

# An Assessment of Decision-Making Processes: Evaluation of Where Land Protection Planning can Incorporate Climate Change Information



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**An Assessment of Decision-Making Processes:  
Evaluation of Where Land Protection Planning can  
Incorporate Climate Change Information**

Global Change Research Program  
National Center for Environmental Assessment  
Office of Research and Development  
U.S. Environmental Protection Agency  
Washington, DC 20460

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## ABSTRACT

Land protection decisions are long-term, hard to reverse, and resource intensive. Therefore these decisions are important to consider in the context of climate change, because climate change may directly affect the services intended for protection and because parcel selection can exacerbate or ameliorate certain impacts. This research examined the decision-making processes of selected programs that protect land to assess the feasibility of incorporating climate change information into the evaluation of land protection programs. The research focused on a sample of programs that seek to protect wildlife and watersheds from the LandVote database, which documents land protection ballot initiatives. Of this sample, we reviewed the decision-making frameworks of 19 programs. Most programs use quantitative evaluation criteria and a bottom-up process for selecting parcels. Almost all programs have one or more advisory committees. The analysis revealed that strategies that might be useful for incorporating climate change into decision making include new decision-support tools for advisory committees, promulgation of different land protection models, and educational outreach for elected officials. As jurisdictions learn more about possible climate change impacts, certain land protection strategies may become more desirable and feasible as part of a portfolio of adaptation strategies that ameliorate impacts on watersheds and wildlife.

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## PREFACE

ICF International and the Global Change Research Program (GCRP) in the National Center for Environmental Assessment (NCEA) of the Office of Research and Development at the U.S. Environmental Protection Agency (U.S. EPA) prepared this report. The project focused on the decision-making processes of programs across the United States that conserve land with the goals of water quality protection and wildlife preservation. Since climate change impacts may directly affect these conservation goals, institutions will need to incorporate climate change information into their decision-making processes. The approach taken in this project is similar to several other assessments and modeling efforts. For example, the NCEA's GCRP also examined decision-making processes in the Chesapeake Bay. In another project, the GCRP reviewed aquatic invasive species management plans to assess the capacity of states to address climate change effects through these plans. The study summarized in this report analyzes the land protection decision-making process to determine possible areas where climate change information could be applicable. The study served as a proof-of-concept for the two aforementioned projects. This study also provides detailed information on the criteria, goals and analyses, and implementation processes that the sampled land protection programs use to make acquisition decisions.

## **AUTHORS AND REVIEWERS**

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## 1. EXECUTIVE SUMMARY

Interactions between climate and land-use changes have the ability to amplify or dampen climate change impacts. For example, research has shown that strategic land management, including land protection, can ameliorate some climate change impacts. Given the rapid rate of land development, understanding the process of land protection becomes more urgent, particularly if this strategy becomes part of a portfolio of climate adaptation options. Such recommendations are becoming more prevalent (e.g., Maryland's Climate Action Plan; Maryland Commission on Climate Change, 2008), especially as states and municipalities draft plans to address climate change.

This report evaluates the current state of land trust prioritization and acquisition practices in order to identify areas where local, county, and state programs could incorporate climate change considerations into decision-making processes. To that end, this study reviewed how local, county, and state governments make decisions regarding which parcels of land to protect by analyzing three main aspects of land protection programs: (1) program goals, (2) prioritization and analysis, and (3) implementation.

This research focused on a selected sample of the LandVote database maintained by the Trust for Public Land. This database collects information on all ballot measures (both advisory and funded measures) in the United States pertaining to land preservation. We reviewed all ballot measures that were passed in 1996, 2000, and 2004. Next, we reviewed the successful measures based on their stated goals in the LandVote database. We retained programs focusing on wildlife and watershed protection; these programs, as compared to those citing recreation and open space as goals, seemed more likely to have a systemized decision-making process and be concerned with broader environmental impacts. Of the 75 programs focusing on wildlife and watershed protection, we conducted literature searches and online research into 53 (several were eliminated due to duplication, lack of information, or other reasons). Of those, 19 programs had definite evaluation criteria and a quantitative or qualitative method for applying them. Summaries of all 53 programs are available in Appendices B and C. In the case of the 19 programs with definitive evaluation criteria, we engaged program staff as reviewers of our program summaries to ensure that we were properly characterizing their respective decision-making frameworks.<sup>1</sup>

We classified the 19 programs along two broad criteria: (1) whether they had quantitative or qualitative methods for applying evaluation criteria; and (2) whether land was selected for

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<sup>1</sup>The 19 programs were contacted again in 2009 and 10 programs responded. Based on these responses, the selection frameworks have evolved somewhat in recent years, though primarily remain similar to what is discussed here. The summaries of these programs in Appendix B have been updated, but the changes do not affect this discussion.

preservation by a top-down (identified by program staff based on an objective standard), bottom-up (nominated by landowners or public or private agencies), or hybrid (combining aspects of top-down and bottom-up) process. Table ES-1 shows the breakdown of how many programs fell into each category. Eleven programs are bottom-up, while only two are top-down; the remaining six are hybrids.

**Table ES-1.  
Program evaluation  
criteria**

	Qualitative	Quantitative
Top-down	0	2
Hybrid	1	5
Bottom-up	5	6

Regarding program goals, we found that they ranged from very specific (e.g., preserve land around a particular aquifer) to broad (e.g., preserve land for wildlife, wetlands, ecological, recreational, and open space needs). The two top-down programs had narrow goals, while the bottom-up programs were generally broader in nature. In 2005, only one program had considered climate change among their goals, and no additional programs indicated in the 2009 update that they have added climate change adaptation as a goal. Many programs were initiated because of the threat of development.

In terms of prioritization, the most common arrangement (eight programs) was bottom-up, in which individual landowners or other entities (such as local governments and non-profit organizations) requested the consideration of specific parcels for preservation. The other three bottom-up programs were conventional grant programs, in which the jurisdiction gave money to another entity on a competitive basis. There were two types of hybrid programs: three with separate funding tracks for bottom-up and top-down selection processes and three that accepted nominations for parcels on a priority list. The two top-down programs selected and prioritized parcels through scientific study of environmental characteristics.

Because they were selected based on wildlife and watershed protection, all of the programs included those two aspects among their evaluation criteria. The other most common criteria used were contiguity to other open space, management issues (such as maintenance and schedule), financial issues (cost and matching funds), recreation, and threat of loss. Most programs contain both objective (e.g., contiguity, presence of endangered species) as well as subjective (aesthetic value) criteria.

There were more programs using quantitative than qualitative criteria. The qualitative programs rely on expert judgment to apply the criteria, while the quantitative programs use some type of numeric system. The range of these systems included weighting and point systems subjectively assigned, systems with points assigned to measurable indicators, and GIS systems that tied a variety of data together to create a ranking. Some jurisdictions were moving from qualitative to quantitative on the basis that their decisions would be more defensible and

successful if quantified, and others were moving in the opposite direction on the basis that experts should have free rein and that a point system is too confining.

Most programs incorporated a fair amount of locally generated data to assist with decision making, such as local open space plans, aerial photos, maps, and development projections. Six programs used some type of state data as well, including data on groundwater and endangered species. Five programs incorporated some federal data, such as U.S. Geological Survey (USGS) maps and Census projections. Finally, 11 programs used geographic information systems (GIS) analysis, although the source and type of the data layers was not always clear.

In terms of program implementation, 11 of 19 programs were county-run, a higher proportion than in the earlier sample of all programs with watershed and wildlife criteria. Almost all of the programs had one or more advisory committees composed in part or in total of citizens, many of whom had particular experience in land use or environmental fields. The role of the advisory committee was to make recommendations on specific land parcels to the decision-making authority, which in most cases is the legislative body of the jurisdiction (the city council or county commissioners). In some cases, the legislative body usually accepted the recommendations; in other cases, political or financial concerns prompted denials of recommended parcels.

The land protection programs included a variety of partnership types, land purchasing policies, and other program implementation decisions. For example, programs had different partnership types, ranging from informal, ad hoc collaborations to acquire specific parcels to formal relationships, particularly with land trusts. There were also differing opinions on the value of purchasing land outright as opposed to purchasing development rights, with some programs favoring the latter to avoid the burden of public landownership. Financial issues were a major concern to some programs, especially to programs in areas of high land prices with restrictions on spending more than the appraised value. Additionally, only a few programs had provisions for funding of maintenance once the land has been acquired.

This review demonstrates that while the land protection programs sampled in this paper did not make acquisition decisions based on climate change considerations directly, many of the criteria and processes reviewed are sensitive to climate change impacts. Incorporating adaptive strategies into existing decision-making processes would not involve changing existing criteria so much as incorporating climate change information into the evaluation of existing criteria. Mechanisms for incorporating such information include: (1) developing decision-support tools for advisory committees; (2) providing a variety of methods to preserve lands; (3) educating elected officials who approve land protection decisions about the climate change benefits; (4) engaging in strategic parcel selection; (5) coordinating with land-use planning processes; and (6)

developing tools for evaluating and prioritizing land parcels for protection. Incorporating climate change information in these decision-making processes can assist with maintaining land protection goals over time, such as wildlife, habitat and high water quality, as well as contribute to climate change mitigation and adaptation.

## 2. INTRODUCTION

Interactions between climate and land use have the potential to exacerbate or ameliorate environmental impacts (Pyke, 2004). Therefore, land protection programs should be considered as part of the solution in developing adaptive strategies (Pyke and Andelman, 2007; Hannah, 2008). Today, land protection programs make decisions without considering future climate change, though decisions are often responding to program goals that play a role in adaptation, such as habitat preservation, wetlands protection, and water quality. As states and municipalities engage in planning their responses to climate change, they are identifying land protection as an adaptive strategy (Maryland Commission on Climate Change, 2008).

The land protection process is important to understand because land development has been increasing at an average of 1.7 million acres per year and an estimated 6.8 million acres have been developed since 2005<sup>1</sup>. The U.S. population is expected to increase to between approximately 380 million to over 420 million by 2050 depending on the scenario (U.S. EPA, 2009), during which time demand for open space and other protected areas is likely to increase (Kline, 2006).

Realizing the value of land protection for adaptation requires a realistic assessment of existing practices, particularly decision-making processes. Understanding the decision-making process is an important component to the success of protected areas, particularly those areas increasingly embedded in human-dominated landscapes (Heller and Zavaleta, 2009; Steelman and Hess, 2009). The potential use of land protection as an adaptation strategy is limited if the decision-making process does not facilitate this use (Climate Change Science Program [CCSP], 2008).

Land protection decisions, like many other decisions made by voters and local, county, and state officials, are particularly important in the context of climate change and projected climate change impacts. From an operational standpoint, land protection decisions are long-term, hard to reverse, and resource-intensive. Decisions meeting these criteria are more sensitive to climate change than others and are therefore good candidates for decision support and climate change information (Sussman and Freed, 2008). For these reasons, it is important that protected lands are chosen in light of projected climate change impacts so that these long-term, irreversible investments meet their intended goals and continue to serve their communities. From an environmental standpoint, land-use decisions are integrally connected to climate and changes in

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<sup>1</sup>Rate of 1.7 million acres per year is based on development between 1982 and 2003 from “National Resources Inventory: 2003 Annual NRI.” United States Department of Agriculture, Natural Resources Conservation Service, February 2007.

climate will have significant impacts on the lands that are protected and the services those protected lands provide. To the extent that parcel selection can be done in a way that ameliorates climate change impacts, rather than exacerbates them, the benefits of protecting these lands will go far beyond many of their imminent objectives.

Protected lands can be used strategically to ameliorate climate change effects through a variety of management approaches (Pyke and Andelman, 2007). Under some proposed carbon credit trading scheme, such protected lands even have the potential to generate revenue for landowners and state and local governments, though this report does not specifically address this topic<sup>1</sup>. Rather, this study emphasizes decisions that are likely to identify land parcels that can lessen the effects of climate change impacts in a given area with respect to water quality and other environmental features.

This study reviews decision-making processes for a sample of land protection programs in the United States. The purpose of this study is to evaluate land acquisition and prioritization decision-making in order to find areas where decisions are sensitive to climate change impacts. This review describes existing selection processes and considers how climate change information may be incorporated in order to ensure that land protection goals are met in the future. Section 5 suggests possible adaptive tactics that land protection programs could pursue, such as effective dissemination of climate change information to key partners and policy-makers. Perceptions of climate change among decision-makers vary, but research suggests that decision-makers and stakeholders feel that climate change information is inconsistent and not locally specific enough to be useful (Vedlitz et al., 2007). Lack of awareness and education surrounding climate change impacts is a barrier to adaptive land protection programs.

The review was completed and described in a draft report in 2005. Nearly 6 years later, the findings remain relevant and timely.

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<sup>1</sup> The Land Trust Alliance has a more in-depth discussion on the role of land protection in addressing climate change: <http://www.landtrustalliance.org/about-us/emerging-issues/climate-change>.

### 3. ANALYSIS APPROACH

The scope of land protection efforts in the United States is expanding rapidly with dozens of new programs initiated each year. The sheer number of programs makes a complete survey impossible and motivated the development of a stratified sampling approach to compile information about different types of programs.

This study uses a four-step framework, described below.

**Step 1: Define the Universe of Land Protection Programs.** We began by defining the universe of land protection programs for this analysis to include those programs recorded in the Trust for Public Land's LandVote database<sup>1</sup>. LandVote collects information on all local, county, special district, and state elections in which voters choose whether to pass measures (advisory or including funding) that are related to land preservation. LandVote covers a period of nine years—1994 to 2005.

To provide a stratified random sample of programs from the 1,632 measures in the LandVote database, we selected three years of interest: 1996, 2000, and 2004. These coincided with presidential election years and presumably higher voter turnout; also, each of these years had substantially more measures up for vote than the previous year (in 1996 and 2000 there were more than double the number from the previous year). Within each of these years, we selected only those programs approved by voters for further consideration. Of the initial list of 1,632 measures, voters approved 406 measures.

**Step 2: Screen Programs to Reflect Stated Goals.** We evaluated the 406 land protection programs identified above based on the publicly stated goals as reported by LandVote. We assigned each program a score to reflect the relevance of land protection goals to the specific interests of the U.S. EPA's Global Change Research Program (GCRP), namely water quality and wildlife protection. We determined scores based on the number of times each of the criteria listed in Table 2 were mentioned. At this stage, we selected only those programs claiming to protect water or watershed resources (e.g., water quantity or quality) or biodiversity (e.g., wildlife or habitat). This excluded programs whose main goal was preserving more broadly defined open space (for recreation or scenic value) and resulted in a list of 75 programs for further research. Although open space can contribute to carbon sequestration, thereby mitigating climate change, the focus of this study was on climate change adaptation, not mitigation. Programs focusing on water quality and biodiversity protection are more likely to serve as adaptive measures in

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<sup>1</sup> Trust for Public Land, LandVote database available at: [www.landvote.org](http://www.landvote.org)

addressing the stressors of climate change. We used a naming convention for program summaries consisting of year passed, state abbreviation, and program identification number to assign a unique name to each program. For example, 2000FL-01 signifies a program that passed in Florida in 2000; if a second program from Florida in 2000 was evaluated, it would be 2000FL-02.

**Step 3: Evaluate Programs Aimed at Protecting Water Quality and/or Wildlife.** For each of the 75 programs citing water quality and/or wildlife protection as primary goals, we conducted preliminary analyses using published sources (generally literature searches for articles and online research) on program goals, parcel selection, prioritization criteria, decision making, mapping, and program outcomes. During this research, we placed a particular emphasis on identifying the criteria used to guide parcel selection. This effort resulted in 53 write-ups,<sup>1</sup> 34 of which are included in Appendix C.

Of the 53 programs included in this research, 20 programs mentioned explicit evaluation criteria; 10 described quantitative means of applying criteria while the other 10 used cited qualitative means. We used these 20 programs in the next step of the framework.

**Step 4: Screen Water and Wildlife Programs to Reflect Selection Criteria.** For these 20 programs, we conducted a more detailed assessment to understand the evaluation criteria used to select parcels, the appointment of selection committee members, and the information used to implement the evaluation criteria more thoroughly. To accomplish this, we identified specific data gaps for various programs and discussed these data gaps with program managers.

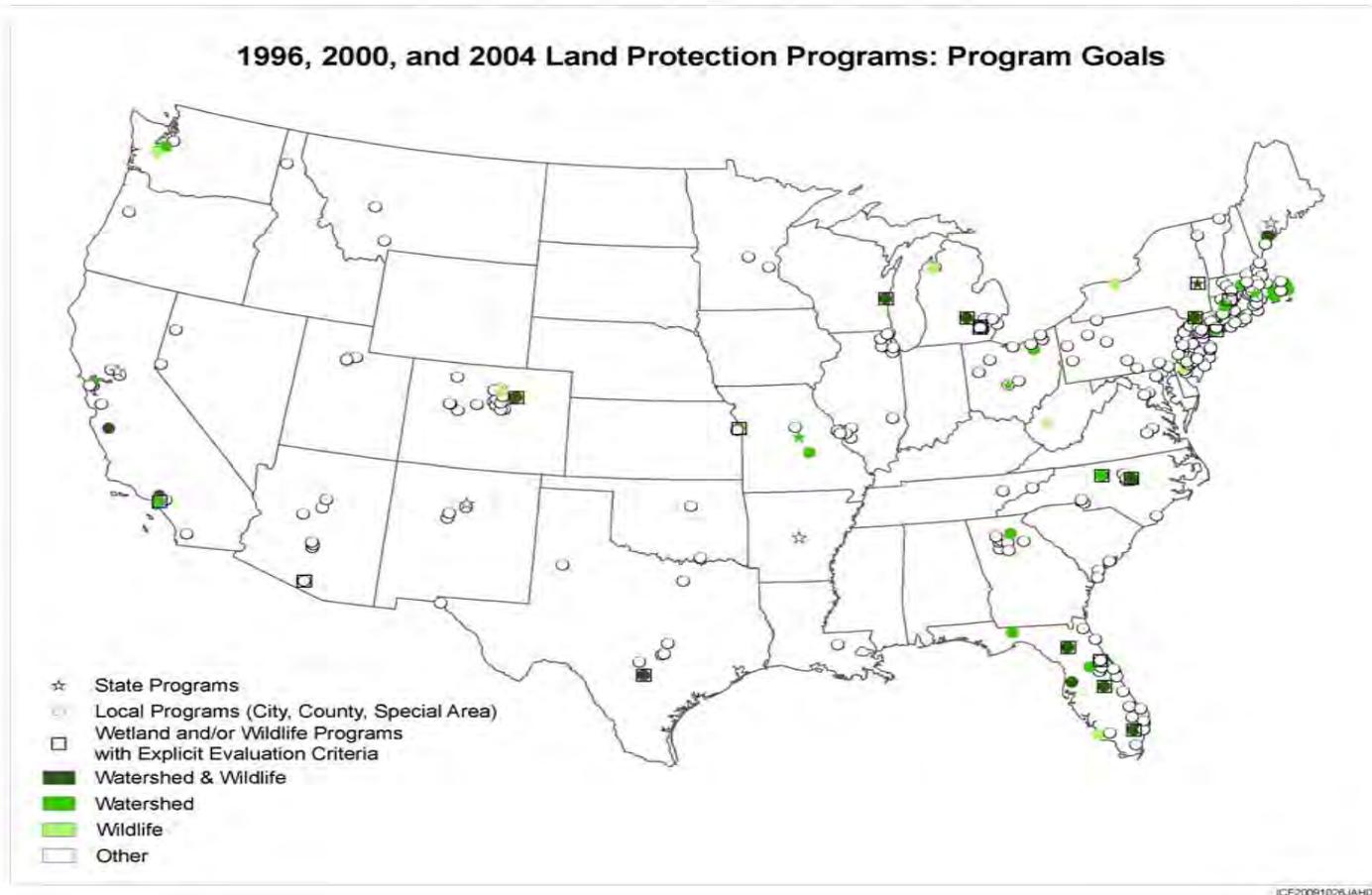
This process yielded a set of 19 case studies with relatively in-depth information for a well-specified subset of programs (of these, two programs were essentially the same program authorized in different years and therefore combined into one write-up.) Appendix A has short one-page summaries of each of the 19 programs, while Appendix B consists of the in-depth write-ups. The 19 programs are the basis of the findings discussed in Section 4.

Figures 1 and 2 depict the geographic distribution of the 406 programs identified in Step 2. Figure 1 shows the distribution of programs as well as the program focus—wetlands, wildlife, both, or neither. Figure 1 also shows that many of the programs focus on open space, but not explicitly on wetlands or wildlife; these programs were eliminated from further analysis. The final subset of programs from Step 4 is indicated in the Figures 1 and 2 with a black box around the symbol. Figure 2 shows the same programs but stratified by funding level, with darker

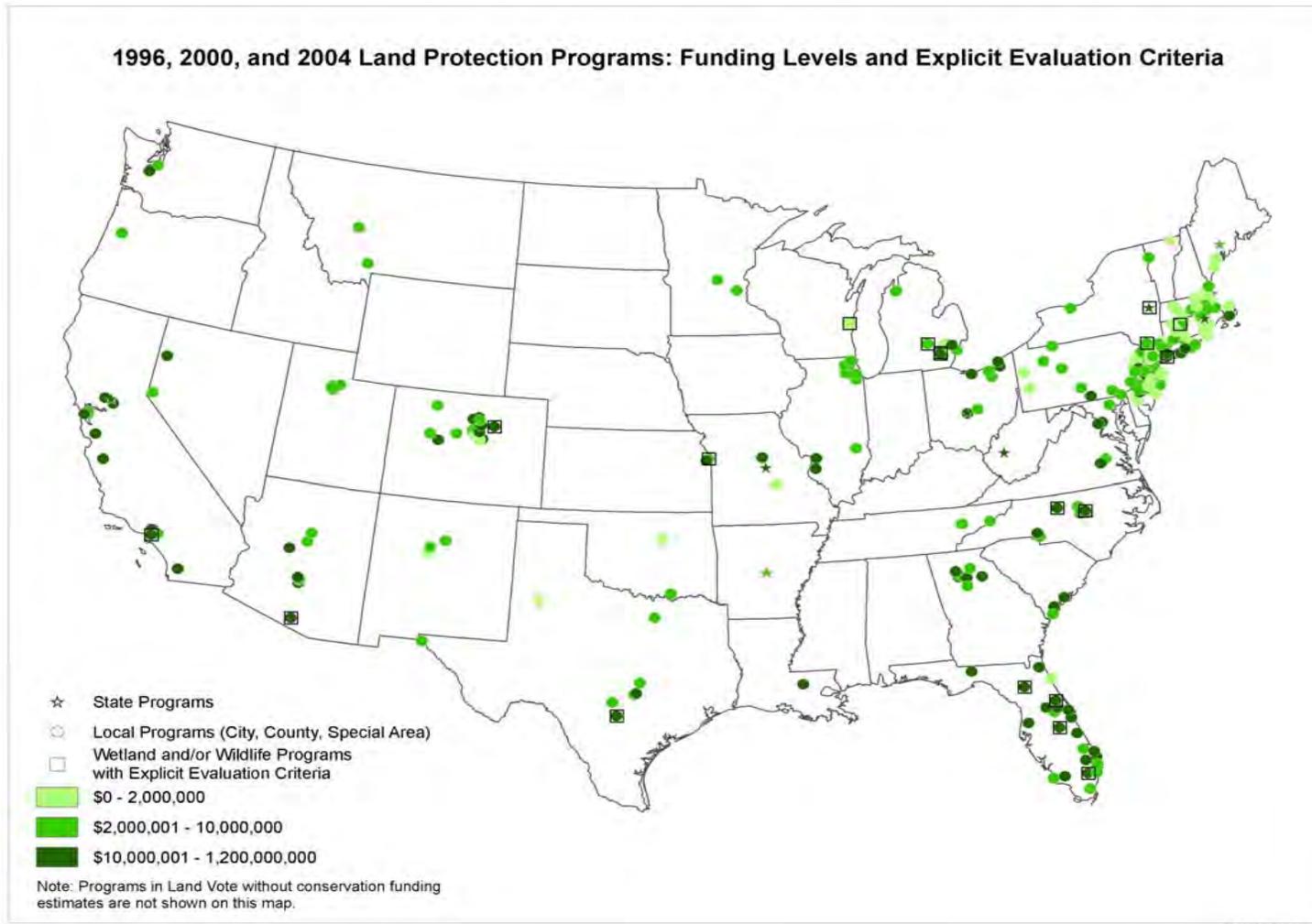
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<sup>1</sup> Of the 75, 15 were local programs that constituted one regional program, and were thus written up as one program. Six programs were excluded because the land was used for existing programs, not new preservation, and three programs could not be researched further due to lack of information. One program was added because it helped explain a later program; these two were later combined into one write-up in Step 4.

shading indicating higher funding levels. Regional maps with these same indicators are available in Appendix D. The screening process considered programs from throughout the country, though the narrowed list of programs may be biased toward the east coast and lake states. However, we believe that this represents a good sample of programs throughout the nation, since those programs analyzed represent both rural and urban areas and counties in all regions of the country.



**Figure 1. 1996, 2000, and 2004 land protection programs: Program goals.**



**Figure 2. 1996, 2000, and 2004 land protection programs: Funding levels and explicit evaluation criteria.**

## 4. ANALYSIS FINDINGS

The analysis findings are organized around the three fundamental parts of the land protection decision-making process. These address why programs are protecting land, how they are selecting specific parcels, and how they implement their selection. Specifically, we examined the following questions:

### **Program Goals**

- What is the range of program goals?
- What prompted the creation of the program?

### **Prioritization and Analysis**

- How are land parcels selected?
- What criteria are used?
- How are criteria applied?
- Where do the data come from?

### **Implementation**

- Who implements the program?
- Who conducts the analysis?
- Who is the ultimate decision maker?
- How does it partner with other governmental agencies or institutions?
- What problems have the programs encountered?
- Where do program staff obtain information?

Under each theme, the emphasis is on the range of experiences across the 19 programs in our sample, as well as any patterns noted within program types, location, size, and level of government. General patterns are discussed, with specific examples highlighted and exceptions noted.

To think about broad patterns within the 19 programs, we classified them according to two criteria, which captured the processes of all of the sampled programs: (1) Is the decision-making process top-down, bottom-up, or hybrid? Top-down refers to programs where specific parcels of land were selected specifically for preservation, while bottom-up indicated that parcels were suggested for preservation by landowners, public agencies, or non-profit groups and then evaluated under the program. Hybrid programs combine elements from top-down and bottom-up; and (2) Are decision criteria qualitative or quantitative? This refers to how the criteria are applied. If programs applied criteria objectively using some type of point system or weighting, we considered the program quantitative, whereas if programs applied criteria more subjectively,

the program was considered qualitative. Note that a program could apply a general set of criteria either way; the distinction lied in the way they were applied, not the criteria themselves.

Table 1 shows how the programs break down along these two dimensions qualitative or quantitative.

**Table 1. Division of 19 programs by process and selection criteria**

	Qualitative	Quantitative
<b>Top-down</b>	None	2000TX-01 Edwards Aquifer (San Antonio) 2004KS-01 Rain to Recreation (Lenexa)
<b>Hybrid</b>	2004AZ-01 Sonoran Desert (Pima County)	1996NY-01 Clean Water/Clean Air (NY State) 2000MI-02 Meridian City 2004CA-02 Los Angeles Clean Water 2004NC-01 Wake County 2004NC-02 Guilford County
<b>Bottom-up</b>	2000FL-01 Broward County 2000FL-02 Volusia Forever (County) 2000MI-01 Washtenaw County 2004CO-01 Adams County 2004NY-01 Nassau County	1996CT-01 Town of South Windsor 2000FL-04 Alachua County 2004FL-01 Osceola County 2000WI-01 Sheboygan County 2004MI-01 Scio Township 2004NY-02 Orange County

#### 4.1. PROGRAM GOALS

We selected these 19 programs for further analysis because of their stated commitments to watershed and wildlife protection. In addition to watershed and wildlife protection, commonly mentioned goals included protection of open space for public recreational use, scenic value, ecological diversity, and encroachment from development. Only one program, 1996NY-01, had a goal related to climate change increasing carbon sequestration in forests.

**What is the range of program goals?** Goals ranged from the very specific to the very broad. The two top-down programs, 2000TX-01 and 2004KS-01, both had very specific water quality goals. Program 2000TX-01 was set up to preserve land around the Edwards Aquifer, the primary source of drinking water for the City of San Antonio, which administers the program. Program 2004KS-01 focused exclusively on stream protection. Given that these two programs were also the only two top-down models, we inferred that a program focused on a tangible goal

is more likely to use a quantitative, data-driven approach to selecting land panels than a program with many and/or broader goals. Program 2004CA-02 also focused almost exclusively on water quality protection, trying to achieving total maximum daily load (TMDL) goals, but the program did not pre-identify land parcels for preservation.

The majority of programs incorporated a wider range of goals. Some did so explicitly by preserving land in distinct categories. For example, program 2004AZ-01, the county-wide Sonoran Desert Open Space program, lists four categories by which land could be preserved, each linked to a different goal: (1) community open space (scenic and recreation value), (2) urban open space (local jurisdiction priorities), (3) habitat protection (biological indicators), and (4) Davis-Monthan open space (prevention of encroachment at a military base). Others had a long list of stated goals. For example, program 2000FL-02 of stated its goals as “Conserve, maintain and restore the natural environment and provide access for the enjoyment and education of the public; provide resources to ensure that sufficient quantities of water are available to meet current and future needs; meet the need for high-quality resource based outdoor opportunities, greenways, trails, and open space; preserve the habitat and water recharge; ensure that the natural resource values of such lands are protected and that the public has the opportunity to enjoy the lands to their fullest potential.”

The programs with multiple goals tended to give them equal weight formally. However, in some cases there was an informal understanding that some goals were more important than others were. For example, while the 2004CO-01 program goals are “To preserve land that protects water quality; protect wildlife areas, wetlands, rivers, and streams; preserve farmland; protect open space to limit sprawl; and for creating, improving, and maintaining parks, trails, and recreation facilities,” according to program staff preserving lands from development had a higher priority than creating recreational facilities. In addition, programs with multiple goals tended to give greater weight to parcels that achieve more than one goal; even if the individual goals have a similar ranking (program 1996NY-01 is one example).

**What prompted the creation of the program?** In more than half of the case studies, the impetus for the program came from development proposals on or near those land parcels ultimately selected for protection, and many programs were created in response to concerns from citizens’ groups. As an example, the three programs in Michigan (2000MI-01, 2000MI-02, 2004MI-01) were grassroots efforts to protect natural areas in traditionally rural or semi-rural areas from development. Program 2000WI-01 also mentioned development pressures and the rising cost of land, but had less emphasis on grassroots or citizens’ involvement. In the 2004NC-02 case study, a grassroots group advocated for an open space program, to which the County

Commissioners ultimately agreed; many of the group's members serve on the committee that helps implement the program.

Of the other programs, water quality protection was the largest motivating factor. Program 2000TX-01 was a grassroots effort for the protection of water quality and quantity in Edwards Aquifer, the only source of drinking water in the area. Program 2004CA-02 was primarily a TMDL attainment program with land protection as one of several tools to achieve that goal. Stormwater management motivated the creation of program 2004KS-01, while a desire to protect habitat and water quality motivated program 2004AZ-01.

#### **4.2. PRIORITIZATION AND ANALYSIS**

Prioritization and analysis, the second major theme that was reviewed, addressed how decisions were made regarding which parcels to target for acquisition. This was considered the most important component of the analysis, as it includes how parcels are selected, what criteria were used to evaluate them, how the criteria were applied, and what data sources were employed. There was a substantial amount of variation among the 19 programs on these dimensions.

**How are land parcels selected?** We describe eleven of the 19 programs as “bottom-up,” meaning that once the program structure was in place, a variety of stakeholders could nominate lands for preservation. They were then evaluated using the program criteria, and selected for preservation based on their performance against those criteria.

In the most common arrangement (used in eight programs) the county or city running the program accepted applications from private landowners who were interested in having the public sector purchase their land. The two programs in Michigan (2000MI-01 and 2004MI-01) also include provisions whereby the agency could solicit landowners to apply for the program. Of the four Florida programs (2000FL-01, 2000FL-02, 2004FL-01, and 2000FL-04), 2000FL-04, Volusia Forever, accepted properties for consideration in two categories: within and outside of the Conservation Corridor. If properties outside the corridor were nominated, they underwent a selection process to determine whether they should be placed on the priority acquisition list, but properties within the corridor were placed on the list immediately. Program 1996CT-01 had a similar priority list, but would also take applications from landowners with parcels not on the list. Program 2004NY-01 also fell into this category.

Three programs operated as grant programs, whereby a county provides funding for others to purchase land or development rights. The only substantive difference from the programs described above is that the counties administering the program do not wish to purchase the land themselves. In program 2000WI-01, a county program, local jurisdictions or non-profit organizations submitted parcels for consideration; if successful, the submitting organization

received a grant to purchase the land. Program 2004CO-01 is similar; Program 2004NY-02 allowed private individuals to make grant applications, provided they had the support of their jurisdiction.

As discussed in Section 4.1, only two programs were top-down, meaning that the jurisdiction implementing the program targeted certain parcels for preservation and was not interested in considering others. Program 2000TX-01 targeted only lands around the Edwards Aquifer, while 2000KS-01 targeted only lands identified through a stream inventory. Program 2000KS-01 did accept land donations from outside these priority areas, but does not solicit or pay for them.

The six remaining programs were hybrids, combining characteristics of bottom-up and top-down programs. Essentially, there were two types of hybrids: those with two separate funding tracks (i.e., some parcels were targeted based on a predetermined list and others were nominated for preservation), and those with a priority list that accepted nominations (as opposed to pursuing them based on internal prioritization). Program 2004AZ-01 is an example of the first hybrid type: it listed all lands to be preserved within the bond measure, but identified them through some top-down processes (biological review) and others through bottom-up (nominations from community groups). Program 2004NC-01 identified specific watersheds and stream corridors to protect and targeted those for acquisition, but also allowed potential partners to suggest other parcels for preservation. Similarly, program 2004NC-02 had two avenues for parcel selection: parcels located in one of nine targeted areas and a nomination process that selected parcels.

In the second hybrid category, program 2004CA-02 began with a priority list of polluted waters and a very specific goal of meeting TMDL standards, but also allowed the public to propose lands for preservation. Program 2000MI-02 had an open space map developed through GIS analysis and accepted applications from landowners whose parcels lie within those boundaries. Under program 1996NY-01, landowners' nominations received greater weight if they fell within a priority area. While the two top-down programs are both municipal, there did not seem to be any other relationships between the size or level of the program and the selection process.

**What criteria are used?** Another program dimension is the type of criteria used to make decisions about which parcels to target. The top-down programs used these criteria at an early stage to develop the targeted list, while the bottom-up programs used them to select among nominated parcels.

All of the 19 programs included both criteria related to watershed and wildlife protection as well as other criteria. In order to provide a snapshot of the criteria used across the programs,

we compiled the criteria into a single table to show the frequency with which each criterion was applied (Table 2). Since the wording varied by program, we standardized the criteria across programs to make them comparable. In some cases, a program used multiple variations on a single criterion, which explains why many criteria have two or more occurrences in a single program. For example, program 2000MI-02 listed as distinct criteria “ecosystems of state, regional or local importance,” “wildlife or vegetation and/or overall high diversity of species,” “contains habitat for protected species,” and “helps connect prime greenways and wildlife corridors.” We classified all of these under “habitat,” so this program shows four criteria under habitat. In addition, we divided wildlife into habitat/biodiversity and geology/natural resources, while we divided watersheds into wetlands and water quality. We counted each distinct subcriterion as a single criterion (Table 2).

Programs cited habitat/land features 32 times, and water issues 34 times. The next most frequent criterion was contiguity or buffer to protected lands, which was cited 19 times. Management issues (such as the existence of a management plan or maintenance issues) and financial issues (such as the availability of matching funds and appraised value) and followed with 15 and 14 mentions respectively. This would seem to indicate that whatever the goals of the program, financial and managerial issues are an integral part of decision making. No other criterion was mentioned more than ten times total; others with multiple mentions included recreational value (ten mentions), development pressure (nine), cultural/historic value (eight), conformity with existing plans (eight), size (seven), partnerships (seven), and aesthetic value (seven).

**Table 2. Criteria used in 19 land protection programs**

**Table 2: Criteria Used in 19 Land Protection Programs**

			Criteria*																															
			Habitat & Land		Water issues		Other issues listed in order of frequency																											
Program ID	Decision Criteria Type	Explanation of Criteria	Total Number of Criteria	Habitat/biodiversity	Geology/natural resources	Wetlands	Water quality	Contiguity/buffer to protected land	Management issues	Financial issues	Recreation	Threat of loss/ devt pressure	Cultural/ historic value	Partnerships	Conforms to existing plans	Size	Aesthetic value	Community support or opposition	Density/ mixed-use issues	Agriculture	Location/ accessibility	Meets multiple objectives	Adjacent land use	Rarity	Appropriate purpose	Willing seller	Contamination	Educational/ scientific	Impact on property values	Negative factors	Scope of benefit (local/state)	Potential for re-use		
Total number of times criteria cited			25	7	18	16	19	15	14	10	9	8	8	7	7	7	6	4	4	3	2	2	2	2	2	2	2	2	2	1	1	1		
2000FL-01	Qualitative	11 criteria	11	7					1	1	1	1	1	1																				
2000FL-02	Qualitative	5 broad criteria (all component parts are checked)	11	1	1	1	1	1	1	1	1	1	1	1	1	1	1																	
2000MI-01	Qualitative	4 broad criteria (all component parts are checked)	6	1	1	1	1	1			1																							
2004AZ-01	Qualitative	3 criteria	3			1		1									1																	
2004CO-01	Qualitative	12 criteria	12					1	3	3		1		1	1			2																
2004KS-01	Qualitative	9 criteria specified, but "many factors"	9			5					1			1	1			1																
2004NC-02	Qualitative	11 types of land can be protected (all component parts are checked)	12	1	1	3	1	2					1		2							1												
2004NY-01	Qualitative	11 criteria for open space projects	11	1		1			3	1		1			1								1				1	1				1		
1996CT-01	Quantitative	3 criteria each scored -2 to +2 (component parts are checked)	4					1								1	1						1											
1996NY-01	Quantitative	3 very broad criteria, ranked on point system (all component parts are checked)	6	1	1	1	1				1		1																					
2000FL-04	Quantitative	6 broad criteria scored on a point basis (all component parts are checked)	16	2	1	1	1	1	1	2	1	1		1	1	1	1	1															1	
2000MI-02	Quantitative	6 criteria each with a maximum point value assigned based on sub-criteria; also allow "special considerations" not specified (sub-criteria are checked)	18	4		1	3	3	1					2		1		2	2			1				1								
2000TX-01	Quantitative	3 data categories for GIS plus 1 screening criteria; weighted and divided into tiers (component parts checked)	5	1	1			1								1	1																	
2000WI-01	Quantitative	16 criteria in 3 areas, ranked on a point scale	16	1	1	1			1	1	1	1	1	3				1	1	1	1	1			1								1	
2004CA-02	Quantitative	3 weighted criteria with sub-sections (component parts are checked)	16		1	1	5		3	2	1				1			1																1
2004FL-01	Quantitative	Must meet 2 of 5 screening criteria, then be scored on matrix (matrix not developed yet; component parts are checked)	7	2		1	1	2									1																	
2004MI-01	Quantitative	2 sets of 3 broad criteria depending whether land is ag or open space (all open space component parts are checked)	18	2	1	1	2	3	1	1	2	1	1		1							1		1		1								
2004NC-01	Quantitative	15 criteria	15			1	1	1	1	1		1		1		1	3	1			1	1		1									1	
		supplemental criteria; ranked on point system																																

\* Note: wording may differ from program documents.

**How are criteria applied?** Programs applied criteria in either qualitative or quantitative fashion. Qualitative application of selection criteria tend to be subjective, though this was not always the case, while quantitative application indicated that some type of numeric ranking, weighting, or scoring was applied. Although the quantitative programs are by nature more objective because they tend to apply measurable criteria, it is possible to have a criterion that can only be assessed subjectively (such as aesthetic value) as part of a quantitative system if it were assigned a point value.

In fact, most programs used a mixture of objective and subjective criteria, regardless of whether they applied these qualitatively or quantitatively. For example, program 2004NC-01 was a quantitative program, in that it weighted the criteria, but it included such subjective criteria as aesthetic value and manageability. On the other hand, 2000FL-01 was a qualitative program and included objective criteria such as habitat type, presence of invasive species, and stage of ecological succession. Only one program, 1996CT-01, was entirely subjective, in keeping with its goal of preserving character.

As noted in Table 1, we characterized six programs as qualitative. Of these, some provided guidance on using the criteria while others did not. Program 2000MI-01 had a checklist of questions to be answered either yes/no or medium/high/very high. Program 2000FL-02 required that for a parcel to be considered, it must meet four of 13 subcriteria, and each criterion received a ranking from low to high. The other programs relied on the knowledge of reviewers to use the criteria and did not give particular instructions; the bond measure for program 2004AZ-01 already listed the parcels to be preserved, so there was no ongoing evaluation process.

Thirteen programs were characterized as quantitative, but within this designation there was a range in the way the prioritization was implemented. The most basic involved some type of weighting or ranking, done on a somewhat subjective basis. For example, program 2004CA-01 used a weighting system, in which three broad criteria were given unequal weights (water quality improvements 40 percent, and multiple objectives and project feasibility 30 percent each). Within each criterion, there were several sub-criteria, ranked on scales with limited room for nuances (either yes/no or low/medium/high). Program 2000WI-01 used points for each criterion, for a maximum possible score of 255; up to 10 points could also be deducted for negative factors (although these are not defined). The maximum number of points available for any single criterion ranged from 10 (economic factors, density standards) to 40 (development potential, natural resources: water). Programs 1996CT-01, 2004NC-01, 1996NY-01, 2004NC-02, 2004NY-02, and 2000FL-04 also used similar methods.

Programs such as 2004MI-01 relied on a point-based system in which points were assigned based on measurable indicators, resulting in more objective findings. For example, the

criterion wetlands and/or floodplain, points were assigned based on the percentage of the parcel with wetlands and/or floodplain features: 0 points for no features, 3 points if less than 10 percent of the parcel contains such features, 7 points if between 10 and 20 percent of the parcels contained such features, and 11 points if over 20 percent of the parcels contained such features. Program 2000MI-02 operated in a similar fashion. 2004FL-01 will eventually adopt a Site Scoring Matrix, but at the time of this writing it had not yet been developed.

Program 2000TX-01 layered three main criteria, each with multiple subcriteria, into a single GIS program. The GIS program then weighted the criteria, with geologic at 50 percent, biologic 20 percent, and watershed 30 percent. The more subcriteria a parcel met, the higher the weighting it received. The program ultimately ranked every square meter in the study region and assigned it to one of eight categories, with the top three categories deemed the most important to preserve. Program 2004KS-01 used a variety of measurable indicators, such as streams' biologic health and hydraulic capacity, to create a five-tiered ranking system for streams.

Several jurisdictions noted that they were moving from a qualitative to a quantitative selection process, or vice versa. Program 2004NY-01 contained a detailed list of criteria that was initially intended to form the basis of a quantitative system, but committee members found it overly restrictive and wanted to rely on their own judgment. Program 2000FL-04 previously used the weighting to assign parcels to a priority list, but then evolved so that all parcels that passed the screening process were considered equally important for acquisition. The system was changed because program managers felt the county would have more leverage in negotiating with landowners if all parcels were considered important.

On the other hand, program 2004FL-01 deliberately adopted a quantitative strategy because research into existing programs indicated that a quantitative approach would be more successful. Program 2004NY-02 has a subjective weighting system, but is moving towards making it more objective, in the hopes of creating defensible decisions. This may be related to an incident in which a parcel with low ratings was approved because the applicant threatened to sue if the parcel was not approved for funding.

**Where do the data come from?** The programs varied in the extent by which they relied on data, but all incorporated some type of data in the decision-making process. Tables 3 and 4 list all data sources mentioned either in the published information or by our contacts.

In general, for the grant programs and other bottom-up programs, applicants supplied data. Typical data requested included maps (such as existing land use maps or topographic maps), site plans, and hazard assessments. These programs often relied heavily on the expertise of the committee members evaluating the application, as well as on site visits and existing city or

county master plans or open space plans. After existing open space maps, expert knowledge was the most commonly cited data source.

The top-down and hybrid programs, which tended to lean more towards quantitative decision making, employed a wide range of data sources, including state and federal data such as statewide data on endangered species and U.S. Geological Survey maps. However, no single state or federal data source was cited more than a few times. This could be because the range of data sources is truly wide, or because the persons contacted were not familiar with all of the data that was employed. For example, program 2004AZ-01 conducted a five-year biologic survey to identify species and habitat as indicators of ecological health; we identify this as a single data source (“species and habitat survey”) in Table 3 although presumably the effort involved more extensive data collection.

Note also that in some cases programs identified specific GIS layers, while in others GIS was simply cited as one of several data sources. While we recognize that GIS is an analysis tool, not a data source, in some cases the staff was not familiar with the specific data layers used in the analysis. Table 4 lists any GIS data layers under a separate GIS category, since in most cases it was not clear who provided the original data. Likewise, in some cases programs listed “consultant reports” as data sources, although it is not clear what data the consultants used to determine their findings.

It was not always clear who collected the data. In some cases it was the review committee; in others, an outside consultant or staff.

**Table 3. Data sources cited (local, state, and federal)**

Program ID	Decision Criteria Type	Data Types																																							
		Local															State					Federal																			
		Existing open space plans	Expert knowledge/review	Consultant reports	Aerial photos	Site visits/field data collection	Wetlands maps	Species/habitat surveys	Contour lines	Development projections	Local map	Management plan	Farmland maps	Topographic maps	Soil survey	Zoning/land use maps	Build-out analyses	Plat map	Site plan	Hazards assessment	Adopted TMDLs	Stream inventory	Groundwater data	Endangered species	Water quality data	Natural features inventory	Ecological assessment	Preservation database	Vegetation	Census projections	USGS GIS terrain slope	USGS stratigraphy maps	USGS faults, caves, Sinkholes	USGS soils	USFWS endangered species	USFWS vegetation	EPA water quality information	FEMA floodplain	USDA Soil Survey Geographic Database		
		6	5	4	4	2	2	1	0	5	5	3	3	3	3	2	2	1	1	1	1	1	3	2	1	1	1	1	1	2	2	1	1	1	1	1	1	1	1		
2000FL-01	Qualitative		X																																						
2000FL-02	Qualitative								X																																
2000MI-01	Qualitative	X									X												X	X	X																
2004AZ-01	Qualitative				X							X																													
2004CO-01	Qualitative													X																											
2004KS-01	Qualitative		X																				X																		
2004NC-02	Qualitative							X																			X														
2004NY-01	Qualitative	X						X	X																																
1996CT-01	Quantitative	X	X	X	X	X	X	X																																	
1996NY-01	Quantitative																																								
2000FL-04	Quantitative							X	X	X																															
2000MI-02	Quantitative				X					X		X												X	X	X			X												
2000TX-01	Quantitative																										X			X	X	X	X	X	X	X	X	X			
2000WI-01	Quantitative					X		X		X		X	X	X	X	X	X	X	X	X								X													
2004CA-02	Quantitative	X																																							
2004FL-01	Quantitative			X	X							X	X	X																											X
2004MI-01	Quantitative	X	X							X																															
2004NC-01	Quantitative		X	X					X						X									X																X	X
2004NY-02	Quantitative	X		X		X							X				X						X																		

**Table 4. Data sources cited (GIS data)**

Program ID	Decision Criteria Type	(Unspecified)	Public lands	Private forest lands	Protected lands/wetlands	Agricultural districts	Wild/scenic/recreational rivers	Aquifer recharge areas	Water bodies	Floodplains	Coastal erosion hazard areas	Coastal fish and wildlife habitat	Local governments	Lands with state/regional significance	Biodiversity inventory	Wildlife management areas	Historic preservation	Heritage areas	Geologic resources	Fiat boundary base maps	Conservation easements	Open space	Endangered species	Natural Heritage
		4	3	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2000FL-01	Qualitative																							
2000FL-02	Qualitative	X																						
2000MI-01	Qualitative		X																			X		
2004AZ-01	Qualitative																							
2004CO-01	Qualitative																							
2004KS-01	Qualitative																							
2004NC-02	Qualitative			X																				
2004NY-01	Qualitative																							
1996CT-01	Quantitative																							
1996NY-01	Quantitative		X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
2000FL-04	Quantitative	X																						
2000MI-02	Quantitative																						X	
2000TX-01	Quantitative																							X
2000WI-01	Quantitative		X																					
2004CA-02	Quantitative	X																						
2004FL-01	Quantitative																							
2004MI-01	Quantitative	X																						
2004NC-01	Quantitative			X																				
2004NY-02	Quantitative																							

### 4.3. IMPLEMENTATION

This section considers how programs implemented the goals and prioritization criteria to preserve land. We have already discussed some implementation issues, such as parcel identification, in the preceding sections. This section addresses the interlocking roles of the implementing organization, the committee that analyzed the information available, the decision-making authority, and partner organizations, whether public or non-profit. Despite the wide differences in program goals and methods of parcel selection and prioritization, most programs had a similar implementing structure, with an outside advisory committee conducting the analysis, reporting to the public agency staff, and an elected body making the final decision.

**Who implements the program?** Of the 19 programs analyzed, six were municipal, 11 were county, one was joint city-county, and one was state. Compared to the initial 53 programs we reviewed, this represents a larger proportion of counties and a lower proportion of municipalities and states. Of the initial 19 county programs, 11 had quantitative or qualitative criteria, but only six of 25 municipal programs and one of seven state programs reported qualitative or quantitative selection processes.

Although this represents an admittedly small sample size, there seems to be a suggestion that county programs are more likely to specify selection criteria than municipal or state programs. One hypothesis might be that county programs are the best level at which to undertake land preservation; perhaps municipalities overall are too small to achieve effective preservation, or more prone to opportunistic programs in which land is preserved due to its availability, while states are too large for such analysis. Alternatively, regional cooperation among all levels of government and involved entities is necessary for effective land protection programs, and county governments represent a balance of local involvement and regional coordination. However, these are very tentative hypotheses; a larger sample size would need to be analyzed to determine if they are valid.

**Who conducts the analysis?** With one exception, all of the programs had some type of advisory committee that made recommendations as to which parcels of land should be preserved. (In the exception, program, 2000KS-01, the public sector was responsible for all aspects of decision making.) Twelve of the programs had one advisory committee. In large part, these were composed of private citizens selected by an elected body. In some cases, there were strict requirements for the composition of the committee. For example, in program 2000FL-04, the Land Conservation Board was appointed by the Board of County Commissioners. The ordinance creating the board specifies that it must contain five persons representing “diverse community interests” and six people with expertise in natural resources. The Natural Areas Technical Advisory Committee for program 2000MI-01 was required to include seven county residents

with expertise in real estate or development, environmental education, fisheries biology/aquatic ecology, land use planning, wildlife management, botany/forestry, and land trust/conservation. 2004CO-01's Open Space Advisory Board required inclusion of members from both incorporated and unincorporated areas.

In some cases the advisory committee included public sector representation. The Task Force for program 1996CT-01 contained some representatives from other town boards (such as zoning and wetlands conservation) as well as the public and one land trust representative. Program 2004NY-02 used the existing Planning Board as advisors, along with the majority and minority leaders of the county legislature.

Six programs had two or more advisory boards. In some cases, they had clearly defined roles. Program 2000TX-01, a rigorous top-down program, had a Scientific Evaluation Team conduct the initial GIS analysis, a Conservation Advisory Board review the analysis, and a Land Acquisition Team (composed of the public sector and land trusts) to pursue identified parcels. Program 1996NY-01, a statewide initiative, had nine Regional Advisory Committees reviewing projects in different regions. In the other four programs (2000MI-01, 2004CA-02, 2004NC-01, and 2004NY-01) the parcels were all reviewed by two committees, but our contacts did not make clear the relationship or individual responsibilities of the two committees.

The overall role of the committee(s) was to review information regarding the parcels under consideration and to make recommendations on whether they should be preserved. Generally, they analyzed data provided by the applicant or the staff administering the program; in some cases they also collected data or visited the site. Depending on the nature of the program, they may have created a priority list ranking parcels; in other cases they may simply have given all parcels a yes or no recommendation. None of the advisory committees had the last word on whether to preserve an individual parcel, but as the section below discusses, some programs treated their recommendations more seriously than others did.

**Who is the ultimate decision maker?** With five exceptions, the ultimate decision maker was the chief elected body of the jurisdiction responsible for administering the program, such as the town council or board of county commissioners. This body took the recommendations from the advisory committee and decided whether to accept them and proceed, or whether to turn down a recommended parcel or alternatively fund the acquisition of a parcel not on the list. In two of these exceptions (2004CA-02 and 2004NY-02), the executive branch was also involved in decision making along with the legislative body.

On paper, the relationship between the elected body and the advisory committee is clear; in practice, some elected bodies always accepted the committee's recommendations and others overrode them. Program 2004NC-01 staff indicated that the Board of Commissioners tends to

approve the committee's recommendations with little discussion. The same was true for programs 2004AZ-01 and 2000TX-01 (in the latter case, the advisory board's effective screening process was credited with giving the legislature solid recommendations, which were considered fair and reliable).

Other programs had cases where the advisory committee's recommendations were not always accepted, generally for political or financial reasons. Program 2004NY-02 staff reported that in one case, the County Executive (whose approval is required along with the legislature) dropped one program and approved funding for a previously denied project, an application from a municipality that had threatened to sue the county if funding was not approved. The decision was controversial as the land purchase has already been made, but the program was not supposed to fund purchases retroactively. In program 1996CT-01, the Town Council vetoed a recommendation by the Task Force to purchase the development rights of a land parcel, because the Council did not want to pay 90 percent of the purchase price without purchasing the land outright. In program 2000MI-01, a recommendation was turned down for financial reasons. In program 2000FL-04, the County Commission acquired a low-ranked parcel since it was located near several elementary schools, and it was felt that the educational value for the students outweighed the fact that its natural value was lower than that of other parcels.

