Collier County

Appendix C

Rural Fringe Mixed-Use District Restudy
TDR Bank Memo

TDR Bank Capitalization

Rural Fringe Mixed-Use District TDR Program

December 20, 2016

Prepared for:

Collier County Zoning Division
2800 N. Horseshoe Dr.
Naples, FL 34104
239-252-2400

Prepared by:

PlaceWorks
3 MacArthur Place, Suite 1100
Santa Ana CA 92707
714-966-9220
placeworks.com

Table of Contents

LIST OF FIGURES

LIST OF TABLES

This page intentionally left blank.

1. Introduction

As part of the restudy of the Rural Fringe Mixed-Use District (RFMUD) Transferable Development Rights (TDR) program, Collier County wants to explore the establishment of a TDR bank. This report describes TDR banks, the potential role and benefits of a bank for the RFMUD TDR program, and how a bank could be funded. The report also provides an economic analysis to determine the amount of funding that should be considered for the bank and the millage rate that would be needed if property taxes provide the initial funding. The report is intended to provide a framework for public discussion about establishing a TDR bank.

RFMUD Restudy

The Board of County Commissioners directed the restudy of the RFMUD in February 2015. In August 2016, the Collier County Growth Management Department published background information, findings, and recommendations in the *Rural Fringe Mixed-Use District Restudy White Paper*. In preparation for the White Paper's distribution to the BCC in December 2016, modifications were made. For brevity's sake, this report highlights portions of the White Paper relevant to a TDR bank. Readers of this report are encouraged to download[1] and read the White Paper for a complete presentation of the RFMUD Restudy.

The restudy is based on the understanding that Collier County will maintain the goals of the RFMUD program as established by the 1999 Final Order and subsequently refined in elements and regulations adopted from 2002 to 2004. To better achieve those goals, the restudy aims to improve the TDR credit system, secure the capability for long-term maintenance of protected sending areas and improve the potential for successful receiving area development. The December 2016 white paper lists 41 initial recommendations including the following:

> *The County should consider the appeal of a publicly funded TDR bank and dedicated assessment and bonding for the program, based on an evaluation of costs and benefits. Board direction will allow a focused analysis including projected costs. (Restudy White Paper, Chapter 4, Section C(3))*

[1] http://www.colliergov.net/your-government/divisions-s-z/zoning-division/community-planning-section/rural-fringe-mixed-use-district-rfmud-transfer-of-development-rights-tdr-rest

TDR Program Background

The RFMUD TDR program encourages development to occur in areas with less environmental value (receiving areas) rather than areas with high environmental value (sending areas). Figure 1 on the opposite page shows the sending and receiving areas in the RFMUD.

The buying and selling of TDR credits is a private-market transaction that compensates sending area property owners with payments for the TDR credits. It compensates receiving area property owners by allowing higher-value higher-density development. The conservation and preservation of high-environmental-value areas benefits the public. And, the more compact development in the receiving areas can benefit the public through lower costs for public facilities and services.

Sending Areas

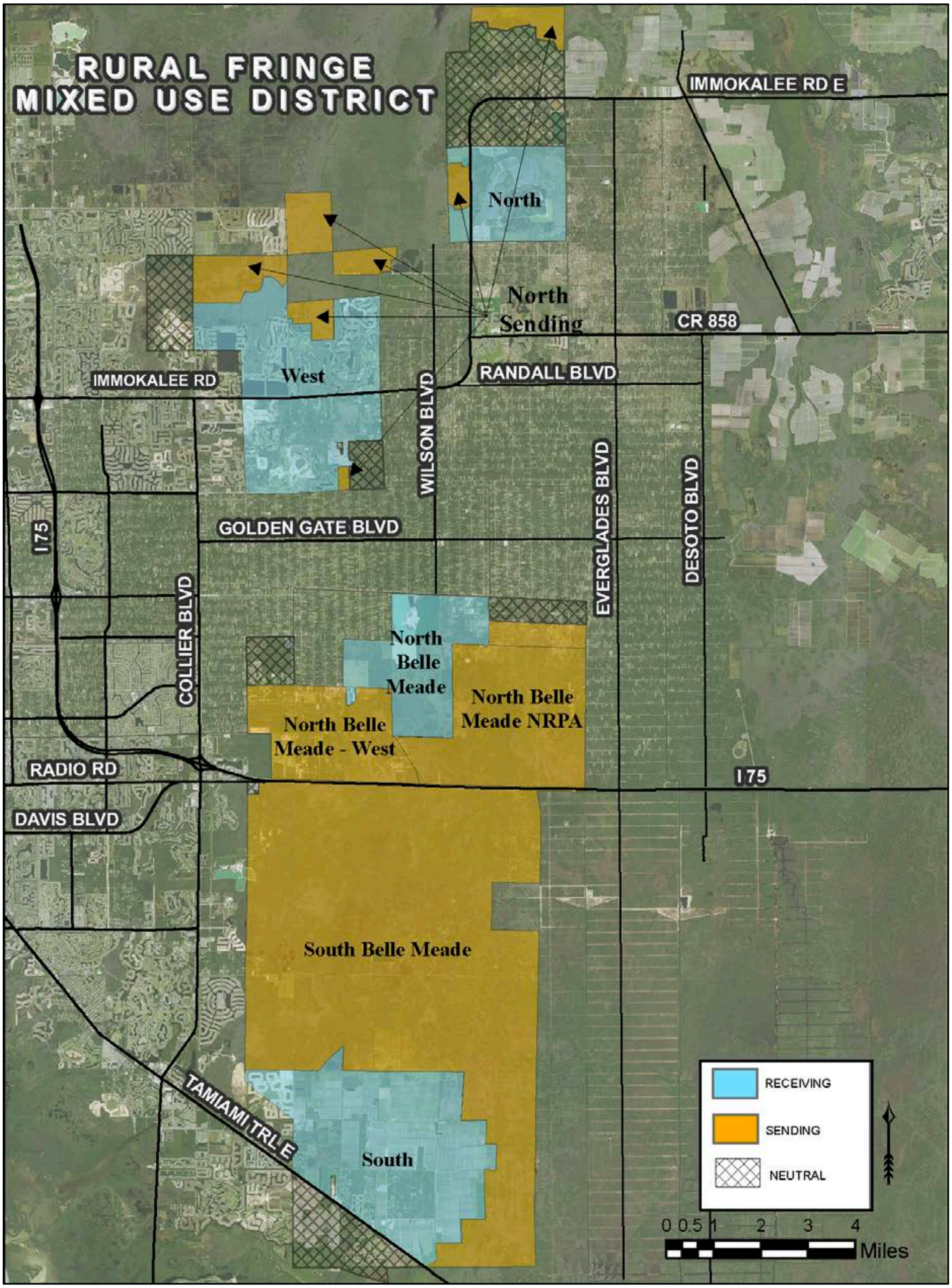
Under the TDR Program, approximately 41,000 acres of land with high environmental value are identified as sending areas, although only 16,700 acres are privately owned. Generally, development in these areas is restricted to no more than one dwelling unit per 40 acres, or smaller lot in existence prior to 1999. In lieu of developing this land, property owners may sever and sell TDR credits. For each five acres in a parcel[2], the TDR program allocates the property owner one base credit and one early entry credit. One additional restoration and maintenance (R&M) credit is available if the property owner restores the land in accordance with program requirements. Finally, one more TDR credit is available if the property is conveyed to a public agency for long-term conservation and preservation. Thus, a five-acre parcel can have up to four TDR credits.

