/A	0.233	1.17
Subtotal		**50.00**															**9.58**
HYDRO SCENARIO* 3 at 25% Wetlands/ 75% Uplands																	
a	Wetland - No Exotics	5.00	N/A	8	9	5	8	8	9	0.700	0.867	0.167	1.00	1.00	N/A	0.167	0.83
b	Wetland- E1	3.75	N/A	8	9	5	8	8	9	0.700	0.867	0.167	1.00	1.00	N/A	0.167	0.63
c	Wetland- E2	5.00	N/A	8	9	5	8	7	9	0.667	0.867	0.200	1.00	1.00	N/A	0.200	1.00
d	Wetland- E3	8.75	N/A	8	9	5	8	7	9	0.667	0.867	0.200	1.00	1.00	N/A	0.200	1.75
e	Wetland- E4	2.50	N/A	8	9	5	8	6	9	0.633	0.867	0.233	1.00	1.00	N/A	0.233	0.58
Subtotal		**25.00**															**4.79**
HYDRO SCENARIO* 3 at 10% Wetlands/ 90% Uplands																	
a	Wetland - No Exotics	2.00	N/A	8	9	5	8	8	9	0.700	0.867	0.167	1.00	1.00	N/A	0.167	0.33
b	Wetland- E1	1.50	N/A	8	9	5	8	8	9	0.700	0.867	0.167	1.00	1.00	N/A	0.167	0.25
c	Wetland- E2	2.00	N/A	8	9	5	8	7	9	0.667	0.867	0.200	1.00	1.00	N/A	0.200	0.40
d	Wetland- E3	3.50	N/A	8	9	5	8	7	9	0.667	0.867	0.200	1.00	1.00	N/A	0.200	0.70
e	Wetland- E4	1.00	N/A	8	9	5	8	6	9	0.633	0.867	0.233	1.00	1.00	N/A	0.233	0.23
Subtotal		**3.50**															**1.92**

UMAM Worksheet 2 of 2 (Continued)

Polygon No.	FLUCFCS TYPE - Exotic Level	UMAM Acres	Phase	Location		Hydrology		Community		Existing w/out UMAM	Proposed w/ UMAM	Delta	T-factor	Risk	Pres. Fact	RFG	Credits
				w/o	with	w/o	with	w/o	with								
HYDRO SCENARIO* 4 at 90% Wetlands/ 10% Uplands																	
a	Wetland - No Exotics	0.00	N/A	8	9	5	8	8	9	0.700	0.867	0.167	1.00	1.00	N/A	0.167	0.00
b	Wetland-E1	9.00	N/A	8	9	5	8	8	9	0.700	0.867	0.167	1.00	1.00	N/A	0.167	1.50
c	Wetland- E2	13.50	N/A	8	9	5	8	7	9	0.667	0.867	0.200	1.00	1.00	N/A	0.200	2.70
d	Wetland- E3	31.50	N/A	8	9	5	8	7	9	0.667	0.867	0.200	1.00	1.00	N/A	0.200	6.30
e	Wetland-E4	36.00	N/A	8	9	5	8	6	9	0.633	0.867	0.233	1.00	1.00	N/A	0.233	8.40
Subtotal		**90.00**															**18.90**
HYDRO SCENARIO* 4 at 75% Wetlands/ 25% Uplands																	
a	Wetland - No Exotics	0.00	N/A	8	9	5	8	8	9	0.700	0.867	0.167	1.00	1.00	N/A	0.167	0.00
b	Wetland-E1	7.50	N/A	8	9	5	8	8	9	0.700	0.867	0.167	1.00	1.00	N/A	0.167	1.25
c	Wetland-E2	11.25	N/A	8	9	5	8	7	9	0.667	0.867	0.200	1.00	1.00	N/A	0.200	2.25
d	Wetland- E3	26.25	N/A	8	9	5	8	7	9	0.667	0.867	0.200	1.00	1.00	N/A	0.200	5.25
e	Wetland-E4	30.00	N/A	8	9	5	8	6	9	0.633	0.867	0.233	1.00	1.00	N/A	0.233	7.00
Subtotal		**75.00**															**15.75**
HYDRO SCENARIO* 4 at 50% Wetlands/ 50% Uplands																	
a	Wetland - No Exotics	0.00	N/A	8	9	8	8	8	9	0.800	0.867	0.067	1.00	1.00	N/A	0.067	0.00
b	Wetland- E1	5.00	N/A	8	9	5	8	8	9	0.700	0.867	0.167	1.00	1.00	N/A	0.167	0.83
c	Wetland-E2	7.50	N/A	8	9	5	8	7	9	0.667	0.867	0.200	1.00	1.00	N/A	0.200	1.50
d	Wetland- E4	17.50	N/A	8	9	5	8	7	9	0.667	0.867	0.200	1.00	1.00	N/A	0.200	3.50
e	Wetland- E4	20.00	N/A	8	9	5	8	6	9	0.633	0.867	0.233	1.00	1.00	N/A	0.233	4.67
Subtotal		**50.00**															**10.50**
HYDRO SCENARIO* 4 at 25% Wetlands/ 75% Uplands																	
a	Wetland- No Exotics	0.00	N/A	8	9	5	8	8	9	0.700	0.867	0.167	1.00	1.00	N/A	0.167	0.00
b	Wetland- E1	2.50	N/A	8	9	5	8	8	9	0.700	0.867	0.167	1.00	1.00	N/A	0.167	0.42
c	Wetland- E2	3.75	N/A	8	9	5	8	7	9	0.667	0.867	0.200	1.00	1.00	N/A	0.200	0.75
d	Wetland- E3	8.75	N/A	8	9	5	8	7	9	0.667	0.867	0.200	1.00	1.00	N/A	0.200	1.75
e	Wetland- E4	10.00	N/A	8	9	5	8	6	9	0.633	0.867	0.233	1.00	1.00	N/A	0.233	2.33
Subtotal		**25.00**															**5.25**
HYDRO SCENARIO* 4 at 10% Wetlands/ 90% Uplands																	
a	Wetland- No Exotics	0.00	N/A	8	9	5	8	8	9	0.700	0.867	0.167	1.00	1.00	N/A	0.167	0.00
b	Wetland- E1	1.00	N/A	8	9	5	8	8	9	0.700	0.867	0.167	1.00	1.00	N/A	0.167	0.17
c	Wetland- E2	1.50	N/A	8	9	5	8	7	9	0.667	0.867	0.200	1.00	1.00	N/A	0.200	0.30
d	Wetland- E3	3.50	N/A	8	9	5	8	7	9	0.667	0.867	0.200	1.00	1.00	N/A	0.200	0.70
e	Wetland- E4	4.00	N/A	8	9	5	8	6	9	0.633	0.867	0.233	1.00	1.00	N/A	0.233	0.93
Subtotal		**1.00**															**2.10**

*The label "Hydro Scenario" indicates the UMAM scoring includes functional lift for hydrological enhancements

UMAM - Uniform Mitigation Assessment Methodology

Note: Scenarios 1,2,3, and 4 represent succesive increasing levels of infestation by exotic vegetation

EXHIBIT 2

MITIGATION VALUE TABLES

NORTH BELLE MEADE
MITIGATION VALUE TABLES

Mitigation Value Tables without Hydrology Lift

Scenario 1

A	B	C	D	E	F	G	H
Percentage of Wetlands (per 100 acres)	**Wetland Credits Generated**	**Wetland Credit Unit Value ($/Credit)**	**Wetland Credit Value**	**Upland Acres**	**PHU Value ($/per Upland Acre)**	**Upland Value ($)**	**Total Mitigation Value (per 100 acres)**
10	0.33	75,000	$23,750	90	4,500	$405,000	**$428,750**
25	0.83	75,000	$62,250	75	4,500	$337,500	**$399,750**
50	1.67	75,000	$125,250	50	4,500	$225,000	**$350,250**
75	2.50	75,000	$187,500	25	4,500	$112,500	**$300,000**
90	3.00	75,000	$225,000	10	4,500	$45,000	**$270,000**

Scenario 2

A	B	C	D	E	F	G	H
Percentage of Wetlands (per 100 acres)	**Wetland Credits Generated**	**Wetland Credit Unit Value ($/Credit)**	**Wetland Credit Value**	**Upland Acres**	**PHU Value ($/per Upland Acre)**	**Upland Value ($)**	**Total Mitigation Value (per 100 acres)**
10	0.47	75,000	$35,250	90	4,500	$405,000	**$440,250**
25	1.17	75,000	$87,750	75	4,500	$337,500	**$425,250**
50	2.33	75,000	$174,750	50	4,500	$225,000	**$399,750**
75	3.50	75,000	$262,500	25	4,500	$112,500	**$375,000**
90	4.20	75,000	$315,000	10	4,500	$45,000	**$360,000**