In three cases, it was not the jurisdiction's top legislative body that made the ultimate decision. In two cases it was a committee of the full legislature; for program 2000MI-01 it was the Parks and Recreation Commission and for program 2000WI-01 it was the County Resources Committee. For the one state program, 1996NY-01, the final authority was the State Department of Environmental Conservation.

#### **How does the program partner with other governmental agencies or institutions?**

Most of the programs had some type of formal or informal partnerships with other levels of government or non-profit organizations, but more often it was on an ad hoc basis rather than a permanent arrangement. For example, program 2004NC-01 acquired more than half of its protected land by working with both the state and municipalities. Some county programs tended to look to state or federal government for additional funding; program 2000FL-02 lists the statewide Florida Forever program, U.S. Department of Agriculture, and the U.S. Fish and Wildlife Service as potential funding partners, and they also looked to the local water management district for maintenance funding.

Some of the programs had well-defined partnerships with non-profit land trusts. In program 2000TX-01, the Trust for Public Land, The Nature Conservancy, and the Bexar Land Trust made up the land acquisition team that pursued the preservation of specific parcels. The 2004AZ-01 program relied heavily on input from The Nature Conservancy and Friends of the

Sonoran Desert to identify priority conservation lands. 1996CT-01 had a seat on its advisory committee reserved for a local land trust representative.

Programs differed in their attitudes towards purchasing land outright as opposed to purchasing the development rights (also known as PDR, or TDR for transfer of development rights). In PDR an organization purchases the right to development, on a percentage of the land's appraised value, but the landowner still retains the title. Some programs are only interested in outright purchase; the Town Council for program 1996CT-01 turned down a PDR offer because they felt the price was too high if the town could not own the land. On the other hand, the 2004NY-01, 2004NY-02, and 2004MI-01 programs were oriented towards purchasing development rights; the program 2004NY-01 contact said that placing the land in county ownership was felt to be a long-term burden.

**What problems have the programs encountered?** While our research did not ask specifically about problems encountered, several issues regarding funding came up that have had a negative impact on some programs' ability to preserve land. The main reason was increasing land prices, especially for Florida programs, the price of land and the need to compete with private developers in a tight real estate market was limiting the programs' effectiveness. Program 2000FL-01, in Broward County (southern Florida) was faced with average per acre costs of \$300,000. (In comparison, in some rural areas in Florida, land was available for preservation at \$1,600 per acre.) While recent economic conditions have caused a decline in land prices in many areas, budget deficits and declining tax receipts caused some programs to stop temporarily. Meanwhile, programs with dedicated funding sources were able to acquire land at a faster pace due to lower land acquisition costs.

Related to this issue were the restrictions some programs placed on funding. The 2000FL-01 program, although faced with high costs and competition from developers, could not exceed 110 percent of the land's appraised value. Programs 2000FL-02, 2000FL-04, 2004AZ-01, and 2004NC-01 could pay only the appraised value. Program 2000MI-02 offered the landowner the appraised value exactly, but if the landowner objected they could get a second appraisal to offer for negotiation. Program 2004AZ-01 had problems with landowners disputing the appraised value of land and rising prices; in addition, the county was unable to purchase state-owned land. The 2000WI-01 program required that all funding must all be spent in the year it is earned, meaning that the county could not save up for larger purchases.

Only a few programs had provisions for long-term maintenance of the preserved land. Program 2000TX-01 set aside just over 10 percent of the total funds to protect the Edwards aquifer for maintenance. Program 2000FL-02 allowed up to 10 percent of total annual funds to go toward stewardship. 2004NY-02 could pay stewardship costs up to 50 percent of total project

costs. Program 2000MI-02 requires a Stewardship Implementation Plan as a condition of purchase, although it was not clear how much funding the city provides for stewardship. Program staff from 2004CO-01, 2004NC-02, 2004NY-01, and 2000FL-04 told us that they did not provide any maintenance funding; staff at other programs did not address this issue.

One interesting idea came from program 2004CO-01. For their applicants without experience in managing land acquisition or stewardship, they appointed a Project Mentor. This gave the jurisdiction receiving funding an opportunity to learn how to manage their program.

**Where does program staff obtain information?** Several programs we analyzed were explicitly modeled on other programs. Program 2000WI-01 based its design on the Dane County program (also in Wisconsin), while program 2000FL-02 was modeled on the statewide Florida Forever program. Program 2004FL-01 surveyed other programs within Florida and adopted what program administrators saw as the keys to those programs' success.

## 5. CONCLUSIONS AND NEXT STEPS

Land protection exhibits the three characteristics of decisions that should reflect some understanding of climate change impacts: it is long term, hard to reverse, and resource-intensive. These characteristics of land protection decisions, along with the rapid pace of land development, now and in the future, and the variety of interactions possible between climate and land use, highlight the importance of incorporating climate change information into land protection decisions. This study identifies several areas within the decision-making process where climate change information could be included.

Although the land protection programs we analyzed did not explicitly consider climate change, existing selection criteria capture some of the features and ecosystem services already threatened by climate change (e.g., wildlife habitat and wetlands). When considering long-term acquisition strategies, land protection programs should consider both the mitigation potential of land through carbon sequestration and the adaptation potential of the land for preserving wildlife migration routes, protecting water sources, and buffering infrastructure and development from storm events.

This review demonstrates that while the land protection programs sampled currently do not make acquisition decisions based on climate change considerations, many of the criteria and processes reviewed are sensitive to climate change impacts. One reason for this sensitivity is that criteria may be implicitly based on the assumption that future climate will resemble historical climate. For example, one of the criteria for protection that the sampled programs cited most frequently was “Contiguity/ buffer to protected land.” Providing adequate space for species to migrate and adapt to changing climate conditions is a key adaptive management goal. However, climate change information could be included to better assess locations of wildlife migration corridors under a range of possible climate scenarios.

Other frequently cited criteria included biodiversity, natural resources, wetlands, and water quality. These criteria attempt to limit anthropogenic stressors from occurring on land parcels with high biodiversity, rich natural resources, large areas of wetlands, and relevance to water quality. Protecting these lands from development increases or maintains the resiliency of the natural system. However, evaluating these criteria in the absence of climate change impact information may result in prioritizing land parcels based on transient indicators. For example, if a conservation program acquires a land parcel primarily because it contains a large number of wetlands acres without considering projected sea level rise, the value of that land may decrease in the future as wetlands retreat and migrate. This review also identified an important barrier to

adaptation planning efforts of land protection programs. Many of the programs were opportunistic and acquired land as it became available using a “bottom-up” approach. In some cases programs did not implement a long-term strategy for prioritizing land acquisition and applying criteria. Integrating adaptive planning into land protection programs will require interpreting prioritization criteria in the context of long-term conservation planning.

The programs reviewed in this study provide an illustrative cross-section of the decision-making process employed by state and local land protection programs. Of the programs we reviewed, only one mentioned climate change as a consideration, but the number of programs considering climate change impacts is likely to increase due to increased awareness at all levels of government.

Based on our limited review, state and local land protection agencies, as well as supporting state and federal agencies, interested in adding climate change to the considerations applied to parcel selection processes would benefit from the following steps.

**Develop decision-support tools for advisory committees.** Advisory committees are clearly a major aspect of land protection programs; they were present in 18 of 19 programs and several had multiple committees. Although there are cases in which elected officials overturn the recommendations of these advisory committees, their recommendations tend to be respected and ultimately implemented. Any efforts to support these committees in making decisions that are backed by science will enable incorporation of climate change considerations and will be easier to defend to the public and other stakeholders than idiosyncratic decisions or those based on personal knowledge.

**Promulgate different preservation models.** Some programs focused only on acquiring land, while others created grant programs for local jurisdictions or purchasing development rights. Jurisdictions without land preservation programs might be amenable to instituting them if they were aware of the myriad of effective options available. As awareness of climate change impacts grows, initiating land protection programs may also become more useful for jurisdictions that are trying to use land preservation for mitigation and adaptation purposes.

**Cooperate with elected officials.** In almost every case, legislatures make the final decisions regarding land to be preserved. The sophistication and information available to these bodies seemed to vary quite dramatically. Cooperation of land protection groups or science advisory groups with elected officials can be improved through some type of outreach program to emphasize the environmental, economic, and social benefits of land preservation; this type of outreach might help generate stronger support for land protection programs, particularly for their use in climate change mitigation and adaptation.

**Engage in strategic conservation.** This study found that many land protection programs rely on an opportunistic, fragmented approach to land preservation; this works to an extent, though a more long-term, strategic approach to land protection would better address many climate change impacts. For example, the Conservation Fund, a non-profit focused on land and water conservation offers a training course titled “Strategic Conservation Planning Using a Green Infrastructure Approach.”<sup>1</sup> Other sources also provide information related to green infrastructure and land protection.<sup>2</sup> By adopting a strategic approach to conservation, a system of prioritization will necessarily take precedent over existing opportunistic practices.

**Coordinate with land-use planning processes.** Land protection programs that are linked to local and regional planning processes will be more successful in meeting program goals. In the absence of strong land-use planning, land protection programs and land development occur opportunistically. When implemented in a coordinated fashion, communities can achieve both strategic land protection and strategic development. Several programs discussed here mentioned such a link in program goals, including programs 2000WI-01, 2004KS-01, and others. As more communities begin to incorporate climate change into their planning process and/or develop specific climate change adaptation plans, land protection program should take advantage of these additional opportunities to interface with the planning process.

**Develop prototype for evaluating and prioritizing land parcels for protection.** In conducting this study, we found that many programs in Step 3 listed quantitative or qualitative selection criteria with no specific means of using them to make decisions. Over half of the programs were initiated in response to citizen groups desiring land protection, often due to development on or near the parcel; this means that many of the programs are based primarily on opportunism. Providing a simple screening approach based on a few criteria may go a long way to prioritizing more valuable lands, particularly as part of a portfolio of strategies to mitigate and adapt to climate change. Alternatively, if the programs have advisory committees that are not making a good effort towards evaluating parcels, they might be receptive to some type of outreach about available data sources and criteria.

As jurisdictions learn more about possible climate change impacts and create mitigation and adaptation plans, it becomes more important to understand decision-making processes in order to provide effective climate change information. This review focuses on decision-making processes of land protection programs and identifies several areas in the process where decision makers can use climate change information. Incorporating such information will enable land

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<sup>1</sup> The website for The Conservation Fund is <http://www.greeninfrastructure.net>.

<sup>2</sup> Additional information is available at LandScope America’s website: <http://www.landscape.org>.

protection to be part of a portfolio of adaptation strategies that ameliorate impacts on water quality and wildlife. States and other jurisdictions are already taking steps to use land protection as part of their adaptation strategies (e.g., Maryland Commission on Climate Change, 2008), but require tools and more targeted information to incorporate into their decision-making processes.

### **5.1. LIMITATIONS AND NEXT STEPS**

While the literature on adaptation approaches has increased in recent years, incorporation and implementation of those principles into planning decisions, particularly land protection decisions, remains sparse, as our review suggests. Future research should build off the information provided here on acquisition practices in order to verify the feasibility of these approaches. For example, conducting surveys or interviews with the key contact persons for each land protection program and enlisting feedback on whether they are receptive to including climate change information and whether they might use the stated mechanisms in their decision-making process would be helpful in determining the adaptive potential of land protection programs. Additional research is needed to determine how land protection programs could be improved to address climate change impacts and specifically to assess which of the decision-making criteria are likely to help achieve adaptation goals and which are not.

In addition, this report only considers 19 land protection programs in detail. The analysis filtered out programs that were not approved by voters, programs that did not cite protecting water quality and/or wildlife as primary goals, and those programs that did not sufficiently specify selection criteria. This reduced the total number of programs under consideration from 1,632 to 19. While it was not possible to review all 1,632 programs, future efforts could improve upon this effort by including additional programs and examining those programs at a higher level of detail, particularly regarding zoning laws and planning tools. Furthermore, future efforts should consider programs adopted since 2004, the last election year included in this study.

### **5.2. ADDITIONAL RESOURCES ON LAND USE PLANNING AND ADAPTATION**

The following list of resources provides additional sources of information on the intersection between land use planning and adaptation. Given the rapidly evolving literature in this area, this list is not comprehensive.

The Heinz Center. 2007. *A Survey of Climate Change Adaptation Planning*.  
[http://www.heinzctr.org/publications/PDF/Adaptation\\_Report\\_October\\_10\\_2007.pdf](http://www.heinzctr.org/publications/PDF/Adaptation_Report_October_10_2007.pdf)

- This report serves as an introductory “road map” to adaptation planning resources for communities, particularly urban areas. The first section of the report points the

reader towards adaptation planning guidebooks and frameworks; the second section highlights adaptation planning efforts that are currently underway.

Snover, A. K., L. Whitely Binder, J. Lopez, E. Willmott, J. Kay, D. Howell, and J. Simmonds. 2007. *Preparing for Climate Change: A Guidebook for Local, Regional, and State Governments*. In association with and published by ICLEI – Local Governments for Sustainability, Oakland, CA. <http://ceses.washington.edu/cig/fpt/guidebook.shtml>.

- This guidebook is designed to help local, regional, and state decision-makers prepare for climate change in the following areas: public services, environmental quality, economic development, land use planning and zoning, fiscal responsibility and risk management, capital investments, and other areas of concern. The report provides guidance on issues such as evaluating climate change impacts to major sectors, building and maintaining support among stakeholders, and identifying major planning areas.

U.S. Government Accountability Office. 2009. Report to the Chairman, Select Committee on Energy Independence and Global Warming, House of Representatives. *Climate Change Adaptation: Strategic Federal Planning Could Help Government Officials Make More Informed Decisions*. <http://www.gao.gov/new.items/d10113.pdf>.

- In this report, the GAO presents its findings on the following topics: actions that federal, state, local, and international authorities are taking to adapt to climate change, the challenges that decision-makers face in their efforts to adapt, and actions that Congress and federal agencies could take to help address these challenges.

Increasingly, states are drafting adaptation plans that may provide useful information to land protection programs and also allow for increased interface with planning processes that consider climate change. Example state adaptation plans include:

- **King County, WA** (<http://www.kingcounty.gov/environment/climate.aspx>);
- **New York City** (<http://www.nyas.org/Publications/Annals/Detail.aspx?cid=ab9d0f9f-1cb1-4f21-b0c8-7607daa5dfcc>); and
- **Massachusetts** (<http://www.nyas.org/Publications/Annals/Detail.aspx?cid=ab9d0f9f-1cb1-4f21-b0c8-7607daa5dfcc>).

## 6. REFERENCES

- Climate Change Science Program (CCSP). (2008) Preliminary review of adaptation options for climate-sensitive ecosystems and resources. In: Julius, SH; West, JM; eds. A Report by the U.S. Climate Change Science Program and the Subcommittee on Global Change Research. U.S. Environmental Protection Agency, Washington, DC: 873 pp.
- Hannah, L. (2008) Protected areas and climate change. In: Ostfeld, RS; Schlesinger, WH; eds. Year in Ecology and Conservation Biology 2008, 1134, New York, NY: New York Academy of Sciences; pp. 201–212.
- Heller, NE; Zavaleta, ES. (2009) Biodiversity management in the face of climate change: A review of 22 years of recommendations. *Biol Conserv* 142(1):14–32.
- Kline, J. (2006) Public demand for preserving local open space. *Soc Nat Resour* 19(7):645–659.
- Maryland Commission on Climate Change. (2008) Climate Action Plan: Interim Report to the Governor and the Maryland General Assembly. Maryland Department of the Environment. 110 pp.
- Pyke, CR. (2004) Habitat loss confounds climate change impacts. *Frontiers Ecol Environ* 2(4):178–182.
- Pyke, CR; Andelman, SJ. (2007) Land use and land cover tools for climate adaptation. *Climatic Change* 80(3-4):239–251.
- Steelman, TA; Hess, GR. (2009) Effective Protection of Open Space: Does Planning Matter? *Environ Manage* 44(1):93–104.
- Sussman, F; Freed, R. (2008) Adapting to Climate Change: A Business Approach. Pew Center on Global Climate Change; 35 pp.
- U.S. EPA (Environmental Protection Agency). (2009) Land-use scenarios: National-scale housing-density scenarios consistent with climate change storylines (Final Report). Washington, DC; EPA/600/R-08/076F.
- Vedlitz, A; Alston, LT; Laska, SB; Gramling, RB; Harwell, MA; Worthen, HD. (2007) Project Final Report: Use of Science in Gulf of Mexico Decision Making Involving Climate Change. Project funded by the U.S. Environmental Protection Agency under Cooperative Agreement No. R-83023601-0.

## APPENDIX A: CASE STUDY ABSTRACTS

One-page abstracts of each of the 19 programs in Tier 4 are presented on the following pages. In 2009, all 19 programs were contacted for updates. Those write-ups that were updated in 2009 are marked with an asterisk (\*).

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## 1996CT-01 South Windsor Open Space Program\*

<b>Jurisdiction Name, State:</b>	Town of South Windsor, Connecticut
<b>Year Ballot Measure Passed:</b>	1996
<b>Program Focus:</b>	Watershed Protection
<b>Evaluation Criteria:</b>	Quantitative
<b>Ballot Measure Description:</b>	Bond for acquisition of open space land
<b>Prioritization Type:</b>	Bottom-up; the Open Space Task Force provides the Town Council with recommendations on the purchase of open space.

### ABSTRACT

**Program Goals.** South Windsor hopes to maintain its character and charm as the town transitions into a fully suburban community. It plans to achieve this goal through the acquisition or preservation of open spaces that provide visual “resting places” for passing motorists, preserve natural resources (including agricultural land), and provide opportunities for the public to enjoy outdoor activities.

**Selection Process.** Land protection in South Windsor involves either coordination with developers at the time of new development or acquisition of specific pieces of land. Priority properties were initially identified using criteria such as location, proximity (to other protected lands, trails, or wildlife corridors), natural or environmental features, archaeological value, and environmental sensitivity. The Town sends out letters each year to the owners of these priority properties asking if they are interested in selling. Willing sellers of non-priority properties can also contact the Town. The Open Space Task Force, composed of Town staff and citizens, applies a rating system to each property and prepares recommendations for the Town Council. The rating system looks at factors such as proposed purpose, location, and property size. The Task Force and Town Council rely on a combination of local knowledge and existing information as a basis for decision making. The Open Space Master Plan includes maps of wetlands, farmland, steep slopes, environmentally-sensitive lands, and town-owned land, which are also consulted during the decision-making process. The Town Council is the decision-making authority regarding open space preservation, but serves primarily as an oversight body.

## 1996NY-01 New York Clean Water/Clean Air Bond Act

<b>Jurisdiction Name, State:</b>	New York State
<b>Year Ballot Measure Passed:</b>	1996
<b>Program Focus:</b>	Watershed and Wildlife Protection
<b>Evaluation Criteria:</b>	Quantitative
<b>Ballot Measure Description:</b>	Proposal 1, The Clean Water/Clean Air Bond Act of 1996, Bond for Preservation of State's Natural Resources (Source: Land Vote). \$1.75 billion in general obligation bonds were passed for the preservation, enhancement, restoration, and improvement of the State's environment and natural resources (Source: New York City Independent Budget Office). \$150 million of the bond money was allocated for State land acquisition projects identified in the New York Open Space Plan (Source: New York Open Space Conservation Plan).
<b>Prioritization Type:</b>	Hybrid; the program combines priority maps and proposals using multiple stakeholder committees to evaluate proposals. The 1998 Open Space Plan states that "every effort has been made to construct the plan from the 'bottom up'."

### ABSTRACT

**Program Goals.** The land protection portion of the bond measure is guided by the New York Open Space Conservation Plan, which include the following goals: the protection of water quality, scenic and cultural resources, and habitat; the preservation of open space for air quality; and the provision of sites for outdoor recreation, education, and research.

**Selection Process.** Anyone can suggest a parcel for consideration. State staff and nine Regional Advisory Committees (RAC's; including members appointed by State officials and other appointed by the communities they represent) screen projects to determine if they: (1) are in a priority project area (as identified in the New York Open Space plan); (2) fall into one of the identified land protection categories; (3) meet minimum criteria for that category; (4) meet a critical need; (5) score greater than 50 when evaluated with established resource value screens; and (6) pass a qualitative review screen. These screens are driven by both data and subjective analysis. Once State staff know how much money is available in the annual budget, the list of eligible projects is further refined based on: (1) the merit of the project; (2) public support for it; and (3) the feasibility of purchasing it within the fiscal year. RACs provide final recommendations to the New York Department of Environmental Conservation for executive decision.

## 2000FL-01 Safe Parks and Land Preservation Bond Program

<b>Jurisdiction Name, State:</b>	Broward County, Florida
<b>Year Ballot Measure Passed:</b>	2000
<b>Program Focus:</b>	Watershed and Wildlife Protection
<b>Evaluation Criteria:</b>	Qualitative
<b>Ballot Measure Description:</b>	Bond issue for safe parks, clean water, and natural land preservation.
<b>Prioritization System:</b>	Bottom-up; advisory committee makes recommendations on parcels of land submitted for consideration by staff, municipalities, or residents of the county.

### ABSTRACT

**Program Goals.** The goal of the Safe Parks and Land Preservation Bond Program is to support a comprehensive plan to improve and expand the conservation and recreation assets of Broward County and its municipalities. By doing this, Broward County seeks to preserve and reclaim approximately 1,425 acres of conservation land, green space, and open space in the county. In addition, the bond seeks to repair and enhance the aging park system to provide safe places for children to play and parks for everyone's enjoyment.

**Selection Process.** Any person of the county can recommend a potential acquisition parcel to the County Commissioners, the Land Preservation Advisory Board (LPAB), or the Land Preservation Section (LPS). The LPS reviews the proposed projects and recommends their designation within one of three land categories (Conservation Land, Green Space, or Open Space). Independent ecological consultants visit and complete an assessment form for each site under consideration as a Conservation Land or Green Space site. Staff conducts reviews of selected sites to confirm the consultants were correctly interpreting data based upon the criteria created. Sites recommended by the LPAB are brought to the County Commission to allocate funding and to authorize County staff to begin the acquisition process. The Real Property Section contacts the landowner, verifies their willingness to sell, performs preliminary title work, and obtains and reviews appraisals and surveys on the property. The LPS contacts the relevant municipality and creates a land acquisition and management agreement for each site that the municipality is willing to manage as a city park. Sites that are located within a municipality but are ecologically sensitive or are an addition or buffer to existing County-owned environmentally sensitive lands are to be managed by the Broward County Parks and Recreation Division. The results of the site acquisition process are communicated to the LPAB. If a purchase price

agreement is reached for the proposed site, a final recommendation made by the LPAB is brought before the County Commission for final approval.

## 2000FL-02 Volusia Forever\*

<b>Jurisdiction Name, State:</b>	Volusia County, Florida
<b>Year Ballot Measure Passed:</b>	2000
<b>Program Focus:</b>	Watershed and Wildlife Protection
<b>Evaluation Criteria:</b>	Qualitative
<b>Ballot Measure Description:</b>	Ad valorem tax with bonding authority for acquisition and improvement of environmentally sensitive, water resource protection, and outdoor recreation lands.
<b>Prioritization System:</b>	Bottom-up; advisory committee makes recommendations on parcels of land submitted for consideration through applications from the public.

### ABSTRACT

**Program Goals.** The goal of Volusia Forever is to finance the acquisition and improvement of environmentally sensitive lands, water resource protection, and outdoor recreation lands, and to manage the lands as conservation stewards. By doing this, Volusia Forever seeks to conserve, maintain and restore the natural environment, provide the public with access to these lands, and ensure that the natural resource values of such lands are protected.

**Selection Process.** The categories and criteria used when evaluating properties for potential acquisition are specified by County Resolution. The categories are proximity and connectivity, furtherance of acquisition efforts, water resources, environmentally sensitive lands, recreation/public use, management and enhancement. Specific criteria are itemized under each category and each property is evaluated on a Yes/No basis. In order to be eligible, a property should receive a specified minimum number of affirmative answers to the primary criteria. Once a property application is submitted, staff does a desk review to evaluate the property using the criteria cited above. The application, along with the staff's evaluation, is presented to the Volusia Forever Acquisition Committee (VFAC) for determining if the property is eligible for the program. If the property is deemed eligible, staff will visit the site and prepare an analytical report that is presented to the VFAC at the next bi-annual ranking meeting. These documents are all public record and are provided to the property owner. Properties are recommended for placement within either Group A or Group B of the Volusia Forever list. Group A is comprised of the active acquisition properties. Properties within Group B are not the preferred candidates for acquisition. The VFAC uses site visit data, public comment, maps, GIS, photos, local knowledge, and availability of matching funds during consideration for list placement. Applications for properties that fall within certain priority areas are automatically placed in

group A for acquisition without further consideration. The VFAC lists are presented to the County Council who has final approval of lists and property purchases.

## 2000FL-04 Alachua County Forever\*

<b>Jurisdiction Name, State:</b>	Alachua County, Florida
<b>Year Ballot Measure Passed:</b>	2000
<b>Program Focus:</b>	Watershed and Wildlife Protection
<b>Evaluation Criteria:</b>	Quantitative
<b>Ballot Measure Description:</b>	Bond issue to acquire, improve, and manage environmentally significant lands.
<b>Prioritization System:</b>	Bottom-up; advisory committee makes recommendations on parcels of land submitted for consideration by the public.

### ABSTRACT

**Program Goals.** The goal of Alachua County Forever is to acquire and protect environmentally significant lands and to protect water resources, wildlife habitat, and natural areas suitable for resource-based recreation.

**Selection Process.** Landowners or other members of the county community submit parcel nominations to Alachua County Forever. Program staff evaluates all nominated parcels using prioritization criteria such as protection of water resources, protection of natural communities and landscapes, protection of plant and animal species, and social/human values. The evaluation is a quantitative ranking process, with each parcel receiving a numeric score between 1 and 5, based on the Land Conservation Decision Matrix (LCDM) and reflecting how well the project addresses each criterion. The LCDM relies on weighted criteria. Environmental Values account for approximately 2/3 of the total score. All other criteria make up the other 1/3 of the score. This score is presented to the Land Conservation Board (LCB). Final scores range from a minimum of 2 to a maximum of 10. Once a property has been evaluated with the LCDM scoring matrix and received a positive recommendation from the LCB, it may proceed to the County Commission for final acquisition approval.

## 2000MI-01 Natural Areas Preservation Program\*

<b>Jurisdiction Name, State:</b>	Washtenaw County, Michigan
<b>Year Ballot Measure Passed:</b>	2000
<b>Program Focus:</b>	Wildlife and Watershed Protection
<b>Evaluation Criteria:</b>	Qualitative
<b>Ballot Measure Description:</b>	10-year, .25 mill., property tax increase for acquisition of environmentally valuable areas and wildlife habitat, water quality preservation, and recreation
<b>Prioritization System:</b>	Bottom-up; advisory committee makes recommendations on parcels of land submitted for consideration.

### ABSTRACT

**Program Goals.** To preserve and protect from development the natural ecological diversity and heritage of Washtenaw County, complement the existing network of publicly and privately protected lands, and maximize quality of life.

**Selection Process.** Property owners submit applications to the Washtenaw County Parks and Recreation Commission (WCPARC) that administers the program. Applications are reviewed by WCPARC staff, who also gather background information and visit the nominated properties. (Although it has not yet been necessary, WCPARC can initiate discussions about potential properties if not enough applications are submitted by landowners.) WCPARC gathers information in four main categories: public water resources; special animals, plants and plant communities; recreational and scientific values; and proximity to protected land. The information gathered by WCPARC is provided to the Natural Areas Technical Advisory Committee (NATAC) who review and visit each nominated property. Then, NATAC recommends to WCPARC whether the parcel should be preserved and how much the County should pay to acquire the property. The recommendation is also forwarded to the Planning Advisory Board and the local government who can provide comments. WCPARC qualitatively rank the nominated properties and select the highest ranking properties to pursue for purchase. At this stage, promising parcels are appraised and subject to a Phase 1 environmental assessment. The final step in the process is negotiating a price for purchasing the property and a decision by WCPARC on whether to purchase the land for that price.

## 2000MI-02 Meridian Charter Township Land Preservation Program\*

<b>Jurisdiction Name, State:</b>	Meridian Township, Michigan
<b>Year Ballot Measure Passed:</b>	2000
<b>Program Focus:</b>	Wildlife, Ecosystem and Watershed Protection
<b>Evaluation Criteria:</b>	Quantitative
<b>Ballot Measure Description:</b>	10-year, .75 mill., property tax increase for open space acquisition, PDR, habitat preservation and recreation
<b>Prioritization System:</b>	Hybrid; advisory board first conducted an inventory of open space using remote sensing and GIS and now makes recommendations on parcels of land submitted for consideration.

### ABSTRACT

**Program Goals.** To protect, preserve and enhance the township's open space and special natural features while also maintaining a maximum degree of biodiversity and developing, managing, and maintaining ecological infrastructure through management of protected areas. Meridian also aims to leave an important natural legacy for future generations through its pursuit of a harmonious balance between preservation and development.

**Selection Process.** Landowners submit applications to Meridian Township's Land Preservation Advisory Board that reviews the applications and compares them to a map of open space that was developed at the beginning of the program. If eligibility requirements are met, the advisory board and Environmental Commission conduct an ecological review/screening. The land screening is the main evaluation process and the criteria evaluated include ecological value, natural or functional value, parcel size, surrounding land use, environmental quality, and aesthetic value. Each of these categories is worth a specific number of points that are assigned by the members of the advisory board and environmental commission that conduct the land screening. In addition to the land screening, the advisory board may also consult the following data sources: State of Michigan Natural Features Inventory, State of Michigan maps showing "most likely" areas to find endangered species, Township Greenspace Plan, and census projections. Results of the land screening and other data collection are evaluated by the advisory board and a decision is made on whether an appraisal of the land is desired. The appraisal is reviewed by the advisory board and a decision is made on whether to present a buy-sell agreement to the landowner and have an environmental site assessment conducted. Upon favorable negotiations with the landowner, a request to purchase the property is forwarded to the Township Board for final approval.

# 2000TX-01 Edwards Aquifer Land Acquisition and Park Expansion Program

**Jurisdiction Name, State:** San Antonio, Texas  
**Year Ballot Measure Passed:** 2000  
**Program Focus:** Drinking Water and Watershed Protection  
**Evaluation Criteria:** Quantitative  
**Ballot Measure Description:** 4-year, 65 million, 1/8-cent sales tax increase for drinking water and watershed protection  
**Prioritization System:** Top-down; lands rated in the top three tiers by the GIS model were given to the land agents, who identify potential lands for acquisition, to pursue. If the Conservation Advisory Board gives a land purchase a favorable rating, the property acquisition was forwarded to the Planning Commission and City Council for review and approval.

## ABSTRACT

**Program Goals.** The program seeks to locate and purchase undeveloped land in the recharge and contributing zones of the Edwards Aquifer as a means of protecting the Aquifer’s water quality and quantity.

**Selection Process.** The Scientific Evaluation Team (SET) input the entire region into a GIS model that assigned a value based on a variety of criteria to every square meter of the region. The criteria included in the model aimed to prioritize characteristics of areas most likely to contain recharge features and geological land features which contribute to Edwards Aquifer. The Conservation Advisory Board (CAB) reviewed the SET’s spatial model, and lands rated in the top three tiers by the GIS model were given to the land acquisition team to pursue. The Land Acquisition Team was composed of non-profit land conservation trusts (The Bexar Land Trust, The Nature Conservancy, and the Trust for Public Land), the City Project Manager, and San Antonio River Authority (SARA) staff. Potential land purchases were approved by the City Project manager and then presented to the CAB by SARA staff, including information on quality of the land and the availability of the tracts for acquisition based on CAB directives. While the land acquisition team negotiated land purchases with the owners, the CAB would evaluate the lands. If the CAB gave a land purchase a favorable rating, the property acquisition was forwarded to the Planning Commission and then City Council for review and approval.

## 2000WI-01 Sheboygan County Stewardship Fund Grant Program

<b>Jurisdiction Name, State:</b>	Sheboygan County, Wisconsin
<b>Year Ballot Measure Passed:</b>	2000
<b>Program Focus:</b>	Wildlife and Wetlands Protection
<b>Evaluation Criteria:</b>	Quantitative
<b>Ballot Measure Description:</b>	Advisory measure to establish fund to protect watersheds
<b>Prioritization System:</b>	Bottom-up; advisory committee makes recommendations on parcels of land submitted as grant proposals by local governments and non-profits.

### ABSTRACT

**Program Goals.** The goals of the Sheboygan County Stewardship Fund Grant Program are to preserve the natural resources of the County while promoting wise growth and economic development and minimizing the loss of local property tax revenues. The program also aims to coordinate County stewardship activities so they are in harmony with other conservation and recreation activities already occurring or planned for the County.

**Selection Process.** Any town, village, city, county agency, or other government agency completing projects within Sheboygan County or any non-profit group may apply for funds through this program. Projects are accepted in four categories: project development, purchase of development rights, land acquisition, and restoration of wetlands and natural habitat. County planning department staff reviews applications first, using a point system that includes the following criteria: natural resources, recreational opportunities, significant features, development potential and more. Their evaluations and scores are forwarded to the Smart Growth-Stewardship Technical and Advisory Committee (SGSTAC). The SGSTAC then reviews the applications and discussions are held to debate point distributions and evaluations of the applications. The SGSTAC then makes a final analysis and provides a final score for each application. These final analyses and scores are provided to the Sheboygan County Resources Committee, which completes a thorough review of the grant applications and recommendations and has full discussions on the funding of the projects. The five-person committee holds a vote and measures pass as long as they have a 3 to 2 vote.

There is also a pre-evaluation period during which agencies/non-profits can submit their grant applications early and get feedback including a “draft” score and a list of the weaknesses in their application. The organization can then revise their application and re-submit it during the application period after making revisions to improve their chances of getting funded.

## 2004AZ-01 Sonoran Desert Open Space and Habitat Protection\*

<b>Jurisdiction Name, State:</b>	Pima County, Arizona
<b>Year Ballot Measure Passed:</b>	2004
<b>Program Focus:</b>	Watershed Protection and Wildlife Protection
<b>Evaluation Criteria:</b>	Qualitative
<b>Ballot Measure Description:</b>	Bond for open space, habitat protection, and forests
<b>Prioritization Type:</b>	Hybrid; the Conservation Acquisition Commission (a citizen advisory committee) reviews and recommends to the Pima County Board of Supervisors properties already identified in the bond measure.

### ABSTRACT

**Program Goals.** Program goals include the acquisition of land to protect wildlife habitat, scenic landscapes, riparian areas, and water quality, and to preserve lands in the vicinity of Davis-Monthan Open Space. The program recognizes four types of properties, and the specific goals for each property depend on the property type. The Community Open Space Parcels are more focused on scenic landscapes and recreation and may not meet the goals to protect wildlife habitat, riparian areas, and water quality. The Habitat Protection Priorities were chosen solely based on their ability to achieve biologic goals. The Urban Space Requested by Jurisdictions may meet a mix of the goals, depending on why a jurisdiction chose to include it on their list. The Davis-Monthan Open Space is intended to restrict public access to land there falls in the approach and departure corridors from the Davis-Monthan Air Force Base.

**Selection Process.** This bond measure provides funding for four categories of properties (with monetary allocations in parentheses): Community Open Space Parcels (\$37.3 million), Urban Open Space Requested by Jurisdictions (\$15 million), Habitat Protection Priorities (\$112 million), and Davis-Monthan Open Space (\$10 million). After the bond measure was approved by voters, the Conservation Acquisition Commission asked county staff to identify habitat-protection priority properties that are greater than 2,500 acres in single ownership, contain important riparian areas, and have critical landscape connections in order to further focus acquisition resources. However, the selection process for each property type varied according to the goals associated with that property type. Projections of future development were also consulted and evaluated to determine how set asides would impact biological factors and avoid negative impacts. Properties in excess of the available funding were listed in the bond measure with the understanding that some properties may be acquired through other sources of funding or at no cost along the way. The Conservation Acquisition Commission reviews and recommends to the Pima County Board of Supervisors all acquisitions of property or rights in property.

## 2004CA-02 Clean Water, Ocean, River, Beach, Bay Storm Water Cleanup Measure

<b>Jurisdiction Name, State:</b>	Los Angeles, California
<b>Year Ballot Measure Passed:</b>	2004
<b>Program Focus:</b>	Watershed Protection
<b>Evaluation Criteria:</b>	Quantitative
<b>Ballot Measure Description:</b>	Proposition O, Clean water bond to reduce total maximum daily load (TMDL), including stormwater retention facilities, parks, and greenbelts.
<b>Prioritization Type:</b>	Hybrid, non-profit organizations, and community groups and City departments can propose parcels. The City of Los Angeles determines how funding is allocated with oversight from two citizen committees.

### ABSTRACT

**Program Goals.** This measure is intended to protect public health by cleaning up polluted storm water and reducing dangerous bacteria in the City's rivers, lakes, beaches, bay, and ocean. It will also institute improvements that protect ground water quality, provide flood control, and increase water conservation, habitat protection, and open space. The primary program goal is to meet federal water quality standards; land protection is only one component of the program.

**Selection Process.** Parcel selection is a stakeholder-driven process, involving the City Council, environmental activists, non-profit organizations, and neighborhood councils. Non-profit organizations and community groups can propose parcels as well as City departments. There is a semi-annual six-month proposal and decision-making process. Proposals are submitted to the City. The Mayor, City Council, 44 City departments, and key stakeholders are all involved in the development of the master schedule, funding allocations, and management decisions. City departments and other key stakeholders in the watershed gather and evaluate technical information. The mayor appoints members to a citizens' oversight advisory committee and an administrative oversight committee. Project review committees (including City staff and the two oversight committees) evaluate projects based on three weighted criteria (and several sub-criteria): water quality improvements; achieves multiple objectives; and project feasibility/readiness/finance. One of the key sub-criteria for parcel selection is whether or not the project addresses a pollution problem identified by the adopted TMDL. The Mayor and City Council ultimately adopt project funding.

## 2004CO-01 Open Space Sales Tax Program

<b>Jurisdiction Name, State:</b>	Adams County, Colorado
<b>Year Ballot Measure Passed:</b>	2004
<b>Program Focus:</b>	Watershed and Wildlife Protection
<b>Evaluation Criteria:</b>	Qualitative
<b>Ballot Measure Description:</b>	20-year renewal of current sales tax rate (which went into effect in 2000) and increase of rate from .20% to .25% for open space.
<b>Prioritization Type:</b>	Bottom-up; advisory committee makes recommendations on grant applications submitted for consideration.

### ABSTRACT

**Program Goals.** The program's goals include: preservation of land that protects water quality; protection of wildlife areas, wetlands, rivers, and streams; preservation of farmland; protection of open space to limit sprawl; and creation, improvement, and maintenance of parks, trails, and recreation facilities.

**Selection Process.** The County initially developed two plans to establish areas of priority for preservation at the outset of the program. No formal criteria were used to evaluate areas established as priorities in those plans; plan development involved a qualitative discussion-based process. Grant applications are accepted twice yearly; they must be from agencies that collect taxes or have one of those agencies as a sponsor to ensure that they are for the public good. Applicants must supply budget information, a timeline, what leverage the project will provide, whether or not the project crosses city boundaries, and a land appraisal. The Open Space Advisory Board (OSAB) meets quarterly to review grant applications and recommends projects for funding to the Board of County Commissioners (BOCC). The OSAB evaluates the applications based on criteria such as: partnerships; community support or opposition; long-term maintenance plan and funding for maintenance in place; connectivity; relevance to community goals; and urgency. The BOCC makes the final funding decision.

## 2004FL-01 Osceola County Land Protection Measure

**Jurisdiction Name, State:** Osceola County, Florida  
**Year Ballot Measure Passed:** 2004  
**Program Focus:** Watershed and Wildlife Protection  
**Evaluation Criteria:** Quantitative  
**Ballot Measure Description:** Ad valorem tax with up to 60 million dollars in bonding authority for acquisition and manage of environmentally significant lands for the protection of water resources, wildlife habitat, and public green space for passive recreation.  
**Prioritization System:** Bottom up, an advisory committee makes recommendations on parcels submitted for consideration by residents or landowners of the county.

### ABSTRACT

**Program Goals.** The goal of the Osceola County Land Protection Measure is to acquire and manage environmentally significant lands and green space for the protection of wetlands and surface water resources, wildlife habitat, and public green space for passive recreation. Osceola County seeks to additionally protect present conservation lands and restore vulnerable habitats, while implementing the objectives and policies of the Comprehensive Management Plan.

**Selection Process.** Parcels are nominated for consideration by landowners within the County, or by a citizen nominating a parcel with the landowner's permission. Parcels are given an initial evaluation by the program coordinator (using information from the application) to determine whether it meets a minimum of 2 of 5 screening criteria. Parcels that pass this initial screening are then presented to the Land Conservation Advisory Board (LCAB) for evaluation and ranking using a quantitative scoring matrix. The LCAB uses a variety of data to perform the evaluation, including application information as well as data from a site visit and data prepared by county staff. After all parcels have been ranked, the LCAB creates an Acquisition List, consisting of two specific lists: The Target Protection List (Target List) and the Active Acquisition List (Active List). The Active List represents parcels of highest interest to the LCAB, and which are immediately ready for acquisition. Target List parcels are also parcels of high interest, yet require initial restoration or improvement, or matching funds for acquisition. The lists are presented to the County Commissioners for final approval prior to any attempts at acquisition.

## **2004KS-01 Turning Rain into Recreation: Lenexa’s Approach to Stormwater Management\***

<b>Jurisdiction Name, State:</b>	Lenexa, Kansas
<b>Year Ballot Measure Passed:</b>	2004
<b>Program Focus:</b>	Watershed Protection
<b>Evaluation Criteria:</b>	Quantitative
<b>Ballot Measure Description:</b>	5-year renewal, 1/8-cent sales tax for “Rain to Recreation” program
<b>Prioritization Type:</b>	Top-down; the City determines where land will be set aside to improve the storm water system.

### **ABSTRACT**

**Program Goals.** Program goals include: reduction in flooding; protection of water quality and natural habitat; and provision of recreational and educational opportunities. The city seeks to achieve this goal through a proactive, integrated, watershed-based approach to storm water management. Land protection is one part of this program.

**Selection Process.** The City commissioned a stream inventory that was completed by a team of consultants in December 2001. The team did a rapid assessment that looked at streams in their entirety using field data and a variety of criteria to classify them on a scale from poor to good. Criteria ranged from “the ecological and hydraulic connectivity and function of the stream” to “aesthetic and recreational value of the stream” to “the impact of stream management on surrounding property values.” Stream setback distances and recommendations about restorative or protective actions were based on a matrix of stream type and stream order. Everything identified in the stream asset inventory (about 1,500 acres of riparian areas) has been protected by a Stream Setback Ordinance, which also encourages dedications of stream corridors and greenways to the City. Additionally, the City adopted a Transfer of Development Rights Ordinance in November 2002, which set up three incentives for dedications to the city: (1) relief of \$7,500/acre excise tax; (2) relief of the setback requirement for the residential side of a development; and (3) relief of previous density requirement for lot sizes. The City Department of Public Works manages the program. The City Council makes the ultimate decision about parcels voluntarily dedicated to the city, upon recommendation of the Public Works Director.

## 2004MI-01 Scio Township Land Preservation Commission

<b>Jurisdiction Name, State:</b>	Scio Township, Michigan
<b>Year Ballot Measure Passed:</b>	2004
<b>Program Focus:</b>	Wildlife and Wetlands Protection
<b>Evaluation Criteria:</b>	Quantitative
<b>Ballot Measure Description:</b>	10-year, .50 mill., property tax for the preservation of farmland, open space, and habitat
<b>Prioritization System:</b>	Bottom-up; landowners submit applications and the land preservation commission evaluates applications based on a set of criteria.

### ABSTRACT

**Program Goals.** The goal of the Scio Township Land Preservation Commission is to preserve working agricultural land; natural areas; and open space from encroaching development.

**Selection Process.** The Land Preservation Commission sends letters to landowners that own large parcels, inviting them to submit applications. The Commission reviews the applications and uses additional information about the properties to evaluate the applications and land parcels based on the evaluation criteria. This program aims to protect natural areas as well as agricultural land and the evaluation criteria are slightly different based on the type of land. In general, the evaluation criteria include Landmark trees, rare species, habitats, wetlands, soils quality, parcel size, groundwater recharge, water frontage, etc. The Commission then selects the applications that meet their criteria and obtains the signature of approval from the landowner to show their interest in selling the development rights. The Commission then presents their findings to the Township Board for final approval. The Commission may submit a request to the state for matching funds to help purchase development rights on the lands selected before submitting their final recommendation to the Township Board.

## 2004NC-01 Wake County Open Space\*

<b>Jurisdiction Name, State:</b>	Wake County, North Carolina
<b>Year Ballot Measure Passed:</b>	2004
<b>Program Focus:</b>	Watershed and Wildlife Protection
<b>Evaluation Criteria:</b>	Quantitative
<b>Ballot Measure Description:</b>	Bond for open space, recreation, and for the protection of water quality and wildlife habitats
<b>Prioritization Type:</b>	Hybrid; most acquisitions originate from plans and maps developed by County staff or Open Space Advisory Committee members (a citizen group), but the public is also welcome to suggest a property at any time.

### ABSTRACT

**Program Goals.** The Wake County Open Space Program is focused on preserving land within four critical watersheds (Falls and Jordan Lakes, Swift Creek, and Little River), 40 miles of stream corridors within these watersheds, and the Mark's Creek area in eastern Wake County. Open space is prioritized to fulfill multiple objectives, including: (1) floodplain management, (2) wildlife habitat, (3) water quality, (4) recreation access, (5) environmental and cultural education, (6) personal fitness, (7) alternative transportation, and (8) recreational resources.

**Selection Process.** There are two avenues for acquiring parcels: (1) the Partnership Program, which provides 50 cents on the dollar for any partner interested in acquiring a parcel; and (2) the Preservation Program, through which the County buys 300 foot parcels on either side of 8 stream corridors identified in a watershed analysis. The Open Space Advisory Committee (OSAC), an eight-member citizen group appointed by the County Board of Commissioners, identifies types of open spaces to be included in the program, develops prioritization criteria, and identifies options for acquisition and conservation of parcels. Parcels over 50 acres or within 30 feet of a priority area (as defined in the countywide Comprehensive Open Space Plan) are evaluated initially against technical criteria for 81 sub-watersheds to determine existing water quality conditions and potential for preservation and restoration. Data from the planning department is then used to identify development pressures. The final step of the selection process is to identify available acquisition opportunities and potential partners and prioritize among the highest ranked projects using 15 qualitative criteria that are subjectively weighted. A potential acquisition undergoes several rigorous reviews by internal staff, the OSAC, the Land Acquisition Review Commission, and, finally, the elected Board of Commissioners.

## 2004NC-02 Guilford County Open Space\*

<b>Jurisdiction Name, State:</b>	Guilford County, North Carolina
<b>Year Ballot Measure Passed:</b>	2004
<b>Program Focus:</b>	Watershed and Wildlife Protection
<b>Evaluation Criteria:</b>	Quantitative
<b>Ballot Measure Description:</b>	Bond for parks, greenways, watershed protection, and open space
<b>Prioritization Type:</b>	Hybrid; parks and recreation projects were determined <i>before</i> the bond, while the open space program relies on nominations and recommendations of a citizen committee.

### ABSTRACT

**Program Goals.** The Guilford County Open Space Program seeks to identify suitable lands for acquisition and preservation and to provide public education about land conservation. The \$20 million 2004 bond measure will provide funding for the protection of natural areas as well as specific parks projects and greenways.

**Selection Process.** Parcels can be selected through two routes: (1) a nomination process that requires submission of an application; and (2) an active selection process that pursues acquisition in nine targeted areas. Nominated parcels are evaluated by the Open Space Subcommittee based on their environmental, social, and cultural importance, recreational and farmland preservation potential, urgency, and cost. The Open Space Subcommittee compiled an initial inventory of existing park land and open spaces through the use of tax records, the watershed acquisition database, and parks and recreation records. They then selected the targeted areas based largely on scientific criteria (e.g., groundwater recharge areas, buffers for drinking water supply lakes and streams, sites providing significant plant or wildlife habitat) and some non-technical criteria (e.g., sites of geologic or historic importance, suitable properties adjacent to existing parks and open space lands). The Open Space Subcommittee works with the County staff person to evaluate and recommend potential land acquisitions. They look at whether or not there are willing sellers and whether or not the project meets the established environmental and biological criteria, and to make sure that the parcel fits in with the existing plans. The Subcommittee and Staff person use maps, surveys, and appraisals to analyze the property, and provide recommendations to the Parks & Recreation Commission. The Parks & Recreation Commission looks at the cost and other criteria of interest to them and then provides recommendations to the County Commissioners (elected officials).

## 2004NY-01 Nassau Open Space, Clean Water Environmental Program

<b>Jurisdiction Name, State:</b>	Nassau County, New York
<b>Year Ballot Measure Passed:</b>	2004
<b>Program Focus:</b>	Watershed Protection
<b>Evaluation Criteria:</b>	Qualitative
<b>Ballot Measure Description:</b>	Bond for acquisition of open space and parkland, parkland improvement, storm water quality improvement, and brownfield remediation.
<b>Prioritization Type:</b>	Bottom-up; citizen open space advisory committee makes recommendations on nominated projects.

### ABSTRACT

**Program Goals.** The Open Space, Clean Water Environmental Program was established to protect Nassau County's drinking water, preserve open space and remaining farmland, protect bays and harbors, and enhance, as well as add new parks and recreational facilities. It provides funding for projects in four areas: (1) open space and parkland acquisition, (2) parkland improvement, (3) storm water quality improvement, and (4) brownfield remediation.

**Selection Process.** Anyone can nominate a property or project for funding, including private citizens, land preservation, environmental and civic organizations, and public officials. The nomination form includes a description of the property or project, reasons for recommendation, and whether or not supplemental funding is available. The Open Space Advisory Committee (OSAC) evaluates nominees qualitatively using separate criteria for each of the four major funding areas and some criteria that are shared (e.g., supplemental funding source, area of benefit, maintenance responsibility, consistency with plans and policies, etc.). All projects are evaluated in terms of their ability to get results quickly, the cost effectiveness of the projects, and their general feasibility. The OSAC visits all of the plots before recommending them to the County Executive. The County Executive submits recommendations to the planning commission and the Open Space and Parks Advisory Committee (a citizen committee with some overlapping members from the OSAC), and the 19-member County legislature makes the ultimate funding decisions.

## 2004NY-02 Orange County Open Space Program\*

<b>Jurisdiction Name, State:</b>	Orange County, New York
<b>Year Ballot Measure Passed:</b>	2004
<b>Program Focus:</b>	Watershed and Wildlife Protection
<b>Evaluation Criteria:</b>	Quantitative
<b>Ballot Measure Description:</b>	Bond to acquire land to be used for open space, natural areas, farmland, and protecting water quality.
<b>Prioritization Type:</b>	Bottom up; the program relies on an application process for parcel selection.

### ABSTRACT

**Program Goals.** The Orange County Open Space Program seeks to protect five major resource areas (listed in rank order of importance): (1) water resources (e.g., existing reservoirs and watersheds, wellhead areas); (2) agriculture; (3) recreation (as it relates to water resources or trails; not for general parks or ball fields); (4) significant land forms and landscapes; and (5) biodiversity (important habitats).

**Selection Process.** Governmental entities, non-governmental organizations, or individual property owners may apply for open space funding. Applications must fall within one or more of the five program resource areas: water resources, agriculture, recreation, landforms and landmarks, and biological diversity. The County requires each non-municipality application to get resolution from the municipality to move forward on a property acquisition to ensure that nothing else has been proposed for the parcel. The County also checks to make sure that the application is compatible with both local (municipal) and County comprehensive plans for open space protection and economic development plans. The County Planning Board reviews the applications and evaluates them according to set criteria for each resource category as well as supplemental criteria. They score and rank projects using a 160-point system, discuss their rankings, and then submit a report with funding recommendations for all eligible and complete applications. The Commissioner of Planning does a technical review of the report. The County Executive reviews applications that contain positive funding recommendations and submits a legislative request to approve funding for recommended projects. All funding requires the approval of the Orange County Executive and Legislature

## APPENDIX B: WRITE-UPS OF TIER 4 PROGRAMS

Background information on the 19 programs with quantitative and qualitative evaluation criteria. The research for these write-ups was originally conducted in 2005. In 2009, all 19 programs were contacted for updates. Those write-ups that were updated in 2009 are marked with an asterisk (\*) below.

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# 1996CT-01 South Windsor Open Space Program\*

## RESEARCH NOTES AND FINDINGS

### Mission statement:

The vision, as adopted by the Town Council, follows:

The Open Space Task Force envisions a South Windsor that continues to maintain its character and charm, often described as “rural character” as the town makes its transition into a fully suburban community. The acquisition or preservation of carefully selected open spaces is a key component of maintaining that community charm. The Task Force recognizes that it is essential to provide a variety of types of open spaces, including:

- Open spaces along major roadways to provide visual “resting places” for passing motorists,
- Open spaces that preserve our natural resources, and
- Open spaces that provide opportunities for the public to enjoy outdoor activities, both passive and active.

(Source: Town of South Windsor Open Space Master Plan)

### Program goals:

In 1996, the Town went to referendum for \$4 million with which to purchase land for open space preservation, recreation, conservation, or agricultural land preservation. Another \$4 million bond went up for vote in the first week of November 2005.

Program goals focus on protection of both human and natural environments (including farmland preservation). The voting public seems to respond to preservation of open space for passive recreation, aesthetic reasons, and to avoid future increases in taxes due to further development. M. Gantick senses, though, that the public is becoming more aware of the air quality and habitat issues that are tied to the protection of open space.

