



# Palm Beach County Agricultural Reserve Master Plan

## Interim Reports

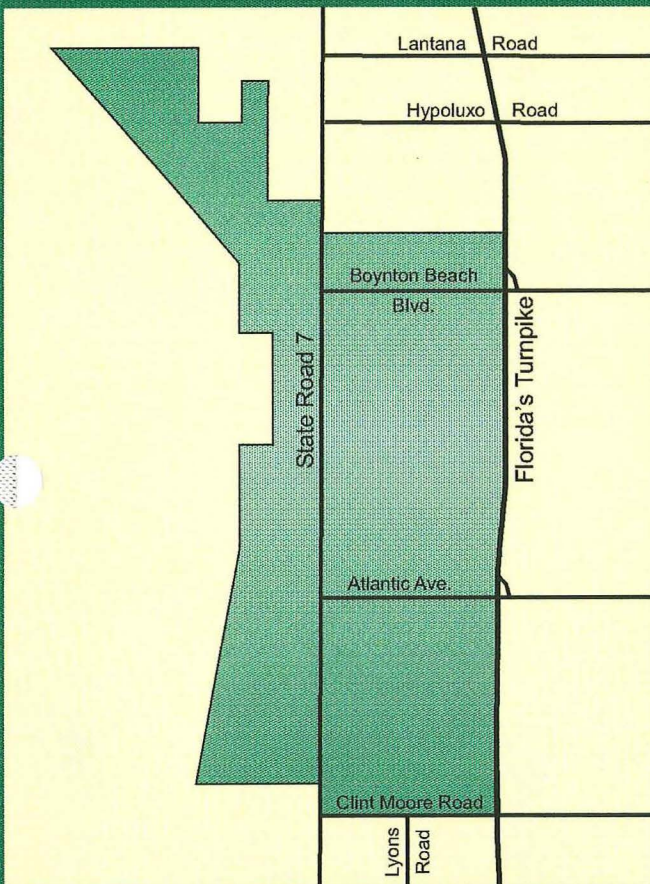
A Cooperative Agreement Between



Palm Beach County  
Planning, Zoning, and Building  
Department  
Planning Division



South Florida Water  
Management District



**CH2MHILL**

September 1998



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## Section

Interim Report No. 1—Chartering the Project

Interim Report No. 2—Defining Objectives and Performance Criteria Measures

Interim Report No. 3—Development of Alternatives

Interim Report No. 4—Evaluation of Alternatives

Phase I Summary Report



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# **Agricultural Reserve Master Plan Interim Report No. 1**

## **Chartering the Project**

Prepared for  
**Palm Beach County  
Planning, Zoning & Bidding Department**

September 1998

**CH2MHILL**



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# Introduction

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In July 1998, the Palm Beach County Board of County Commissioners (BCC) authorized CH2M HILL to proceed with the development of a Master Plan for the Agricultural Reserve (Ag Reserve) in south-central Palm Beach County (County). The master planning effort is a cooperatively funded agreement between the County and the South Florida Water Management District (District).

This is the first of four interim reports to be completed as part of the Phase I master planning effort. Phase I is scheduled for completion at the end of December 1998, results of which, will be presented to the BCC on December 15, 1998. The second phase, depending on the results of Phase I and the decision by the BCC, will be completed by the end of May 1999.

The following provides an overview of the Ag Reserve area and of the approach for the master planning effort. Also presented in this Interim Report are the results of the initially chartering meeting to establish leadership and commitment among the groups working on the masterplan and the results of the first public workshop.

## Purpose

As established by the BCC, the purpose of the Ag Reserve master planning process is "To preserve and enhance agricultural activity and environmental and water resources in the Ag Reserve, and produce a master development plan compatible with these goals." Throughout the project, this purpose statement will be used to guide the master planning effort.

