

PREPARING FOR LONG-TERM STEWARDSHIP: A DUAL APPROACH FOR ILLINOIS

SUMMARY REPORT

NOVEMBER 2016

PREPARED BY







Contributors

Bill Schleizer, CEO Delta Institute Ben Shorofsky, Programs Specialist Delta Institute Kerry Leigh, Executive Director Natural Land Institute Caitlin Hopkins, Independent Contractor Natural Land Institute Jen Walling, Executive Director Illinois Environmental Council Nishaat Killeen, Communications & Engagement Associate Delta Institute

Acknowledgements

The report was made possible through generous funding from the Grand Victoria Foundation. We would like to thank them for their continued leadership in the conservation space in Illinois and for supporting practitioners working to maintain the high value ecosystems in our state. In addition, we would like to thank those who contributed to the content of this report by providing their insight, feedback, and enthusiasm. We would specifically like to thank the Vital Lands Illinois network and the funding working group and members of the Prairie State Conservation Coalition.

Preparing for Long-Term Stewardship: A Dual Approach for Illinois

Beginning in October of 2015, Delta Institute, Illinois Environmental Council (IEC), and the Natural Land Institute (NLI) engaged in a robust conversation with Illinois conservation practitioners to better understand the conditions that are hindering broader funding for long-term tewardship of conserved land and to identify mechanisms that could provide that funding in the future. This research, funded by the Grand Victoria Foundation and rooted in the work of the Vital Lands Illinois collaborative, sets the stage for more long-term work, implementing sustainable stewardship funding mechanisms in a collaborative, concerted effort.

This summary report summarizes the stages of that research and presents the Dual Approach we are presenting for stewardship funding in Illinois. The three sections of the full report can be found at the following links

Part 1: Understanding Stewardship Funding in Illinois: The Policy Landscape and Practitioner Perspective: <u>http://bit.ly/DA_Part1</u>

Part 2: Engagement and Outreach Strategy: <u>http://bit.ly/DA_Part2</u>

Part 3: A Dual Approach to Stewardship Financing: Resource optimization and Agricultural Working Land Investments: <u>http://bit.ly/DA_Part3</u>









By addressing insufficient and inconsistent funding for stewardship through the implementation of a long-term, scalable financing strategy, the Illinois conservation community can overcome the constraints of the current funding cycle and chart a new path forward. Our team spent the last year researching, investigating, and analyzing potential models that could provide that new direction for conservation land trusts. In the end, we believe the solution proposed here, The Dual Approach Framework, addresses practitioner needs while being flexible and adaptable with changing policy. This strategy, illustrated in Figure 1, is built around the adoption of two key approaches:

1. Creating **formalized regional partnerships** that can optimize resources and capacity

2. Building an **agricultural working lands investment cooperative** that will promote sustainable practices while creating a steady flow of annual returns



Figure 1: A Dual Approach to Stewardship







Traditionally, the burden of stewardship, defined here as *the practice of providing long-term maintenance, including the overhead and administration needed, to ensure high-quality land is conserved in perpetuity*, has fallen on the state, municipalities, or government agencies. Of the over 1 million acres of land conserved in Illinois, only about 70,000 remains in the hands of non-governmental conservation groups. With the present budget impasse and the continued need to increase conservation, the trends suggest that land trusts should prepare to increase their acreage holdings with insufficient and unpredictable funding for stewardship. The annual cost for stewarding this land is estimated to be between \$8 and \$11 million, and with acreage likely to increase and the ecosystem stressors such as the spread of invasive species and climate change, that figure could grow to over \$16 million in the next 20 years.

To identify which mechanisms would be viable in Illinois, we assessed the policy constraints and identified key barriers of each one through formal and informal engagement with conservation practitioners. Through this engagement strategy, which included a survey, interviews, informal discussions, resource sharing, and outside research, we identified a list of practitioner needs that fall into two main categories – increasing the usable funding pot, and building capacity across organizations. We considered these categories of needs as we evaluated various financial and partnership mechanisms. In addition to this process we also assessed which mechanisms have worked in other geographies and how that process may translate to Illinois.

We found that the two mechanisms presented in this framework, when used together, can address practitioner needs without significant state policy changes. Illinois is home to a robust ecosystem of conservation organizations, which makes it a challenge to create one framework that meets the needs, missions, and objectives of all groups. We have constructed this framework to provide opportunities for groups of different size, scope and agency to participate, but understand that these mechanisms may not be applicable or utilized by some organizations. As a new stewardship funding option, this Dual Approach could help increase statewide capacity and build beneficial, lasting funding partnerships through a collective impact model.







APPROACH 1: CREATING REGIONAL PARTNERSHIPS TO ADDRESS CAPACITY

Addressing stewardship funding needs has as much to do with efficiently using the funding available as it does with creating new funding sources. By collaborating across geographies, there is an opportunity for land trusts to achieve an efficiency of scale.

Based upon the Illinois Department of Natural Resources areas, we propose the creation of five regional partnerships, as seen in Figure 2, with each eventually having their own regional stewardship coordinator funded through resources from the investment cooperative.

These cooperatives would be built around the Collective Impact Model, which work creates long term commitments across the group by basing partnership design on five key ideas.

- 1. A Common Agenda
- 2. Shared Measurement
- 3. Mutually Reinforcing Activities
- 4. Continuous Communication
- 5. Backbone Support

Conserving Land in Northern Illinois

This framework, as well as the work of individual members and stewardship coordinators to identify synergies in activities and look for ways to share resources will ensure that these more formalized partnerships are beneficial to conservation land trusts statewide. As opposed to other volunteer partnerships, these regional partnerships also have an outlined funding source, provided through the second approach.

Figure 2: Potential Regional Partnerships



APPROACH 2: CREATING AN AGRICULTURAL WORKING LANDS INVESTMENT COOPERATIVE

Agricultural working lands have been used as a financial investment with much success in the conservation space in recent years. Through an investment cooperative where land trusts in Illinois pool donated land and money, this investment vehicle could provide the revenue source land trusts need, while increasing sustainable farming practices in the state. This approach would be a win-win for land trusts and farmers who would be able to ensure that land is both conserved at a high quality and kept in agriculture production.

In order to raise the \$8 to \$11 million needed annually for stewardship today, between 27,000 and 71,000 acres depending on the quality of the land. These numbers are highly dependent on the location, plot size, farm layout, and soil productivity, among other factors. The cooperative would:

- determine lease rates
- manage farmer relationships
- assist farmers in adopting sustainable farming practices and set farming requirements in leases
- determine payout structure between cooperative members and regional partnerships to ensure that those who contributed the most would be proportionately compensated.

Through this agricultural investment cooperative, land trusts of all sizes will be able to tap into the 27 million acres of farmland in Illinois, contribute to its conversion to more sustainable practices, and alleviate the uncertainty surrounding their stewardship funding now and into the future.

Realizing the Dual Approach

To implement this Dual Approach, these five regional partnerships and investment cooperative will need to be established, tested, and scaled. This will be a multi-year effort that will require the long-term buy-in of land trusts and the investment in a shared approach to stewardship funding. The implementation roadmap is summarized in the graphic on the following page and details one path for realizing this new model.

The full report provides practitioners and stakeholders with a detailed analysis of the existing conditions, our engagement strategy, and the dual approach framework. The overall implementation will be driven by the practitioners, as this report is intended to be the beginning a conversation that, we hope, in the end will build a sustainable funding model and more effective stewardship partnerships throughout the state. Links to the three sections of the full report can be found below:

Part 1: Understanding Stewardship Funding in Illinois: The Policy Landscape and Practitioner Perspective: <u>http://bit.ly/DA_Part1</u>

Part 2: Engagement and Outreach Strategy: http://bit.ly/DA_Part2

Part 3: A Dual Approach to Stewardship Financing: Resource optimization and Agricultural Working Land Investments: <u>http://bit.ly/DA_Part3</u>







IMPLEMENTING A DUAL APPROACH TO STEWARDSHIP FUNDING

Approach 1: **Creating Regional Partnerships** to Address Capacity

Preparation Phase

- » Review with practitioners
- » Develop operational boundaries
- » Rank stewardship needs
- » Continue to identify models

Pilot Phase

- » Hire initial stewardship coordinator
- » Create collective impact frameworks
- » MOUs between partners
- » Initiate 1-5 resource sharing activities per region

Approach 2: **Creating an Agricultural Working Lands Investment Cooperative**

Preparation Phase

- » Identify initial partnership group
- » Build detailed proforma
- » Create operating structure
- » Design cooperative's model sustainable farmland lease
 - **Pilot Phase**
- » Identify 1,000-3,000 acres for pilot
- » Lease farmland to sustainable farmers
- » Raise funds to test purchase model
- » Manage leases through 1 year
- » Monitor environmental benefits
- » Hold guarterly reviews

Growth Phase

- » Evaluate initial partnership activities
- » Develop timeframe for expanding partnership activites
- » Create long-term operating plan

Growth Phase

- » Evaluate pilot and iterate
- » Add 10+ additional partners
- » Grow to 10.000+ acres
- » Build farmer recruitment
- » Monitor environmental benefits



Perpetuity Phase

- » Fund 5 regional stewardship coordinators through Investment Cooperative
- » Carry out regional operating plan





- » Evolve partnerships with practitioner needs
- » Include over 20+ land trusts in » Assist farmers in implementing cooperative
- » Manage 40,000 to 80,000 acres in cooperative
 - sustainable practices



PREPARING FOR LONG-TERM STEWARDSHIP: A DUAL APPROACH FOR ILLINOIS

PART 1: UNDERSTANDING STEWARDSHIP FUNDING IN ILLINOIS: THE POLICY LANDSCAPE AND PRACTITIONER PERSPECTIVE

NOVEMBER 2016

PREPARED BY:







Contributors

Bill Schleizer, CEO Delta Institute Ben Shorofsky, Programs Specialist Delta Institute Kerry Leigh, Executive Director Natural Land Institute Caitlin Hopkins, Independent Contractor Natural Land Institute Jen Walling, Executive Director Illinois Environmental Council Nishaat Killeen, Communications & Engagement Associate Delta Institute

Acknowledgements

The report was made possible through generous funding from the Grand Victoria Foundation. We would like to thank them for their continued leadership in the conservation space in Illinois and for supporting practitioners working to maintain the high value ecosystems in our state. In addition, we would like to thank those who contributed to the content of this report by providing their insight, feedback, and enthusiasm. We would specifically like to thank the Vital Lands Illinois network and the funding working group and members of the Prairie State Conservation Coalition.

Preparing for Long-Term Stewardship: A Dual Approach for Illinois - Part 1 of 3

Beginning in October of 2015, Delta Institute, Illinois Environmental Council (IEC), and the Natural Land Institute (NLI) engaged in a robust conversation with Illinois conservation practitioners to better understand the conditions that are hindering broader funding for long-term tewardship of conserved land and to identify mechanisms that could provide that funding in the future. This research, funded by the Grand Victoria Foundation and rooted in the work of the Vital Lands Illinois collaborative, sets the stage for more long-term work, implementing sustainable stewardship funding mechanisms in a collaborative, concerted effort.

This report, Understanding Stewardship Funding in Illinois: The Policy Landscape and Practitioner Perspective, represents the existing conditions report for that work. A summary of this work and the other sections of this report can be found at the following links:

Summary Report: http://bit.ly/dualapproach

Part 2: Summary of Engagement and Outreach Strategy: http://bit.ly/DA_Part2

Part 3: A Dual Approach to Stewardship Financing: Resource optimization and Agricultural Working Land Investments: <u>http://bit.ly/DA_Part3</u>







OVERVIEW

To date, over 1 million acres in Illinois, approximately 2.8% of the total area, has been conserved by state and local municipalities, public agencies, the Illinois Nature Preserves Commission, and land trusts. However, of this acreage, only 70,000 acres are currently being held in conservation by land trusts and other non-governmental organizations through easements or ownership.¹ While this may seem like a small percentage of the total acreage protected, it does not reflect the true impact of land trusts in the state whose traditional model has been to "acquire, restore, and transfer," where it acquires land for conservation, restores it, and then transfers that property to a governmental body who manages the long-term stewardship of the property. While this model has traditionally allowed conservation organizations to acquire land and ensure long-term ecosystem health, the present state budget crisis in Illinois, and the increasing stressors on ecosystems from land use change, invasive species, and climate change, has resulted in a need for a new model. This new model will likely call on the land trusts in the state to hold property for longer periods of time, even in perpetuity; as a result, understanding how a land trust could adapt to this change is a key component to this project team's research.

In order to better map the current stewardship funding conditions of the physical and fiscal landscapes in Illinois, the project team conducted research, distributed an online survey, and performed follow-up interviews with conservation practitioners in Illinois. It should be noted that while this engagement process covered a variety of topics, the research focused on stewardship, defined by our team as *the practice of providing long term maintenance, including the overhead and administration needed, to ensure high quality conserved land in perpetuity*. Our findings will not be a surprise to practitioners as these findings represent the current conditions, but will be useful to the larger community interested in better funding <u>and protecting</u> our ecosystems health statewide.

1 http://www.prairiestateconservation.org/pscc/iview/







Key Findings

1. With changing politics at the state level, there is a need among practitioners for reliable funding long term funding, or for extended contracts that avoid the constant search for new funding sources.

2. There is a need for more holistic funding of conservation projects so they can meet acquisition, restoration, long-term management, and administrative/ capacity needs.

3. There is a need for new funding mechanisms that are available to all conservation entities, including smaller organizations and nonprofits who are disadvantaged when competing for limited dollars.

4. There is a need for diverse funding sources that can also be used to meet the match requirements of other grants, enabling conservation practitioners to leverage all of their funding options.

5. Requirements and restrictions on funding sources need to be reduced, allowing the conservation entity to fulfill their mission.

6. Greater capacity (staff, equipment, and expertise) is needed at the organizational level to maintain longterm management activities.

7. There is a need for smaller organizations to work in concert to tap into larger ecosystem services and working lands opportunities.

THE POLICY LANDSCAPE FOR STEWARDSHIP FUNDING IN ILLINOIS

At the state level, government funding for conservation is inadequate. Illinois' only statewide agency dedicated to the conservation of open lands is the Illinois Department of Natural Resources (IDNR), which has received a reduction in funding of over 70% and has cut its staff in half since 2002.²Primarily, the resources that the IDNR has provided to outside parties have been focused on acquisition and restoration.

Since 2002, the Illinois conservation community has used significant political capital to protect this already limited funding for acquisition and restoration. In 2004, the environment and conservation community organized a coalition to respond to Governor Blagojevich's proposal to take a "holiday" from funding open space acquisition in Illinois. This coalition formed under the existing Partners for Parks and Wildlife (PPW) coalition, which was founded in 2002. The coalition ultimately grew to more than 130 member organizations, and was successful in restoring all of the proposed cuts, amounting to \$56 million, to the state budget. In 2005, PPW secured \$18 million that was proposed to be cut, and in 2006 prevented a \$20 million cut while also increasing the new appropriation by \$13 million, for a three year total of \$107 million.³ In 2011, this coalition worked to successfully restore money swept from the Open Space Land Acquisition and Development Fund (OSLAD) and the Natural Areas Acquisition Fund (NAAF). These funds are the primary source of acquisition for conservation at the state level.

Partners for Parks and Wildlife and the Illinois Environmental Council (IEC), in collaboration with the community of conservation practitioners, have had some success in increasing specific funding for IDNR operations, a key component of protecting land that is already in conservation and managed by IDNR. In 2012, partners successfully lobbied the state to pass a state license plate fee, resulting in an additional \$30 million a year in steady funding for agency operations. This was a significant step to securing perpetual funding for land conservation and natural resources protection at the state level. There are some concerns that the "Safe Roads Amendment" will impact this funding stream, but joint efforts are underway to protect this funding via statute.⁴ Despite these recent gains, at the time of this publication, the larger state budget impasse has left IDNR with a bare bones budget in FY16 and an incomplete stop gap budget in FY17.⁵

2 http://www.lib.niu.edu/2007/ip070524.html

3 https://partnersforparksandwildlife.org/about-ppw/

4 http://www.wsiltv.com/story/33614940/safe-roads-amendment-raises-funding-questions-for-idnr

5 https://www.illinois.gov/gov/budget/Pages/default.aspx









Figure 1: Historic Funding of IDNR: FY 2008 - 2017

Budget constraints have already severely interfered with the State of Illinois' ability to acquire or assist in the acquisition of land and to fund the eventual stewardship of its high value ecosystem. There are three main sources of funding used by the state to acquire land - the Natural Areas Acquisition Fund (NAAF), Open Space Lands Acquisition and Development Program (OSLAD), and the Open Lands Trust (OLT). During this budget impasse, the major sources of state funding are presently being used in the following ways:

- The NAAF funding is now used for funding operations staff. From a 2002 high of acquiring 3,700 acres, NAAF has not acquired any land since 2012 and is presently devoted to paying staff salary.
- The OSLAD funding, which has been protected from budget sweeps for many years and mainly used for parks and "gray" infrastructure, saw a \$50 million sweep in 2016 and a \$50 million appropriation, but to projects that received grant agreements in 2014.
- Nearly \$9 million is still available in the Open Lands Trust fund, but due to the budget crisis, the money is not being appropriated and the Open Lands Trust money was last authorized in 2014.







Overall, support for land conservation is bipartisan and comes from legislators and constituents across the entire state. This statewide support has enabled many successful efforts to protect funding, but in troubling budget times, conservation is seen as a "quality of life" issue and a lower priority than critical health and safety issues. Conservation groups understand that they currently cannot rely on state money to fund land acquisition or on a transfer of property to the state for stewardship. The complex and political landscape at the state level has impacted the previously discussed "acquire, restore, & transfer" model that land trusts have relied on for long-term stewardship.

While the situation for funding conservation in Illinois seems dire, there are policy bright spots in Illinois. For example, no county has ever turned down property tax increases to fund conservation, with the most recent county referenda passed in 2011 by Kane County.⁶ The referendum authorized a \$30 million bond to support the Forest Preserve District paid for by property taxes. In addition, in 2014 the conservation community successfully restored recreation liability protections after a seven year hiatus. Many Vital Lands Illinois members are currently planning to pursue a bill to make stewardship-specific grants available to land trusts from NAAF funding. It is also well understood that public-private partnerships have support from both the Rauner administration and lawmakers, and policymakers are receptive to scenarios that allow conservation land trusts to work in conjunction with IDNR and the Illinois Nature Preserves Commission (INPC). These conditions provide potential opportunities for the conservation community to work with policymakers to increase conservation opportunities throughout the state.







⁶ http://www.lib.niu.edu/2007/ip070524.html

METHODOLOGY

Given the policy constraints within the state, practitioners have long been seeking alternative funding mechanisms for stewardship and other conservation activities throughout Illinois. To create a baseline understanding of current funding conditions in Illinois, the project team assembled a matrix of sample funding mechanisms that either are currently available to practitioners or have been available in the past. This matrix is available in Appendix A: Sample funding mechanisms currently or historically available in Illinois and referenced by practitioners.

To better illustrate the needs of conservation practitioners, the project team collected data from practitioners through an online survey that was distributed in May of 2016. The survey was sent via email to 121 practitioners, of which 30 responses were received. We were able to draw conclusions from the thorough responses and insights we received from a representative group of practitioners. We discussed our initial findings from the survey with the Vital Lands Network Conservation Funding focus group and conducted formal followup interviews with six practitioners to further delve into some their survey responses. A copy of the survey questions, and a summary of key findings are provided in Appendix B: Practitioner Survey Summary & Key Findings.

Each respondent represents a unique organization in Illinois. The organizations varied from conservation organizations, to private firms, to state agencies. Seventy percent (21 of 30) of respondents represented non-profit conservation organizations and the remaining 30% (9 of 30) represented a variety of public conservation entities including: Forest Preserve Districts, Townships, Illinois Department of Natural Resources, Illinois Nature Preserves Commission, Conservation Districts, and unspecified entities that were supported by tax dollars (Figure 2).