### 2009 Update

The South Windsor Open Space Program has continued to secure open space since the initial report. Despite declining economic conditions, the program has become more aggressive in land acquisition in recent years.

There have been no major changes in parcel selection criteria, though the program has increased open space requirements from developers. For proposed projects subject to a conservation plan, developers are required to preserve 50 percent of the land as open space. The program has also benefited from increasing state grants for land conservation. (Source: Banach)

The goals were intentionally left wide open. Many of the acquisitions are market driven (ability to purchase often depends on when a property becomes available). The Plan outlines 13 goals and objectives. The Town has also identified certain sites that are higher priority than others. (Source: Town council minutes, Gantick)

**Parcel selection process:**

There are two avenues for land protection in South Windsor: (1) coordination with developers; or (2) acquisition of specific pieces of land. The first option can take a number of different forms: (1) the Town takes open space from developers at the time of development; (2) the Town asks the developer to provide money instead of land; (3) the association of homeowners in a new development own shares of set aside open space; (4) the developer deeds a parcel of land to the South Windsor Land Trust; or (5) the State acquires the property as part of the State open space program.

When specific pieces of land are considered for acquisition, there are two basic approaches for initial parcel selection: (1) letters are sent every few years to owners of properties that are on the top priority list; and (2) people approach the Task Force with properties to sell.

The top priority properties were initially identified using criteria such as location (weighted more heavily than other criteria), proximity (to other protected lands, trails, or wildlife corridors), natural or environmental features, archaeological value, and environmental sensitivity. The selection of these properties was mostly qualitative. (Source: Gantick)

**Prioritization criteria:**

The Open Space Master Plan contains the following criteria for review of open space:

“Town-owned open space (subdivision or non-subdivision) can generally serve a number of functions including:

- conservation of natural resources and environmentally sensitive land,
- screening and buffering of residential properties from other land uses/developments,
- preservation of scenic vistas and rural characteristics, and
- recreational areas (passive and/or active).

The above functions can be used to evaluate the proposed open space relative to the criteria listed below.

## 1. Proposed purpose

The proposed purpose needs to be determined first, as the majority of the following criteria are directly related to the purpose.

- What is the intended purpose?
- What is the most appropriate purpose (active recreation [present or future], passive recreation, open space, agriculture, natural diversity, habitat, buffering, access to something)?

\_\_\_\_\_ +2 very appropriate purpose  
\_\_\_\_\_ +1 somewhat appropriate purpose  
\_\_\_\_\_ 0 purpose neither appropriate nor inappropriate  
\_\_\_\_\_ -1 somewhat inappropriate purpose  
\_\_\_\_\_ -2 very inappropriate purpose

## 2. Location

- Is the property contiguous to other open space or is it a solitary property?
- Is the location appropriate to the intended purpose?
- Is the external access adequate?
- Is this an area in which the Town would like to acquire open space?
- If part of a proposed subdivision, is the open space exterior or interior to the proposed subdivision?

\_\_\_\_\_ +2 very desirable location  
\_\_\_\_\_ +1 somewhat desirable location  
\_\_\_\_\_ 0 location neither good nor bad  
\_\_\_\_\_ -1 somewhat undesirable location  
\_\_\_\_\_ -2 very undesirable location

## 3. Property size

Size evaluation is directly related to contiguous/non-contiguous status.

- Is the width appropriate for the planned purpose?
- Is the length appropriate for the planned purpose?
- Area? Will it serve the intended purpose? If contiguous to existing open space, does it enhance the existing open space (just making existing open space bigger is not necessarily an enhancement)?

- \_\_\_\_\_ +2 size is very appropriate
- \_\_\_\_\_ +1 size is somewhat appropriate
- \_\_\_\_\_ 0 size is neither appropriate nor inappropriate
- \_\_\_\_\_ -1 size is inappropriate
- \_\_\_\_\_ -2 size is very inappropriate

There has historically been little weighting of criteria, but the current plan and revisions to the scoring system above have tried to incorporate more weighting. A sliding scale is now used to compare final scores (rather than pluses and minuses, which can cancel one another out and not provide an accurate final score). Generally, a higher score means that a parcel is a better candidate for acquisition. Some properties are clear winners, and some are more questionable (and, thus, more reliant on the ranking system for evaluation).” (Source: Gantick)

**Decision-making process:**

The Task Force applies the rating system to each property referred to it by the Town Council and prepares a recommendation to the Council regarding the desirability of that property. (Source: Open Space Master Plan)

The Task Force is composed of several Town staff (representing relevant departments), representatives from relevant Town Boards (e.g., Planning and Zoning, Wetlands Conservation, Parks and Recreation, Agricultural Land Preservation), three residents at large, and one representative from the South Windsor Land Conservation Trust. There are no term limits, but there is some turnover as people change positions.

The Task Force walks each prospective property and discusses it as a group. They work on scoring individually and then reconvene to discuss the rankings. They come to a consensus and submit their recommendations in a report to the Town Council.

Disagreements are usually worked-through in discussions. The recommendations to the Town Council usually represent the viewpoints of more than 50 percent of the group. The Town Council gets a summary of what the vote was, so they are aware if there was a lot of dissent.

Task Force meetings are open to the public. There are also public input sessions, and the Town Council has a public hearing when they are planning to purchase a property.

Barriers that have arisen in the past have included: (1) cost of the property is too high; (2) disparity in the appraisal of land by local and State appraisers (when partnering with the State grant program); (3) property owners are not in a position to sell; or (4) the Council does not want to purchase a parcel that the Task Force recommends (which has only happened once).

**Ultimate decision maker:**

The Town Council, as the legislative body for the Town, is the primary decision-making authority regarding open space preservation. It primarily serves as an oversight body. The Council can authorize funds, arrange referenda and bond issues, accept land gifts, and authorize other programs (such as purchase of development rights). The Town Council has total power to veto the recommendations of the Task Force, but they have only exercised it once. The Task Force wanted to purchase the development rights for a high visibility property from a farmer, but the Town Council did not want to pay 90% of the property value to simply keep the farmer from selling out to a developer (but not own the land). (Source: Open Space Master Plan, Gantick)

**Information used to apply prioritization criteria:**

The Task Force and Town Council rely on a combination of local knowledge and information in records as a basis for decision making. The Open Space Master Plan includes numerous maps of wetlands, farmland, steep slopes, environmentally-sensitive lands, town-owned land, etc. The Town has also hired consultants to do surveillance of species and habitats (usually when partnering with the State grant program). Build-out analyses for the town have been considered. The impacts of climate change have not been discussed. (Source: Open Space Master Plan, Gantick)

**Priority map:**

Yes. There are two maps in the Plan that cover: (1) prospective properties; and (2) prospective areas for conservation and preservation.

**Partnerships:**

The Town has partnered with the Connecticut Department of Environmental Protection in the past. The Town also partners with the South Windsor Land Trust when developers deed land to them. The Town partners with various local and national non-profit organizations to share information and collaborate in setting aside land (e.g., Audubon Society, Trust for Public Land, a local Wildlife Refuge).

**Available and expended funding:**

Most of the \$4 million in the 1996 bond has been spent. Another \$4 million was approved in a vote in November 2005.

There is no upper limit on how much can be spent to acquire a parcel of land. Land appraisals usually guide the determination of reasonableness of cost.

**Acres protected:**

Since the program began with bond money in 1989, 1,600 acres (out of a total of 19,000 acres in the Town) have been set aside.

Members of the Task Force did an analysis of the tax impact of business as usual (not setting aside a parcel of land). There have also been several surveys of how the community feels about open space. There is State surveillance of forest lands, habitat, and biological populations. Additionally, the local high school has started tracking biological indicators as well.

South Windsor is at the front of the pack in Connecticut, but some other communities have started to think about open space protection. (Source: Gantick)

**Sources:**

Town of South Windsor, <http://www.southwindsor.org/Open%20Space/Openspace.htm>, accessed on August 17, 2005.

Town of South Windsor Open Space Master Plan, revised February 2005.

Gantick, Michael, Director of the South Windsor Public Works Department, personal communication with Susan Asam, ICF Consulting, on October 26, 2005.

Banach, Marcia, Director of the South Windsor Planning Department, personal communication with Philip Groth, ICF International, on April 24, 2009.

**POINT OF CONTACT:**

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## 1996NY-01 New York Clean Water/Clean Air Bond Act

### RESEARCH NOTES AND FINDINGS

#### **Mission statement:**

The 1998 guiding principles of the Open Space Conservation Plan stated that, “Given limited public dollars and overall economic concerns, it is essential to establish careful and understandable priorities for State action to conserve specific open space parcels and cultural resources; Such priorities ought to be established through the combination of objective measurements of land conservation needs and broad based citizen opinion.” (Source: 1998 Open Space Plan)

“Objective measurements” come into play throughout the analyses by staff and the nine Regional Advisory Committees (RACs). Databases with scientific information (described in chapter 3 of the 2002 Open Space Conservation plan) trigger closer looks at particular parcels and then citizen opinion (through public comments) is laid on top of these more technical analyses. (Source: Sheehan)

#### **Program goals:**

The land protection portion of the bond measure is guided by the New York Open Space Conservation Plan. This plan is regularly updated, and the 2002 Goals of the Open Space Conservation Plan include:

- protect water quality (including surface and underground drinking water) to sustain aquatic ecosystems and water based recreation,
- provide high quality outdoor recreation, on both land and water,
- protect and enhance scenic and cultural resources,
- protect habitat for the diversity of plant and animal species both to assure the protection of unique and irreplaceable ecosystems and to sustain traditional pastimes of hunting, fishing, trapping and viewing fish and wildlife,
- maintain critical natural resource based industries of farming, wood products, commercial fishing and tourism,
- provide places for education and research on ecological, environmental and appropriate cultural resources to provide better understanding of the systems from which they derive, and

- preserve open space, particularly forest lands, for the protection and enhancement of air quality.

The NY Open Space Plan must be updated every three years by the State Department of Environmental Conservation (DEC) and the State Office of Parks, Recreation and Historic Preservation (OPRHP).

None of the goals are more central to the program mission than others, but programs that can achieve multiple objectives are favored. The Open Space Program engages both the State Department of Environmental Conservation (DEC) and the State Office of Parks, Recreation and Historic Preservation (OPRHP), so it touches upon dual goals of conservation and recreation. These goals are updated every three years along with the plan. The goals have expanded to include biodiversity in the 2005 Plan. (Source: New York Open Space Conservation Plan; Sheehan)

**Parcel selection process:**

Project review and selection process includes:

- (1) *Resource area screen* (project is within a resource area), (2) *Category & Minimum Eligibility Screen* (project meets category definition and minimum subcategory qualifications),
- (3) *Vulnerability & Criticalness Screen* (project is vulnerable or project meets critical needs),
- (4) *Alternatives Screen* (Do any alternatives provide adequate protection OR meet a critical need? including voluntary programs, protection programs, land use regulation, non-state protection),
- (5a) if an alternative is available, implement *Alternative Protection*,
- (5b) *Resource Value Screen* (calculate resource value (RV) from Rating System Subcategory),
- (6) If  $RV > 50$ , *Qualitative Review Screen* (impact of location, compatibility with other plans, compatibility with regional and local plans, multiple benefits, alternative or additional funds for acquisition, alternative management support, agricultural or commercial forestry impact, local economy), and
- (7) *Executive Decision* (based on location, availability, easement potential, cost vs. value, human benefit, other factors).

Anyone can suggest a project (including the general public), but generally projects are put up for consideration by the DEC or the RACs. The program operates on a “willing seller willing buyer” basis. The State has the power to exercise eminent domain, but has not.

New projects can be considered at any time, but the process generally follows the annual State budget cycle. The Governor's budget comes out in April for the Environmental Protection Fund (EPF) and includes a list of eligible projects taken from the Open Space Plan. The list has been recommended by State staff and the RACs (after having gone through the entire screening process). The State legislature can add to the list. Once State staff knows how much money is available, the list of eligible projects is further whittled down based on: (1) the merit of the project; (2) public support for it; and (3) the feasibility of purchasing it within the fiscal year. (Source: Sheehan)

**Prioritization criteria:**

- (1) Needs assessment (recreation, open space, natural resources),
- (2) Resource categories (forest preserve, water resource protection, significant ecological areas, recreational opportunities, distinctive character, enhancement of public lands), and
- (3) Areas of important open space values (major resource areas (i.e., specific geographic subdivisions), major linear systems (corridors, rivers, topographic ridges, important trails), resources of statewide importance, historic and archaeological resources, heritage areas, urban recreation, shore access, public land improvement, water resource protection, exceptional biological and natural sites, working landscapes, trail)

Projects that make it onto the priority list may remain on the list for years until funding is available and the seller is willing to sell. If a new project is proposed, it can be analyzed and put on the list in a matter of weeks (usually those projects that are clear winners).

Climate change impacts have been considered in thinking about what parcels to set aside. The 2005 plan identifies a goal to increase carbon sequestration in forests, which is seen as and described as a good reason for forest land preservation. The forest health group has also looked at climate models to think about the impacts of climate change on forest structure and composition. Climate change is recognized as particularly relevant (and taken into account) when thinking about coastal areas. (Source: Sheehan)

**Decision-making process:**

See Open Space Plan 1998 (or 2002) Appendix C: Resource Value Rating Systems (Step 6 in Prioritization Process); each of the six resource categories has a set of rules that correspond with a rating between 0 and 100. Recommendations to decision makers (Step 7).

The first screen is a check on whether or not the proposed parcel is in a priority project area. If it is not, there is little chance it will move forward. If it is, the decision-making process proceeds through the following steps:

1. An analysis of whether or not the project falls into one of the land protection categories (listed in Chapter 3, p. 57 of the 2002 plan). If it falls into more than one of the categories, it is noted and preferred.
2. An analysis of whether or not the project meets the land protection category definition and minimum subcategory qualifications (also on p. 57 of the 2002 plan).
3. A look at whether or not the project meets a critical need.
4. An assessment of the alternatives (i.e., if the goals can be met by alternative approaches that do not involve purchase of the land or development rights). If an alternative exists that is preferable, the alternative is pursued at this point.
5. If no alternatives are preferable, State department staff and RACs apply the resource value screens to rate projects from 1-100. If a project scores above 50, it proceeds to the next step. Project scores are not used to compare projects (i.e., a project that receives a 70 is not considered a better candidate than one that receives a 60; both move forward in the decision-making process as equals).
6. A qualitative review screen (chapter 4, p. 72 of 2002 Plan) is applied by staff of relevant agencies. Projects are analyzed at the regional level first, then reviewed at the State level, and then reviewed by the agency executive.
7. An executive decision is made by the head of the lead agency, but in consultation with the Governor and State staff. The lead agency (either DEC or OPRHP) is determined depending on the goals of the project. If projects overlap the domain of both agencies, they work together.

State staff and RAC members carry out the resource value screen and assigning rankings, all of whom have technical expertise, rank projects. The rankings are both data driven and subjective analysis. See more details above.

Many citizens and groups choose to comment. There are State-wide public hearings. The overwhelming majority of comments (on a scale of about 2,000 to 3,000 in the last round of public hearings) are positive. The public can (and do) propose projects. The RAC's are half appointed by the State and half by the community they represent (which is another avenue for public participation). This program is among the most popular planning efforts in State history.

Communities have the power to veto any land acquisition in their domain, which has brought a lot of trust to the process, but can also create barriers. As an example, four communities vetoed a plan to create a working easement in the State's largest working forest. The State negotiated a working easement for 250,000 acres owned by International Paper. The area fell into the domain of 31 towns in the Adirondacks. The four communities that have vetoed

the project account for about 30,000 of those acres. The State is working with those communities to convince them of the merits of the plan, but will have to move forward without those 30,000 acres if the communities will not budge.

Most places, however, are begging the State to come buy land. In particular, communities facing development pressures are looking to preserve open space at a critical time in their development. The State is encouraging local government measures to complement their efforts. The State has produced an open space planning guide for local governments that provides step-by-step advice on creating and implementing an open space program. The State is also encouraging communities to come up with local revenue sources. (Source: Sheehan)

**Ultimate decision maker:**

The nine Regional Advisory Committees (RACs) provide recommendations to the New York DEC for “executive decision.”

The RACs and State staff work closely together and engage in ongoing dialogue. There is mutual respect for the expertise that both bring to the table and a good working relationship towards shared goals. (Source: Sheehan)

**Information used to apply prioritization criteria:**

The New York Open Space plan is based on an elaborate set of GIS-based resource inventories, including public lands, private forest lands, protected wetlands, agricultural areas and agricultural districts, wild/scenic/recreational rivers, aquifer recharge areas, waters, floodplains, coastal erosion hazard areas, significant coastal fish and wildlife habitats, local government, lands of statewide or regional significance, significant ecological and wildlife resources (via a contractual agreement with The Nature Conservancy, the DEC maintains a statewide biodiversity inventory of significant natural resources for the state of New York—NY Heritage program), wildlife management areas, historic preservation area, heritage area, geologic resources (importance of areas for geologic education and study), fiat boundary base maps.

State staff and members of the RACs constantly consider available data and technical information. Some steps of the decision-making process (as described above) are solely qualitative, though. (Source: New York Open Space Conservation Plan, Sheehan)

**Priority map:**

Yes, state-wide conservation value maps (appear to be pixels or small analytical units).

## **Partnerships:**

Guiding principles for the open space conservation plan include: the State should work in partnership with others including local governments, not-for-profit conservation organizations and private landowners to establish and achieve land conservation goals.

Partnerships are preferred, particularly easements and cost sharing with private/non-profit organizations; implementation is based on creating effective partnerships including:

- *Regional Advisory Committees* (membership shall represent sportsmen, farmers, forest owners, environmentalists, historic preservationists, recreationalists, and educators) that consult with and advise agencies on regional projects and priorities;
- *Local Governments* (including promoting the creation of local open space plans);
- *Conservation, Recreation, and Preservation Organizations* (are playing an increasingly important role, including fund raising, obtaining land donations, acting as an intermediary for the acquisition of land, managing open space areas, providing volunteers for management and maintenance, providing technical assistance to governments and others involved in land conservation);
- *Private Landowners* (especially via conservation easements);
- *Tourism and Travel Industry* (promote link between land protection and tourism/visitor experiences); and
- *Federal Government* (including funding and technical assistance via USFWS, USNPS, GSA Rural Development Program, FERC, ACOE, Conservation Reserve Program, USDA, Office of Ocean and Coastal Resource Management, Wetlands Reserve Program).

The Nature Conservancy, The Open Space Institute (regional), Trust for Public Land, Scenic Hudson (regional) have partnered with the State to pursue its open space goals. The State views the local land trusts and other groups as the eyes and ears on the ground. They work closely with State staff and the RACs to provide information and advice. (Source: New York Open Space Conservation Plan, Sheehan)

## **Available and expended funding:**

\$150 million was set aside for State land acquisition projects identified in the New York Open Space Plan. All of the \$150 million in bond money has been spent, but the Open Space Program gets an annual budget through the Environmental Protection Fund. (Source: New York Open Space Conservation Plan, Sheehan)

**Acres protected:**

Unavailable (many different numbers are presented in the Plan).

925,000 acres have been set aside through the New York Open Space Program. There are numerous general studies and New York-specific studies showing the benefits (including the economic benefits) of open space protection. There have been no specific studies showing how particular open space parcels set aside through the New York Open Space Program have resulted in public benefits.

**Sources:**

The Department of Environmental Conservation and The Office of Parks, Recreation and Historic Preservation. 1998 *Conserving Open Space in New York State: Final State Open Space Conservation Plan and Final Generic Environmental Impact Statement*..

Pataki, George E. 2002 Letter from Governor George E. Pataki to New Yorkers..

New York Open Space Conservation Plan. 2002. <http://www.dec.state.ny.us/website/opensp/>, accessed online October 25, 2005.

Sheehan, Francis, New York Department of Environmental Conservation, Division of Lands and Forests, personal communication with Susan Asam, ICF Consulting, October 27 and 28, 2005.

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## **2000FL-01 Safe Parks & Land Preservation Bond Program**

### **RESEARCH NOTES AND FINDINGS**

#### **Mission statement:**

“To support a comprehensive plan to improve and expand the conservation and recreation assets of Broward County and its municipalities.” (Source: Broward County Website)

#### **Program goals:**

“Preserve and reclaim approximately 1,425 acres of conservation land, green space, and open space in Broward County; Repair and enhance our aging park system to provide safe places for our children to play and parks for everyone's enjoyment.” (Source: Broward County Website)

#### **Parcel selection process:**

Anyone can recommend a potential acquisition project to the Land Preservation Advisory Board. Proposed projects may be submitted to the County Commissioners, the Land Preservation Advisory Board, or the Land Preservation Section. (Source: Broward County Website)

#### **Prioritization criteria:**

- Habitat type and diversity
- Exotic or invasive species presence
- Development pressure
- Management needs
- Passive recreation potential
- Aesthetic significance
- Stage of ecological succession
- Structural diversity
- Wildlife utilization
- Protected species
- Species diversity

Ecological consultants were hired to visit and complete an assessment form for each site under consideration as a Conservation Land or Green Space site. Staff conducted reviews of selected sites to confirm the consultants were correctly interpreting data based upon the criteria created. The main criteria that differentiated between a Conservation Land and a Green Space

was whether the resource was considered by staff to be a “restorable” resource. (Source: Broward County Website)

**Decision-making process:**

Participants include the public, Board of County Commissioners, Land Preservation Advisory Board, Broward County municipalities, Land Preservation Section (Environmental Protection Department), Real Property Section (Public Works and Transportation Department), County Attorney’s Office, and the Parks and Recreation Division (Community Services Department). (Source: Burgess)

Anyone can recommend a potential acquisition project to the Land Preservation Advisory Board. Proposed projects may be submitted to the County Commissioners, the Land Preservation Advisory Board, or the Land Preservation Section. (Source: Broward County Website)

The Land Preservation Section reviews the proposed projects and recommends their designation within one of the three land categories identified in the Land Preservation Resolution 2000-1230 (sites that do not meet the criteria for Conservation Land or Green Space may be proposed for acquisition as Open Space). The Land Preservation Advisory Board recommends the addition of each site into the Land Preservation Inventory within one of the three land categories. (Source: Burgess)

The sites recommended by the Land Preservation Advisory Board are brought to the County Commission to allocate funding for the sites and to authorize County staff to initiate the acquisition process. (Source: Burgess)

The Real Property Section or their designee contacts the landowner, ascertains the landowner’s willingness to sell, and, in conjunction with the County Attorney’s Office, performs preliminary title work and obtains and reviews appraisals and surveys on the property. The Land Preservation Section contacts the relevant municipality and prepares, in conjunction with the County Attorney’s Office, a land acquisition and management agreement for each site that the municipality is willing to manage as a city park. The Land Preservation Section will obtain a letter of support from the city or town for sites that are located within a municipality but would be managed by the Broward County Parks and Recreation Division because of their ecological sensitivity and/or their potential as an addition or buffer to existing County-owned environmentally sensitive land. (Source: Burgess)

The results of the site acquisition process are communicated to the Land Preservation Advisory Board. If a purchase price agreement is reached for the proposed site, the LPAB’s recommendation is sought and an Agenda Item is placed for the County Commission discussion, including a 28-day advance notice of acquisition, when required by the Administrative Code.

The Agenda Item will include the results of the due diligence and negotiation process and the Land Preservation Advisory Board recommendation. (Source: Burgess)

Staff generally recommends into which category a site qualifies. The category of Conservation Lands is essentially natural communities considered restorable. Green Spaces contain a component of a natural community but are not considered restorable (e.g., tree canopy only with understory highly disturbed, or drained wetland that cannot be rehydrated.) Everything else is lumped into the Open Space category: agricultural lands, vacant lots, even motels on the beach to be removed and replanted with trees and grass. (Source: Burgess)

**Information used to apply prioritization criteria:**

There is no prioritization in the Conservation Land (CL) or Green Space (GS) categories. Open Space parcels are narrowed down to the following: sites in County Commission districts with funding shortfalls (in an attempt to provide district equity); sites in cities with no other land acquisition projects in the CL or GS categories; and the projects that provide the best passive recreational amenities. (Source: Burgess)

**Ultimate decision maker:**

The Broward County Board of County Commissioners are the ultimate decision makers, with recommendations from the Land Preservation and Acquisition Advisory Board (LPAB). (Source: Broward County Website)

The ultimate decision as to whether or not a site is acquired is based on the price offered. While it is estimated that the program could acquire approximately 75% of the sites in the CL and GS inventories, the actual percentage was closer to 30% because of the hot real estate market in south Florida in 2005. Many sites were lost to development, others had unwilling sellers, and some resulted in failed negotiations because the County relied upon property appraisals that did not always appear to reflect the “market value” that others were willing to pay. (Source: Burgess)

Some of the main constraints for the program have been: the willingness of a property owner to sell to the County; a lack of support for specific sites by the municipality within which the sites lie; the unwillingness of the County Commission to exceed 10% above the appraised value; or the unwillingness of a municipality to manage a small site within their jurisdiction (i.e., they support acquisition but are not interested in managing). (Source: Burgess)

**Priority map:**

All Conservation Land and Green Space sites were selected for acquisition (no prioritization). The Open Space sites were ranked by the LPAB, utilizing various criteria based

upon the funding cycle, with a main priority to ensure that each municipality received at least one land acquisition within their jurisdiction if they requested any.

**Partnerships:**

Trust for Public Lands (TPL); TPL assisted initially in acquiring sites that were subject to intense development pressure before we were able to contract with private acquisition consultants. TPL worked independent of the County (not under contract) and assisted in several early acquisitions. The partnership was discontinued after the early stages of the program's inception. (Source: Burgess)

**Available and expended funding:**

As of October 2005, \$135 million spent on land acquisition and ecological restoration costs. (Source: Burgess)

**Acres protected:**

As of October 2005, 145 acres of conservation land, 111 acres of green space, and 545 acres of open space have been protected. The dollar per acre average is approximately \$300,000 (this figure averages beachfront and commercial sites with more rural lands). (Source: Burgess)

**Sources:**

Broward County Parks and Recreation Commission: <http://www.broward.org/ourfuture/>, accessed on August 2005.

Donald Burgess, Land Preservation Administrator Environmental Protection Department, personal communication with Toby Mandel, ICF Consulting, on November 14, 2005.

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## 2000FL-02 Volusia Forever\*

### RESEARCH NOTES AND FINDINGS

#### **Mission statement:**

“The Mission of Volusia Forever: Finance the acquisition and improvement of environmentally sensitive, water resource protection, and outdoor recreation lands, and to manage these lands as conservation stewards in perpetuity.” (Source: Volusia Forever Website)

#### **Program goals:**

Volusia Forever was created by vote (61%) of the county’s citizens in the year 2000. This twenty year program is supported by an annual ad valorem assessment (0.2 mills). “Conserve, maintain and restore the natural environment and provide access for the enjoyment and education of the public; provide resources to ensure that sufficient quantities of water are available to meet current and future needs; meet the need for high-quality resource based outdoor opportunities, greenways, trails, and open space; preserve the habitat and water recharge; ensure that the natural resource values of such lands are protected and that the public has the opportunity to enjoy the lands to their fullest potential.” (Source: Volusia Forever Website)

#### **Parcel selection process:**

The Volusia Forever Advisory Committee (VFAC) provides assistance on potential acquisitions by reviewing and ranking properties under consideration and making formal recommendations to the County Council. (Source: Volusia Forever Website)

Committee is comprised of nine citizens appointed by the County Council. Each district County Council member appoints one Committee member and the County Council Chair and Vice-Chair each appoint two Committee members. The Committee’s term is for two years and members can be re-appointed. Other than being a registered elector and resident of the county, there are no formal qualifications required in order to be appointed to the VFAC. The members of the VFAC typically represent a wide variety of backgrounds and interests.

In general, when designing the program (not just the VFAC), Volusia looked at other counties with programs in place, and then took the best practices of each of the other programs. In particular, Volusia Forever looked heavily at the State’s Florida Forever program.

Volusia Forever is a voluntary program relying exclusively upon willing sellers. Applications are only accepted from the landowner or his/her authorized representative.

Members of the public may not submit an application to the program for land that they do not own or are not authorized by the landowner to represent.

There are two application cycles each year, typically concluding in June and December. The application solicits information describing the site and explaining why the property should be considered for the program. Applications received are forwarded to the VFAC for determination of eligibility using the established criteria. (Source: Isenhour)

**Prioritization criteria:**

The categories and criteria used when evaluating properties for potential acquisition are specified by County Resolution. The categories are proximity and connectivity, furtherance of acquisition efforts, water resources, environmentally sensitive lands, recreation/public use, management and enhancement. With the exception of the enhancement category, each of these categories are primary.

Specific criterion are itemized under each category. Each property, as it relates to the criterion, is evaluated on a Yes/No basis. A sliding scale, ranging from Low to High, is used to further define the applicability of an affirmative response to a criterion. In order to be eligible, a property should receive a specified minimum number of affirmative answers to the primary criteria. (Source: Isenhour)

**Decision-making process:**

Once a property application is submitted, staff does a desk review to evaluate the property using the criteria cited above. The application, along with staff's evaluation, is presented to the VFAC for the purpose of determining if the property is eligible for the program.

If the property is deemed eligible, staff will visit the site and prepare an analytical report that is presented to the VFAC at the next bi-annual ranking meeting. These documents are all public record and provided to the property owner.

Properties are recommended for placement within either Group A or Group B of the Volusia Forever list. Group A is comprised of the active acquisition properties. Properties within Group B are not the preferred candidates for acquisition, and more importantly, typically do not have a funding partner. If a funding partner were to become available, a Group B property could be elevated to Group A.

When considering placement of property within a Group, the Committee uses the criteria cited above plus additional information including public comment, maps, GIS, photos, local knowledge and the probability for receiving matching funds from other land acquisition sources. Climate change is not considered at all, as it is beyond the scope of what is necessary to determine if a property is worthy of acquisition.

The VFAC's recommended ranking of eligible properties is subsequently presented to the County Council, which has final approval of the ranking. The meetings of both the VFAC and County Council are public hearings. (Source: Isenhour)

**Ultimate decision maker:**

The County Council has final approval of the Ranking list and approves all property purchases. (Source: Walsh)

A property must be Group A to be acquired. The County Council can move properties between Groups A and B, but cannot place a property within either Group without prior eligibility review and recommendation by the VFAC. The County Council has been very supportive of the recommendations of the VFAC. (Source: Isenhour)

There is no ranking scheme of the properties within Groups A or B. Acquisition efforts for multiple properties within Group A may be undertaken concurrently. Initially, there was a ranking system within the Groups, but it was removed. Prioritization ceased for several reasons: conflicts with partners, coordinating grant cycles with the highest priority sites didn't work out, and many prime sites could not be acquired. Volusia is attempting to acquire properties as the opportunity arises, rather than having to wait for a certain property to make it to the "top of the list." This strategy promotes the effectiveness of the program's overall acquisition efforts by eliminating the scenario wherein a landowner placed in a preeminent position could delay or preclude negotiates for other properties. Volusia also has the ability to buy a property with 100% funding and can seek matching funding later. (Source: Isenhour)

Significant time constraints of a potential acquisition are the requirements associated with the process by which a local government purchases real property (i.e., the appraisal process, surveying, etc.).

**Information used to apply prioritization criteria:**

Not available.

**Priority map:**

Priority areas are the Volusia Conservation Corridor (VCC), which bisects the county, the Ponce Preserve Conservation Project and the Doris Leeper Spruce Creek Preserve, both of which are located in the eastern portion of the county, and the Lake George Conservation Area, located in the northwestern quadrant of the county.

All properties that fall within these priority areas move to Group A without any other considerations (prioritization criteria, etc.).

When looking outside of the priority areas, connectivity of a potential acquisition with other conservation lands is a significant consideration. Conservation lands represent approximately one quarter of the county. Other important considerations are property size and habitat(s).

**Partnerships:**

A goal of the program is to leverage each local dollar with a dollar from a funding partner. Potential acquisition partners include; the St. Johns River Water Management District, State agencies (e.g., Florida Division of Forestry, Florida Communities Trust), Federal agencies (e.g., Department of Agriculture), local municipalities and non-profit organizations (e.g., the Trust for Public Lands). (Source: Isenhour)

**Available and expended funding:**

Monies generated from a \$40 million bond (issued in 2005) and annual ad valorem revenue support the Volusia Forever program. While the bond funds represent a “one-time” source of revenue, the ad valorem assessment is for the 20-year life of the program. As recently demonstrated, the real estate market can be volatile. The amount of revenue generated yearly varies dependent upon the taxable base upon which the millage is levied. Ten percent of the total annual funds are allocated for land management. (Source: Isenhour)

To date, approximately \$52 million in Volusia Forever funds have been expended for acquisition. This amount has been furthered by the expenditure of approximately \$33 million by our acquisition partners. (Source Isenhour)

**Acres protected:**

To date, Volusia Forever has protected, with our funding partners, approximately 33,000 acres. This acreage consists of 39 purchases (both fee simple and less-than fee) plus numerous parcels acquired in antiquated subdivisions/plats through the “small-lot” initiative of the Volusia Forever program. (Source: Isenhour)

**Other Information:**

Volusia County was one of the first counties to have a taxpayer funded program, established in 1986. The Volusia Forever program is the second land acquisition endeavor.

The Volusia Forever program has received both national and state awards;

- “Better Community Award” (2008) from the 1000 Friends of Florida
- “County Leadership in Conservation Award” (2006) from the Trust for Public Lands and the National Association of Counties, and

- “Achievement Award (2003) from the National Association of Counties.

**Sources:**

Ed Isenhour, Volusia Forever Program Coordinator, County of Volusia, personal communication with Philip Groth, ICF Consulting, May 8, 2009.

Volusia Forever, <http://volusiaforever-echo.com/forever/default.htm>, accessed on August 2005.

Robert J. Walsh, Volusia Forever Program Manager, Land Acquisition & Management, personal communication with Toby Mandel and Anne Choate, ICF Consulting, November 11, 2005.

**POINT OF CONTACT:**

Ed Isenhour, Volusia Forever Program Coordinator, County of Volusia, Division of Land Acquisition and Management. Phone: (386) 740-5261. Email: [eisenhour@co.volusia.fl.us](mailto:eisenhour@co.volusia.fl.us).

## 2000FL-04 Alachua County Forever\*

### RESEARCH NOTES AND FINDINGS

#### **Mission statement:**

“Alachua County Forever is a land conservation program to acquire and protect environmentally significant lands. Through this program, Alachua County seeks to acquire, protect and manage environmentally significant lands, protect water resources, wildlife habitat, and natural areas suitable for resource-based recreation.” (Source: Alachua County Forever )

#### **Program goals:**

Alachua County Forever will be a conscientious, innovative, progressive leader in land conservation and use acquisition, stewardship and funding development practices to preserve the environmental integrity of Alachua County and improve the quality of life for current and future generations. (Source: Alachua County Forever )

#### **Parcel selection process:**

On July 25, 2000, the Alachua County Board of County Commissioners (BoCC) approved Ordinance 00-13, enabling the creation of a Land Conservation Board (LCB). Appointed by the BoCC, the 11 citizens volunteer to review and recommend lands within Alachua County to be acquired for conservation purposes. The LCB is composed of five members representing diverse community interests and six members whose qualifications include education and experience in natural resources. (Source: Alachua County Forever website)

Selection of a property generally takes between two and six months. A landowner or another member of the community submits parcel nominations. Approximately 1/3 of non-landowner nominations do not progress past the nomination stage, as the owners are not interested in selling the land. Of the remaining 2/3, half are eager to participate, and half are only interested in considering alternative arrangements such as easements, etc. (Source: Buch)

Program staff evaluates all nominated parcels using the prioritization criteria below. The evaluation is a quantitative ranking process, with each parcel receiving a score. This score is presented to the LCB. (Source: Buch.

[http://www.alachuacounty.us/assets/uploads/images/EPD/Land/Files/Resolution%2009-010\\_Web.pdf](http://www.alachuacounty.us/assets/uploads/images/EPD/Land/Files/Resolution%2009-010_Web.pdf))

## **Prioritization criteria:**

### **I. ENVIRONMENTAL VALUES**

#### **I.1. Protection of Water Resources**

- A. Whether the property has geologic/hydrologic conditions that would easily enable contamination of vulnerable aquifers that have value as drinking water sources;
- B. Whether the property serves an important groundwater recharge function;
- C. Whether the property contains or has direct connections to lakes, creeks, rivers, springs, sinkholes, or wetlands for which conservation of the property will protect or improve surface water quality;
- D. Whether the property serves an important flood management function.

#### **I.2. Protection of Natural Communities and Landscapes**

- A. Whether the property contains a diversity of natural communities;
- B. Whether the natural communities present on the property are rare;
- C. Whether there is ecological quality in the communities present on the property;
- D. Whether the property is functionally connected to other natural communities;
- E. Whether the property is adjacent to properties that are in public ownership or have other environmental protections such as conservation easements;
- F. Whether the property is large enough to contribute substantially to conservation efforts;
- G. Whether the property contains important, Florida-specific geologic features such as caves or springs;
- H. Whether the property is relatively free from internal fragmentation from roads, power lines, and other features that create barriers and edge effects.

#### **I.3. Protection of Plant and Animal Species**

- A. Whether the property serves as documented or potential habitat for rare, threatened, or endangered species or species of special concern;
- B. Whether the property serves as documented or potential habitat for species with large home ranges;
- C. Whether the property contains plants or animals that are endemic or near-endemic to Florida or Alachua County;
- D. Whether the property serves as a special wildlife migration or aggregation site for activities such as breeding, roosting, colonial nesting, or over-wintering;
- E. Whether the property offers high vegetation quality and species diversity;
- F. Whether the property has low incidence of non-native invasive species.

#### **I.4. Social/Human Values**

- A. Whether the property offers opportunities for compatible resource-based recreation, if appropriate;
- B. Whether the property contributes to urban green space, provides a municipal defining

greenbelt, provides scenic vistas, or has other value from an urban and regional planning perspective.

## II.1. MANAGEMENT ISSUES

- A. Whether it will be practical to manage the property to protect its environmental, social and other values (examples include controlled burning, exotics removal, maintaining hydro-period, and so on);
- B. Whether this management can be completed in a cost-effective manner.

## II.2 ECONOMIC/ACQUISITION ISSUES

- A. Whether there is potential for purchasing the property with matching funds from municipal, state, federal, or private contributions;
- B. Whether the overall resource values justifies the potential cost of acquisition;
- C. Whether there is imminent threat of losing the environmental, social or other values of the property through development and/or lack of sufficient legislative protections (this requires analysis of current land use, zoning, owner intent, location and market conditions);
- D. Whether there is an opportunity to protect the environmental, social or other values of the property through an economically attractive less-than-fee mechanism such as a conservation easement. (Source: Alachua County Forever  
[http://www.alachuacounty.us/assets/uploads/images/EPD/Land/site\\_scoring\\_criteria.pdf](http://www.alachuacounty.us/assets/uploads/images/EPD/Land/site_scoring_criteria.pdf),  
[http://www.alachuacounty.us/assets/uploads/images/EPD/Land/Files/Resolution%2009-010\\_Web.pdf](http://www.alachuacounty.us/assets/uploads/images/EPD/Land/Files/Resolution%2009-010_Web.pdf))

The Decision Matrix uses weighted criteria (the most important criteria are more heavily weighted). Environmental Values account for approximately 2/3 of total score. All other criteria make up the other 1/3 of the score. (Source: Buch)

### **Decision-making process:**

Staff evaluates projects, or portions of projects, with the Land Conservation Decision Matrix (LCDM) and assigns a numeric score between 1 and 5 reflecting how well the project addresses each criterion. The Environmental and Social/Human Values that make up Section I of the LCDM determine if a property meets the intent of the Alachua County Forever Program. This section is weighted so that the average of the scores in this section equals 2/3 of the total final score calculated by the LCDM. The Management and Economic/Acquisition Issues make up Section II, which assess a property's vulnerability and the economic feasibility of acquisition and management. This is weighted so that the average of the scores from this section equals 1/3 of the total score calculated by the LCDM. Total final scores range from a minimum of 2 to a maximum of 10. (Source: Buch.)

[http://www.alachucounty.us/assets/uploads/images/EPD/Land/Files/Resolution%2009-010\\_Web.pdf](http://www.alachucounty.us/assets/uploads/images/EPD/Land/Files/Resolution%2009-010_Web.pdf)).

### **Ultimate decision maker:**

The County Commission (CC) is the ultimate decision maker. The LCB makes recommendations to the CC. Once a property has been evaluated with the LCDM scoring matrix and has received a positive recommendation from the board, it may proceed to the CC. Properties that do not meet these two requirements are not eligible for consideration or acquisition. Approximately ½ of the properties that are presented to the LCB by the program staff are approved to the CC. (Source: Buch)

A total of 31 properties have been recommended to the CC from the LCB. Although it was initially specified in the ballot language, there is not a priority list or ranking among the properties. Prioritization was discontinued to try to increase negotiation power for the county. By keeping all parcels on an equal playing field, landowners may be more apt to accept an offer made by the County since there are other parcels the County can choose if any given landowner is difficult during negotiations. (Source: Buch)

There is a loose link between the results of the evaluation of prioritization criteria by the LCB and the ultimate decision to purchase a parcel. The highest scoring property would ideally be the highest priority for acquisition, but the County is a political environment with additional factors that need to be considered. One example of a low scoring property that was elevated for acquisition is a property that is close in proximity to three elementary schools. The CC decided that it was more valuable to instill a sense of environmental ethic in the younger population of the County than choose a parcel with a higher score. In short, the CC has the ability to deviate from top scorers, but will only do so for the greater benefit of the community. (Source: Buch)

There are not too many legal, regulatory or political constraints, but there are significant financial constraints to acquisition. There is huge competition with developers for many of their properties. Unfortunately the county tends to “lose” the battle with developers, since the upper limit of purchasing price is not allowed to exceed the appraised price per acre of land. The issue has always been present, but it is becoming increasingly prevalent. (Source: Buch)

### **Information used to apply prioritization criteria:**

Many data sources are used to evaluate a property, including technical sources. GIS mapping and current aerial maps are used in addition to a property walk. The LCB also uses 1-2 foot laser shot contour lines from aircraft showing fine scale hydrology and topography, aiding them to see sink holes and microclimates. (Source: Buch)

**Priority map:**

There is a map available on the web site, with color coded parcels for the county. (<http://www.alachuacounty.us/assets/uploads/images/EPD/Land/Images/ACF%20Project%20Map%20090313.pdf>.)

**Partnerships:**

Partners include the State of Florida, regional water management authorities, city of Gainesville, The Nature Conservancy, other private groups, and the Forest legacy program (grant). (Source: Buch)

**Available and expended funding:**

From 2001 through March 2008, acquisitions were funded through \$29 million in voter-approved bonds, payable through a quarter-mill ad valorem property tax, levied for 20 years. (Source: Alachua County Forever Website). With its passage in 2008, the “Wild Spaces Public Places” referendum funds new acquisitions from April 2009 onward. This new 0.5% Local Government Infrastructure Surtax is expected to raise between \$10 million and \$15 million for land conservation through December 2010.

Both funds must be used for land acquisition or acquisition activities. Up to 10% of the funds can be set aside for initial capital improvements, and none can be used for stewardship or management. In order for there to be any management of the property, the County must designate County funds in the annual budget. (Source: Buch)

The program has experienced significant financial restraints in acquiring lands. There is an extremely high level of competition with developers for many of the properties on the acquisition list. Unfortunately, many properties are “lost” to the developers, as the County is restricted to paying up to the appraised value for the property. (Source: Buch)

**Acres protected:**

Currently (through March 27, 2009) the Active Acquisition List has \$98 million and 42,863 acres. Included in this estimate is the 17,086 acres that have already been protected. Those acquisitions cost \$74 million, \$23 million of which came from the program budget. Prices have ranged from \$1,000 to \$50,000 per acre. (Source: Buch.

<http://www.alachuacounty.us/assets/uploads/images/EPD/Land/Files/Program%20Summary.pdf>)

**Other Information:**

The Florida Communities Trust (a state agency) ([www.myflorida.com](http://www.myflorida.com)) has a very good system for soliciting and evaluating applications. This program, like the other state programs is funded through bonds and transfer taxes, which might be a statutory requirement. (Source: Buch)

In Florida, approximately 30 of all 67 counties have some form of land protection and acquisition program. Programs, which have dedicated management/stewardship funding built into the measure, are clearly in the best situation for long term success. (Source: Buch)

**Sources:**

Alachua County Forever, [www.alachuacountyforever.us](http://www.alachuacountyforever.us), accessed June 15, 2009.

Ramesh Buch, Environmental Program Supervisor, personal communication with Toby Mandel, ICF Consulting, October 31, 2005.

**POINT OF CONTACT:**

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## **2000MI-01 Natural Areas Preservation Program\***

### **RESEARCH NOTES AND FINDINGS**

#### **Mission statement:**

“The Washtenaw County Board of Commissioners declares that Washtenaw County is a desirable place to live, work and visit in large part because of the existence of natural areas within the County. Natural areas have aesthetic as well as practical benefits for County citizens. In addition, the purchase of natural areas can be used to protect fragile lands and environmentally threatened lands. The purchase of natural areas within the County will further these public benefits. Passive recreation would be appropriate use of this land.” (Source: NAPP)

The property tax millage and land preservation program was established through a grassroots effort to set aside natural areas and protect them from development. (Source: Freeman)

#### **Program goals:**

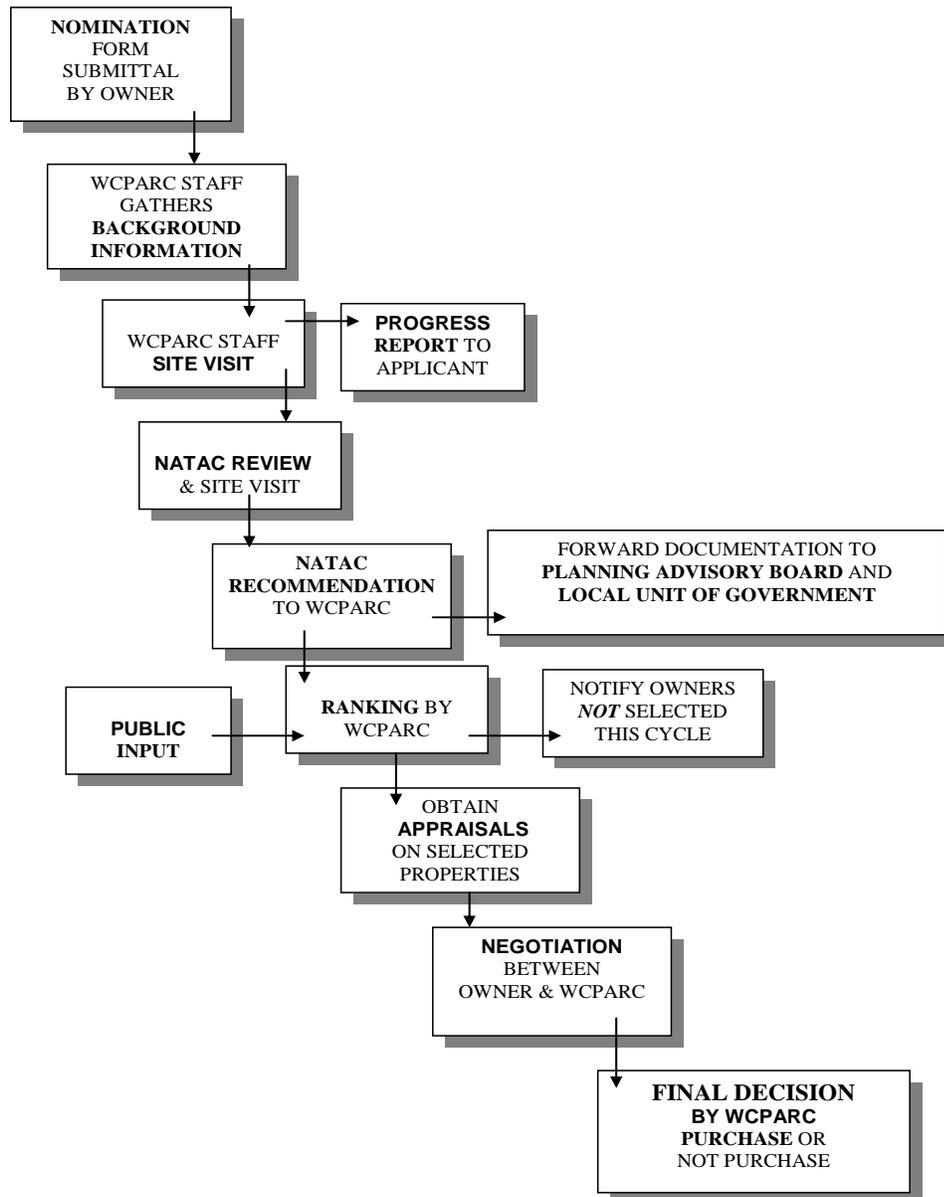
“Preservation of the natural, ecological diversity/heritage of Washtenaw County; complement the existing network of publicly and privately protected lands; maximize the public benefit.” (Source: Parks and Recreation Commission)

The phrase “maximize public benefit” means “maximize quality of life”. The preservation of natural areas is a key component of quality of life and that water resources and wildlife are included in the term natural areas. In addition, all land areas preserved are required to be viable habitat for wildlife or plants and as such, larger parcels often receive higher priority. (Source: Freeman)

#### **Parcel selection process:**

Property owners are invited to submit applications to the Washtenaw County Parks and Recreation Commission (WCPARC), which administers the program.-(Commission has elected to prohibit initiating contact with owners Applications are reviewed by WCPARC staff, who also gather background information and visit the nominated properties. The information gathered by WCPARC is provided to the Natural Areas Technical Advisory Committee (NATAC), who reviews and visits each nominated property. Then, NATAC recommends to WCPARC whether the parcel should be preserved, and how much the County should pay. The recommendation is also forwarded to the Planning Advisory Board and the local government who can provide

comments. WCPARC ranks the nominated properties and selects the highest ranking properties to pursue for purchase. At this stage, promising parcels are appraised and subject to a Phase 1 environmental assessment. The final step in the process is negotiating a price for purchasing the property and a decision by WCPARC on whether to purchase the land for that price. See Figure B-1 .



**Figure B-1. Washtenaw County Natural Areas Preservation Program property review process.**

(Source: Washtenaw County Parks and Recreation Commission)

The Natural Areas Technical Advisory Committee (NATAC) includes seven county residents with the following expertise: Professional Real Estate or Development Practice, Environmental Education, Fisheries Biology/Aquatic Ecology, Professional Land Use Planning, Wildlife Management, Botany/Forestry, and Land Trust/Conservation. Currently, three positions are filled by faculty or staff at the University of Michigan; the others are a realtor, a public school employee, and a design professional. (The affiliation of the member holding the land trust position was not available.)

**Prioritization criteria:**

“A. Public Water Resources.

I. Water Resources Access/Frontage. Does the property have frontage on a lake or perennial stream? \_\_\_yes \_\_\_no.

If the property borders an aquatic ecosystem, assign relative screening score following the table below. If it fits in more than one category use highest value.

Borders Lake, large pond, or chain of ponds		Borders perennial stream (@1:24,000)	
Frontage is 100-500 ft.	Medium	50-100 ft.	Medium
Frontage is 501-1000 ft.	High	100-2000 ft	High
Frontage > 1000 ft. or the entire system is contained in the parcel.	Very high	>2000 ft. or >500 ft on both sides	Very high

II. Surface water quality protection. Is the property directly connected to a surface-water ecosystem? \_\_\_yes \_\_\_no

Does the property drain to:

- A seepage system with significant public access and/or ownership (Medium)
- A small drainage system (median discharge of 5-25 cubic ft/sec) (High)
- A larger drainage system (median discharge greater than 25 cubic ft/sec) (Very high)

III. Ground water quality protection. Does the parcel contain any known or expected recharge areas? \_\_\_yes \_\_\_no

Does the property contain significant areas of known or expected:

Regional groundwater recharge (Medium)

Local high velocity recharge for throughflow/groundwater connections to surface water (High)

Local high velocity recharge for throughflow/groundwater connections to public well/water supply systems (Very high)

IV. Wetland Conservation/ protection. Does the parcel contain or border wetland areas?  
\_\_\_yes \_\_\_no

Does the property contain:

5-15 acres of lacustrine fringe, riverine, or palustrine marsh wetlands (Medium)

15-50 acres of lacustrine fringe, riverine, or palustrine marsh wetlands (High)

>50 acres of any type of wetland or a complete palustrine wetland >20 acres in size (Very High)

NOTE: Lacustrine = lake; Riverine = river; Palustrine = standing water.

B. Special Animals, Plants and Plant Communities

I. Wildlife Habitat. Does the property support important terrestrial or aquatic populations or habitat or add to already protected property/ies that would protect wildlife populations or habitat? \_\_\_yes \_\_\_no

The property contributes high quality home range habitat for wide ranging resident wildlife compatible with surrounding land uses. (Medium)

The property secures important habitat within the property or in combination with protected adjoining properties for at least one of the following: migrating songbirds, migrating waterfowl, desirable resident species requiring specialized habitat conditions. (High)

The property secures essential habitat for rare, threatened or endangered species. (Very high)

II. Special Plants and Plant Communities. Does the property have some native vegetation?  
\_\_\_yes \_\_\_no

The property contains sufficient components of pre-European settlement vegetation to allow restoration to pre-European settlement conditions. (Medium)

The property supports populations of plant species that show a fidelity to high quality natural communities and specialized habitats within the property. (High)

The property secures essential habitat for rare, threatened or endangered plant species or rare, imperiled or critically imperiled plant communities. (Very high)

C. Recreational and Scientific Values

I. Recreation. Will the property provide access to public waters or trails, or protect a trail corridor?

(a) Will the property, or a specifically granted affirmative right to public access if a conservation restriction, provide deeded public access to public waters where no such permanent access now exists in the vicinity?