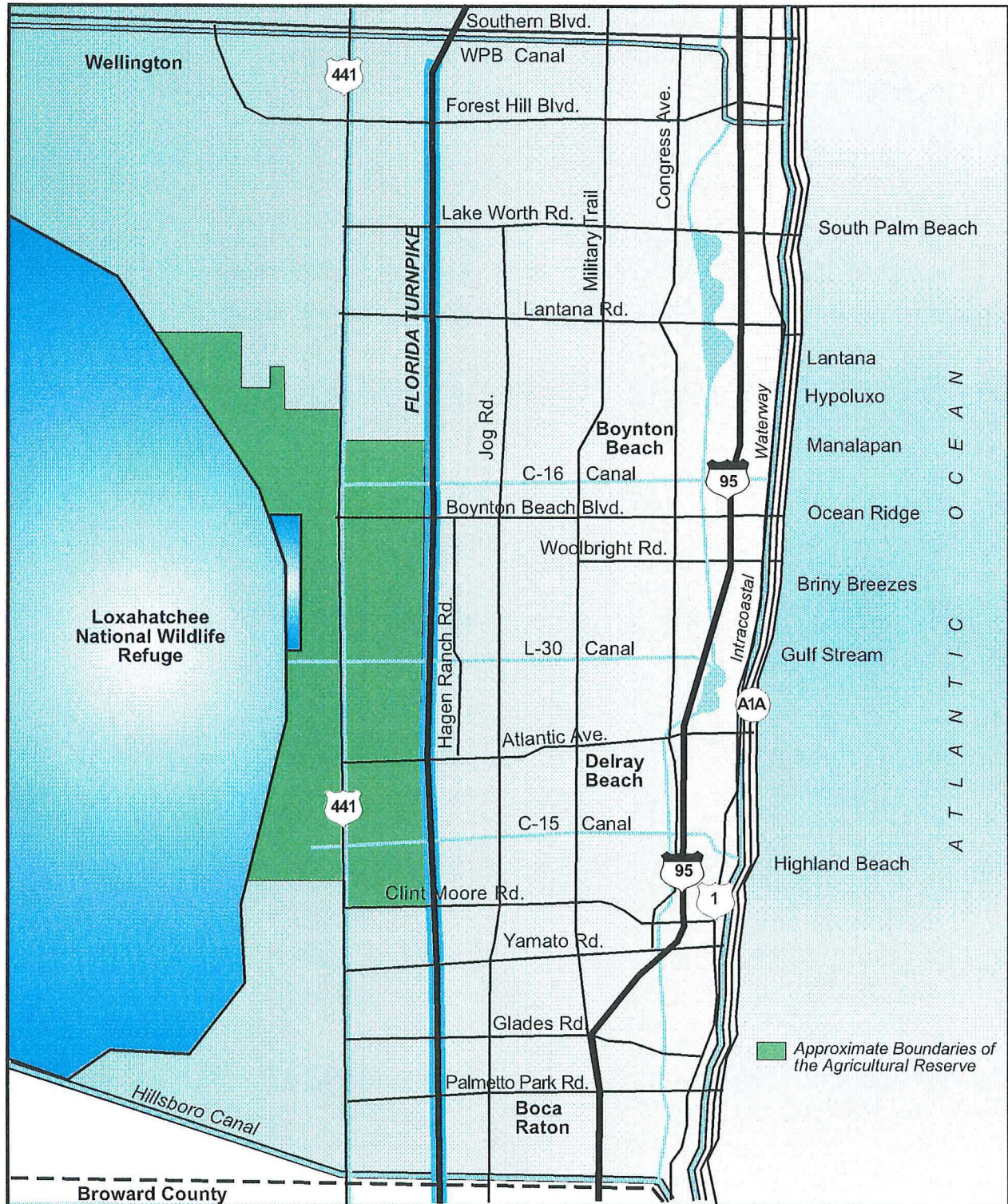
## Location

The Ag Reserve encompasses 20,923 acres, generally located between Hypoluxo Road (extended) to the north and Clint Moore Road to the south, and west of Florida's Turnpike to the Arthur R. Marshall Loxahatchee National Wildlife Area (Water Conservation Area 1). Exhibit 1-1 shows the location of the Ag Reserve within Palm Beach County.