Figure 2: Survey Respondents









Figure 3: Focus Areas of Survey Participants

Survey respondents work in a range of focus areas and most reported being involved in more than one main focus area. The number of responses for each Focus Areas are shown in Figure 3.

The focus of the follow up interviews was to gain a deeper understanding of what practitioners were facing, and if they were piloting any innovative financing mechanisms. The project team also conducted interviews with several other individuals that were not a part of the conservation practitioner survey, such as funders, investors, and representatives of nationwide networks. A summary of all of the interviews can be made available upon request. After compiling the data from the survey and the follow-up interviews, the project team identified the barriers to be addressed with a new conservation funding mechanism.

The diverse range of conservation organizations and focus areas of conservation practitioners in Illinois result in an array of needs and wants for funding critical conservation activities efficiently and sustainably. Survey questions were designed to further determine these needs and to learn about what was working, had worked in the past, or what practitioners' thoughts were for funding conservation and stewardship-specific activities.







FUNDING

In the survey, we asked practitioners to list what source(s) are being using to fund their acquisitions, restoration activities, stewardship, capacity building, and general operations. According to our survey results, the majority of conservation practitioners currently rely on traditional funding sources such as: grants from private foundations, private donors, and federal grants. Eighty percent of survey respondents (24 of 30) reported private foundation grants are their main funding source for land acquisition, and 67% of respondents (20 of 30) utilize private foundation grants for the majority of their land management and restoration activities. Survey respondents were asked to address limitations and barriers to each of these funding sources.

First, there is currently a perceived deficit in funding for conservation and stewardship activities in Illinois. This gap is validated through a 2009 report from the Conservation Funding Committee of the Natural Resources Advisory Board.⁷ Presently, only one private foundation within the state, Grand Victoria Foundation, covers the acquisition and stewardship activities while a second foundation, the Illinois Clean Energy Community Foundation, primarily funds acquisition and organizational capacity building.⁸⁹ Conservation practitioners have to prioritize how and where they spend their limited funding; frequently having to forgo critical conservation opportunities due to a lack of budget. Both government agencies and non-profit conservation organizations reported similar concerns related to funding availability. Not surprisingly, conservation practitioners emphasized the need for an increase in the overall availability and diversity of funding throughout the state to address this barrier.

Another major barrier that conservation practitioners noted is that most traditional funding sources do not consider a holistic approach to conservation. For example, conservation organizations have been able to protect over 1 million acres of critical habitat in Illinois, but they lack access to a long-term, reliable fund for continued stewardship of the properties. The traditional "acquire, restore, & transfer" model has involved land trusts and other organizations acquiring the land and then transferring that property to a state agency who acquires the management responsibilities. This traditional transfer of property into state hands is becoming more unreliable. As IDNR's budget has also been reduced, the ability to manage and steward these sites to their fullest potential has become an increasing concern and in some cases undermined. With changing policy norms and limited funding, conservation practitioners must identify funding sources that view conservation not just as protection, but also as restoration and long-term management, to guarantee that high quality ecosystems are preserved in perpetuity.







⁷ http://www.dnr.state.il.us/nrab/pdf/full_report_privatelands.pdf

⁸ http://www.grandvictoriafdn.org/grant-programs/guidelines/vital-lands-illinois

⁹ http://www.illinoiscleanenergy.org/natural-areas-program/capacity-building

Requirements for Funding

Often times, grant-making organizations have criteria or stipulations, such as IDNR's public accessibility requirement in OSLAD, which must be met in order to be eligible to apply for conservation funding. Practitioners identified these requirements as a barriers to achieving their primary goals around conservation and stewardship. In order to compete for this limited funding, grantees often tailor their projects to meet these requirements. Some practitioners feel that this type of prescriptive grant requirement results in skewing conservation missions and have concerns that this may result in reduced conservation outcomes. Conservation entities are faced with the decision to either not apply for the very limited funding opportunities or meet to meet requirements that may not fall within the groups' missions.

Requirement of some type of match, typically cash or an in-kind donation, or that they are reimbursement create additional barriers to utilizing funding. Frequently, land trusts and public agencies are unable to supply this match or do not have the liquid capital to participate in reimbursement programs. In the past, there has been funds available at the state or local level that would assist conservation entities to meet federal match requirements, but recently public agencies are having difficulties funding their own match requirements. Thousands of federal dollars for stewardship activities are left on the table, because funding through programs such as the Pittman-Robertson and Dingell-Johnson (PRDJ) Act funds are reimbursement-based.

Timing of Funding

Traditional funding sources typically do not enable conservation organizations to act quickly when conservation opportunities arise. Many organizations report that they are unable to successfully close land transactions because the funding cycles do not coincide with the pace of the project, and there was no long-term strategy for funding maintenance in place. For example, a landowner is willing to donate a conservation easement, but may demand that the project be completed by the end of the year in order to take advantage of the federal tax incentives. The land trust is unable to complete the project because they are unable to apply for transaction costs (title work, survey, appraisal, etc.) in the timeframe that the landowner requires, resulting in land that will remain unprotected. This barrier may sometimes be addressed through partnering with larger organizations, such as the Conservation Fund or The Nature Conservancy, but the practitioners we interviewed still cited an increased need for quick, readily available sources of funding.







PARTNERSHIPS AND STAFF CAPACITY

Partnerships

The conservation practitioner survey and interviews also sought information about participation in partnerships and the benefits and barriers to being involved in networks and public-private partnerships. Based on survey responses, most conservation practitioners rely on partnerships to maintain high-quality ecosystem benefits on their conservation sites. However, these partnerships can be complicated and difficult to manage and sustain. Survey respondents were asked if there were any expired funding sources that they had found to be very successful. Many responded that the Conservation 2000 Ecosystem Partnership program was highly effective and useful to them. C2000, as the program was known, was funded by the State of Illinois in 1995 as a \$100 million initiative to create holistic, broad-based partnerships for conservation. According to survey respondents, the C2000 program was successful for the following reasons:

- It encouraged local partnerships,
- It funded public agencies as well as nonprofit conservation organizations,
- Grants were awarded regularly on a 2 year cycle, and
- Practitioners were able to hire contractors with the needed expertise to implement best management practices on large areas of land to reap the maximum impact in a short amount of time.

In 2008, C2000 was converted to Partners for Conservation and limited funding to programs at IDNR, the Illinois Department of Agriculture, and the Illinois Environment Protection Agency. This conversion undermined the usefulness of the program according to many survey respondents.

Staff Capacity

Land conservation requires a significant amount of staff capacity; responsibilities include everything from strategic planning for future acquisitions and grant management, to having the skills and knowledge needed for long-term management and restoration of the land. Survey respondents reported that their biggest challenge in funding and maintaining conservation projects is that they lack the capacity to implement the land management work on the ground. Many land trusts rely on volunteers who can be inconsistent and need significant oversight. Conservation practitioners within the state, such as Jo Daviess Conservation Foundation and the Natural Land Institute, are partnering to share resources in order to perform more conservation work; however, oftentimes these partnerships become complicated and sometimes become ineffective due to geographies and differences in organizational makeup.







CONCLUSION

The identified barriers in this report were identified through research, surveying, interviewing, and informal conversations with the Illinois conservation community. In order for any mechanism to grow funding capacity for stewardship in the state, they should work to directly address a majority of the following:

- 1. With changing politics at the state level, there is a need for reliable funding year after year, or for longer term contracts to avoid a constant search for new funding sources.
- 2. There is a need for more holistic funding of conservation projects so they can meet acquisition, restoration, long term management, and administrative/capacity needs.
- 3. There is a need for new funding mechanisms that are available to all conservation entities, including smaller organizations and nonprofits.
- 4. There is a need for diverse funding sources that can also be used to meet the match requirements of other grants, enabling conservation practitioners to leverage all of their funding options.
- 5. Requirements and restrictions on funding sources need to be lessened, allowing the conservation entity to fulfill their mission.
- 6. Greater capacity (staff, equipment, and expertise) is needed at the organizational level to maintain long-term management activities.
- 7. There is a need for smaller organizations to work in concert to tap into larger ecosystem services and working lands opportunities.









PREPARING FOR LONG-TERM STEWARDSHIP: A DUAL APPROACH FOR ILLINOIS

PART 2: SUMMARY OF ENGAGEMENT AND OUTREACH STRATEGY

NOVEMBER 2016

PREPARED BY:







Contributors

Bill Schleizer, CEO Delta Institute Ben Shorofsky, Programs Specialist Delta Institute Kerry Leigh, Executive Director Natural Land Institute Caitlin Hopkins, Independent Contractor Natural Land Institute Jen Walling, Executive Director Illinois Environmental Council Nishaat Killeen, Communications & Engagement Associate Delta Institute

Acknowledgements

The report was made possible through generous funding from the Grand Victoria Foundation. We would like to thank them for their continued leadership in the conservation space in Illinois and for supporting practitioners working to maintain the high value ecosystems in our state. In addition, we would like to thank those who contributed to the content of this report by providing their insight, feedback, and enthusiasm. We would specifically like to thank the Vital Lands Illinois network and the funding working group and members of the Prairie State Conservation Coalition.

Preparing for Long-Term Stewardship: A Dual Approach for Illinois - Part 2 of 3

Beginning in October of 2015, Delta Institute, Illinois Environmental Council (IEC), and the Natural Land Institute (NLI) engaged in a robust conversation with Illinois conservation practitioners to better understand the conditions that are hindering broader funding for long-term tewardship of conserved land and to identify mechanisms that could provide that funding in the future. This research, funded by the Grand Victoria Foundation and rooted in the work of the Vital Lands Illinois collaborative, sets the stage for more long-term work, implementing sustainable stewardship funding mechanisms in a collaborative, concerted effort.

This section, *Summary of Engagement and Outreach Strategy*, represents the existing conditions report for that work. The summary of this work and the other sections of this report can be found at the following links:

Summary Report: http://bit.ly/dualapproach

Part 1 Understanding Stewardship Funding in Illinois: The Policy Landscape and Practitioner Perspective: http://bit.ly/DA_Part1

Part 3: A Dual Approach to Stewardship Financing: Resource optimization and Agricultural Working Land Investments: <u>http://bit.ly/DA_Part3</u>







OVERVIEW

This document outlines the project team's actions to initiate dialogue with the Illinois conservation community during the research and development phase of this project. The objective of the dialogue was to identify a spectrum of perspectives on funding needs and constraints, align stakeholder needs with the financing mechanisms being investigated, build a network around alternative conservation strategies, and ground-truth our conclusions. Our engagement strategy focused on informal engagement, coupled with indepth interviews and conversations with existing practitioners in Illinois. We also engaged the broader conservation finance community through the Vital Lands Illinois Network.

We found this strategy to be highly beneficial when researching effective mechanism implementation strategies for Illinois and identifying barriers in the field as a whole. Our strategy centered on tapping into existing networks at the regional, state, and national levels, and allowed us to build off of the previous work of Illinois conservation stakeholders and aggregate input from a wide variety of practitioners. Ultimately, we hope that with our engagement strategy and with the continuation of those efforts, conservation stakeholders and policymakers will be more engaged and armed with the tools necessary to support successful implementation of a sustainable stewardship financing program. We hope to continue to build this engagement strategy going forward by reaching out to more conservation practitioners individually and through more robust engagement of funders and investors to further include their unique perspectives.

This report details our stakeholder mapping process, our communications strategy and how we hope to continue moving this process forward in the future.







IDENTIFYING STAKEHOLDERS & TARGET AUDIENCES

- 1. We identified land protection and management entities in Illinois, including state and local governments, traditional conservation groups, policy makers, and other stakeholders.
- 2. We identified stakeholder groups and organizations for maximum efficiency in outreach activities both in Illinois and national organizations that support Illinois efforts. These groups included:
 - Vital Lands Illinois: <u>www.grandvictoriafdn.org/grant-programs/guidelines/vital-</u> lands-illinois
 - Prairie State Conservation Coalition: <u>www.prairiestateconservation.org/pscc/</u>
 - Chicago Wilderness: <u>www.chicagowilderness.org/</u>
 - National Association of State Conservation Agencies (NASCA): <u>www.nascanet.org</u>
 - Illinois Association of Conservation & Forest Preserve Districts: <u>dekalbcounty.org/</u> <u>forestpreserve/il-associationconsrvation.html</u>;
 - Illinois Association of Park Districts (IAPD): www.ilparks.org
 - Land Trust Alliance: <u>www.lta.org</u>
 - Conservation Finance Network: <u>www.conservationfinancenetwork.org</u>
- 3. We identified funders/investors interested in the results of this study and compiled a list of relevant parties through the Conservation Finance Network and with collaboration from the Vital Lands Illinois 'Team Money' Funding Working Group. Examples include listed below:
 - Grand Victoria Foundation: <u>www.grandvictoriafdn.org/</u>
 - Gaylord & Dorothy Donnelley Foundation: <u>www.gddf.org</u>
 - The Lyme Timber Company: <u>www.lymetimber.com/</u>
 - Iroquois Valley Farms: <u>www.iroquoisvalleyfarms.com</u>
- 4. We Identified policy decision-makers relevant to this work.
 - Conducted site visits with legislators at land trusts
 - Identified conservation champions
 - Involved Illinois Department of Natural Resources (IDNR), U.S. Fish and Wildlife Service (USFWS), Illinois Nature Preserve Commission, and other agencies in this work.
 - Considered role of Illinois Environmental Protection Agency (IEPA) (water revolving fund, carbon regulation, and energy agencies in this work
 - Compiled a list of decision-makers in state government that will help us ground truth some of our final mechanisms.







COMMUNICATION OUTREACH ACTIVITIES & DELIVERABLES

- The team prepared two surveys to gather data from the practitioners and the funders/ investors. We collected and collated stakeholder lists and contact information and distributed surveys via email. The 'Team Money' funding working group from Vital Lands Illinois reviewed the practitioner survey prior to its distribution to ensure the questions were properly framed. The funding survey was reviewed by a foundation representative with experience in conservation funding to ensure that the focus of the survey was correct.
- 2. We followed-up with conservation practitioners and funders/investors after survey results had been gathered to clarify responses and dive deeper.
- 3. We then analyzed the results from the survey responses and interviews, and utilized those data in our mechanism analysis and presentations to the practitioner community.
- 4. We engaged the Vital Lands Illinois network, and specifically the 'Team Money' working group, on several occasions, including getting mechanism feedback at the VLI minisummit in October 2016. 'Team Money' was simultaneously identifying case studies that were used in our mechanism analysis.
- 5. The team continued to engage practitioners in ground-truthing interviews and informal conversations.
- 6. At the 2016 Chicago Wilderness Congress, we presented a three-fold presentation to disseminate the results of the research and provided an opportunity to clearly articulate our potential next steps. We also collected feedback.
- 7. Practitioners were again asked for input related to the Dual Approach financing mechanism presented in *Part 3: A Dual Approach to Stewardship Financing: Resource optimization and Agricultural Working Land Investments of this report.*



Figure 1: Practitioners providing input on funding mechanisms at the Vital Lands Mini-summit, Oct 2016







CONTINUING THE CONVERSATION

This project team understands that the conservation practitioner community must continue to coalesce around stewardship funding moving forward. Only through unified action can activities such as the passing of the Stewardship Act at the state level, or the implementation of the Dual Approach presented in Part 3 be successful. We do not presume to have a perfect solution to stewardship financing and greater work will need to be done to ensure that conservation land trusts can continue to protect the diverse Illinois landscape. In order to continue this process, we plan to continue our engagement in this community through the following avenues:

Presenting the Research Results

- We recommend that this research initiative be folded into the Conservation Funding VLI work group to some extent moving forward. The group could lead the research effort, help build the network of pilot participants, and create opportunities to evaluate the work of this team. The group is already planning a Vital Session (web-based interactive meeting of VLI members) to collect feedback in early December 2016. The feedback received will be incorporated into our larger effort moving forward.
- 2. Presenting the final results and the next steps at the annual Vital Lands Summit in February 2017 will also disseminate the information as well as receive input for designing the next implementation phase of the research project.
- 3. The Prairie State Conservation Coalition hosts an annual meeting in March 2017 where the results of the study can be presented to the participants. As conservation practitioners, feedback from this group will be valuable.
- 4. We will make this report and case studies available online through the Vital Lands Network, and individual team websites.

Engage and Identify Early Adopters

- The team will identify a small group of conservation land trusts interested in piloting the dual mechanism approach presented in Part 3. It is our intent that these stakeholders will represent a diverse cross-section of the practitioner community and are willing to help improve the resource optimization and working land investment model
- 2. The IEC will lead the effort to present financing information to legislators when they are in session and meet with agencies to discuss the results of this project. While these mechanisms do not require drastic policy changes one reason why they were advantageous in Illinois support of IDNR and other policy makers will be critical to their success.
- 3. Continue to engage informally with VLI and PSCC members who can provide comments, input, and support around these mechanisms.









PREPARING FOR LONG-TERM STEWARDSHIP: A DUAL APPROACH FOR ILLINOIS

PART 3: A DUAL APPROACH TO STEWARDSHIP FINANCING: RESOURCE OPTIMIZATION AND AGRICULTURAL WORKING LAND INVESTMENTS

PREPARED BY:







illinois Environmental Council

Contributors

Bill Schleizer, CEO Delta Institute Ben Shorofsky, Programs Specialist Delta Institute Kerry Leigh, Executive Director Natural Land Institute Caitlin Hopkins, Independent Contractor Natural Land Institute Jen Walling, Executive Director Illinois Environmental Council Nishaat Killeen, Communications & Engagement Associate Delta Institute

Acknowledgements

The report was made possible through generous funding from the Grand Victoria Foundation. We would like to thank them for their continued leadership in the conservation space in Illinois and for supporting practitioners working to maintain the high value ecosystems in our state. In addition, we would like to thank those who contributed to the content of this report by providing their insight, feedback, and enthusiasm. We would specifically like to thank the Vital Lands Illinois network and the funding working group and members of the Prairie State Conservation Coalition.

Preparing for Long-Term Stewardship: A Dual Approach for Illinois - Part 3 of 3

Beginning in October of 2015, Delta Institute, Illinois Environmental Council (IEC), and the Natural Land Institute (NLI) engaged in a robust conversation with Illinois conservation practitioners to better understand the conditions that are hindering broader funding for long-term tewardship of conserved land and to identify mechanisms that could provide that funding in the future. This research, funded by the Grand Victoria Foundation and rooted in the work of the Vital Lands Illinois collaborative, sets the stage for more long-term work, implementing sustainable stewardship funding mechanisms in a collaborative, concerted effort.

This report, Understanding Stewardship Funding in Illinois: The Policy Landscape and Practitioner Perspective, represents the existing conditions report for that work. A summary of this work and the other sections of this report can be found at the following links:

Summary Report: http://bit.ly/dualapproach

Part 1: Understanding Stewardship Funding in Illinois: The Policy Landscape and Practitioner Perspective: http://bi.ly/DA_Part1

Part 2: Summary of Engagement and Outreach Strategy: http://bit.ly/DA_Part2







TABLE OF CONTENTS

Introduction	4
Modeling the Financial Need	5
Analyzing Potential Solutions	6
Approach 1: Creating Regional Partnerships to Address Capacity	8
Approach 2: Creating an Agricultural Working Lands Investment Cooperative	11
A Sample Scenario	15
Why a Dual Approach to Stewardship Financing?	17
Implementation Roadmap	18
Appendix A: Source List	24
Appendix B: Preliminary Stewardship Projections	28
Appendix C: Mechanism Matrix	32
Appendix D: Mechanism Case Studies	43
Appendix E: Finalist Mechanism Framework Analysis	52
Appendix F: A Sample Scenario	55







INTRODUCTION

When the project team initially set out to identify ways to better fund stewardship in Illinois, we had a hypothesis: the traditional "acquire, restore & transfer" model used by land trusts in Illinois was no longer a viable long-term strategy for maintaining high quality ecosystems. What we found through our research, summarized in Part 1 and Part 2 of this report, is that Illinois conservation practitioners are grappling with the fact that traditional land acquisition and management models are inadequate and unsustainable. Additionally, climate change is presenting unprecedented challenges through the spread of invasive species and microclimate alterations, raising concerns about increasing stewardship costs per acre in the future, all while public funding to support these needs is decreasing. While practitioners expressed a definitive need for more sustainable funding, they also emphasized the need for greater capacity including staff time, resources, and expertise.