Receiving Areas

The TDR program identifies approximately 28,000 acres of land with less environmental value as receiving areas, 14,000 acres of which are vacant. Generally, land in receiving areas is limited to one dwelling unit per five acres. However, property owners in the receiving area can develop at higher densities by purchasing a TDR credit for each housing unit over one per five acres, up to a maximum density of one unit per acre.

[2] Partial credits are allocated for the portion of the parcel over five acres. In addition, legally non-conforming parcels less than five acres in size are allocated TDR credits as though they contained five acres.

Figure 1: Sending and Receiving Areas, Rural Fringe Mixed Use District, 2016



Source: Collier County.

TDR Program Activity

To date, 4,600 TDR credits covering 6,500 acres have been processed or are pending process. Of these, 2,100 have been used to increase density in receiving area development projects. Figure 2 on the opposite page shows where TDR credits have been transferred from and to. Nationally, Collier County's RFMUD is considered a success story. However, since the 2008–09 recession, the pace of TDR transactions has slowed.

Public Sentiment About the TDR Program

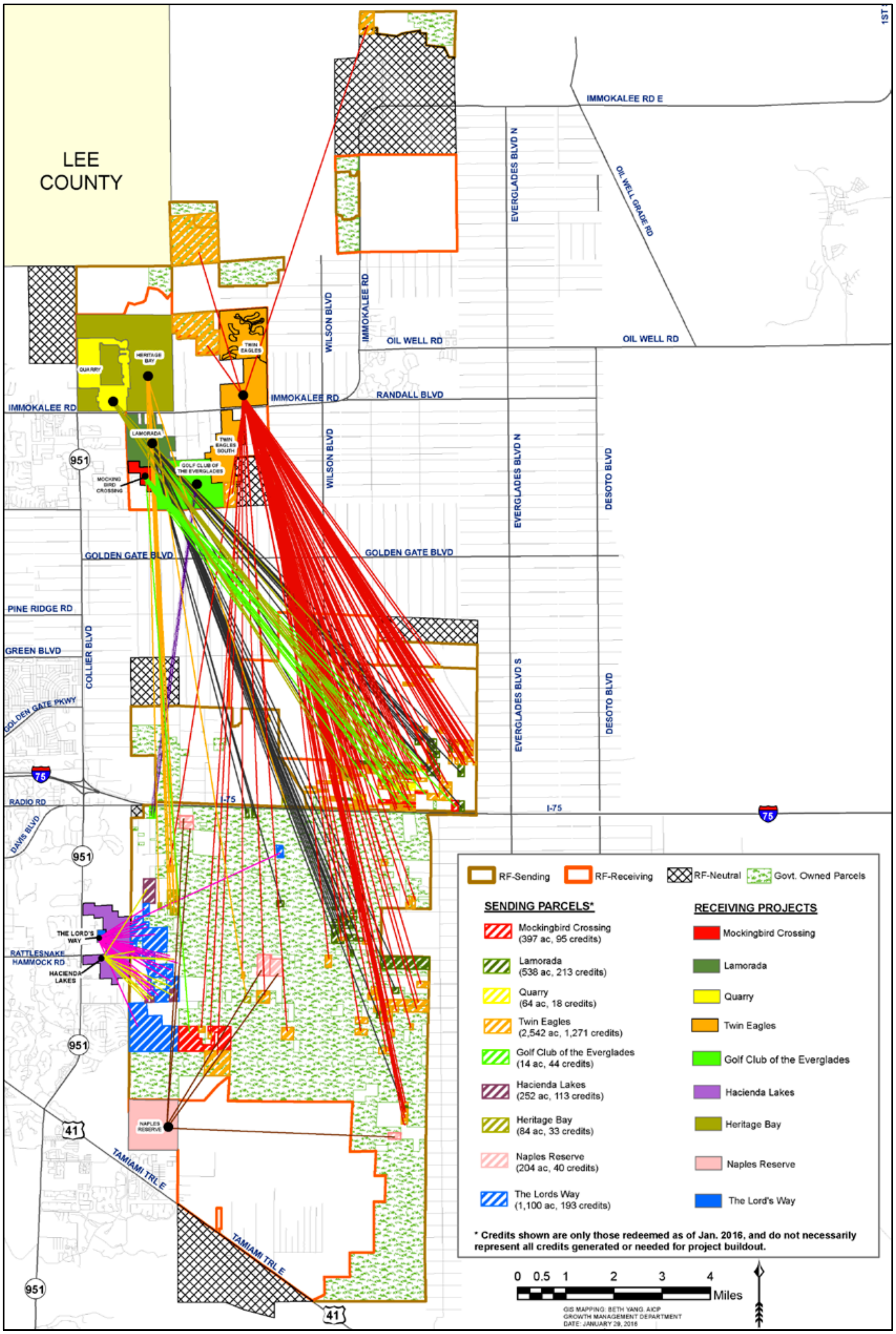
Six public workshops, 15 interviews and numerous calls, surveys, and meetings were conducted with citizens, agency representatives, stakeholders and the media for the RFMUD restudy in 2016. As detailed in the white paper, some stakeholders are dissatisfied with the pace of transfer activity. Stakeholders also generally agree that the receiving areas could absorb the supply of TDRs in the sending area. However, the bulk of demand for TDRs will occur in the future, creating a gap in demand that frustrates those sending area landowners who want to sell their TDRs sooner rather than later. As discussed in Part 2 of this report, TDR banks are a potential solution to this concern.