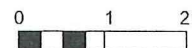
## Background and History

Starting with Palm Beach County's 1972 Land Use Plan, the area now known as the Ag Reserve was designated from a larger area as "Residential Estates" with densities ranging from 1 dwelling unit (DU) per acre to 1 DU per 2.5 acres. In 1980, the County's Comprehensive Plan formally created the reserve area and defined its boundaries. The emphasis was preservation of agriculture and reducing densities to 1 unit per 5 acres. It also allowed "80/20 Planned Unit Developments (PUDs)" with 1 unit per acre clustered on 20 percent of the land with a minimum of 40 acres, and established provisions for Transfer of Development Rights (TDRs) outside of the Ag Reserve.





Approximate Scale in Miles



**Exhibit 1-1**  
Location of Agricultural Reserve



In 1989 the County's Comprehensive Plan revised the area's boundaries to remove non-contiguous portions and reflect land use changes made during the 1980s. These revisions reduced the area by more than 5,000 acres and set aside remaining lands for agricultural purposes or low residential density (one dwelling unit per 10 acres). Also, a moratorium was enacted until a study could be completed to evaluate the long-term viability of agriculture. TDR options were still permitted, but the 80/20 PUD option and 1 DU per 5 acres provision were suspended.

## **Ag Reserve Study**

In 1990, the County hired Dames and Moore to conduct a phased study of the Ag Reserve, which included:

- Phase I - An Economic Impact Analysis and an Analysis of Agricultural Determinants (February 1991)
- Phase II - A Land Use Suitability Analysis (October 1991) and Development of Alternative Scenarios, Related Strategies, and Impact Assessment (February and March 1992)

According to the economic impact and agricultural determinants portion of the study:

- The outlook for agriculture is clearly uncertain, especially its long-term possibilities. Variables (such as international trade policy) are showing trends that typically restrict options, increase competition, and raise costs for what is now and in the short-term a viable industry.
- The effect of the various agricultural determinants evaluated under Task 1.2 of this study is unclear when taken singularly. However, when taken in combination, the potential long-term effects on the Ag Reserve area are a reduction in the viability of agricultural operations.
- County strategy that shuts out options for agricultural operations precludes maneuvering that will become increasingly necessary to mitigate the adverse impacts of changes in agricultural determinants. For example, if either production costs or external competition increases, the ability of the farmer to finance certain technological improvements in the production process may become critical. Limiting options in this area could have major impacts.
- Many of the factors impacting agriculture in the Ag Reserve area are removed from the County control. Land use regulations stand out as a notable exception. Other options such as direct intervention in the financing of operations present other, but more difficult, options to the County.
- The County should exercise extreme caution against losing the direct benefits of the current land use strategy in the Ag Reserve area. Equal caution must be taken to block the opportunities for scattered development made possible under current regulations.

A suitability analysis was conducted using Geographical Information Systems (GIS) technology to evaluate the suitability of various land use types within the Ag Reserve area.



The suitability analysis concluded that:

- Soil characteristics are a factor in differentiating property in Ag Reserve area. All lands are classified as "Unique" for agricultural purposes. All soils have limitations of varying degrees, some of which can be overcome or minimized with land management practices.
- Roadway characteristics are a powerful determinant of land use suitability. Unlike some variables that have been analyzed where there is not a substantial variance in assigned values, the values assigned for transportation facilities across the system range from -3 to +3. This indicates that proximity is a critical factor with respect to both suitability and unsuitability. Factors evaluated include the desirability for easy access, visibility requirements for land uses, and adverse impacts such as noise.
- Proximity to major wastewater treatment facilities is the key issue. Proximity advantages increase with increased development intensity and density. Therefore, the eastern portion of the Ag Reserve is considered relatively more suited for development than the western portion of the area.
- The amount of land area within the Ag Reserve that is subject to Ordinance 88-7 is relatively limited. Within these areas, however, land use suitability varies greatly. Only Conservation/Open Space uses are considered appropriate. Commercial and industrial uses are severely constrained.
- While the portion of the Ag Reserve subject to 100-year flooding is relatively small, the distinctions between appropriate land uses are significant. Higher positive and high negative values are assigned. This will be a critical factor for the affected areas.
- The greatest concentration of environmentally sensitive areas is located on the western borders of the Ag Reserve. These areas are identified as unsuitable for all uses except CON/OS. Areas within a quarter mile also have negative suitability values for development. This factor will be important due to the wide range of values assigned.