This report is designed to help practitioners address these barriers and strengthen the conservation land trust community throughout the state. We propose a two-fold solution. First, building upon the successful partnerships throughout the state, we propose regional stewardship partnerships that provide expertise and equipment to land trusts in need, more efficiently utilizing resources and bringing down stewardship costs (referred to as "Approach 1" or "Partnerships" in this report). Second, building upon models developed in the private sector and through larger land trusts, we propose the establishment of a non-profit working lands investment cooperative (referred to as "Approach 2" or "Investment Cooperative" in this report). This group would pool donated land and potentially monetary support from land trusts and other entities, require sustainable farming practices to be implemented on these agricultural lands, and use rental income to steward the conserved land. This two-fold solution will generate a steady flow of revenue for land trusts while increasing organizational impact through investing in sustainable agriculture in the state. This model will also limit the need to develop in-house capacity to manage farming operations and manage farming leases while not sacrificing mission impact.

We hope this dual approach can provide the capacity throughout the state to address stewardship needs while:

- creating a scalable income source that can work in our state's uncertain political climate,
- create sustainable revenue sources that do not rely on funding cycles or grant applications, and
- build a mutually beneficial relationship between farmers and land trusts by protecting farmland for future agricultural use and improving the health of our natural resources







MODELING THE FINANCIAL NEED

The Prairie State Conservation Coalition (PSCC), an association of Illinois land trusts, has mapped the over 1 million acres of conserved land in the state that are managed through agencies, municipalities, the Illinois Nature Preserve Commission, and conservation land trusts.¹ Through that exercise, they found that of the 1 million acres, only 74,216 acres are currently conserved by land trusts and nonprofits, the focus of this report. Additionally, of those 74,216 acres, 23,090 acres are protected through conservation easements. While land trusts are responsible for some stewardship on easements, we determined that the remaining 51,126 acres currently held by conservation organizations is where our research would focus. This decision was based on practitioners' ability to easily control the outcomes of these properties. There is also potential to see growth in the number of acres held by land trusts in the coming years as the traditional transfer to stat or other municipal landholders is less certain. The area of operation of most of these land trusts can be found in Figure 1.

Based on our analysis, found in *Appendix B: Preliminary Stewardship Projections*, we found that to conserve these acreages as they stand now, the community would need between \$8 and \$11 million annually taking into account the different needs of different ecosystem types.

Given the barriers at the state level, discussed in Part 1 of this report, and the need to augment the traditional "acquire, restore & transfer" model, we used a growth rate of 1,000 acres conserved statewide and held by land trusts per year, consistent with recent trends, and projected that growth rate for the next 20 years. With this rate and an added annual 2% inflation rate in line with the market, an additional \$300,000 to \$600,000 in stewardship costs will be needed each year, depending on ecosystem type protected and actual costs. This would result in a stewardship need of between \$16 and \$21.5 million annually by 2036.

The project team engaged with practitioners to ground-truth the acreage and financial projections used by the Illinois Sustainable Natural Areas Vision produced through the Illinois Natural History Survey.³ To respond to the ever evolving conservation landscape in the state, it will be necessary to reevaluate these figures and other stewardship projections periodically.

³ wwx.inhs.illinois.edu/files/9513/3907/5663/SNAV_Final.pdf









Figure 1: Map of Illinois Conservation Land Trusts¹

5

¹ www.prairiestateconservation.org/pscc/iview/

² www.prairiestateconservation.org/Illinois%20Directory/IL_Lan dTrusts_34x44P_625000_031811_.pdf

ANALYZING POTENTIAL SOLUTIONS

To assess the viability of funding mechanisms for stewardship, the team analyzed twentythree different models. The models can be found in Table 1 while our detailed screening process can be found in *Appendix C: Mechanism Matrix*. Each funding mechanism was analyzed for its financial flow, involved parties, strengths, weaknesses, and applicability to both Illinois and stewardship. As expected, a number of these mechanisms can provide funding for stewardship, but only when coupled with funding for acquisition or restoration and when structured to do so from the beginning.

As we determined which of these mechanisms would be better suited to meet stewardship needs in Illinois, we then identified six case studies that demonstrate different examples of funding structures. The six case studies listed in Table 2 can be found in *Appendix D: Mechanism Case Studies*. They represent a variety of successful programs that informed the structures and partnership approaches in our Dual Approach presented in this report.

Carbon income investments program	Impact investing
Carbon offsets	Insurance payments for environmental risk mitigation
Collective impact model (resource optimization through partnerships)	Natural capital levy
Conservation easement	Opt-in donation
Cost share payments	Program related investments (PRI)
Deposit refund scheme	Real estate transfer tax
Direct budget allocations	Sales tax or excise tax
Ecosystem services fees (also known as payment for ecosystem services, PES)	Settlement funding
Endowed funds	State revolving funds (Clean Water State Revolving Fund)
Green bond financing	Substitute funds
Green commodities price premiums from	Tourism/user fees
working lands	Transfer of development rights

Table 1: List of Funding Mechanisms Analyzed







Table 2: Mechanism Case Studies

Case Study	Demonstrated Mechanism (s)
CA Greenhouse Gas Reduction Fund	Carbon Income Investment Program
"From Forests to Faucets" Partnerships	Ecosystem Service Fees
Freshwater Trust Medford Oregon Temperature Trading	Ecosystem Service Fees
Iroquois Valley Farms Working Lands Model	Impact Investing & Green Commodity Price Premiums from Working Land
MI Natural Resources Trust Fund	Natural Capital Levy
Sierra Nevada Watershed Improvement Program	Collaborative Partnership Models

After reviewing mechanisms, case studies, meeting with practitioners, and researching models both nationally and in Illinois, the team developed eight final mechanisms that address the key barriers identified in our practitioner engagement. A summary of the mechanisms and barriers can be found in Table 3. We further analyzed each of these mechanisms and a summary of those findings can be found in Appendix E: Finalist Mechanism Framework Analysis. This analysis was used as the basis for this Dual Approach.

After this multi-phase research process, we developed the following Dual Approach that addresses the needs of conservation land trusts, creates a sustainable funding mechanism, and has the co-benefits of increasing conservation goals, all with limited policy implications.

Barriers Addressed Mechanism Ballot Measure Stewardship Fund Sustainable Funding Private or Foundation Developed Stewardship Sustainable Funding Fund Match Requirements Scale Needed to Tap into Markets Land Aggregation for Ecosystem Services or Coordination Markets Match Requirements Expanding use of State Clean Water State Sustainable Funding **Revolving Loan Fund** Capacity Development Quick Access Business to Business Service Network Match Requirements Coordination Sustainable Funding Working Lands as an Investment Model Quick Access A Stewardship Clearing House or Unified Quick Access **Conservation Bank** Capacity Development

Table 3: Potential Stewardship Mechanisms for Illinois







APPROACH 1: CREATING REGIONAL PARTNERSHIPS TO ADDRESS CAPACITY

Overview

A key barrier for practitioners is the lack of capacity to conduct, organize, and administer their stewardship activities at a large scale. Some groups are already collaborating around stewardship activities, including one partnership between the Jo Daviess Conservation Foundation and Natural Land Institute in northwest Illinois and the River to River Cooperative Weed Management, and Southern Illinois Prescribed Burn Association in the southern part of the state. Building upon these partnerships, we propose that five regional stewardship partnerships be formed following the five regional areas developed by the Prairie State Conservation Coalition (PSCC). Each of these regional partnerships would be managed by one full-time stewardship coordinator, paid for through funds created by Approach 2 and supplemented through grant funding. These stewardship coordinators are intended to supplement existing coordinators and efforts, create efficiencies at scale, and help to manage resource allocation throughout a broader area. Regional partnerships could also exchange equipment and expertise, further improving stewardship statewide. Similar to the model of a Soil and Water Conservation District, the stewardship region would help coordinate volunteer activity, provide technical assistance and expertise, and serve as a match-maker between organizations in order to optimize resource use.

Regional Breakdown

We understand that one of the most powerful tools for small- and medium-sized conservation organizations throughout the state is their strong community and place-based approach to conservation. As such, we recommend beginning this process with regional working groups based around the five regions delineated by the Illinois Department of Natural Resources. These regions are mapped in Figure 2 along with potential initial partnerships that are based upon PSCC's regional breakdown of land trusts.¹

1 http://www.prairiestateconservation.org/pscc/directory-land-trusts-illinois-2/



While these geographies do not perfectly line up with the operating boundaries of each land trust, they provide a good starting point for formalizing stewardship partnerships.

A Collective Impact Model for Activities

Each partnership would be framed around a Collective Impact Model for that region.² Collective Impact initiatives are defined as "long-term commitments by a group of important actors from different sectors to a common agenda for solving a specific social problem." ³While land trusts would all fall within the same sector, each organization has a different geography and oftentimes slightly different organizational goals, making this model useful for framing for the regional stewardship partnerships.

This model, first presented by John Kania and Mark Kramer through the Stanford Social Innovation Review, lays out five steps for collective success. These five conditions are:

- **1. Common Agenda:** All participants share a vision that includes a common understanding of the problem and a joint approach to solving the problem through agreed-upon actions.
- **2. Shared Measurement:** All participating organizations agree on how success will be measured and reported, with a short list of common indicators identified and used for learning and improvement.
- **3. Mutually Reinforcing Activities:** A diverse set of stakeholders, typically across sectors, coordinate a set of differentiated activities through a mutually reinforcing plan of action.
- **4. Continuous Communication:** All players engage in frequent and structured open communication to build trust, assure mutual objectives, and create common motivation.
- **5. Backbone Support:** An independent, funded organization dedicated to the initiative provides ongoing support by guiding the initiative's vision and strategy, supporting aligned activities, establishing shared measurement practices, building public will, advancing policy, and mobilizing resources.

For these regional partnerships, PSCC, VLI, or the Stewardship Network could potentially serve as natural backbone organizations, because they already serve as conveners of land trusts in the state and represent neutral stakeholders. The Stewardship Network would also link these regional partnerships to national activities and provide additional support.

While many of the land trusts in the state have their own coordinators, the regional stewardship partnerships will allow for equipment and expertise to be shared across landscapes, which allows for more acres to be stewarded regionally and a savings for practitioners statewide on stewardship activities.

³ http://c.ymcdn.com/sites/www.lano.org/resource/dynamic/blogs/20131007_093137_25993.pdf







² http://collectiveimpactforum.org/

Addressing Potential Roadblocks

When implementing a regional strategy such as this one, it is important to assess potential roadblocks that could hinder them from being successful. First, when we discussed this mechanism with practitioners, there was concern about practitioners having to sacrifice their own organization's monetary resources. In order to counteract this, we propose a plan for long-term funding for regional coordinators from the Investment Cooperative described in the second approach. Additionally, these regional partnerships could create economic opportunities for conservation practitioners by managing contracts among partners who hold different stewardship expertise.

Based on the experience of similar partnerships in the state, long-term buy-in will be difficult to maintain. Partnerships often have significant success in their first few years, but they will lose their usefulness to their members if not shepherded and maintained. This is where the collective impact model is helpful. By maintaining a collective goal of ensuring long-term stewardship through dedicated "herders," in the form of regional coordinators, long-term utility to member organizations is constantly being monitored and this constant pitfall of partnerships is avoided.

Administrative and Funding Needs

The Regional Partnerships presented here, will take time and buy-in from multiple stakeholders in order to develop. The PSCC and the VLI network have already laid the groundwork for permanent regional stewardship partnerships.

We propose that five full-time staff members eventually be funded through the agricultural working lands investment cooperative, with overall management housed through a backbone organization. However, we suggest that first one statewide stewardship coordinator with multi-stakeholder experience be funded through grant funds in order to guide the partnerships through development. This buildout would take place over a five year timeframe with the salary for regional coordinator would work in the existing regional framework and partners could meet regularly with their stewardship coordinators to discuss available resources, evaluate ecosystem health at alandscape scale, and provide stewardship expertise to volunteers and local stewardship coordinators.

Average stewardship coordinator annual salaries range from \$30,000 to \$50,000. For this model, we suggested a \$40,000 per year with an additional 20% to cover benefits (fringe) and an additional 20% indirect rate to cover organizational costs of the backbone organization. This equates to an initial funding need of \$56,000, growing to \$280,000 to account for 5 coordinators with a 2% annual increase for inflation.

If we assume a reduction of 10% in the \$8 to \$11 million annual stewardship costs due to operational efficiencies at scale, the savings to conservation land trusts statewide could be upwards of \$500,000 annually. Further financial modeling will be conducted after the pilot by Jo Daviess and NLI. It will assist the project team in quantifying financial implications of these regional stewardship partnerships.







APPROACH 2: CREATING AN AGRICULTURAL WORKING LANDS INVESTMENT COOPERATIVE

Overview

While Approach 1 helps to address efficient resource allocation and optimize landscape scale conservation, utilizing agricultural working lands provides an opportunity to increase available money for stewardship while also providing an opportunity to enhance land conservation outcomes. We are proposing a statewide cooperative investment organization that will utilize both donated and purchased farmland in order to produce income for land trust stewardship activities. This approach will simultaneously promote sustainable farming practices throughout the state through lease agreements. This model builds upon existing private farmland investment models, farmland management models being piloted and implemented throughout the nation by land trusts, and sustainable agriculture models that promote best management practices (BMPs).

Farmland leasing for investment is not a new concept. Many land trusts currently engage in farmland leasing and use this practice to supplement other income sources. By pooling resources and agricultural land, small- and medium-sized land trusts that would otherwise be limited in their ability to engage in this practice, could do so as part of a larger cooperative. This structure will help mitigate the investment risk for any one land trust and provide an investment platform for groups to grow their holdings over time.

This approach was chosen not only for its ability to raise the needed stewardship funds for private land trusts in our state, but also for its ability to align mission and investment. Land trusts can view this funding mechanism as a way to not only steward the land that is under their protection, but also ensure that farmland is properly managed, improving regional ecosystem health. We see this as a win-win opportunity for land trusts and an opportunity to align their interests with farmers who are interested in protecting the long-term viability of the soils on which they farm.

Administrative and Financial Structure

While working lands investment organizations are typically structured as limited-liability corporation (LLCs) or another for-profit structure, we anticipate this cooperative structure being set up as a separate non-profit entity or under an existing non-profit that would enter into agreements with land trusts throughout the state. The cooperative decision making process would be equally distributed among all land trust members. The organization would be run with an operations staff, likely two employees with skillsets in farmland lease management and sustainable farming practices and be backed by the backbone organization. The non-profit would be comprised of member organizations (the land trusts), that would






contribute donated farmland or cash fees to the group. All cash contributions would be used to purchase additional farmland. The nonprofit entity could also seek out additional funding on its own. In many ways, this approach would serve as a working lands "endowment" of sorts.

Farmland would then be leased to qualified farmers and those interested in making the switch from conventional farming in long-term, or "evergreen," leases.⁴ This provides farmers with the security needed to implement sustainable farmland management practices over time. Lease guidance on sustainable farming is readily available through the Drake Agricultural Law Center, the *Breaking Ground Guide* produced by Openlands and Liberty Prairie Foundation, and other sources.⁵⁶

The operations staff would determine proper management techniques that would need to be included in lease agreements based on present sustainable management stance approved by land trust members. The cooperative could encourage additional BMP implementation through incentives directed to farmers and assisting with existing programs such as USDA's Natural Resources Conservation Service (NRCS).⁷ Rent would be determined by the land's quality and location, as outlined in models developed by Iroquois Valley Farms (see Iroquois Valley Farms Case Study) and other farmland management organizations.⁶

As rent is received, a percentage of those funds will be used for the expenses of the management organization while the remaining funds will be distributed to individual land trusts and regional partnerships for stewardship activities. In order to ensure that cooperative members feel they are receiving a fair return on their investments, whether it be in the form of farmland or monetary contributions or donations, revenue would be distributed based on a formula that considers the acreage, location, and productivity of contributed land. This method ensures that member revenues are proportionate to their contributions. Once the backbone organization is established and receiving consistent revenue, it can utilize that money to fund the regional partnerships discussed in Approach 1.

Preliminary Financial Modeling

To assess the viability of a nonprofit cooperative farmland investment organization, we identified the acreage needed to meet the \$8 to \$11 million financially need annually for stewardship. To do this, we estimated lease rates with the help of the Illinois Society of Professional Farm Managers and Rural Appraisers' 2016 Illinois Farmland Values & Lease Trends report.^o Average lease and value rates can be found in Table 4. It should be noted that rental rates would vary considerably throughout the state, and because of this, these numbers can only be used as a preliminary estimate.

4 Evergreen leases are those that automatically renews the length of the agreement after a predetermined period,

unless notice for termination is given.

- 5 http://sustainablefarmlease.org/
- $\ \ \, 6 \quad https://www.foodlandopportunity.org/downloads/BreakingGround_081616.pdf$
- 7 https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/eqip/
- 8 http://landforgood.org/wp-content/uploads/LFG-Farmland-Investment-Models-Report.pdf
- 9 http://www.ispfmra.org/wp-content/uploads/2016/03/2016-Illinois-Farmland-Values-Lease-Trends.pdf







Farmland class	Avg. annual rent	Land value per acre	
Excellent Productivity	\$ 400 / ac.	\$ 12,000 / ac.	
Good Productivity	\$ 350 / ac.	\$ 7,800/ac.	
Average Productivity	\$ 250 / ac.	\$ 5,500/ac.	
Fair Productivity	\$ 150 / ac.	\$ 4,800/ac.	

Table 4: Farmland Rental and Value Rates in Illinois, 2015

Based on these rental rates and the stewardship need identified, we projected the acreage needed for both low stewardship costs and high stewardship costs under two scenarios: 100% "Fair Productivity" farmland and 100% "Good Productivity" farmland. The scenarios do not take into account any stewardship endowments that may already exist for land held by conservation land trusts and may over-estimate the acreage need. Additionally, they do not take into account existing farmland under ownership of land trusts. The results of this analysis are found in Table 5 including the approximate amount of funds needed to purchase this quantity of farmland. The cost values provide a framing for the approximate fund that would be needed in order to create this investment cooperative without including donated farmland.

Table 5: Estimates of acreage needed to fund Illinois private land stewardship

			Stewardship Scenario	
			Low Annual Cost per Acre	High Annual Cost per Acre
Scenario	100% Good Productivity	Acres Needed in Cooperative	27,268	35,704
Cel	Productivity	Cost to Purchase Acres	\$212,688,320	\$278,488,769
Farmland S	100% Fair	Acres Needed in Cooperative	54,535	71,407
	Productivity	Cost to Purchase Acres	\$261,770,240	\$342,755,408

Under the 100% Good Productivity and low cost stewardship scenario, approximately 27,000 acres of farmland would be necessary in order to generate the annual revenues needed to steward land conserved by private land trusts today. That number would need to grow by an additional 10,000 acres within 20 years to account for acquisition projections. Under the 100% Fair Productivity model and high stewardship cost scenario, approximately 71,000 acres are needed, with a final 20-year target of 98,000 acres. This acreage represents at most a 0.27% of the approximately 27 million acres of farmland in the state.







Potential Roadblocks

Many roadblocks need to be addressed to establish this cooperative investment organization. The first is the need for a rental and returns structure that does not redistribute stewardship dollars from a land trust with quality farmland to one without. To address this, we propose creating a rental and income distribution model that considers the comparative amount of property or monetary funds contributed, and the value of that property. A cooperative share structure that take into account both contribution size and value of that contribution in a share should alleviate concerns among land trusts.