TDR Banks

TDR banks acquire TDRs from sending-area property owners, hold them until needed, and sell them to developers to use for receiving site development projects. When adequately funded, TDR banks can buy TDRs from willing sellers in the near term and hold them for eventual sale to developers in the future, as TDR demand increases. One of the conclusions reached in the restudy public workshops was to explore establishing a TDR bank.

Most often, the local government establishes and operates the TDR bank, or a public agency established by the 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.

Figure 2: Completed TDR Credit Transfers, RFMUD, 2016



Source: Collier County.

Report Organization

Part 2 of the report describes the benefits of creating a TDR bank, and Part 3 evaluates the advantages and disadvantages of several alternative ways of capitalizing a TDR bank. Part 4 provides an economic analysis to determine an appropriate amount of initial funding for a TDR bank and the millage rate that would be needed, if this is the route the county were to use to fund the initial capitalization. Part 5 provides a summary of the report's recommendations.

2. TDR Bank Benefits

TDR Bank Benefits

Ways in which TDR banks have benefitted other TDR programs illustrate the value a bank could have for Collier County.

Accelerate Sending-Area TDR Sales

During the RFMUD Restudy meetings, sending area property owners reported that there were not enough TDR buyers because there were many entitled but not yet constructed development projects. This is a typical case in which a TDR bank can provide a valuable service. A bank could buy TDRs from sending area owners in the short term and sell them when receiving area TDR demand materializes.

Create a Revolving Fund

TDR banks recoup their original expenditures as they sell TDRs. Banks can then use the proceeds from those sales for further TDR acquisitions, to achieve other public goals (such as ongoing operations and maintenance of preserves), and to repay the initial funding. Effective TDR banks convert what would otherwise be a one-time public expenditure into a revolving fund for preservation. This can be an important feature in the context of securing public funding for a TDR bank.

Supplement the Private Market

TDR banks provide receiving area developers with an alternative source of TDRs. In a private market transaction, the developer must find, contact, and negotiate with one or, usually, more sending area property owners to purchase TDRs. With a TDR bank, a developer knows how many TDR credits are available, what the price will be, and what the process is to obtain the credits.

The existence of a TDR bank does not, in and of itself, guarantee that sufficient credits will be available when developers need them. An underfunded bank may face challenges maintaining an adequate supply of TDR credits. The purpose of this report's analysis is to determine the amount of funding needed to ensure that a TDR bank would be sufficiently capitalized.

Stabilize Prices and Foster Certainty

TDR banks help stabilize TDR prices, especially over time as supply and demand move in and out of balance with economic cycles. A bank provides price certainty for sending area property owners when they consider whether to participate in the TDR program. A bank also allows developers to analyze the financial feasibility of a potential development with a degree of certainty that TDR credits will be available in the future at the assumed price when they have to buy the credits.

Market and Promote the TDR Program

TDR banks often provide program marketing, administration, transaction facilitation and other functions. These efforts produce more successful programs, and they benefit private market transactions. TDR programs without a bank still perform these functions. However, local governments that invest in a TDR bank are more likely to protect that investment by adequately staffing and funding these functions.

Demonstrate Commitment

Establishing and funding a TDR bank demonstrates to property owners and developers the local government's commitment to TDRs. Furthermore, a bank funded by a voter-approved tax measure, or professional polling, demonstrates overall community support for the TDR program and conservation. In turn, this demonstrated commitment helps motivate sending area property owners to more seriously investigate and consider participating in the TDR program rather than waiting on the sidelines.

Challenges to Establishing a TDR Bank

Even with the benefits a bank provides for TDR programs, there are challenges to setting up an effective TDR bank.

Competition for Public Funds

TDR banks can be self-sustaining for as long as there is a supply of TDRs and development capacity to use them. Nevertheless, a bank requires some initial funding from public coffers. Securing public funding presents challenges, especially considering competition for limited public dollars. The initial public funding that goes into a TDR bank becomes a revolving fund, continuing to pay for additional conservation over time, in contrast to many other alternatives which tend to be one-time uses of money. In addition, if the funding is provided through an increased millage rate, the TDR bank would be drawing from new funds rather than competing for support from the county's general fund. Whatever the source, successfully obtaining public funds requires a robust public engagement process. This is even more so if a public vote will be needed.

Holding Time

The length of time the bank may be expected to hold TDRs until there is demand to sell them can become a concern. This is especially true if a debt obligation is used to finance the initial bank capitalization, and TDR sales are needed to repay the debt. It is less of a concern if an increase in ad valorem property tax directly funds the initial capitalization or secures the debt obligation that funds the initial capitalization.

Either way, the holding time should be less of a concern in Collier County because the TDR program has been effective for many years and has already used 2,100 TDR credits. The economic analysis in this report uses a conservative approach that assumes a lengthy period before TDR sales occur at a substantial rate. The county should avoid making overly-optimistic projections about how fast the bank will recycle the initial funding for additional TDR purchases.

Preservation Support

TDR banks can hold TDRs for a long time with minimal criticism if citizens appreciate the public benefits secured by the banks purchase of TDRs. For example, TDR banks in King County, Washington and Palm Beach County, Florida purchased TDRs from land that ultimately became parks, nature preserves and open space. This consideration may be less important in Collier County because a bank is likely to experience some sales in the short term. Nevertheless, the public engagement process should publicize the benefits from bank purchases of TDRs.