In developing alternative land use scenarios, the following list of study parameters was used to guide the development process:

- Complimentary agricultural and conservation uses
- Transportation and public utility locations
- State mandates on urban sprawl and urban service areas
- Positive and negative impacts
- Existing internal and external land uses
- Land use suitability analysis
- Relative feasibility of capital improvements

Seven alternative development scenarios ranging from maintaining/enhancing the agricultural resource base to maximum urban development were described and evaluated in the study. In addition, an eighth alternative, titled "Concurrency Based Anti-Urban Sprawl," was developed by the Rangeline Coalition for consideration in the evaluation process. The eight alternatives were narrowed down to the following four alternatives:

- Alternative A - Maintain/Enhance Agricultural Resource Base
- Alternative B - Anti-Urban Sprawl (Traditional Neighborhood Design [TND])

- Alternative C - Expand Urban Service Area
- Alternative D - Concurrency-Based Anti-Urban Sprawl

Alternative A focused on describing various implementation strategies for maintaining or enhancing agriculture in the Ag Reserve areas and included:

- Fee Simple Ownership and Purchase of Development Rights
- Transfer of Development Rights (TDRs)
- Use Value Assessment
- Agricultural Districts

It was assumed that the existing infrastructure in place would be sufficient to accommodate this alternative.

The second alternative, Anti-Urban Sprawl, focused discussions primarily on the land use concept of TNDs, with some mention of others such as Rural Villages, Public Investment to Existing Communities, Florida Quality Developments, and Pedestrian Pockets. To discourage urban sprawl, a TND is discussed and includes:

- A town center(s), village center(s), or activity node(s) providing employment and shopping
- A complimentary mix of land uses resulting in self-contained units minimizing vehicular trips and trip length that is also pedestrian-friendly
- Avoidance of strip development
- A hierarchy of streets promoting efficiency and safety through functional specialization
- Integration of open space uses
- Protection of natural resources and environmentally sensitive lands

Expanding the urban service area was based on the suitability analysis previously conducted, and generally included expanding the service area to the eastern portion (i.e., east of State Road (SR) 7 [U.S. 441] in the northeastern and southeastern portions, and east of future Lyons Road alignment in the center portion). No efforts were made to preserve agriculture, and expansion would make use of existing infrastructure. Assumptions were made with respect to future land use densities that included 1.5 DU per acre in the northeastern portion, 1.0 DU per acre in the central portion and 3.5 DU per acre in the southeastern portion. Also, no increased densities in the western half would occur due to lack of infrastructure and proximity to environmentally sensitive lands.

The alternative developed by the former Rangeline Coalition - Concurrency Based Anti-Urban Sprawl - can be summarized as follows:

- The urban service area is expanded
- Potential concepts include the TND with a "rural town" atmosphere and economic activity centers
- Establishes a uniform density level (2 DU per acre) throughout the Ag Reserve, with most building intensity shifted to locations around the rural town

- Property owners who have higher intensity designations would need to acquire density from other owners in the Ag Reserve

Although this plan contained a blend of the other three alternatives, it was found to be inconsistent with some of the assumptions and findings of the study.