Farmers face risks when they join a program like this. Many sustainable farmland groups cite an inability to identify interested farmers as one of the largest hindrances to more rapid growth. To address this, we will utilize the relationships of land trust members to identify partner farmers as well market research to identify new farmer entering the space. This Dual Approach is an opportunity for farmers and land trusts, two groups often at odds, to collaborate over a shared interest in protecting Illinois' farmland while stewarding it. By promoting sustainable farming techniques, land trusts will be able to scale up their conservation efforts on farmland, while the long-term lease structure assures farmers that their farmland removed from production. If farmers cannot be identified through traditional means, the cooperative organization can choose to enlist a farm management company to assist in identifying sustainable farmers. Following the model of some private farmland investment companies, we will also explore the possibility of reducing rents during initial years in order to account for the increased costs associated with implementing sustainable practices on farms.

Proper management techniques are necessary, and identifying them is a top priority. Land trusts will differ on what defines sustainable farmland BMPs and whether organic certification or another measure should be pursued as part of the lease agreement. BMPs can be tracked annually through monitoring and verification of selected ecosystem services. One potential method to address these decisions would be to have cooperative members vote annually on major BMP practices that are presented by the management team and experts from participating organizations. Future lease agreements would then reflect any changes agreed upon by the cooperative members.

Slow early growth could also hinder the success of this project. Increasing acreage at the start will be key to its success. To address this, the team plans to recruit a key group of early participants with existing agricultural holdings that can serve as a pilot cooperative. By providing many avenues to engage with the agricultural investment program, we believe we can scale this mechanism as described in the Implementation Roadmap below.







A SAMPLE SCENARIO

To demonstrate this Dual Approach in action, we developed a sample case study of a theoretical, four member regional partnership and its operations described in Table 6. Assumptions were made around changes in stewardship costs and acreage added and while only one year of this scenario is shown, the model continues to scale in future years. A ten year model for this scenario can be found in *Appendix F: A Sample Scenario*.

Land Trust	Conserved Acres Held in 2017	Average Annual Acreage Increase	Stewardship Cost by Acreage in 2017				
Α	2,000	20	\$267,500				
В	400	5	\$36,000				
С	200	5	\$51,202				
D	20	2	\$3,950				
Total Acreage	2,620	32	\$358,652				
Stewardship Coordinat	\$56,000						
Cooperative 5% Manag	Cooperative 5% Management Fee \$17,933						

Table 6: Sample Regional Partnership Characteristics

We assumed that one stewardship coordinator was in place for the sample region, necessitating a total of \$56,000 going to the backbone organization each year. An additional 5% farmland management fee was added to the total cost in Table 7, equating to annual fee of approximately \$18,000 and would be coupled with other regional partners to provide the needed overall management fees for the backbone organization and investment cooperative. This results in a total need of approximately \$432,500. Based on these projections, and under the assumption that 50% of the farmland is considered "Fair Productivity" and 50% of the farmland is considered "Good Productivity," 1,923 acres of agricultural land would be needed to generate the desired stewardship revenue. In the situation that more or less acreage was contributed to the regional fund, the revenue would still be distributed proportionally to each member's contributions.

The rental incomes from this acreage would be pooled by the Investment Cooperative and distributed to the regional cooperative and individual land trusts. Additionally, we assumed that cooperative members contributed proportionally to their acreage holding, although that is not a requirement of the model.







Entity for which Funds are Distributed	Funds Available for Distribution	% of Need Covered
A	\$273,780	102%
В	\$54,756	152%
С	\$27,378	53%
D	\$2,738	69%
Total Acreage	\$56,000	100%
Stewardship Coordinator	\$17,933	100%
Cooperative Management		

Table 7: Annual Distribution of Stewardship Funding to Land Trusts

In the case of Land Trust B, there is a surplus of stewardship dollars provided. This is because its stewardship costs were lower than the other organizations, and the organization could choose to invest in acquisition, utilize that investment to grow their operations in other areas, or reduce their acreage contributed. Additionally, the two smallest land trusts benefit the least as a percentage of their need but would likely gain the most from the regional stewardship coordinator, given their own lack of internal capacity. The regional partnership and stewardship coordinator could analyze ways for Land Trust A and B to collaborate with the other two land trusts to ensure that funding is used to its highest potential. The regional group could also assess if changes need to be made to the share payment scheme in order to create an equitable mechanism for conservation for all land trusts, whether that be through issuing the excess of one group to another member or through other means.

This Dual Approach would protect an additional 3,000 acres of sustainable farmland after ten years, amplifying the initial impact of the four land trusts. This sample demonstrates how one potential configuration of this Dual Approach can create more manageable investment structures that are mission aligned and scalable for any size organization.







WHY A DUAL APPROACH TO STEWARDSHIP FINANCING?

The Dual Approach presented in this framework plan provides land trusts with two ways to address stewardship needs. The first is bringing individual costs down across the board by creating regional partnerships that share resources and staff capacity. The second is creating an agricultural investment organization that will aggregate farmland and stewardship dollars and implement sustainable farmland leases that provide returns while also aligning with long-term conservation goals. We believe these two approaches are well suited for the state because the mechanisms:

- 1. Can reasonably scale to provide all necessary funding for land trust-based stewardship across Illinois,
- 2. Do not require key policy changes,
- 3. Provide a flexible framework for land trusts to engage where they feel they need to and at different scales,
- 4. Leverage existing partnerships throughout the state including PSCC and VLI,
- 5. Align with mission goals around conservation and protection of landscapes in the state,
- 6. Build capacity among practitioners while also allowing land trusts to focus effort on what they are best suited to do the acquisition of high value lands, restoration of those lands, and the on-the-ground stewardship activities needed to maintain them







IMPLEMENTATION ROADMAP

The roadmap presented in this section is intended to be used by practitioners as they move forward in implementing this dual approach. We foresee this roadmap as a living document that will evolve as policy opportunities, capacity, and needs continue to change. An individual roadmap is provided for each approach; however, the two approaches are deeply intertwined. A brief version of this roadmap is presented at the end of the *Summary Report*.







Roadmap Part 1

	Approach 1: Crea	ating Regional Partnerships to Address Capacity	
Phase	Activity	Key Steps and Decision Points	Timeframe for completion
	Review dual approach with key practitioners statewide and confirm buy in for broader stewardship partnerships	 Present framework and implementation roadmap to practitioners Leverage VLI Summit and PSCC Annual Meeting for knowledge sharing Confirm regional stewardship partnerships are worth pursuing. Determine if these partnerships should be housed within PSCC or another entity 	1 to 3 months
Preparation	Confirm and develop operational boundaries for regional partnerships	1. Confirm that 5 partnerships is suitable for the state given landscape changes, political boundaries, and land trust preference	1 to 3 month
Prepa	Identify key stewardship needs in each region and create list of priority stewardship needs and areas.	 Determine resource capacity in each region and resources that can be brought to the various groups Identify more near term and longer term stewardship needs in each region 	1 to 3 month
	Further evaluate regional partnership models for stewardship	 Review Jo Daviss and NLI resource sharing pilot Review River to River Weed Management structure and Southern Illinois Prescribed Burn Association's models in greater depth Identify any examples of collective impact being utilized for land conservation activities 	1 to 3 month
	Raise initial funds to hire initial stewardship coordinator to facilitate groups	4. Identify interested funders who can invest in the pilot implementation	8 months
	Work with regional groups to establish a collective impact framework	 Hold regional meetings to discuss goals and needs in stewardship. Establish clear guidance on activities that individual groups will work together on 	1 year
Pllot	Regional Partners sign Memorandum's of Understanding with backbone organization formalizing the collective impact framework regionally	 Determining whether each region should have their own agreement or if practitioners in the state should implement a collective agreement Determine how decision making will be conducted as a group Determining what land trusts will be expected to contribute regionally and what they will be provided with through the coordinator and in the form of resource sharing 	1 year, 2 months
	Regional Stewardship Partnerships carry out pilot activities	 The stewardship coordinator works with individual groups to carry out the collective impact goals set out in the MOUs Identify at least one resource sharing activity that can be carried out in each of the five regions with a target of 3 to 5 activities. 	3 years
NATU		Table continues on next page.	





	Approach 1: Creating Regional Partnerships to Address Capacity				
Phase	Activity	Activity Key Steps and Decision Points			
Growth	Evaluate successes, areas for improvement, areas for expansion, and needs to improve the collective impact of the partnerships	 Regional partnerships hold meetings to evaluate benefits of the pilot program Partnerships will have to decide whether to continue utilizing this collective impact framework for stewardship 	3 years		
	The Stewardship Coordinator working with PSCC and practitioners, will decide on timeframe for expansion	 Practitioners will need to decide whether additional regional coordinators are needed still and in what time frame Determine whether equipment and additional resources or training will be needed 	3 years		
	Create operating and funding plan for next 3 years	 Determine number of stewardship coordinators would be optimal for the regional partnerships Assess expansion opportunities Leverage PSCC Annual Meetings and VLI Coordination Committee for evaluation of framework 	3.5 years		
	Carry out operating and funding plan in coordination with Approach 2	 Continue to build partnerships and resource sharing regionally Identify additional needs and assist land trusts in identifying the best way to carry out those goals 	5 years		
Perpetuity	Build funding plan through the Approach 2 and additional grant funding where needed.	 Determine whether a portion of the investment cooperative revenues can be utilized for regional stewardship coordination Supplement any additional funding needs through grant programs 	ongoing		
	Continue to evolve regional stewardship models based upon the needs of the practitioners	8. Hold annual regional progress meetings to evaluate the goals of each region and better reflect the stewardship needs of the organizations	ongoing		



Roadmap Part 2

	Approach 2: Creating an Agricultural Working Lands Investment Cooperative				
Phase	Activity	Key Steps and Decision Points	Timeframe for completion		
	Recruit and Create Leadership Group and Initial Partners	 Identify 3 to 5 initial cooperative members with existing farmland being traditionally cropped Build repository of information around land trust owned farmland in the state Work with these members to develop initial marketing materials and work through operations planning 	3 months		
Preparation	Build detailed proforma and business plan demonstrating stewardship need and growth of the investment cooperative	 More accurately assessing conservation land trust financial needs for stewardship and existing funding to create a detailed financial model Identify operating and overhead costs through 5+ years of operations Determine % of funding that could be used to fund the regional partnerships of Approach 1 Create rental rate model that takes into account farmland location and value, sustainable practices being implemented, cash contributions, and potentially additional factors Determine payout schedule to land trusts 	6 months		
Ā	Create cooperative operating structure and establish official relationship	 Create a voting and by-laws structure that allows for flexibility of size without giving more control or influence to any one land trust member Work with legal counsel to establish formalized agreements between the cooperative, members, and farmers Determine length of agreement between cooperative and land trust members 	1 year		
	Create model sustainable farmland lease for cooperative	 Leverage existing lease examples such as those created by the Drake Agricultural Law Center, Pinchot Institute, Library Prairie, Openlands, and other practitioners Work with leadership team to identify BMPs of interest weighing how implementation of these BMPs impacts both ecosystem health and rental returns 	1 year		

Table continues on next page.





	Approach 2: Creating an Agricultural Working Lands Investment Cooperative				
Phase	Activity	Activity Key Steps and Decision Points			
	Identify initial 1000 to 3000 acres of farmland from initial partnership group to test financial mechanism in action	 Work with specific land trust staff and boards to enter these acres into the investment program. Identify if existing lease agreements prohibit any activities and work with partners in those specific situations 	1 year		
	Lease farmland to sustainable agriculture farmers or management companies	 Market farmland through traditional and non- traditional avenues such leasing websites and local word of mouth Assist farmers in identifying additional resources available through USDA, State and other programs for sustainable practices 	1.5 years		
Pllot	Raise an additional \$100,000 to \$300,000 in funding to demonstrate how cash payments could factor into the model	1. Identify funders and private donors who would support this model by emphasizing the long-term return and sustainability of it.	2 years		
	Manage leases through 1 year of operation	 Document income generated and overhead Provide returns to cooperative members 	3 years		
	Monitor environmental benefits	1. Model and quantify the ecosystems benefits as a result of the sustainable agriculture practices implemented	ongoing		
	Hold annual review meetings and quarterly review calls	 Convene partners annually to discuss project and review program. This will allow the cooperative members to make key decisions around BMP operations and report back to land trust boards on voting measures Hold quarterly review web calls to update members 	ongoing		
		2. Hold quarterly review web calls to update members on management operations.			

Table continues on next page.



	Approach 2: Creating an Agricultural Working Lands Investment Cooperative				
Phase	Activity	Key Steps and Decision Points	Timeframe for completion		
	Evaluate pilot program and Make any necessary improvements to business plan	 Convene partners annually to discuss project and review program. This will allow the cooperative members to make key decisions around BMP operations and report back to land trust boards on voting measures Hold quarterly review web calls to update members on management operations. 	3.5 years		
Growth	Add additional land trust partners and grow the farmland under management	 Target the addition of 10 to 15 additional land trusts to cooperative Grow acreage to 10,000 acres of farmland through purchases or donations. 	5 years		
Gr	Continue to build platform for farmer recruitment	 Market farmland through traditional and non- traditional avenues such leasing websites and local word of mouth Assist farmers in identifying additional resources available through USDA, State and other programs for sustainable practices 	5 years		
	Monitor environmental benefits	1. Model and quantify the ecosystems benefits as a result of the sustainable agriculture practices implemented	ongoing		
	Add additional land trust partners and grow the farmland under management	 Target the inclusion of 20+ cooperative members in Illinois Grow acreage to 40,000 to 80,000 acres of farmland through purchases or donations. 	10+ years		
Perpetuity	 Continue to build platform for farmer recruitment 1. Market farmland through traditional and nor traditional avenues such leasing websites and loc word of mouth 2. Assist farmers in identifying additional resource available through USDA, State and other program for sustainable practices 		ongoing		
	Monitor Environmental benefits	1 Model and quantify the acceptore benefits as			





APPENDIX A: SOURCE LIST

Ages, Middle, Industrial Revolution, United States, Clean Air Act, Environmental Protection Agency, Environmental Quality, and Acid Precipitation. "Investing in Conservation" 419, no. X (1991): 41101.

Alan Bjerga, Cindy Hoffman And Laurie Meisler. "Family Farms Navigate Risk in the New Economy," November 21, 2016. https://www.bloomberg. com/graphics/2016-farm-economy/.

Alexander Sasha Aronson James Whaley Oliver, David Lamb. "The Relationship between Ecological Restoration and the Ecosystem Services." Ecology and Society 21, no. 1 (2016): 34.

America, Latin, and Caribbean Region. "Expanding Financing for Biodiversity Conservation," .

Asabere, Paul K., and Forrest E. Huffman. "The Relative Impacts of Trails and Greenbelts on Home Price." Journal of Real Estate Finance and Economics 38, no. 4 (May 19, 2009): 408–19.

Balmford, Andrew, Kevin J. Gaston, Ana S. L. Rodrigues, and Alexander James. "Integrating Costs of Conservation into International Priority Setting." Conservation Biology, 2000. doi:10.1046/ j.1523-1739.2000.00000-i2.x.

Bayon, Ricardo, J. Steven Lovink, and Wouter J. Veening. "Financing Biodiversity Conservation," 2000, 37.

Bernard, Florence, Rudolf S. de Groot, and Jos?? Joaqu??n Campos. "Valuation of Tropical Forest Services and Mechanisms to Finance Their Conservation and Sustainable Use: A Case Study of Tapantí National Park, Costa Rica." Forest Policy and Economics 11, no. 3 (2009): 174–83.

Bos, Melissa, Robert L. Pressey, and Natalie Stoeckl. "Marine Conservation Finance: The Need for and Scope of an Emerging Field." Ocean and Coastal Management 114 (2015): 116–28. Brandon, Katrina. "Ecotourism and Conservation : A Review of Key Issues." Environment, no. April (1996).

Brodnax, Sara. "Habitat Exchanges A Market-Based Conservation Mechanism Building Block Markets," 2013.

Carolina, North, United States, The North, Carolina Agriculture, Cost Share, North Carolina, Agriculture Cost, et al. "Agriculture Cost Share Program (ACSP)," n.d.

Centre, The Ecology. "Making Conservation Decisions Under Uncertainty For The Persistence of Multiple Species" 17, no. 1 (2007): 251–65.

Chakraborty, Kalyan, and John E. Keith. "Estimating the Recreation Demand and Economic Value of Mountain Biking in Moab, Utah: An Application of Count Data Models." Journal of Environmental Planning and Management 43, no. 4 (2000): 461– 69.

Clark, Story. A Field Guide to Conservation Finance. Island Press, 2007.

Conservancy, Sweetwater River. "Sweetwater River Conservancy Introduction," 2013.

Consulting, Manta, Monica Jain, and Remy Garderet. "Financing Fisheries Change: Learning From Case Studies,"

Corning, Sarah E., Rasul A. Mowatt, and H. Charles Chancellor. "Multiuse Trails: Benefits and Concerns of Residents and Property Owners." Journal of Urban Planning and Development 138, no. 4 (December 2012): 277–85.

Credit Suisse, WWF, and McKinsey & Company. "Conservation Finance: Moving beyond Donor Funding toward an Investor-Driven Approach," 2014, 31.







Ecosystem Marketplace. "Innovative Markets and Market-Like Instruments for Ecosystem Services: The Matrix 2013," 2013, 2013.

Englin, Jeffrey, and Robert Mendelsohn. "A Hedonic Travel Cost Analysis for Valuation of Multiple Components of Site Quality: The Recreation Value of Forest Management." Journal of Environmental Economics and Management 21, no. 3 (November 1991): 275–90.

Environmental Defense Fund. "Grassland Project Protocol," 2015.

Environmental, Vela. "Local Conservation Finance: The Sheridan County Ballot Initiative," 2013.

Extension.org. "The Advantages and Disadvantages of Cluster/Conservation Development," 2013.

Gasses, Climate Trust And Coalition on Ag Greenhouse. "Mobilizing Conservation Finance." USDA, 2015.

Glosser, Deanna. "Illinois Sustainable Natural Areas Vision," 2011.

Graff, Walter, and Rob Burbank. "New Conservation Model in Maine : Structured Financing That Benefits Communities." Federal Reserve Bank of Boston, 2016. https://www.bostonfed.org/commdev/ c&b/2012/spring/new-conservation-model-inmaine.htm.

Gutman, P. "From Goodwill to Payments for Environmental Services." A Survey of Financing Options for Sustainable Natural Resource Management in Developing Countries, 2003. http://portals.wi.wur.nl/files/docs/File/nfp for all/ FinancingMech/FromGoodwilltoPESWWFcases. pdf.

Hansen, Kristi. "Upper Green River Conservation Exchange Market-Based Conservation Mechanism," 2013. Hopper, Kim, and Ernest Cook. The Trust for Public Land's Conservation Finance Handbook: How Communities Are Paying for Parks and Land Conservation. Trust for Public Land, 2004.

Huwyler, By Fabian, Juerg Kaeppeli, Katharina Serafimova, Eric Swanson, and John Tobin. "Making Conservation Finance Investable." Stanford Social Innovation Review, 2014, 1–7.

Huwyler, Fabian, Jürg Käppeli, and John Tobin. "Conservation Finance From Niche to Mainstream: The Building of an Institutional Asset Class," 2016, 1–25.

"Eyes on the Horizon." The Impact and Investor Survey. May (2009): 7541320–7541320.

Initiative, 2i Investing. "Green SMEs and Access To Finance: The Role of Banking Diversity," n.d.

Jessica Fox, Royal C Gardner, and Todd Maki. "Stacking Opportunities and Risks in Environmental Credit Markets." Environmental Law Institute, no. 2009 (2011): 2–4.

John Kania, Mark Kramer. "Collective Impact." Stanford Social Innovation Review, 2011. http://c. ymcdn.com/sites/www.lano.org/resource/ dynamic/blogs/20131007_093137_25993.pdf.