Adequate Funding

Establishing a TDR bank with inadequate funding can result in calls for additional public funding and can also discourage sending area property owners from participating in the TDR program. This is especially true when receiving area demand is slow. Sending area property owners are more likely to be patient if they see TDR bank sales generating funding for additional TDR purchases. The RFMUD TDR program's successful track record should lessen concerns about the length of time before the bank is able to make new purchases after the initial funding has been used.

Specific RFMUD Benefits

In addition to the general benefits a bank provides for a TDR program, there are three specific RFMUD TDR issues that a bank could address.

Near-Term Support

In the public engagement process for the RFMUD restudy, sending area property owners expressed concern about the slow pace of current and near-term receiving area demand for TDRs. A well-funded TDR bank could satisfy the current sending area desire to sell TDRs.

Ease of Acquisition

Receiving area developers have expressed their concern that obtaining TDRs has become and will continue to become more difficult and discourage their interest in participating in the TDR program. TDRs have been severed from many of the larger parcels and the ones that are easiest for severing TDRs. The smaller the sending area parcels with available TDRs, the more property owners a developer must negotiate with and the more cumbersome the process. A TDR bank ensures a ready supply of TDRs when developers need them. And depending on the processes the county would establish, a TDR bank could have a fairly simple and efficient sales procedure.

Perpetual Land Maintenance

Conveying land to the Florida Forestry Service has been an effective way to ensure perpetual land maintenance in the South Belle Meade sending area. The county is examining the possibility of establishing an environmental mitigation bank, or Regional Offsite Mitigation Area (ROMA), in the North Belle Meade sending area. This would provide a cost-effective way for the county to mitigate the impacts of its transportation and other infrastructure projects and provide a possible solution to perpetual land management and hydrology capital improvements for properties from which TDRs have been severed in the selected geographic area.

TDR banks often sell TDRs for a slightly higher price than they pay to purchase them. A part of this difference in prices can be used to repay the initial funding for the bank. If the TDR bank is funded with a dedicated millage rate increase, the amount generated for repayment could also be used for other conservation purposes, including maintenance of properties conveyed to the county after TDR credits have been severed.

3. Funding Options

Typically, local governments initially fund TDR banks with public funding, ranging from general fund to a voter approved tax. The first section below describes the traditional public funding. The next two sections describe less-traditional but nevertheless possible capitalization options.

Traditional Public Funding

There are several types of public funding that Collier County could consider if it decides to establish a TDR bank. This section provides a brief description of these types of funding and then discusses the advantages and disadvantages of a dedicated ad valorem tax relative to the other types of public funding. The appendix provides more detailed descriptions of these types of public funding with examples from other programs.

Types of Public Funding

Partnerships with Preservation Organizations

Local governments can stock TDR banks by partnering with land preservation programs that traditionally restrict land with generic conservation easements rather than TDR easements. Although these most often take the form of purchase of development rights (in which the rights are retired rather than transferred to a receiving area), some programs have used the funding to create a true TDR program.

Conservation Bonds

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.

General Fund

Local governments can devote general fund money to capitalizing a TDR bank. King County, Washington started its TDR bank with a $1.5 million loan. The TDR program repaid the loan in full, with interest, in 2016. Bank funding may change each year depending on changing constraints on the general fund.

Severing TDRs from Government Purchased Property

Local governments buying parkland or protecting nature preserves can sever development rights and deposit them into the TDR bank.

Dedicated Ad Valorem Property Tax

Local governments can dedicate an increase ad valorem property tax to fund the initial capitalization of a TDR bank. Depending on the total funding desired and the amount of tax revenue generated, this tax could be for a limited number of years, with TDRs purchased in each year directly from the tax revenue generated. When the revenue generated cannot fund the initial capitalization adequately in a few years, the tax revenue could be used to secure bond financing, with the debt repaid by the tax revenue over a longer time period. For a RFMUD TDR bank, the amount of funding needed, which is determined in the next part of this report, could probably be directly generated over five years, without using bond financing.

Advantages of an Ad Valorem Tax

Quick Start to TDR Purchases

A dedicated ad valorem tax could generate sufficient revenues to begin making a significant number of TDR purchase in the near term. A conservation bond could also begin in the near term, albeit slightly longer to obtain voter approval. The other types of public funding would take many years to make a significant amount of TDR purchases.

Ability to Satisfy More Sending Area Property Owners

The RFMUD Restudy White Paper reaffirms the goal of treating all sending area properties the same. With the other types of funding, which will not be able to make a significant number of purchases in the near term, the county would have to prioritize purchases because there would likely be many more interested TDR sellers than could be accommodated with the limited funds. This would be less of an issue with an ad valorem tax and with a conservation bond.

Funding for Other Public Purposes

An ad valorem tax and a conservation bond could be structured to generate revenues for other public benefits, most notably the long-term maintenance or hydrological enhancement of preserved lands from which TDRs have been severed. Because they generate much less revenue, the other types of public funding would not pay for other public benefits.

Disadvantages of an Ad Valorem Tax

The primary disadvantage of a conservation bond is the need to obtain voter approval. We assume that an ad valorem property tax to directly fund a TDR bank would not require voter approval. Given the numerous benefits of a TDR bank, there may be a strong case for voter approval of a conservation bond. However, the time and cost involved with the referendum process should be considered.

The county directly appropriating from the general fund to a special fund for a TDR bank could avoid the cost and time of voter approval.

Given the challenge of obtaining voter approval, a natural inclination would be to rely on the state and federal government to fund the TDR bank through grants and loans. Certainly, there is no reason not to use that funding when available. However, there are no such programs that could fully provide the amount of funding determined necessary in the next part of this report.

TDR Surcharge

At least one TDR program, if not more, requires that developers pay a surcharge to the jurisdiction for every TDR credit used in a TDR development project. At one time, the City of Los Angeles required a public benefit payment of $35 per square foot of transferred floor area. The revenue generated was used for affordable housing, open space, historic preservation, public transportation, and public and cultural facilities. Although the amount has changed, it is still a highly effective means of generating funding for improvements in downtown Los Angeles.

Collier County could use the revenue from a surcharge for multiple community benefits in the RFMUD, which might involve capitalizing a TDR bank. This approach has the advantage that it does not rely on public funding. Unless, however, the county could require payment of the surcharge on entitled but not yet constructed projects, this alternative would not generate substantial funds for a TDR bank until the development market in the RFMUD returned in strength, and by then, the case for establishing a TDR bank would be much weaker.