Scenario 3

A	B	C	D	E	F	G	H
Percentage of Wetlands (per 100 acres)	**Wetland Credits Generated**	**Wetland Credit Unit Value ($/Credit)**	**Wetland Credit Value**	**Upland Acres**	**PHU Value ($/per Upland Acre)**	**Upland Value ($)**	**Total Mitigation Value (per 100 acres)**
10	0.58	75,000	$43,500	90	4,500	$405,000	**$448,500**
25	1.46	75,000	$109,500	75	4,500	$337,500	**$447,000**
50	2.92	75,000	$219,000	50	4,500	$225,000	**$444,000**
75	4.38	75,000	$328,500	25	4,500	$112,500	**$441,000**
90	5.25	75,000	$393,750	10	4,500	$45,000	**$438,750**

Scenario 4

A	B	C	D	E	F	G	H
Percentage of Wetlands (per 100 acres)	**Wetland Credits Generated**	**Wetland Credit Unit Value ($/Credit)**	**Wetland Credit Value**	**Upland Acres**	**PHU Value ($/per Upland Acre)**	**Upland Value ($)**	**Total Mitigation Value (per 100 acres)**
10	0.77	75,000	$57,750	90	4,500	$405,000	**$462,750**
25	1.92	75,000	$144,000	75	4,500	$337,500	**$481,500**
50	3.83	75,000	$287,250	50	4,500	$225,000	**$512,250**
75	5.75	75,000	$431,250	25	4,500	$112,500	**$543,750**
90	6.90	75,000	$517,500	10	4,500	$5,000	**$562,250**

Mitigation Value Tables with Hydrology Lift

Hydro Scenario 1

A	B	C	D	E	F	G	H
Percentage of Wetlands (per 100 acres)	**Wetland Credits Generated**	**Wetland Credit Unit Value ($/Credit)**	**Wetland Credit Value**	**Upland Acres**	**PHU Value ($/per Upland Acre)**	**Upland Value ($)**	**Total Mitigation Value (per 100 acres)**
10	1.67	75,000	$125,250	90	4,500	$405,000	**$530,250**
25	4.17	75,000	$312,750	75	4,500	$337,500	**$650,250**
50	8.33	75,000	$624,750	50	4,500	$225,000	**$849,750**
75	12.50	75,000	$937,500	25	4,500	$112,500	**$1,050,000**
90	15.00	75,000	$1,125,000	10	4,500	$45,000	**$1,170,000**

Hydro Scenario 2

A	B	C	D	E	F	G	H
Percentage of Wetlands (per 100 acres)	**Wetland Credits Generated**	**Wetland Credit Unit Value ($/Credit)**	**Wetland Credit Value**	**Upland Acres**	**PHU Value ($/per Upland Acre)**	**Upland Value ($)**	**Total Mitigation Value (per 100 acres)**
10	1.80	75,000	$135,000	90	4,500	$405,000	**$540,000**
25	4.60	75,000	$345,000	75	4,500	$337,500	**$682,500**
50	9.00	75,000	$675,000	50	4,500	$225,000	**$900,000**
75	13.50	75,000	$1,012,500	25	4,500	$112,500	**$1,125,500**
90	16.20	75,000	$1,215,000	10	4,500	$45,000	**$1,260,000**

Hydro Scenario 3

A	B	C	D	E	F	G	H
Percentage of Wetlands (per 100 acres)	**Wetland Credits Generated**	**Wetland Credit Unit Value ($/Credit)**	**Wetland Credit Value**	**Upland Acres**	**PHU Value ($/per Upland Acre)**	**Upland Value ($)**	**Total Mitigation Value (per 100 acres)**
10	1.92	75,000	$144,000	90	4,500	$405,000	**$549,000**
25	4.79	75,000	$359,250	75	4,500	$337,500	**$696,750**
50	9.58	75,000	$718,500	50	4,500	$225,000	**$943,500**
75	14.38	75,000	$1,078,500	25	4,500	$112,500	**$1,191,000**
90	17.25	75,000	$1,293,750	10	4,500	$45,000	**$1,338,750**

Hydro Scenario 4

A	B	C	D	E	F	G	H
Percentage of Wetlands (per 100 acres)	**Wetland Credits Generated**	**Wetland Credit Unit Value ($/Credit)**	**Wetland Credit Value**	**Upland Acres**	**PHU Value ($/per Upland Acre)**	**Upland Value ($)**	**Total Mitigation Value (per 100 acres)**
10	2.10	75,000	$157,500	90	4,500	$405,000	**$562,500**
25	5.25	75,000	$393,750	75	4,500	$337,500	**$731,250**
50	10.50	75,000	$787,500	50	4,500	$225,000	**$1,012,500**
75	15.75	75,000	$1,181,250	25	4,500	$112,500	**$1,293,750**
90	18.90	75,000	$1,417,500	10	4,500	$45,000	**$1,462,500**

EXHIBIT 3

IMPLEMENTATION COSTS

NORTH BELLE MEADE
IMPLEMENTATION COSTS

Implementation costs for wetland areas can be considered as the cost of the following for a 5-year period:

Initial treatment/eradication of exotic and nuisance vegetation
Five years of ongoing treatment of exotic and nuisance vegetation
Replanting of areas with 75 percent or greater levels of exotic vegetation
Prescribed burns where and when appropriate
Funding of the long-term management fund

For the purpose of this analysis, the need and/or cost for prescribed burning of wetland areas during the five year implementation period is assumed to be negligible relative to other costs.

Implementation Cost for Wetland Areas by Infestation levels

For areas with **less than 25 percent** (**E1**) **exotic/nuisance** infestation

Initial treatment		$500/acre
Five years of ongoing treatment (5 x $25)		$125/acre
Replanting		N/A
Funding of perpetual management		$1,025/acre
	Total	**$1,650/acre**

For areas with **25 to 50 percent (E2) exotic/nuisance infestation**

Initial treatment		$1,000/acre
Five years of ongoing treatment	(5 x $50)	$250/acre
Replanting		N/A
Funding of perpetual management		$1,025/acre
	Total	**$2,275/acre**

For areas with **51 to 75 percent (E3) exotic/nuisance infestation**

Initial treatment		$1,500/acre
Five years of ongoing treatment	(5 x $75)	$375/acre
Replanting		N/A
Funding of perpetual management		$1,025/acre
	Total	**$2,900/acre**

For areas with **greater than 75 percent (E4) exotic/nuisance infestation**

Initial treatment		$2,000/acre
Five years of ongoing treatment	(5 x $125)	$625/acre
Replanting		$3,500/acre
Funding of perpetual management		$1,025/acre
	Total	**$7,150/acre**

For areas with **no exotic or nuisance vegetation present**

Initial treatment		N/A
Five years of ongoing treatment	(5 x $125)	$60/acre
Replanting		N/A
Funding of perpetual management		$1,025/acre
Total		**$1,085/acre**

The above information is presented in tabular form below.

Table E3-1. General per acre Implementation Costs Summary for Wetland Areas

Infestation Level	Implementation Cost Per Acre
None	$1,085
Minor (E1)	$1,650
Moderate (E2)	$2,275
High (E3)	$2,900
Extreme (E4)	$7,150

The actual implementation costs for any given area will greatly depend on the range of initial initial habitat values (primarily exotic/nuisance infestation levels).

Use of the four infestation level scenarios described above to calculate the probable implementation costs for different degrees of exotic infestation yields to results shown in Table E3-2, below.