Larson, Eric R., Stephen Howell, Peter Kareiva, and Paul R. Armsworth. "Constraints of Philanthropy on Determining the Distribution of Biodiversity Conservation Funding." Conservation Biology: The Journal of the Society for Conservation Biology 30, no. 1 (2016): 206–15.

Lauretta Burke, Janet Ranganathan, and Robert WinterBottom. "Revaluing Ecosystems: Pathways for Scaling Up the Inclusion of Ecosystem Value in Decision Making." World Resources Institute, n.d.

Law, Stanford. "Financing Community-Based Conservation of Working Land," 2007.

Levitt, James N. Conservation Capital in the Americas: Exemplary Conservation Finance Initiatives. Lincoln Institute of Land Policy, 2010.





25

Levitt, James N., and Lydia K. Bergen. From Walden to Wall Street: Frontiers of Conservation Finance. Island Press, 2005.

Linden, Larry, Steve Mccormick, Ivan Barkhorn, Roger Ullman, Guillermo Castilleja, Dan Winterson, and Lee Green. "A Big Deal for Conservation." Stanford Social Innovation Review, no. Summer (2012): 42–49.

Marlowe, Justin. "Environmental Risks Becoming Part of Bond Assessments," 2014. http://www. governing.com/columns/public-money/govbond-assessments-environment.html.

Mayrand, Karel, and M. Paquin. "Payments for Environmental Services: A Survey and Assessment of Current Schemes." Unisfera International Centre. Montreal, Canada. 52p, no. September (2004): 1–52.

Mcglynn, Emily, Christopher Galik, David Tepper, Jerod Myers, Julie Demeester, Justin Baker, Adam Chambers, et al. "Building Carbon in America's Farms, Forests, and Grasslands: Foundations for a Policy Roadmap," no. February (2016).

Mead, Matthew. "Leading the Charge : Conservation and the Wyoming Energy Strategy," 2013.

Morey, Edward R., Terry Buchanan, and Donald M. Waldman. "Estimating the Benefits and Costs to Mountain Bikers of Changes in Trail Characteristics, Access Fees, and Site Closures: Choice Experiments and Benefits Transfer." Journal of Environmental Management 64, no. 4 (April 2002): 411–22.

Nost, By Eric, Erin Kitchell, Andrew L. Roe, Chloe Wardropper, and Eric Nost. "Nature's Finance: Perspectives on Markets and Conservation Introduction," no. 1949 (2016).

Oswald Beiler, Michelle, Kelly Burkhart, and Mike Nicholson. "Evaluating the Impact of Rail-Trails: A Methodology for Assessing Travel Demand and Economic Impacts." International Journal of Sustainable Transportation 9, no. 7 (October 3, 2015): 509–19. Pagiolo, Stefano, and The World Bank. "Introduction to Payment for Environmental Services." In USAID Policy Seminar, 2007.

Parker, C., and M. Cranford. "Little Biodiversity Finance," 2010, 166.

Phelps, Jacob, Edward L. Webb, and Lian P. Koh. "Risky Business: An Uncertain Future for Biodiversity Conservation Finance through REDD+." Conservation Letters 4, no. 2 (2011): 88–94.

Preston, Lynelle. "Investing in Mountain: Innovative Mechanism and Promising Examples for Financing Conservation and Sustainable Development." The Mountain Institute 1 (1997). doi:10.1017/ CBO9781107415324.004.

"Green Commodities Programme" United Nations Development Programme n.d.

Redford, Kent H., Peter Coppolillo, Eric W. Sanderson, Gustavo A. B. Da Fonseca, Eric Dinerstein, Craig Groves, Georgina Mace, et al. "Mapping the Conservation Landscape." Conservation Biology: The Journal of the Society for Conservation Biology 17, no. 1 (February 1, 2003): 116–31.

Richards, Michael, and Michael Jenkins. "Potential and Challenges of Payments for Ecosystem Services from Tropical Forests." Forestry Briefing 16 (2007). https://www.odi.org/sites/odi.org.uk/ files/odi-assets/publications-opinion-files/816. pdf.

Rubin, Steven M., Jonathan Shatz, and Colleen Deegan. "International Conservation Finance: Using Debt Swaps and Trust Funds to Foster Conservation of Biodiversity." Journal of Social, Political and Economic Studies, 1994.

"The Conservation Note Prospectus," NatureVest 2016.

Small, Steve. "Note #7: The Business of Open Space: What's Next?? And I Really Mean It!!," 2016. http://www.stevesmall.com/business-openspace-whats-next-really-mean/.





26

Smith, Lars Christian. "Conservation Finance." Finance, 2009, 1–8.

Sullivan, Sian. "Banking Nature? The Spectacular Financialisation of Environmental Conservation." Vol. 45, 2013. doi:10.1111/j.1467-8330.2012.00989.x.

Svadlenak-gomez, Karin, Tom Clements, Charles Foley, Nikolai Kazakov, Dale Lewis, Dale Miquelle, and Renae Stenhouse. "Paying for Results." Director, n.d.

The World Bank. "Green Bonds Impact Report," no. June (2015): 1–23.

Toye, Cory. "Market Approaches to Water Management," 1–25, 2013.

Trust for Public Land. "Illinois Conservation Congress Presentation," 2010, 1–23.

VanBlarcom, Brian, and John Janmaat. "Comparing the Costs and Health Benefits of a Proposed Rail Trail." Journal of Policy Research in Tourism, Leisure and Events 5, no. 2 (2013): 187–206.

Wendland, Kelly J., Miroslav Honz??k, Rosimeiry Portela, Benjamin Vitale, Samuel Rubinoff, and Jeannicq Randrianarisoa. "Targeting and Implementing Payments for Ecosystem Services: Opportunities for Bundling Biodiversity Conservation with Carbon and Water Services in Madagascar." Ecological Economics: The Journal of the International Society for Ecological Economics 69, no. 11 (2010): 2093–2107.

"Economic Impacts of FSC Certification on Forest Operators," WWF 2015.

"Guide to Conservation Finance: Sustainable Financing for the Planet," 2009. http://wwf. panda.org/what_we_do/how_we_work/ conservation/forests/publications/?175961/ wwfguidetoconservationfinance. "Long-Term Stewardship Calculator Handbook. pdf," n.d. https://www.conservationgateway.org/ ConservationPlanning/ToolsData/Documents/ Long-Term%20Stewardship%20Calculator%20 Handbook.pdf.

"Illinois State Land Conservation Funding Report Offers Plans for Preserving Natural Areas," 6/2017. http://www.lib.niu.edu/2007/ip070524.html.

"Farmland Investment Models Report." Land For Good, 2016. http://landforgood.org/wp-content/ uploads/LFG-Farmland-Investment-Models-Report.pdf.

"Farmland Investment Report Summary." Land for Good, 2016. http://landforgood.org/wp-content/ uploads/LFG-Farmland-Investment-Report-Summary.pdf.

"Impact Investing in Conservation Finance." The impactDEALS Forum, 2014, 0–4.

"Illinois Conservation Partnership Annual Report 2013." Department of Agriculture, State of Illinois, 2013.

"Conservation Note Impact Report." NatureVest, 2015.

"Chapter Five: Key Considerations for a Sustainable Farm Lease | Sustainable Farm Lease." Accessed November 23, 2016. http://sustainablefarmlease. org/2010/10/key-considerations-for-asustainable-farm-lease-agreement/.

"Land Management Cost Case Studies." Center for Natural Lands Management, 2004. http://www. eli.org/sites/default/files/docs/epa_land_mgmt_ cost_casestudies.pdf.





APPENDIX B: PRELIMINARY STEWARDSHIP PROJECTIONS

This appendix describes our preliminary calculations for stewardship needed by conservation land trust annually. This projection builds upon data from the PSCC's IView Database and the Illinois Sustainable Natural Areas Vision (ISNAV).

The following assumptions were made related to the acreage needing to be protected:

Description	Value	Unit	Source
Land held by land trusts and non-profits for long-term maintenance	51,127	acres	http://www.prairiestateconservation.org/ pscc/iview/
Rate of Acquisition	1,500	acres/year	Based upon recent trends and I-view data http://www.prairiestateconservation.org/ pscc/wp-content/uploads/2015/12/Private- Land-Conservation-2015.pdf

We approximated acreage by ecosystem type based on percentages calculated from the core natural area acreage referenced in the Illinois Sustainable Natural Areas Chapter 2 – Future Funding Needs. These numbers are strictly used for preliminary projections and would need to be evaluated further. Annual maintenance needs for each of these ecosystem types was also estimated as part of the ISNAV documentation process based on five-year annualized cost.

		Average Maintenance Cost per Acre		
Ecosystem Type	Percentage of Total Acreage	Low	High	
Forest	62%	\$150	\$200	
Savanna	7%	\$200	\$250	
Prairie	10%	\$215	\$260	
Wetland	21%	\$150	\$200	

With these assumptions, we are able to project stewardship costs for private land trusts throughout the state. A 2% inflation rate was included in this projection as well¹

1 http://inflationdata.com/Inflation/Inflation_Rate/CurrentInflation.asp







Ye	ar	2017	2018	2019	2020	2021	2022
Inflation Ra	ate		2%	2%	2%	2%	2%
Total Acres Stewardsh		51,127	52,127	53,127	54,127	55,127	56,127
Ecosystem	n Acreage E	stimates					
Forest		31,699	32,319	32,939	33,559	34,179	34,799
Savanna		3,579	3,649	3,719	3,789	3,859	3,929
Prairie		5,113	5,213	5,313	5,413	5,513	5,613
Wetlands		10,737	10,947	11,157	11,367	11,577	11,787
Annual Ste	wardship C	osts per Acre b	y Ecosystem Ty	pe	<u>.</u>		
E	Low	\$150	\$153	\$156	\$159	\$162	\$166
Forest	High	\$200	\$204	\$208	\$212	\$216	\$221
C	Low	\$200	\$204	\$208	\$212	\$216	\$221
Savanna	High	\$250	\$255	\$260	\$265	\$271	\$276
Dusinis	Low	\$215	\$219	\$224	\$228	\$233	\$237
Prairie	High	\$260	\$265	\$271	\$276	\$281	\$287
	Low	\$150	\$153	\$156	\$159	\$162	\$166
Wetlands	High	\$200	\$204	\$208	\$212	\$216	\$221
Annual Stewardship Projections							
Low Projec	ction	\$8,180,320	\$8,507,126	\$8,843,733	\$9,190,401	\$9,547,398	\$9,914,999
High Proje	ction	\$10,711,107	\$11,139,019	\$11,579,763	\$12,033,681	\$12,501,124	\$12,982,452

Table continues on next page.







Ye	ar	2023	2024	2025	2026	2027	2028
Inflation Rate 2%		2%	2%	2%	2%	2%	2%
Total Acres Stewardsh		57,127	58,127	59,127	60,127	61,127	62,127
Ecosystem	n Acreage E	stimates	-	-	-	•	
Forest		35,419	36,039	36,659	37,279	37,899	38,519
Savanna		3,999	4,069	4,139	4,209	4,279	4,349
Prairie		5,713	5,813	5,913	6,013	6,113	6,213
Wetlands		11,997	12,207	12,417	12,627	12,837	13,047
Annual Ste	ewardship C	Costs per Acre b	y Ecosystem Ty	/pe			
Forest	Low	\$169	\$172	\$176	\$179	\$183	\$187
Forest	High	\$225	\$230	\$234	\$239	\$244	\$249
Covenne	Low	\$225	\$230	\$234	\$239	\$244	\$249
Savanna	High	\$282	\$287	\$293	\$299	\$305	\$311
Ducivia	Low	\$242	\$247	\$252	\$257	\$262	\$267
Prairie	High	\$293	\$299	\$305	\$311	\$317	\$323
\//atlasada	Low	\$169	\$172	\$176	\$179	\$183	\$187
Wetlands	High	\$225	\$230	\$234	\$239	\$244	\$249
Annual Stewardship Projections							
Low Projection \$10,293,485		\$ 10,683,144	\$11,084,273	\$11,497,173	\$11,922,156	\$ 12,359,539	
High Proje	ction	\$13,478,032	\$ 13,988,242	\$14,513,470	\$ 15,054,111	\$ 15,610,572	\$16,183,271

Table continues on next page.







Ye	ar	2031	2032	2033	2034	2035	2036
Inflation Rate 29		2%	2%	2%	2%	2%	2%
Total Acres Stewardsh		65,127	66,127	67,127	68,127	69,127	70,127
Ecosystem	n Acreage Es	stimates					
Forest		40,379	40,999	41,619	42,239	42,859	43,479
Savanna		4,559	4,629	4,699	4,769	4,839	4,909
Prairie		6,513	6,613	6,713	6,813	6,913	7,013
Wetlands		13,677	13,887	14,097	14,307	14,517	14,727
Annual Ste	ewardship C	osts per Acre b	y Ecosystem Ty	ре			
Forest	Low	\$198	\$202	\$206	\$210	\$214	\$219
Forest	High	\$264	\$269	\$275	\$280	\$286	\$291
Savanna	Low	\$264	\$269	\$275	\$280	\$286	\$291
Savarına	High	\$330	\$336	\$343	\$350	\$357	\$364
Prairie	Low	\$284	\$289	\$295	\$301	\$307	\$313
Prairie	High	\$343	\$350	\$357	\$364	\$371	\$379
Wetlands	Low	\$198	\$202	\$206	\$210	\$214	\$219
wetlands	High	\$264	\$269	\$275	\$280	\$286	\$291
Annual Stewardship Projections							
Low Projection \$13,749,391			\$14,239,718	\$ 14,744,158	\$ 15,263,080	\$15,796,861	\$16,345,888
High Proje	ction	\$ 18,003,109	\$ 18,645,130	\$ 19,305,632	\$ 19,985,095	\$20,684,014	\$21,402,896







APPENDIX C: MECHANISM MATRIX

Mechanism	Description	Financial Flow	Involved Parties	Strength(s)	Weakness(es)	Applicability to Illinois?	Applicability for Sustainable Stewardship
Carbon Income Investments Program	The sale of emission allowances has produced large pots of money for California and other areas experimenting with Cap and Trade. These funds are often directed to further carbon emissions reduction products. Conservation maintenance and operations has been identified as one of the possible uses for these funds.	A government will obtain the funds from the generated revenue of the cap and trade or emissions reduction program. The government will then invest these funds in conservation stewardship projects.	 State government entity in charge of cap and trade/ emissions reduction program. Government environmental agency allocated cap and trade/emissions reduction program funds for a conservation program. 	 Utilizes a group of funds created from carbon transactions to create additional environmental benefits. The ability to tackle two different environmental needs: carbon sequestration and some other conservation project. Has produced a huge nest egg for activity in California where the Greenhouse Gas Reduction Fund is active. 	 Needs to come out of an existing carbon or other offset program. With decreasing limits, the amount of money generated will decrease, meaning the funds will need to be placed in a trust or risk being depleted. While this funding could be used for conservation, many additional interests will likely seek to use the funding for other purposes. 	As of right now, Illinois would not be able to establish a carbon income investment program without an existing carbon framework. Illinois is working on a carbon framework and an opportunity may present itself to advocate for an income investment program.	A carbon income investment program could be tailored specifically for the use of stewardship. Presently, the California Greenhouse Gas Reduction Fund utilizes a portion of the income from the sale of carbon credits for conservation related activities but is restricted to that funding benefiting the state of California.
Carbon Offsets	The sale of emissions allowances produced from the conservation of forestland, grasslands, or other conservation efforts. The most notable mandatory carbon market exists in California however voluntary markets also present opportunities.	Regulated entities are allocated a certain level of CO2 pollution each year. These entities have the ability to buy further allowances from entities with extra allowances while also meeting their obligations.	 A regulator, usually a state, must manage the allocation of credits. A organization must create the carbon offsets and verify that they in-fact comply with the established offset protocols. A regulated entity or interested party in the voluntary market must purchase the credits at market rate. In California, this has presently been around 85% of the price of allowances. Optionally, a bundler is sometimes used to aggregate offset purchases for larger buyers. 	 Creates financial revenues for carbon benefits. Creates continued revenues for conservation. 	 Projects must meet strict eligibility requirements and be verified, limiting the amount of income that these offsets can generate. Cost of verification can prevent smaller projects from tapping into this benefit. Offset income may not be significant sources of revenue to maintain conservation efforts. 	While Illinois does not presently have its own carbon offset market, conservation practitioners with eligible projects can list them as offsets on the California market. The limitation of this mechanism lies in the scale needed to make the verification costs worthwhile.	Carbon offset purchases are presently and could continue to be used for conservation practices. While this is an opportunity to bring additional revenue, because of the high costs associated with verification, it is typically not recommended to pursue carbon transactions on projects of less than 10,000 acres in aggregate. Few eligible properties of this size exist in Illinois.



Mechanism	Description	Financial Flow	Involved Parties	Strength(s)	Weakness(es)	Applicability to Illinois?	Applicability for Sustainable Stewardship
Collective Impact Model (Resource Optimization through Partnerships)	Through well-organized collaboration, the impact of the whole is increased. The Collective Impact Model focuses on five principles: Common Agendas, shared measurement, mutually reinforcing activities, continuous communications, backbone support	The mechanism mutual contributions of all parties involved. By collaborating, groups can lower their overall costs. Financial services would be exchanged across parties.	 Partnership members who would contribute. Backbone Organization who would organize and manage the partnership. 	 Relies on a broad group to accomplish a mutual goal. Does not rely on policy changes or outside funding. Optimizes the use of funds. 	 Does not create new funding sources. Relies on everyone being active participants and engaged in the process. Partnerships often need a lot of care and feeding over time. 	Partnership models have a long history in the Illinois conservation community and some historical success such as with the C2000 program. Partnerships could take place under the present dynamics taking place in Illinois.	Partnership Models have potential to lower the overall costs of stewardship. They could also be used to help small and medium size land trusts leverage additional resources by aggregating efforts. They could be used lower equipment and staffing costs as well. Some organizations in the state are already working on various partnership models.
Conservation Easement	Private landowners sells or donates an easement protecting or conserving land to a nonprofit or government. That organization then holds the easement and requires the maintenance of ecosystem benefits in one way or another.	Private land owner receives monetary benefits from selling the easement or a tax benefit from donating the easement to a land trust or government agency.	 Private land owners selling (or donating) the easement. Government agency or land trust that acquires the new conserved land. 	 Tax incentives in the US have been created to entice landowners to contribute their land in a conservation easement. Landowners are usually allowed to live on and work on the land, as long as it is in line with the legally binding contract created through the easement. 	 Conservation easements lower the value of properties since they are being left unchanged and their redevelopment potential is sold. This type of agreement does not generate large or continuous flows of revenue for maintenance. Landowners become responsible for complying with the easements and the holder of the easement must enforce it. 	Easements are presently being used in Illinois as an acquisition method. According to PSCC's IView database, presently approximately 240,000 acres are held in conservation easements.	The most common easement transactions result in the landowner maintaining their responsibility to uphold the easement. In doing so, landowners must understand the requirements of their easement and have a good understanding of how to carry out stewardship activities. To better apply to stewardship, a stewardship trust could be created as part of the transaction (an increasingly prevalent practice) to ensure that a portion of the proceeds from selling the easement go toward maintaining the intent of the easement.