The bigger disadvantage to this approach is that it does not generate additional money for conserving sending area properties. A separate report, *TDR Analysis Report*, analyzed the financial feasibility of receiving area development and determined the dollar amount that developers could afford to pay to acquire TDRs. To pay a surcharge, each development project would need to pay less to purchase TDRs. This reduction could be in the average TDR price or in a change in the transfer ratio so that fewer TDR credits would be required. Either way, a surcharge would be a zero-sum gain in the amount of funding flowing to sending area property owners.

TDRs from County-Owned Property

As an alternative to funding the initial capitalization of a TDR bank, the county could sever TDR credits from land the county owns in the sending areas. Those TDR credits could then be deposited in the bank or sold and the proceeds deposited in a TDR bank.

Collier County owns about 300 acres of land in RFMUD sending areas. Although purchased for other reasons, these properties 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.

This approach would not require new county investment. However, it would also not generate new revenue for purchasing TDR credits until the development market in the RFMUD returned in strength, and by then, the case for establishing a TDR bank would be much weaker. Furthermore, this approach would not generate an adequate amount of initial funding for a TDR bank. If the 300 acres of county-owned property received the maximum number of TDR credits, for example eight per five acres, it would result in 2,400 credits (or 12 percent of the theoretical supply), or $24 million. While this would not be sufficient to fully fund the TDR bank, it would be a good start to full capitalization. Furthermore, these credits could be severed and transferred to the bank quickly so the bank is able to sell TDRs while it awaits voter approval for a conservation bond.

4. Economic Analysis

This part of the report provides an economic analysis that identifies a target amount for the initial funding of a TDR bank and projects an annual cash flow for the bank. The target is based on reasonable assumptions and conservative estimates. However, there is no exactly right number. The target is intended to serve as a starting point for public discussions, and the result of those discussion may be a different target that is equally reasonable.

Initial Funding Objective

The objective of the initial funding of a TDR bank is to fund the purchase of one-half of the likely supply of TDR credits. A separate study, *TDR Analysis Report*, determined the likely supply of TDR credits across the four sending areas. The likely supply is 16,400. Therefore, the objective of the initial funding is to enable a TDR bank to acquire 8,200 TDR credits.

The *TDR Analysis Report* recommends a target price of $10,000 per TDR credit. At that price, the initial funding should be about $82 million. Assuming that the initial funding is provided by a dedicated ad valorem property tax over five years, the $82 million in initial funding equates to about $16,420,000 each year for acquiring TDR credits.

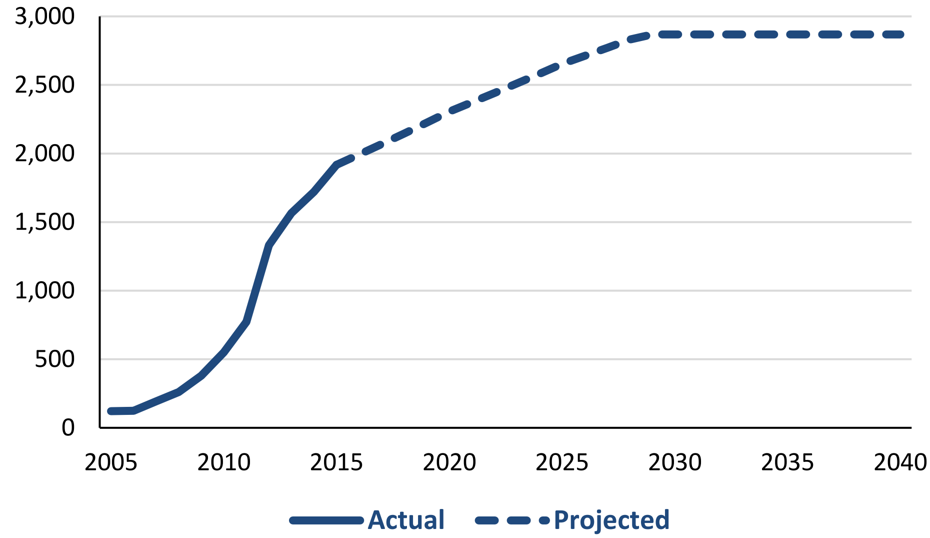
Receiving Area Buildout

Because the TDR bank would reinvest the proceeds from the sales of TDR credits, the bank's cash flow depends on the rate of development in the receiving areas. The economic analysis begins by projecting the rate of development.

Because the west receiving area has experienced the most development to date, its development pattern is used as a model for the other three receiving areas. Figure 3 shows the number of households in the west receiving area from 2005 to 2015 and Collier County's current projection for this area through 2040. The chart shows that this area had relatively rapid growth from 2006 to 2012. From 2012 onward, the growth rate slows, but the area maintains a steady level of growth.

The analysis assumes that the other three receiving areas will experience the same amount of household growth over the first six years of substantial development, followed by a straight-line trend until they reach their assumed buildout.

Figure 3: Actual and Projected Household Growth, West Receiving Area, 2005 to 2040



Source: PlaceWorks, 2016, using data from Collier County.

The analysis makes the following assumptions about the other three growth areas:

+ The North receiving area will begin substantial development starting in 2022 and will fully buildout by 2040.
+ The North Belle Meade receiving area will begin substantial development in 2027, and it will be 50 percent builtout by 2050.
+ The South Belle Meade receiving area will begin substantial development in 2035, and it will be 35 percent builtout by 2050.

Based on these assumptions, Table 1 on the following page shows the projected number of households in each receiving area from 2016 to 2050. The yearly increase in the number of households determines the number of TDR credits needed. The final column in Table 1 shows the number of TDR credits projected to be purchased each year.