Table E3-2. Implementation Costs by Scenarios (Per 100 Wetland Acres)

Scenario 1- Low Infestation Levels

Infestation Level	Unit Cost per 100 Acres of Wetlands	Percentage of Land with Infestation Level	Implementation Cost
None	$108,500	80	$86,800
Minor (E1)	$165,000	20	$33,000
Moderate (E2)	$227,500	0	0
High (E3)	$290,000	0	0
Extreme (E4)	$715,000	0	0
Total			**$119,800**

Scenario 2 – Mostly Low to Moderate Levels of Infestation

Infestation Level	Unit Cost per 100 Acres of Wetland	Percentage of Land with Infestation Level	Implementation Cost
None	$108,500	30	$32,550
Minor (E1)	$165,000	30	$49,500

Scenario 2 – Mostly Low to Moderate Levels of Infestation (Continued)

Infestation Level	Unit Cost per 100 Acres of Wetland	Percentage of Land with Infestation Level	Implementation Cost
Moderate (E2)	$227,500	20	$45,500
High (E3)	$290,000	20	$58,000
Extreme (E4)	$715,000	0	0
Total			**$185,550**

Scenario 3 - Mostly Moderate to High Levels of Infestation

Infestation Level	Unit Cost per 100 Acres of Wetland	Percentage of Land with Infestation Level	Implementation Cost
None	$108,500	20	$21,700
Minor (E1)	$165,000	15	$24,750
Moderate (E2)	$227,500	20	$45,500
High (E3)	$290,000	35	$101,500
Extreme (E4)	$715,000	10	$71,500
Total			**$264,950**

Scenario 4 - Mostly High Levels of Infestation

Infestation Level	Unit Cost per 100 Acres of Wetland	Percentage of Land with Infestation Level	Implementation Cost
None	$108,500	0	0
Minor (E1)	$165,000	10	$16,500
Moderate (E2)	$227,500	15	$34,125
High (E3)	$290,000	35	$101,500
Extreme (E4)	$715,000	40	$286,000
Total			**$438,125**

Implementation Costs for Upland Areas

Exotic and nuisance vegetation commonly occurs in both wetlands and uplands in Southwest Florida. The costs presented for the four scenarios above are primarily representative of treatment costs for wetland systems. Treatment costs for upland areas are typically less because prescribed burning can be used as an effective management component of any exotic vegetation eradication program.

Prescribed Burn Costs

The cost to burn land is highly variable depending on the amount of fuel load present, the linear feet of burn lines that need to be established, the size of the area to be burned, the types of habitat present, and other factors. For the purposes of this analysis, an assumed cost of $850 per 100

acres of uplands will be used for the initial burn event and $600 per 100 acres for the follow-up burn likely to be required during the five year implementation period.

Prescribed burns are also a useful management tool for certain types of wetland habitats. The use of fire in wetland areas often reduces the need to treat exotic and nuisance species; therefore, for the purpose of this analysis, the cost of burning wetlands, where appropriate, is assumed as accounted for in the costs for ongoing treatments of exotic/nuisance vegetation in wetland areas.

The costs for implementation for upland areas can be generally defined as:
Initial Burn Cost + Follow-up Burn Costs + funding perpetual management fund
Using the assumed estimated cost numbers for 100 acres this equation yields:
$1,500 + $600 + ($1,025/acre x 100 acres) x = **$104,600 per 100 acres for upland implementation costs**

Combined Wetland and Upland Implementation Costs
For a given 100-acre area, the combined implementation costs can generally be calculated as:
(Percent Upland x $104,600) + (Percent Wetland x Implementation Costs for given levels of infestation)

The following tables give the combined implementation costs for the four infestation level scenarios for a 100-acre area with upland/wetland ratios of 10/90, 25/75, 50/50, 75/25, and 90/10 to represent a range of upland/wetland land composition types.

Table E3-4. Combined Implementation Costs for Lands With 10 Percent Uplands/90 Percent Wetlands

Infestation Levels	Wetland Implementation Cost per 100 Acres	Upland Implementation Cost per 100 Acres	Upland/Wetland Composition 10 Percent Uplands/90 Percent Wetlands		
			Wetland Cost	Upland Cost	Combined Implementation Cost
Scenario 1	$119,800	$104,600	$107,820	$10,460	**$118,280**
Scenario 2	$185,550	$104,600	$166,995	$10,460	**$177,455**
Scenario 3	$264,950	$104,600	$238,455	$10,460	**$248,915**
Scenario 4	$438,125	$104,600	$394,312	$10,460	**$404,772**

Combined Implementation Costs for Lands With 25 Percent Uplands/75 Percent Wetlands

Infestation Levels	Wetland Implementation Cost per 100 Acres	Upland Implementation Cost per 100 Acres	Upland/Wetland Composition 25 Percent Uplands/75 Percent Wetlands		
			Wetland Cost	Upland Cost	Combined Implementation Cost
Scenario 1	$119,800	$104,600	$89,959	$26,150	**$116,109**
Scenario 2	$185,550	$104,600	$139,163	$26,150	**$165,313**

Combined Implementation Costs for Lands With 25 Percent Uplands/75 Percent Wetlands (Continued)

Infestation Levels	Wetland Implementation Cost per 100 Acres	Upland Implementation Cost per 100 Acres	Upland/Wetland Composition 25 Percent Uplands/75 Percent Wetlands		
			Wetland Cost	Upland Cost	Combined Implementation Cost
Scenario 3	$264,950	$104,600	$198,713	$26,150	**$244,863**
Scenario 4	$438,125	$104,600	$328,594	$26,150	**$357,744**

Combined Implementation Costs for Lands With 50 Percent Uplands/50 Percent Wetlands

Infestation Levels	Wetland Implementation Cost per 100 Acres	Upland Implementation Cost per 100 Acres	Upland/Wetland Composition 50 Percent Uplands/50 Percent Wetlands		
			Wetland Cost	Upland Cost	Combined Implementation Cost
Scenario 1	$119,800	$104,600	$59,900	$52,300	**$112,200**
Scenario 2	$185,550	$104,600	$92,775	$52,300	**$145,075**
Scenario 3	$264,950	$104,600	$132,475	$52,300	**$184,775**
Scenario 4	$438,125	$104,600	$219,063	$52,300	**$271,363**

Combined Implementation Costs for Lands With 75 Percent Uplands/25 Percent Wetlands

Infestation Levels	Wetland Implementation Cost per 100 Acres	Upland Implementation Cost per 100 Acres	Upland/Wetland Composition 75 Percent Uplands/25 Percent Wetlands		
			Wetland Cost	Upland Cost	Combined Implementation Cost
Scenario 1	$119,800	$104,600	$29,950	$78,450	**$108,400**
Scenario 2	$185,550	$104,600	$46,388	$78,450	**$124,838**
Scenario 3	$264,950	$104,600	$66,238	$78,450	**$144,688**
Scenario 4	$438,125	$104,600	$109,532	$78,450	**$187,982**

Combined Implementation Costs for Lands With 90 Percent Uplands/10 Percent Wetlands

Infestation Levels	Wetland Implementation Cost per 100 Acres	Upland Implementation Cost per 100 Acres	Upland/Wetland Composition 90 Percent Uplands/10 Percent Wetlands		
			Wetland Cost	Upland Cost	Combined Implementation Cost
Scenario 1	$119,800	$104,600	$11,980	$94,140	**$106,120**
Scenario 2	$185,550	$104,600	$18,555	$94,140	**$112,695**
Scenario 3	$264,950	$104,600	$26,495	$94,140	**$120,635**

Combined Implementation Costs for Lands With 90 Percent Uplands/10 Percent Wetlands (Continued)

Infestation Levels	Wetland Implementation Cost per 100 Acres	Upland Implementation Cost per 100 Acres	Upland/Wetland Composition 90 Percent Uplands/10 Percent Wetlands		
			Wetland Cost	Upland Cost	Combined Implementation Cost
Scenario 4	$438,125	$104,600	$43,812	$94,140	**$137,952**

EXHIBIT 4

CREDIT GENERATION COST TABLES

NORTH BELLE MEADE
CREDIT GENERATION COST TABLES

The total cost to generate Mitigation Value is the combined costs of:
Land + Implementation + Program Administration
Land value is assumed at $2,250 per acre = $225,000 per 100 acres
Program administration cost is assumed as $37,600 per 100 acres over a 5 year period

The following table gives the total costs for the four infestation level scenarios for a 100± acre area with upland/wetland ratios of 10/90, 25/75, 50/50, 75/25, and 90/10 to represent a range of upland/wetland land composition types.