Mechanism	Description	Financial Flow	Involved Parties	Strength(s)	Weakness(es)	Applicability to Illinois?	Applicability for Sustainable Stewardship
Cost Share Payments	Reimbursement or upfront payment of a percentage of the cost for the implementation BMPs or conservation action to improve ecosystem services. Most often utilized on agricultural land such as with CRP, CSP, EQIP, and others.	A landowner voluntarily agrees to the implementation of BMP(s) on their land and enters into a contract with a government agency to receive a percentage of the cost of establishing the BMP(s).	 Landowner who implements BMP(s) or conservation action. Government agency that facilitates that contract and initiation of the BMP(s). 	 Creates a Public-Private Partnership between local community and the government, allowing for funding to come from two different sources. Creates additionality by increasing the amount of land that can be conserved. 	 Drafting a detailed contract between the government and the landowner in order to ensure all BMP(s) are being successfully implemented. Ensuring the BMP(s) are maintained to the highest degree feasible. Often a one-time-payment from the government and may need to be structured as a continual agreement. 	This would be feasible and has already be utilized in Illinois for farming. This mechanism is most applicable to agriculture which makes up close to 75% of the land area of Illinois and could present an opportunity for additional conservation on land. For this to grow in Illinois, additional funding sources would need to provide the funding for these cost share programs, something that may be politically infeasible in the short term.	This mechanism is better utilized for restoration activities as it tends to fund the conversion of traditional land into better managed properties. With that said, a cost-share program could be created to fund stewardship on conserved land if the government will was there and the payments were on-going instead of one time.
Deposit Refund Scheme	Government requires certain companies to take out an environmental bond. At the end of a government assessment on the company's actions, the bond (deposit) will be returned to the company, if the company's actions did not harm the environment. If the company's actions did harm the environment, the bond will be used to pay for the environmental degradation done by the company.	The government will hold the bond (deposit) sell and return power. Companies will either have money from the bond returned to them or invested in the repair of the environmental degradation done by the company.	 Government issuing an environmental bond. Company or business that is required to buy the environmental bond. 	 Environmental degradation will be paid for by the corporation that caused the degradation. Allows for internalization of environmental degradation costs. Strict government monitoring of environmental degradation will promote BMP(s) with businesses in order to avoid losing the money used to purchase the required bond (deposit). 	 Creating or revamping a government agency/ department to enforce and monitor businesses on their environmental degradation. Reactive approach to environmental protections. May not create sustainable funding for conservation. 	This mechanism could have long-term applications within the state. Presently, the state reaches settlements with environmental damagers. This would allow them to be protected up-front but would require significant political capital among conservation organization to be achieved.	This mechanism could be better utilized for restoration and acquisition given its nature as an offsetting mechanism for environmental damage. However, by taking a more holistic view to conservation, a portion of the money received through the deposit refund scheme could be utilized to steward existing land.
Direct Budget Allocations	A government sets aside a portion of its budget to be directly allocated for use in maintaining conservation lands.	The budget allocation is made by a governing body and those funds are given to conservation groups or governmental departments to implement into their conservation projects.	 Government that creates the direct budget allocation. Government agency/ department or conservation group that uses the funds for their conservation project. 	 If there is an extensive budget and funds can be set aside for this allocation, this will allow for long-term, sustainable funding of conservation programs. Would create a clean, easy to identify source of funding for conservation. 	 If the government faces a budget crisis, then the funding for these allocations are at risk of being cut. Would require a tradeoff with other government spending. Would require significant political capital to achieve. 	With the current budget crisis in Illinois, this funding mechanism is not likely to be feasible.	This could create stewardship funding opportunities but would likely need to be appropriated regularly, thereby making it an uncertain source of stewardship funding.





Mechanism	Description	Financial Flow	Involved Parties	Strength(s)	Weakness(es)	Applicability to Illinois?	Applicability for Sustainable Stewardship
Ecosystem services fees (also known as Payment for Ecosystem Services, PES)	Downstream beneficiaries of ecosystem services pay for the continual flow of those services. Examples include source water protection, fire prevention, and water quality among others	A downstream or upstream user will pay a certain amount of money in order to secure the health and maintenance of an ecosystem service they rely on. The upstream providers use this money to maintain and secure the ecosystem service.	 Beneficiaries who pay fee to secure longevity of ecosystem service. Upstream providers who use the revenue generated from the fee to maintain the ecosystem service. 	 The ecosystem service provider will receive a payment that can make conservation practices more attractive financially. The ecosystem service users avoid substantial mitigation and restoration costs if the ecosystem service was damaged by upstream use. The payments for the ecosystem services provide previously unrealized funding for conservation efforts. 	 Growing concern about the equitable nature of PES in diverse socio-economic cultures. Assigning economic values may limit the perceived benefits that the ecosystem provides. Can have high setup and admin costs. Quantification can be challenging Valuation of environmental services can be varied and tricky 	This funding mechanism could address some of Illinois' key conservation issues, by mitigating damaging practices that harm ecosystem services (i.e. issue of Chicago River pollution feeding into the Mississippi River). Some ecosystem service programs rely on the use of NPDES permitees however the fees paid by NPDES are needed for basic funding of the IEPA water program. As such, an Ecosystem Services program would have to look for alternative sources of funding or run the risk of competing for limited environmental funding.	PES provides stewardship capabilities by creating continual revenues in return for the maintenance of ecosystem services. This mechanism would guarantee high quality ecosystems under the parameters established in the Ecosystem Services contract and if contracts are written correctly can provide proper stewardship of sites.
Endowed Funds	Fund established by a foundation or trust that makes consistent withdrawals from invested capital. The capital in endowment funds is usually specified for specific purposed.	An organization raises a fund and then invests the principle. The return on that investment is used annually to fund some aspect of the organizational mission.	 Organization in need of funding for a purpose. Donors who provide the principle for investment. Fund Manager who invests the principle 	 Fund operates in perpetuity. Well established system of fundraising with management support readily available. 	 Can be hard to raise the initial principle to start a fund. Can be impacted by financial market conditions. Growing concern among advocacy organizations around endowment investments and mission conflicts. 	Endowments are currently a common tool in Illinois for ensuring continued returns for mission based organizations.	Endowments are currently one of the most commonly used tools for stewardship. By establishing endowments upfront, conservation organizations can ensure that the ecosystems they protect have the resources needed in perpetuity.



Mechanism	Description	Financial Flow	Involved Parties	Strength(s)	Weakness(es)	Applicability to Illinois?	Applicability for Sustainable Stewardship
Green Bond Financing	A tax-exempt bond issued by the government to fund projects focused on conservation.	The green bond is issued by the government and sold to organizations for a set term. The proceeds from the sale of the bond are used to fund the conservation project.	 Government agency that issues the green bond for sale. Entities that buy the bond expecting a safe return on their investment. Environmental organization or agencies that use the proceeds from the sale of the green bond to fund their conservation work. 	 Creates a Public-Private Partnership between businesses, environmental organizations and the government. Creates an immediate source of funding for projects in need. 3. Can be sized to meet the need. 4. Governments and financial institutions are very familiar with bonding as it is a common financing practice. 	 May not be a viable option for governments that already have a significant bond risk and/or poor bond rating. Would need to have a viable payment scheme in order to pay back the bond. 	Although a good financing mechanism in certain states, this may not be the best approach at this time due to the existing bond rating in the state. It may be more viable in local counties and municipalities with better bond ratings.	Bonds are not traditionally designed for sustained long-term investments but one could potentially be designed to seed a fund that could be used for long- term stewardship. With any type of investment, the government would need to identify ways of returning that investment.
Green commodities price premiums from Working Lands	When something produced from conserved land in an environmentally-friendly manner is more expensive. The price premium is used to support the environmentally preferred practices.	An owner or manager of conservation land uses that land as working land and produces a product from that land, which can then be sold. The buyer pays a premium and the additional revenue goes back into the conservation land.	 Owner/manager of the conservation land who produces and environmentally-sustainable product. Buyer of the environmentally-sustainable product who is willing to pay a higher price to protect the land. 	 Creation of a sustainable product in place of a previously environmentally damaging commodity. Protection of land area that has put under stress due to previous environmentally damaging commodity. Potential for branding and CSR opportunities around sustainable products 	 Ensuring the program and the green commodity will be self-sustaining in the long-term. Reliant on market demand for purchasing of the product. Utilizing conserved land for product creation has the potential to be detrimental to the ecosystem benefits. 	This financing mechanism will promote sustainable products for the market and ensure the protection, conservation and restoration of working land areas. Governmental involvement may be needed to promote the switch to sustainable working land models but by framing this as public private partnerships, this could be feasible in the long-term at the State level.	Price premiums could be used to fund stewardship; however the uncertainty in certain markets may create uncertainty around the long-term viability of this approach.
Impact Investing	Investments made by private investors who are looking for both a financial return and a social or environmental return on their investments	A conservation organization seeks out investments from a high wealth individual, fund, or other impact investor. The investor makes an investment. Under the specified terms, the investor receives a return and typically measurement information related to the co-benefits of that investment.	 Impact Investor who supports the environmental mission. Conservation Organizations who are interested in receiving capital and have a way of returning that investment over time. 	 Taps into a new source of funding. Large market interest in impact investing and significant funding already available. Could be uniquely structured for specific needs. 	 Investment structures can be complex and hard for organizations without a background in it to manage. Still need to identify other sources of revenue, such as user fees, in order to return the investment and any additional returns to the investor. Investors can have influence over the mission of the organization and put pressure on the conservation organization. 	Impact Investing is a growing field in Illinois with organizations looking how they can receive returns through investments in environmental organizations.	Impact Investments are presently being used in certain acquisition situations. Identifying investing opportunities is possible but a second income stream such as working lands funding, user fees, or future donations, would need to be in place before a stewardship investment transaction took place.





Mechanism	Description	Financial Flow	Involved Parties	Strength(s)	Weakness(es)	Applicability to Illinois?	Applicability for Sustainable Stewardship
Insurance Payments for Environmental Risk Mitigation	An insurance company makes investments or pay out over time for conservation programs that decrease risk of payouts to insures such as insurance related to flooding or fire.	An insurance company would pay an organization to decrease some sort of environmental risk such as green infrastructure benefits. Down the line, the insurance company will see a return on their investment with less claims due to environmental risks. Conservation practitioners utilize that funding for stewardship or other conservation activities.	 Insurance company that invests in decreasing an environmental risk. Organization that works to decrease a detrimental conservation risk. 	 Ability to promote conservation programs, while also lowering environmental risks from natural disasters or catastrophic events. Insurance companies' claims go down and insurers decrease their payout risk with lower rate of natural disasters. 	 Insurance companies will need to see direct, data-driven benefits of conservation work that may be difficult to provide. Conservation Activities would need to be closely tied to the service areas of the insurance company. 	For a program such as this to work in Illinois, insurance companies would need to be able to see the benefit of their investment in associated conservation activities. This is likely most applicable in the urban areas of the state where risk of flooding could directly be tied to conservation activities.	These payments could and should apply to continued risk mitigation, thereby covering the operations and maintenance of conserved land. The initial agreement between the conservation organization and the insurance company should include the establishment of a stewardship fund or long- term payment agreement.
Natural Capital Levy	Fee, charge or tax for any extraction of natural resources that negatively impacts ecosystem services. The fee can then be used for conservation activities. Mineral leasing rights are often utilized in this way.	A user degrades an ecosystem somewhere due to extraction of natural resources and must pay a fee that supports ecosystem protection in another location or the same location.	 User who extracts a natural resource. Government agency or conservation group that uses the money generated from the fee to protect a different or same ecosystem. 	 Allows for resources to be extracted by different corporations for business purposes, while also accounting for the damage accumulating in that land area through the extraction of the natural resources. Can entice businesses to implement BMP(s) into their natural resource extraction models, meaning down the road they would no longer have to pay a tax or fee as they would extract the natural resources in an environmentally-friendly way. 	 Does not prevent resource extraction but may actually facilitate it by allowing corporations a way of "accounting" for their damage. Some land trusts and other organizations have reservations about utilizing this type of money and may not take advantage of a levy such as this. 	A program such as this would need to be implemented by the government at the state level and while approval of this in Illinois is unlikely in the near future this could be considered under different administrations. Programs similar to this have been successfully utilized to create natural resource funding in Michigan and other states throughout the country.	This levy could be utilized for funding stewardship but may create an additionality conundrum. Multiple levies could maintain high quality ecosystems over time through; however, this could result in an overall degradation of the landscape. Alternatively, this could be seen as an okay tradeoff if multiple sources of funding were brought to a high value area that was at risk of degradation.
Opt-In Donation	Taxpayers and consumers can choose to contribute to funds that support conservation work. Either through checking a box on their state tax returns, choosing an environmental license plate, or though other form of donation where available.	Donor chooses to contribute additional funds and state agencies or collecting organization provides those funds directly to conservation groups.	 Donor who chooses to take a direct action to support the cause. Administrator of funding whether it be a government agency or otherwise. Government or Conservation Entity that receives the funding. 	 New funding sources. Voluntary, so those who want to be involved can be. People tend to support causes they feel directly connected to. Easy to replicate through multiple avenues. 	 Voluntary meaning the size of the funding pot could change rapidly without explanation. Marketing the Opt-In must be factored into the financial equation. If through a governmental process such as on tax returns, additional bureaucratic processes would need to be in place. 	This is a possibility in Illinois and has been used before for license plates. The present legislative impasse means that this may not create a reliable funding source in the near term as these sweeps of these funds are often possible.	This fund has the potential to be a long-term stewardship fund as it is available in perpetuity. The opt-in option would need to be large enough to cover the needed stewardship costs as well as any additional administration that would be needed.





Mechanism	Description	Financial Flow	Involved Parties	Strength(s)	Weakness(es)	Applicability to Illinois?	Applicability for Sustainable Stewardship
Program Related Investments (PRI)	Investments made by foundations or institutions involving a return of capital, but relate to the mission of the organization. Can include loans, guarantees, linked deposits, or equity investments. This investment typically requires a lower return than traditional investments.	A foundation or institution decides to invest a portion of its endowment or portfolio in investments that relate to its mission. The investor expects to receive a return on their investment in the long-term.	 Foundation or institution that invests in a conservation activity or program that coincides with its mission. Conservation organization that uses the investments for its conservation project. 	 Uplifts the image of the foundation or institution by investing in conservation-related programs. Can aid in the growth and development of up-and-coming conservation-related work. Significant resources available through endowments. 	 Ensuring the investments produce real and successful conservation efforts while still producing a return for the endowment. Identifying foundations and institutions who align their missions with conservation activities can be difficult. Still need to identify other sources of revenue, such as user fees, in order to return the investment and any additional returns to the foundation or institution. 	Many foundations and institutions in Illinois are already utilizing PRIs to make investments in organizations that meet their business goals. The key link is matching programs looking for investing with institutions and foundations with similar missions and goals.	While PRIs are a useful tool, they may be more suited to acquisition and restoration than to stewardship. In addition they could only be utilized when a return is expected through ecosystem service payments, user fees, working lands, or additional revenue streams. If these conditions are met, a PRI could be used to provide acquisition restoration and a fund for stewardship.
Real Estate Transfer Tax	A small tax levied on property transactions specifically allocated for a prescribed purpose, such as conservation finance.	The tax creates a constant stream of funding that can be used for operations and maintenance of conservation land.	 Government oversees the collection of the tax and appropriates it to specific purposes. Government agencies must carry out the transfer of the tax to conservation groups through a grant making process. Those paying the real estate transaction who must pay the tax. Conservation organization or government agency that uses the revenue from the tax for their conservation project. 	 Clear and direct way to generate revenue that can be dedicated to conservation programs. A small tax spread out over many individuals can generate a large amount of revenue over long time period. 	 As this requires government involvement, getting an additional tax approved, especially when taxes in other areas are already high, will be difficult to achieve. Governments can shift focus in future years resulting in a loss of funding as priorities change. 	Real Estate Transfer Taxes could potentially be used in Illinois as they have been for many years to fund OSLAD and NAAF however, this would have to be structured in a way to prevent the new funding from taking away from existing open space funding. Funding would also need to be created in a way that prevented sweeping at the state level of the funds. If it was structured in a way to allow the continued success of OSLAD and NAAF, this could be an applicable source of funding in the state.	A source of funding such as this would be well suited for stewardship activities. The funding created would be renewable and if structured properly could secure a portion of the funding needed for stewardship in the state from both public and private entities.



Mechanism	Description	Financial Flow	Involved Parties	Strength(s)	Weakness(es)	Applicability to Illinois?	Applicability for Sustainable Stewardship
Sales Tax or Excise Tax	A small tax levied on sales of a certain category of goods or generally on all goods in the governed region.	The state passes the legislation necessary to increase the sales tax potentially through a ballot measure. This money is then dedicated to conservation activities and used annually as it is generated.	 Government oversees the collection of the tax and appropriates it to specific purposes. Government agencies must carry out the transfer of the tax to conservation groups through a grant making process. Those purchasing the item must pay the tax. Conservation organization or government agency that uses the revenue from the tax. 	 Creates a regular stream of cash that can be used for conservation activities. Could potentially generate large sums of money though a very small increase in sales tax. Could be done at the local level as well as at the state level depending on political constraints. 	 Would likely require voter approval and a large public campaign process. Potential for state to sweep funding in the future. 	At a state level, a sales tax increase is not presently feasible however at local levels, this measure could be effective. The sales tax could also focus on items specifically related to land conservation such as sporting goods related to hunting, fishing, and camping. In 2007, the Illinois Association of Park Districts estimated that a 1/8-cent sales tax could create between \$119 and \$126 million annually.	A tax such as this could would be well suited for stewardship financing. By creating a continually replenishing fund, the regulator would be able to regularly supply stewardship dollars to local land trusts within the geography.
Settlement Funding/ Mitigation Funding	Funding resulting from an agreement between a government and a company who has caused unforeseen environmental damage.	A corporation or entity acts in an illegal manner that degrades the environment. That organization enters into a settlement agreement with the State. The state then uses those funds or creates an endowment with that money to improve environmental conditions elsewhere.	 Government enters into the settlement agreement. Entity who commits damage must pay a penalty as part of the agreement. Government agencies must utilize that funding, either internally or through grant making programs. Conservation organizations or government agencies that use the funds. 	 Can create large funding pot quickly. The settlement agreement can be written to protect the funds for the specified use. More easy to utilize than other mechanism that rely on additional investors. 	 Irregular and variable in size. Usage of the funding can sometimes be competitive and bureaucratic. Depending on funding, the pot could be sinking in that it will eventually run out. 	Settlement funds are presently utilized in Illinois and we expect them to be available into the future. With the present budget impasse, any settlement funds would likely be highly competitive.	Settlement funds could most certainly be used for stewardship funding although conservation organizations would likely have to make their case to receive this funding as compared to internal governmental agencies.