(b) Will the property abut a trail, or be within reasonable proximity of a trail that is now or could be regularly used by the general public for recreation?

II. Scientific Site. Is the property a recognized, or potential, site of scientific/interpretive study (e.g., natural communities, species, archeological resources)?

D. Proximity to Protected Land

I. Adjacency. Does the property abut, or is otherwise integral to, a permanently protected tract of public or private land being held for conservation or recreation purposes?

II. Enhancement. Will the property enhance the ecosystem integrity of an adjacent, permanently protected tract of public or private land being held for conservation or recreation purposes?" (Source: Parks and Recreation Commission 2001)

WCPARC intentionally did not develop a point based system. The program did not want to be held back or restricted from purchasing a property because of a point score. Instead, a more subjective system was developed which evaluates properties through comparison of the qualifications of all nominated properties. Essentially, the properties are ranked in order of importance for preservation. They are also able to review properties submitted in earlier years if the property owner agrees. Under this system, the properties that are evaluated as having highest priority are pursued first. (Source: Freeman)

In their evaluation criteria, there is no single most important criteria for selection although there is an emphasis on water resources and stream/river frontage. While the focus in the water resources criteria above is on amount of water frontage, wetlands, and recharge zones, they do consider the condition of the water resource as well. In addition, they do not specifically

consider the implications of climate change, pollution, or habitat loss, on the properties in the evaluation process but they do consider development pressures. The program might consider pursuing a property above another if there is an imminent development threat. (Source: Freeman)

**Decision-making process:**

NATAC recommends properties to WCPARC for purchase. WCPARC evaluates the recommendation and selects properties to pursue. These properties are then appraised, subject to a Phase 1 environmental assessment and cost negotiations are begun with property owners. WCPARC reviews the appraisals, environmental assessments, and cost negotiations for these properties and makes final decision on whether to purchase each property. For the full parcel selection process, see Figure B-1 .

The process takes about 4to 6 months to come to a decision on which properties the Commission would like to acquire. The actual acquisition process can take much longer, especially if extensive Title work is required for the property. The process is slow and deliberate but necessary to assure the acquisition of prime properties. (Source: Freeman)

**Ultimate decision maker:**

Washtenaw County Parks and Recreation Commission.

The Commission thoroughly reviews the recommendations made by NATAC and makes the decision on which lands to purchase and how much money they are willing to spend. In one instance, a piece of land recommended by NATAC for purchase was rejected by the Parks Commission. In this instance, the Parks Commission decided that this land parcel was not as high a priority as other lands being recommended and funding is limited such that not all parcels can be purchased. (Source: Freeman)

**Information used to apply prioritization criteria:**

Data used in the evaluation process include data from the University of Michigan on groundwater and water quality, maps of groundwater/recharge areas from the Department of Planning and Environment, analysis of the land by the naturalist on NATAC, endangered species/species of concern data from state DNR, and additional GIS layers/maps from the County Planning and Environment Office – including protected land and conservation easement information. In addition, WCPARC staff, NATAC, and WCPARC decision makers walk the properties nominated. (Source: Freeman)

**Priority map:**

No county wide map of priority lands has been developed. The program is still receiving numerous nominations each year and is working to keep on top of them. If the number of nominations decreases, they would consider putting together a map of priority areas in the County and perhaps contacting landowners. (Source: Freeman)

**Partnerships:**

Parks Commission partnered with a local land trust, the Southeast Michigan Land Conservancy on protection of a 64-acre parcel, part of the 325 acre LeFurge Woods Nature Preserve, owned by the Conservancy. A 205-acre site near the River Raisin included an agreement that The Nature Conservancy would purchase an additional adjacent 40 acres. (Source: the Nature Conservancy) Applicants are asked if they have been working with an organization.

There is no specific partnership with one NGO or land protection agency. The program will work with other groups to purchase land or help purchase land if needed though. (Source: Freeman)

**Available and expended funding:**

\$27.5 million is current estimate. Implementing legislation allows up to seven percent to be spent on program administration.

They receive about 2.75 million per year from the property tax. (Source: Freeman)

Through June 2009, they have spent a total of \$ \$17.75 million to purchase land. They are in their ninth funded year. So far, land costs have ranged from \$5,000/acre to \$25,000/acre depending largely on location. (Source: Freeman)

They are able to carry any excess funds over to the next year for future land purchases. They can also work with a property owner to purchase a land area in two installments if there are not enough funds in the budget to purchase a property. So far however, they have not had to do this.

They have noticed an increase in wildlife activity on the natural lands that they have protected, especially if the lands were previously being used (or farmed) regularly. Scientific articles discussing these types of impacts have not been identified, but the program keeps the public informed of their process regularly through local newspaper articles on land that has been protected. Providing this information to the public will be critical in making sure that the millage is renewed in 2010.

**Acres protected:**

Twenty-four parcels, ranging in size from six acres to 205 acres, have been acquired since 2002.

As of June 2009, a total of 1,687 acres have been protected. (Source: Freeman)

The land can't be sold or removed from protection while the millage is in effect. Technically, if the millage is not renewed in 2010, the legislation could be interpreted such that the land could be sold (this is unlikely as WCPARC has not sold any land in 35 years). The Washtenaw County Parks and Recreation Commission is the owner of the properties purchased and they hold the properties under state statute in the name of the County.

The lands purchased through NAPP are kept completely natural. No buildings are put on the lands (not even bathrooms) and only passive recreation, essentially walking, is allowed on the properties. The public is allowed to access the land but there are no paved trails and neither bikes nor pets are allowed. The naturalist on staff does hold nature walks periodically. (Source: Freeman)

NAPP focuses on the fee simple purchase of land rather than the purchase of conservation easements. As of June 2009, only three conservation easements, totaling 82 acres, have been purchased. Public access is an important aspect of the program in Washtenaw County and if public access were not allowed, they would not even consider purchase of a conservation easement. (Source: Freeman)

NAPP was not modeled after any other land preservation program but it did draw on the experience of some citizens (members of NATAC) that had prior work experience at a Land Trust. (Source: Freeman)

As far as providing helpful information for other Counties interested in similar programs, it is critical to have a public forum for discussion of the program and that it is imperative to get the local home builders association to support the program. They were able to do this by convincing them that they would receive less public opposition to the developments they were building if the public felt that key natural areas were being preserved in the process. Although the process may be slow-going at times, it is important to be deliberate and not rush the process. (Source: Freeman)

**Sources:**

Freeman, Tom. 2005. Telephone conversation between Tom Freeman, Superintendent of Park Planning, Washtenaw County Parks & Recreation Commission, and Amanda Vemuri, ICF Consulting on October 25, 2005.

Parks and Recreation Commission,  
[http://www.ewashtenaw.org/government/departments/parks\\_recreation/napp/pr\\_natac.html](http://www.ewashtenaw.org/government/departments/parks_recreation/napp/pr_natac.html), accessed on July 19, 2005.

Washtenaw County Parks and Recreation Commission. 2001. Natural Areas Preservation Program Screening System for Review of Potential Acquisitions. Received by email from Tom Freeman, October 25, 2005.

Washtenaw County Parks and Recreation Commission. Natural Areas Preservation Program Property Review Process. Received by email from Tom Freeman, October 25, 2005.

Natural Areas Preservation Program (NAPP). Ordinance No. 128. Declaration of Purpose.  
[http://www.ewashtenaw.org/government/departments/parks\\_recreation/napp/pr\\_natac.html/pr\\_natacord.html](http://www.ewashtenaw.org/government/departments/parks_recreation/napp/pr_natac.html/pr_natacord.html), accessed on October 25, 2005.

Washtenaw County,  
[http://bocdob.ewashtenaw.org/bocdob/jsp/ad\\_boards.jsp?value=Natural%20Areas%20Technical%20Advisory%20Committee%20&subid=32](http://bocdob.ewashtenaw.org/bocdob/jsp/ad_boards.jsp?value=Natural%20Areas%20Technical%20Advisory%20Committee%20&subid=32), accessed on July 19, 2005.

The Nature Conservancy, <http://nature.org/wherewework/northamerica/states/michigan/funding/>, accessed on July 19, 2005

Michigan Natural Areas Council Newsletter, October 2001, No. 42:3, <http://www-personal.umich.edu/~ranecurl/mnac/News&Views1001.pdf>, accessed on July 19, 2005.

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## **2000MI-02 Meridian Charter Township Land Preservation Program\***

### **RESEARCH NOTES AND FINDINGS**

#### **Mission statement:**

Purpose from the Land Preservation Program Ordinance (Article III. Division 1. Sec. 22-57):

“This article is adopted for the following purposes: (1) To protect, preserve and enhance the township’s open space and special natural features. (2) To serve additional public purposes through the purchase of property or interests in property for open space, enhancement of the natural habitat and water quality, and the establishment of a reserve fund to ensure that funding is available for the perpetual stewardship of these lands. (3) To leave an important natural legacy for future generations. (4) To take deliberate steps to ensure the continuation of a pleasant and livable community that will benefit our residents, visitors, and the local economy by employing a variety of techniques that will allow areas of natural landscape to remain in perpetuity throughout the township.” (Source: Meridian Township Ordinance)

Meridian residents have a long history of very active pursuit of keeping their community “rural in character.” As a regional shopping destination, a population of nearly 40,000 and excellent school systems in Michigan, this is not an easy task. Meridian residents have the benefit of living beside Michigan State University with many of its professors of forestry, wetlands, fisheries, agriculture, etc., as members of the community. As a result, Meridian has many residents who highly value the surrounding natural resources, have an in-depth knowledge and understanding of its value, and are willing to assist the Township in its pursuit of finding a harmonious balance between preservation and development. (Source: Helmbrecht)

#### **Program goals:**

“The criteria were developed to reflect principles established by landscape ecology and land conservation objectives to maintain a maximum degree of biodiversity and to develop, manage, and maintain ecological infrastructure through management of protected areas.”

(Source: Thomas)

**Parcel selection process:**

The Land Preservation Advisory Board based their screening process (in part) “on principles of landscape ecology using a weighted, multi-variable approach similar to USDA’s Land Evaluation and Site Assessment procedure.” (Source: Thomas)

The process consists of four main components. First, open space was inventoried using remote sensing and GIS. Second, land screening criteria were developed and tested. Third, nominated properties are reviewed in the field and results are archived in the GIS. Fourth, technical information are input into a public information program. (Source: Thomas)

Property owners are invited to submit applications.

**Prioritization criteria:**

“The screening criteria include ecological value, natural or functional value, parcel size, surrounding land use, environmental quality, and aesthetic value.” (Source: Thomas)

Each of the categories listed also has subcriteria with associated point values. Ecological value is worth 100 points total, spread across the following five subcriteria: (1) contains ecosystems of state, regional or local importance (40 points); (2) contains protected wildlife or vegetation and/or overall high diversity of species (30 points); (3) contains habitat for protected species (15 points); (4) helps connect prime greenways and wildlife corridors (10 points); and (5) other ecological values (5 points).

Natural or functional value is worth a total of 90 points and has the following subcriteria: (1) significant upland buffer to an area otherwise protected (wetland, riparian area, or shoreline) (31.5 points); (2) contains significant woodlot or woodland (22.5 points); (3) contains prime/unique soils or agricultural values (18 points); (4) provides ground water recharge and water quality enhancement; provides flood and storm water control (13.5 points); and (5) important natural feature not protected by other means (4.5 points).

Parcel size is worth 80 points with four subcriteria: (1) large land area with potential, through succession, to become significant natural resource (40 points); (2) parcel > 5 acres, contiguous to permanently preserved property or one that has PDR offered (20 points); (3) parcel > 5 acres (12 points); and (4) parcel < 5 acres having important habitat value (8 points).

Surrounding land use is worth a total of 70 points and has the following five subcriteria: (1) property contiguous to protected property (e.g., wetland, riparian area, park) (24.5 points); (2) open space value of property can be protected after purchase (17.5 points); (3) property contiguous to agricultural area (14 points); (4) property contiguous to residential area (10.5 points); and (5) property contiguous to mixed use area (3.5 points).

Environmental quality is worth 40 points total, spread across three subcriteria: (1) property contains no environmental contamination (32 points); (2) property contains possible environmental contamination (6 points); and (3) property contains known environmental contamination (2 points).

Aesthetic value is worth 40 points and has three subcriteria: (1) provides open greenspace to separate incompatible land uses or monotony of same uses (22 points); (2) provides unique multiple use opportunities (12 points); and (3) aesthetic values average for township (6 points).

Special considerations can be worth up to 40 points. (Source: Thomas)

The most important criteria/intent is to select properties with significant natural feature<sup>1</sup> value. Program money is set aside for “enhancement” which allows for projects such as returning a wetland to its more natural state or rescuing plants, e.g., Trillium, from a development site and having it transplanted onto a Land Preservation property. (Source: Helmbrecht)

Occasionally the advisory board has debates regarding the point values for highly visible parcels carrying a higher aesthetic value than natural feature value. The debates are “lively” and generally board members fall into the following two categories, academics versus “sensitives.” (Source: Helmbrecht)

The program has targeted many properties alongside water features or known spawning habitats. Red Cedar River flows across the Township and the Township also boasts medium-size Lake Lansing. That said, Helmbrecht stated that “One of the beauties of this program is its intentional diversity. Unlike other programs focusing on one specific type of land, e.g., Leelanau County, MI and the cherry farms, we have selected to preserve a wide variety of lands.” (Source: Helmbrecht)

In discussions of the evaluation criteria, the advisory board has considered change over time and this is projected to some extent in the Stewardship and Stewardship Implementation plans. Climate specific discussion, however, has not occurred. (Source: Helmbrecht)

### **Decision-making process:**

“Amend Section 22-61 as follows:

- (a) Application completion and submission. A property owner interested in submitting property for consideration shall personally or through an agent complete the township’s land preservation application form. Application forms shall be obtained from, and completed applications shall be submitted to, the office of the township clerk.

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<sup>1</sup> Natural features include lakes, rivers, animals, plants, ecosystems, etc. and maps of this information can be obtained from the Michigan Natural Features Inventory.

- (b) Application receipt and review. The office of the township clerk may receive applications at any time and shall take them to the Advisory Board no less frequently than on a quarterly basis.
- (c) Advisory board initial review. Within sixty (60) days after the applications are forwarded by the township clerk the advisory board shall perform an initial review to determine whether the subject properties meet applicable eligibility requirements. Advisory board members, accompanied by Environmental Commission members shall cause an ecological review applying the land screening criteria outlined in the rules of procedure to be performed with respect to each eligible property and the results of that ecological review shall be timely reported to the advisory board.
- (d) Advisory board evaluation and recommendation. Following receipt of the ecological review, the advisory board may obtain appraisals, title work, surveys and such other information as it deems reasonably necessary to conduct its final evaluation and arrive at a determination as to which property interests, if any, may be recommended to the township for acquisition. No appraisal shall be required for property to be donated to the land preservation program.
- (e) Negotiations for acquisition. Upon determining that a property interest may be recommended to the township for acquisition, the advisory board may undertake negotiations with the property owner to arrive at mutually acceptable terms for the township's acquisition of that property interest.
- (f) Conditional agreements for property interest acquisition. After completion of negotiations all terms and conditions agreed upon for the acquisition of a property interest by the township shall be set forth in a writing executed by the property owner and the township's designated representative. This agreement shall be expressly conditioned upon approval by a majority vote of the township board.
- (g) Environmental site assessment. An environmental site assessment shall be authorized by the township manager and conducted on behalf of the township before any acquisition of a property interest is submitted for final approval by the township board.
- (h) Final board approval. After a conditional agreement for the township's acquisition of a property interest is obtained, that agreement and the advisory board's recommendation with respect to the subject acquisition shall be submitted to the township board. Upon review of the conditional agreement and recommendation, the township board shall determine, by a majority vote taken at a regularly

scheduled or special meeting, whether to approve the purchase or donation as set forth in the conditional agreement.

- (i) Completion of acquisition. The advisory board shall take all actions necessary to complete the acquisition of property interests approved by the township board and the township clerk shall record all documents necessary to evidence those acquisitions with the Ingham County Register of Deeds.”

The decision-making process as presented above reflects recommended changes in the ordinance. (Source: Helmbrecht)

To summarize the official language above for the decision-making process, Helmbrecht provided the following synopsis of the process as it actually functions.

- Applications are received at any time.
- Applications are taken to the Advisory Board during their next regularly scheduled meeting, but not less than quarterly. (Advisory Board meets on a monthly basis).
- Advisory Board members discuss the merits of the property having been submitted and determine if walking the property to evaluate using the Land Screening Criteria is appropriate. If yes, members of both the Land Preservation Advisory Board, as well as the Township Environmental Commission select a date and walk the property to determine its desirability.
- Land Preservation Advisory Board members are provided the Land Screening Criteria results at their next meeting.
- Following presentation of the “field results” the Advisory Board determines if the results warrant contracting for an official appraisal of the property.
- The completed appraisal is reviewed by the Advisory Board and determination is made if we choose to go forward and present a buy-sell agreement to the property owner.
- An Environmental site assessment is requested and received.
- Upon completion of favorable negotiations with the landowner and Advisory Board, a request to purchase is forwarded to the Township Board (which is the same as a city council).
- Upon favorable response for purchase of the property from the Township Board, the recommended property is forwarded, through resolution to the Planning Commission for a section 9 review as required.
- Upon favorable response from both Township Board and Planning Commission all approvals are complete and closing documents can be prepared.

- Following purchase an environmental consulting firm is hired to complete an extensive “Stewardship Plan” for the property. The “plan-report” includes: Site Description; Environmental feature descriptions for all types of trees, scrubs, wet and dry meadows, open water, wetlands, upland and any rare plants and wildlife. Additionally it describes easements and restrictions, management opportunities, constraints, recommendations for enhancement, use - both long and short term, photographs and maps.

The final step is the Stewardship Implementation Plan. This plan describes where trails should go or where existing trails should be diverted to protect rare species etc.; where signs identifying property as a Land Preservation Natural Area should be placed; an annual schedule for completion of recommended actions (e.g., remove dangerous little bridges, culverts, car parts, debris; remove invasive non-native species, place interpretive signage, etc.); and finally, an annual schedule for general monitoring and reporting. (Source: Helmbrecht)

All applications offering property to the Advisory Board are available to the public. All discussion following receipt of the application through signed agreement is conducted in closed session. Once a buy-sell agreement is taken to the Township Board the information is available to the public. The Advisory Board has a very strong commitment to using the millage dollars wisely and openly, as well as a complete responsibility and gratitude to the residents for funding this program. (Source: Helmbrecht)

**Ultimate decision maker:**

Township Board.

There have been no modifications to the properties or prices presented to the Township Board. Helmbrecht did not think modifications or rejections would be likely. However, the Township Board is the ONLY body capable of approving expenditures and therefore they have all the discretion they choose to effect. (Source: Helmbrecht)

The time it takes to acquire a new parcel for protection (from parcel identification through the acquisition process) varies widely depending on circumstances associated with each property. Their acquisitions have ranged from as short as 6 months to as long as 4-5 years. (Source: Helmbrecht)

**Information used to apply prioritization criteria:**

State of Michigan Natural Features Inventory (Source: Helmbrecht); Ecological Assessment (Source: Thomas; Meridian Township Ordinance); Local biological surveys; and open space identified through remote sensing and GIS. Land screening was also used as a data source. The Township and advisory board have access to State of Michigan maps identifying the

“most likely” areas to find endangered species and have used it as a data source on occasion as well. (Source: Helmbrecht)

In addition, the data are validated by the Township’s Environmental Commission and/or by an Environmental Consultant. The advisory board also considers census projections and development in general during its discussions of potential properties. (Source: Helmbrecht)

**Priority map:**

Yes. They developed their own map by first mapping available open space. As open space is nominated for acquisition, the parcels are reviewed in the field and the results of the review are input into the GIS map. (Source: Thomas)

Independent of Land Preservation, the Township Board commissioned the research and development of a Greenspace Plan for the Township, which includes consultant data plus resident data gathered during four public forums for discussion and identification of the public’s perception of the valuable properties in the Township. The completed Greenspace plan is used on a regular basis by the Land Preservation Advisory Board. (Source: Helmbrecht)

**Partnerships:**

Michael Thomas, Former Department of Community, Agriculture, Recreation and Resource Studies, Michigan State University (wrote a paper and poster of activity).

**Available and expended funding:**

\$9.5 million is current estimate for total funding that will be generated. (Source: Meridian Monitor, Summer 2005)

Thirty properties have been acquired so far through purchase, donation, and tax delinquency. (Source: Helmbrecht)

The cost of the properties has ranged from \$3,500 to \$38,000 per acre depending upon whether the property consists mainly of wetlands or uplands. Approximately 20% of current acquisitions have been 100% donation. Donated parcels are among the highest ranking acquisitions from an environmental perspective. (Source: Helmbrecht)

In the process of purchasing the properties, an appraisal is required (except for donated parcels) and the Township shares the appraisal with the landowner and does not offer less than the appraised value. There have been multiple instances when the seller has offered to donate a portion of the value, which is allowed. There is a “general, unwritten rule” that if someone wants the property to carry their name, there must be at least a 50% donation of its appraised value. Additionally, when there is a lack of agreement between seller and buyer on the Township’s

appraised value, the landowner may choose to obtain his/her own appraisal, after which the discussion begins anew toward finding a purchase price. (Source: Helmbrecht)

### **Acres protected:**

Since implementation in 2001, five properties had been acquired through donation (90 acres), 19 properties (376 acres) through purchase, six properties (28 acres) through tax delinquency, for a total of 494 +/- acres as of Summer 2009. (Source: Helmbrecht)

The ordinance states that the land is permanently preserved with strict requirements. The land could only be sold if there was a public vote resulting in a 75% majority vote in favor of selling. More importantly the ballot language used when the millage was passed included the words “for the purchase of land and/or interests in land for permanent preservation of open green spaces and natural features throughout the township.” Should future boards choose to change the ordinance language, the permanency issue will revert to the intent written into the original ballot language from which the funds for purchase were derived. (Source: Helmbrecht)

Only one difficulty was identified related to the purchase of development rights. Michigan law does not provide the authority to Townships to purchase development rights. However, legislation was found that permits Townships to purchase conservation easements of any size that allows them to reach the same goal. While it takes a long time to finalize land protection deals, the people who want to have their land protected are very passionate about its protection. These people “have no interest in the money they receive and have no need to sell it quickly, as long as it will be protected in perpetuity.” (Source: Helmbrecht)

### **Sources:**

Helmbrecht, Mary. 2005. Email from Mary Helmbrecht, Clerk of Meridian Township, to Amanda Vemuri, ICF Consulting including an attachment with typed responses to questions. Sent October. 24, 2005. Telephone conversation between Mary Helmbrecht and Amanda Vemuri on October 20, 2005.

Thomas, M.R. The Use of Ecologically Based Screening Criteria in a Community-Sponsored Open Space Preservation Program. Poster Presentation at 2004 Michigan Land Use Summit. [http://www.landpolicy.msu.edu/resources/2004summit/thomas\\_eco.pdf](http://www.landpolicy.msu.edu/resources/2004summit/thomas_eco.pdf), accessed on July 15, 2005.

Meridian Township Board. Meridian Land Preservation Program Growing. Meridian Monitor. Summer 2005. [http://www.twp.meridian.mi.us/frame\\_meridmon.htm](http://www.twp.meridian.mi.us/frame_meridmon.htm), accessed on July 18, 2005.

Meridian Township. Ordinance No. 2001-15, 1(127-2), 11-8-2001. Article III. Land Preservation Program. Section 22-56 through Section 22-89. <http://www.municode.com/services/mcsgateway.asp?sid=22&pid=13564>, accessed on July 18, 2005.

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# **2000TX-01 Edwards Aquifer Land Acquisition and Park Expansion Program**

## **RESEARCH NOTES AND FINDINGS**

### **Mission statement:**

There is no specific mission statement for the program. The main focus of the program was to buy sensitive land<sup>1</sup> over the Edwards Aquifer to protect water quality and quantity.

(Source: Spegar (a))

The program itself was the result of a grassroots effort when it became apparent in the 1980s and 1990s that development in the northern band of Bexar (pronounced Bear) County along Loop 1604 (local interstate) was beginning to increase. This area is known for winding roads, trees, and the ability to overlook downtown San Antonio, which makes it an attractive place to live. People in the area became concerned about the rapid development and its potential impact on Edwards Aquifer, which is their sole drinking water source. As a result, the Proposition 3 initiative was developed. The initiative was successful, resulting in the approval of a sales tax to collect up to \$45 million for the purchase of sensitive land over Edwards Aquifer and \$20 million to create linear parks along the Leon and Salado Creeks. (Source: Spegar (a), (b))

The Proposition 3 initiative passed in 2000 went through January of 2005. A new sales tax referendum has already passed and will kick off in Fall 2005/Winter 2006. This sales tax included an additional \$90 million for the purchase of sensitive land over Edwards Aquifer.

(Source: Spegar (a))

### **Program goals:**

Locate and purchase undeveloped land in the recharge and contributing zones of the Edwards Aquifer as a means of protecting the Aquifer from increased pollution. (Source: Corzine)

### **Parcel selection process:**

The entire region was input into a GIS model that assigned a value based on a variety of criteria to every square meter of the region. Lands rated in the top three tiers by the GIS model were given to the land agents to pursue for acquisition. (Source: Stone and Schindel)

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<sup>1</sup> Sensitive lands are lands located in the recharge and contributing zones of the Edwards Aquifer where the water more readily seeps into fractures, fissures, and caves to replenish the aquifer. (Source: Spegar (b))

**Prioritization criteria:**

The Scientific Evaluation Team (SET)<sup>1</sup> developed a matrix using GIS to allow objective comparison of all properties in the recharge and contributing zones (about 150,000 acres). The three primary data categories included in the spatial model were geologic, biologic, and watershed data. Specific criteria were selected for each category. The geologic criteria included terrain slope, stratigraphy, mapped faults, caves and sinkholes, and soils. The biologic criteria included the habitat of the Golden-Cheeked Warbler to represent surface biologic datasets and to represent the subsurface component they selected nine species of karst invertebrates found only in caves in this area. The Golden-Cheeked Warbler is an endangered species that needs mature mixed ash juniper and oak forests for nesting. These nine invertebrates include three beetles, five spiders, and one harvestman and are listed on the Threatened and Endangered Wildlife List. The third category, watershed, consisted of multiple criteria including property size, adjacency, and proximity of a property to other “Open Space” properties. The SET also set a minimum property size at 60 acres; this size was deemed necessary for effective wildlife management.

These three data categories were combined into a GIS spatial overlay and given the following weightings by category, geologic (50 percent); biologic (20 percent); and watershed (30 percent). The GIS modeling process assigned a value based on the weighted overlay to every square meter of the region. Lands meeting the greatest number of criteria had the higher values.

“The results of the modeling were divided into 8 tiers with the 3 highest tiers meeting the overall criteria developed by the SET to be considered for evaluation for purchase.” (Source: Stone and Schindel)

The goal of the model was to “prioritize characteristics of areas most likely to contain recharge features and geological land features which contribute to Edwards Aquifer.” Since the focus of the land acquisition was to protect Edwards Aquifer water quality, quantity, and recharge potential, the geologic features associated with the recharge and contributing lands were of most importance. They were not very concerned with the protection of wildlife habitat specifically although it was often the case that areas important for wildlife habitat were also important for the aquifer. (Source: Spegar (a), (b))

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<sup>1</sup> The SET was an advisory board charged with developing a spatial model to identify potential land for acquisition. The SET spatial model was developed by or included databases from the following agencies and individuals, Texas Parks and Wildlife, Edwards Aquifer Authority, San Antonio Water Systems, COSA Public Works Department, COSA Parks and Recreation Department, U.S. Geological Survey, University of Texas at San Antonio, Natural Resource Conservation Service, San Antonio River Authority, George Veni and Associates, and ESRI.

In addition to the criteria embedded in the spatial model, the CAB focused on additional selection criteria. The CAB was especially concerned with areas for acquisition where development was imminent and they made an effort to negotiate and acquire land prior to development. Specific considerations during the process also included “size, cost, proximity to other public property, open space linkages, and adjacency to other Prop 3 property, advance sale of small parcels around property indicating development direction, location in relation to developed areas, status of development plans, visible street centerline staking or initial street cut, and extension of utilities or considered extension of utilities.” (Source: Spegar (b))

In the criteria development and evaluation process, climate change was not specifically considered. (Source: Spegar (a))

### **Decision-making process:**

The Conservation Advisory Board (CAB)<sup>1</sup> reviewed the SET’s spatial model and then lands rated in the top three tiers by the GIS model were given to the land acquisition team to pursue. The Land Acquisition Team was “composed of non-profit land conservation trusts (The Bexar Land Trust, The Nature Conservancy, and The Trust for Public Land), the City Project Manager, and San Antonio River Authority (SARA) staff. The non-profit land conservation trusts each focused on lands in a different part of the county and would suggest potential land purchases. When the non-profit conservation trusts identified a potential land purchase, they would get approval by the City Project manager and then work with SARA staff to develop a presentation for the CAB. SARA would present each potential land purchase to the CAB, including information on quality of the land and the availability of the tracts for acquisition based on the CAB directives. “While the land acquisition team negotiated land purchases with the owners, the CAB would evaluate the lands. If the CAB gave a land purchase a favorable rating, the property acquisition was forwarded to the Planning Commission and then City Council for review and approval.” After land is purchased, CAB works with City staff to determine appropriate park land use intensity. (Source: Spegar (a), (b); Stone and Schindel)

### **Ultimate decision maker:**

City Council.

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<sup>1</sup> The CAB had nine members with the following affiliations, Texas Parks and Wildlife, Edwards Aquifer Authority, San Antonio Water Systems, COSA Public Works Department, COSA Parks and Recreation Department, San Antonio River Authority, Open Space Advisory Board, Parks and Recreation Advisory Board, and Business Representative. (Source: Spegar (b))

The City Council approved each of the land acquisitions put before them. Spegar thinks this is a result of the effective screening process by the CAB. A few land purchases did not get approval from the CAB. (Source: Spegar (a))

After approval from City Council, the City Project Manager would finalize the land purchases, sometimes going to closing as soon as two days after final approval. (Source: Spegar (a))

**Information used to apply prioritization criteria:**

- U.S. Geological Survey GIS map of terrain slope, stratigraphy, mapped faults, caves and sinkholes, and soils.
- SET provided GIS layer of golden-cheeked warbler habitat—an endangered species.
- U.S. Fish and Wildlife Service provided GIS layer of nine species of karst invertebrate (subsurface) habitat—on the list of Threatened and Endangered Wildlife.
- Texas Parks and Wildlife and U.S. Fish and Wildlife Service provided GIS overlay of vegetation.

**Priority map:**

Yes. Full explanation of the map is in the prioritization criteria section. In general, a map was created using biologic, geologic, and watershed overlays and rankings from these overlays generated ranked tiers of lands needing protection. They developed the map using data from a variety of sources listed in “Information used to apply prioritization criteria”.

They also have maps of the lands that have been protected through this program. (Source: Spegar (b))

**Partnerships:**

“With approximately half of the aquifer’s 80,000 acres of recharge zone already developed or planned for development, the Trust for Public Land, The Nature Conservancy and the Bexar Land Trust are working closely with the City of San Antonio, the San Antonio Water System, and the Texas Parks and Wildlife Department to quickly protect the remaining sensitive lands before further development can take place. Since 1993, the Trust for Public Land has protected almost 10,000 acres of recharge land over the Edwards Aquifer in the San Antonio area. Most of the land has been conveyed to the Texas Parks and Wildlife Department, and water quality conservation easements on the properties are conveyed to the City of San Antonio.” (Source: Ernst, Gullick, and Nixon)

The Trust for Public Land, The Nature Conservancy, and the Bexar Land Trust made up the Land Acquisition Team and were responsible for identifying willing sellers of high priority land for the protection of the Edwards Aquifer. They were responsible for negotiating purchase prices and being the contact person for the landowner during the acquisition process. They also attended the CAB land acquisition evaluation meetings, so that they could answer questions if needed (Source: Spegar (a))

### **Available and expended funding:**

The sales tax initiative was for a total of \$65 million, only \$45 million of which went towards Edwards Aquifer land acquisition. The remaining \$20 million was for the purchase of parks along the Leon and Salado Creeks. (Source: Spegar (a), (b))

About \$40.5 million from the sales tax initiative was used to purchase land or conservation easements while about \$4.5 million was set aside for maintenance and operations after purchase. (Source: Stone and Schindel; Spegar (a))

A further breakdown of the \$40.5 million for land acquisition is the following, \$36.4 for land acquisition, \$1 million for park infrastructure, \$2 million for due diligence, and \$1.1 for commercial paper. (Source: Spegar (a), (b))

In total, \$36.71 million was spent on land acquisition. Money remaining in the improvements/due diligence funds was able to be put toward acquisition. Currently, \$710,000 remains and will be used for clean-up. (Source: Spegar (a))

The average purchase price was \$5,808/acre. In just a few years, land costs have risen in the area to \$35,000/acre. (Source: Spegar (a))

No studies have been done yet to assess the impacts of the protection of land in the recharge and contributing zones of Edwards Aquifer but this is something that they would like to do in the future. (Source: Spegar (a))

### **Acres protected:**

About 6,484 acres (from 17 purchases and 3 donations) have been protected through the program. Two additional parcels are still in the acquisition process and if purchased will add an additional 60 acres. (Source: Spegar (a), (b))

The land acquisition process would take anywhere from 45 days to 3 years from initial identification to acquisition. (Source: Spegar (a))

The land is protected permanently. Under state law, once property becomes park land, the decision to sell land must be approved by a majority vote of the voters. They are able to grant public easements for utilities if needed. (Source: Spegar (a))

When they started the process to develop the program, there were no other programs in Texas on which to base their program. Spegar is aware of another land preservation program in Austin, Texas, but its goals and method of identifying land for protection are significantly different. (Source: Spegar (a))

Some difficulties that were encountered include the following:

- They initially had some difficulty purchasing and owning Bexar County land since the purchase was being made by the City of San Antonio. Some initial purchases were annexed to the City but then they were able to change the law slightly to allow the City to purchase the land.
- Some of the developers that owned the land were rather greedy and made it difficult to settle on a deal. The City could not pay over the appraisal cost and the sellers were in a willing seller program but still the negotiation process could be difficult.
- Properties might have an option period for purchase and it could be difficult to get the entire process completed before the period during which the property could be purchased expired.
- The program had a number of different agencies and parties involved which could make the process difficult and slow moving.
- Coordination between different agencies and organizations could be difficult as each has a different culture and set of constraints. This problem lessened over time as the groups began to understand each other better. (Source: Spegar (a))

#### **Sources:**

Spegar, Susan. (a) Telephone conversation between Susan Spegar, Special Project Manager, Proposition Three Special Projects Office, and Amanda Vemuri, ICF Consulting, November 1, 2005.

Spegar, Susan. (b) Prop 3 Edwards Aquifer Program. PowerPoint Presentation, sent via email from Susan Spegar to Amanda Vemuri, November 1, 2005.

Corzine, Jason. "San Antonio Protects 90 Acres for Park (TX)." Trust for Public Land. May 15, 2003. [http://www.tpl.org/tier3\\_cd.cfm?content\\_item\\_id=11723&folder\\_id=264](http://www.tpl.org/tier3_cd.cfm?content_item_id=11723&folder_id=264), accessed on July 18, 2005.

Ernst, C., Gullick, R., and Nixon, K. "Protecting the Source: Land Conservation as a Drinking Water Protection Tool." Trust for Public Land. [www.lgean.org/documents/tplforest.doc](http://www.lgean.org/documents/tplforest.doc), accessed on July 18, 2005.

Stone, D, and Schindel, G.M. 2002. "The Application of GIS in Support of Land Acquisition for the Protection of Sensitive Groundwater Recharge Properties in the Edwards Aquifer of South-Central

Texas.” Journal of Cave and Karst Studies, 64(1): 38-44.

<http://www.caves.org/pub/journal/PDF/V64/v64n1-Stone.pdf>, accessed on July 18, 2005.

Bexar Land Trust. “Our Help to the City of San Antonio as it Acquires Land to Protect the Aquifer.” Bexar Land Trust News. Volume 5, issue 1, 2004.

<http://www.bexarlandtrust.org/BLT2004WinterNewsletter.PDF>, accessed on July 18, 2005.

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## 2000WI-01 Sheboygan County Stewardship Fund Grant Program

### RESEARCH NOTES AND FINDINGS

#### Mission statement:

No mission statement was specifically written for this program. (Source: Haydin)

The County wanted to be engaged in the land acquisition process and provide a pot of money that could assist in the acquisition of key lands as land acquisition costs were rising and non-profits were finding it more difficult to purchase some of these lands. (Source: Haydin)

#### Program goals:

The goals are the following:

- Ensure citizen involvement in the County's Stewardship process,
- Cultivate environmental stewardship within individuals, organizations, and government entities,
- Help implement projects identified in the County's Outdoor Recreation and Open Space Plan,
- Provide County-matching funds for leveraging dollars from federal, state, local, and private entities for conservation activities,
- Coordinate County stewardship activities so they are in harmony with other conservation and recreation activities already occurring or planned for the County,
- Initiate only those stewardship activities that cannot be accomplished by current or upcoming regulatory tools, such as land use planning, zoning, land division ordinances, and shoreland-wetland-floodplain regulations,
- Preserve the County's natural resources while minimizing the loss of local property tax revenues,
- Form green space and wildlife habitat corridors by linking existing natural areas together,
- Acquire, protect, and restore only those resources that can adequately be maintained by specific public or private custodians in the future,
- Preserve the natural resources of the County while continuing to promote wise growth and economic development,

- Promote beautiful, healthy, and thriving cities and villages, so new and existing County residents will always have attractive alternatives to living in rural areas, and
- Municipalities that have adopted “Smart-Growth” compliant comprehensive plans will receive higher priority for County Stewardship Funding. (Source: 2004 application form)

**Parcel selection process:**

“Any town, village, city, county agency, or other government agency completing projects within Sheboygan County or any non-profit group as reported in federal form 501(c) may apply for funds through this program.” (Source: 2004 application form) Projects are accepted in four categories: (1) project development, (2) purchase of development rights, (3) land acquisition, and (4) restoration of wetlands and natural habitat. Other projects not fitting these categories can be awards, provided they meet program goals.

County planning department staff review applications first, then forward them to the Smart Growth-Stewardship Technical and Advisory Committee (formerly named the Citizens Advisory Board (CAB) in 2002 (Source: Haydin)) for recommendations. Final decisions are made by the County’s Resources Committee.

Applications are due October 14<sup>th</sup>, the Smart Growth-Stewardship Technical and Advisory Committee meets in November and the County Resources Committee meets in December to give final approval. The entire process takes about 2-3 months from the time applications are received until they are approved and funds dispersed. (Source: Haydin)

**Prioritization criteria:**

“Projects that are tied to the Sheboygan County Comprehensive Outdoor Recreation and Open Space Plan, another municipality’s Outdoor Recreation and Open Space Plan, or a Smart Growth-compliant comprehensive plan will receive first consideration.” (Source: 2003 press release)

Part A

Natural Resources: Water	30
Natural Resources: Land	20
Recreational Opportunities	25
Cultural/Historical Qualities:	15
Community Cooperation	10

Part B

Project Availability	10
Economic Factors	10
Management Factors:	10
Planning Factors	15
Density Standards	10
Negative Factors	- 10
Significant Natural Features	10
Significant Archaeological Features	10
Significant Historic Features	10

Part C

Quality of Farmland	30
Development Potential	40

**Decision-making process:**

The program uses a detailed checklist to award points in three broad categories: Part A evaluates each project against the overall goals and priorities of the Sheboygan County Stewardship Fund.

Part B weighs other project factors that play an important part in the viability of these proposals to result in a desirable and completed project.

Part C evaluates Purchase of Development Rights (PDR) applications. (Source: 2004 application form)

The checklist is composed largely of yes/no questions. Maximum points are awarded as shown on the above table.

The planning staff is the first to evaluate each application using the point system and they pass their evaluation along to the Smart Growth-Stewardship Technical and Advisory Committee. The Smart Growth-Stewardship Technical and Advisory Committee then discusses the program and may or may not agree with the point distribution as provided by planning department staff. Meetings are held to discuss any differences in opinion, and the Smart Growth-Stewardship Technical and Advisory Committee then makes a final analysis and provides a final score for each application. This final analysis and score is what is provided to the Sheboygan County Resources Committee. (Source: Haydin)

There is also a pre-evaluation period when agencies/non-profits can submit their grant applications early and get feedback including a “draft” score and a list of the weaknesses in their application. The organization can then revise their application and re-submit it during the application period after making revisions to improve their chances of getting funded. (Source: Haydin)

In terms of water resources, they are looking at both water quality aspects and the aesthetics of water resources. (The water component was based on the Dane County and other state stewardship programs.) An example of a project that would receive high marks for the water components is the following: A public/private partnership needed \$10,000 for habitat construction in a trout stream that was located in a watershed that historically had a great deal of agriculture – resulting in agricultural run-off into the stream as well as dredging and trenching in the stream. The larger project was reconstructing stream flow to a more natural, meandering stream. Habitat construction would complement this larger project and result in improved water quality, habitat, and aesthetics. (Source: Haydin)

Climate change has not been a part of the discussions on these grant applications. Personally, Haydin thinks that climate change will impact these resources but specific grants or

projects have not been pursued for climate change related reasons. In thinking more broadly about global change, the land use aspect is discussed when evaluating grant applications. She suspects that some of the reasons why climate change is perhaps not forefront in the discussion is because Sheboygan County already has a great deal of public land, specifically state-owned forest which is already protected. (Source: Haydin)

**Ultimate decision maker:**

Sheboygan County Resources Committee.

This committee does a thorough review of the grant applications and recommendations that are put before them and have full discussions on the funding of the projects. The five-person committee holds a vote and measures pass as long as they have a 3 to 2 vote. So far all recommended projects have been funded, but at least one received some opposition by a Resources Committee member. (Source: Haydin)

**Information used to apply prioritization criteria:**

Applicants are required to provide, among other items: a project narrative; project information (including county map, plat map, topographic map, aerial photograph, soils survey, site plan, additional graphic information); environmental hazards assessment form (only necessary if an acquisition); information on community support; and a management plan.

County planning department staff use information provided by applicants as well as their own databases to evaluate properties. Specifically, county staff use GIS to review land information such as aerial photography, contour maps, USGS topographic maps, wetland inventories, parcel and zoning maps. In addition, they review County/state agency plans such as outdoor recreation plans, water quality plans, etc. to see if a project would contribute to the achievement of an agency goal as laid out in the agency plan. (Source: Haydin)

Typically no projections or forecast data are used; occasionally census projections would be reviewed, but the growth rate in Sheboygan County is not changing much so this is generally not necessary. (Source: Haydin)

The grant applications can vary widely in what they are aiming to do, which means that the most useful information in the evaluation process is application specific. (Source: Haydin)

**Priority map:**

No priority maps are used. However, GIS is used when evaluating grant applications – on a site by site basis. (Source: Haydin)

**Partnerships:**

The Sheboygan County Stewardship Fund Grant Program has no formalized partnerships. However, funds are often provided to assist one aspect of a larger project or funds are joined with funds from other organizations such as the Sheboygan County Conservation Association (and association of non-profit conservation organizations in the county). The groups that the grant program might work with ranges from non-profits to local, county, or state agencies. (Source: Haydin)

**Available and expended funding:**

\$40,000 available in 2004 grant cycle; expenditures not available.

There is political pressure for the program to spend all its money each year and since some of the money comes from impact fees levied during the year, the money is not allowed to be carried over to the next year. (Source: Haydin)

There is no documented evidence of economic, environmental or social impacts resulting from the grant applications that have been funded, but Haydin suspects that some do result from specific projects. She provided three examples. First, they provided money to help with the development of a promenade along a river in the City of Sheboygan that has provided access and possibly generated positive economic impacts. Second, the habitat restoration in the trout stream described in the “Decision-making process” above will likely provide positive environmental impacts. Third, they provided funding for a wetlands delineation project as part of a Village park development that will likely result in positive social impacts since the parks has natural areas as well as trails and a playground. (Source: Haydin)

The greatest challenge Haydin has found is the amount of money they have available and the inability to carry funding over into the next year if applications are not as worthy in one year or if a larger/more important acquisition might be coming up in a future year. (Source: Haydin)

**Acres protected:**

This program is not a direct land acquisition program. Some of the grant applications do support direct land acquisition but they often support other goals. In addition, the funding that goes toward land acquisition is often only a smaller part of a larger funding source for the acquisition, so the acres that are acquired are only purchased through this program in part. As a result, no specific information on the number of acres protected through this program is available or applicable. (Source: Haydin)

Haydin did note that land costs have varied for the projects they have been involved in, ranging from a cost of \$12,000 for 10 acres of marshland to costs of \$5,400 per acre and \$7,500 per acre for other projects. (Source: Haydin)

As mentioned in the “Mission Statement” discussion above, this program was modeled after the Dane County Stewardship Fund Program. The idea for implementing this type of program in Sheboygan County came from Adam Payne, the County Administrative Coordinator, who had lived in Dane County for many years. It was also a nice alternative to a sales tax program because sales tax referendums are not popular in Sheboygan County. (Source: Haydin)

**Sources:**

Haydin, Shannon. 2005. Telephone Conversation between Shannon Haydin, Sheboygan County Planning Director, and Amanda Vemuri of ICF Consulting, October 24, 2005.

Project web site, <http://www.co.sheboygan.wi.us/html/d%5Fplanning%5Fstewardship.htm>, accessed on July 15, 2005.

Application forms for 2002, 2003, and 2004

Grants guidelines, 2002

Press release, 2004

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## **2004AZ-01 Sonoran Desert Open Space and Habitat Protection\***

### **RESEARCH NOTES AND FINDINGS**

#### **Mission statement:**

Voters approved the sale of general obligation bonds “for the purpose of acquiring open space and habitat protection, including Sonoran Desert open space, protecting wildlife habitats, saguaro cacti, ironwood forests and lands around rivers, washes and recharge areas to ensure high water quality, and the acquisition of lands in the vicinity of Davis-Monthan Air Force Base to prevent urban encroachment.” (Source: Pima County (a))

#### **Program goals:**

Program goals include, “the acquisition of land in fee or for the purchase of conservation easements, to protect wildlife habitat, scenic landscapes, riparian areas, and water quality, and to preserve lands in the vicinity of Davis-Monthan Open Space.” (Source: Pima County (b))

The specific goals depend on the category of properties. The Community Open Space Parcels are more focused on scenic landscapes and recreation and may not meet the goals to protect wildlife habitat, riparian areas, and water quality. The Habitat Protection Priorities were chosen solely based on their ability to achieve biological goals. The Urban Space Requested by Jurisdictions may meet a mix of the goals, depending on why a jurisdiction chose to include it on their list. The Davis-Monthan Open Space is intended to restrict people from the land that falls in the approach and departure corridors from the Davis-Monthan air force base.

The Sonoran Desert Conservation Plan was developed over several years and identified 55 vulnerable species that are indicators of ecological health. An analysis of the habitat they need to thrive was undertaken and a 2-million acre Conservation Land System was identified. Approximately 1 million acres of the Conservation Lands System was already protected in federal, state, and local reserves. The remaining 1 million acres was narrowed down to 500,000 acres that were identified for protection first. The 2004 Open Space bond is one tool for acquiring that land. A second tool is development set asides.

The County will only purchase land from a willing seller. The County cannot use eminent domain; that clause was included in the bond measure to gain the support of voters. (Source: Fyffe)

**Parcel selection process:**

There are four categories of properties included in this measure: (1) Community Open Space Parcels (\$37.3 million), (2) Urban Open Space Requested by Jurisdictions (\$15 million), (3) Habitat Protection Priorities (\$112 million), and (4) Davis-Monthan Open Space (\$10 million). Properties in excess of the available funding were listed in the bond measure with the understanding that some properties may be acquired through other sources of funding or at no cost along the way, and that others would have owners unwilling to sell. Habitat Protection Priorities are prioritized into highest priority and secondary priority categories. During implementation of the program, secondary priority properties were sometimes acquired before highest priority properties depending on when opportunities arose.

The Community Open Space Parcels were selected for their scenic and recreational value through a qualitative selection process with no set criteria. Some of the parcels remained unpurchased from 1997 Bond measure. Others were important to the Parks and Recreation department and still others were nominated by individual community groups that approached Pima County. The Urban Space Requested by Jurisdictions parcels were requested by jurisdictions, or community members on behalf of those jurisdictions, who compiled lists based on their own open space plans or community priorities. The Habitat Protection Priorities were selected based on biological indicators and analysis, as described above. Pima County contracted out the development of the priorities to the Arizona Open Space Land Trust and The Nature Conservancy. The Davis-Monthan Open Space included all the land in the approach and departure corridors surrounding the Davis-Monthan Air Force Base.

The list of properties is intentionally static to provide the voters with an idea of what may be purchased. The process to select parcels initially was driven by the community and the County, though, and the list of properties to acquire is much longer than could possibly be achieved with the available money. Owners can apply to sell a property and the County can buy it if it is already on the list. Owners occasionally approach the County looking to sell a property that is not on the list, but in these cases, the County tries every avenue possible to protect the property without acquiring it, or seeks other funding sources. (Source: Fyffe)

**Prioritization criteria:**

After the bond measure was approved by voters, the Conservation Acquisition Commission asked county staff to identify habitat-protection priority properties that meet the following criteria: “greater than 2,500 acres in single ownership, parcels with important riparian areas, and parcels within critical landscape connections in order to further focus acquisition resources.” (Source: The Nature Conservancy)

Properties identified from the following sources were evaluated to develop a list of Community Open Space parcels: “1) remaining parcels included in the voter-approved 1997 Open Space Bond Program; 2) parcels identified as important to the open space goals of Pima County’s Natural Resources, Parks, and Recreation Department; 3) additional parcels located on the urban fringe or within urban Tucson that were identified by community and environmental groups as well as individual members of the community as being of special merit...; and 4) parcels reclassified to conservation status by the Arizona State Land Department through Pima County’s Arizona Preserve Initiative Application.” (Source: Pima County (c))

There were not that many Community Open Space properties on the list, so the County targeted all of them. The decision-making process for “Urban Open Space Requested by Jurisdictions” involved jurisdictions giving the County a list of properties for inclusion in the bond measure. The properties were chosen based on criteria such as location in flood prone areas or historical value of the area. There are more urban areas than are acquired through other components of the Open Space Program. The County typically negotiates with landowners and then consults the jurisdiction to make sure that they support the acquisition of the land. There is no formal application process.

The parcels that fall within the Davis-Monthan Open Space portion of the program were based on a report by the Davis-Monthan Air Force base and the City of Tucson. The goal for now is to simply restrict people from lands that are already vacant. The space may be used in the future for solar photovoltaic ground mounted panels. (Source: Fyffe)

### **Decision-making process:**

The Conservation Acquisition Commission must review and recommend to the Pima County Board of Supervisors all acquisitions of property or rights in property. It calls upon county staff to initially identify candidate properties. (Source: Pima County (c))

The Conservation Acquisition Commission members are appointed. The Board of Supervisors appoints several people who are conservation-minded. The County Manager appoints a person (who currently represents real estate interests). Additionally, certain organizations have representatives that sit on the Commission (e.g., realtor groups, rancher groups, environmental groups). The members serve 8-year terms.

The Commission plays both an oversight role for work done by county staff and participates in detailed analyses and evaluation of properties. The County staff negotiates deals with varying levels of involvement from the Commission. The Commission may also get involved with prioritization and instruct the County to look into particular issues.

The Commission votes on decisions. They meet about once a month. They are required to meet four times a year, but they have been meeting more frequently due to the number of acquisitions underway.

The biggest barrier is having a willing seller, which, by definition, is willing to sell at the appraised value of the land. There is sometimes disagreement over appraisals. At the beginning of the program rapid increases in land prices meant that less land could be acquired with available funds. However, after the housing market collapsed, land prices dropped, and the number of potential buyers dropped, and the County was able to acquire a significant number of properties at reasonable prices.

Another barrier is the inability to purchase State land, which is a huge proportion of land in Arizona. The State auctions land off, with the profits going to schools. The County cannot outbid developers in an auction. Numerous efforts at State Trust land reform at the State Legislative level and the ballot box have failed.

Meetings of the Conservation Acquisition Commission are open to the public and the press (which had a strong presence in the early months of the program). The public can comment during meetings and generally provides comments in support. There have been a few incidences when the public is opposed to an acquisition (e.g., mining interests were worried about how their rights to mine land would be impacted by an acquisition). (Source: Fyffe)

**Ultimate decision maker:**

Pima County Board of Supervisors.

The Pima County Board of Supervisors generally supports the recommendations of the Conservation Acquisition Commission and does not try to overturn or block acquisition decisions. The Board, which consists of five members, is elected for 4-year terms. They serve a role similar to a City Council. Most of them have been educated about land protection over the past years by going through the conservation process and are pretty savvy in this area. (Source: Fyffe)

**Information used to apply prioritization criteria:**

The multi-year planning process mentioned previously involved considerable collection and analysis of data. Decisions about the Habitat Protection Parcels were based heavily on the data analysis. Other land protection decisions are based on more qualitative information. Projections of where development was expected to go in the future were consulted and evaluated to determine how set asides would impact biological factors and help avoid negative impacts. The impacts of climate change have not been specifically considered. (Source: Fyffe)

**Priority map:**

Thousands of maps were developed during the planning process. A single map was referenced in the bond measure and it shows all properties that are eligible to acquire under the acquisition program.