Table E4-1. Total Credit Generation Cost

Infestation Levels	Upland/Wetland Composition 10 Percent Upland/90 Percent Wetland			
	Combined Implementation Cost	Land Cost	Administrative Cost	Total Credit Generation Cost
Scenario 1	$118,280	$225,000	$37,600	**$380,880**
Scenario 2	$177,455	$225,000	$37,600	**$440,055**
Scenario 3	$248,915	$225,000	$37,600	**$511,515**
Scenario 4	$404,772	$225,000	$37,600	**$667,372**

Infestation Levels	Upland/Wetland Composition 25 Percent Upland/75 Percent Wetland			
	Combined Implementation Cost	Land Cost	Administrative Cost	Total Credit Generation Cost
Scenario 1	$116,109	$225,000	$37,600	**$378,709**
Scenario 2	$165,313	$225,000	$37,600	**$427,913**
Scenario 3	$244,863	$225,000	$37,600	**$507,463**
Scenario 4	$357,744	$225,000	$37,600	**$620,344**

Infestation Levels	Upland/Wetland Composition 50 Percent Upland/50 Percent Wetland			
	Combined Implementation Cost	Land Cost	Administrative Cost	Total Credit Generation Cost
Scenario 1	$112,200	$225,000	$37,600	**$374,800**
Scenario 2	$145,075	$225,000	$37,600	**$407,675**
Scenario 3	$184,775	$225,000	$37,600	**$447,375**
Scenario 4	$271,363	$225,000	$37,600	**$533,963**

Table E4-1. (Continued)

Infestation Levels	Upland/Wetland Composition 75 Percent Upland/25 Percent Wetland			
	Combined Implementation Cost	Land Cost	Administrative Cost	Total Credit Generation Cost
Scenario 1	$108,400	$225,000	$37,600	**$371,000**
Scenario 2	$124,838	$225,000	$37,600	**$387,438**
Scenario 3	$144,688	$225,000	$37,600	**$407,288**
Scenario 4	$187,982	$225,000	$37,600	**$450,582**

Infestation Levels	Upland/Wetland Composition 90 Percent Upland/10 Percent Wetland			
	Combined Implementation Cost	Land Cost	Administrative Cost	Total Credit Generation Cost
Scenario 1	$106,120	$225,000	$37,600	**$386,720**
Scenario 2	$112,695	$225,000	$37,600	**$375,295**
Scenario 3	$120,635	$225,000	$37,600	**$383,235**
Scenario 4	$137,952	$225,000	$37,600	**$400,552**

Appendix C

Rural Fringe Mixed-Use District Restudy
TDR Bank Memo

TDR Bank Memo

Date: July 31, 2016
To: Kris Van Lengen, Community Planning Manager, Collier County, FL
From: Rick Pruetz, FAICP
RE: TDR Bank Options

At your request, this memo discusses TDR banks and related mechanisms in the context of Collier County's Rural Fringe Mixed-Use District (RFMUD). The concept of a TDR bank has received attention during the ongoing restudy of this program. TDR banks are entities officially authorized by a community to acquire, hold and sell TDRs for ultimate use in TDR receiving site projects. Many TDR banks are run as an additional task of local government or as a separate public agency established by that government. However, some TDR banks are managed by separate organizations, such as non-profit conservancies, using policies and procedures established by the government in question.

As detailed below, TDR banks can perform many functions. But they are most helpful as a means of offering sending area property owners an alternative means of selling their TDRs, particularly when developer demand for TDRs is slow. For this reason, a TDR bank appears to be an attractive option for the RFMUD, where sending owners are concerned about the pace of developer demand for TDRs in the near-term future.

As another benefit, adequately-stocked TDR banks assure developers of a readily accessible supply of TDRs in the event that they have difficulty buying TDRs directly from sending area property owners. Despite the fact that RFMUD developers have acquired and redeemed 2,129 TDRs to date, concerns have been expressed that TDRs will become (or perhaps have become) harder to buy, thus jeopardizing the success of the program unless a ready source of TDRs can be assured. There are other ways of providing that assurance, such as allowing developers to achieve bonus density via a legislated Density Transfer Charge (DTC) which is basically a cash-in-lieu payment. But there are pros and cons to both of these methods as discussed below.

The RFMUD restudy is also examining the issue of funding perpetual land management primarily in North Belle Meade where no non-county agencies are currently authorized to accept title from sending area property owners who may wish to convey title in order to sell their title-conveyance TDRs. The county is currently examining the possibility that establishment of an environmental mitigation bank, or Regional Offsite Mitigation Area (ROMA), for properties in North Belle Meade as a cost effective way for the county to mitigate the impacts of its transportation and other infrastructure projects as well as a solution to funding perpetual land management and the ability of the county to accept title to sending area land in North Belle Meade. This memo continues to explore possible means of using TDR to address the conveyance-of-title hurdle in the

event that the ROMA alternative does not materialize. However, if ROMA does materialize, a TDR bank could focus on the primary concern in the RFMUD: finding a way to reimburse sending area landowners for selling their TDRs in the near-term while receiving area developer TDR demand grows over the long term. Throughout the restudy meetings, both sending site landowners and the development community have seen a TDR bank as a promising solution to this so-called “lag time” concern.

Section A below briefly addresses the pros and cons of TDR banks to organize a detailed examination of these issues in later sections of the memo which include: B) Options for Stocking a TDR Bank; C) Density Transfer Charges, D) TDRs Granted to County for Accepting Title, E) Surcharge and F) Next Steps.

A) Should Collier County Form a TDR Bank?

Advantages

A1) During the RFMUD Restudy meetings, sending area property owners reported that there currently are an insufficient number of TDR buyers due to a large inventory of entitlements in the receiving areas. A TDR bank could buy TDRs from sending area owners in the short term and sell them during the period of time needed for additional TDR demand to materialize in the receiving areas.

A2) When TDR banks sell their holdings, the original expenditure is recouped and can be used for further acquisitions and/or to achieve other public goals such as ongoing operations and maintenance of preserves. In other words, an effective TDR bank converts what would otherwise be a one-time public expenditure into a perpetual revolving fund for preservation. This can be an important feature in the effort to secure public funding to stock the TDR bank rather than use those tax dollars for many other competing public programs. As detailed in Disadvantage A1 below, full disclosure is advisable if a TDR bank is expected to hold TDRs for a long time period before selling and reusing the proceeds. However, given the number of TDRs already purchased by receiving area developers, this may not be a serious concern.

A3) TDR banks allow receiving site developers an alternative to finding and negotiating TDR purchases directly from sending site owners. If the bank is stocked with a sufficient number of fairly-priced TDRs, developers should be able to buy the TDRs needed to achieve desired densities. The existence of a TDR bank does not in and of itself guaranteed that it will be holding a sufficient number of TDRs to satisfy any level of developer demand. An inadequately stocked TDR bank might be a concern in a new program with no track record. However, the RFMUD program has operated without a bank for many years and developers have managed to buy and retire 2,129 TDRs to date from private sellers. Furthermore, if future developers have trouble buying TDRs from either land owners or a TDR bank, the County can consider allowing compliance via

Density Transfer Charges (Section C) as a means of keeping this difficulty from jeopardizing the program.

A4) TDR banks tend to stabilize TDR prices, creating more certainty about the amount that sending area property owners can expect to receive when they consider whether or not to pursue the TDR option. Price stabilization also allows developers to perform economic analysis of projects at the conceptual stage with less concern that wildly fluctuating prices might cause unforeseen costs in the distant future when they have to buy the TDRs for these projects.

A5) Banks often perform additional program marketing, administration, transaction facilitation and other functions that produce more successful programs. These functions can and do occur in many programs that do not bank TDRs. But governments that go to the trouble of buying, holding and selling TDRs are logically more likely to protect that investment by ensuring that these functions have adequate resources and personnel.

A6) The formation of a TDR bank signals to sending area landowners and receiving area developers that a government is serious about building a successful TDR program. The commitment demonstrated by the formation of a bank may motivate more sending area property owners in particular to investigate the TDR option rather than taking a wait-and-see posture.

<u>Disadvantages</u>

A1) Public funding can be a hard sell given intense competition for limited public dollars. As discussed in Advantage A2, TDR banks resell the TDRs they acquire, creating an ongoing fund for preservation from what would otherwise be a one-time use of money. This gives TDR banks a potentially effective selling point in the battle for tax dollars. Logically, the extent of this competitive advantage is related to the length of time the bank holds the TDRs before selling them and the level of public support for the land protected by TDR bank acquisitions.

a) *Holding Time* – If a TDR bank experiences no sales for a long time period, the program could be criticized, particularly if a promise of fast sales was used to promote the public expenditures needed to stock the bank and if the prospect for some near-term TDR bank sales is questionable. Fortunately, 2,129 TDRs have been redeemed to date by the RFMUD program. Assuming the pace of redemptions has not declined significantly, it would appear that a RFMUD TDR bank would not have to wait an inordinate amount of time to experience some sales activity assuming it offers TDRs at or near market value. Nevertheless, it is advisable to avoid making overly-optimistic promises about how fast the bank will be revolving the original capitalization.

b) *Preservation Support* – It is possible for TDR banks to hold TDRs for a very long time without criticism if average citizens support the preservation of the land secured by those TDRs. For example, King County, Washington and Palm Beach County, Florida have stocked their TDR banks with TDRs severed from

land that ultimately became parks, nature preserves and open space. If governments would have purchased land or conservation easements with or without the potential to recoup those costs via TDR, they face less criticism if a long time period is needed to sell those TDRs. This consideration may not be essential in Collier County since a RFMUD bank is likely to experience sales in the short term as discussed above. However, the public will logically be more likely to support public funding of a TDR bank if citizens Countywide foresee an attractive public benefit from the preservation itself in addition to the monetary return from TDR bank sales.