Mechanism	Description	Financial Flow	Involved Parties	Strength(s)	Weakness(es)	Applicability to Illinois?	Applicability for Sustainable Stewardship
State Revolving Funds (Clean Water State Revolving Fund)	Permanent, independent source of low-cost financing for eligible recipients to control pollution and improve environmental quality. The CWSRF includes basic loans, purchase of debt or refinance, guarantees and insurance, guaranteed SRF revenue debt, loan guarantees or additional subsidization.	State governments will administer the loan programs when an applicant requests a loan for a conservation activity. The applicant will pay back the loan within a certain time-frame (usually 40 years).	 State governments who issue loans for conservation programs. Applicant that uses loan for its conservation program with direct link to water quality or protection. 	 Reliable source of money flow from the government to recipients who want to start conservation programs related to water quality or source protection. Guarantee payback ensures the government will receive the money given out through the loan, plus interest. This means the conservation program needs to be lucrative and economically beneficial. 	 The conservation program needs to identify additional sources of revenue to pay back the loan so this program may provide a short term solution that in the end does not sustain stewardship funding. Conservation project must be able to link work to water conservation, water security, or other program area under the Clean Water Act. (https://www.epa.gov/ cwsrf/learn-about-clean- water-state-revolving-fund- cwsrf#eligibilities) 	Presently, Illinois has roughly \$800 million in the Clean Water Revolving Fund. While not all projects would be able to utilize this funding, with some key policy changes, certain projects related to conservation such as those involving green infrastructure could be eligible for CWSRF dollars.	The CWSRF could provide short-term stewardship opportunities; however, because the loan requires repayment, this mechanism would not create a permanent source of revenue and may create more challenges in identifying ways to repay the loan.
Substitute Funds	Venture capital fund focused on substitutes to products that have a detrimental impact on the conservation and preservation of nature (e.g., investing in the research and development of substitutes to palm oil, diamonds, cleaning products, etc).	The venture capital fund is invested in a conservation activity that will benefit the substitute market. The fund will then receive a return on the substitute product when it outperforms traditional product.	 Venture capital fund that invests in substitute product creation. Company responsible for creating the substitute product. Consumers who choose to buy the substitute product, which helps the venture capital fund's conservation activity 	 No reliance on government money. Attacking two conservation issues: creating a substitutes to an environmentally damaging product and protecting the land area hurt by the original, environmentally damaging product. 	 A chance the substitute product will not be well- received, resulting in a failure of the venture capital investment and further degradation to a particular area of land. The link from the product to the environmental protection must be clearly defined to be applicable. 	If implemented correctly, substitute funds have the potential to flourish, especially within the city of Chicago. As an economic hub, venture capital investments in start-up businesses focused on researching and developing substitutes to environmentally damaging products would most likely be successful. However, the market must be there for consumers to want to purchase or engage with the substitute products otherwise the financial case for investing in the natural resource will be difficult to make.	Substitute funds have potential to be used for stewardship if linked closely to the environmental protection. If alternatives are identified that rely on ecosystem health, those invested in the growth of the substitute will also be invested in the growth and maintenance of conserved land,



Mechanism	Description	Financial Flow	Involved Parties	Strength(s)	Weakness(es)	Applicability to Illinois?	Applicability for Sustainable Stewardship
Tourism/User Fees	Payments to access and enjoy the biodiversity of a site. Often paid through entrance fees, licenses, and/or permits.	Tourist and users pay a certain fee to the management entity of a site in order to access the site or utilize it for hunting, camping, fishing, or other uses. The group can use the revenue generated from the fees to maintain and conserve the site.	 Management organization responsible for conserving an area of land. Tourist or Users who wants to visit and engage with the Tourist group's land area. 	 Does not need to involve government agencies. Can be implemented on an individual site by site basis. Creates a closed loop system: User pays fee, revenue from fee maintain tourist site in top condition, user enjoys benefits from conserved site, user returns and continues to pay user fee, etc. Creates positive engagement opportunities with users which could provide additional fundraising opportunities. 	 Not all sites are attractive for tourism or users. Tourist fees would void an organization's recreation liability protections, perhaps making the collection more costly as insurance costs rise. Some land is too sensitive for human use/recreation. 	Tourist and User Fees are applicable to Illinois given the diverse land types throughout the state and the existing interest in outdoor and recreation activity; however, the loss of recreation liability protection creates a tradeoff that decreases the benefit of this opportunity.	Tourism and User Fees would definitely apply to stewardship as they provide a continual source of funding and could directly be utilized for maintaining the property that people are utilizing.
Transfer of Development Rights	A TDR enables landowners within valuable ecosystem areas to be financially compensated for choosing not to develop their lands. The landowner can sell the rights to develop land to another developer who can use that at another location. The land is then permanently protected through a conservation easement or other mechanism.	The landowner of the undeveloped land can sell their development rights to another land owner in a different area who wants to develop their land. The money generated can be used to conserve and protect the undeveloped land.	 Landowner who sells development rights. Landowner who buys the other original landowners development rights in order to proceed with development elsewhere. Government agency or conservation group who uses a portion of the money generated from the purchase of the development rights to protect the original land. 	 Depending on how the TDR is initiated, government involvement can be kept to a minimum, allowing all transactions to take place within the private sector. A contract can be created between the environmental organization, the landowner selling the development rights and the landowner purchasing the development rights, in which the new holder of the development rights is still held to certain best management practices. Provides an incentive for developers to conserve a portion of their assets by generating revenue from not acting. 	 Care needs to be taken in assessing what type of ecosystem services are trying to be protected. Requires an outside force or incentive to engage in this type of activity. Most likely this would come from a policy measure or CSR type pressure. 	As this can be initiated without the interaction of government agencies and departments, being kept within the private sector, the likelihood of this succeeding is high. Many people promote the TDR when it is used to protect vulnerable, undeveloped lands and the TDR is applied to suburban and urban development plans, specifically in an environmentally-sustainable way to promote responsible behavior. A key component to this would be creating a "green development" contract between the three involved parties.	Transfer of development rights is most applicable to acquisition but could be used to holistically fund conservation. By stipulating that a portion of the sale of the development rights goes towards perpetually managing and maintaining the conserved land within the sales contract, this would ensure stewardship of the project.



APPENDIX D: MECHANISM CASE STUDIES









CALIFORNIA GREENHOUSE GAS REDUCTION FUND

As part of the California Cap-and-Trade Program, the California Environmental Protection Agency has developed a new fund called The California Greenhouse Gas Reduction Fund (GGRF). This fund was developed during FY 2012-13 and is presently operating under its Second Investment Plan (SIP) period, which was created for FY 2016-17 and will run until FY 2018-19. The GGRF invests the auction proceeds from the cap-and-trade program in activities in California that further the efforts to reach their aggressive climate and greenhouse gas reduction goals. Under the first investment plan, \$832 million was invested, and during FY2015-2016, \$1.4 billion was invested through 12 state agencies. These agencies either implemented the work or held competitive awarding processes.

HOW IT APPLIES TO STEWARDSHIP

During the First Investment Plan, \$67 million was competitively awarded for wetlands, watershed, and forestery protection and enhancement. Like the first plan, the SIP focuses on three main areas - Transportation and Sustainable Communities, Clean Energy and Energy Efficiency, and Natural Resources and Waste Diversion. The last section highlights "conservation and improved management strategies for achieving net climate benefits and long-term carbon sequestration on natural and working land." The investments from the GGRF, under this third section, targets the management of natural and working lands in order to promote carbon sequestration. The fund also works to conserve forests and agricultural land to stop the conversion to carbon-intensive land uses. Finally, within this third area, the GGRF creates cost-share programs that restore areas like forests, wetlands, and meadows.

For more information:

https://www.arb.ca.gov/cc/capandtrade/auctionproceeds/auctionproceeds.htm

STRENGTHS

- Through the cap-and-trade program, the GGRF will have a continuous supply of funds invested in conservation initiatives
- GGRF creates a double benefit by addressing carbon sequestration and funding additional environmental projects in California

CHALLENGE

• With the limit of carbon offsets for sale going down each year in California, the GGRF will eventually have to look towards other sources for funding this project

CASH FLOW DIAGRAM





Quick Facts

GGRF was established in 2012

Funds for the GGRF come from the revenue gained from the auctioning of carbon offsets to California corporations

For FY 2015-16, the Auction Proceeds Budget appropriations from the legislature for the GGRF was \$1.4 billion

The Funds are invested into projects that continue to reduce GHG emissions, while also creating other environmental conservation initiatives

Main areas addressed in SIP: Transportation and Sustainable Communities, Clean Energy and Energy Efficiency, Natural Resources and Waste Diversion

THE YUBA HEADWATERS MEADOW RESTORATION PROJECT A CA GGRF FUNDED PROJECT

The Yuba Headwaters Meadows are located in the Sierra Nevada region of California. The South Yuba River Citizens League (SYRCL), in partnership with the Tahoe National Forest, was awarded \$567,480 to restore degradation on 165.3 acres in three mountain meadows that was caused by human land use activities (such as timber harvesting, grazing and road and trail building) over a five year period. These meadows, like others, are high in biodiversity, a carbon sink and provide habitat for rare, sensitive and threatened species. In addition to restoration activites, the SYRCL will monitor greenhouse gas emissions and carbon sequestration on these meadows as part of the GGRF grant program.

Positive Impacts

Creates a larger and more efficient storehouse for atmospheric carbon

Provides the co-benefits of protecting and improving water quality through filtration and pollution reduction

Enhances water storage through the replenishment of groundwater aquifers

Enhances biodiversity by providing essential habitat for many species of fish and wildlife, some of which are endangered or threatened.

For more information visit: http://yubariver.org/our-work/restoration/ meadow-restoration/









IROQUOIS VALLEY FARMS

Iroquois Valley Farms (IVF) is a certified B-corporation that provides a unique opportunity for accredited investors to invest in the growing business of healthy food and farmland through social responsibility, environmental soundness, and economic viability. The company raises capital through private placement offerings and in turn purchases farmland which is leased to small and mid-sized family farmers with continually renewable leases. IVF requires farmers to convert land to organic acres as part of the lease agreement. The leases have an initial 7-year term, a minimum base rent, and a variable income component based on total farm revenues. After the first 7 years, the farmers have the option to continue to lease or purchase the land from IVF. The initial investment is insured by the base rent, and returns increase as the soil quality increases and the farm becomes more profitable.

Currently, IVF utilizes the existing valuation of conventional farming to determine the cost of their investment opportunities. However, over time the value of investing in Iroquois Valley Farms will reflect the greater income potential of local and organic farming. In the first 7 years of operations (2007-2014, total returns reflect a 2.5x multiples on capital invested for IVF. Iroquois Valley has a portfolio of over 3,000 sustainably-farmed acres. The company has purchased 25 farms to date, including certified organic and farms in transition to certified organic.

For more information: <u>http://iroquoisvalleyfarms.com/</u>

HOW IT APPLIES TO STEWARDSHIP

Iroquois Valley Farm's model promotes stewardship on working lands. Because farmers are required to transition their lands to organic as part of their lease agreements, IVF can maintain soil quality over the lands it currently owns. In addition, if property is purchased by the farmers after the first lease, the farmers are likely incentivized to maintain organic farms due to higher margins.

STRENGTHS

- Provides a unique positive impact investing option and is easily scalable
- Protects the environment by promoting sustainable farming practices

CHALLENGES

- Larger payoffs take more time as the soil is restored and land is transitioned to organic
- Dependent on farmers continuing to farm the land and does not provide long-term guarantee of protection after sale
- Currently, shares are not available to the public, but a private placement memorandum (PPM) is released annually.

CASH FLOW DIAGRAM





Quick Facts

Founded in 2007

Total assets under management: \$27 million as of June 2016

Funded by investments from private accredited investors (i.e. family offices, foundations, rollover IRA funds, and college endowments)

3,000 acres of certified organic or in transition to organic farms purchased to date

Board of members are elected to guide operations and can continually renew leases for farmers

Certified B-Corporation

Company is set up to buy and hold farmland and offer continually renewable leases to family farmers

MICHIGAN NATURAL RESOURCES TRUST FUND

The Michigan Natural Resources Trust Fund (MNRTF) utilized revenue from mineral and non-renewable resource leases to create an endowment for investment in restoration and conservation activities. The fund was established under the Kammer Recreational Land Trust Fund Act in 1976 and reached its \$500 million maximum in 2011, triggering a change in the structure that made the fund self-sustaining. Those revenues are now invested elsewhere, while the MNRTF continues to use investment earnings to support resource protection and public outdoor recreation. Since its inception, the fund has invested over \$1 billion in acquisition and development. In any given year, not more than 25% of the funds can be used for development of recreation facilities while the rest is used for land acquisition. An applicant must provide 25% in match funding.

HOW IT APPLIES TO STEWARDSHIP

While the Fund, which is overseen by the Department of Natural Resources, only funds acquisition and development, the most recent program review added an emphasis on long-term sustainability into the grant application process prioritizing projects that have actionable plans for maintaining ecosystem services. As this fund became self sustaining through funding from a renewable revenue source, a new fund with the exact same funding mechanism could be created specifically for stewardship. Other localities can also look to this revenue-based model for creating stewardship and conservation funds.

STRENGTHS

- Self-sustaining endowment
- Development of fund had minimal impact on state funding
- Often used to leverage other funding for conservation
- Prioritized long-term sustainability in applications

CHALLENGES

- Funding specified for only acquisition and development unless modified by referendum
- Funds are only provided to local units of government and state agencies



Quick Facts

Began in 1976

Funded over \$1B in activites

Funded from sale and lease of stateowned mineral rights and royalty payments from oil, gas, and mineral leases

Allows for pubic acquisition of lands for resource protection and public outdoor recreation

In 2011, the fund reached \$500 million corpus and is now self-sustaining

Projects that have plans established for funding of maintenance receive higher scores in the proposal phase

CASH FLOW DIAGRAM



DODD PARK WATER TRAIL DEVELOPMENT PROJECT A MICHIGAN NRTF FUNDED PROJECT

In January 2016, the Cass County government received news they would be receiving \$277,500 in funding from the Michigan NRTF board to develop the Dodd Park Water Trail. Cass County will meet the required 25% match by funding an additional \$97,500. This project is scheduled to take two years and will include a new bridge, a universally accessible canoe/kayak landing, interpretive signage, a larger parking area, access trails, and bathrooms. There will also be construction on a camping area, which will include two cabins with amenities, picnic grills, and fire rings. While this project, in compliance with the Fund quidelines, is about development, park stewardship is a key componenent of the application before awards are made.

POSITIVE BENEFITS

This project allows for major improvements in accessibility to the park and the Dowagiac River Water Trail. This is the first large-scale project in this 51-acre park since a restoration project nearly 10 years ago. Dodd Park is a popular destination with locals for fishing and water-based activities. According to the Dowagiac Daily News, it accounts for "90 percent of the public access to the Dowagiac River" so accessibility improvements are key in making this area more appealing and user-friendly.



Source: http://www.casscountymi.org/LinkClick.aspx?fileticket=zAzWmWz9G3g%3D&tabid=231&mid=730

For more information:

http://www.michigan.gov/documents/dnr/MNRTF_annual_report_e_versiona_490458_7.pdf

http://www.leaderpub.com/2016/06/09/dodd-park-plan-moves-forward/

http://www.heraldpalladium.com/news/local/cass-gears-up-for-dodd-park-improvements/article_92cfe600-72d8-5672-b2be-d16c243c1cd6.html







"FROM FORESTS TO FAUCETS" PARTNERSHIP

The Denver Water Company and the Rocky Mountain Region of the US Forest Service joined forces in 2010 to create the "From Forests to Faucets" partnership. This partnership was in response to two major forest fires, the Hayman Fire in 2002 and the Buffalo Creek Fire in 1996, which compromised the Denver Water companies source waters and resulted in over \$10 million in costs. The goal was to improve forest and watershed conditions within the Denver Region over a 5-year period. Specifically, the conservation projects will focus on reducing the likelihood of wildfires and mitigating insect infestations within the forests. The long-term objective is to try to address forest and watershed conservation issues on 46,000 acres of land critical to the water supply of the Denver region. Denver relies on water sources from snowpacks and streams located on these US Forest Service lands and, as such, this partnership was designed to accelerate the impact that either organization could have on their own. Over the 5-year timeframe, the partnership will result in \$33 million for restoration and conservation. Since the 2010 start, the partnership has been operating under budget and has expanded its scope to include additional acreage.

For more information:

http://www.denverwater.org/SupplyPlanning/WaterSupply/PartnershipUSFS/ waterus-forest-service-partnership/29454/

HOW IT APPLIES TO STEWARDSHIP

This partnership is an example of a unique payment scheme for ecosystem services. Half of the funding for these initiatives comes from the users of Denver Water. It is in their best interest to ensure source water protection, and for a small incremental cost to the users, a large source of funding was created for protection of existing forests. In 2010, the company implemented water fees that are expected to result in a total increase of \$27 for users.



Quick Facts

5 year partnership created in 2010

Each partner committed \$16.5 million

17,000 acres of National Forest lands in Colorado are currently being treated and restored

Denver Water raised funds through a small ratepayer annual fee amounting to approximately \$1.65 in 2011 per household

Over the course of the project, ratepayers will pay a total of \$27

STRENGTHS

- Successful and mutually beneficial partnership between US Forest Service (public) and Denver Water (quasi-private) accelerating conservation benefits
- Low cost to individuals while creating large funding source
- Ecosystem service (source water) sustained via predictable funding loop

CHALLENGES

- The partnership has to be regularly renegotiated to continue beyond the initial period
- Customers often do not back rate increases so increasing funding in future may be difficult



MEDFORD OREGON TEMPERATURE TRADING

The Freshwater Trust is an environmental organization based in Oregon that focuses on conservation in the Pacific Northwest. In 2011, The Freshwater Trust helped Medford, Oregon mitigate warming of the Rogue River caused by discharge of warm water from the city's wastewater treatment center to comply with the Clean Water Act. The City considered a number of options to address the issue, but these options were cost-prohibitive. Traditionally, the city would look to invest in cooling tanks or placing the warm water into a nearby stream or pond until properly cooled. However, those alternatives were extremely expensive, and could have cost the city and taxpayers upwards of \$15 million. Through the guidance of The Freshwater Trust, Medford decided to take a more cost-effective route that offered a higher benefit pay back.

The solution was for the city to pay landowners who owned stretches of land along the river basin to plant trees which provide shade and reduce thermal loading. This partnership between public and private entities saved the city more than \$8 million, as it cost a total of \$6.5 million. The verification protocol uses a 2 to 1 ratio, doubling the impact that could have resulted from a traditional cooling system. The Freshwater Trust uses a third-party certification program that would determine how many kilocalories of temperature were avoided.

For more information:

http://www.thefreshwatertrust.org/case-study/medford-water-qualitytrading-program/

HOW IT APPLIES TO STEWARDSHIP

In order to ensure this project benefitted the community as a whole, The Freshwater Trust worked with local tree nursery companies to grow, plant, and maintain the native tree species planted along the river. This type of innovative financing produced additional areas of conserved land while also providing a steady stream of money from the city to maintain these plantings.

STRENGTHS

- Maintains biodiversity of the river while doubling the kilocalorie reductions needed to comply with legal requirements.
- Planting and maintenance of the trees provided economic opportunity
- Offers additional environmental benefits (i.e. reduction of carbon in atmosphere, filtration of agricultural runoff, wildlife habitat, nutrient regulation)

CHALLENGES

- Ensuring there is sufficient land area to lease and negotiating long term agreements
- Creating and establishing first-of-their-kind verification protocols

CASH FLOW DIAGRAM





Quick Facts

Program initiated in 2011 to help Medford comply with the Clean Water Act

Saved over \$8 million dollars for a total project cost of \$6.5 million

Currently 337,260,273 kilocalories of thermal loading offset/day

Resulted in 27 acres or 3.6 miles of stream planted with native plants

The Freshwater Trust leases the land for 20 years, which allows them to maintain the project sites

Trees grown locally at Althouse Nursery in Cave Junction, Oregon

SIERRA NEVADA WATERSHED IMPROVEMENT PROGRAM (WIP)

The Sierra Nevada forests and watershed have been under increasing stress from continuous droughts, long-term fire suppression, insect attacks and disease, and climate change. All of these issues have led to massive increases in wildfires. In order to support restoration efforts, the Sierra Nevada Conservancy (SNC) and the United States Forest Service (USFS) have partnered together to create the Sierra Nevada Watershed Improvement Program (WIP). The WIP is a coordinated, integrated, collaborative program that aims to restore the health of one of California's primary watersheds through the integration and coordination of governments, special districts, private and corporate interests, nonprofits, foundations, and other out-of-region beneficiaries. The program is implementing large-scale restoration through three focus areas - increased investment, needed policy changes, and increased infrastructure - with the eventual goal of increasing restoration annually from 200,000 to 500,000 acres. The initial funding for this project came from a \$7.5 billion water bond, of which \$25 million was directly allocated to SNC.

For more information visit: <u>http://restorethesierra.org/</u>

HOW IT APPLIES TO STEWARDSHIP

The WIP is presently identifying key restoration work and creating the coordinated implementation plan necessary to address the needs. Assessments should be complete in late 2016 for the 17 watershed assessment areas, and pilot programs will begin shortly after. Meanwhile, the partners have also signed a prescribed fire memorandum of understanding, expanding this tool as a stewardship technique in the region. As the plan develops, further stewardship opportunities will be identified.