Maps are heavily consulted and analyzed. There are in-house County GIS staff members who work full time to update and analyze maps. (Source: Fyffe)

**Partnerships:**

The Nature Conservancy and Friends of the Sonoran Desert worked together to identify Pima County's priority conservation lands and encourage the County's Board of Supervisors to include the open space bond measure on the ballot. (Source: The Nature Conservancy)

The County continues to get information from The Nature Conservancy. The County also contracts out work to the Arizona Open Land Trust, which acts as the County realtor in negotiating some land acquisitions. The Friends of the Sonoran Desert was a political group that was set up to help the bond measure pass initially. They continue to put out a periodic newsletter covering the performance of the County and will help to get voters on board for another measure in the future. Counties can partner with a state open space program. The Heritage Fund Program is a voter initiative that is supposed to provide \$20 million a year for land protection, but the legislature cuts from it each year when preparing the budget. Pima County has partnered with the State in the past for some grant money for open space and trails.

Pima County is a bit of an anomaly in the state in terms of their open space program. There are not other counties in Arizona that are so proactive. (Source: Fyffe)

**Available and expended funding:**

\$140 million of the available \$174.3 million has been spent to date, and it is expected that all but \$10 million will be spent by August 2009. The County can only spend at or near appraised value for the land. (Source: The Nature Conservancy, Fyffe)

**Acres protected:**

42,000 acres of land have been bought through this measure to date. 130,000 acres worth of grazing rights have been purchased. (Source: Fyffe)

**Sources:**

Fyffe, Nicole, Pima County, Personal Communication with Susan Asam, ICF Consulting, November 4, 2005.

The Nature Conservancy. "Bond Celebrates First Anniversary," June 2, 2005, <http://nature.org/wherewework/northamerica/states/arizona/press/press1948.html>, accessed on July 18, 2005.

Pima County (b), Completed Projects Question 1, June 2005, <http://www.bonds.pima.gov/bonds2004/pdf2004/OpenSpaceCompleted2004.pdf>, accessed on July 18, 2005.

Pima County (c), Bond Implementation Plan, May 18, 2004, <http://www.bonds.pima.gov/bonds2004/pdf2004/BIPOToc.pdf>, accessed on July 18, 2005.

Sonoran Desert Conservation Plan, <http://www.pima.gov/cmo/sdcp/index.html>, accessed on November 3, 2005.

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## **2004CA-02 Clean Water, Ocean, River, Beach, Bay Storm Water Cleanup Measure**

### **RESEARCH NOTES AND FINDINGS**

#### **Mission statement:**

The program mission is: “to protect public health by cleaning up polluted storm water; keeping pollution, trash, toxic chemicals, dangerous bacteria from rivers, beaches; preserving clean drinking water by protecting groundwater quality; reducing flooding; increasing water conservation; protecting bays, rivers, lakes from storm water contamination.” (Source: League of Women Voters)

#### **Program goals:**

“The improvements will clean up polluted storm water and reduce dangerous bacteria in the City’s rivers, lakes, beaches, bay, and ocean. The measure will also institute improvements that protect ground water quality, provide flood control, and increase water conservation, habitat protection and open space.” (Source: League of Women Voters)

The primary purpose of the program is to improve water quality in the city. Human health and environmental protection are intertwined, so (in the opinion of S. Kharagani) improving water quality benefits both humans and the environment (including wildlife habitat). The primary goal is to meet TMDL standards; compliance is not an easy task. Land protection is one tool in the effort to reduce TMDL. The City is using an adaptive management approach (which adapts as conditions and needs change), employing green technologies, and considering achieving compliance to be an iterative process. If there are other needs (e.g., protection of human health, habitat protection) that can be met while improving water quality, then it is a bonus. (Source: Kharagani)

#### **Parcel selection process:**

Program priorities were identified at the outset based on the Clean Water Act §303(d), which lists polluted water bodies and specific pollutants. In the Los Angeles area, entire water bodies are polluted with a variety of pollutants (e.g., trash, heavy metals, etc.). The driving factor in the initial prioritization effort was to identify the most polluted areas (among those on the CWA §303(d) list) to tackle first, which turned out to be the Los Angeles River). Beaches were also identified as a priority, because they are so visible to the public and tourists. Additionally,

there was a lawsuit concerning beach clean-up and, subsequently a court-mandated order to take action. Cleaning up these polluted areas is one of the key goals of the program. One of the sub-criteria for project selection is whether or not the project addresses a pollution problem identified by the adopted TMDL, since meeting TMDL standards is a key aspect of the program.

Parcel selection is a stakeholder-driven process, involving the City Council, environmental activists, non-profit organizations, and neighborhood councils (of which there are 123-124 each containing members nominated by their community to advise elected officials). All of the stakeholders can, and do, consult available sources and many are experts in the field of water quality. Non-profit and community organizations can propose projects during two-month windows that occur twice a year. Neighborhood councils can provide input at public meetings. (Source: Kharagani)

**Prioritization criteria:**

“The primary criteria are divided into three categories, with the following weighting: (1) Water Quality Improvements at 40%; (2) Achieves Multiple Objectives at 30%; and (3) Project Feasibility/Readiness/ Financial at 30% of the overall scoring.” Within these three categories, there are a number of sub-criteria (ranging from compliance with regulations to subjective criteria) to help evaluate potential projects. These sub-criteria are evaluated on a yes/no or low/medium/high basis. See Exhibit 1 below for more detail. Criteria for selection are dynamic; they can be amended as necessary if it becomes apparent they should be revised.

**Exhibit 1.** Evaluation Criteria, Sub-criteria, and Scale

Criteria	Weighting	Sub-criteria	Scale
Water Quality Improvements	40%	Pollution problem identified by adopted TMDL	Yes/No
		Meets wet weather water quality regulations	Low/Med/High
		Meets dry weather water quality regulations	Low/Med/High
		Reduces pollutant loads	Low/Med/High
Multiple Objectives	30%	Enhances drinking water source	Low/Med/High
		Provides potential for beneficial reuse	Low/Med/High
		Enhances environment	Yes/No
		Provides open space/recreational areas	Yes/No
		Reduces flooding	Yes/No
		Consistent with the Integrated Regional Watershed Management, Plan, the Los Angeles River Revitalization Plan, and the Watershed/Water Management Plan	Yes/No
Project Feasibility/ Readiness/Financial	30%	Durability of project	Low/Med/High
		Cost of project	Low/Med/High
		Relies on proven technology	Yes/No
		Project ready for implementation	Yes/No
		Potential for external funding	Yes/No
		Strong community support	Yes/No

(Source: City of Los Angeles Stormwater Program)

The project review committees (including a citizens oversight advisory committee (COAC) and an administrative oversight committee (AOC) consult technical information and discuss issues). There has only been one set of projects to go through the evaluation process, and it was probably an exceptional case due to the tight deadline. There was not enough time for discussion; funding for trash technologies had to be passed to be implemented before surpassing the TMDL limits in September 2006.

The committees make final decisions with a vote and then send them to the City Council and Mayor (the ultimate decision makers). (Source: Kharagani)

**Decision-making process:**

There are 44 City departments (e.g., Recreation and Parks, Water and Power, Street Services, Engineering) as well as key stakeholders that are involved in the development of the master schedule, funding allocations, and management decisions. The time-frame for decision making is two months to receive proposed projects, another two months to evaluate them, and then an additional two months to adopt them. This is a semi-annual process; projects in 2005 can be proposed from October 15 to December 15 (and are submitted to the City).

The Mayor and City Council approve criteria for selection of individual projects, the list of projects, the general scope of each project, and the overall program budget and schedule. The Mayor appoints members to the citizens oversight advisory committee (COAC) and the administrative oversight committee (AOC) for 3-year terms. The COAC and AOC oversee everything that happens in the Prop O. Committee members bring considerable expertise to the table (in water, land protection, and other subjects) and represent a cross-sectional cut of the community. The AOC develops and reviews project criteria (which are dynamic) and has the power to make some adjustments to projects along the way.

Deputies from the City Council and the Mayor's office are involved in the process and staff provide input at various points in the system. Any outstanding issues arise at those points, rather than at the final decision point. Staff review technical information and participate in discussions throughout. The elected officials ultimately adopt the project funding.

The process is very political, but also very transparent and open to the public. All meetings are open to the public. Some meetings are held in the communities to get more involvement. (Source: City of Los Angeles Stormwater Program, Kharagani)

**Ultimate decision maker:**

City Council and the Mayor.

**Information used to apply prioritization criteria:**

Adopted TMDLs and EPA water quality information are used. The program also uses a number of existing plans in the watersheds. GIS and dynamic modeling is used and life-cycle costs are considered. Community needs and input is also used in decision-making. The system is monitored daily and weekly. More effort is focused in areas where things are working (responding to changes).

Data is one factor among many considered. City departments and other key stakeholders in the watershed gather and evaluate the technical information. There is an expert review of the scientific information before it is used in decision making. (Source: Kharagani)

**Priority map:**

GIS-based maps have been developed and used. The City prioritizes based on TMDL requirements. The community may have other concerns that are parallel to the TMDL goals. The City strives to work on projects that achieve multiple objectives. (Source: Kharagani)

**Partnerships:**

Partnerships include: Water Environment Research Foundation (WERF); Clean Water Association; Southern California Coastal Water Research Project; and others. The City tries to leverage the resources (often studies, expert advice) they provide. (Source: Kharagani)

**Available and expended funding:**

The measure authorizes the City to issue up to \$500 million in general obligation bonds. The City is just starting the process; they have approved \$17 million for trash TMDL compliance. (Source: Kharagani)

**Acres protected:**

Not available.

**Sources:**

City of Los Angeles Stormwater Program,  
[http://www.lastormwater.org/WPD/general/measure\\_o/about.htm](http://www.lastormwater.org/WPD/general/measure_o/about.htm), accessed on August 8, 2005.

League of Women Voters, <http://www.smartvoter.org/2004/11/02/ca/la/meas/O/>, accessed on August 8, 2005.

Kharagani, Shahram, LA Stormwater Program, Personal Communication with Susan Asam, ICF Consulting, October 25, 2005.

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## 2004CO-01 Open Space Sales Tax Program

### RESEARCH NOTES AND FINDINGS

#### **Mission statement:**

The bylaws of the Open Space Advisory Board (OSAB) include the vision, which incorporates the program goals listed below.

#### **Program goals:**

“To preserve land that protects water quality; protect wildlife areas, wetlands, rivers, and streams; preserve farmland; protect open space to limit sprawl; and for creating, improving, and maintaining parks, trails, and recreation facilities.” (Source: Rocky Mountain News)

The Adams County area is under a lot of pressure by development. The OSAB, thus, considers land acquisition to be a more primary goal than building recreational sites. (Source: Spinella)

#### **Parcel selection process:**

The Open Space Advisory Board (OSAB) consist of seven members, four of whom are residents of unincorporated Adams County and three of whom are residents of cities or towns located in Adams County.

The OSAB meets quarterly to review grant applications and recommend projects for funding to the Board of County Commissioners (BOCC). (Source: Open Space Grant Program)

To establish initial priorities, the County developed two plans: (1) the Adams County Open Space Plan; and (2) the South Platte River Heritage Plan. These plans identified areas of priority for preservation, and were developed by an extensive steering committee that represented varying interests. They are taken into consideration during project evaluation.

“The Open Space plan was developed by a steering committee of interested citizens, representatives of the Adams County cities and staff from the county and cities. Barr Lake State Park, Colorado Division of Wildlife, Metro Wastewater Reclamation District, Urban Drainage, U.S. Fish and Wildlife Service and Rocky Mountain Bird Observatory also participated in the planning process.” (Source: Adams County Open Space Plan)

No formal criteria were used to evaluate areas. A more qualitative, discussion-based process was undertaken to develop the plan.

Members of the OSAB are appointed by the Board of County Commissioners (BOCC) for four-year terms. The OSAB is set up to get representatives from unincorporated areas (who often serve repeat terms) and different cities (who rotate). People who want to sit on the OSAB can submit a letter as to why they want to be on the Board.

Grant applications follow a twice yearly cycle, due on February 1 and August 1. Rejected applicants are encouraged to reapply, and the Board sometimes offers suggestions on what to change in their application before they reapply.

Grant applications must be from agencies that collect taxes or must have one of those agencies as a sponsor. This provision was designed to limit applications to those that seek to benefit the public good. It is meant to eliminate applications from individuals seeking benefits for themselves.

The program is constantly evolving, so the information that applicants must supply also changes. The Board generally wants to see budget information, a timeline, what funding leverage the project will provide, whether or not the project crosses city boundaries, and a land appraisal.

The OSAB receives about 9-12 grants each cycle, of which nearly all get recommended to the BOCC. The BOCC can choose to fully or partially fund projects, so it has some flexibility. (Source: Spinella)

**Prioritization criteria:**

The OSAB makes funding recommendations to the Board of County Commissioners based on a set of criteria. The criteria are:

- Project funding and quality of leverage summary
- Partnerships
- Community support information
- Project budget
- Estimated project timeline
- Proposed grant fund use(s)
- Long-term maintenance
- Connectivity
- Fulfilling the needs of the community and meets the open space tax goals
- Project management and performance
- Urgency
- Opposition

The OSAB generally considers projects with partners to be better. Partners provide funding support, as opposed to advice or information. The most successful projects tend to have partners.

The County frequently uses the sales tax funds as seed money for other grants. They have tapped into the State Lottery Funds for open space (called Great Outdoors Colorado, or GOCO). There are also various State grants available such as the “Fishing is Fun” grants or the State Trails Program that can be accessed depending on the project goals. There are community donations that can act as partnerships (such as a donate-a-brick program). The Colorado Rockies (the baseball team) has also provided support in the past to build ball fields.

Applicants need to provide evidence that they have a plan for long-term maintenance; the OSAB wants to see that there is a plan. Cities with maintenance departments are often the applicants, and need to demonstrate that they have considered how they will maintain an area. The OSAB has not chosen to provide grant money for maintenance in the past, but could in the future. Funding typically goes towards improvement or acquisition of a parcel.

Connectivity refers to wildlife corridors and recreation areas, as well as anything else that could be instrumental in a larger effort (e.g., trails, connecting cities, etc.). It is broadly defined.

In determining if the needs of the community will be met, the OSAB looks at how projects will contribute to the community and how they will benefit the public. Community surveys are often done and are included with application materials. The OSAB wants to see that the community supports the measure (and likes to see letters of support from community members).

Project management and performance is assessed by looking at whether or not the applicant has experience in similar projects. If they have never undertaken a similar project, the OSAB is likely to recommend a project mentor (e.g., the Parks Department).

The OSAB wants to know if there is any opposition from the community (if anyone is strongly against the project and why) before approving a project. If there is opposition, they suggest the applicant return to their community and mitigate the conflict before funding is granted. There is infrequently opposition from community members. (Source: Spinella)

### **Decision-making process:**

Grants are submitted twice yearly. County staff review the applications first and then forward them to the OSAB. The OSAB visits the sites under consideration and applicants provide three-minute presentations at the next OSAB meeting. The OSAB then recommends projects to the BOCC, who review the projects and ask further questions. Decisions are driven by qualitative criteria (as described above).

It typically takes three months to make awards from the time the application is submitted. The entire decision-making process is open to the public. The public attends meetings, which are posted on the website. Comments are generally positive. There was more significant involvement by the public in the beginning of the program when it was being developed. (Source: Spinella)

**Ultimate decision maker:**

Board of County Commissioners (BOCC). The BOCC gets involved in the final decisions. They ask a lot of questions, but do not typically analyze much data. (Source: Spinella)

**Information used to apply prioritization criteria:**

This program relies more on a qualitative analysis of projects. (Source: Spinella)

**Priority map:**

There are priority maps that are available online and are closely consulted during the decision-making process. One of the criteria used in evaluating projects is how they fit with the open space plans and existing maps. The Boards want to know if a project is part of their larger goals. (Source: Spinella)

**Partnerships:**

Adams County and Trust for Public Lands are working together to purchase a 70-acre farm along with 10 shares of the Lower Clear Creek Ditch Company. The land is currently being farmed to produce irrigated grass/ alfalfa mix hay. Adams County would like to purchase the land and water to place conservation easements on the land, and then trade the land for conservation easements on other nearby farms (Riverdale Road Farmland Purchase, \$800,000).

The Conservation Fund, in partnership with Colorado State Parks and Adams County Open Space, proposes to purchase the 153-acre Maul Property as an addition to Barr Lake State Park buffer (Maul Property Acquisition, \$400,000). (Source: Funded Open Space Projects)

**Available and expended funding:**

\$173 million (\$8.65 million per year starting January 2007 and ending December 2026) in additional revenue is expected from increasing the dedicated sales tax from 0.2 to 0.25 percent. (Source: Rocky Mountain News)

As of 2004, the Open Space Sales Tax had funded 87 grants (totaling \$17.8 million and leveraging over \$78 million in matching funding from other sources) since the program's inception in 1999 (1999CO-01). Sixty-eight percent of revenues are earmarked for Open Space

grants. Thirty percent is returned to the local jurisdiction in which it was collected. Two percent goes towards administrative costs. (Source: Open Space Report)

To date (November 2005), a total of \$25 million has been spent. (Source: Spinella)

**Acres protected:**

3,500 acres have been protected through tax funds to date. (Source: Spinella)

**Sources:**

Adams County Open Space Plan, [http://www.co.adams.co.us/services/department/parks/open\\_space-plan.html](http://www.co.adams.co.us/services/department/parks/open_space-plan.html), accessed on November 4, 2005.

Open Space Sales Tax Program, [http://www.co.adams.co.us/services/department/open\\_space/index.html](http://www.co.adams.co.us/services/department/open_space/index.html), accessed on June 28, 2005.

Rocky Mountain News.com, [http://election.rockymountainnews.com/issueDetail.cfm?issu\\_id=2104](http://election.rockymountainnews.com/issueDetail.cfm?issu_id=2104), accessed on June 28, 2005.

Open Space Grant Guidelines, [http://www.co.adams.co.us/services/department/open\\_space/grant\\_info.html](http://www.co.adams.co.us/services/department/open_space/grant_info.html), accessed on June 28, 2005.

Open Space Report, [http://www.co.adams.co.us/services/department/open\\_space/2004\\_Open\\_Space\\_Report.pdf](http://www.co.adams.co.us/services/department/open_space/2004_Open_Space_Report.pdf), accessed on June 28, 2005.

Spinella, Kathy, Adams County Open Space Program, Personal Communication with Susan Asam, ICF Consulting, November 4, 2005.

**POINT OF CONTACT:**

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## 2004FL-01 Osceola County Land Protection Measure

### RESEARCH NOTES AND FINDINGS

#### Mission statement:

Synopsis of mission statement:

- “To acquire, protect and manage environmentally significant lands and green space that
  - ✓ contain natural upland or wetland communities, native plant communities, rare and endangered flora and fauna, endemic species, endangered species habitat....
  - ✓ offer optimal human social value, including balanced geographic distribution when possible, resource and nature-based recreation, and protection of water resources ....
  - ✓ serve to recharge the county’s aquifers and protect its wetlands and surface water resources...
- To protect present conservation lands by acquiring, protecting and managing adjacent properties...and add to resource connectivity and to existing natural areas and wildlife corridors;
- To restore the natural functions, as necessary, to any impacted and vulnerable habitats....
- To help implement the objectives and policies of the County’s Comprehensive Management Plan....
- To identify the County’s environmental lands and green spaces for acquisition, including... development rights, environmental easements, leases, leaseback arrangements and life estates ....
- To... maintain and preserve their natural resource values, and provide appropriate resource and nature-based recreational and educational opportunities....
- To have the acquired sites available...to educate the general public....
- To protect natural resources which are adjacent to the boundaries of other conservation land acquisition programs....
- To cooperate actively with other acquisition, conservation, and resource management programs....

- The Program fund shall be in addition to...current and future funds for parks and recreation....
- To purchase lands not to exceed \$60 million as outlined in Resolution 04-55R....”

(Source: Ordinance 04-28 text)

**Program goals:**

The goal of this measure is to “acquire and manage environmentally significant lands for the protection of water resources, wildlife habitat, and public green space for passive recreation.”

(Source: Ballot measure text)

**Parcel selection process:**

Synopsis of parcel selection process:

The Land Conservation Advisory Board (LCAB) shall be made up of nine Osceola County residents, exclusive of elected officials ....The nine members shall...provide the following representation:

Members of the LCAB shall have expertise in ecology, conservation of natural resources, real estate or land acquisition, land appraisal, land management, ecotourism or environmental education....

The LCAB shall have the following duties and responsibilities:

....[R]ecommend to the Board an Acquisition List consistent with the goals of the Program.

....[M]ay recommend to the Board proposed expenditures from the fund; additional selection or acquisition policies, procedures, and programs....

....The actions and recommendations of the LCAB are advisory only.”

(Source: Ordinance 04-28 text)

Applications for the LCAB were solicited from any citizen or business owner in Osceola that had an interest in participating. After soliciting the applications, approximately two dozen applications were received for all board seats. The county commissioners selected the LCAB based on the qualifications of the applicants. (Source: Matthews)

**Prioritization criteria:**

Synopsis of prioritization criteria:

“The evaluation of each acquisition proposal shall be based on satisfying at least two of the initial screening criteria in this section. Qualified sites shall then be prioritized by a Site Scoring Criteria Matrix (“Scoring Matrix”) to be developed by the LCAB and County staff,

based on similar scoring systems used by the State of Florida's Conservation and Recreational Lands program and/or other land acquisition programs. The initial screening criteria are:

1. Land with the rarest, most unique and endangered habitats found in the County, in the following order of preference: sandhill, lake margin swamps, wetlands, bayheads, pine uplands and flatwoods, river floodplain, dry prairie, wet prairie, cypress domes, xeric oak, scrub, high quality open range, other native habitats.
2. Lands offering the best human social values, including balanced geographic distribution, where possible, proximity to population, connectivity to other green space, green way and/or other conservation areas, appropriate access for passive and compatible uses, and enhancement of the aesthetic setting of the County.
3. Land, which protects the most natural water resource values, including aquifer recharge, water quality, wetland dependant species habitat, and flood control.
4. Land containing the most biological value, including biodiversity, listed species habitat, connectivity, restoration potential, and ecological quality.
5. Land, which enhances and/or protects the environmental value of current conservation lands through function as a buffer, ecological link, or habitat corridor.

Any qualified land that meets at least two of the above criteria, and has matching funds available and/or which the Program has funds available and could leverage a significantly higher funding rank if submitted with another acquisition program.

The proposed acquisition lands which are qualified under the initial screening criteria shall be evaluated and ranked by the LCAB, with the assistance of County staff, using the Scoring Matrix described [above], and site visit information which confirms or refutes the initial screening criteria evaluation, and based on comparative size (to prefer larger or similar lands), vulnerability to destruction (to prefer most threatened of qualified lands), and the estimated feasibility and costs of management (to prefer most manageable lands).

The Board shall approve a list of Target Protection Areas that contains specific sites that generally satisfy the initial screening criteria and meet the goals of the Program. Inclusion on this list is not a guarantee of subsequent purchase. All proposals will be evaluated and ranked by the LCAB, with the assistance of County staff, for recommendation to the Board.” (Source: Ordinance 04-28 text)

The criteria above are solely for the purpose of an initial evaluation. Once a property passes the initial screening, it is evaluated with the scoring matrix. At this stage of evaluation the

county is trying to “weed out” parcels that are not worth being presented to the LCAB. The program coordinator is likely to perform the initial evaluation based on the surveys and boundaries provided by the nominator, as well as natural data collected by county government biologists and private individuals. (Source: Matthews)

The LCAB recommends projects into one of two categories, “Target Site” or “Active Acquisition.” The “Target” designation indicates that the county is interested in the site, although matching funding may need to be sought, or the site might not be ready for purchase. An “Active Acquisition” designation indicates that the county commission will actively seek to purchase the site. Target sites can become Active sites as funds become available or as properties become “ready” for purchase. The program coordinator will likely make that determination. (Source: Matthews)

No exceptions can be made to the initial screening criteria requirement of having a minimum of at least two of five criteria. In many cases a program that passed the initial screening will be removed from consideration once more information is acquired and the LCAB begins scrutinizing more closely. (Source: Matthews)

The program sought to model itself after the most successful programs in Florida. In order to do this, known land protection programs in Florida were surveyed during the design phase. The program adopted what was considered best practices from the other programs. The adoption of a quantitative ranking system was a key feature in the design of the program. (Source: Matthews)

### **Decision-making process:**

Synopsis of decision-making criteria:

“...County staff will publish a notice requesting all interested landowners who meet the eligibility criteria to submit an application to the County for participation in the Program. County staff may also send letters of inquiry to the eligible landowners....

Proposals, which satisfy the initial screening, are forwarded to the LCAB and staff for secondary criteria review and ranking. Staff shall include with each proposal: boundary and location maps for each site; descriptions of the biological and hydrological characteristics; a summary of its potential for appropriate use; development potential of the site and adjacent land; an assessment of the management needs and costs; the assessed value; and any potentially available matching funds. This acquisition proposal information shall be the Initial Criteria Screening Report (“Screening Report”).

Upon completion of the Screening Report, the LCAB shall hold a public hearing to consider the recommendations regarding each site, the applicant and/or landowner's comments, and comments from the public....The LCAB shall evaluate all qualified proposals using the Scoring Matrix and propose top-ranked projects for the Active Acquisition List.

The Board shall vote on whether to approve all or part of the proposed Active Acquisition List....After approval of the list, the Board will direct the County Manager to begin negotiations for property acquisition(s) ...." (Source: Ordinance 04-28 text)

Parcel applications must come from a landowner within the county, or from a citizen who would like to nominate a parcel with the landowner's permission. The County will only negotiate with willing sellers and does not wish to spend time and effort on parcels that are not "really" for sale. There is no condemnation involved in the acquisition process. (Source: Matthews)

**Ultimate decision maker:**

Osceola County Board of County Commissioners. (Source: Ordinance 04-28)

**Information used to apply prioritization criteria:**

In order to evaluate each property, staff will provide the following to the LCAB in a screening report: boundary and location maps for each site; descriptions of the biological and hydrological characteristics; a summary of its potential for appropriate use; development potential of the site and adjacent land; an assessment of the management needs and costs; the assessed value; and any potentially available matching funds. Landowner/applicants comments, as well as public comments about each property are also taken into consideration. (Source: Ordinance 04-28 text)

**Partnerships:**

Not available.

**Available and expended funding:**

The amount available is \$60 million. The County has not bonded anything as of yet. In 2006, the program intends to bond \$20-30 million, with the option of increasing the bond deemed necessary. The program will run for 20 years, or until the funding has run out. After all funding has been spent, another vote for additional funding may be proposed. (Source: Matthews)

**Acres protected:**

No acres have been protected yet. On January 1, 2006, the LCAB will begin to review applications. It might take at least 12 months of evaluation and negotiation before the first purchase. (Source: Matthews)

**Other Information:**

The saveosceola.org website was created to gather support for the program, rather than use it as a way of communicating updates to the public. It has been shut down since the measure is passed, and will not re-open. (Source: Matthews)

The program will be publicized through different types of events and fliers, and through a newly created website. A key element to the program's success will be transparency to the County citizens since their money is funding the measure. A website listing the accomplishments and status of the acquisition will be established in January 2006. Applications will be available on the website and will also be advertised in the local newspapers. (Source: Matthews)

**Sources:**

Ballot measure text, <http://saveosceola.org/Resolution%20Ballot%20Question.pdf>, accessed on July 12, 2005.

Ordinance 04-28 text, <http://saveosceola.org/Ordinance%20No.%2004-28.pdf>, accessed on July 12, 2005.

Randy Mathews, Environmental Lands Coordinator, Osceola BOCC, personal communication with Toby Mandel, ICF Consulting, October 28, 2005.

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## **2004KS-01 Turning Rain into Recreation: Lenexa’s Approach to Stormwater Management\***

### **RESEARCH NOTES AND FINDINGS**

#### **Mission statement:**

“The mission of the Watershed Management Division is to reduce flooding, protect water and environmental quality, and create recreational opportunities for the citizens of Lenexa through a proactive, integrated, watershed-based approach to storm water management.”

(Source: Rain to Recreation)

#### **Program goals:**

The “goals of the Program are to reduce flooding, protect water quality and natural habitat and provide recreational and educational opportunities.” Land protection is one part of this program. (Source: Rain to Recreation)

#### **Parcel selection process:**

In the growth area of the city: “Criteria will be established to identify and create an inventory of natural streams that deserve protection. The City will then develop plans to conserve the identified natural streams. The inventory will also identify degraded reaches. Their restoration potential will then be ranked and prioritized.” Property owners may also dedicate land parcels to the City if the City determines that the proposed dedication meets the City’s watershed purposes. (Source: Rain to Recreation)

The City commissioned a stream inventory that was completed in December 2001. It was created by a team of consultants, including Patti Banks Associates (a local firm), a local branch of Tetrattech, and Applied Ecological Services (a contractor based out of Wisconsin). The team did a rapid assessment that looked at streams in their entirety using a variety of technical criteria to classify them into five categories ranging from “sensitive” to “significantly impacted.” A matrix of the type of stream versus the stream order (a measure of the relative size of streams) was created to help prioritize what kinds of restorative or protective actions to take.

In March 2002, the City adopted a Stream Setback Ordinance to encourage dedication of stream corridors or greenway trails (which fits in with the parks and recreation plan). The Stream Setback Ordinance protects everything identified on the map in the stream asset inventory by requiring new developments or changes in the land to comply with the ordinance (and, thus,

restrains development). This protection covers about 1,500 acres of riparian areas. Dedication of greenway trails is an opportunity to provide flood control while providing recreational opportunities. Regional stormwater facilities have been identified, so it is clear what plots of land are good for watershed purposes. The parks and recreation master plan identifies what is good for parks in terms of greenways.

The City requests dedications, but also is approached with dedications (only dedications that will be good for the City are accepted). In November 2002, the City adopted a Transfer of Development Rights Ordinance, which set up three incentives for dedications to the city: (1) relief of \$7,500/acre excise tax; (2) relief of the setback requirement for the residential side of a development; and (3) opportunity to achieve previous density on fewer acres. (Source: Beezhold (a))

**Prioritization criteria:**

“Criteria used to prioritize stream conservation or restoration efforts may include many factors, such as:

- The ecological and hydraulic connectivity and function of the stream within the overall watershed or drainage system
- The physical and biological health of the stream and its supporting ecosystem
- The potential to control natural flow regimes within the stream after the surrounding area is developed
- Aesthetic and recreational value of the stream
- Hydraulic capacity of the natural stream
- Impact of stream management on surrounding property values
- Existence of wetlands
- Development potential of area immediately surrounding the stream
- Unique environmental or aesthetic characteristics of the stream”

(Source: Rain to Recreation)

These criteria were wrapped into the Stream Setback Ordinance that emerged from the stream asset inventory. The decision-making process is mostly data driven. There has not really been an instance when climate change was considered, but the larger metropolitan area has been thinking about it. (Source: Beezhold (a))

In the mature part of the city, there is also a sub-watershed process that involves a fluvial geomorphologist and consultants’ assessment of stresses from a hydrologic standpoint.

Expenditures are prioritized based on where current stream restoration is needed or where it will be needed in the future.

**Decision-making process:**

The City Department of Public Works manages the program. The City Council makes the ultimate decision about parcels voluntarily dedicated to the city.

The City Council is involved in the adoption of new standards and new ordinances (including the Erosion and Sediment Ordinance, the 2002 Transfer of Development Rights Ordinance, and the 2004 Manual of Best Management Practices for Stormwater Quality).

For the adoption of the 2004 Manual of Best Management Practices for Stormwater Quality, the City Council was brought up to speed on new standards issued by the American Public Works Association (APWA). They generally follow technicalities closely. The Economic Development Council is also important to engage. Everything presented to these councils is couched in terms of improving the quality of life for citizens.

There are public Council meetings when the Council takes actions. There is a lot of public participation. Vision 2020, a comprehensive planning effort that initially sparked the concern for stream protection, was begun in 1998. It involved over 100 groups interested in keeping a balance between development and environmental protection.

The public also regularly attends stormwater neighborhood meetings. These public meetings are critical to bringing stream restoration to suburban areas and taking proactive steps. They provide opportunities to communicate with the public about upcoming and ongoing projects. (Source: Beezhold (a))

**Ultimate decision maker:**

The ultimate decision maker is the City Council, upon recommendation of the Public Works Director. The City Council is very engaged and gets briefed at a high level of detail. They are concerned about efficiency and effectiveness of policies.

**Information used to apply prioritization criteria:**

“The streams in western Lenexa were assigned a type designation, based on stream quality assessments conducted by Patti Banks Associates for Lenexa's Stream Inventory. Field data, based on key indicators and environmental criteria, was used in a weighting/scoring system to determine stream type. Stream type and stream order served as the criteria upon which stream setback distances were based.” (Source: Rain to Recreation)

**Priority map:**

The Western Lenexa Stream Type Map “indicates stream type and order information to be used in the determination of stream setback requirements.” (Source: Rain to Recreation)

**Partnerships:**

The City plans to try to “identify and take advantage of all available opportunities to cooperate with other communities to effectively manage storm water” and protect the shared Mill Creek watershed. (Source: Rain to Recreation)

Lenexa is a municipality within Johnson County, which it sometimes partners with for funding and works with to facilitate communication with neighboring municipalities. Working with other municipalities is one of the eight guiding principles behind the program. It participates in Johnson County’s Stormwater Management Advisory Council (SMAC) by sharing proposed projects and cost-benefit analyses to determine whose project will best meet the needs of the area for the lowest cost. There are some joint projects underway.

Lenexa took the lead in working with the Mid-America Regional Council and the Kansas City Chapter of the American Public Works Association to bring municipalities together across state lines to develop regional water quality standards. It also partners with some environmental groups and land trusts, such as the Blue River Watershed Organization, the Kansas Land Trust, the Arbor Day Foundation, the Kansas Alliance for Wetlands and Streams, the Friends of the KAW (as the Kansas River is sometimes referred to), and the Audubon Society. (Source: Beezhold (a))

**Available and expended funding:**

Anticipated revenue totals \$7.9 million (includes county funds and grants).

Funding comes from several sources: (1) a stormwater utility charge for impervious areas (\$4.50 per month per equivalent dwelling unit or EDU—considered to be the size of an average single family lot at 2,750 square feet), which generates about \$1.4 million per year; (2) a 1/8 cent sales tax passed by 78% of the voters twice, which generates about \$1.5 million per year; (3) a system capital development charge (each new home pays a one-time charge of \$850 per EDU and then pays the stormwater utility charge for the rest of the life of the home), which contributes about \$450,000 per year; and (4) a land disturbance fee, which generates about \$100,000 per year.

Before these charges were put into place, the City did a survey of residents to assess how much they were willing to pay for water quality and quality of life. Eighty percent of respondents expressed a willingness to pay to protect these resources. The survey revealed that citizens were

concerned with water quality and habitat preservation and valued passive recreational activities such as walking, bird watching, and similar hobbies. (Source: Beezhold (a))

**Acres protected:**

The City already owns 470 acres that are protected and is protecting about 1,300 acres of future streams by ordinance. About 115 of the 470 acres have been dedicated to the city.

The City has looked at benefits in terms of money. An analysis showed that green infrastructure would save 25 percent over the business as usual approach. Other public benefits that have been considered are: improved recreational opportunities; taking people out of flooding situations; providing educational opportunities (signage is provided at all facilities for educational purposes); and improving quality of water going to Kansas City. (Source: Beezhold (a))

Lake Lenexa was completed in 2006 with a park soft opening to the public the summer of 2008 and a Grand Opening of Black Hoof Park and Lake Lenexa on May 2, 2009. The park is over 300 acres of preserved and restored streamways, three wetlands, and protected upland forest. The lake is 35 acre surface area with a boat launch for nonmotorized boats. Miles of trails and boardwalks give the community access to the park, water, and spillway. (Source Beezhold (b))

The program has completed several other small lake and park amenities/facilities for the city including Mize Lake (7.5 acre surface area) at Cedar Station Park that incorporates wetlands and bioretention cells to clean road runoff and the restoration of a 2.5 acre lake at the 27 acre Hidden Woods Park. The program has also completed several stream restoration projects all of which have won the APWA Environmental Project award including Brentwood Neighborhood Stormdrainage Improvements and Stream Stabilization (\$9 million completed in 2008), Manchester Park Neighborhood Stream Restoration and Wetland (\$750,000 with \$350,000 of that from EPA 319 grant completed in 2006) and Parkhurst Neighborhood Stream Restoration done with new in-house green crew for a fraction of the cost of hiring a contractor (completed in 2007).

The program is currently completing a capital project in association with our new urbanist development (live, work, play) called City Center. The project, City Center Central Green, includes a transition of formal green space to a series of recirculating pools into a constructed wetland that enters into the Parkhurst Stream Restoration (noted above). These connected spaces are accessible by a trail. The stormwater that is cleaned in the Central Green flows down stream to Shawnee Mission Lake that is the most visited lake and park in the State of Kansas and thus an important resource that must be protected.

**Sources:**

Beezhold, Mike (a), Watershed Manager, City of Lenexa, Personal Communication with Susan Asam, ICF Consulting, November 9, 2005.

Beezhold, Mike (b), Watershed Manager, City of Lenexa, Personal Communication with Philip Groth, ICF Consulting, May 28, 2009

City of Lenexa, <http://www.ci.lenexa.ks.us/Stormwater/index.html>, accessed on August 10, 2005.

Creating Quality Places, [http://www.qualityplaces.marc.org/4a\\_studies.cfm?Case=42](http://www.qualityplaces.marc.org/4a_studies.cfm?Case=42), accessed on August 10, 2005.

Rain to Recreation, <http://www.raintorecreation.org/index.html>, accessed on August 10, 2005.

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Ron Norris and Mike Beezhold, City of Lenexa. Phone: (913) 477-7680. Email: [rnorris@ci.lenexa.ks.us](mailto:rnorris@ci.lenexa.ks.us) or [mbeezhold@ci.lenexa.ks.us](mailto:mbeezhold@ci.lenexa.ks.us).

## 2004MI-01 Scio Township Land Preservation Commission

### RESEARCH NOTES AND FINDINGS

#### **Mission statement:**

There is no specific mission statement available. However, the millage was passed because of strong public sentiment that land needed to be protected and saved from encroaching development. Many people specifically moved to the area for a semi-rural life style and rapid development was threatening the area. (Source: Knol)

#### **Program goals:**

To preserve working agricultural land; natural areas; and open space. (Source: Scio Info Newsletter, Fall 2004)

#### **Parcel selection process:**

A land use consultant is familiar with the area and has identified many of the properties that are relevant for the program. He contacts some of the landowners directly and invites them to apply. The Land Preservation Commission also sends letters to people in the township that own land parcels of a certain size or larger. In this first round of applications for agricultural land, letters were sent to 50-60 landowners. (Source: Knol)

Landowners submit applications that are reviewed by the Land Preservation Commission. The Land Preservation Commission uses the criteria listed below to evaluate the applications and determine which the best options are. (Source: Knol)

#### **Prioritization criteria:**

##### Scoring System for Review of Potential Acquisitions

The scoring system below is used to review potential land, easement, and development rights acquisitions. The system is intended to identify high-quality agricultural, open space, and park and recreation lands that are appropriate for protection through the Scio Township program. In addition to the points identified for each criteria, the Land Preservation Commission may employ discretionary points in each category to address factors not included.

##### **Agricultural Land**

###### 1. Characteristics of the Land

- a. **Soil Quality.** Percent of the property with **prime, unique, or locally important soil types** (as defined by the U.S. Department of Agriculture).

For scoring, divide the number of acres of quality soils by total acres and then multiply that by 13 to produce the score.

b. **Parcel Size.**

<40 acres	2
40-80 acres	3
>80 acres	5

c. **Road Frontage.**

<500 feet	0
500-1,000 feet	1
>1,000 feet	2

d. **Groundwater Recharge/Protection.** Percent of property serving as a **groundwater recharge area** or protecting groundwater resources.

<50%	2
50-75%	4
>75%	5

e. **Woodlands.** Does the property contain **Landmark Trees**?

Up to five points may be awarded.

f. **Other Habitats.** Does the property contain other important habitats such as wetlands, grasslands, or stream corridors?

Up to five points may be awarded.

g. **Public Water Resources Frontage/Proximity.** Amount of frontage on **open water** or a **perennial stream.**

No frontage	0
<100 feet	2
100-500 feet	4
>500 feet	6

2. Context

a. **Adjacent Zoning Classification.** Percent of the properties contiguous with the subject property that is in agricultural or open space zoning. (Refer to Scio Township Zoning Ordinance.)

<50%	1
50-89%	2
90% or more	4

b. **Adjacent Land Use.** Percent of the properties contiguous with the subject property that is in an agricultural or open space use.

<50%	2
50-89%	4
90% or more	6

c. **Master Plan Designation.** Is the property designated for an agricultural or open space use in the Scio Township Master Land Use Plan?

10 Yes      0 No

d. **Proximity to Protected Land.** Distance to land that is permanently protected by a public agency, a land conservancy or other conservation organization, or by a perpetual conservation easement.

>1 mile	0
1 mile or less	5
adjacent	10

e. **Scenic Value.** Does the property provide a broad, sweeping view from publicly accessible sites such as public roads and waterways?

Up to five points may be awarded.

f. **Historic Value.** Does the property have important historical or cultural features?

Up to five points may be awarded.

g. **Connectivity.** Does the property provide a connection or decrease the distance between existing trails, parks, preserves or **natural feature complexes**?

Up to ten points may be awarded.

### 3. Acquisition Considerations

a. **Matching Funds.** Percent of the appraised value of development rights available from sources other than the landowner or the Township.

No matching funds	0
<20%	5
20-50%	10
>50%	14

b. **Landowner Contribution.** Percent of the appraised value of development rights the landowner is willing to donate.

No contribution	0
<10%	5
10-20%	8
>20-30%	12
>30%	15

- c. **Development Pressure.** Is the property currently on the market or otherwise threatened with development?

Up to ten points may be awarded.

4. Discretionary Points. The Land Preservation Commission may award up to 15 discretionary points for factors not considered in the scoring system.

### Draft Criteria for Natural Areas and Open Space

1. Characteristics of the Land

- a. **Woodlands.** Does the property contain **Landmark Trees**?

Up to five points may be awarded.

- b. **Rare Species.** Does the property feature species of special concern or interest?

Up to five points may be awarded.

- c. **Other Habitats.** Does the property feature contain other important habitats such as grasslands or scrub/shrub?

Up to five points may be awarded.

- d. **Parcel Size.**

<20 acres	2
20-40 acres	3
>40 acres	5

- e. **Road Frontage.**

No frontage	0
<500 feet	1
500-1,000 feet	2
>1,000 feet	3

- f. **Wetlands and/or Floodplain.** Percent of the property with those features.

No features	0
<10%	3
10-20%	7
>20%	11

g. **Groundwater Recharge/Protection.** Percent of property serving as a **groundwater recharge area** or protecting groundwater resources.

<50%	2
50-75%	4
>75%	6

h. **Slopes.** Percent of the property that features slopes >12%.

<10%	0
10-20%	2
>20%	4

i. **Public Water Resources Frontage/Proximity.** Amount of frontage on **open water** or a **perennial stream**.

No frontage	0
<100 feet	5
100-500 feet	10
>500 feet	14

## 2. Context

a. **Adjacent Zoning Classification.** Percent of the properties contiguous with the subject property that is in agricultural or open space zoning. (Refer to the Scio Township Zoning Ordinance.)

<50%	1
50-89%	2
90% or more	4

b. **Adjacent Land Use.** Percent of the properties contiguous with the subject property that is in an agricultural or open space use.

None	0
<50%	3
50-89%	4
90% or more	5

c. **Proximity to Protected Land.** Distance to land that is permanently protected by a public agency, a land conservancy or other conservation organization, or by a perpetual conservation easement.

>1 mile	low	0
1 mile or less	medium	5
adjacent	high	9

d. **Scenic Value.** Does the property provide a broad, sweeping view from publicly accessible sites such as public roads and waterways?

Up to five points may be awarded.

e. **Historic Value.** Does the property have important historical or cultural features?

Up to five points may be awarded.

f. **Connectivity.** Does the property provide a connection between existing trails, parks, preserves or **natural feature complexes**, or close the distance?

Up to ten points may be awarded.

3. Acquisition Considerations.

a. **Matching Funds.** Percent of the appraised value of development rights available from sources other than the landowner or the Township.

No matching funds	0
<20%	4
20-50%	8
>50%	11

b. **Landowner Contribution.** Percent of the appraised value of development rights the landowner is willing to donate.

No contribution	0
<10%	2
10-20%	4
>20%	6

c. **Urgency for Acquisition.** Is the property currently on the market or is otherwise threatened with development?

Up to ten points may be awarded.

d. **Recreation Potential.** Can or will the property provide access to public lands, waters or trails, or protect a trail corridor?

  10   Yes        0   No

4. Discretionary Points. The Land Preservation Commission may award up to \_\_\_\_ discretionary points for factors not considered in the scoring system.

**Parks and Recreation Land (criteria to be developed)**

**Glossary of Terms**

Agricultural soils:

- Prime: Land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber and oilseed crops, and is available for these uses. It has the soil quality, growing season and moisture supply needed to produce economically sustained high yields of crops when treated and managed according to acceptable farming methods, including water management. In general, prime farmlands have an adequate and dependable water supply from precipitation or irrigation; a favorable temperature and growing season; acceptable acidity or alkalinity; acceptable salt and sodium content; and few or no rocks. They are permeable to water and air. Prime farmlands are not excessively erodible or saturated with water for a long period of time, and they either do not flood frequently or are protected from flooding.
- Unique: Land other than prime farmland that is used for the production of specific high value food and fiber crops. It has the special combination of soil quality, location, growing season and moisture supply needed to produce economically sustained high quality and/or high yields of a specific crop when treated and managed according to acceptable farming methods. Examples of crops are tree nuts, olives, cranberries, citrus and other fruits and vegetables.
- Locally Important: Specified prime farmland soils with slopes of 6-18% and non-prime farmland soils with slopes up to 12%.

Groundwater recharge area: Land where permeable soil and rock materials relatively close to the land surface transfer an excess of water from precipitation to subsurface strata where it is stored in aquifers.

Landmark tree: Any tree listed in the definitions section of Article 12 of the Scio Township Zoning Ordinance. Size varies according to species and is the diameter in inches as measured at breast height (DBH).

Public water: Groundwaters, lakes, rivers and streams and all other watercourses and waters, including the Great Lakes, within the jurisdiction of this state [definition of “Waters of the State,” from a section of the Natural Resources and Environmental Protection Act, MCL 324.3101].

Open water: A lake or pond of one acre in size or greater.

Perennial stream: A water body that flows continuously throughout the year.

Natural feature complex: A cluster of natural features in a relatively undisturbed state—including but not limited to unforested wetlands, forested wetlands, forested uplands, old fields, grasslands and steep slopes—that relate together ecologically as a natural system. (Source: Scio Township Land Preservation Program, 2005)

The Open Space criteria are still being finalized. (Source: Knol)

Water resources are an important factor in the evaluation process but have not been relevant thus far during the evaluation of the first set of agricultural land applications. However, Scio Township is located on the Huron River, so water resources could be an important aspect in future applications. There already are some protections in place as regards Huron River – it is protected by the Natural Rivers Act. (Source: Knol)

In the first round of agricultural land applications, six applications were received but only three qualified because the criteria require that there be active agricultural use on the lands. (Source: Knol)

In the development of the criteria, neither climate change nor pollution or “stressors” specifically were addressed; the focus was on creating basic evaluation criteria. Many of the people on the Commission have a science background (or PhDs) and would certainly consider stressors if it was relevant to a specific parcel of land. There has been specific discussion of the importance of protecting land that is critical for endangered or threatened species. The program has the ability to add discretionary points to the score of a parcel should it be clear that a land was important for another reason, which could be related to stressors. (Source: Knol)

### **Decision-making process:**

Landowners are invited to submit applications and the applications are submitted to the Land Preservation Commission. The Commission reviews the applications and uses additional information about the properties to evaluate the applications and land parcels based on the criteria listed above. Next, the Commission selects the applications that meet their criteria and obtains the signature of approval from the landowner to show their interest in selling the development rights. The Commission then presents their findings to the Township Board for final approval. (Source: Knol)

The Commission may submit a request to the state for matching funds to help purchase development rights on the lands selected before submitting their final recommendation to the Township Board. (Source: Knol)

The recommendation of the Land Preservation Commission is presented at a public meeting of the Township Board. (Source: Knol)

**Ultimate decision maker:**

Township Board.

Theoretically, the Township Board could veto a recommendation or require changes, but it is expected that the Board will rely heavily on the recommendation of the Land Preservation Commission. (Source: Knol)

**Information used to apply prioritization criteria:**

The Land Preservation Commission uses the following sources to make decisions about which applications/land parcels to recommend for purchase of development rights: application, GIS, independent appraisal, landowner interviews, land use consultant expertise, and the Commission walks the properties. (Source: Knol)

Township planning documents—such as the Scio Township Master Land Use Plan (adopted on 10/8/96, as amended), the Scio Township Zoning Ordinance (adopted 11/26/03, as amended), Wetland and Watercourse Protection and Restoration Ordinance (2005-01) and Open Space and Greenway Plan (adopted 10/19/04)—serve as reference documents for the Land Preservation Commission. (Source: Scio Township Land Preservation Program, 2005)

No one source of information is more important than another across the board; it is likely to be situation specific. (Source: Knol)

**Priority map:**

No.

**Partnerships:**

Not available.

**Available and expended funding:**

\$5 million is expected over 10 years. Estimated revenue for year 1 is \$575,000. (Source: Scio Info Newsletter, Fall 2004)

The program completed their first round of applications for agricultural land. No money has been expended yet as they are waiting to hear if they will get matching funds from the state for the purchase of development rights on two agricultural land parcels. (Source: Knol)

**Acres protected:**

The measure is expected to protect approximately 1,000 acres. No information on acres protected to date, if any. (Source: Olsson and Rubin)

The program completed their first round of applications for agricultural land. No land has been protected yet as they are waiting to hear if they will get matching funds from the state for the purchase of development rights on two agricultural land parcels. In addition, they expect to usually purchase development rights rather than purchase the land outright. (Source: Knol)

**Sources:**

Knol, Kathleen. 2005. Telephone conversation between Kathleen Knol, Clerk of Scio Township and Amanda Vemuri of ICF Consulting. October 24, 2005. A second interview with Ms. Knol and another member of the Land Preservation Commission was planned but never completed because of difficulty in scheduling and the additional Commission member was unreachable at the second scheduled interview time.

Scio Township Land Preservation Program. 2005. Scoring System for Review of Potential Acquisitions, Received via email from Kathleen Knol on October 24, 2005.

Scio Township. Scio Info, Fall 2004. Ann Arbor, MI. [http://www.twp.scio.mi.us/newsletters/10-04scio\\_info.pdf](http://www.twp.scio.mi.us/newsletters/10-04scio_info.pdf), accessed on June 29, 2005.

Olsson, K. and Rubin, L. "Investing in Greenspace." Huron River Report, Spring 2005. [http://www.hrwc.org/pdf/HRR\\_2005\\_1Spring.pdf](http://www.hrwc.org/pdf/HRR_2005_1Spring.pdf), accessed on June 29, 2005.

**POINT OF CONTACT:**

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A second interview with Ms. Knol and another member of the Land Preservation Commission was planned but never completed because of difficulty in scheduling.

## 2004NC-01 Wake County Open Space\*

### RESEARCH NOTES AND FINDINGS

#### Mission statement:

“Wake County has crafted a strong Environmental Stewardship Agenda to protect our drinking water and ensure that citizens tomorrow enjoy the same quality of life we enjoy today. The Agenda focuses on water and air quality, open space preservation, solid waste disposal and recycling, and environmental health and education...

...open space is a protected living system of natural and cultural resources provided and maintained for the benefit of residents, businesses, and visitors. This “green infrastructure” is essential in protecting our water supply, keeping people and property out of high risk flood hazard areas, providing places where residents can recreate for health and fitness, and protecting the biological diversity of irreplaceable landscapes. In November 2000, Wake County voters authorized \$15 million...with an emphasis on purchasing land that protects sensitive stream and drinking water sources.” (Source: Wake County Open Space Plan)

The 2004 bond for open space, recreation, and protection of water quality and wildlife habitats was intended to provide additional funding on top of the 2000 authorization of \$15 million in funds. All of the \$15 million from the 2000 bond has been spent (on giving grants to communities to develop community-level open space plans and then consolidating those plans into one big plan). (Source: Smith)

#### Program goals:

The Wake County Open Space Program is focused on preserving land within four critical watersheds (Falls and Jordan Lakes, Swift Creek, and Little River), 40 miles of stream corridors within these watersheds, and the Mark’s Creek area in eastern Wake County. Open space was prioritized to fulfill multiple objectives, including: (1) floodplain management, (2) wildlife

#### 2009 Update

In 2007 voters approved an additional \$50 million bond measure to fund the program, though the program has since been suspended due to current economic conditions.

No significant changes have been made in the parcel selection process, though it is likely that the entire program will be re-evaluated once it is resumed. While selection criteria and program goals were followed in land acquisition, the parcel selection has largely been driven by opportunity. Programs officials have noted that earlier acquisitions focused on water qualities, and later acquisitions have trended more towards recreational amenities. (Source: Smith, 2009)

habitat, (3) water quality, (4) recreation access, (5) environmental and cultural education, (6) personal fitness, (7) alternative transportation, and (8) recreational resources.

The primary engine/driving objective is water quality, which appeals to multiple stakeholders (general public, environmentalists, development interests, etc.). When the program partners with other towns, they sometimes achieve some secondary objectives as well. Protecting stream corridors (300 foot strips) often also allows for the protection of species and some of the other program goals. (Source: Smith)

### **Parcel selection process:**

Citizens worked together on a countywide Comprehensive Open Space Plan. This “greenprint for the future” knits together the County’s open space plan with those of all 12 Wake County municipalities. This unique plan provides for open space protection in ways that are close to home, such as greenway linkages and neighborhood parks. Watershed and Growth Management Plans address growth issues, including watershed protection and prioritization of purchases under the County’s open space plan.