A2) A TDR bank may not have enough capital on hand to immediately buy every TDR that sending area property owners want to sell. In other words, after a TDR bank is formed, there may still be calls for additional capitalization. However, very few programs attempt to fully fund total immediate acquisition. Furthermore, sending area owners are more likely to be patient if they see TDR bank sales generating funding for additional TDR purchases. Because the RFMUD program has retired 2,129 to date, a RFMUD bank should be able to provide a reasonably reliable sales option for sending area property owners.

B) Options for Stocking TDR Bank

A major hurdle to forming a TDR bank is securing the funding to stock the bank with TDRs. This section begins with a list of TDR bank funding approaches used in various programs throughout the US followed by a more detailed evaluation of one approach for the reasons stated below.

- State governments have established TDR banks, often in the form of state agencies, that buy and sell TDRs from sending sites in more than one jurisdiction located within a planning area where preservation is of statewide significance such as the New Jersey Pinelands Development Credit Bank, the New Jersey Highlands Development Credit Bank and the California Tahoe Conservancy which buys and sells various forms of marketable rights for the TDR program of the Tahoe Regional Planning Agency.
- State governments can grant or loan money to local jurisdictions and agencies that buy, hold and sell TDRs within individual jurisdictions. The California Coastal Conservancy, a state agency, created a satellite non-profit organization, the Mountains Restoration Trust, with a $300,000 grant under provisions that require the Trust to reimburse the Conservancy over time via the sale of TDRs within the Malibu TDR program operating in then-unincorporated Los Angeles County. Similarly, in the late 1980s, the California Coastal Conservancy loaned $275,000 to the Land Conservancy of San Luis Obispo County to buy and sell TDRs, a revolving fund that succeeded in creating a nature preserve in San Luis Obispo County over the course of two decades. In the New York Central Pine Barrens program, the Central Pine Barrens Clearinghouse received $5 million as part of an environmental mitigation settlement in 1995; by 2009, the Central Pine

Barrens had repaid that money to the State of New York while still retaining a clearinghouse balance of $3.2 million.

- Local governments can stock TDR banks by partnering with land preservation programs that traditionally restrict land with generic conservation easements rather than TDR easements. Pennsylvania's leads the US in the amount of preserved farmland largely due to the incentives provided by the state's purchase of development rights program, funded by a voter approved $100-million bond and cigarette taxes. Lancaster County, Pennsylvania, with 85,510 acres protected as of 2010, leads the nation in preserved farmland using a combination of grants from the state and by appropriating almost $1 million of County tax dollars per year for several years to farmland preservation. In most Lancaster County townships, state, county and local taxes buy traditional easements and then wait for future cash infusions. In contrast, Warwick Township partners with Lancaster County (and/or the Lancaster Farmland Trust) to fund TDR easements and the County allows Warwick to bank and resell the resulting TDRs with the stipulation that all TDR sale proceeds be applied to additional land preservation. To date, Warwick's TDR program has preserved more than 1,560 acres of farmland, which is over 12 percent of the township's total land area.
- The voters of local jurisdictions can approve conservation bonds. Rather than use this money once for traditional acquisition of land or easements, some communities sever the TDRs from land they preserve and resell them in a TDR bank. In Palm Beach County, Florida, voters approved a $100 million bond that was used to acquire 35,000 acres of environmentally-sensitive land. The 9,000 TDRs severed from this land are sold by the Palm Beach County TDR bank at commissioner-established prices ranging from $10,000 to $50,000 each with sale proceeds dedicated to expansion and maintenance of the nature preserve system. At a more modest level, Burlington County, New Jersey started its bank by the issuance of a $1.5 million county bond; the TDRs banked by this bond were instrumental to the success of Chesterfield Township's award-winning TDR program.
- Local governments can devote general fund money to capitalizing a TDR bank. King County, Washington started its TDR bank by including $1.5 million in its 1999 budget. Manheim Township, Lancaster County, Pennsylvania stocked its TDR bank by buying TDRs with general fund money and holding them for resale.
- Local governments can dedicate a portion of tax revenues to acquire TDRs in the course of buying parkland and protecting nature preserves. These TDRs then constitute the inventory of the government's TDR bank. In King County, Washington, the revenue dedicated to open space, called Conservation Futures, has been used to buy TDRs for its TDR bank. In a single transaction, King County used $22 million of Conservation Futures funding to protect 90,000 acres of forest east of Seattle, with the resulting 990 TDRs placed in the TDR bank for resale. To date, TDR acquisitions have preserved 141,500 acres in King County.

- When state statutes allow it, TDR programs can stock TDR banks by deed-restricting qualifying land purchased for public ownership, severing the TDRs and depositing them in the TDR bank. Before the recording of the TDR easement, these sending sites should not be previously restricted from development by prior conservation easements or any limitations imposed by the funding mechanism used to acquire them. Some jurisdictions, like Milton, Georgia, only allow severance of TDRs from sending sites acquired after the adoption of the TDR program. In Sunny Isles Beach, Florida, TDRs can only be severed from land acquired by the city after incorporation. It should be noted that some TDR programs allow the severance and holding of TDRs from any qualified, unrestricted public land regardless of when it was acquired. For example, Madison, Georgia allows city-owned parks to qualify as sending sites, including parkland acquired prior to adoption of the TDR ordinance, and the City severs and sells these TDRs under its TDR program. No restrictions appear to limit the land from which TDRs can be severed from city-owned land in West Valley City, Utah. Seattle, Washington's TDR program promotes a wide range of public improvements including open space, performing arts centers, historic structures, landmark theaters and affordable housing; by severing and reselling TDRs from these properties, Seattle has succeeded in helping to finance several important public projects including a concert hall and sculpture park. At a smaller scale, Morgan Hill, California bought a 43-acres of open space and offers the resulting TDRs to developers at $75,000 each.
  Collier County owns roughly 300 acres of land in RFMUD sending areas that were purchased for other reasons but would qualify as sending sites under the TDR program. The county could itself become a seller of TDRs severed from these properties and use the sale of these TDRs as initial capitalization of a RFMUD TDR bank. The advantage of this approach is that it could jumpstart a TDR bank in the event that other methods of capitalization fail to materialize. However, this method, like similar methods relies on TDR sales to create and maintain working capital for the RFMUD bank; these sales compete with private transactions. Consequently, special restrictions would likely be needed to minimize impact on the private market. One technique noted above would be to limit the TDRs severed from these 300 acres to a supply that was sufficient to allow the county to start buying TDRs from private sending site owners without dominating the entire market. Even then, this option has the near-term problem of generating revenue entirely from TDR sales at a time when demand for TDRs is sluggish.
- Collier County could put a referendum before the voters asking for approval of using a small portion of property tax to fund the acquisition of TDRs from the RFMUD and possibly other areas in need of preservation in Collier County. If the county used this tax revenue to finance a bond, a substantial amount of money could become available in the near term future to buy and hold TDRs for resale when the receiving area entitlement is depleted and demand for TDRs increases. As these banked TDRs are sold, the proceeds could be used again to preserve additional land (and bank additional TDRs) and/or

fund the restoration/maintenance of the preserved land. The ability of TDRs to recycle an initial amount of public money may make this technique more appealing to voters than typical open space bond measures. In addition, this new program could set aside sufficient money for an endowment fund to assure restoration and perpetual maintenance of land conveyed to the county by the TDR program if money is needed for this purpose because the mitigation bank or ROMA has not materialized.