Table 1: Projected Number of Household by Receiving Area, 2016 to 2050

	West	North	North Belle Meade	South Belle Meade	Annual TDR Demand
2016	1,990				
2017	2,070				66
2018	2,150				67
2019	2,230				69
2020	2,310				70
2021	2,370				58
2022	2,440	120			152
2023	2,510	120			63
2024	2,580	190			113
2025	2,650	260			114
2026	2,710	380			142
2027	2,770	550	120		275
2028	2,830	770	120		224
2029	2,870	1,640	190		748
2030	2,870	2,500	260		716
2031	2,870	3,370	380		755
2032	2,870	4,240	550		794
2033	2,870	5,100	770		833
2034	2,870	5,970	1,060		883
2035	2,870	6,830	1,350	120	976
2036	2,870	7,700	1,630	120	886
2037	2,870	8,560	1,920	190	935
2038	2,870	9,430	2,210	260	935
2039	2,870	10,300	2,490	380	975
2040	2,870	10,300	2,780	550	351
2041	2,870	10,300	3,070	770	389
2042	2,870	10,300	3,350	1,700	929
2043	2,870	10,300	3,640	2,620	929
2044	2,870	10,300	3,930	3,550	929
2045	2,870	10,300	4,220	4,480	929
2046	2,870	10,300	4,500	5,400	929
2047	2,870	10,300	4,790	6,330	929
2048	2,870	10,300	5,080	7,250	929
2049	2,870	10,300	5,360	8,180	929
2050	2,870	10,300	5,650	9,100	929

Source: PlaceWorks, 2016.

TDR Bank Cash Flow Table

The projected cash flow for the TDR bank is based on the following assumptions:

+ The target price for TDRs is $10,000.
+ To balance the cash flow and ensure that the initial funding is repaid, the bank would purchase TDRs for $9,921 per credit and would sell TDRs for $10,079 per credit; the difference would create an opportunity for the private market while offsetting, in part, the county's administrative cost.
+ The bank would use 51.4 percent of the proceeds from the sales of TDR credits to purchase new credits in the following year.
+ The bank would use 47.1 percent of the proceeds from the sales of TDR credits to repay the initial funding.
+ The bank would use 1.5 percent of the proceeds from the sales of TDR credits to offset, at least partially, administrative costs, up to $100,000 in a single year (see appendix for a discussion of administrative costs).
+ The bank should repay the initial funding within 30 years.

Table 2 on the following page shows what the cash flow for the TDR bank would be under these assumptions.

Cash Inflow

The first column shows the cash flowing into the bank from the initial capitalization. Based on the assumptions, the amount reflects the initial funding objective discussed on page 15 ($81.5 million to purchase 8,200 TDR credits at a price of $9,921 per credit) spread equally over five years. The second column indicates the cash flowing into the bank from its sales of TDR credits based on the projected demand (see Table 1 on page 17) and a sales price of $10,079 per credit. The third column is the total cash inflow each year, the sum of the first two columns.

Cash Outflow

The fourth column is the amount that the bank would generate to help offset the county's cost to administer the TDR program and the TDR bank. The amount is 1.5 percent of the proceeds from the bank's sales of TDRs each year, up to an assumed maximum of $100,000 per year. The fifth column is the amount that the bank would provide to repay the initial funding. The county could dedicate this funding to one or more purposes. The funds could be deposited into the general fund to reimburse taxpayers. The county could use the funds to preserve and

Table 2: Illustrative TDR Bank Cash Flow, RFMUD, 2017 to 2050

Year	(1) Initial Capitalization	(2) Cash Inflow from TDR Sales	(3) Gross Cash Inflow	(4) Cash Outflow to Help Offset Administration Cost	(5) Cash Outflow to Repay Initial Capitalization	(6) Balance Available for TDR Purchase
2017	16,290,000	666,000	16,960,000	(10,000)	(314,000)	16,630,000
2018	16,290,000	679,000	16,970,000	(10,200)	(320,000)	16,640,000
2019	16,290,000	692,000	16,980,000	(10,400)	(326,000)	16,650,000
2020	16,290,000	706,000	17,000,000	(10,600)	(332,000)	16,650,000
2021	16,290,000	588,000	16,880,000	(8,800)	(277,000)	16,590,000
2022		1,535,000	1,540,000	(23,000)	(723,000)	790,000
2023		631,000	630,000	(9,500)	(297,000)	320,000
2024		1,143,000	1,140,000	(17,100)	(538,000)	590,000
2025		1,154,000	1,150,000	(17,300)	(543,000)	590,000
2026		1,432,000	1,430,000	(21,500)	(674,000)	740,000
2027		2,774,000	2,770,000	(41,600)	(1,306,000)	1,430,000
2028		2,257,000	2,260,000	(33,900)	(1,063,000)	1,160,000
2029		7,543,000	7,540,000	(100,000)	(3,551,000)	3,890,000
2030		7,214,000	7,210,000	(100,000)	(3,396,000)	3,720,000
2031		7,608,000	7,610,000	(100,000)	(3,582,000)	3,930,000
2032		8,006,000	8,010,000	(100,000)	(3,769,000)	4,140,000
2033		8,395,000	8,400,000	(100,000)	(3,953,000)	4,340,000
2034		8,901,000	8,900,000	(100,000)	(4,191,000)	4,610,000
2035		9,839,000	9,840,000	(100,000)	(4,632,000)	5,110,000
2036		8,925,000	8,930,000	(100,000)	(4,202,000)	4,620,000
2037		9,427,000	9,430,000	(100,000)	(4,438,000)	4,890,000
2038		9,428,000	9,430,000	(100,000)	(4,439,000)	4,890,000
2039		9,823,000	9,820,000	(100,000)	(4,625,000)	5,100,000
2040		3,534,000	3,530,000	(53,000)	(1,664,000)	1,820,000
2041		3,924,000	3,920,000	(58,900)	(1,847,000)	2,020,000
2042		9,365,000	9,360,000	(100,000)	(4,409,000)	4,860,000
2043		9,365,000	9,360,000	(100,000)	(4,409,000)	4,860,000
2044		9,365,000	9,360,000	(100,000)	(4,409,000)	4,860,000
2045		9,365,000	9,360,000	(100,000)	(4,409,000)	4,860,000
2046		9,365,000	9,360,000	(100,000)	(4,409,000)	4,860,000
2047		9,365,000	9,360,000	(100,000)	(4,409,000)	4,860,000
2048		9,365,000	9,360,000	(100,000)	0	9,260,000
2049		9,365,000	9,360,000	(100,000)	0	9,260,000
2050		9,365,000	9,360,000	(100,000)	0	9,260,000

Source: PlaceWorks, 2016.

maintain lands from which TDRs have been severed and which have been conveyed to the county. The county could use the revenue for an environmental fund for estuary health, aquifer health, and hydrological capital improvements.