The public is welcome to “suggest a property.” The public does not need to provide any justification for suggesting a property; they can call and inquire generally. This option is not widely exercised, and usually is undertaken by people with funding already in line (for a partnership; see more information about partnerships below). If someone calls with a suggestion, the County will see if it matches any of the corridor goals or if there are any partners interested in purchasing the parcel. One parcel was donated, and although it is not on the County’s list, but will be accepted.

There are two avenues for acquiring parcels (and K. Smith estimates they each consume about 50% of the funds):

- (1) Partnership Program, which provides 50 cents on the dollar for any partner interested in acquiring a parcel. Partners (e.g., non-profit organizations, agencies, or community groups) take the lead on what is important to them and the criteria (below) need to be met, but very loosely.
- (2) Preservation Program, which involved analysis of 81 sub-watersheds using GIS data to identify eight stream corridors. The County is looking to buy parcels of 300 feet on either side of a stream. (Source: Smith)

### **Prioritization criteria:**

The Open Space Partnership Program has established 15 qualitative criteria for prioritization: (1) location, (2) proximity, (3) linkage, (4) water quality/water supply protection, (5) accessibility, (6) aesthetic quality, (7) use/utility, (8) number of open space categories, (9)

threat of loss, (10) rarity, (11) parcel size, (12) cost, (13) manageability, (14) partnerships, and (15) parcel configuration.

Criteria (8) refers to how many of the following five priority open space categories the parcel falls into: (1) environmental, (2) recreational, (3) wildlife habitat, (4) cultural resources, or (5) historic resources.

The criteria are weighted, but subjectively. The process is data driven, but subjectivity enters into the process later. The County Open Space Plan was laid on top of the watershed data to help determine the best opportunities. These criteria need to be only loosely met for partnership purchases, which is not data driven and tied to the priorities of the partners. (Source: Smith)

### **Decision-making process:**

“The Open Space Advisory Committee (OSAC) is an eight-member citizen group appointed by the Board of Commissioners to advise it on open space preservation issues.” The OSAC is responsible for identifying types of open spaces to be included in the program, developing prioritization criteria, and identifying options for acquisition and conservation of parcels, among other roles. (Source: Wake County Open Space Program)

For all 81 watersheds, parcels over 50 acres or within 30 feet of a priority area were evaluated (a.k.a. Matrix Prioritization Analysis) against the following factors to determine existing water quality conditions and potential for preservation and restoration: (1) soil moisture (e.g., hydric soils), (2) FEMA 100-year flood zone, (3) wetlands (data not specified), and (4) water recharge area; variables weighted according to planning objectives (e.g., Wake County Open Space Plan gives higher significance to upland hardwoods, bottomland forests, floodplain forests and wetlands, because they are critical to water quality). CH2M HILL (a consultant) completed the initial watershed analysis, using Division of Water Quality data and field sampling. A watershed committee reviewed the findings as well as various stakeholders.

Development pressures drove the development of an open space plan. Data from the planning department was used to identify these pressures after the watershed analysis. In general, the County tries to buy land in areas that are less than 20 percent developed. The final step of the evaluation process is to identify available acquisition opportunities and potential partners and prioritize among the highest ranked projects using the criteria above.

Barriers have included the limits on the price of the property and approval by multiple entities. The County cannot purchase above the appraised value of the land, so developers or others can easily outbid them in a purchase of a parcel. Potential parcels undergo several rigorous reviews by internal staff, the Open Space Advisory Committee (OSAC), and the Land

Acquisition Review Commission (LARC), then the elected Board of Commissioners approves the purchase (which can be highly political).

The public is not that involved (and if so, it is rarely to express negative opinions), the public can attend OSAC meetings and watch the Board of Commissioners on TV. The LARC is closed to the public. (Source: Smith)

**Ultimate decision maker:**

The Board of Commissioners makes the final decision. They can vote on an acquisition in a public session (if they know everyone is already on board), or they can have a closed session meeting that usually involves a presentation of technical information by County staff. It used to be more common to assess acquisitions in closed sessions, but the Board has been doing everything in open sessions and approving acquisitions with little discussion or analysis. (Source: Smith)

**Information used to apply prioritization criteria:**

Data used is typical GIS data including Natural Heritage GIS data and SSURGO soil data. See Appendix F of the Open Space Plan (Open Space Prioritization Process). The County has an in-house GIS department that works with consultants to gather and analyze data. (Source: Smith).

**Priority map:**

Yes; it includes watersheds (coarse scale) and parcels (micro scale).

**Partnerships:**

“The Open Space Partnership Grant Program is an initiative created by OSAC and Wake County staff to collaborate with local organizations in preserving our significant natural resources. The grant program will provide funding to organizations in Wake County to acquire—and plan for acquiring—land...” (Source: Wake County Open Space Program)

More than half the protected lands were acquired in partnership with other cities and towns, state agencies, nonprofits and individuals.

Partnership strategies have included: (1) determining long-range jurisdictional responsibility; (2) identifying local land-trust priorities; (3) facilitating county-wide planning effort to support the Governor’s Million Acre Initiative; (4) supporting county-wide planning efforts through financial and technical support; and (5) prioritizing and protecting significant lands outside municipal long-range planning boundaries.

**Available and expended funding:**

\$26 million.

\$16-17 million has been spent (of the 2000 and 2004 bond money, which totals \$41 million). It is estimated that the appraised value of the land acquisitions is around \$35 million. An estimated 2,300-2,400 acres have been set aside as open space. (Source: Smith)

**Acres protected:**

From the late 1990s, when the program began, through 2005, a total of 1,800 acres worth \$23.1 million have been acquired.

There has not been an analysis of the benefits resulting from the 1,800 acres of open space that have been acquired, but there may be more down the road. No noticeable changes other than noting that nothing is built on the set aside land. (Source: Smith)

**Sources:**

Wake County Open Space Program, <http://www.wakegov.com/parks/openspace/default.htm>, accessed on July 2005.

Smith, Kurt, Wake County Open Space Planner (Program Coordinator), Personal communication with Susan Asam, ICF Consulting, on October 25, 2005.

Smith, Kurt, Wake County Open Space Planner (Program Coordinator), Personal communication with Philip Groth, ICF International, on April 24, 2009.

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## 2004NC-02 Guilford County Open Space\*

### RESEARCH NOTES AND FINDINGS

#### **Mission statement:**

“The mission of the Guilford County Open Space Program is to identify suitable lands for acquisition and preservation and to provide public education about land conservation.” (Source: Readling)

#### **Program goals:**

The goals of the programs are to (1) protect 100 acres of open space per 1000 residents, (2) educate the public about the benefits of land conservation, (3) develop a land management and stewardship plan that balances the needs of natural resource protection with appropriate public access, and (4) enhance regional open space initiatives through partnerships. Of The \$20 million 2004 bond measure, \$10 million was set aside for protection of natural areas through the County’s open space program. (Source: 2009 Guilford County Open Space Report)

This funding for the open space program represented a major win (and the first sum of money) for a program that started in the late 1990s through a grass-roots effort to address preservation of natural areas as open space. The grassroots group went before the County Commissioners to request funding for a formal program, and followed the advice of the Commissioners to go through the planning department to draft a plan and conduct a survey of how much open space existed in the County. The County decided it was not going to fund a formal program, but would provide the salary for one person. It also established a committee under the Parks and Recreation Commission, which consisted of people involved in the initial grassroots efforts. (Source: Readling)

The following principles govern the open space program:

1. Acquisition and preservation of open space will be based on working with willing property owners. There will be no takings of private land.
2. Establishing priority areas for the acquisition of open space and updating them periodically, while being flexible enough to take advantage of special acquisition opportunities and respond effectively to threats on high priority tracts.
3. A focus on the multiple uses, functions and benefits of open space.
4. Adherence to the concept of *corridors* and *bubbles*, such that, in thirty years, there will be strategically located open space bubbles or core areas throughout the

county. Those core areas will be linked together by corridors, such as streams, greenways, bike trails, walking paths, or other linear connections to facilitate wildlife migration and recreation in core areas. Core areas will have uses appropriate for each site.

5. Optimal use of bond funds to maximize their impact by seeking matching grants, by accepting donations of land, and by seeking partners to help acquire and manage open space.

(Source: 2009 Guilford County Open Space Report)

### **Parcel selection process:**

The Open Space Subcommittee was charged initially with compiling an inventory of existing park land and open spaces. “The inventory was compiled through the use of tax records, the watershed acquisition database, park and recreation records, and with the assistance of staff members from the City of Greensboro, the City of High Point, The Town of Jamestown, and the Town of Gibsonville.”

Parcels included in the inventory met one of three criteria: (1) owned by a government entity or local land conservancy; (2) consisted of undeveloped open space or recreationally developed park land; or (3) recorded conservation easement on property (including a Water Quality Conservation Easements or private easements).

Parcels can be selected through two routes: (1) a nomination process whereby citizens refer properties for review by the Open Space Committee or (2) a proactive selection process that pursues acquisition in targeted areas.

The Open Space Committee selected nine target areas using several information sources (described in more detail below). The Committee originally sought large areas of undeveloped hardwoods and stream corridors of importance. These target areas have changed over time as the Committee finds that the community is not interested in these areas or some other factors arise.

The Committee intentionally did not select the target areas prior to the bond measure because they wanted to avoid speculation. There had seen speculation in the Haw River area after the State announced plans to preserve the area. (Source: Readling)

### **Prioritization criteria:**

The following types of land [shall] be considered for acquisition and preservation under this program:

- Lands identified in the Natural Areas Inventory...and Riparian Corridor Conservation Design for the Upper Haw River, Mears Fork and Benaja Creek, suitable properties adjacent to existing parks and open space lands

- Wetlands, meadows and mature forests
- Creek, stream, and river corridors, particularly along planned trail routes
- Groundwater recharge areas
- Buffers for drinking water supply lakes and streams
- Buffers for agricultural land
- Corridors connecting parks, open spaces, schools, and neighborhoods
- Sites of geologic or historic importance
- Sites providing recreational or educational potential
- Sites providing significant plant or wildlife habitat
- Sites providing significant water quality protection
- Additional sites as indicated on the open space target areas map

(Source: Guilford County Open Space Program)

The criteria used to analyze nominated parcels are listed in greater detail in the Guilford County Open Space Report in Appendix 4. (Source: 2009 Guilford County Open Space Report)

**Decision-making process:**

The open space program is supported by the equivalent of one full-time staff person [within the Property Management Department].

A citizen advisory board (the Guilford County Open Space committee) provides leadership and oversight for the program as a subcommittee of the Parks and Recreation Commission. The committee “consists of nine voting members, one of whom also serves on the Guilford County Parks & Recreation Commission. Members serve a three-year term and are appointed by the Parks & Recreation Commission.” The members represent a diversity of backgrounds.

The Open Space committee works with the County staff to evaluate and recommend potential land acquisitions based on established criteria and priorities. The committee acts as a screening body, but does not have the power to approve the purchase of land or development rights. The Subcommittee looks at whether or not there are willing sellers and whether or not the project meets the established environmental and biological criteria, and to make sure that the parcel fits in with the existing plans. The Subcommittee and Staff use maps, surveys and appraisals to analyze the property, and provide recommendations to the Parks & Recreation Commission. The Parks & Recreation Commission looks at the cost and other criteria of interest to them and then provides recommendations to the County Commissioners (elected officials).

Acquisition or preservation of a land parcel can be carried out through fee-simple purchase, full donations, or bargain sales. The bond money cannot be used for long-term

maintenance of a property since interest is paid on bond money. Long-term maintenance or stewardship is on the table as an issue to start thinking about, but there is no operating budget to pay for it. The program plans to start acquiring land and then move forward with determining how to fund and maintain the land. (Source: 2009 Guilford County Open Space Report)

**Ultimate decision maker:**

The ultimate decision makers are the County Commissioners. Through 2008, the Board of County Commissioners has been supportive of open space projects except for one farmland preservation project seeking funds for a conservation easement. The Board has specified fee simple purchases to be made with open space bond funds.

**Information used to apply prioritization criteria:**

The following information was consulted to come up with nine target areas: (1) the original open space plan; (2) regional and statewide program information such as the NC One Naturally Program, which asked regions to identify (through public input at public meetings) areas where they have interest in preservation; (3) 15-year old Natural Heritage Inventory; and (4) color aerials.

**Priority map:**

Several maps are consulted during the decision-making process:

- Guilford County Master Parks and Recreation Plan, July 1991
- Natural Area Inventory of Guilford County (1991)
- Open Space Program Target Areas Map

**Partnerships:**

The open space plan will be implemented in cooperation between Guilford County and its municipalities, adjoining counties, the Soil and Water Conservation District, the Piedmont Land Conservancy, the Guilford County School District, and other interested groups such as the Haw River Assembly to identify, plan, fund, and carry out open space acquisition and preservation projects.

Additional funding will be sought from the following sources, though values are subject to change:

- NC Clean Water Management Trust Fund (\$100 million/year statewide)
- NC Natural Heritage Trust Fund (\$6 million/year statewide)
- NC Farmland Preservation Program (\$500,000 in initial funding)
- NC Parks and Recreation Trust Fund (\$18 million/year statewide)

- NC Water Resource Development Grants (\$750,000/year statewide)
- NC Wetland Restoration Grants (\$9 million in initial funding)
- Conservation Tax Credits (equal to up to 25 percent of the fair market value of donated interests, up to a maximum allowable credit of \$250,000 for individuals and \$500,000 for corporations)

**Available and expended funding:**

\$10 million is available.

**Acres protected:**

Through 2008, the County has purchased 196 acres of land through the Open Space Program, and has 530 acres of pending projects. (Source: 2009 Guilford County Open Space Report)

**Sources:**

Guilford County Open Space Program,

<http://gcms0004.co.guilford.nc.us/webapps/parks/default.asp?Go=Showapage&Pagename=OpenSpace>.

Guilford County Open Space Report, May

2009, <http://www.co.guilford.nc.us/government/openspace/FinalMay09.pdf>.

Reading, Anna, Guilford County Open Space Program, Personal communication with Susan Asam, ICF Consulting, November 17, 2005.

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## **2004NY-01 Nassau Open Space, Clean Water Environmental Program**

### **RESEARCH NOTES AND FINDINGS**

#### **Mission statement:**

The Long Island Regional Planning Board has called for the preservation of 45,000 of Long Island's remaining 90,000 acres of unprotected open space. Nassau County established a dedicated fund for open space preservation, water quality protection, and parks improvement. The Trust Fund represents the first time Nassau County will have a program with dedicated funding for preserving open space and protecting the environment. (Source: Nassau County Environmental Bond Act Program)

#### **Program goals:**

The "...\$50 million Open Space, Clean Water Environmental Program to protect Nassau County's drinking water, preserve open space and remaining farmland, protect bays and harbors, and enhance, as well as add new parks and recreational facilities...in four areas: open space and parkland acquisition, parkland improvement, storm water quality improvement and brownfield remediation."

The four areas covered by the bond referendum sought to achieve wider voter support for the referendum by impacting more sections of the county. Open space largely exists in the northeast quadrant of the County only, so most acquisitions will take place there. Brownfield remediation, however, will occur largely in the central part of the County.

The initial legislation crafted by environmentalists and citizen groups called for an explicit subdivision of funds, with 60–70 percent set aside for open space acquisition. The County legislature struck down those provisions, however, preferring to leave the funding portions flexible. (Source: Nassau County Environmental Bond Act Program, Maher)

#### **Parcel selection process:**

Anyone can nominate a property or project for funding, including private citizens, land preservation, environmental and civic organizations, and public officials. The nomination form includes a description of the property or project, reason for recommendation, and whether or not supplemental funding is available. Three public meetings were held in town at the end of February 2005 to explain the nomination process and solicit nominations. Two hundred and sixty

nominations were submitted in April 2005 with 216 of these nominations evaluated (once the overlapping nominees had been eliminated). (Source: Maher)

**Prioritization criteria:**

The criteria for each of the four major project areas appear below and are more fully explained on the project web site.

Open Space Acquisition Evaluation Criteria:

- Significant physical or natural features (including buffer for freshwater or tidal wetlands, deep flow aquifer recharge area, fish and wildlife habitat, area with threatened or special species of concern)
- Environmental impairment (including erosion or sedimentation, habitat degradation, water supply contamination, surface or groundwater quality degradation, flooding, species loss or threat)
- Natural resource value
- Public resource value (if project is implemented)
- Area of benefit (neighborhood, village, city, region...)
- Supplemental funding sources
- Status of proposed acquisition
- Consistency with plans and policies
- Level of maintenance required
- Maintenance responsibility
- Urgency

Parkland Improvement/Restoration Evaluation Criteria:

- Significant physical or natural features
- Environmental or community value
- Natural areas or scenic resources
- Public resources value
- Urgency
- Area of benefit
- Level of maintenance
- Maintenance responsibility
- Population density in vicinity
- Number of parks in proximity
- Current use of the park
- Supplemental funding source

Stormwater Project Evaluation Criteria:

- Impairment to be addressed
- Improvement anticipated by project
- Owner of project property
- Maintenance responsibility
- Level of maintenance required
- Area of benefit
- Supplemental funding source
- Consistency with plans and policies
- Waterfront revitalization etc.

Brownfield Project Evaluation Criteria:

- Significant physical features of property
- Financial aspects of property
- Impairment to be addressed by project
- Resource value of project
- Supplemental funding sources
- Current property ownership
- Environmental information pertaining to property
- Consistency with plans and policies

“Note: In the evaluation process, consideration will also be given to other factors, among which are: geographic location, urgency, timing of property acquisition, and timing of project implementation. A list of properties/projects will be prepared for each program category after consideration of the evaluation criteria described above, consistency with County policies and the requirements of the law which created the Environmental Program, and assessment of what combination of projects best meets the goals of the program.” (Source: Nassau County Environmental Bond Act Program)

Information and criteria are considered qualitatively. The criteria were originally intended to form the basis of a quantitative scoring system (and had points assigned to them), but this approach was abandoned when the Committee members began to evaluate projects and felt it was restrictive instead of helpful. Members of the Committee have a lot of experience and local knowledge that they bring to the table, so they do not feel the need for extensive data analysis.

Projects are considered much more favorably if they have secured an additional funding source (from a municipality, a foundation, etc.) and if they have been well thought out. Other important criteria include the ability of the project to get results quickly, the cost effectiveness of the project, and its general feasibility. The County prefers to purchase development rights, which

are worth about 90 percent of the purchase price in Nassau County (as opposed to about 50 percent in other parts of the country). Owning the property becomes a long-term burden on the County. If the County is planning to purchase the property, it wants to know that there is a long-term maintenance plan in place.

The criteria help to assign projects to three groups: A (highly ranked); B (need more information); and C (lower priority). The property owners of projects that fell into Groups A and B were contacted to see if they were interested in selling the property or development rights. If the owners were not interested, the projects were set aside. (Source: Maher)

### **Decision-making process:**

The Open Space Advisory Committee recommends a list of properties and/or projects for each program category after reviewing all nominations and considering what projects and/or combinations of projects best meet the goals of the Nassau County Environmental Program. The Open Space Advisory Committee was established by the County legislature and includes civic and environmental leaders, a representative from the planning commission, a representative from the Open Space and Parks Advisory Committee, and the minority and majority leaders from the County legislature (who dropped out early in the process out of concern about being involved in controversial decisions down the line). The Open Space Advisory Committee reaches decisions through consensus and has not yet had a problem with conflicting priorities.

The Open Space Advisory Committee applies the evaluation criteria listed herein and considers other factors, such as geographic location, urgency, and technical and financial feasibility, when developing the lists. The list of recommendations is a \$50 million package that goes to the County Executive, who then submits recommendations to the planning commission and the Open Space and Parks Advisory Committee (a citizen committee with some overlapping members from the Open Space Advisory Committee), who then provides recommendations to the County legislature (19 members). The \$50 million package intentionally includes too many projects for the available funding, based on a hope that costs will be shared and a concern that not all projects may be supported by the legislature.

Climate change has not been explicitly considered, but it is in the back of peoples' minds that land protection is one part of a response to climate change. (Source: Maher)

### **Ultimate decision maker:**

The 19-member County legislature makes the final decisions on what projects to fund.

**Information used to apply prioritization criteria:**

Information is generally provided by the applicant. The County used Google Earth to identify large plots of open space and the advisory committee visited all of the plots they recommended. The New York Open Space plan was updated in the winter of 2004. The County mapped out open space projects with merit for this update, and consulted that map when evaluating nominations. A great deal of local knowledge on the part of the advisory committee members also went into the evaluation process. Additionally, County staff met with nominators, provided their input, and developed cost estimates for many of the projects. (Source: Maher)

**Priority map:**

The New York Open Space plan was updated in the winter of 2004. The County mapped out open space projects with merit, and consulted that map when evaluating nominations.

**Partnerships:**

Funding partnerships are encouraged by the selection criteria. The County hopes to be able to leverage its funds with funding from other municipalities, state funding, foundation money, and through deals with landowners. The County will partner with landowners who are willing to set aside conservation easements for some portion of their property. They have intentionally been very inclusive when mapping out open space plots to ensure that landowners can get federal tax credits (which require properties receiving the credit to be listed in an open space plan). The County also encourages local municipalities to set up arrangements with developers to preserve half of a plot of land and confine development to the remaining half of the plot. The County has worked with Westbury Gardens, The Nature Conservancy, and other organizations in the past. (Source: Maher)

**Available and expended funding:**

\$50 million became available in 2004, of which \$38 million was used to acquire property for protection of open space. The County ran another bond referendum in 2006 for an additional \$100 million, which was overwhelmingly approved by voters. The bond money can only be spent on capital improvements or purchase of land or development rights; it cannot be spent on long-term maintenance.

**Acres protected:**

No acres have been protected yet, since none of the funding decisions have been made.

**Sources:**

Maher, Tom, Nassau County, Personal communication with Susan Asam, ICF Consulting, November 21, 2005.

Nassau County Environmental Bond Act Program, <http://www.co.nassau.ny.us/EBA/index.html>, accessed on September 7, 2005.

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## 2004NY-02 Orange County Open Space Program\*

### RESEARCH NOTES AND FINDINGS

#### **Mission statement:**

The Orange County Open Space Fund is available to help protect water resources, agriculture, recreation, landforms and landmarks, and biological diversity.

All municipalities within Orange County may apply for matching funds from the Orange County Open Space Program. Three municipalities have funding set aside for open space protection. (Source: Dobbins).

#### **Program goals:**

Program goals are laid out in detail in the Orange County Open Space Plan. Essentially, the goal is to protect five major resource areas (listed in rank order of importance): (1) water resources (e.g., existing reservoirs and watersheds, wellhead areas); (2) agriculture; (3) recreation (as it relates to water resources or trails; not for general parks or ballfields); (4) significant land forms and landscapes; and (5) biodiversity (important habitats). The goals were set at the outset of the program. (Source: Jones)

#### **Parcel selection process:**

Complete applications will be submitted to the Orange County Planning Board and the Majority and Minority Leaders of the County Legislature with a report recommending actions to be taken on the Application.

The Orange County Open Space Fund will provide matching support for fee simple or development rights purchase price, up to fifty percent (50%) of the total appraised value. Applicants may include governmental entities, non-governmental organizations, or individual property owners. (Source: Orange County Department of Planning)

“The County Planning Board with the Majority and Minority Leaders of the County Legislature will review the applications and submit a report with funding recommendations for all eligible and complete applications. This report will be submitted to the Commissioner of Planning for technical review.”

“The County Executive will review applications that contain positive funding recommendations and will submit a legislative request to approve funding for the recommended projects. All funding will require the approval of the Orange County Executive and Legislature.”

Applications were considered in two cycles each year (with spring and fall deadlines).

If appropriate, the Orange County Legislature will serve as Lead Agency under the New York State Environmental Quality Review Act (SEQRA).

A stewardship/monitoring plan is required for consideration of a property. The County does not want to own or manage a property directly but is required to have a real estate interest in each property due to the nature of the funds, which were bonded, that are used. This has resulted in the County either co-holding conservation easements or having a third-party-right to enforce the easement. For fee simple transactions, the County has placed a restrictive covenant on the property. (Source: Dobbins)

Applicants are required to include maps, but the County provides suggestions about where they can acquire appropriate maps (including the County in-house GIS staff).

The County may solicit technical information after an application is submitted if there is a need for more information, however there has not been a need to do that yet. Municipalities have been doing a great job of putting together their applications, perhaps due to their experience in preparing these types of applications for state and federal funding.

The members of the Orange County Planning Board are appointed by the County Executive (who tries to maintain a level of diversity on the Board). Currently, there is a former regional director of EPA, 2 lawyers, an environmental consultant, a representative from the business community, a contractor who does restoration work, a member of the local agricultural preservation board, etc.

The voting body that makes decisions on applications includes: the nine members of the appointed Board; three alternates who can sit in if a Board member is absent; the head of the Republicans in the County legislature; and the head of the Democrats in the County legislature.

Board members and two County legislators review the applications separately and then discuss them together. Two to three weeks before they meet, each member of the Board receives a full set of applications to review and rank. They then discuss priorities at the meeting. The Department of Planning adds up the rankings and gives Board members a tally sheet showing which projects were ranked highest most frequently, etc. The scoring sheets based on the prioritization criteria listed below are used as a guide, but are not relied upon heavily. There is typical agreement on the top three and then it is broken down into what people think are the highest priorities.

There is not a lot of additional analysis when funding is approved by the Orange County Executive and Legislature. The Executive generally takes the recommendations of the Board. For example, in one particular round the Board recommended four projects, which slightly exceeded

the amount of available funding. The County Executive decided to fully fund three of the programs and drop the fourth .

There are two application deadlines yearly (generally, spring and fall), and the review schedule is set around these deadlines. (Source: Jones, Dobbins)

**Prioritization criteria:**

“Applications for open space funding must fall within one or more of the five resource categories outlined in the Orange County Open Space Plan and the goals of the Orange County Comprehensive Plan.”

Water resources (25 points total); eligible areas to consider include:

- Water supply watershed properties
- Wellhead protection lands 500-1,500 ft radius
- New water supply properties
- Properties adjacent to DEC priority water body list
- Participates in water quality stewardship program

Agriculture (25 points total); eligible areas to consider include:

- Prime agricultural soils
- Other agricultural soils
- Active agriculture
- Well-maintained buildings and accessories

Recreation (20 points total); eligible areas to consider include:

- Trail corridors and linkages
- Municipal parks
- Buffers to existing parks
- Nature Preserves
- Management includes public access
- Public access to stream/lake shoreline

Landforms and landmarks (20 points total); eligible areas to consider include:

- Scenic byway corridors
- Lands supporting National/State Historic sites or National/State Historic Districts
- Scenic area of County significance
- Other official historic or cultural recognition

Biological diversity (20 points); eligible areas to consider include:

- Presence of rare species
- Presence of valuable habitats

- Participates in forest management or biological stewardship program
- Bordering priority aquatic systems

Supplemental criteria; eligible areas to consider include:

- Includes municipal financial support (10 points)
- Property is adjacent to presently protected open space land (10 points)
- TDR banking in support of municipalities with TDR laws (10 points)
- High development potential or imminent land use conversion (20 points)
- Fund request is less than 50% by county (10 points)
- Economic value to community and region (10 points)
- Located in a Priority Growth Area (10 points)

Total Possible Points: 405.(Source: Attachment B: Orange County Open Space Plan: Project Evaluation Criteria, a non-binding aid to assist applicants)

The Planning Board assigns the rankings for the projects (see above). The Department of Planning does the initial check for completeness of applications. They can notify applicants if something is missing and give them a week to complete their application. Three of the Department of Planning staff rank the application individually and compare their rankings internally. They provide that information to the Planning Board. There is sometimes consensus all around (staff and Board members) about the top projects, but not always.

Projects get scored over a range, but the sub-criteria are not clearly defined. Board members apply their own scale as they think appropriate. The Department of Planning is working on making the rankings more precise. The hope is that the evaluation process will rely more heavily on the rankings in the future, which will make it easier for the Board to defend their decisions if questioned. The intent of the rankings was to get applicants to think more globally when considering property protection (i.e., an agriculture set aside might be good for water protection as well). Some applicants are more savvy than others about including multiple resource benefits in their applications.

Climate change has not been a point of discussion.

The public was involved in the development of the open space plan and decisions about how funds were to be raised (through selling bonds). Planning Board deliberations are closed to the public, but Board members are appointed representatives of the public. The general public can participate in public hearings that are held before a project is funded and can submit written comments. (Source: Jones)

**Decision-making process:**

Applications are reviewed by the Orange County Department of Planning for eligibility, completeness, and consistency with the Orange County Open Space Plan.

The County requires each non-municipality application to get resolution from the municipality to move forward on a property acquisition to ensure that nothing else has been proposed for the parcel. The County also checks to make sure that the application is compatible with both local (municipal) and County comprehensive plans for open space protection and economic development plans. (Source: Jones)

**Ultimate decision maker:**

The County Executive will review applications that contain positive funding recommendations and will submit a legislative request to approve funding for the recommended projects. The Legislature has the final say (through a vote) on whether to fund the projects, but their vote has always been unanimously in favor. (Source: Dobbins)

**Information used to apply prioritization criteria:**

Information is reported by the applicant.

Information sources include: (1) protected open space maps, including private open space, municipal parks, water supply lands, county parkland, state lands, state-funded TDR (Transfer of Development Rights) farms, and Federally-owned lands, including a category of temporary protection (West Point Military Academy, County-owned Reservoir Lands, New York State Department Environment Conservation Term Easements 480[a]); and (2) existing land use maps, including public watershed and wellhead protection areas, open space, agricultural lands, developed lands, and priority growth areas.

Identifying priorities within the water resources area involved consulting existing data from the NY State Department of Environmental Conservation (NY DEC), Orange County Water Authority, and local water studies. Identifying particular goals within the last resource area involved the expertise of local scientists, information from the NY DEC, and input from environmental and scientific groups such as the Wildlife Conservation Group and Scenic Hudson. (Source: Jones)

**Priority map:**

Yes; Map 16: Open Space Resources indicates “Open Space Resource Value” (moderate, high, highest).

**Partnerships:**

The County will match open space investments “dollar-for-dollar” by municipalities. Partnerships are worth extra points on the Attachment B worksheet.

The County is more focused on working to get municipalities to partner with each other than partnering with other entities. If two municipalities work together, they can protect resources that go beyond political boundaries. (Source: Jones)

**Available and expended funding:**

\$3.5 million was spent in the first year of the program. The County Executive has allocated \$3.5 million for next year. Funding was at \$1-\$2 million for the next two rounds. Fall 2007 was the last competitive round. The program is currently on hold due to economic conditions, but funding is anticipated in the future.

There were no upper limits to funding in the first round of applications. An upper bound was discussed initially, but no one wanted to jeopardize the sale of an important property. The County might limit how much they are willing to spend on a project, but there is no set limit. There is an unwritten policy that the County wants to award money to as many applicants as possible rather than funding one big project. (Source: Jones, Dobbins)

**Acres protected:**

2,285 acres have been protected through the Orange County Open Space Program, which included several large farms and some small parcels (e.g., well sites with only a few acres of land). An additional 710 acres will be protected once the real estate closings have occurred for those parcels. (Source: Dobbins)

There have not been any assessments of the public benefit associated with setting aside open space in Orange County. Most of the applications coming in concern the protection of agricultural land, which provides a benefit to the farm as well as open space benefits. (Source: Jones)

**Sources:**

Dobbins, Kelly, Orange County Open Space Program, Personal Communication with Emily Rowan, ICF Consulting, June 25, 2009.

Jones, Rich, Orange County Open Space Program, Personal Communication with Susan Asam, ICF Consulting, November 9, 2005.

Orange County Department of Planning, [www.orangecountygov.com/planning](http://www.orangecountygov.com/planning), accessed on July 2005.

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## APPENDIX C: WRITE UPS OF TIER 3 PROGRAMS

Background information on the 34 programs researched with published sources. Note that these case studies follow an initial write-up format, which was changed after we began conducting telephone interviews with program staff.

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## 1996CA-01 Safe, Clean, Reliable Water Supply Act

**Jurisdiction Name, State:** California  
**Year Ballot Measure Passed:** 1996  
**Percent of Vote Obtained:** 63%  
**Funding Mechanism:** Bond  
**Ballot Measure Description:** Proposition 204 authorizes the state to sell \$995 million of general obligation bonds for the purposes of restoration and improvement to the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (hereafter, referred to as “the Bay-Delta”), wastewater treatment and water supply and conservation, and local flood control and prevention. (Source: California Secretary of State)  
**Prioritization Type:** Top-down; the California Department of Water Resources and the State Water Resources Control Board set priorities.

### **Mission statement:**

“In enacting this measure, the people of California declare all of the following to be the objectives of this act:

- (a) To provide a safe, clean, affordable, and sufficient water supply to meet the needs of California residents, farms, and businesses.
- (b) To develop lasting water solutions that balance the needs of the state's economy and its environment.
- (c) To restore ecological health for native fish and wildlife, and their natural habitats, including wetlands.
- (d) To protect the integrity of the state's water supply system from catastrophic failure due to earthquakes and flooding.
- (e) To protect drinking water quality.
- (f) To protect the quality of life in our communities by ensuring recreational opportunities and maintaining parks, trees, and plants.”

(Source: Proposition 204 text)

### **Program goals:**

“This act provides for a bond issue of \$995,000,000 to provide funds to ensure safe drinking water, increase water supplies, clean up pollution in rivers, streams, lakes, bays, and coastal areas, protect life and property from flooding, and protect fish and wildlife and makes changes in the Water Conservation and Water Quality Bond Law of 1986 and the Clean Water and Water Reclamation Bond Law of 1988 to further these goals.” (Source: California Secretary of State)

**Parcel selection process:**

The California Department of Water Resources and the State Water Resources Control Board (hereafter, referred to as “the Board”) will have the job of setting priorities on many of the projects. Some of the funds have specific destinations; the rest will come in the form of grants, many to local water suppliers.

Funding was divided as follows at the outset:

- \$390 million for the Bay-Delta Ecosystem Restoration Program as defined by CALFED, the joint state and federal coalition that is carrying out the historic 1994 Accord to "fix" the Bay-Delta,
- \$193 million for the Delta Improvement Program in the Bay-Delta watershed,
- \$235 million for the Clean Water and Recycling Program to improve water quality and promote water recycling and reuse,
- \$117 million for projects statewide that enhance water supplies and improve water management and demand management, including \$10 million for Lake Tahoe, and
- \$60 million for flood control and prevention. (Sources: California Biodiversity News, Graebner)

**Prioritization criteria:**

The measure does not outline prioritization criteria for most of the programs, but does specify what programs the State can fund with this money and some program-specific details such as what percentage can be spent on program administration. In some instances, expenditure of bond funds is contingent on actions by the state or federal government (e.g., completion of environmental review of projects, entry into a cost-sharing agreement for funding projects, etc.).

The measure does identify prioritization criteria for some of the sub-programs falling under the larger Clean Water and Water Recycling Program. For example, the measure identifies the following four eligibility criteria for Clean Water Loans and Grants:

- (1) Necessary to prevent water pollution or to reclaim water.
- (2) Eligible for funds from the State Revolving Fund Loan Account or federal assistance.
- (3) Certified by the board as entitled to priority over other eligible projects.
- (4) Complies with applicable water quality standards, policies, and plans. (Source: Proposition 204 text: Chapter 5, Article 2, §78610)

The measure identifies similar eligibility criteria for the Water Recycling Program. Projects in this program must meet “applicable reclamation criteria and water reclamation requirements” and comply “with applicable water quality standards, policies, and plans.” In making loans available to public agencies, the Board should consider “whether the project is cost-effective or necessary to protect water quality.” (Source: Proposition 204 text: Chapter 5, Article 3, §78620 and §78622)

Under the Drainage Management program, the measure states that, “Priority shall be given to funding source reduction projects and programs.” (Source: Proposition 204 text: Chapter 5, Article 4, §78644)

The Seawater Intrusion Control program outlines the following criteria for funding:

- (A) Necessary to protect groundwater that is (i) within a basin that is subject to a local groundwater management plan for which a review is completed pursuant to the California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code) and (ii) is threatened by seawater intrusion in an area where restrictions on groundwater pumping, a physical solution, or both, are necessary to prevent the destruction of, or irreparable injury to, groundwater quality.
- (B) Is cost-effective. In the case of a project to provide a substitute water supply, the project shall be cost-effective as compared to the development of other new sources of water and shall include requirements or measures adequate to ensure that the substitute supply will be used in lieu of previously established extractions or diversions of groundwater.
- (C) Complies with applicable water quality standards, policies, and plans. (Source: Proposition 204 text: Chapter 5, Article 6, §78648)

**Decision-making process:**

Not available.

**Ultimate decision maker:**

California Department of Water Resources and the State Water Resources Control Board.

**Information used to apply prioritization criteria:**

Not available.

**Data Sources:**

“X” if used:

	Local biological surveys		Any EPA water quality information
	Natural Heritage data (Nature Serve, TNC)		Other (list)
	National Hydrography database	X	None mentioned
	EPA reach files (GIS stream data)		None used
	National Wetlands Inventory		

**Priority map:**

No.

**Partnerships:**

Some of the funding will go to the CAL-FED Bay-Delta Ecosystem Restoration Program, which is a state and federal coalition.

**Available and expended funding:**

\$995 million. About half of the funds were spent by 2000, and the funds were virtually gone by 2003.

**Acres protected:**

No estimate of the total number of acres protected is available. It is estimated, however, that water flowing through the Bay-Delta provides drinking water for about 22 million people in California and irrigates 45 percent of the fruits and vegetables produced in the United States. (Source: California Secretary of State)

**Sources:**

California Biodiversity News, *Prop. 204: Water Bond Will Improve Biodiversity*, <http://ceres.ca.gov/biodiv/newsletter/v4n2/prop204.html>, accessed on June 28, 2005.

California Secretary of State, Vote 96, Proposition 204, <http://vote96.ss.ca.gov/Vote96/html/BP/204.htm>, accessed on June 28, 2005.

Graebner, Lynn. "A cure for the Delta blues?" Business Journal-Sacramento, Sacramento, CA. December 12, 1996.

Legislative Analyst's Office, [http://www.lao.ca.gov/analysis\\_2000/resources/res\\_2\\_cc\\_an100.htm](http://www.lao.ca.gov/analysis_2000/resources/res_2_cc_an100.htm), accessed on June 28, 2005.

Proposition 204 text, <http://vote96.ss.ca.gov/Vote96/html/BP/204text.htm>, accessed on June 28, 2005.

## **1996CA-02 Safe Neighborhood Parks, Gang Prevention, Tree-Planting, Senior and Youth Recreation, Beaches and Wildlife Protection**

**Jurisdiction Name, State:** Los Angeles County, California  
**Year Ballot Measure Passed:** 1996  
**Percent of Vote Obtained:** 65%  
**Funding Mechanism:** Other – Benefit Assessment  
**Ballot Measure Description:** Proposition A, Safe Neighborhood Parks Act, 20-year assessment for parks, beaches, water quality, open space, and recreation  
**Prioritization Type:** Hybrid; the measure set aside funds for specific uses, but also included a provision allowing cities in Los Angeles County and community-based organizations to apply for grant money.

### **Mission statement:**

Proposition A was passed to provide funding for neighborhood parks, gang prevention, tree planting, recreation, and beach and wildlife protection. (Source: Jimenez and Aidem)

### **Program goals:**

The program seeks to provide funding to support parks, beaches, water quality, open space, at risk youth centers, and recreation.

### **Parcel selection process:**

“At the county level, 80 percent of the money received each year goes to specified projects (those projects that had been hammered out during the process of negotiation over the ballot initiative language); the rest is split between administration for the district and a per parcel allocation to cities to fund maintenance of projects, and a small pot for a competitive grants program.” (Source: Pincetl)

Of the money set aside for parkland acquisitions, the Santa Monica Mountains Conservancy, a State agency, is responsible for selecting specific parcels for protection. (Source: Noxon)

### **Prioritization criteria:**

Not available.

### **Decision-making process:**

About 80 percent of the funding was allocated to specific projects during negotiations over the ballot initiative language. The remaining 20 percent of funds was dedicated to

administration costs, allocated to cities for maintenance, and set aside for a small competitive grants program. Community-based organizations can submit grant applications for the competitive grants program. Decisions appear to be made at the county level.

In terms of land acquisition, “the measure made \$17.7 million available for purchases in the Santa Monica Mountains and an additional \$5 million for open space in the Santa Susana range.” The Santa Monica Mountains Conservancy, a State agency, is responsible for selecting specific parcels for protection. (Source: Noxon)

**Ultimate decision maker:**

Los Angeles County

**Information used to apply prioritization criteria:**

Not available.

**Data Sources:**

“X” if used:

	Local biological surveys		Any EPA water quality information
	Natural Heritage data (Nature Serve, TNC)		Other (list)
	National Hydrography database	X	None mentioned
	EPA reach files (GIS stream data)		None used
	National Wetlands Inventory		

**Priority map:**

No.

**Partnerships:**

The Santa Monica Mountains Conservancy, a State agency, is working to select parcels for protection.

**Available and expended funding:**

\$150 million in funds were initially allocated.

**Acres protected:**

The Santa Monica Mountains Conservancy hoped to acquire 9,000 acres at the outset of the funding allocation for parkland acquisition. (Source: Noxon)

**Sources:**

Jimenez, Teresa and Patricia Farrell Aidem. "City Asks for Park Funding," Daily News of Los Angeles, November 12, 1998.

Noxon, Christopher. "Conservancy Eyes 8,000 SCV Acres," Daily News of Los Angeles, January 10, 1997.

Pincetl, Stephanie. (2003). Nonprofits and park provision in Los Angeles: An exploration of the rise of governance approaches to the provision of local services, *Social Science Quarterly*, 84(4).

## **1996CA-03 Open Space, Recreational Playfields, and Creek Restoration Assessment District**

<b>Jurisdiction Name, State:</b>	Albany, California
<b>Year Ballot Measure Passed:</b>	1996
<b>Percent of Vote Obtained:</b>	64%
<b>Funding Mechanism:</b>	Other – Benefit Assessment
<b>Ballot Measure Description:</b>	Measure R, establishment of an assessment district for open space
<b>Prioritization Type:</b>	Top-down; parcel selection decisions are made by the City of Albany.

### **Mission statement:**

The measure taxes property owners to raise funds for building ball fields, restoring creeks, and purchasing and maintaining undeveloped land on Albany Hill as open space. (Source: Lochner)

### **Program goals:**

The program aims to provide funding for open space, playfields, and creek restoration.

### **Parcel selection process:**

The parcels of open space targeted at the passing of the measure included: “11 acres on the southwest slope owned by Golden Gate Development Co., four acres between Taft and Jackson streets owned by Landvest Co., about two acres at the end of Madison Street owned by Ralph Willis, and several smaller lots.” (Source: Lochner (b))

### **Prioritization criteria:**

The use of these funds is restricted to the original allocation: 50 percent for open space on Albany Hill, 25 percent for the acquisition, development and maintenance of playfields and 25 percent for creek restoration. (Source: City of Albany)

### **Decision-making process:**

Not available.

### **Ultimate decision maker:**

City of Albany.

**Information used to apply prioritization criteria:**

Not available.

**Data Sources:**

“X” if used:

	Local biological surveys		Any EPA water quality information
	Natural Heritage data (Nature Serve, TNC)		Other (list)
	National Hydrography database	X	None mentioned
	EPA reach files (GIS stream data)		None used
	National Wetlands Inventory		

**Priority map:**

No.

**Partnerships:**

Not available.

**Available and expended funding:**

Anticipated revenue totals \$3.5 million. The bonds will be paid off in 2019, and at that time the assessment will expire. (Source: City of Albany)

**Acres protected:**

The measure initially envisioned protecting around 20 acres.

**Sources:**

City of Albany, <http://www.albanyca.org>, accessed on August 4, 2005.

Lochner, Tom (a). “Albany Open Space Plan Under Fire: Hill Project Would Cost \$69 a Year.” West County Times, October 9, 1996.

Lochner, Tom (b), “Tax Bid to Unify Albany Hill As Parkland Proponents See Saving a Regional Jewel, Foes an Elitist Land Grab Lacking Specifics.” West County Times, August 13, 1996.

## 1996CT-02 Farmington Reservoir

**Jurisdiction Name, State:** Farmington, Connecticut  
**Year Ballot Measure Passed:** 1996  
**Percent of Vote Obtained:** 71%  
**Funding Mechanism:** Bond  
**Ballot Measure Description:** Bond to protect land for hiking and passive recreation  
**Prioritization Type:** Top-down; the town voted for the purchase of the Farmington Reservoir property.

**Mission statement:**

Not available.

**Program goals:**

“To purchase 52 acres of open space, including the former Farmington Reservoir and surrounding land. The parcel has been set aside for passive recreation such as walking and bird watching.” (Source: Greenwood)

**Parcel selection process:**

Not available.

**Prioritization criteria:**

Not available.

**Decision-making process:**

Referendum.

**Ultimate decision maker:**

Voters in Farmington, Connecticut.

**Information used to apply prioritization criteria:**

Not available.

**Data Sources:**

“X” if used:

	Local biological surveys		Any EPA water quality information
	Natural Heritage data (Nature Serve, TNC)		Other (list)

	National Hydrography database	X	None mentioned
	EPA reach files (GIS stream data)		None used
	National Wetlands Inventory		

**Priority map:**

No.

**Partnerships:**

“In partnership with the Farmington Land Trust, the Trust for Public Land (TPL) helped the town of Farmington acquire 53 wooded acres, including a 15-acre spring-fed reservoir that had once supplied drinking water to town residents. This project is part of TPL’s Connecticut Watershed Initiative, a statewide effort to protect land surrounding active drinking water supplies as well as former and potential sources of clean drinking water.” (Source: TPL Web site)

**Available and expended funding:**

\$875,000.

**Acres protected:**

52 acres.

**Sources:**

Greenwood, Michael. “Town Council Boosts Land Budget Proposal,” The Hartford Courant, February 12, 1998.

Trust for Public Land, [http://www.tpl.org/tier3\\_cd.cfm?content\\_item\\_id=1144&folder\\_id=261](http://www.tpl.org/tier3_cd.cfm?content_item_id=1144&folder_id=261), accessed on August 5, 2005.

## 1996FL-01 Safe Neighborhood Parks Act

<b>Jurisdiction Name, State:</b>	Miami-Dade County, Florida
<b>Year Ballot Measure Passed:</b>	1996
<b>Percent of Vote Obtained:</b>	67%
<b>Funding Mechanism:</b>	Bond
<b>Ballot Measure Description:</b>	Bond to improve neighborhood and regional parks and acquire recreational areas, beaches, and natural lands
<b>Prioritization Type:</b>	Hybrid; the ordinance includes a list of projects to be completed with the funds, but a smaller portion of funds is allocated on the basis of competitive grants.

### **Mission statement:**

“OSNP [Office of Safe Neighborhood Parks] is a department of Miami-Dade County created to serve as staff support to the Safe Neighborhood Parks Citizens’ Oversight Committee and administer the bond program consistent with the Ordinance and the Administrative Rules.” (Source: Office of Safe Neighborhood Parks)

### **Program goals:**

“The purpose of the SNP Bond Program is to:

- Restore and improve neighborhood and regional parks throughout the County, thus improving the overall quality of life for its citizenry
- Provide safe places for children to play and alternatives to gangs and gang activities
- Increase recreational opportunities for senior citizens
- Provide pleasant places for all residents to enjoy relief from congestion and urban stress
- Improve, restore, expand and enhance safety of parks, open spaces and recreation lands and facilities, therefore reducing crime and increasing the attractiveness of the County as a place to live and locate businesses
- Maintain sound economic conditions and a high standard of livability in the County by increasing property values, economic activity, employment opportunities and tourism throughout the County
- Ensure the protection of beach, park, recreation and natural areas vital to the quality of life in the County”

(Source: Office of Safe Neighborhood Parks)

**Parcel selection process:**

“There are 136 projects specified in the SNP Bond Ordinance (96-115) that must be completed unless the Ordinance is changed. To date there have been only two projects, specified in the SNP Bond Ordinance, that have been changed.” (Source: Office of Safe Neighborhood Parks, Frequently Asked Questions)<sup>1</sup>

**Prioritization criteria:**

Not available.

**Decision-making process:**

The ordinance established the “Safe Neighborhood Parks Citizens’ Oversight Committee (SNPCOC) to oversee the administration of the bond program. The SNPCOC is comprised of thirteen volunteer members one residing in each of the County’s Commission District, appointed by their respective Commissioner.” (Source: Office of Safe Neighborhood Parks) The ordinance requires that the Oversight Committee reflect the geographic, ethnic, racial, and gender make-up of the county.

Only \$15 million of the \$200 million bond is awarded competitively to municipalities, with the rest going to projects on the list or to municipalities on the basis of population. The Oversight Committee determines which grants will be approved. However, the original process of establishing the project list is not described in the ordinance.

**Ultimate decision maker:**

It is unclear whether project list was available to voters. Only the Board of County Commissioners can change the project list.

**Information used to apply prioritization criteria:**

Not available.

**Data Sources:**

“X” if used:

	Local biological surveys		Any EPA water quality information
	Natural Heritage data (Nature Serve, TNC)		Other (list)
	National Hydrography database	X	None mentioned
	EPA reach files (GIS stream data)		None used

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<sup>1</sup> A list of the 136 projects was not available in the bond ordinance text.

National Wetlands Inventory		
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**Priority map:**

Unknown.

**Partnerships:**

“The guiding force behind this [ballot measure] campaign was the Trust for Public Land, which designed the ballot measure, created a Citizens’ Advisory Committee, coordinated the grassroots support, and sponsored a direct mail campaign.” (Source: Trust for Public Land) The measure was sponsored locally by the Trust for Safe Neighborhood Parks, Inc. (Source: Parks and Recreation Department)

**Available and expended funding:**

\$200 million general obligation bond. During the first five years of the program, \$21.6 million was spent on park land acquisition. (Source: Florida’s County Land Preservation Programs)

**Acres protected:**

Not available.

**Sources:**

Trust for Public Land, Conservation Finance Case Studies, [http://www.tpl.org/tier3\\_cdl.cfm?content\\_item\\_id=943&folder\\_id=707](http://www.tpl.org/tier3_cdl.cfm?content_item_id=943&folder_id=707), accessed on July 21, 2005.

Miami-Dade County, Department of Environmental Resources Management, [http://www.miamidade.gov/derm/land/eel\\_program.asp](http://www.miamidade.gov/derm/land/eel_program.asp), accessed on July 26, 2005.

Miami-Dade County Office of Safe Neighborhood Parks, [http://www.miamidade.gov/SNPTrust/about\\_us.asp](http://www.miamidade.gov/SNPTrust/about_us.asp), accessed on July 28, 2005.

Miami-Dade County, Parks and Recreation Department, <http://www.miamidade.gov/parks/Safe1996.asp>, accessed on July 21, 2005.

Florida’s County Land Preservation Programs, [http://www.tpl.org/content\\_documents/fl\\_county\\_survey\\_report.pdf](http://www.tpl.org/content_documents/fl_county_survey_report.pdf), accessed on July 21, 2005.

## 1996MA-01-15 Cape Cod Open Space Land Acquisition Program

**Jurisdiction Name, State:** Barnstable, Bourne, Brewster, Chatham, Dennis, Eastham, Falmouth, Harwich, Mashpee, Orleans, Provincetown, Sandwich, Truro, Wellfleet, Yarmouth (Barnstable County, Cape Cod, Massachusetts)

**Year Ballot Measure Passed:** 1996: Question 2, Advisory Measure: 1 Percent Real Estate Transfer Tax Increase for Open Space, Trails, Recreation, Watershed Protection, Creation of Regional Land Bank  
1998: Referendum to enact the Cape Cod Open Space Land Acquisition Program for the purposes of acquiring land and interests in land to protect public drinking water supplies and open space and conservation land, and to create walking and bicycle trails and recreational areas

**Percent of Vote Obtained:** varied by jurisdiction

**Funding Mechanism:** 3% surcharge on real estate property tax bills, per 1998 referendum

**Ballot Measure Description:** 1996: Question 2, 1% real estate transfer tax for open space, Advisory (advisory vote)  
1998: Creates regional land bank by 3% surcharge on property tax bills for open space, watershed protection, trails, recreation

**Prioritization Type:** Bottom-up; the town's open space committee makes recommendations to the town council.

### **Mission statement:**

No formal mission statement.

### **Program goals:**

The Cape Cod Open Space Land Acquisition Program was created “for the purpose of acquiring land and interests in land for the protection of public drinking water supplies, open space, and conservation land, the creation of walking and bicycling trails, and the creation of recreational areas.” (Source: Cape Cod Land Bank)

### **Parcel selection process:**

Each town's board of selectmen or town council is required to create or designate a town open space committee to carry out the provisions of the Act. The committee can be an existing board, special committee, or nonprofit land trust/conservation organization. Committee members may not be paid for their service. Town committees are responsible for recommending to town meeting (town council in Barnstable) what lands or interests in lands should be acquired with town land bank funds. The Act delegates the responsibility of making recommendations to town meeting to the town's open space committee.

A Board of Selectmen may disagree with the town open space committee recommendation, but the Act does not provide for the Selectmen to make different recommendations to town meeting. Town meeting, has the final say and may accept or reject the recommendations of an open space committee. (Source: Cape Code Land Bank)

**Prioritization criteria:**

Town open space committees are required to “use as a guideline” local and regional open space plans, master plans, and local comprehensive plans, if any in considering any specific acquisition. (Source: Cape Code Land Bank)

**Decision-making process:**

Not available.

**Ultimate decision maker:**

The Board of Selectmen or town council.

**Information used to apply prioritization criteria:**

Not available.

**Data Sources:**

“X” if used:

	Local biological surveys		Any EPA water quality information
	Natural Heritage data (Nature Serve, TNC)		Other (list)
	National Hydrography database	X	None mentioned
	EPA reach files (GIS stream data)		None used
	National Wetlands Inventory		

**Priority map:**

No.