Rather than attempt to discuss all of these options in detail, this section evaluates the pros and cons of the last option discussed above, which allows some discussion of the pros and cons of all the options. Specifically, the option in question involves voter approval of the dedication of a portion of property tax revenue, possibly a quarter mill of property tax revenue per year for perhaps a 10-year period, which would be comparable to the Conservation Collier referendum approved by 60 percent of voters in 2002 for the Conservation Collier program with another referendum adopted by 82 percent of the voters in 2006 removing limits on the total amount that the program could generate before the quarter mill tax expired in 2013 The goals of this referendum might be confined to the RFMUD or funding of an RFMUD TDR bank might be part of larger, perhaps county-wide conservation program. Either way, the referendum would expressly allow the RFMUD program to sever, bank and resell TDRs from land in RFMUD sending areas (and possibly future sending areas in other parts of the Collier County.) A portion of this potential new levy could also capitalize a long term management trust fund to pay for restoration and perpetual maintenance of land preserved within the RFMUD as well as other preserves countywide. Since public support must be strong to assure voter approval, this scenario assumes that the referendum will emphasize that preserves in the RFMUD will be accessible to the public for hiking, nature study and other activities compatible with conservation.

<u>Advantages</u>

B1) This option can start preserving RFMUD sending sites as soon as levy money is available. Consequently, this option may result in a greater amount of near-term preservation/acquisition of RFMUD sending sites than options that rely entirely on cash from the sale of banked TDRs. For example, some of the other options listed above involve severing and banking TDRs from previously-acquired public land, a process that stocks the TDR bank but cannot buy new TDRs until the banked TDRs are sold.

B2) The near-term availability of a large amount of funding from a multi-million-dollar bond would generate more money for near-term RFMUD sending site preservation than appropriations from the annual County budget. As discussed in Disadvantage A2 above, a larger near-term capitalization of a TDR bank increases the number of sending area TDRs that can be acquired. With the larger source of funding from a bond, the TDR program would be better able to address the concerns of MFMUD sending area landowners. That said, if approval of a new bond is unlikely, even modest budget appropriations for TDR

acquisitions would demonstrate willingness to fund at least some additional near term relief for these landowners. These near-term appropriations might ultimately be superseded by a bigger funding source. For example, King County, Washington started its TDR bank by including $1.5 million in its 1999 budget. But by 2004, King County was able to deposit 990 TDRs in its TDR bank using $22 million from its Conservation Futures fund, the portion of property tax revenues dedicated to open space preservation.

B3) Any of the above options that work would address receiving area developers' concerns about being able to acquire TDRs when they need them. However, this paper argues that a large amount of county bond funding may be superior to options that require new state funding or some retooling of existing state programs because these state alternatives are unknown at this time and outside the control of Collier County. In other words, near-term funding from a referendum-approved bond would put more TDRs in a TDR bank and therefore give receiving area developers greater certainty of being able to find TDRs when needed.

B4) TDR banks allow jurisdictions to target acquisitions of the highest priority land. However, if Collier County prefers to avoid prioritization, it can establish acquisition procedures that treat sending area properties equally in some or all respects.

B5) This scenario assumes that voter-approved bond funding would use all or a portion of the proceeds for a long term management trust fund or endowment fund in the event that the ROMA mitigation bank does not materialize. Consequently, in addition to buying sending area land/easements in advance of demand and giving developers the assurance of being able to buy TDRs, this scenario addresses a third concern about how the county would pay for ongoing management of properties conveyed to a RFMUD preserve in parts of the RFMUD where other agencies will not accept conveyance of title.

<u>Disadvantages</u>

B1) As discussed above in Disadvantage A1), getting voters to agree to tax themselves for open space preservation can be difficult particularly after many people are still recovering from the Great Recession and its effect on property values, interest rates and trust fund income. However, Collier County voters might respond positively to the ability to recycle funding by buying and selling TDRs, potentially giving a TDR-enabled bond a better chance of voter approval than a bond that involves only one-time use of funding. However, as discussed in Disadvantage A1), it seems advisable to avoid creating expectations of rapid repayment and instead portraying a TDR bank as a way of creating a perpetual revolving fund for preservation that operates over of long time period. Given the uncertainty of getting voter approval for open space bonds, jurisdictions would logically prefer to fund TDR banks using state grants and loans or by retooling current federal/state preservation programs in a way that allows the local

jurisdiction to keep, hold and resell TDRs (the first three options discussed above). It goes beyond the scope of this paper to investigate the extent to which opportunities exist for getting funding from higher levels of government. It would be well worth the effort to explore these possibilities. But, unless and until these opportunities materialize, it may be advisable to pursue options directly under Collier's control rather than rely on getting funding from some other source.

C) Density Transfer Charges

In most TDR programs, developers must retire actual TDRs if they choose to exceed baseline densities in receiving zones. However, at least 24 US programs allow developers to exceed baseline by making a cash payment in lieu of submitting actual TDRs, an option referred to as a Density Transfer Charge or DTC. The program then uses DTC money exclusively to preserve qualified sending sites (with a small fraction often retained to cover program administration.) In six of the 25 programs mentioned above, DTC is the only way developers can exceed baseline. However, this memo focuses on those programs that offer developers both options for exceeding baseline in receiving areas, actual TDRs and DTC.

Some programs with TDR banks also offer developers the option of using actual TDRs or DTC. However, the information readily available suggests that almost all programs that offer DTC as a developer option use DTC revenues to purchase easements or land without generating actual TDRs to be held in a TDR bank for resale. (A 1995 report about the Malibu TDR program asserts that DTCs were used in the late 1980s to buy TDRs but this may have been a figure of speech and it is now difficult to confirm that 20-year old claim.) Jurisdictions apparently do not buy TDRs with DTC revenue because DTC primarily serves as an alternative solution to the benefits provided by a TDR bank: DTC gives developers another way of exceeding baseline without buying TDRs in the private market. In addition, the accumulation of TDRs in a bank could conceivably slow the pace of sending site preservation since the sale of the banked TDRs are competing with the more direct acquisition funding that occurs when DTC money is available to buy land/easements immediately upon payment of the DTC. For these reasons, this memo assumes a traditional DTC approach, meaning that DTC funds are used to buy only land or easements but not actual TDRs for resale via a TDR bank.

This section assumes that the DTC is established at a higher amount than estimated private TDR sales prices. This is done to assure that the DTC is not setting an artificially low ceiling for private TDR sales. This higher value is also aimed at paying for some or all of the administration needed to buy sending area land/easements with DTC revenue. In addition, a small portion of the DTC revenue could also be applied to a land management endowment fund to pay for perpetual maintenance of an RFMUD preserve formed from land conveyed to the county in areas not served by non-county conservation agencies. However, care

should be taken to not set the DTC value so high that developers cannot profitably use it. Consequently, the setting of this value should be based on economic analysis. Also this number must be updated to adjust for changes in real estate values. Some programs make these adjustments upon the recommendation of staff while others prompt jurisdictions to adjust this amount annually based on yearly government real estate statistical reports.

Advantages

C1) This option addresses the concern that the program could languish if developers cannot find actual TDRs in the private market and decline to exceed baseline. With a reasonably-priced DTC, developers know they will be able to comply without the cost, delay and uncertainty of having to find and negotiate TDR purchases from sending area property owners or intermediaries.

C2) Because the DTC amount is known in advance, it allows developers to plan for their cost in advance, ideally when they first begin to conceive and perform financial analysis on a project. To the extent that developers in Collier County decline to exceed baseline in order to avoid the uncertainty of TDR cost, the DTC option could raise demand for DTC and consequently accomplish more sending area preservation, a result that addresses the concerns of many sending area landowners.

C3) The ability to comply via DTC should particularly appeal to smaller developers and developments who lack the time, personnel or resources to pursue purchases of TDRs in the private market. Charlotte County, Florida allows compliance via actual TDRs or DTC. A review of nine Charlotte County TDR receiving area projects between 2003 and 2005 reveals that the six largest projects (ranging in size from 45 to 605 dwelling units) opted to buy and retire actual TDRs while the three smallest projects (needing only one or two bonus units) opted to comply via DTC. However, even larger developments may choose DTC when finding TDRs on the private market is particularly difficult. For example, even with the DTC set at almost $50,000 per bonus single-family residence, developers in Livermore, California paid roughly $1,576,000 as of 2010 for more than 30 bonus units, primarily within a single large development. If the DTC option is motivating new developers and developments to exceed baseline, this represents an increase in demand which further translates into additional sending area preservation that might not otherwise occur.

C4) The cash generated by DTC programs is easier to combine with other funding sources and has the potential to leverage more preservation. For example, DTC revenue can be readily offered as matching funding for federal/state grants and other preservation programs including money from private non-profit conservancies, an approach offered by the DTC program in Gunnison County, Colorado. Consequently, the greater ability of DTC cash to leverage additional funding could increase the money available to preserve sending area properties in Collier County.