Balance to Purchase Additional TDRs

The final column in Table 2 is the difference between the annual cash inflow and cash outflow. This is the amount that the bank would have available each year to reinvest in the purchase of additional TDRs. The initial funding would enable the bank to purchase 8,200 TDR credits; the amount the bank would reinvest could enable the purchase of up to 9.000 additional credits by the time the bank repays the initial funding.

Final Repayment

The data shows that the bank would be able to repay the initial funding by 2047. Once the bank has repaid the initial capitalization, it could become self-sustaining, each year buying and selling TDRs per market demand. The county could decide instead to phase the bank out after the initial funding has been repaid.

Millage Rate

The cash flow presented Table 2 assumes that the initial capitalization is directly funded through an increased millage (established through the county budget or approved by the voters) dedicated to a special fund or a direct appropriation by the BCC from the general fund. In terms of 2017 taxable value, the $16.3 million for initial funding in each of the first five years would be equivalent to approximately 0.21 mills.

5. Recommendations

Based on input from the RFMUD Restudy, there is a desire among sending area property owners to sever and sell TDR credits. However, there is weak demand for TDR credits for receiving area development projects, even though the long-term demand appears to be strong. To bridge the gap between the supply of credits that could be available in the near term and the demand that may not materialize in the near-term, we recommend that Collier County establish a TDR bank for the RFMUD and that the county provide funding upfront for the initial capitalization of the bank.

The most effective way to capitalize a TDR bank would be for the BCC to increase the millage rate and direct the increased revenue to a special fund for the TDR bank. If an increase of 0.21 mills is feasible, over five years the county could sufficiently capitalize the TDR bank to acquire one-half of the likely supply of TDR credits.

If a 0.21 mills tax rate increase is not feasible, the county could ask the voters to approve a conservation bond, which could be repaid with a lower millage rate over a period longer than five years. With the time required to schedule and conduct an election on the bond and the time to issue bonds, this approach would extend the timeline for when the county could begin purchasing TDR credits. Nevertheless, this approach would still be an effective means to bridge the gap between the near-term potential supply of TDRs and the long-term demand.

We also recommend that the county consider how best to use the revenues generated by the bank's sales of TDRs. The investment in the bank's capitalization could serve double duty. First, the initial funding can be recycled, creating a revolving fund for TDRs and a self-sustaining TDR bank for as long as there is supply and demand for TDR credits. Second, the repayment of the initial funding can, in-turn, fund other needed and desired public benefits, including conservation and maintenance of preserved lands and hydrological capital improvements. Reimbursing the general fund is also a worthy goal, but because the prepayment may take 30 years, the annual impact may be less noticeable.

Finally, we recommended the county explore the various assumptions laid out on pages 16 and 18. These assumptions lead to one illustrative cash flow program, but there is no single correct program. A different set of assumptions that better match the Collier County context and values may result in an equally valid level of capitalization.

This page intentionally left blank.

Appendix

Appendix C-1: Traditional Public Funding Examples

Partnerships with Preservation Organizations

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 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.

Conservation Bonds

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.

General Fund

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 with the stipulation that this start-up capital be repaid when the TDR Bank's cash balance exceeded $2 million; in 2016, the TDR Bank exceeded that balance and the TDR Bank refunded the initial capitalization to King County. Manheim Township, Lancaster County, Pennsylvania stocked its TDR bank by buying TDRs with general fund money and holding them for resale.

Severing TDRs from Government Purchased Property

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.

Dedicated Ad Valorem Property Tax

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.

Appendix C-2: TDR Bank Staffing

This appendix discusses possible staffing needs in the event that Collier County decides to create a TDR bank. TDR programs and banks vary significantly in scale, activity and ambition. They also change over time. This memo provides examples from three programs spanning that range of diversity.

Warwick Township, Lancaster County, Pennsylvania

At the smaller end of the scale, Warwick has preserved 24 farms with 1,560 acres (about 12 percent of the total land area) with its TDR program since 1991. A Warwick Township administrative assistant estimates that one percent of her time is needed to keep records of acquisitions and sales. With the Town Manager, Town Planner and Town Solicitor similarly devoting one percent of their time TDR bank transactions require a total of less than 0.1 Full Time Equivalent (FTE) employee.

New Jersey Pinelands Development Credit Bank

At the other end of the spectrum, the New Jersey Pinelands Development Credit Bank was created by the State of New Jersey to facilitate a TDR program operating in 53 municipalities within seven counties occupying a land area of one million acres. The program has preserved almost 52,000 acres as of 2015. New Jersey funded the bank with a state appropriation of $5 million in 1985. The bank has purchased 1,581 credits and private parties have purchased 1,896 credits to date. The bank has sold 775 credits and private parties have sold 1,088 credits to date.

Staffing for the bank has changed significantly over time. In the early 1980s, the New Jersey Pinelands Development Credit Bank was staffed by one part-time director and a secretary. By 2005, the year in which credit prices peaked, the New Jersey Pinelands Development Credit Bank staff consisted of two full-time administrators, one full-time outreach person, a part-time data entry clerk, and a fulltime secretary. At a separate location, the New Jersey Pinelands Commission in 2005 processed applications using one full time planner, one part-time GIS person, one part-time planner in the Development Review office (to determine allocations, review deeds, process paperwork), two part-time supervisors and a part-time secretary. Consequently, the total staff for the two offices in 2005 was roughly eight FTE positions.