STRENGTHS

- Collaboration among a variety of entities spreads burden of work among many stakeholders
- Engagement of local crews and restoration-focused collaboratives brings jobs into the communities in the Sierra Nevada Region

CHALLENGES

- Poor wood- and biomass-processing infrastructure in the Sierra Nevada hinders forest restoration efforts
- Securing commitments from stakeholders for collaborative funding to maintain forest/watershed restoration efforts take time and energy
- Investments are made for specific projects and as such require more work





Quick Facts

SNC and USFS led the formation of the WIP collaborative effort in 2015

Program focused on increasing investment, addressing policy, and increasing restoration infrastructure

Broad mandate to address a variety of restoration needs

Enhanced through \$25 million in funding from a \$7.5 billion water bond approved by California voters

Presently working on creating the WIP strategy before pilot implementation in 2017

APPENDIX E: FINALIST MECHANISM FRAMEWORK ANALYSIS

Mechanism	Description and Funding Structure	Mechanism Type (Public, Private, Partnership)	Scale of Mechanism	Size of Funding Pot	Addresses what Need Expressed by Conservation Practitioners	
Ballot Measure Stewardship Fund	Pass a ballot measure to levy a small property tax increase to fund a stewardship fund. This could be done at the State or County Level	Public	Between \$8 M and \$11 M annually for stewardship	Between \$8 M and \$11 M annually for stewardship	Sustainable Stewardship Funding	
Privately or Foundation Developed Stewardship Fund	Aggregation of smaller funding from conservation minded foundations to allocate for stewardship in perpetuity.	Private	Between \$200 and \$375 million would need to be raised (based on a 3.75% return)	Between \$8 M and \$11 M annually for stewardship	Sustainable Stewardship Funding.	
Land Aggregation for Ecosystem Payments and Carbon Markets	Aggregate eligible parcels up to 10,000 acre minimum to make transactions more feasible	Private	This would be highly dependent on the ecosystem market tapped. If 50,000 acres of eligible forest land was pooled for the carbon market and under the assumption that that would return \$5.38 acres per year based on Forest Carbon Portal Estimates, you would receive \$269,000 per year.	Under existing carbon markets and assuming all private land eligible, would produce around \$300,000 annually. Mitigation markets would be significantly more lucrative but are irregular	Scale needed to tap into Ecosystem Markets - Carbon, Endangered Species, Wetlands Banking; expand CREP, 10,000 acres "too large"; new source of funding; establishes connectivity between our individual work (great!); interconnected landscape of sufficient scale to allow us to thrive; tax credit for private work?;	
Clean Water Revolving Loan Fund	Expand the definition of permissible activities under the Clean Water SRF to allow for stewardship of habitat critical to source water protection.	Public	10% of the CWSRF is allocated for a Green Project Reserve (GPR). For FY2015, approximately \$6.3 million was allocated for GPR projects (http://www.epa.illinois.gov/ Assets/iepa/grants-loans/water-financial-assistance/ state-revolving-fund/2016-wpc-intended-use-plan. pdf). Conservation practitioners could be eligible for this funding under the source water protection criteria in the Environmentally Innovative category under the Drinking Water program.	A portion of the annual pot (\$5 to \$8 million) could be utilized for projects that draw the connection between source water protections.	Expanding funding sources. Sustainable funding mechanisms, Protection of headwaters/wetlands	
Funding the Business to Business Partnership Network	Building on collaborations in place between individual land trusts, build a network of shared services and skills at a state level. breaking the state into regional partnership areas.	Private or Partnership	This is not a funding mechanism but is instead a more efficient use of resources. Startup funding would be required to build the sharing platform out which we estimate in the range of \$100,000 to \$300,000. This funding would be used for inventory collection, collaborative planning, platform development, and storage capacity.	This is not a funding mechanism but is instead a more efficient use of resources. Startup funding would be required to build the sharing platform out which we estimate in the range of \$100,000 to \$300,000. This funding would be used for inventory collection, platform development, and storage capacity.	Capacity and Resources; reducing inefficiencies and redundant efforts; using existing resources, but making them more widely available;	
Working Land Management Income	In order to manage conserved working lands while limiting the management impact on land trusts, create an entity that can lease land, manage property using conservation cropping techniques, and return larger portions of the returns to land trusts.	Private	Between 30,000 and 80,000 acres of farmland would need to be under management to generate the revenues for stewardship needed at the state level. If this property was purchased, we estimate its value to between \$222 and \$355 million	Between \$8 M and \$11 M annually for stewardship	Sustainable monetary payments for Land Trusts; support local land owners financially, economic incentive via trusted relationships	
The Stewardship Clearing House or Unified Conservation Bank	Better link stewardship organizations and funders/funds by facilitating the needs of the two groups. The Bank could also collect resources and distribute them according to guidance of practitioners.	Partnership	This is not a funding mechanism but is instead a more efficient use of resources. Startup funding would be required to build the criteria platform out which we estimate in the range of \$100,000 to \$300,000. This funding would be used for fund collection, grant and funding requirements, platform development, and pilot implementation.	This is not a funding mechanism but is instead a more efficient use of resources. Startup funding would be required to build the criteria platform out which we estimate in the range of \$100,000 to \$300,000. This funding would be used for fund collection, grant and funding requirements, platform development, and pilot implementation.	Identifying and sourcing deals for stewardship.	





Mechanism	Other Impacted Agencies, Groups, Organizations, Individuals	Potential Lead Organizations or Groups	Implementation Needs	Constraints and Barriers (real or perceived)
Ballot Measure Stewardship Fund	State and local agencies, Nonprofit conservation organizations.	IEC	 Statewide assessment of willingness to pay for stewardship outside of NE Illinois. Political support at the state and local levels. Lobbying action taken by IEC, practitioners, and individual constituents 	 voters like acquiring land, but don't like adding people and expenses to annual budgets Differences in geography between north and south of State;
Privately or Foundation Developed Stewardship Fund	Nonprofit Land Trusts	Vital Lands Group; GVF, ICECF and other national foundations	 Structure of funding as grants, annual payments, or other mechanism. a scientific systemic and strategic approach to prioritizing funded projects Willing funders who see value in larger stewardship fund. 	 Variety of missions and funding priorities among funders; Few Conservation funders in Illinois. Different geographies among funders; This has been tried 2 times in Illinois and failed. And we would need a new approach to make this work; It's often easier to get one or two funders together to work on an issue
Land Aggregation for Ecosystem Payments and Carbon Markets	PSCC and VLI groups	Delta Institute, TNC, Private Ecosystem Market Aggregators	 Depending on the market, need to be able to show the additionality benefit of the work. Tends to work better for restoration. Management group to screen all parcels for eligibility within the different compliance and voluntary offset markets. Payment and MOU efficiency among potentially 40+ partners. 	 Requires significant legal and policy expertise in order to structure deals. Significant verification costs Stacking potentially produces overall environmental degradation. small acreages in Illinois; no nutrient standards enacted by EPA;
Clean Water Revolving Loan Fund	IDNR, IEPA, Water Utilities, US EPA, US FWS	TNC, TCF, IEC	 This is mostly applicable in the central part of the state around key source water lakes such as Carlyle Lake, Raccoon Creek Reservoir, & Lake Springfield where source water protection is of the most concern. (http:// illinois-epa.maps.arcgis.com/apps/webappviewer/index.html?id=4d37a05f5ba441f1b30dab54ccb81fc8). Land trusts would need to work with the water utilities in the region to create source water partnerships 	 As a loan, an additional funding stream would also be needed to pay back the loan more suited for acquisition than stewardship; Puts conservation groups in direct competition with wastewater treatment, urban and green infrastructure in the state
Funding the Business to Business Partnership Network	Land Trusts, public open space agencies, Municipalities, and State Agencies such as IDNR could all participate on the platform.	PSCC, The Stewardship Network	 Before this work could be done, an "inventory" of land trust capacities and resources (i.e. equipment, gis, stewardship staff, etc) would need to be collected A 3rd party organization would need to sign on to manage logistics and network building (potentially the Stewardship Network) Identifying the distance that land trusts are willing to travel to share resources. 	 This does not create additional revenue sources to grow capacity so partners would still need to fundraise Geography of the state requires that there be smaller sub groups working together Requires a set of common needs
Working Land Management Income	soil and water conservation districts;	backbone organization (dedicated lease management organization); Vital Lands Illinois; Farm Bureau	 Identifying available agricultural land to seed program. Identify strategy for growing agricultural investments. Model lease and policies around sustainable agriculture management Payment scheme between land trusts and management organizations 	 Identifying sources of farmland and funds to purchase that land. Land trust boards may not be receptive to this type of investment Farmers often feel a conflict between sustainable practices and farm yield
The Stewardship Clearing House or Unified Conservation Bank	NRCS;	PSCC; VLI; municipalities, county governments; US EPA, IL EPA	 Platform for identifying and sourcing deals. Available stewardship dollars that could be moved into the bank would need to be identified 	 Grant making organizations have their own processes and prefer those processes Doesn't Create New Funding



Mechanism	Policy Implications	Key Unknowns	Administrative burden	Eligibility Requirements	Timeline for Implementation
Ballot Measure Stewardship Fund	 Stewardship often needs to be coat-tailed with forest protection, open space, parks; Budget Impasse makes State Level ballot funding difficult 	 Is it worth doing county level measures? What size rate increase is reasonable? How will the campaign be framed and who will lead and fund that effort? 	High upfront burden in terms of creating the campaigns needed to get ballot measures passed. Once passed, the mechanism would require a governmental agency to oversee a grant-making process.	The grant process would likely follow similar state level programs and be open to all agencies, local units of government, and nonprofit organizations engaged in stewardship efforts. Other state level grant requirements would also be in place	3 to 6 years to create a campaign and get the ballot measure implemented
Privately or Foundation Developed Stewardship Fund	 Could provide match for additional stewardship and acquisition activities 	 Who will manage the fund? Can funders agree to core principles for fund? Will additional funders enter the conservation funding realm in Illinois to be a part of this fund? 	This could be managed through one of the funders or through a new staff established through fund resources. Relatively straightforward and this oversight team would have to manage a grant-making process	The fund could be available to all groups demonstrating a stewardship need on key Illinois ecosystems. The fund could establish a fixed per acre maintenance fee dependent on location and ecosystem type to lessen both the granting requirements and the review process of the fund. Projects would be expected to have focused stewardship plans to demonstrate how resources would be use.	3 to 5 years to initiate the fund. 5 to 10 years to raise the corpus.
Land Aggregation for Ecosystem Payments and Carbon Markets	 Every parcel would need to be reviewed for eligibility against the complex standards Would have to identify a way to decrease transaction costs With the implementation of the nutrient loss reduction strategy and the potential for a carbon framework, this could prove more viable in the future than it is today 	 Type of market tapped and eligibility under that program Distribution of funding once market payments received Aggregation tracking to ensure verification? 	Significant administration needed related to contract management, land aggregation and tracking, verification process, and sale of credits.	Eligibility for conserved land to be part of this mechanism would depend on the ecosystem market and standards for that ecosystem type.	0-1 year to identify key ecosystem markets, 1-2 years to aggregate parcels and conduct transaction
Clean Water Revolving Loan Fund	 This is mostly applicable in the central part of the state around key source water lakes such as Carlyle Lake, Raccoon Creek Reservoir, & Lake Springfield where sourcewater protection is of the most concern. (http:// illinois-epa.maps.arcgis.com/apps/webappviewer/index. html?id=4d37a05f5ba441f1b30dab54ccb81fc8) There would need to be a change in how the CW SRF is administered and interpreted to include more conservation 	 Will there be an identified payment source would need to be identified? If this only work for key groups near key source water sources, how are additional funds raised to account for other areas? Are their key partnerships that can be formed with water utilities? 	Additional administration beyond that presently associated with the SRF wouldn't be necessary as this would simply be an interpretation chance that would allow conservation land trusts to be move involved.	This would be open to projects that proved a connection to source waters. In addition, all other eligibility requirements of the Illinois SRF would still apply	3 to 6 years to expand the use of the IL SRF for more land conservation activities.
Funding the Business to Business Partnership Network	 As this is non-governmental, there would be limited policy implications. The sub-partnerships could utilize the collaborative framework to more effectively distribute match requirements for grants. 	 What services can land trusts provide through the service exchange? Will land trusts pay each other directly or go through a third party? How will equipment and staff be shared in an equitable way? 	High administrative burden to steward the partnership network. This would require additional staff to coordinate conversations, identify resources that could be cross-used, provide expertise on the ground, and constantly be looking for additional efficiencies. A new group of staff would likely be needed.	All parties conducting stewardship activities could participate in these partnerships including conservation land trusts, NGOs, governmental agencies, municipalities, and others. Involvement in the partnership would require adoption of the common agenda and a commitment to work inter-organizationally	1-3 year to conduct statewide inventory and needs assessment and establish regional partnerships.
Working Land Management Income	 Ability to tap into State CSP, CRP, other incentive programs Conflict between farm acreage and conservation could result in pushback from the Farm Bureau Opportunity to create a public-private partnership 	 Whether the farmland management organization would be a traditional farmland business or a new entity. How would revenue be divided among participants? How would acres of farmland be acquired? Who would manage the bmp implementation on individual farmland? 	There would be significant administration associated with this model. There would need to be lease management, farmland acquisition and assessment, BMP implementation, management of payments to land trusts, and opportunities for growth research.	Depending on how the organization was established, any group interested in promoting sustainable agriculture could be involved. For the sake of producing stewardship dollars, nonprofit land trusts willing to contribute toward farmland purchases could be valuable.	1 to 2 years to aggregate pilot data, inventory stewardship costs, and develop farmland management org. 3+ to begin aggregating farm acres. 8+ years to create large fund
The Stewardship Clearing House or Unified Conservation Bank	 Would require changes to how mitigation and other state funding is administered. Could be framed as a public-private partnership. 	 What is the process by which resources are pooled? What does the oversight of the bank look like and who is involved? 	There would be significant administration associated with managing and distributing pooled resources. This would likely include a grant making process.	As this is intended to pool resources from a variety of sources, the grant process would likely have to follow the typical grant-making process through the State of Illinois. Groups would need to demonstrate their stewardship needs and present how these resources would be used.	Established in 2 to 4 years following a detailed review and outreach and engagement process.





APPENDIX F: A SAMPLE SCENARIO

	Acreage Held in 2017	n Average Annual Acreage Increase	Ecosystem Type By Percentage of Acreage				Stewardship Cost by Acreage in 2017				Acres Farmland
Land Trust			Forest	Savanna	Prairie	Wetlands	Forest	Savanna	Prairie	Wetlands	Initially Donated
A	2,000	20	63%	2%	15%	2%	\$150	\$200	\$215	\$150	500
В	400	5	50%	0%	40%	10%	\$100	\$120	\$70	\$120	20
С	200	5	54%	1%	30%	15%	\$234	\$293	\$305	\$234	10
D	20	2	40%	0%	30%	30%	\$160	\$100	\$270	\$175	8
Total	2,620	32									538
Inflation Rate	2%										
Year	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Acres Under Management											
A	2000	2020	2040	2060	2080	2100	2120	2140	2160	2180	2200
В	400	405	410	415	420	425	430	435	440	445	450
С	200	205	210	215	220	225	230	235	240	245	250
D	20	22	24	26	28	30	32	34	36	38	40
Total	2,620	2652	2684	2716	2748	2780	2812	2844	2876	2908	2940
Average Stewardship Costs per Acre											
A	\$134	\$136	\$139	\$142	\$145	\$148	\$151	\$154	\$157	\$160	\$163
В	\$90	\$92	\$94	\$96	\$97	\$99	\$101	\$103	\$105	\$108	\$110
С	\$256	\$261	\$266	\$272	\$277	\$283	\$288	\$294	\$300	\$306	\$312
D	\$198	\$201	\$205	\$210	\$214	\$218	\$222	\$227	\$231	\$236	\$241
Stewardship Need by Land Trust											
A	\$267,500	\$275,579	\$283,873	\$292,389	\$301,133	\$310,109	\$319,323	\$328,783	\$338,492	\$348,459	\$358,689
В	\$36,000	\$37,179	\$38,391	\$39,636	\$40,916	\$42,231	\$43,582	\$44,971	\$46,398	\$47,863	\$49,369
С	\$51,202	\$53,531	\$55,934	\$58,411	\$60,964	\$63,597	\$66,310	\$69,107	\$71,989	\$74,958	\$78,018
D	\$3,950	\$4,432	\$4,931	\$5,449	\$5,986	\$6,542	\$7,117	\$7,713	\$8,330	\$8,969	\$9,630
Total	\$358,652	\$370,721	\$383,129	\$395,885	\$408,999	\$422,478	\$436,334	\$450,574	\$465,209	\$480,250	\$495,706
5% Management Fee	\$17,933	\$18,536	\$19,156	\$19,794	\$20,450	\$21,124	\$21,817	\$22,529	\$23,260	\$24,013	\$24,785





	Acreage Held in 2017	Average Annual Acreage Increase	Ecosystem Type By Percentage of Acreage				Stewardship Cost by Acreage in 2017				Acros Formland
Land Trust			e Forest	Savanna	Prairie	Wetlands	Forest	Savanna	Prairie	Wetlands	Acres Farmland Initially Donated
Stewardship Coordinator	\$56,000	\$57,120	\$58,262	\$59,428	\$60,616	\$61,829	\$63,065	\$64,326	\$65,613	\$66,925	\$68,264
Total Needed	\$432,584.09	\$446,376.61	\$460,547.80	\$475,107.29	\$490,064.94	\$505,430.85	\$521,215.37	\$537,429.10	\$554,082.89	\$571,187.86	\$588,755.40
Productivity											
% "Good Productivity"	50%										
% "Fair Productivity"	50%										
Average Lease Rates											
Good	\$ 300	306	312	318	325	331	338	345	351	359	366
Fair	\$ 150	153	156	159	162	166	169	172	176	179	183
Acreage of Farmland Needed	1923	1945	1967	1990	2012	2035	2057	2079	2102	2124	2147
Cost to Purchase											
Good	7800	7956	8115	8277	8443	8612	8784	8960	9139	9322	9508
Fair	4800	4896	4994	5094	5196	5300	5406	5514	5624	5736	5851
Value of Acreage	12,112,355	12,498,545	12,895,338	13,303,004	13,721,818	14,152,064	14,594,030	15,048,015	15,514,321	15,993,260	16,485,151
Breakdown of Funds											
Management Fees	\$17,933	\$18,536	\$19,156	\$19,794	\$20,450	\$21,124	\$21,817	\$22,529	\$23,260	\$24,013	\$24,785
Stewardship Coordinator	\$56,000	\$57,120	\$58,262	\$59,428	\$60,616	\$61,829	\$63,065	\$64,326	\$65,613	\$66,925	\$68,264
Available for Distribution	\$358,652	\$370,721	\$383,129	\$395,885	\$408,999	\$422,478	\$436,334	\$450,574	\$465,209	\$480,250	\$495,706
Distributed to A	\$273,780	\$282,374	\$291,201	\$300,267	\$309,577	\$319,138	\$328,957	\$339,040	\$349,392	\$360,022	\$370,937
Distributed to B	\$54,756	\$56,615	\$58,526	\$60,491	\$62,511	\$64,588	\$66,722	\$68,917	\$71,173	\$73,491	\$75,873
Distributed to C	\$27,378	\$28,657	\$29,977	\$31,338	\$32,744	\$34,193	\$35,689	\$37,231	\$38,821	\$40,461	\$42,152
Distributed to D	\$2,738	\$3,075	\$3,426	\$3,790	\$4,167	\$4,559	\$4,965	\$5,387	\$5,823	\$6,276	\$6,744
% of Initial Annual Need Distributed											
A	102%	102%	103%	103%	103%	103%	103%	103%	103%	103%	103%
В	152%	152%	152%	153%	153%	153%	153%	153%	153%	154%	154%
С	53%	54%	54%	54%	54%	54%	54%	54%	54%	54%	54%
D	69%	69%	69%	70%	70%	70%	70%	70%	70%	70%	70%