C5) A limited portion of DTC revenues can be used to defray the cost of TDR/DTC program administration.

C6) As long as the DTC amount does not become prohibitively expensive for developers, the county could deposit a small portion in a land management endowment fund. This could allow the county to accept title to sending area land located in parts of the RFMUD not served by non-county conservation agencies. This would allow sending area properties throughout the RFMUD the ability to convey title if that is their preference. Consequently, DTC has the ability to address multiple concerns: the ability to convey title throughout the RFMUD as well as provide greater certainty to developers and potentially increase demand for sending area preservation by making it easier for developers to exceed receiving area baselines. Bear in mind that the need to use DTC revenues to form a land management endowment fund for North Belle Meade may not be needed if the ROMA mitigation bank materializes.

C6) As with a TDR bank, DTC allows the jurisdiction to target high priority acquisitions. However, if Collier County prefers to avoid prioritization, it can establish acquisition procedures that treat sending area properties equally in some or all respects.

<u>Disadvantages</u>

C1) Some attendees at the RFMUD restudy meetings voiced opposition to the DTC option. They may be concerned that the DTC amount will not be set high enough, thereby depressing the price that sending area property owners could receive for their TDRs on the private market. However, if the County sets the DTC above average market value, the DTC should not reduce the average market value of TDRs. Some properties in the sending area have a higher market value and their owners may feel entitled to get a higher than average market value price for their TDRs. It should be noted that these property owners will have trouble getting more than average market value for actual TDRs under the current program since developers will logically be looking for the least expensive TDRs. Also RFMUD restudy meeting attendees seemed disinclined to make distinctions between properties with different market values. Throughout the restudy meetings, commenters called for equal treatment of sending area properties regardless of differences, including market value differences.

C2) Perhaps there is concern that Collier County might not use DTC revenue exclusively to acquire sending area land/easements, program administration and contributions to a land management endowment fund. If so, this concern should be reduced or eliminated by the fact that TDR/DTC program is fully transparent on the County's website.

C3) Perhaps there is concern that DTC could allow a jurisdiction to establish procedures allowing a DTC fund to pay more than average market value for

sending area land or development rights. For example, if the DTC fund pays more than the average market value for some properties, less sending area acreage would be preserved and fewer landowners would be able to receive DTC money. This could generate disagreements about when it is appropriate to spend more than average market value on a property. If so, the county could adopt a policy of using DTC money to buy land and easements sending area land with a wide range of market value.

C4) Perhaps there is concern that a DTC fund might pay less than average market value for certain sending area parcels (because these parcels have lower-than-average market value and their owners are willing to accept less than average market value). In this scenario, the owners of average or higher-than – average market value sending area property might worry that they may have less of a chance of getting DTC funding. In response, these property owners will still be able to offer their TDRs directly to developers. Secondly, as mentioned above, the county could adopt a policy of using DTC money to buy land and easements from sending area properties with a wide range of market values.

C5) The DTC scenario evaluated in this memo would allow the county to use a small portion of DTC revenues for program administration and contributions to a land management endowment fund. Some sending area property owners might oppose this under the assumption that it means that less money would be spent on sending area land preservation. In response, the county might adopt a policy that the portion of the DTC spent on land or easement acquisition be no lower than the average market value of TDRs and that the portion of the DTC used for administration and endowment be limited to the amount that the DTC exceeds average TDR market value. The economic study would help the county develop a DTC that meets these objectives while avoiding the adoption of a DTC that is too expensive for developers to profitably use. As another response to this concern, it should be noted that the availability of DTC may generate activity from developers who might otherwise avoid exceeding baseline due to apprehension about the time, cost and uncertainty of buying TDRs directly from private land owners. If so, this increased demand would generate more purchases of TDRs from sending area landowners.

D) TDRs Granted to County for Accepting Title

For each five acres of sending area land, the current RFMUD TDR program issues one TDR for recordation of an easement plus one so-called early-entry TDR, one TDR for restoration and one TDR for conveyance of land title to an authorized conservation agency. This formula will be revised following an ongoing economic analysis. The revised formula aims to adequately compensate sending area property for achieving three community goals: permanent restriction of development potential, cost of restoring degraded land and conveyance of title to an approved conservation agency.

Collier County planning staff has raised the idea of creating a county TDR bank that would sever, hold and resell TDRs from land conveyed to a county RFMUD preserve that functions in those parts of the RFMUD where non-county conservation agencies cannot accept title. As mentioned above, the RFMUD restudy is examining the possibility of forming a county mitigation bank or ROMA (Regional Offsite Mitigation Area) which would solve the current inability for landowners in North Belle Meade to receive TDRs for conveying title. There are potential opportunities to include a TDR feature within a ROMA. But to avoid making an already complex discussion even more complex, this memo assumes that if the ROMA materializes, the TDR bank would not have to include the funding of a land maintenance endowment fund and could concentrate entirely on buying TDRs from sending area owners in the near term while receiving area demand for TDRs grows. However, the discussion in Section D of this memo assumes that the ROMA does not materialize and that a TDR bank would attempt to address the monetizing of a land management endowment fund for North Belle Meade as well as the lag-time issue.

Because the RFMUD program aims to maximize choice, owners of land that can be conveyed to non-county conservation agencies could opt to do any of four alternatives: 1) decline to participate; 2) only record an easement; 3) record an easement and restore their land themselves; or 4) restore the land themselves and convey title to the non-county applicable non-county conservation agency. Owners of sending area land that cannot be conveyed to a non-county conservation agency might have five alternatives: 1) decline to participate; 2) only record an easement; 3) record an easement and restore their land themselves; 4) restore the land themselves and convey title to a future county RFMUD preserve; or 5) convey title to unrestored land to a future county RFMUD preserve. It should be noted that land should ideally be restored by the county if title to that land is ultimately conveyed to the county since a consistent and coordinated approach to restoration is more likely to result in successful long-term management. However, this memo assumes that the county will continue to allow landowners to restore their properties themselves even when these landowners plan to ultimately convey title. The forthcoming economic study will inform decisions about the appropriate number of TDRs to grant under each of these options presumably with the goal of offering average market land value to sending area property owners who convey title.

In addition to the TDRs issued to the sending area property owners, the county would sever, bank and sell TDRs from the land conveyed to the future county RFMUD preserve. The number of TDRs issued to the RFMUD bank will be informed by the economic study. But, as a hypothetical example, four TDRs per five acres of sending area land might be shared between the landowner and the RFMUD TDR bank. If landowners choose to restore their land before conveyance, they might receive three TDRs and the RFMUD bank might receive one. If landowners choose to convey unrestored land to the RFMUD preserve, the owners might get two TDRs and the RFMUD bank might get two.

There are at least two sub-options: one in which the RFMUD TDR bank sells its TDRs to fund TDR purchases from sending area landowners as well as capitalizing a RFMUD land management endowment fund and a second sub-option in which the TDR bank uses its TDR sale proceeds simply to finance the land management endowment fund, discussed as follows.

- In one of many possible permutations of this option, the sale of RFMUD bank TDRs would initially be used to buy any kind of TDRs from any part of the RFMUD. This initial period would last for a finite number of years meant to supplement purchases of sending area TDRs in a near term time period in which private developer demand for TDRs is sluggish due to the large inventory of existing entitlements. When that time period ends, proceeds from the sale of all RFMUD bank TDRs would be deposited to an RFMUD land management endowment until an adequate endowment funding level is reached to assure perpetual maintenance for the land in the RFMUD preserve (meaning the land conveyed to the county in areas not served by other conservation agencies.) Once adequate endowment fund levels are achieved, some proceeds from RFMUD sales could be used to buy TDRs from sending area property owners as long as enough proceeds are deposited in the endowment fund to maintain a sufficient level of funding. However, there appear to be few benefits to using RFMUD TDR bank sale proceeds to buy TDRs from sending area property owners. This occurs because the amount of funding during the near term time period is likely to be small since a privately-financed TDR bank would have to sell its limited supply of TDRs to receiving area developers before it can buy TDRs from sending area property owners. In this near-term period, developer demand may continue to be sluggish and the proceeds of TDR bank sales may produce only a modest acquisition fund for the bank. Even a small acquisition fund could be useful in the event that developer demand for TDRs takes a downturn. But it is expected that developer demand will increase once entitlement inventory in the RFMUD receiving area is depleted. Consequently the amount that the TDR bank assembles in the near term may be too small to provide a significant benefit in terms of buying TDRs from sending area property owners. As a result, this memo focuses instead on the following option.
- In this sub-option, the RFMUD severs TDRs from land conveyed to the RFMUD preserve and contributes the proceeds to a land management endowment fund to finance the perpetual maintenance of the RFMUD preserve.