**Partnerships:**

No direct partnerships are listed; however, the Cape Cod Land Bank website does list the following organizations as “Providing Assistance with Land Protection on Cape Cod”:

- The Nature Conservancy (Massachusetts Chapter)
- Massachusetts Audubon Society
- Trust for Public Land

- The Trustees of Reservations
- Orenda Wildlife Land Trust
- The HSUS Wildlife Land Trust
- The Compact of Cape Cod Conservation Trusts.

**Available and expended funding:**

Available funding varies by town. In total, between January 1999 and December 2002, the Land Bank purchases have totaled \$93,998,051.

**Acres protected:**

These Land Bank purchases have resulted in 3,273 acres protected.

**Sources:**

Cape Cod Land Bank, <http://www.capecodcommission.org/landbank/home.htm>, accessed on August 2, 2005.

## 1996OH-01 Bath Nature Preserve Program

**Jurisdiction Name, State:** Bath Township, Ohio  
**Year Ballot Measure Passed:** 1996  
**Percent of Vote Obtained:** 75%  
**Funding Mechanism:** Bond  
**Ballot Measure Description:** Bond to purchase land for open space and watershed protection  
**Prioritization Type:** Top-down; the land area to be purchased was decided in advance (and it appears that the Township Trustees decided on the land to purchase).

**Mission statement:**

Not available.

**Program goals:**

Not available.

**Parcel selection process:**

The land area to be purchased was decided in advance of the vote.

**Prioritization criteria:**

Not available.

**Decision-making process:**

Not available.

**Ultimate decision maker:**

Not available.

**Information used to apply prioritization criteria:**

Not available.

**Data Sources:**

“X” if used:

	Local biological surveys		Any EPA water quality information
	Natural Heritage data (Nature Serve, TNC)		Other (list)
	National Hydrography database	X	None mentioned

	EPA reach files (GIS stream data)		None used
	National Wetlands Inventory		

**Priority map:**

No.

**Partnerships:**

Not available.

**Available and expended funding:**

The 404 acres for the Nature Preserve were purchased in October 1997 for \$2,894,958 at four percent interest. The Township expects to finish payment in 2017. No funding for purchasing additional lands remains. (Source: Bath Township, Summit County, Single Audit; Bath Parks)

An earlier newspaper article noted an agreement between Bath Trustees and John Chlebina, who purchased the entire Firestone Estate, for Bath to purchase 370 acres of the estate for \$3.3 million. (Source: Beacon Journal)

**Acres protected:**

Approximately 400 acres for the Bath Nature Preserve. (Source: City History of Bath)

**Sources:**

City History of Bath, <http://www.drelocation.com/ohio/summitco/bath.htm>, accessed July 19, 2005.

Bath Parks, Bath Nature Preserve and Trailhead, <http://www.bathtownship.org/parks/BNP%20map/bnplit.pdf>, accessed July 19, 2005.

Bath Township, Summit County. Single Audit. [http://www.auditor.state.oh.us/auditsearch/Reports/2004/Bath\\_Township\\_03-Summit.pdf](http://www.auditor.state.oh.us/auditsearch/Reports/2004/Bath_Township_03-Summit.pdf), accessed July 19, 2005.

“Parcels for Parks.” Beacon Journal, September 17, 1997.

## 1999CO-01 Open Space Sales Tax Program

<b>Jurisdiction Name, State:</b>	Adams County, Colorado
<b>Year Ballot Measure Passed:</b>	1999
<b>Percent of Vote Obtained:</b>	62%
<b>Funding Mechanism:</b>	Sales tax
<b>Ballot Measure Description:</b>	7-year, .20% countywide sales tax to preserve open space
<b>Prioritization Type:</b>	Bottom-up; advisory committee makes recommendations on grant applications submitted for consideration.

### **Mission statement:**

No formal mission statement.

### **Program goals:**

“To preserve open space in order to limit sprawl, to preserve farmland, to protect wildlife areas, wetlands, rivers, and streams, and for creating, improving and maintaining parks and recreation facilities.” (Source: Resolution 99-1)

### **Parcel selection process:**

The Open Space Advisory Board (OSAB) consist of seven members, four of whom are residents of unincorporated Adams County and three of whom are residents of cities or towns located in Adams County.

The OSAB meets quarterly to review grant applications and recommend projects for funding to the Board of County Commissioners (BOCC). (Source: Resolution 99-1)

### **Prioritization criteria:**

The OSAB makes funding recommendations to the Board of County Commissioners based on a set of criteria. The criteria are:

- Project funding and quality of leverage summary,
- Partnerships,
- Community support information,
- Project budget,
- Estimated project timeline,
- Proposed grant fund use(s),
- Long-term maintenance,
- Connectivity,

- Fulfilling the needs of the community and meets the open space tax goals,
- Project management and performance,
- Urgency, and
- Opposition.

It is not clear from available information how these criteria are applied by OSAB.

(Source: Open Space Grant Guidelines)

**Decision-making process:**

Not available.

**Ultimate decision maker:**

Board of County Commissioners.

**Information used to apply prioritization criteria:**

Not available.

**Data Sources:**

“X” if used:

	Local biological surveys		Any EPA water quality information
	Natural Heritage data (Nature Serve, TNC)		Other (list)
	National Hydrography database	X	None mentioned
	EPA reach files (GIS stream data)		None used
	National Wetlands Inventory		

**Priority map:**

No.

**Partnerships:**

Adams County and Trust for Public Lands are working together to purchase a 70-acre farm along with 10 shares of the Lower Clear Creek Ditch Company. The land is currently being farmed producing irrigated grass/ alfalfa mix hay. Adams County would like to purchase the land and water to place conservation easements on the land, and then trade the land for conservation easements on other nearby farms (Riverdale Road Farmland Purchase, \$800,000).

The Conservation Fund, in partnership with Colorado State Parks and Adams County Open Space, purposes to purchase the 153-acre Maul Property as an addition to Barr Lake State Park buffer (Maul Property Acquisition, \$400,000). (Source: Funded Open Space Projects)

**Available and expended funding:**

\$38.5 million is expected over the seven-year program, assuming \$5.5 million per year. 68 percent of revenues are earmarked for Open Space grants. 30 percent is returned to the local jurisdiction in which it was collected. Two percent is for administrative costs. (Source: Resolution 99-1)

Approximately \$17.9 million has been spent over four years. (Source: Open Space Report)<sup>1</sup>

**Acres protected:**

2,983 acres protected since 2000.

**Sources:**

Open Space Sales Tax Program, [http://www.co.adams.co.us/services/department/open\\_space/index.html](http://www.co.adams.co.us/services/department/open_space/index.html), accessed on June 28, 2005.

Resolution 99-1, [http://www.co.adams.co.us/services/department/open\\_space/resolution.html](http://www.co.adams.co.us/services/department/open_space/resolution.html), accessed on June 28, 2005.

Open Space Grant Guidelines, [http://www.co.adams.co.us/services/department/open\\_space/grant\\_info.html](http://www.co.adams.co.us/services/department/open_space/grant_info.html), accessed on June 28, 2005.

Funded Open Space Projects, [http://www.co.adams.co.us/services/department/open\\_space/funded\\_projects.html](http://www.co.adams.co.us/services/department/open_space/funded_projects.html), accessed on June 28, 2005.

Open Space Report, [http://www.co.adams.co.us/services/department/open\\_space/2004\\_Open\\_Space\\_Report.pdf](http://www.co.adams.co.us/services/department/open_space/2004_Open_Space_Report.pdf), accessed on June 28, 2005.

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<sup>1</sup> Although this program was not subject to a vote in one of the three years selected to focus on for this portion of the research, it is included because it is the predecessor to CO2004-01.

## 2000CA-01 Safe Neighborhoods, Clean Water, and Coastal Protection Act

<b>Jurisdiction Name, State:</b>	California
<b>Year Ballot Measure Passed:</b>	2000
<b>Percent of Vote Obtained:</b>	63%
<b>Funding Mechanism:</b>	Bond
<b>Ballot Measure Description:</b>	Proposition 12, Safe Neighborhoods, Clean Water, and Coastal Protection Act
<b>Prioritization Type:</b>	Hybrid; the State determines what projects will be funded in most cases and how much grant money will be given to local governments. Local governments can decide which projects to fund with available grant money.

### **Mission statement:**

Proposition 12 “provides for a bond issue of two billion one hundred million dollars (\$2,100,000,000) to provide funds to protect land around lakes, rivers, and streams and the coast to improve water quality and ensure clean drinking water; to protect forests and plant trees to improve air quality; to preserve open space and farmland threatened by unplanned development; to protect wildlife habitats; and to repair and improve the safety of state and neighborhood parks.” (Source: Voter Guide)

### **Program goals:**

Program goals include protection of land around lakes, rivers, and streams and the coast to improve water quality and ensure clean drinking water; protection of forests and plant trees to improve air quality; preservation of open space and farmland threatened by unplanned development; protection of wildlife habitats; and repair and improved safety of state and neighborhood parks. (Source: Voter Guide)

### **Parcel selection process:**

Not available.

### **Prioritization criteria:**

At the time of its passing, the state planned to spend about \$940 million of the bond money on grants to local agencies for local recreational, cultural, and natural areas. The state would then use the remaining \$1.16 billion for recreational, cultural, and natural areas of statewide significance. (Source: League of Women Voters)

**Decision-making process:**

All funds must be appropriated by the legislature through the budget process. (Source: Trust for Public Land)

**Ultimate decision maker:**

State of California.

**Information used to apply prioritization criteria:**

Not available.

**Data Sources:**

“X” if used:

	Local biological surveys		Any EPA water quality information
	Natural Heritage data (Nature Serve, TNC)		Other (list)
	National Hydrography database	X	None mentioned
	EPA reach files (GIS stream data)		None used
	National Wetlands Inventory		

**Priority map:**

No.

**Partnerships:**

Trust for Public Land participated in the budget process to allocate bond funds. (Source: Trust for Public Land)

**Available and expended funding:**

Expected funding totals \$2.1 billion.

**Acres protected:**

Not available.

**Sources:**

League of Women Voters, <http://ca.lwv.org/lwvc.files/mar00/pc/prop12.html>, accessed on August 5, 2005.

Trust for Public Land, [http://www.tpl.org/tier3\\_cdl.cfm?content\\_item\\_id=4523&folder\\_id=1365](http://www.tpl.org/tier3_cdl.cfm?content_item_id=4523&folder_id=1365), accessed on August 5, 2005.

Voter Guide, <http://primary2000.ss.ca.gov/VoterGuide/pdf/12.pdf>, accessed on August 5, 2005.

## 2000CA-02 Safe Drinking Water, Watershed Protection, and Flood Control Bond

<b>Jurisdiction Name, State:</b>	California
<b>Year Ballot Measure Passed:</b>	2000
<b>Percent of Vote Obtained:</b>	65%
<b>Funding Mechanism:</b>	Bond
<b>Ballot Measure Description:</b>	Proposition 13, Safe Drinking Water, Watershed Protection, and Flood Control Bond
<b>Prioritization Type:</b>	Hybrid; the State determined from the outset how most of the bond money would be allocated, but there is also a grant component to the measure.

### **Mission statement:**

“This act provides...funds for a safe drinking water, water quality, flood protection, and water reliability program.” (Source: Voter Guide)

### **Program goals:**

The program aims to improve the safety, quality, and reliability of water supplies, as well as to improve flood protection. (Source: Voter Guide)

### **Parcel selection process:**

The funding was split out as follows from the outset:

- \$292 million for flood protection;
- \$70 million for safe drinking water facilities;
- \$468 million for watershed protection;
- \$355 million for clean water and water recycling;
- \$155 million for water conservation; and
- \$630 million for water supply reliability.

The bond measure further identifies specific parcels of land and habitat to be protected within these broad funding categories. (Source: Voter Guide)

### **Prioritization criteria:**

Not available.

**Decision-making process:**

The bond money will be available for expenditure by various state agencies and for loans and grants to local agencies and nonprofit associations. Much of the money was allocated to specific projects at the time the bond measure was passed. (Source: Voter Guide)

**Ultimate decision maker:**

State of California Department of Water Resources.

**Information used to apply prioritization criteria:**

Not available.

**Data Sources:**

“X” if used:

	Local biological surveys		Any EPA water quality information
	Natural Heritage data (Nature Serve, TNC)		Other (list)
	National Hydrography database	X	None mentioned
	EPA reach files (GIS stream data)		None used
	National Wetlands Inventory		

**Priority map:**

No.

**Partnerships:**

Some of the funding will go to the CAL-FED Bay-Delta Ecosystem Restoration Program, which is a state and federal coalition.

**Available and expended funding:**

The bond provides a total of \$1.97 billion.

**Acres protected:**

Not available.

**Sources:**

League of Women Voters of California, <http://ca.lwv.org/action/prop0003/prop13.html>, accessed on August 5, 2005.

Voter Guide, <http://primary2000.ss.ca.gov/VoterGuide/pdf/13.pdf>, accessed on August 5, 2005.

## 2000FL-03 Blueprint 2000 & Beyond Program

<b>Jurisdiction Name, State:</b>	Leon County, Florida
<b>Year Ballot Measure Passed:</b>	2000
<b>Percent of Vote Obtained:</b>	60%
<b>Funding Mechanism:</b>	One cent sales tax
<b>Ballot Measure Description:</b>	20-year, one-cent, sales tax renewal for traffic relief, clean lakes, and to protect and expand parks.
<b>Prioritization Type:</b>	Unknown, but believed to be Top-Down

### **Mission statement:**

“To implement the Blueprint 2000 program in a timely and cost effective manner, utilizing sound but innovative business practices, while keeping the citizenry informed and involved.” (Source: Blueprint 2000 Website)

### **Program goals:**

“Preserve, protect, and enhance the community's quality of life through the implementation of holistic and coordinated planning, transportation, water quality, environmental and green space projects consistent with the Blueprint 2000 philosophy.” (Source: Blueprint 2000 Website)

### **Parcel selection process:**

Details on the selection process are not available; however, below is a description of the organizations that are potentially involved.

The Intergovernmental Agency (IA) is a separate governing body, comprised of the combined City and County Commissioners. The City and County created the IA to govern the project management structure for the project planning and construction of the Blueprint projects. The IA is to convene every other month to consider major program changes, contracts, and change orders that exceed the authority of the Intergovernmental Management Committee (IMC).

Reporting to the IA is the IMC, composed of the City Manager and County Administrator. The IMC is charged with monitoring the operations of the Blueprint program; implementing the annual financial and performance audit; recommending an annual operating budget; recommending approval of long-term and short-term work plans; recommending the issuance of requests for proposals; and considering for approval all purchasing, contracts, and change orders up to 20 percent of project costs.

The Citizen Advisory Committee (CAC) was established to serve in an advisory capacity to the Blueprint 2000 Intergovernmental Agency and ensure that the original vision presented to the voters and described in the Interlocal Agreement would be implemented. The CAC convened in November 2001; representatives consist of:

- Economic and Environmental Consensus Committee member;
- Planner;
- Financial Expert with Bonding experience;
- Natural Scientist/Biologist;
- Chairman of the Economic Development Council (or designee);
- Chairman of the Planning Commission (or designee);
- Representative from the Capital City Chamber of Commerce;
- Representative from the Council of Neighborhood Associations;
- Representative from the Big Bend Environmental Forum;
- Representative of the Civil Rights Community; and
- Representative of the Disabled Community.

The role of the CAC is to review work plans and financial performance audits, and to make recommendations to the IA.

**Prioritization criteria:**

Not available.

**Decision-making process:**

The CAC (established to serve in an advisory capacity to the Blueprint 2000 Intergovernmental Agency and ensure that the original vision presented to the voters and described in the Interlocal Agreement would be implemented) makes recommendations to the IA, who has ultimate decision-making authority.

**Ultimate decision maker:**

The IA, a separate governing body comprised of the combined City and County Commissioners.

**Information used to apply prioritization criteria:**

It is not clear from available information how any criteria are applied.

**Data Sources:**

“X” if used:

	Local biological surveys		Any EPA water quality information
	Natural Heritage data (Nature Serve, TNC)		Other (list)
	National Hydrography database	X	None mentioned
	EPA reach files (GIS stream data)		None used
	National Wetlands Inventory		

**Priority map:**

There is an interactive GIS map on the Blueprint 2000 and Beyond website, however it makes no indication of priorities. Rather, it maps the current projects and other prominent features of the landscape.

**Partnerships:**

Blueprint 2000 was developed by a group of citizens representing a broad spectrum of the community including business, environmental and neighborhood interests, called the Economic and Environmental Consensus Committee (EECC). Their guide to an effective and efficient infrastructure and natural resource management is the basis of the proposed sales tax extension with 80 percent of future sales tax proceeds being committed to Blueprint 2000 projects View a list of all projects. The remaining 20 percent would be split 10 percent each to the County and the City for other high priority sales tax eligible projects.

**Available and expended funding:**

Blueprint 2000 will receive approximately \$600 million dollars over the 15-year period, which is about 80 percent of every dollar collected by the additional one-cent sales tax at a projected 4.5 percent growth rate.

**Acres protected:**

Not available.

**Sources:**

Blueprint 2000, <http://www.blueprint2000.org/>, accessed July 26, 2005.

## 2000FL-05 Seminole County Trails and Greenways

**Jurisdiction Name, State:** Seminole County, Florida  
**Year Ballot Measure Passed:** 2000  
**Percent of Vote Obtained:** 58%  
**Funding Mechanism:** Bond  
**Ballot Measure Description:** Bond issue to acquire and improve natural/environmental lands, trails, greenways and blueways.  
**Prioritization Type:** Top-down; lands are chosen to fit the requirements of specific trail projects.

### **Mission statement:**

The bond is intended to fund the development of a network of urban and wilderness trails throughout the County and provide additional funds for the acquisition of Natural Lands.

### **Program goals:**

Create an interconnected system of urban trails that will be over 50 miles long as well as connections to schools, parks, shopping and neighborhoods.

### **Parcel selection process:**

Lands are chosen based on the following projects:

Advance the construction of the Cross Seminole Trail, a 14-mile urban trail, and complete the four-mile connection from this trail to the Seminole Wekiva Trail, another 14-mile urban trail located west of I-4.

The goal of the program is to create a 20-mile network of wilderness trails, including a section of the Florida National Scenic Trail, a 1,300-mile wilderness path, which runs from the panhandle to the Everglades.

### **Prioritization criteria:**

Not available.

### **Decision-making process:**

Not available.

### **Ultimate decision maker:**

County Staff/Board of County Commissioners.

**Information used to apply prioritization criteria:**

Not available.

**Data Sources:**

“X” if used:

	Local biological surveys		Any EPA water quality information
	Natural Heritage data (Nature Serve, TNC)		Other (list)
	National Hydrography database	X	None mentioned
	EPA reach files (GIS stream data)		None used
	National Wetlands Inventory		

**Priority map:**

Not available.

**Partnerships:**

None mentioned.

**Available and expended funding:**

\$25 million.

**Acres protected:**

Not available.

**Sources:**

Seminole County Public Works, Trails and Greenways Program website,  
<http://www.visitseminole.com/pw/trails/referendum.asp>, accessed August 2005.

1000 Friends of Florida Organization, article on Florida Land Acquisition covering many counties,  
[http://www.1000friendsofflorida.org/Natural\\_Resources/Land\\_Acquisition.asp](http://www.1000friendsofflorida.org/Natural_Resources/Land_Acquisition.asp), accessed August 2005

## 2000IL-01 Lake County Forest Preserve District

**Jurisdiction Name, State:** Lake County Forest Preserve District, Illinois (component of Lake County)

**Year Ballot Measure Passed:** 2000

**Percent of Vote Obtained:** 67%

**Funding Mechanism:** Bond

**Ballot Measure Description:** Bond issue for land acquisition, habitat restoration, trail improvement

**Prioritization Type:** Unknown; insufficient published information available to make determination.

### **Mission statement:**

Forest Preserve District mission statement: “To preserve a dynamic and unique system of diverse natural and cultural resources, and to develop innovative education, recreation, and cultural opportunities of regional value, while exercising environmental and fiscal responsibility.” (Source: Lake County Forest Preserve District)

### **Program goals:**

“...requirements include protecting natural areas for wildlife habitat, preserving wetlands, prairies and forests, providing trails, greenways, river and lake access, protecting against flooding, expanding existing Preserves and creating new sites.” (Source: Lake County Forest Preserve District)

### **Parcel selection process:**

Not available.

### **Prioritization criteria:**

Not available.

### **Decision-making process:**

Not available.

### **Ultimate decision maker:**

Not available.

**Information used to apply prioritization criteria:**

Not available.

**Data Sources:**

“X” if used:

	Local biological surveys		Any EPA water quality information
	Natural Heritage data (Nature Serve, TNC)		Other (list)
	National Hydrography database	X	None mentioned
	EPA reach files (GIS stream data)		None used
	National Wetlands Inventory		

**Priority map:**

Unknown.

**Partnerships:**

The District has worked with CorLands, a nonprofit organization affiliated with the Openlands Project, to purchase land. (Source: CorLands)

**Available and expended funding:**

The bond measure passed in 2000 is for \$85 million. The fund balance in the Land Acquisition Fund was \$15.7 million on June 30, 2004, after spending \$20.7 million in the preceding year on land acquisition. The District took in approximately \$48 million in property taxes; however, it was not clear what portion of this funded land acquisition as opposed to other District activities. (Source: Annual Report, FY 2003-04)

For the FY 2005-06 budget, land acquisition is budgeted at \$5.4 million. One article reported that the balance remaining for land acquisition was \$9.1 million in February 2005. (Source: Zawislak) In an interview in April 2005, Executive Director Tom Hahn said that most of the proceeds from the 2000 bond measure have been spent. (Source: Lissau)

**Acres protected:**

In 2001, at least two major parcels were acquired, for a total of 858 acres. (Source: Chicago Wilderness Magazine) In FY 2003-04, 583 acres were protected, which included both a new preserved and additional parcels in existing reserves. (Source: Annual Report, FY 2003-04) The District controls a total of approximately 25,000 acres.

**Sources:**

“Lake County Acquires Two New Forest Preserves.” Chicago Wilderness Magazine, Summer 2001.  
<http://chicagowildernessmag.org/issues/summer2001/news/lakecounty.html>, accessed on July 20, 2005.

Lake County Forest Preserve District, <http://www.lcfpd.org>, accessed on July 20, 2005.

Comprehensive Annual Financial Report, FY 2003-04, Lake County, Illinois.

Annual Budget, Executive Summary, FY 2005-06, Lake County, Illinois.

CorLands, <http://www.corlands.org/index.html>, accessed July 20, 2005.

Lissau, Russell. “Forest preserve to lower expenses.” Daily Herald (Arlington Heights, IL), April 26, 2005.

Zawislak, Mick. “Forest preserve district assessing future land needs.” Daily Herald (Arlington Heights, IL), February 12, 2005.

## 2000ME-01 Freeport Conservation Commission

**Jurisdiction Name, State:** Freeport, Maine  
**Year Ballot Measure Passed:** 2000  
**Percent of Vote Obtained:** 63%  
**Funding Mechanism:** Bond  
**Ballot Measure Description:** Bond issue to fund town land bank for acquisition of open space, wildlife habitat, and farmland preservation  
**Prioritization Type:** Top-down; the process is not clear but potential land to be purchased appears to be identified by the Commission/Town Council.

**Mission statement:**

Not available.

**Program goals:**

Not available.

**Parcel selection process:**

Not available.

**Prioritization criteria:**

Land to be acquired must be within the municipality, and may be any of the following types of land: ocean, harbor, river, stream, lake or pond frontage and adjoining backlands; fresh or saltwater marshes, estuaries, flood plains and adjoining uplands; islands; land for future active or passive public outdoor recreational use, including hiking trails, bicycle paths, green belts and high elevations with a view; aquifers, aquifer recharge areas and other ecologically fragile or significant property; properties with unique historical or geological characteristics or otherwise important to the community's cultural welfare; woods or forestland suitable for a town forest or usable by deer as a wintering yard; farmland or wildlife habitat; open spaces which help to shape the settlement pattern of the community by promoting the village concept and discouraging sprawl; or vacant parcels of land, vacant buildings and properties or buildings and properties in significant disrepair which may be reclaimed for the purpose of establishing natural areas for open space or park land. (Source: Town of Freeport)<sup>1</sup>

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<sup>1</sup> Unable to confirm from source whether the language was specifically for this bond measure.

**Decision-making process:**

All expenditures authorized by the Commission must be approved by the Town Council through the budgetary process. (Source: Town of Freeport)

**Ultimate decision maker:**

Freeport Town Council.

**Information used to apply prioritization criteria:**

Not available.

**Data Sources:**

“X” if used:

X	Local biological surveys		Any EPA water quality information
	Natural Heritage data (Nature Serve, TNC)	X	For Florida Lake (from Management Plan): ME State Planning Office ranked it as one of most significant in “Casco Bay Watershed Wetlands Characterization” GIS analysis by USFWS verified Florida Lake as important habitat for at least 14 rare, threatened, endangered or declining species of national significance. Maine Department of Inland Fisheries and Wildlife labeled Florida Lake as “High Value Wading Bird and Waterfowl Habitat.” For Hedgehog Mountain (from Management Plan): Back’s Sedge ( <i>Carex backii</i> ) was identified and is listed as critically imperiled by the Maine Natural Areas Program Department of Inland Fisheries and Wildlife conducted initial surveys and found no Significant or Essential Wildlife Habitats
	National Hydrography database		None mentioned
	EPA reach files (GIS stream data)		None used
	National Wetlands Inventory		

**Priority map:**

No.

**Partnerships:**

Acquisition of two adjacent properties (99 acres), including the former Florida Lake Campground, was funded through a State Land for Maine's Future grant, a Casco Bay Important Habitats grant, and through the expenditure of funds from the Freeport Open Space Bond.

(Source: Florida Lake Management Plan)

Freeport's Conservation Commission partnered with Hedgehog Mountain Fund, L.L. Bean, Inc., and the Davis Conservation Foundation to acquire the 96 acres surrounding Hedgehog Mountain. (Source: Hedgehog Mountain Management Plan)

**Available and expended funding:**

One source suggests that approximately \$220,000 was spent to purchase the 96 acres near Hedgehog Mountain. Money for this acquisition was also provided by the Hedgehog Mountain Fund, L.L. Bean, Inc., and the Davis Conservation Foundation. It is unclear of the exact amount spent by the Freeport Conservation Commission Open Space Bond. (Source: Bell; Hedgehog Mountain Management Plan)

**Acres protected:**

195 total acres. This bond measure helped protect 99 acres surrounding Florida Lake. Additional property in this area was protected through land donations and the use of other funds. (Source: Florida Lake Management Plan) Ninety-six acres were purchased to protect a large forested tract of land near Hedgehog Mountain, between the recycling center and 42 acres of land designated for athletic fields. (Source: Bell)

**Sources:**

Town of Freeport. Code of Ordinances, Chapter 35: Conservation Commission, <http://www.freeportmaine.com/codes/allordinances.html>, accessed on July 19, 2005.<sup>1</sup> Town of Freeport Conservation Commission. 2004. Florida Lake Management Plan, [www.freeportmaine.com/boardcommittee.docs/Florida%20Lake%20Management%20Plan.doc](http://www.freeportmaine.com/boardcommittee.docs/Florida%20Lake%20Management%20Plan.doc), accessed on July 19, 2005.

Town of Freeport Conservation Commission. 2004. Hedgehog Mountain Management Plan. <http://www.freeportmaine.com/boardcommittee.docs/boardcommitteedocsindex.html>, accessed on July 19, and August 24, 2005.

Bell, Tom. "Land Deal Would Expand Freeport Park: On Tuesday, the Town Council Will Discuss a Proposal to Buy 92-acre Lot." Portland Press Herald, November 11, 2000.

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<sup>1</sup> No date available to confirm this was developed in response to the bond measure passed in 2000.

## 2000NJ-01 Open Space Trust Fund

**Jurisdiction Name, State:** Brick Township, New Jersey  
**Year Ballot Measure Passed:** 2000  
**Percent of Vote Obtained:** 76%  
**Funding Mechanism:** Property tax  
**Ballot Measure Description:** Property tax increase to create a dedicated fund to purchase property and easements for recreation and water quality protection  
**Prioritization Type:** Unknown; insufficient published information available to make determination.

### **Mission statement:**

None identified.

### **Program goals:**

Although not directly tied to this program, the township noted the following regarding open space preservation in general:

“By purchasing open space the Township has prevented the construction of over eight hundred (800) housing units, including approximately six hundred (600) single family homes. Based on the national average of 2.1 children per household, we estimate that over one thousand two hundred (1,200) children will not be attending Brick Township’s schools as a result of our Open Space Preservation Program. Those additional thousand students would have increased enrollment, increased class size, and most important to the taxpayers of Brick, increased the school tax by approximately \$6.43 million dollars annually, or 14.38 cents a year on the school’s tax rate each year, every year, forever.” (Source: Brick Township)

In an interview before the vote took place, the mayor was quoted as saying:

“By placing this issue on the ballot, we are asking Brick Township's taxpayers whether they think it’s in their best interest to continue to fund open space preservation to slow down development and avoid the inevitable larger tax increases that come with the building of new residential developments, due to additional children in our schools and additional municipal services being needed.” (Source: Natoli)

### **Parcel selection process:**

Not available.

**Prioritization criteria:**

Not available.

**Decision-making process:**

Not available.

**Ultimate decision maker:**

Not available.

**Information used to apply prioritization criteria:**

Not available.

**Data Sources:**

“X” if used:

	Local biological surveys		Any EPA water quality information
	Natural Heritage data (Nature Serve, TNC)		Other (list)
	National Hydrography database	X	None mentioned
	EPA reach files (GIS stream data)		None used
	National Wetlands Inventory		

**Priority map:**

No.

**Partnerships:**

New Jersey counties and municipalities with open space trust funds or other dedicated sources of funding for open space preservation can apply for state Green Acres grants under more favorable terms than local governments without such funding (matching funds of 50 percent, rather than the usual 25 percent, and a streamlined application process).

**Available and expended funding:**

Estimated that property tax (1 cent on every \$100 of assessed value) would raise approximately \$440,000 annually. If used to finance a 20-year bond, it would finance \$7 million in open space purchases.

**Acres protected:**

1,000 acres since 1994 (further breakdown not available). In August 2000: “The township’s most recent purchase was a 17.5-acre parcel of undeveloped land off Drum Point

Road on a bend between Cherry Quay and Church roads.” (Source: Natoli) The land was originally slated for 320 units of housing. (Source: Mikle) In May 2001, a 140-acre tract (consisting of 11 parcels) initially slated for residential and commercial development was under consideration for preservation; two of the parcels border creeks. (Source: Rizzo) The New Jersey Department of Environmental Protection’s web site of land acquired lists playgrounds, farms, conservation areas, woods, parking, an airport, parks, and beaches. (Source: New Jersey Department of Environmental Protection, Open Space Database.)

**Sources:**

Brick Township web site,

[http://www.twp.brick.nj.us/Land%20Use/Open%20Space/index.asp?openspace.htm&topmenu.htm&side\\_menu\\_map.htm](http://www.twp.brick.nj.us/Land%20Use/Open%20Space/index.asp?openspace.htm&topmenu.htm&side_menu_map.htm), accessed July 15, 2005.

Mikle, Jean. “Land meant for housing purchased as open space.” Asbury Park Press, August 9, 2000.

Natoli, Cori Anne. “Brick considers tax increase to save open space.” Asbury Park Press, August 30, 2000.

New Jersey Department of Environmental Protection Open Space Database,

<http://www.nj.gov/dep/greenacres/openspace.htm>, accessed July 15, 2005.

Rizzo, Nina. “Brick moves to preserve more land.” Asbury Park Press, May 10, 2001.

## 2000OH-01 Clean Ohio Green Space Conservation Program

**Jurisdiction Name, State:** Ohio  
**Year Ballot Measure Passed:** 2000  
**Percent of Vote Obtained:** 57%  
**Funding Mechanism:** Bond  
**Ballot Measure Description:** \$400 million, constitutional amendment to authorize the State to issue bonds for environmental conservation including land acquisition  
**Prioritization Type:** Bottom-up; applications for projects are submitted (by local political subdivisions or nonprofits) and then reviewed and approved or disapproved by the district Natural Resources Assistance Councils and then submitted to the Ohio Public Works Commission for final approval. (Source: Ohio General Assembly)

**Mission statement:**

Not available.

**Program goals:**

“To preserve green space and farmland, improve outdoor recreation, and revitalize blighted neighborhoods by cleaning up and redeveloping polluted properties.” (Source: Clean Ohio)

**Parcel selection process:**

Local political subdivisions or nonprofits submit parcels for selection. (Source: Ohio General Assembly)

**Prioritization criteria:**

Prioritization is handled by the district Natural Resources Assistance Councils and each can develop their own methodology for prioritization. Methodologies on file can be found online at <http://www.pwc.state.oh.us/NRAC.METHODOLOGYS.2.htm>.

A sample methodology available on the Greenspace Conservation Program website ([http://www.pwc.state.oh.us/clean\\_ohio.htm](http://www.pwc.state.oh.us/clean_ohio.htm)) is summarized here to provide a general understanding of the criteria used for prioritization.

The sample methodology has four parts. The first part is a preliminary screening (yes/no), which makes sure the applicant is eligible, the application was received on time, the project has a relevant open space or riparian corridors or watersheds purpose, and that the project would not fund hydromodification, facilities or legal obligations.

Part two lists twenty-five topic areas that a project might emphasize. A project receives two points for each topic area emphasized in the application, up to a 50 point maximum. (Examples include: protects habitat for rare, threatened, and endangered species; preserves headwater streams, etc.).

Part three rates the requirements of the project including percent of Clean Ohio matching funds needed; level of coordination (meets goals of multiple agencies); level of conservation coordination (with other open space, etc. programs in other districts); community benefits; extent of public access; operation and maintenance; project management experience; and cost-effectiveness of Clean Ohio funding necessary to complete project. A project can receive up to 40 points for part three.

Part four is worth 10 points and addresses any additional criteria such as community planning; regional significance; natural resource viability; level of funding from other sources; readiness to proceed; open space related facilities construction readiness; and others. (Source: Green Space Conservation Program)

**Decision-making process:**

Applications for projects are submitted (by local political subdivisions or nonprofits) and then reviewed and approved or disapproved by the district Natural Resources Assistance Councils and then forwarded to the Ohio Public Works Commission for final approval. (Source: Ohio General Assembly)

**Ultimate decision maker:**

Ohio Public Works Commission.

**Information used to apply prioritization criteria:**

Information on selection criteria are obtained from applications. (Source: Green Space Conservation Program)

**Data Sources:**

“X” if used:

	Local biological surveys		Any EPA water quality information
	Natural Heritage data (Nature Serve, TNC)	X	Other (list): All information is included on application forms but can include whether the project would protect rare or endangered species, preserves headwater streams, preserves or restores water quality, or wetlands, or

		Natural Heritage, etc.
	National Hydrography database	None mentioned
	EPA reach files (GIS stream data)	None used
	National Wetlands Inventory	

**Priority map:**

No.

**Partnerships:**

Specific information not available but partnerships are encouraged. (Source: Green Space Conservation Program)

**Available and expended funding:**

Annual funds available for the Clean Ohio Conservation Program are \$37.5 million. The funding must be approved each year by the Ohio legislature. Over 300 projects have been approved, although funding has not been disbursed or completely disbursed for all projects. (Source: Green Space Conservation Program)

**Acres protected:**

Not available.

**Sources:**

Clean Ohio. <http://clean.ohio.gov/>, accessed on July 19, 2005.

Ohio General Assembly. House Bill 385. [http://www.legislature.state.oh.us/bills.cfm?ID=124\\_HB\\_385](http://www.legislature.state.oh.us/bills.cfm?ID=124_HB_385), accessed on July 19, 2005.

Green Space Conservation Program. “Funded Projects,” “Sample Methodology,” and “Round 2 Funding.” [http://www.pwc.state.oh.us/clean\\_ohio.htm](http://www.pwc.state.oh.us/clean_ohio.htm), accessed on July 19, 2005.

## 2000RI-01 Open Space and Recreation and Clean Water Bonds

**Jurisdiction Name, State:** Rhode Island  
**Year Ballot Measure Passed:** 2000  
**Percent of Vote Obtained:** 73%  
**Funding Mechanism:** Bond  
**Ballot Measure Description:** Bond issue for acquisition of open space, groundwater protection, and public recreation facilities  
**Prioritization Type:** Top-down; the Rhode Island Department of Environmental Management (DEM) manages the program and spending.

**Mission statement:**

No formal mission statement.

**Program goals:**

“Rhode Island is rapidly losing land for parks, farmland, wildlife habitat and land that supports our drinking water. Open spaces that are important to our heritage and environment can be saved if we act today. Governor Almond has proposed for the November 2000 ballot a \$34 million bond issue to acquire and protect important land over the next ten years.

Under Open Space 2000 the Governor has called for accelerating the state’s land protection program by proposing a \$34 million bond issue for November, and with the funds acquire an additional 35,000 acres by 2010.” (Rhode Island DEM(a))

**Parcel selection process:**

Not available.

**Prioritization criteria:**

Not available.

**Decision-making process:**

Not available.

**Ultimate decision maker:**

Rhode Island DEM.

**Information used to apply prioritization criteria:**

Not available.

**Data Sources:**

“X” if used:

	Local biological surveys		Any EPA water quality information
	Natural Heritage data (Nature Serve, TNC)		Other (list)
	National Hydrography database	X	None mentioned
	EPA reach files (GIS stream data)		None used
	National Wetlands Inventory		

**Priority map:**

No.

**Partnerships:**

Municipal and private land trusts and The Nature Conservancy (Rhode Island DEM (c)).

**Available and expended funding:**

\$34 million (Rhode Island DEM (b)).

**Acres protected:**

Within the Statewide Open Space Protection program, 87 properties and over 6,462 acres have been protected throughout the State in the four years since the 2000 Open Space and Recreation Bond was passed. An additional 1,100 acres of farmland have been protected (Rhode Island DEM (b)).

Other open space projects have been funded, but acreage is not available. For example, in 2002, 19 proposals for DEM’s Local Open Space Grants were funded with \$5.7 million. In 2004, DEM received 46 applications for Open Space Grants for the \$3.5 million in funds that remain from the 2000 Bond (Rhode Island DEM (b)).

**Sources:**

Rhode Island DEM(a), <http://www.dem.ri.gov/programs/bpoladm/plandev/landacq/rios2000.htm>, accessed on August 3, 2005.

Rhode Island DEM (b), <http://www.dem.ri.gov/programs/bpoladm/plandev/pdf/bondques.pdf>, accessed on August 3, 2005.

Rhode Island DEM (c), <http://www.dem.ri.gov/programs/bpoladm/plandev/pdf/land2003.pdf>, accessed on August 3, 2005.

## 2004AZ-02 McMillan Mesa Open Space Land Acquisition

<b>Jurisdiction Name, State:</b>	Flagstaff, Arizona
<b>Year Ballot Measure Passed:</b>	2004
<b>Percent of Vote Obtained:</b>	53%
<b>Funding Mechanism:</b>	Bond
<b>Ballot Measure Description:</b>	Bond for wildlife, meadows, and greenways
<b>Prioritization Type:</b>	Bottom-up; priority land was identified by the City Council based on a public process including focus groups, public meetings, surveys, etc. Ultimately, the City Council makes decisions about project implementation and prioritization of projects is based on specific criteria as listed below.

### **Mission statement:**

The purpose of the bond is “to provide for the preservation and public use of portions of land in the City as open space.” (Source: City of Flagstaff (a))

### **Program goals:**

The bond measure would enable, “the acquisition of up to approximately 110 acres on McMillan Mesa consisting of open meadows, wildlife habitat, buffers, and viewsheds, located south of Forest/Cedar Avenue and Buffalo Park, generally extending west from Gemini to Turquoise and Ponderosa Parkway.” (Source: City of Flagstaff (a))

### **Parcel selection process:**

This land parcel was selected based on citizen input through city boards and commissions, a bond advisory task force, public meetings, community surveys and focus groups, and public comments during city council meetings. (Source: City of Flagstaff (b))

### **Prioritization criteria:**

Criteria for project implementation include: land availability and acquisition negotiations; environmental permitting processes; utility relocations; weather; and design and construction lead time. (Source: City of Flagstaff (b))

### **Decision-making process:**

Project implementation will be determined by the City Council with public input. (Source: City of Flagstaff (b))

**Ultimate decision maker:**

Flagstaff City Council.

**Information used to apply prioritization criteria:**

Not available.

**Data Sources:**

“X” if used:

	Local biological surveys		Any EPA water quality information
	Natural Heritage data (Nature Serve, TNC)		Other (list)
	National Hydrography database	X	None mentioned
	EPA reach files (GIS stream data)		None used
	National Wetlands Inventory		

**Priority map:**

Yes. Maps showing priority protection areas were created as part of the McMillan Mesa Master plan project (carried out over from October 2001 to April 2002). This bond measure is one of many sources of potential funds identified in the McMillan Mesa Master Plan. It will, thus, allow the City to protect only a portion of the priority areas. (Source: McMillan Mesa Workshop Series)

**Partnerships:**

Not available.

**Available and expended funding:**

Total anticipated revenue: \$10.1 million to be spent from the years 2005 to 2014.

**Acres protected:**

The measure is anticipated to protect up to 110 acres.

**Sources:**

City of Flagstaff (a), Information Pamphlet for City of Flagstaff, Arizona, General Election and Bond Authorization Special Election, May 18, 2004, <http://www.flagstaff.az.gov/documents/Bond%20Program/Publicity%20Pamphlet%20for%20May2004.pdf>, accessed on July 19, 2005.

City of Flagstaff (b), Our Town, Our Future: May 18, 2004 City Bond Election presentation, [http://www.flagstaff.az.gov/documents/Bond%20Program/Bond\\_Election4.ppt](http://www.flagstaff.az.gov/documents/Bond%20Program/Bond_Election4.ppt), accessed on July 19, 2005.

McMillan Mesa Workshop Series, <http://www.mcmillanmesa.net/>, accessed on August 4, 2005.

## 2004AZ-03 Regional Open Space – Observatory Mesa Land Acquisition

**Jurisdiction Name, State:** Flagstaff, Arizona  
**Year Ballot Measure Passed:** 2004  
**Percent of Vote Obtained:** 56%  
**Funding Mechanism:** Bond  
**Ballot Measure Description:** Bond for wildlife  
**Prioritization Type:** Bottom-up; the land parcel was selected based on citizen input through city boards and commissions, a bond advisory task force, public meetings, community surveys and focus groups, and public comments during city council meetings.

### **Mission statement:**

The purpose of the measure is “to provide permanent natural open spaces for the public use.” (Source: City of Flagstaff (a))

### **Program goals:**

The bond measure would enable, “the acquisition of up to approximately 480 acres of Arizona State Trust lands for wildlife habitat protection and conservation of observatory viewing quality, which is located within the city limits along the urban/wildland interface on the western edge of the City on Observatory Mesa.” (Source: City of Flagstaff (a))

### **Parcel selection process:**

This land parcel was selected based on citizen input through city boards and commissions, a bond advisory task force, public meetings, community surveys and focus groups, and public comments during city council meetings. (Source: City of Flagstaff (b))

### **Prioritization criteria:**

Criteria for project implementation include: land availability and acquisition negotiations; environmental permitting processes; utility relocations; weather; and design and construction lead time. (Source: City of Flagstaff (b))

### **Decision-making process:**

Project implementation will be determined by the City Council with public input. (Source: City of Flagstaff (b))

### **Ultimate decision maker:**

Flagstaff City Council.

**Information used to apply prioritization criteria:**

Not available.

**Data Sources:**

“X” if used:

	Local biological surveys		Any EPA water quality information
	Natural Heritage data (Nature Serve, TNC)		Other (list)
	National Hydrography database	X	None mentioned
	EPA reach files (GIS stream data)		None used
	National Wetlands Inventory		

**Priority map:**

No.

**Partnerships:**

The City plans to coordinate with the Arizona Preserve Initiative or State Trust land reform matching grants. (Source: City of Flagstaff (b))

**Available and expended funding:**

Total anticipated revenue is \$5.5 million to be spent by 2013 or sooner. (Source: City of Flagstaff (b))

**Acres protected:**

The measure is anticipated to protect up to 480 acres.

**Sources:**

City of Flagstaff (a), Information Pamphlet for City of Flagstaff, Arizona, General Election and Bond Authorization Special Election, May 18, 2004, <http://www.flagstaff.az.gov/documents/Bond%20Program/Publicity%20Pamphlet%20for%20May2004.pdf>, accessed on July 19, 2005.

City of Flagstaff (b), Our Town, Our Future: May 18, 2004 City Bond Election presentation, [http://www.flagstaff.az.gov/documents/Bond%20Program/Bond\\_Election4.ppt](http://www.flagstaff.az.gov/documents/Bond%20Program/Bond_Election4.ppt), accessed on July 19, 2005.

## **2004AZ-04 Neighborhood Open Space and Flagstaff Urban Trail System (FUTS)**

**Jurisdiction Name, State:** Flagstaff, Arizona  
**Year Ballot Measure Passed:** 2004  
**Percent of Vote Obtained:** 59%  
**Funding Mechanism:** Bond  
**Ballot Measure Description:** Bond for neighborhood open space, trails, greenways, wildlife, scenic areas, and geologic features  
**Prioritization Type:** Bottom-up; the land parcel was selected based on citizen input through city boards and commissions, a bond advisory task force, public meetings, community surveys and focus groups, and public comments during city council meetings.

**Mission statement:**

The purpose of the bond is “to provide neighborhood open spaces and land for the Flagstaff Urban Trail System.” (Source: City of Flagstaff (a))

**Program goals:**

The bond measure would enable, “the acquisition of up to approximately 550 acres of open space lands in and around the City’s neighborhoods consisting of wildlife habitat, geological features, riparian and scenic areas, and buffers spread throughout the City and for the connection of neighborhoods, parks, schools, employment, shopping and other areas with approximately 50 miles of the Flagstaff Urban Trails System.” (Source: City of Flagstaff (a))

**Parcel selection process:**

This land parcel was selected based on citizen input through city boards and commissions, a bond advisory task force, public meetings, community surveys and focus groups, and public comments during city council meetings. (Source: City of Flagstaff (b))

**Prioritization criteria:**

Criteria for project implementation include: land availability and acquisition negotiations; environmental permitting processes; utility relocations; weather; and design and construction lead time. (Source: City of Flagstaff (b))

**Decision-making process:**

Project implementation will be determined by the City Council with public input. (Source: City of Flagstaff (b))

**Ultimate decision maker:**

Flagstaff City Council.

**Information used to apply prioritization criteria:**

Not available.

**Data Sources:**

“X” if used:

	Local biological surveys		Any EPA water quality information
	Natural Heritage data (Nature Serve, TNC)		Other (list)
	National Hydrography database	X	None mentioned
	EPA reach files (GIS stream data)		None used
	National Wetlands Inventory		

**Priority map:**

No.

**Partnerships:**

Not available.

**Available and expended funding:**

Total anticipated revenue is \$7.6 million to be spent over the years 2005 to 2014.

(Source: City of Flagstaff (b))

**Acres protected:**

The measure is anticipated to protect 550 acres.

**Sources:**

City of Flagstaff (a), Information Pamphlet for City of Flagstaff, Arizona, General Election and Bond Authorization Special Election, May 18, 2004,

<http://www.flagstaff.az.gov/documents/Bond%20Program/Publicity%20Pamphlet%20for%20May2004.pdf>, accessed on July 19, 2005.

City of Flagstaff (b), Our Town, Our Future: May 18, 2004 City Bond Election presentation,

[http://www.flagstaff.az.gov/documents/Bond%20Program/Bond\\_Election4.ppt](http://www.flagstaff.az.gov/documents/Bond%20Program/Bond_Election4.ppt), accessed on July 19, 2005.

## 2004CO-02 Tax for Open Space

**Jurisdiction Name, State:** Erie, Colorado  
**Year Ballot Measure Passed:** 2004  
**Percent of Vote Obtained:** 64%  
**Funding Mechanism:** Property tax  
**Ballot Measure Description:** Ballot Issue 2A, 10-year, 4 mill. property tax levy for open space  
**Prioritization Type:** Bottom-up; program expenditures first submitted to a citizen advisory board for recommendation to the Board of Trustees.

### **Mission statement:**

No formal mission statement.

### **Program goals:**

All proceeds of the increased property tax are to be used to:

- “Create hiking, biking, and walking trails throughout town to connect neighborhoods and the regional trail network;
- Purchase natural areas to separate Erie from other communities;
- Preserve wildlife habitat;
- Protect natural areas along Coal Creek and Boulder Creek; and
- Conserve scenic landscapes and views.”

(Source: Rocky Mountain News.)

### **Parcel selection process:**

Not available.

### **Prioritization criteria:**

Not available.

### **Decision-making process:**

Not available.

### **Ultimate decision maker:**

Board of Trustees.

**Information used to apply prioritization criteria:**

Not available.

**Data Sources:**

“X” if used:

	Local biological surveys		Any EPA water quality information
	Natural Heritage data (Nature Serve, TNC)		Other (list)
	National Hydrography database	X	None mentioned
	EPA reach files (GIS stream data)		None used
	National Wetlands Inventory		

**Priority map:**

No.

**Partnerships:**

Not available.

**Available and expended funding:**

\$4.38 million in estimated funding.

**Acres protected:**

Not available.

**Sources:**

Town of Erie, <http://www.ci.erie.co.us/index.cfm?objectid=1B721C2E-F200-8670-069785961A8B9196>, accessed on August 3, 2005.

Rocky Mountain News, [http://election.rockymountainnews.com/issueDetail.cfm?issu\\_id=2051](http://election.rockymountainnews.com/issueDetail.cfm?issu_id=2051), accessed on August 3, 2005.

## 2004CT-01 Purchase of the Southington Drive-In

**Jurisdiction Name, State:** Southington, Connecticut  
**Year Ballot Measure Passed:** 2004  
**Percent of Vote Obtained:** 68%  
**Funding Mechanism:** Bond  
**Ballot Measure Description:** Bond to acquire land for recreation and sewage treatment purposes  
**Prioritization Type:** Top-down; the public knew at the time of the vote which property was going to be acquired by the town.

**Mission statement:**

Not available.

**Program goals:**

To acquire the 40-acre plot of land, including about 23 acres of wetlands, known as “the Southington drive-in property.” To be used “for recreational, sewage treatment plant property access and other municipal purposes.” (Sources: New Britain Herald; Southington Election Department)

**Parcel selection process:**

Not available.

**Prioritization criteria:**

Not available.

**Decision-making process:**

Property owner Peter G. Perakos closed the drive-in in 2003 and offered the land for sale. In July, 2003, Arthur B. Estrada & Associates of North Haven appraised the land for the town at \$975,000.

Developer Anthony Denorfia then entered into an agreement with Perakos in January 2004 to buy the property for \$1.5 million. However, Denorfia decided to step aside if the referendum passed. (Source: Pukalo)

**Ultimate decision maker:**

Voters in the Town of Southington.

**Information used to apply prioritization criteria:**

Not available.

**Data Sources:**

“X” if used:

	Local biological surveys		Any EPA water quality information
	Natural Heritage data (Nature Serve, TNC)		Other (list)
	National Hydrography database	X	None mentioned
	EPA reach files (GIS stream data)		None used
	National Wetlands Inventory		

**Priority map:**

No.

**Partnerships:**

No.

**Available and expended funding:**

\$1.61 million.

**Acres protected:**

40 acres.

**Sources:**

Southington Elections Department, <http://registrars.southington.org/elections/referendum4-27-2004.shtml>, accessed on August 4, 2005.

Cornell, Scott. “Town to buy drive-in site.” New Britain Herald, April 28, 2004. [http://www.newbritainherald.com/site/news.cfm?newsid=11398523&BRD=1641&PAG=461&dept\\_id=10110&rfti=6](http://www.newbritainherald.com/site/news.cfm?newsid=11398523&BRD=1641&PAG=461&dept_id=10110&rfti=6), accessed on August 4, 2005.

Pukalo, Mark. “Residents OK Purchase Of Drive-In Property.” The Hartford Courant, April 28, 2004. <http://www.geocities.com/rochfordpaul/southington.html>, accessed on August 4, 2005.

## **2004FL-02 Pasco County Environmental Lands Acquisition and Management Program**

<b>Jurisdiction Name, State:</b>	Pasco County, Florida
<b>Year Ballot Measure Passed:</b>	2004
<b>Percent of Vote Obtained:</b>	52%
<b>Funding Mechanism:</b>	Sales tax
<b>Ballot Measure Description:</b>	Penny Sales Tax: 10-year, 1 cent sales tax increase for environmentally significant lands, recreation, public safety, schools, city projects
<b>Prioritization Type:</b>	Bottom up; individuals can nominate parcels for consideration.

### **Mission statement:**

The purpose of the Environmental Lands Acquisition and Management Program (ELAMP) is to acquire lands and conservation easements in order to: protect natural communities including uplands and wetlands, connect natural linkages, conserve viable populations of native plants and animals, protect habitat for listed species, protect water resources and wetland systems, protect unique natural resources, enhance resource-based recreational opportunities, and expand environmental education opportunities with Pasco County.

### **Program goals:**

Pasco County has earmarked a quarter of its allocation from the Penny for Pasco — an estimated \$36.3 million over 10 years — to protecting environmentally sensitive lands. The County Commission has already adopted the Environmental Lands Acquisition and Management Program or ELAMP to help coordinate this challenging task.