Today, the separate office for the Pinelands Development Credit Bank has been closed and the banking functions have been absorbed by staff at the Pinelands Commission roughly consisting of one full-time planner, one part-time administrator, one part time Development Review staffer, one part-time GIS technician, one part-time director and presumably one half time administrative assistant, or 3.5 FTE personnel. Bear in mind that the Pinelands Development Credit Bank has not received new capitalization from public sources for over 30 years (although it has gotten public money to buy and retire credits since then). Also, the level of bank activity is low at this point despite the vast size of the planning area. In an August 18, 2016 conversation, the Pinelands Commission' Chief Planner, who now also wears the hat of Pinelands Development Credit Bank Executive Director, commented that the person in charge of a TDR bank should ideally work fulltime exclusively on bank responsibilities. A TDR bank director can rely on expertise in other offices that are needed to run the bank but that do not require a full-time person devoted exclusively to the bank (legal, GIS, computing and planning staff for processing applications). However, she also mentioned that a truly active program is labor intensive: recruiting participants and guiding them through the process is very time consuming. Some landowners will have little understanding of easements and title reports much less TDR details. If the Pinelands Development Credit Bank were to receive a significant shot of new public capitalization, at least one additional fulltime position would need to be added and possibly some currently half time positions would become fulltime in order to actively promote, facilitate and administer the program. She did not offer a number but assuming that three current part time positions became full time and if one additional full time position were added, the Pinelands program staff would grow from 3.5 FTE to six FTE positions.

King County, Washington TDR Bank

From the standpoint of scale, activity and ambition, the TDR bank in King County, Washington may be the best model for Collier County. This program has preserved 145,000 acres to date. The King County TDR Bank works intensively with Seattle and other incorporated cities within the county to reach inter-jurisdictional transfer agreements which often include incentives and highly innovation features like revenue sharing between the cities and the county. The King County program also sometimes offers to pay for amenities in cities that enter into agreements to accept TDRs from land under county jurisdiction and TDRs held by the King County TDR bank. Negotiating these inter-jurisdictional agreements is labor intensive and represents a type of work that probably is not on the near-term horizon in the event that Collier County chooses to start a bank.

King County started its TDR bank in 1999-2000 with a $1.5 million loan from the county budget. The bank must repay this loan when its cash balance exceeds $2 million. But the bank never reaches this cash balance because it quickly uses all revenue to buy more TDRs. (Due to an impending large acquisition, the bank currently must exceed this cash balance per an agreement with Seattle; but this is acknowledged to be a necessary exception to the original loan agreement).

The bank is also partly stocked with TDRs purchased with money from the county's Conservation Futures Fund, (a portion of property tax dedicated to land preservation). King County likes to use the TDR bank for acquisitions because the revenue from TDR sales creates a perpetual revolving fund for preservation. The King County TDR Bank Manager estimates that TDRs transferred to the bank resulting from Conservation Futures funding has totaled roughly $7.5 million over the years, an average of $500,000 annually although these acquisitions actually vary from year to year. Conservation Futures has also paid about $2.5 over the program's 15-year history for amenities within incorporated cities that sign agreements to accept TDRs from the county; this additional $2.5 million in funding assists the work of the TDR bank although it does not directly add any TDRs to the bank inventory. The TDR bank is sometimes the holder of a conservation easement on land preserved by non-TDR means; in some instances, the bank has severed and banked TDRs from these properties.

The TDR bank office does more than buy and sell TDRs. It:

+ Maintains a registry of would-be buyers and sellers of TDRs to facilitate private as well as public transactions
+ Maintains records of all transactions
+ Documents current conditions on land offered as sending sites by owners
+ Administers 95% of public and private transactions; sometimes the bank gets assistance from private brokers but the bank staff is still involved in every transaction at a minimum to provide information and document the prices charged for the TDRs
+ For large transactions, the bank works with title and escrow services (a single King County TDR bank transaction bought 990 TDRs by preserving 90,000 acres east of Seattle for $22 million)
+ Oversees drafting of the conservation easement
+ Creates the TDR certificates (305 certificates to date)
+ Records all easements and certificates with county recorder
+ In other words, administers and/or monitors all aspects of every transaction with the exception of retiring the TDRs upon approval of a receiving site project wanting bonus development potential.

The TDR Bank Manager is 0.7 FTE on TDR bank work. A position that mostly handles a non-TDR task (impact mitigation) spends 0.2 FTE on TDR bank work and a third position is budgeted to devote 0.4 FTE to TDR bank data management and stakeholder assistance. This adds up to 1.3 FTE within the TDR bank. This is supplemented by another 1.2 FTE of support services in other offices who handle tasks like ongoing monitoring of preserved sites, real estate professionals and legal assistance. Consequently, 2.5 FTE accomplish the work of the TDR bank and the sending site end of all TDR transactions, public and private. As mentioned above, the only task not included in this total is conducted by the planners in the development review section who extinguish the TDRs upon approval of receiving site applications. The TDR Manager said that if the annual funding increased significantly, such as a $10 million infusion of capital to buy TDRs, he would ask for one more position to market the program, prioritize acquisitions and supplement the one-on-one assistance to stakeholders. Then he would evaluate whether any additional temporary positions were needed to handle a spike in acquisitions.

List of Preparers

This report was prepared by Steve Gunnells, Chief Economist at PlaceWorks and Rick Pruetz, FAICP, of Planning and Implementation Strategies.

Steve's works with communities to bridge the gap between long-range planning, policies, and economic development; with community organizations and special districts to fund and implement priority projects; and with developers, to guide project decision-making and obtain entitlements based on sound economic and market analysis. Steve previously worked as a community planning and economic development consultant for communities and developers in Michigan and Ohio. He has also served as the field director for a consulting team on a World Bank project in Yemen, an Economic Development Fellow with the International Economic Development Council, and a county Planning Director in Virginia.

Rick is the leading national TDR practitioner, having prepared TDR studies and ordinances for over 30 communities. In addition, Rick lectures and writes extensively on TDRs, including the book *Saved by Development: Preserving Environmental Areas, Farmland and Historic Landmarks with Transfer of Development Rights* in 1997 and coauthoring *The TDR Handbook: Designing and Implementing Transfer of Development Rights Programs* in 2012.

Currently, Steve and Rick are collaborating to assist the New Jersey Highlands Regional Council with re-evaluating the Highlands Regional TDR Program, helping Santa Fe County, NM, to establish a TDR bank for the county's new TDR program, recommending revisions to the Irvine, CA, TDR program for the Irvine Business Complex, and supporting the Tahoe Regional Planning Agency to develop and adopt improvements to its regional TDR program.