<u>Advantages</u>

D1) This option allows the county to acquire TDRs at no public expense, hold them in a TDR bank, sell them to receiving area developers and deposit the proceeds to a land management trust fund that maintains a future county-operated RFMUD preserve with land accumulated when sending area land owners convey title to their properties to the county. The biggest advantage of

this option is that it allows the county to start an endowment fund to maintain sending area land conveyed to the county without the difficulty and uncertainty of convincing voters to approve a referendum dedicating property tax dollars to support a bond or some other way of funding a TDR bank with public money.

D2) This option addresses the current roadblock that prevents landowners in some parts of the RFMUD from being able to receive conveyance TDRs because no conservation agency is currently authorized to accept title. Consequently, it should motivate the participation of RFMUD sending area landowners who have declined to sell any TDRs without the ability to ultimately convey title. (Bear in mind that Section D assumes that the North Belle Meade ROMA mitigation bank does not materialize.)

D3) When this TDR bank has a sufficient number of TDRs on hand to sell, it gives developers assurance that they will be able to find and buy TDRs when they need them without the time, expense and uncertainty of buying TDRs from sending area property owners.

Disadvantages

D1) Private purchases of TDRs are needed to launch and sustain the advantages of this option. For example, a developer would have to buy TDRs from a sending area landowner who conveyed title to the RFMUD preserve before the RFMUD bank could sever its TDRs. And the RFMUD bank would then have to sell those TDRs to a receiving area developer in order to obtain the money to contribute to a land management endowment fund. There will be a delay between the time that RFMUD preserve accepts title to a particular property and the time that the proceeds from the resulting TDRs is deposited to the endowment fund. In other words, the county would be accepting responsibility for managing a property in advance of the funding needed for that management. In contrast, an option involving a significant infusion of public money could create a larger land management endowment fund in a shorter period of time, thereby assuring the county of its ability to maintain the RFMUD preserve.

D2) Owners of RFMUD sending area land served by a non-county conservation agency may object to this option since they already have an organization that will accept their land and the TDRs sold by the RFMUD TDR bank compete with their TDRs when developers are in the market to buy TDRs. However, at the RFMUD restudy community meetings, sending area landowners repeatedly proposed equity in the treatment of sending area property owners. This option essentially gives all sending area property owners the same opportunity to sell all of their TDRs if that is their preference.

E. Surcharge

At least one TDR program and probably more require that developers pay a surcharge to the jurisdiction for every TDR the developer redeems in the course

of getting project approval for a project involving bonus development. At one time, the City of Los Angeles required a “Public Benefit Payment” to the City of $35 per square foot of transferred floor area to be used for affordable housing, open space, historic preservation, public transportation and public/cultural facilities. The amount required under the Los Angeles Public Benefits Payment has changed but it is still a highly effective means of generating funding for improvements in downtown Los Angeles. (More examples could probably be found if Collier County has any interest in further exploring this concept.)

In Collier County, the county could use the revenue from a hefty surcharge for multiple community benefits in the RFMUD which might involve capitalizing a TDR bank and/or making contributions to a land management endowment fund to pay for perpetual care of North Belle Meade sending sites acquired by the county (assuming the ROMA mitigation bank does not materialize to pay for this ongoing maintenance). The RFMUD is in the enviable position of having substantial demand for TDRs in the long term. Consequently this program can increase the ratio of TDR allocations to sending area property owners to completely offset any reduction in the per-TDR payment that developers pay to sending area property owners. This would allow developers to pay a reduced cost per TDR to sending area property owners plus a substantial surcharge and still experience an affordable total expense for both the TDR purchase and the surcharge.

Advantages

E1) Like Option D, this option allows capitalization of a TDR bank using private rather than public money.

E2) A TDR bank could use surcharge money to buy TDRs from sending site property owners as soon as developers redeem TDRs to get approval for receiving site projects involving bonus development. The readily-available cash from a surcharge gives this option an advantage over certain options in Sections A and D of this memo which require the TDR bank to sell TDRs severed from county land before any money is available to acquire more TDRs from sending area landowners.

E3) Administration of a fund generated from surcharges is likely to be simpler to administer than options, like those in Section D of this memo, which require the TDR bank to sell TDRs before cash is actual available for use.

E3) To the extent that this option results in a well-stocked, adequately-capitalized TDR bank, it would offer the advantages of a privately-funded TDR bank: ability to create a perpetual revolving fund for preservation; assurance that developers would be able to secure TDRs when needed; TDR price stabilization; and the possibility of improved administration for benefits like stakeholder transaction assistance.

Disadvantages

E1) In this option, surcharges do not generate revenue until developers redeem TDRs to get approval for projects involving bonus density. While the RFMUD TDR program has resulted in the redemption of 2,129 TDRs to date, near term demand is slow, consequently meaning that the benefits of surcharge revenue will also be slow to materialize. Consequently, it does not appear to be a robust solution for the lag-time problem.

E2) As with the DTC option, some stakeholder could be concerned that Collier County might not use surcharge revenue exclusively for the TDR program. However, as discussed in Disadvantage C2, this concern should be reduced or eliminated by the fact that RFMUD program is fully transparent on the County's website.

E3) Because the surcharge generates cash, some stakeholders may be have concerns that are similar to those discussed in in Section C because DTC also generates cash. The details of these potential concerns and possible responses are comparable to those found in Disadvantages C3, C4 and C5 above.

F) Next Steps

This memo suggests that a TDR bank funded by a large input of public money would achieve the greatest number of program goals including the following:

- A near-term, substantial amount of money could buy a large supply of TDRs from sending area property owners and hold these TDR for eventual sale to receiving area developers as demand materializes in the long term, thus addressing the all-important lag-time issue.
- In the event that the mitigation bank, or ROMA, does not materialize, a large infusion of public money could also be used to capitalize an endowment fund for the perpetual management of a new county reserve that allows North Belle Meade sending area property owners to convey title to the county.
- An adequately-capitalized TDR bank will be likely to have enough TDRs in stock to assure developers of an alternative source of acquiring readily-available TDRs at a known price when they need them. This assurance may cause more developers to use the TDR option, leading to additional demand which ultimately translates into increased purchases of sending area TDRs.

In contrast, some of the options discussed in this memo do not require public capitalization. Some of these "bootstraps" options rely on TDR sale proceeds to generate revenue that can then be used to buy TDRs from sending area landowners. For example, Section B discusses the possibility of capitalizing a TDR bank by selling TDRs from land the county already owns and Section D discusses the creation of special TDRs that only a county TDR bank can sever and sell from the North Belle Meade sending area land conveyed to the county

(in the event that the mitigation bank or ROMA does not materialize), These options seem inferior to options in which a TDR bank is publically funded because time would be needed to sell the TDRs in the bank and thereby generate the cash needed to buy new TDRs; this problem would be compounded by the fact that near term demand is slow. The surcharge discussed in Section E does not require public funding nor does it require time for TDRs to be sold before cash is available to purchase TDRs. However, the surcharge is dependent on the pace at which developers redeem TDRs in order to get approval to proceed on projects involving bonus density. So, the surcharge would also be unlikely to equal the amount of capital for a TDR bank to buy a substantial number of TDRs in the near term, which is when capital is needed to address the lag-time issue.

If this summation seems reasonable, the county should consider the likelihood of publicly funding a TDR bank. Following County Board direction, polling could be conducted to estimate the chances of voters approval of a small portion of property tax to support a bond (with the understanding that proceeds from the eventual sale of the TDRs acquired with this bond could be used over and over to accomplish additional preservation and maintenance).

Public funding from federal, state and other non-county sources (as briefly sketched in Section B) should also be investigated. If both the county referendum and non-county public funding sources seem dubious, the county can also consider budgeting enough money to fund an initial round of TDR acquisitions as mentioned in Section B. Although this amount will create a fraction of the start-up money likely to be generated by a sizeable bond, it would nevertheless demonstrate the advantages of using TDR to recycle limited funding and could ultimately lead voters to approve a steady source of funding as in the King County, Washington example discussed in Section B.

In the event that none of these public resources materialize, the county can consider the bootstrap options with the understanding that they will likely have less ability to address the very important lag-time issue because they generate revenue only when developers either buy TDRs or redeem TDRs, activities that currently occur but occur so slowly at the moment that they are likely to be less effective in solving the major concern about the RFMUD program.