### **Parcel selection process:**

Under this program individuals can nominate a piece of property for consideration. Nominations will be evaluated by the Environmental Lands Acquisition Selection Committee (ELASC). The Environmental Lands Acquisition Selection Committee was appointed by the Pasco County Board of County Commissioners to help in the land selection process. This eleven-member committee consists of individuals with the following affiliations:

Vice president and senior ecologist with Biological Research Associates;

- Owner of Little Everglades Ranch;

- Senior environmental scientist and professional associate with HDR Engineering;
- Senior environmental analyst at Tampa Bay Water;
- Environmental program director at Southwest Florida Water Management District;
- Professional nature photographer;
- Environmental science professor at Saint Leo University;
- Senior environmental scientist with Scheda Ecological Associates, Inc.;
- Vice president of environmental services with Florida Design Consultants;
- Executive director of Pascowildlife, Inc.;
- There is one vacancy in the Real Estate/Business/Finance category.

The ELASC meets monthly, and is currently accepting nominations of lands to be considered for possible purchase of fee title or conservation easements by Pasco County. Anyone, other than members of the ELASC and the Board of County Commissioners, may nominate a parcel for consideration in the ELAMP. Nominated parcels will be reviewed in the order they are received. All information submitted will become the property of Pasco County and will be public record. The County is not responsible for any costs or expenses relating to the filing of an application.

Applicants are encouraged to submit applications for projects that meet the objectives of the ELAMP (i.e., protect natural communities including uplands and wetlands, connect natural linkages, conserve viable populations of native plants and animals, protect habitat for listed species, protect water resources and wetland systems, protect unique natural resources, enhance resource-based recreational opportunities, and expand environmental education opportunities with Pasco County).

**Prioritization criteria:**

Prioritization criteria are not readily available. Other than the aforementioned objectives of the ELAMP, no criteria are specifically identified on the ELAMP website or related sources.

**Decision-making process:**

The 11-member ELASC panel will meet every quarter to rank properties that have been nominated for conservation. The ranking process is not described in program documentation on the Internet; however, a job posting for an Environmental Lands Program Coordinator in Pasco County indicates that ranking may involve GIS mapping insofar as the job announcement requires familiarity with GIS. The makeup of the ELASC was very closely watched and carefully crafted to ensure that the committee would consist of at least five members with strong science backgrounds.

**Ultimate decision maker:**

The ELASC panel will advise the County Commission, which will make all final purchasing decisions.

**Information used to apply prioritization criteria:**

Not available (see notes in decision-making process above).

**Data sources:**

“X” if used:

	Local biological surveys		Any EPA water quality information
	Natural Heritage data (Nature Serve, TNC)		Other (list)
	National Hydrography database	X	None mentioned
	EPA reach files (GIS stream data)		None used
	National Wetlands Inventory		

**Priority map:**

Not clear whether mapping is used to assist in ranking and prioritizing parcels.

**Partnerships:**

Not available.

**Available and expended funding:**

The Program will use 25 percent of the County’s 45 percent of the Penny for Pasco proceeds and matching funds, if available, from federal, state, municipal, private non-profit, and Water Management District land acquisition funding sources. An estimated \$36.3 million over 10 years is expected to be allocated for this program from Penny for Pasco funds.

**Acres protected:**

None yet.

**Sources:**

ELAMP, [www.pascocountyfl.net/elamp/elamp.html](http://www.pascocountyfl.net/elamp/elamp.html); accessed on August 3 and 23, 2005.

County job postings, <http://pascocountyfl.net/personnel/pos/0405025.htm>, accessed on August 23, 2005.

2004 Pasco County annual report, <http://www.pascocountyfl.net/2004PCAR.pdf>, accessed on August 3, 2005.

## 2004FL-03 Waterfront Access and Waterfront Preservation Bonds

**Jurisdiction Name, State:** Palm Beach County, Florida  
**Year Ballot Measure Passed:** 2004  
**Percent of Vote Obtained:** 68%  
**Funding Mechanism:** Bond  
**Ballot Measure Description:** Bond to acquire property to protect, preserve, and expand public access to bodies of water and working waterfronts  
**Prioritization Type:** Not yet determined; program is still being developed.

**Mission statement:**

Not available.

**Program goals:**

“...protect, preserve, and expand public access to freshwater and saltwater bodies of water and preserve working waterfronts thereon by financing the cost of acquisition of real property and interests therein and of certain capital improvements...” (Source: Ballot measure text)

**Parcel selection process:**

As the bond measure passed less than a year before this writing, it seems the details have not yet been worked out. According to the minutes summary from a March 1, 2005 County Board of Commissioners meeting:

“Staff has identified 3 categories of projects that are the focus of this program: 1) Boat ramps and public waterfront recreational areas; 2) Marinas and boat yards which are in danger of being converted to other uses such as condominiums resulting in the loss of marine industry jobs and a negative financial impact to the local economy; and 3) Waterfront redevelopment projects within municipalities. Since passage of the bond issue, Staff has been meeting with numerous property owners interested in participating in this program. In addition, Staff has met with and received information from numerous community redevelopment agencies seeking funding assistance for their waterfront oriented redevelopment projects. The number of potential projects and the projected costs associated therewith, far exceeds available funding and Staff resources available to implement these projects. Therefore, Board direction regarding allocation of funds to the 3 categories of projects and prioritization of projects within and amongst the categories is requested. Staff has developed lists of potential projects within each of these categories, as well

as suggested criteria for establishing priorities for acquisition.” (Source: Board of County Commissioners minutes summary and discussion)<sup>1</sup>

**Prioritization criteria:**

Not available, however, according to several articles, the main reason for passage of the bond measure was the public’s fear of marinas being developed into high-end waterfront housing, thus making it difficult for boaters to use the waterfront. It is likely that preserving such access will be high on the county’s list of priorities. (Source: Becker; Poole)

**Decision-making process:**

Not available.

**Ultimate decision maker:**

Seems to be the Board of County Commissioners, but process still under development.

**Information used to apply prioritization criteria:**

Not available.

**Data Sources:**

“X” if used:

	Local biological surveys		Any EPA water quality information
	Natural Heritage data (Nature Serve, TNC)		Other (list)
	National Hydrography database	X	None mentioned
	EPA reach files (GIS stream data)		None used
	National Wetlands Inventory		

**Priority map:**

Unknown.

**Partnerships:**

According to one report just after the bond measure passed, “A nonprofit agency, such as the Tallahassee-based Trust for Public Land, then would negotiate purchases on the county's behalf and bring proposals to the county commission.” However, details of the program had not yet been worked out at the time. (Source: Poole)

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<sup>1</sup> The project lists and criteria were not included in the board minutes.

**Available and expended funding:**

\$50 million bond issue, of which the Board of County Commissioners approved spending \$35 million on land acquisition in March 2005. (Source: Board of County Commissioners minutes summary) With land values as high as they are in southern Florida, the \$35 million may not purchase much land. (Source: Becker)

**Acres protected:**

None to date.

**Sources:**

Board of County Commissioners minutes summary and discussion, March 1, 2005.

<http://www.pbcountyclerk.com/minutes/pdf/030105.pdf> (summary) and [http://minutes.co.palm-beach.fl.us/minutes/viewframes.jsp?pid=64+2+DL4+libp29+Clerk+Research%3Blibp%3BPBC\\_Title19+16+P2WZNNM6QUQTC551](http://minutes.co.palm-beach.fl.us/minutes/viewframes.jsp?pid=64+2+DL4+libp29+Clerk+Research%3Blibp%3BPBC_Title19+16+P2WZNNM6QUQTC551) (discussion), accessed on July 29, 2005.

Becker, Lori. "No room at the ramp." Palm Beach Post, July 3, 2005.

Text of bond measure, [http://pbcelections.org/Sample%20Ballots/2004\\_GEN\\_ENG.pdf](http://pbcelections.org/Sample%20Ballots/2004_GEN_ENG.pdf), accessed on July 29, 2005.

Poole, Deana. "Higher Taxes Backed To Keep Marinas In Public's Reach." Palm Beach Post, November 3, 2004.

## 2004MA-01 Program to Purchase Hillcrest Country Club

**Jurisdiction Name, State:** Leicester, Massachusetts  
**Year Ballot Measure Passed:** 2004  
**Percent of Vote Obtained:** 81%  
**Funding Mechanism:** Bond  
**Ballot Measure Description:** Question 1, Bond for open space, watershed protection, golf course.  
**Prioritization Type:** Top-down; location was chosen by town officials prior to public vote.

**Mission statement:**

Not available.

**Program goals:**

Protection of the property is intended to safeguard the municipal water supply and enable the town to develop new wells for an additional town-wide water supply.

**Parcel selection process:**

The Hillcrest Country Club Property was selected prior to the public vote. Selection information is not available.

**Prioritization criteria:**

Not available.

**Decision-making process:**

Not available.

**Ultimate decision maker:**

Town of Leicester.

**Information used to apply prioritization criteria:**

Not available.

**Data Sources:**

“X” if used:

	Local biological surveys		Any EPA water quality information
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	Natural Heritage data (Nature Serve, TNC)		Other (list)
	National Hydrography database	X	None mentioned
	EPA reach files (GIS stream data)		None used
	National Wetlands Inventory		

**Priority map:**

No.

**Partnerships:**

Leicester had some significant assistance from the Trust for Public Lands in negotiating and acquiring the Hillcrest Country Club.

**Available and expended funding:**

\$3.8 million to acquire the entire Hillcrest Country Club Property (over 310 acres), only part of which is being protected for watershed/water supply purposes.

**Acres protected:**

Over 200 acres have been protected for watershed/water supply land and will provide opportunities for passive recreation compatible with watershed protection. The remaining portion of the property has been protected for recreational uses.

**Sources:**

Leicester Town Annual Report, 2004,

<http://www.ci.leicester.ma.us/annualreport/2004AnnualTownReport.pdf>, accessed on August 2005.

Massachusetts American Planning Association Newsletter, May 2004:

[http://www.massapa.org/newsletters/may\\_2004.pdf](http://www.massapa.org/newsletters/may_2004.pdf), accessed on August 2005.

## 2004MI-03 Recreational Authority of Traverse City and Garfield Township

**Jurisdiction Name, State:** Traverse City and Garfield Township, Michigan  
**Year Ballot Measure Passed:** 2004  
**Percent of Vote Obtained:** 80%  
**Funding Mechanism:** Bond  
**Ballot Measure Description:** Bond for the acquisition of open space and wildlife habitat  
**Prioritization Type:** Top-down; parcels to be preserved were identified prior to passage of the bond. Traverse City and Garfield Township created a joint Recreational Authority to facilitate purchase of the properties.

**Mission statement:**

Not available.

**Program goals:**

To preserve open space and wildlife habitat.

**Parcel selection process:**

Parcels were identified prior to passage of the bond. The properties identified for purchase include a 56-acre parcel with three historic barns; a bayfront building that will be demolished and turned into open space; and 108 acres of field, forests, and wetlands, adjacent to a ski area. (Source: People and Land; Ganter)

The importance of the properties as described by Friends for Recreational Lands in Garfield Township & Traverse City is included below. All three of the properties are adjacent to existing publicly-owned “park” properties. They all have existing trails that connect to larger trail systems on the adjacent public properties. The Smith/Barney (bayfront) property is the last privately held parcel along 9,500-feet of West Bay frontage. The Hickory Meadows property and the Barns property have both been used by the public for decades. Now, both are likely to be developed in the near future, should this opportunity to purchase them for public use fail. Both serve as habitat for wildlife, offer plenty of room for passive public recreation in quiet areas, and yet are very close to where we live and work. (Source: Friends for Recreational Lands)

**Prioritization criteria:**

Not applicable.

**Decision-making process:**

In June 2003, Garfield Township and the City of Traverse formed a Recreational Authority as a way of funding the public purchase of three prime properties in the area. The Recreational Authority determined that prudent planning must include both an acquisition bond (to buy the properties) and an operating millage (to cover maintenance, insurance, legal fees, and community planning). The Grand Traverse Regional Land Conservancy secured purchase agreements to reserve the properties pending the outcome of the November 2, 2004 election. (Source: Ganter)

**Ultimate decision maker:**

Land to be acquired was decided in advance.

**Information used to apply prioritization criteria:**

Not applicable.

**Data Sources:**

“X” if used:

	Local biological surveys		Any EPA water quality information
	Natural Heritage data (Nature Serve, TNC)		Other (list)
	National Hydrography database		None mentioned
	EPA reach files (GIS stream data)	X	None used
	National Wetlands Inventory		

**Priority map:**

No.

**Partnerships:**

This bond measure was on the ballot with an associated property tax measure and both had to be passed in order for Traverse City and Garfield Township to be able to purchase and maintain the specified properties. Both measures passed and the City and Township are working together through the joint Recreational Authority.

**Available and expended funding:**

The bond measure passed for \$6.65 million.

The associated property tax measure (20-year, .1 mill. property tax increase) passed for an expected total of \$2.5 million, which will be used to cover maintenance, insurance, legal fees, and community planning.

**Acres protected:**

Approximately 165 acres.

**Sources:**

People and Land. "Land Use Issues Gain Higher Profile in Election 2004." PAL Update, Oct/Nov 2004. <http://www.peopleandland.org/Newsletters/PALUpdateOctNov04.pdf>, accessed on July 20, 2005.

Ganter, E. "The Open Space & Natural Area Proposals." Northern Express: Northern Michigan's Largest Newsweekly. <http://www.northernexpress.com/editorial/features.asp?id=733>, accessed on July 20, 2005.

Friends for Recreational Lands in Garfield Township & Traverse City. "Frequently Asked Questions: What is so important about these properties." <http://www.yesopenspace.org/answers.html#purchase2>, accessed on July 20, 2005.

## 2004MO-01 Rolla, Missouri – Stormwater and Park Land Program

**Jurisdiction Name, State:** Rolla, Missouri  
**Year Ballot Measure Passed:** 2004  
**Percent of Vote Obtained:** 66%  
**Funding Mechanism:** Bond  
**Ballot Measure Description:** \$3 million total, \$0.8 million for open space, Bond for stormwater control and land acquisition  
**Prioritization Type:** Unknown; insufficient published information available to make determination.

**Mission statement:**

Not available.

**Program goals:**

Not available.

**Parcel selection process:**

Number of acres (120) was decided in advance. Information on whether the location of the 120 acres was decided in advance was not available. (Source: Penprase)

**Prioritization criteria:**

Not available.

**Decision-making process:**

Not available.

**Ultimate decision maker:**

Not available.

**Information used to apply prioritization criteria:**

Not available.

**Data Sources:**

“X” if used:

	Local biological surveys		Any EPA water quality information
	Natural Heritage data (Nature Serve, TNC)		Other (list)

	National Hydrography database	X	None mentioned
	EPA reach files (GIS stream data)		None used
	National Wetlands Inventory		

**Priority map:**

No.

**Partnerships:**

Not available.

**Available and expended funding:**

\$800,000 for land acquisition. (Source: LandVote)

**Acres protected:**

The proposition included a plan to purchase 120 acres of land for combination stormwater retention basins and parkland. (Source: Penprase)

**Sources:**

Penprase, Mike. "Voters in four Ozarks towns approve sewer, water proposals." Springfield News-Leader, April 7, 2004.

## 2004NJ-02 Open Space Trust Fund

**Jurisdiction Name, State:** Carteret Borough, New Jersey  
**Year Ballot Measure Passed:** 2004  
**Percent of Vote Obtained:** 57%  
**Funding Mechanism:** Property tax  
**Ballot Measure Description:** 2 cents per \$100 property tax for acquisition and/or improvement for lands, parks and water.  
**Prioritization Type:** Unknown; insufficient published information available to make determination.

**Mission statement:**  
 None identified.

**Program goals:**  
 None identified.

**Parcel selection process:**  
 Not available.

**Prioritization criteria:**  
 Not available.

**Decision-making process:**  
 Not available.

**Ultimate decision maker:**  
 Not available.

**Information used to apply prioritization criteria:**  
 Not available.

**Data Sources:**  
 "X" if used:

	Local biological surveys		Any EPA water quality information
	Natural Heritage data (Nature Serve, TNC)		Other (list)
	National Hydrography database	X	None mentioned

	EPA reach files (GIS stream data)		None used
	National Wetlands Inventory		

**Priority map:**

Unknown.

**Partnerships:**

New Jersey counties and municipalities with open space trust funds or other dedicated sources of funding for open space preservation can apply for state Green Acres grants under more favorable terms than local governments without such funding (matching funds of 50 percent, rather than the usual 25 percent, and a streamlined application process).

**Available and expended funding:**

Carteret’s Open Space Trust Fund began in 2000. From 2002-2004, the township spent \$500,000 from the Open Space Trust fund, along with \$1.5 million from Middlesex County and \$1.9 million in state grants. (Source: Maskaly (a)) The increased funding from the 2000 tax level of one cent was expected to raise annual revenues from \$100,000 to \$300,000. (Source: Maskaly (b))

**Acres protected:**

While expenditure details were not given, the article implied that most funds from 2002-2004 had been spent on park improvement. (Source: Maskaly (a)) Before the measure passed, “[Carteret Mayor] Reiman said if voters approve the measure, the extra revenue will be used to make improvements at the Little League baseball fields and the Waterfront Park.” (Source: Maskaly (b)) Another group wanted funds to build a soccer field. (Source: Maskaly (c)) The New Jersey Department of Environmental Protection’s web site of land acquired showed that most of land acquired by the Borough was either parks or athletic playing fields. (Source: New Jersey Department of Environmental Protection, Open Space Database.) The Borough is also involved in an effort, funded largely by a state grant, to restore the industrial Arthur Kills waterfront to a park. (Source: Walsh)

**Sources:**

LandVote Database, Trust for Public Land, [www.landvote.org](http://www.landvote.org).

Maskaly, Michelle (a). “Carteret Presses For Open-Space-Fund Hike.” The Home News Tribune, October 23, 2004.

Maskaly, Michelle (b). "Carteret would hike open-space tax \$24 a year." The Home News Tribune, July 24, 2004.

Maskaly, Michelle (c). "New soccer teams takes shape Carteret program is upbeat." The Home News Tribune, November 15, 2004.

Walsh, Diane C. "Towns and Agencies Receive Open Space Money; County Gets \$20M Share Of Anti-Sprawl Funds." Newark Star-Ledger, June 29, 2003.

New Jersey Department of Environmental Protection Open Space Database,  
<http://www.nj.gov/dep/greenacres/openspace.htm>, accessed July 18, 2005.

## 2004NY-03 Webster Open Space

<b>Jurisdiction Name, State:</b>	Webster, NY
<b>Year Ballot Measure Passed:</b>	2004
<b>Percent of Vote Obtained:</b>	52%
<b>Funding Mechanism:</b>	Bond
<b>Ballot Measure Description:</b>	Bond for open space, wildlife, trails, farmland, easements
<b>Prioritization Type:</b>	Bottom up; predetermined.

### **Mission statement:**

None available.

### **Program goals:**

Acquire specific properties to protect open space and block development.

### **Parcel selection process:**

The 2003 plan proposes to preserve permanently from development properties of 11 different owners located in various areas throughout Webster. Collectively just more than 900 acres would be saved from development.

Many properties are grouped together in small clusters that result in saving one large area.

“Most everyone will remember that in April 2002 a much larger open space plan was proposed – for an amount of \$22 million to preserve anywhere from 3,000 to 5,000 acres. That proposal was defeated by a margin of about 60% to 40%. Exit polls after that vote, however, showed that support for some kind of preservation of open space – something on a more economical scale and a plan that was specific concerning properties to be preserved.

The Town Board worked with Open Space Committee Chair Larry Peckham and the John Behan consulting firm on the revised plan.” (Source: Webster Open Space Plan)

### **Prioritization criteria:**

Not available.<sup>1</sup>

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<sup>1</sup> Larry Peckham and John Behan could probably clarify the process.

**Decision-making process:**

A municipal committee identified specific parcels and submitted a request for bond funding to voters.

**Ultimate decision maker:**

Webster voters authorized debt funding; town board actually approves spending the money.

**Information used to apply prioritization criteria:**

1996 Report on Preservation of Environmental Sensitive Areas in Monroe County (Monroe County Environmental Management Council) identified several sites in Webster that are environmentally sensitive and should be targeted for preservation (Comprehensive Plan).

Sites ranked highest primarily focused around the Irondequoit Bay ecosystem, including:

- Irondequoit Bay’s Northeastern Shoreline (the Sandbar)
- Webster Village Well field
- Devil’s Cove on Irondequoit Bay

**Data Sources:**

“X” if used:

	Local biological surveys		Any EPA water quality information
	Natural Heritage data (Nature Serve, TNC)		Other (list)
	National Hydrography database	X	None mentioned
	EPA reach files (GIS stream data)		None used
	National Wetlands Inventory		

**Priority map:**

Yes, four figures from the Comprehensive Plan:

- Figure 16: Core Area Existing Conditions
- Figure 17: Core Area Future Land Use Concept
- Figure 18: Parks, Trails and Significant Natural Resource Areas Plan
- Figure 19: Future Land Use Concept

**Partnerships:**

The Trust for Public Lands (TPL) has been active in Webster, including an \$800,000 acquisition of a 130-acre property using funds from the \$5.9 million bond referendum approved April 27, 2004. This action was made possible through partnerships with the Henry Philip Kraft

Memorial Fund and Sarah K. de Coizart Article TENTH Perpetual Charitable Trust. Planning involved the TPL Great Lakes Greenprint project and TPL Great Lakes Program.

**Available and expended funding:**

Open space preservation program cost is not to exceed \$5.9 million. The Town has secured more than \$1.75 million in Federal, State and County grant funding to help with preserving properties.

**Acres protected:**

1,020 (planned).

**Sources:**

Town of Webster Comprehensive Plan, [www.ci.webster.ny.us/properties/comp\\_plan.htm](http://www.ci.webster.ny.us/properties/comp_plan.htm), accessed August 19, 2005.

## 2004PA-01 Nockamixon Township Open Space Program

**Jurisdiction Name, State:** Nockamixon Township, Pennsylvania  
**Year Ballot Measure Passed:** 2004  
**Percent of Vote Obtained:** 60%  
**Funding Mechanism:** Income tax  
**Ballot Measure Description:** \$3.8 million, 0.25 % income tax increase to be used to acquire property to protect and preserve open space, farmland, watersheds, parks and conservation sites  
**Prioritization Type:** Unknown; insufficient published information available to make determination.

**Mission statement:**  
 Not available.

**Program goals:**  
 Not available.

**Parcel selection process:**  
 Not available.

**Prioritization criteria:**  
 Not available.

**Decision-making process:**  
 Not available.

**Ultimate decision maker:**  
 Not available.

**Information used to apply prioritization criteria:**  
 Not available.

**Data Sources:**  
 "X" if used:

	Local biological surveys		Any EPA water quality information
	Natural Heritage data (Nature Serve, TNC)		Other (list)

	National Hydrography database	X	None mentioned
	EPA reach files (GIS stream data)		None used
	National Wetlands Inventory		

**Priority map:**

No.

**Partnerships:**

Not available.

**Available and expended funding:**

Estimated annual revenue is \$180,000 (Source: Delaware Valley Regional Planning Commission)

Another estimate of annual revenue due to the tax increase is \$190,000. (Source: Moultrie)

**Acres protected:**

Not available.

**Sources:**

Delaware Valley Regional Planning Commission. Local Funding Programs, May 2005.

<http://www.dvrpc.org/planning/environmental/openspace/local.htm>, accessed on July 19, 2005.

Moultrie, Dalondo. "Voters in Bucks County, Pa., township back higher income tax for land." The Morning Call, November 3, 2004.

## 2004RI-01 Open Space, Recreation, Bay and Watershed Protection Bond

**Jurisdiction Name, State:** Rhode Island  
**Year Ballot Measure Passed:** 2004  
**Percent of Vote Obtained:** 70.8%  
**Funding Mechanism:** Bond  
**Ballot Measure Description:** Question 8, Statewide environmental bond for open space preservation and acquisition, wetlands protection, greenway expansion, and anti-pollution projects  
**Prioritization Type:** Top-down; the Rhode Island Department of Environmental Management (DEM) manages the program and spending.

### **Mission statement:**

No formal mission statement.

### **Program goals:**

“The Open Space, Recreation, Bay and Watershed Protection Bond, will fund strategic investments in land, water and recreation:

- Preserve thousands of acres per year to expand and link our parks and other recreation facilities, and preserve farmland and habitat
- Restore eelgrass, salt marshes and other important natural habitats
- Clean up Narragansett Bay and RI’s waterways
- Reduce stormwater pollution in cities and towns
- Reduce nutrient pollutants from wastewater treatment plants.”

(Source: Rhode Island DEM Fact Sheet on Question 8)

### **Parcel selection process:**

Not available.

### **Prioritization criteria:**

Not available.

### **Decision-making process:**

Not available.

### **Ultimate decision maker:**

Rhode Island DEM.

**Information used to apply prioritization criteria:**

Not available.

**Data Sources:**

“X” if used:

	Local biological surveys		Any EPA water quality information
	Natural Heritage data (Nature Serve, TNC)		Other (list)
	National Hydrography database	X	None mentioned
	EPA reach files (GIS stream data)		None used
	National Wetlands Inventory		

**Priority map:**

No.

**Partnerships:**

Municipal and private land trusts and The Nature Conservancy.

**Available and expended funding:**

\$70 million projected to be available.

**Acres protected:**

Not available.

**Sources:**

Rhode Island DEM, <http://www.dem.ri.gov/programs/bpoladm/plandev/landacq/index.htm>, accessed on August 3, 2005.

Rhode Island DEM, <http://www.dem.ri.gov/programs/bpoladm/plandev/pdf/bondques.pdf>, accessed on August 3, 2005.

Rhode Island DEM, Fact Sheet on Question 8: Open Space, Recreation, Bay and Watershed Protection Bond. No date.

## 2004UT-01 Corner Canyon Program

**Jurisdiction Name, State:** Draper, Utah  
**Year Ballot Measure Passed:** 2004  
**Percent of Vote Obtained:** 59%  
**Funding Mechanism:** Bond  
**Ballot Measure Description:** \$7 million bond for watershed protection  
**Prioritization Type:** Top-down; the land to be purchased was determined in advance of development of the bond measure.

**Mission statement:**

Not available.

**Program goals:**

To protect Corner Canyon, a 1,035-acre property nestled in the foothills below the Lone Peak Wilderness Area. The Canyon is a source of the City's drinking water. (Source: Lampe 2005)

**Parcel selection process:**

The parcel was identified before the development of the bond measure.

Using passage of the \$7 million bond issue to leverage other funds, the Trusty for Public Lands (TPL) and the City of Draper are currently negotiating to purchase the entire 1,035-acre property for public protection. (Source: Lampe)

**Prioritization criteria:**

Not available.

**Decision-making process:**

Not available.

**Ultimate decision maker:**

Not available.

**Information used to apply prioritization criteria:**

Not applicable.

**Data Sources:**

“X” if used:

	Local biological surveys		Any EPA water quality information
	Natural Heritage data (Nature Serve, TNC)		Other (list)
	National Hydrography database	X	None mentioned
	EPA reach files (GIS stream data)		None used
	National Wetlands Inventory		

**Priority map:**

No.

**Partnerships:**

The City of Draper is working with the Trust for Public Land.

**Available and expended funding:**

Not available.

**Acres protected:**

None yet; Corner Canyon is 1,035 acres.

**Sources:**

Lampe, Nicole. “Draper Voters Act to Protect Corner Canyon.” Trust for Public Land, Utah Newsletter, Spring 2005. [http://www.tpl.org/tier3\\_cd.cfm?content\\_item\\_id=19697&folder\\_id=675](http://www.tpl.org/tier3_cd.cfm?content_item_id=19697&folder_id=675), accessed on July 19, 2005.

## 2004WA-01 Parks and Recreational Sidewalks Utility Tax Fund

**Jurisdiction Name, State:** Olympia, Washington  
**Year Ballot Measure Passed:** 2004  
**Percent of Vote Obtained:** 57%  
**Funding Mechanism:** Other – utility tax  
**Ballot Measure Description:** 3% utility tax increase for parks, open space, and sidewalks  
**Prioritization Type:** Top down; the City will determine how to spend tax revenues.

### **Mission statement:**

The tax was passed for “the purpose of acquiring and making improvements to parks, wildlife habitat, natural areas, open space, hiking and biking trails, walking paths, and recreation sidewalks.” (Source: City of Olympia)

### **Program goals:**

“Initially, most of the money would be used for land acquisition for future parks and trails; once the property has been secured, [park] development would begin.” (Source: Walk Olympia)

### **Parcel selection process:**

Two-thirds of the money will be used for park acquisition and development. It will fund three new community parks, 10 new neighborhood parks, more than 500 acres of open space acquisition, and construction of ten new hiking trails through that open space. The other third of the money will be spent on sidewalk construction and maintenance. The money will primarily be spent on sidewalks within a half-mile of parks, school playgrounds, trails, and other recreational destinations to meet the goal of enhancing recreational walking. (Source: Walk Olympia; Active Living Leadership)

### **Prioritization criteria:**

Not available.

### **Decision-making process:**

Not available.

### **Ultimate decision maker:**

City of Olympia.

**Information used to apply prioritization criteria:**

Not available.

**Data Sources:**

“X” if used:

	Local biological surveys		Any EPA water quality information
	Natural Heritage data (Nature Serve, TNC)		Other (list)
	National Hydrography database	X	None mentioned
	EPA reach files (GIS stream data)		None used
	National Wetlands Inventory		

**Priority map:**

No.

**Partnerships:**

Not available.

**Available and expended funding:**

Anticipated yearly revenue totals roughly \$2.25 million. (Source: Walk Olympia)

**Acres protected:**

The tax fund is expected to enable about 500 acres of open space acquisition.

**Sources:**

Active Living Leadership, <http://www.activelivingleadership.org/news49.htm>, accessed on July 19, 2005.

City of Olympia, <http://www.ci.olympia.wa.us/>, accessed on July 20, 2005.

Walk Olympia, [http://www.walkolympia.org/wst\\_page5.php](http://www.walkolympia.org/wst_page5.php), accessed on July 19, 2005.

## **2004WA-02 Acquisition of Gig Harbor Waterfront Open Space and Land to Restore Eddon Boatyard**

**Jurisdiction Name, State:** Gig Harbor, Washington

**Year Ballot Measure Passed:** 2004

**Percent of Vote Obtained:** 62%

**Funding Mechanism:** Bond

**Ballot Measure Description:** Bond to acquire waterfront open space and land to initiate restoration of boatyard for historical, cultural, and recreational purposes

**Prioritization Type:** Top down; parcel was identified before the vote.

### **Mission statement:**

“This proposition authorizes the City to acquire waterfront space and land and initiate restoration of the Eddon boatyard for historical, cultural, educational and recreational purposes.”

(Source: City of Gig Harbor)

### **Program goals:**

The primary program goal is to acquire of waterfront open space and land, commonly known as Eddon boatworks. (Source: City of Gig Harbor)

### **Parcel selection process:**

Parcel selected based on its historical value.

### **Prioritization criteria:**

Not available.

### **Decision-making process:**

Not available.

### **Ultimate decision maker:**

Gig Harbor City Council.

### **Information used to apply prioritization criteria:**

Not available.

### **Data Sources:**

“X” if used:

	Local biological surveys		Any EPA water quality information
	Natural Heritage data (Nature Serve, TNC)		Other (list)
	National Hydrography database	X	None mentioned
	EPA reach files (GIS stream data)		None used
	National Wetlands Inventory		

**Priority map:**

No.

**Partnerships:**

Friends of Eddon Boatworks are working in partnership with the City of Gig Harbor.

**Available and expended funding:**

\$3.5 million.

**Acres protected:**

1.3 acres are slated to be protected.

**Sources:**

City of Gig Harbor,

<http://www.piercecountywa.org/xml/abtus/ourorg/aud/elections/archives/gen2004/vp/gig.pdf>, accessed on August 4, 2005.

## **APPENDIX D: REGIONAL MAPS**

This section includes eight regional maps—four that break down the information from Figure 1 by region, and another four for Figure 2.

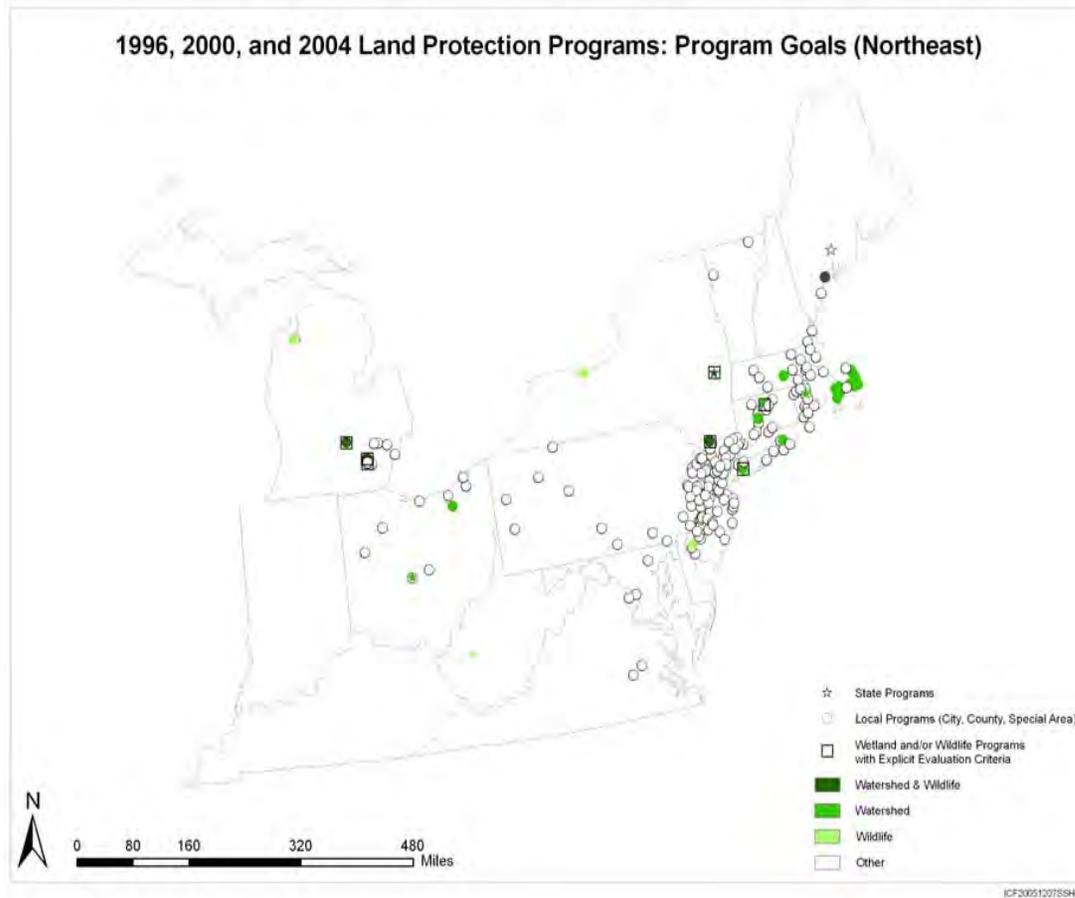
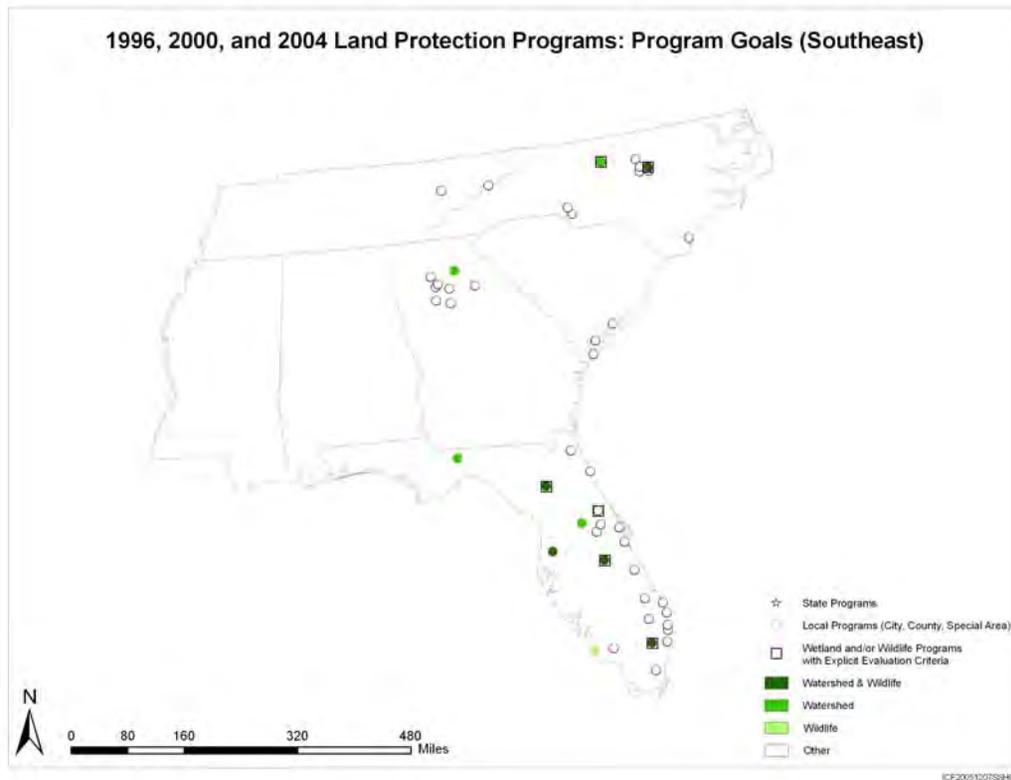
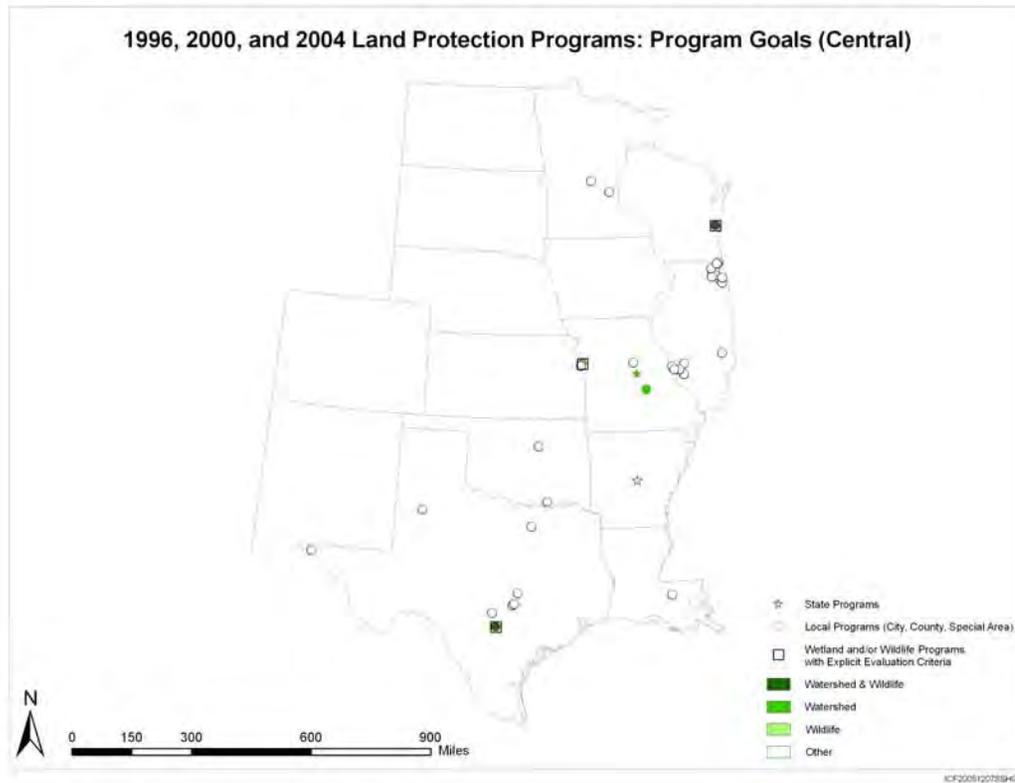


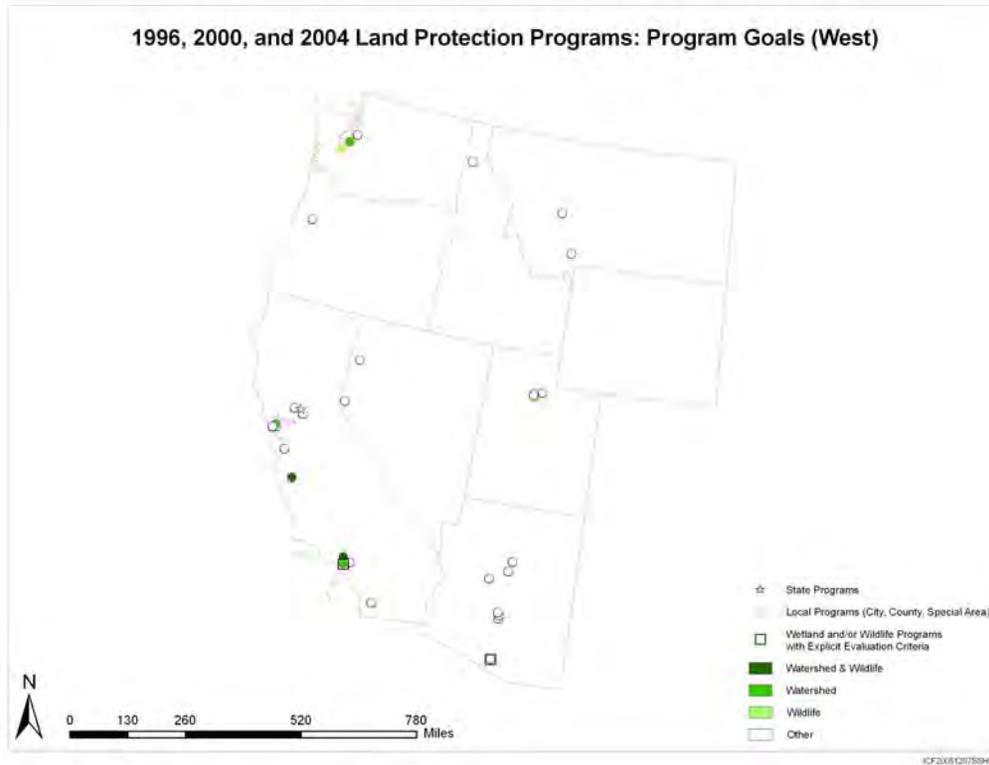
Figure D-1. 1996, 2000, and 2004 land protection programs: Program goals (Northeast).



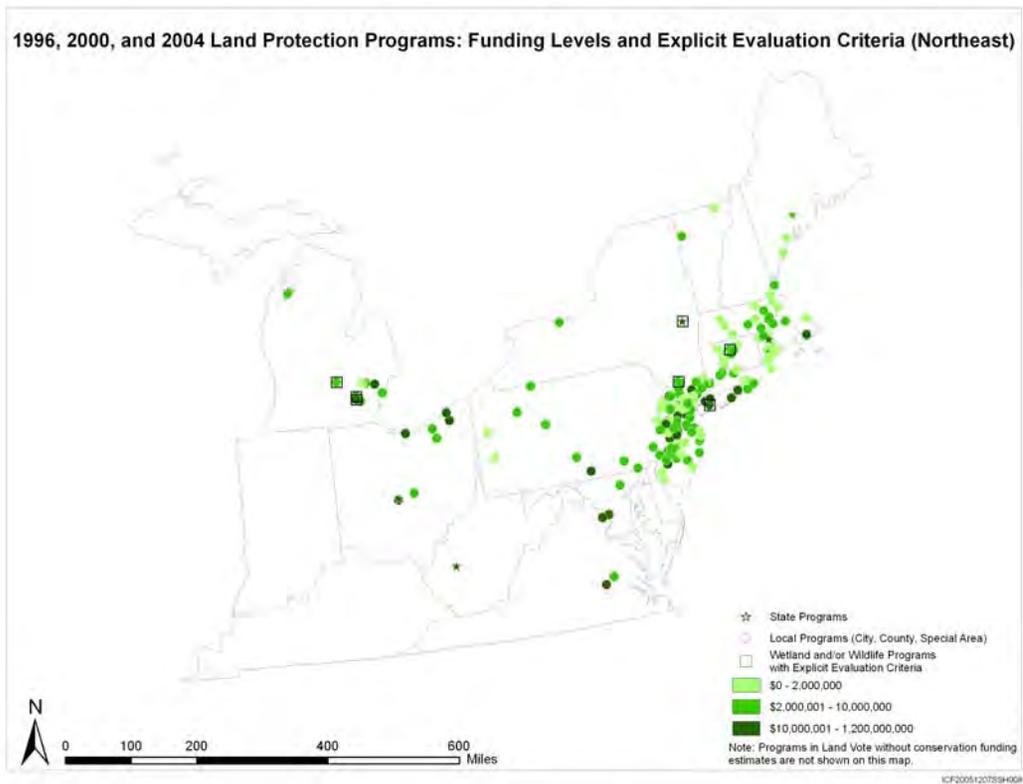
**Figure D-2. 1996, 2000, and 2004 land protection programs: Program goals (Southeast).**



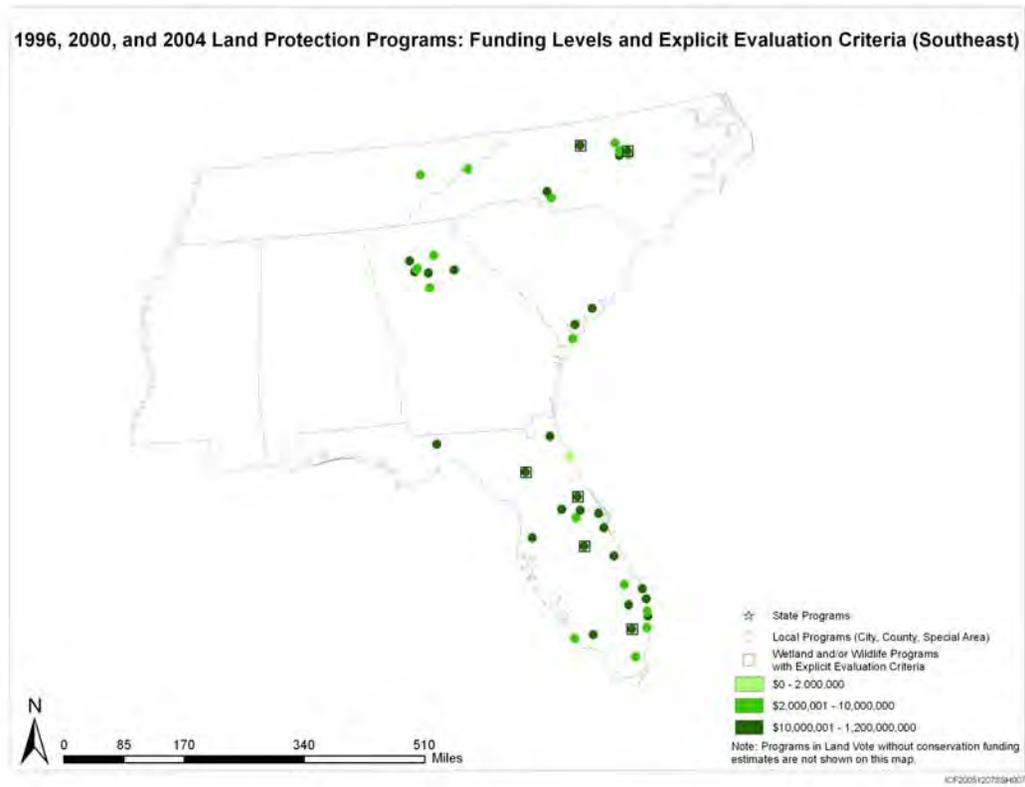
**Figure D-3. 1996, 2000, and 2004 land protection programs: Program goals (Central).**



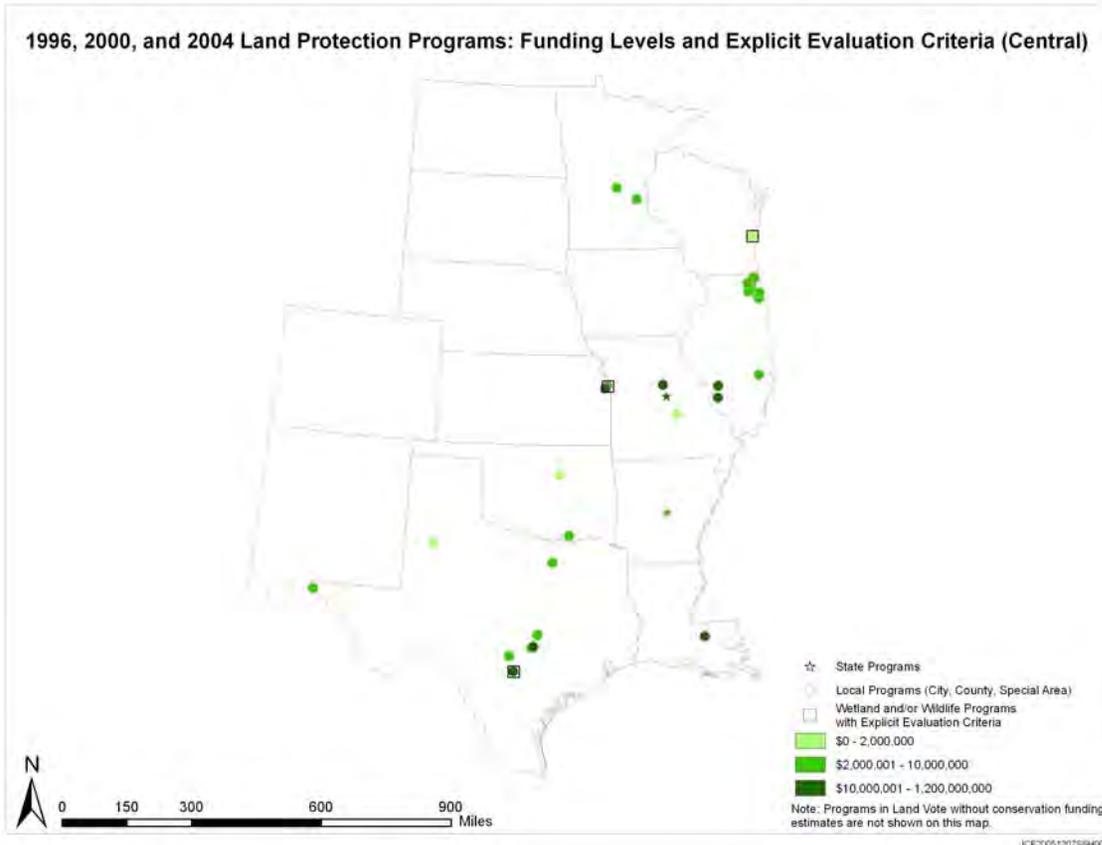
**Figure D-4. 1996, 2000, and 2004 land protection programs: Program goals (West).**



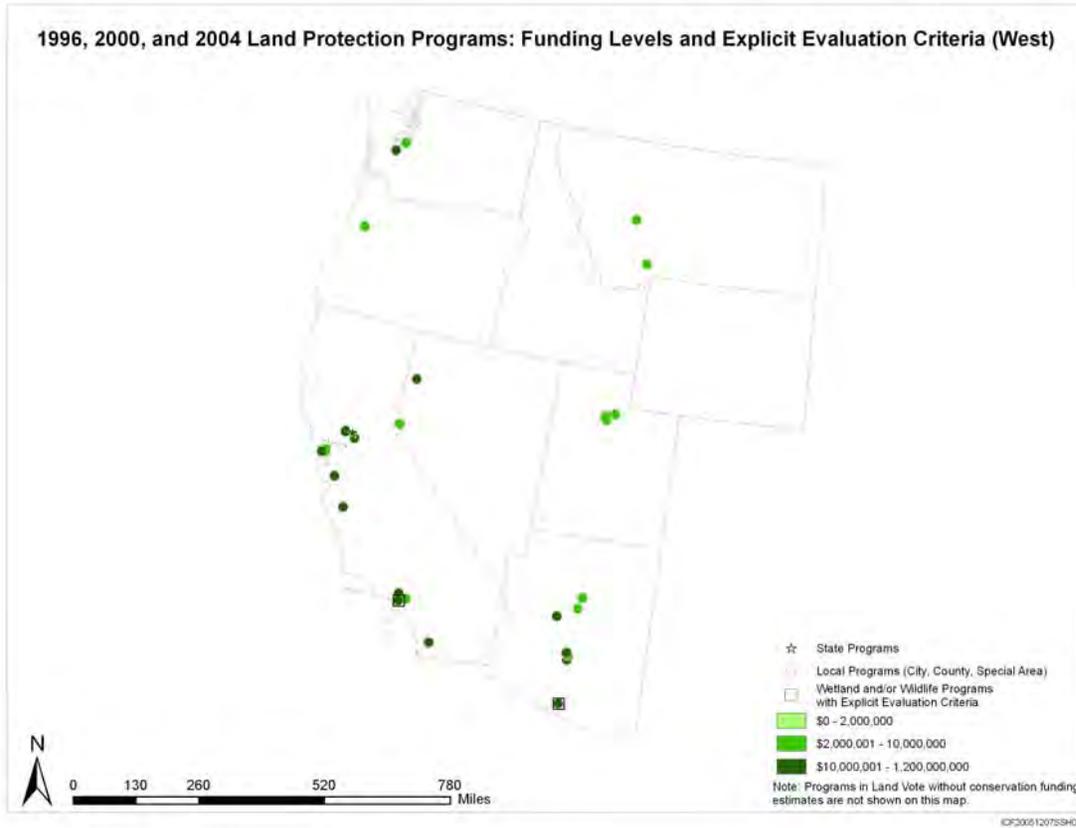
**Figure D-5. 1996, 2000, and 2004 land protection programs: Funding levels and explicit evaluation criteria (Northeast).**



**Figure D-6. 1996, 2000, and 2004 land protection programs: Funding levels and explicit evaluation criteria (Southeast).**



**Figure D-7. 1996, 2000, and 2004 land protection programs: Funding levels and explicit evaluation criteria (Central).**



**Figure D-8. 1996, 2000, and 2004 land protection programs: Funding levels and explicit evaluation criteria (West).**

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