## **Purchase of Agricultural Conservation Easements**

In May 1993, the County Planning Division staff completed a preliminary report as part of Phase III of the work to be originally completed by Dames and Moore. The report outlined the steps the County took to establish an Agricultural Reserve Citizens' Committee (ARCC) and made recommendations for establishing a Purchase of Agricultural Conservation Easements (PACE) program (similar to the previously mentioned PDR program). The study concluded that as much as \$100 to \$200 million would be needed to fund the PACE program.

As a supplement to the above report, American Farmland Trust (AFT) prepared a report titled, *How to Retain Agriculture in the Agricultural Reserve, Enhance its Contribution to the Economy of Palm Beach County, and Save Taxpayer's Money* (June 1993). The report concluded that agriculture is worth saving, not just for the economic contribution it makes to the County, but because of the importance of its food production to the nation. Agricultural lands also provide a buffer between urban development and environmentally sensitive lands such as the Loxahatchee National Wildlife Refuge. Therefore, AFT further advocated implementation of the PACE program.

By 1995, the BCC lifted the moratorium and began allowing development in the Ag Reserve at 1 DU per acre if clustered on 40 percent of the land, leaving 60 percent or a minimum of 150 acres in preserved open space (e.g., agriculture). Preserved areas under this option are not required to be contiguous with the development area, and is limited to the east side of SR 7.

## **Ag Reserve Bond Issue**

As a result of the recommendation from ARCC and AFT, a PACE committee was established in 1996 to assist in the implementation of the program created as part of County Ordinance #95-34. During its first year, the PACE committee reviewed three applications, each of which were withdrawn prior to any action by the County. The County had originally agreed to fund the PACE program out of general revenues, but did not set aside a line item in the budget for this purpose. The perceived lack of assured funding was viewed as a factor contributing to the program's low utilization. In response, the BCC directed County staff in November 1997 to explore issues related to a \$1,000,000 bond issue to fund the PACE program.

Finally in February 1998, the County Planning Division reported back on the following issues:

- Existing Land Uses
- Programs to Protect the Ag Reserve
- Maximum Development Potential
- Bond Issue to Preserve Agriculture



Existing land use and programs to protect the Ag Reserve will be discussed in more detail in this section. Maximum development potential and methods to address the bond issue will be discussed in a subsequent interim report and phase as part of this master planning effort.

## **Status and Preservation of the Agricultural Industry in South Florida**

In January 1998, a study was completed for the National Audubon Society (Hazen & Sawyer, 1998) that examined the status of agriculture in South Florida, and possible ways to preserve it. Specifically, the report provided an overview of Agriculture in Palm Beach, Broward, and Miami-Dade counties, an estimate of agriculture's contribution to the regional economy, an estimate of its future outlook, and recommendations to ensure the survival of agriculture.

Agriculture in South Florida provides many benefits to the community:

- Creates jobs and income
- Provides a buffer between urban development and the Everglades ecosystem
- Provides for water storage and recharge
- Requires less infrastructure than urban/suburban communities
- Provides more scenic vistas surrounding the Everglades than urban/suburban neighborhoods
- Provides aesthetic nursery plants for landscaping
- Enhances national food security

The eastern portion of Palm Beach, which includes the Ag Reserve, produces citrus, vegetables, ornamentals, milk, and beef cattle. Some of the important vegetable crops grown in the County are cucumbers, escarole, bell peppers, tomatoes, and squash. In 1996, the farm value of bell peppers remained relatively high at approximately \$51 million on 5,600 acres. However, tomato acreage has fallen from approximately \$27 million in 1990 to \$22.2 million in 1996. Also in 1996, escarole and squash produced a farm value of approximately \$4.9 million.

The County has the largest acreage of nursery and greenhouse crop production. In 1996, \$151 million in nursery and greenhouse crops were produced on approximately 31,000 acres.

While not considered an agricultural product, the equestrian industry is recognized by the County as an agricultural use. According to the report, resident and non-resident households spend a tremendous amount of money maintaining their horses. If the County were unable to accommodate horses, 83 percent of horse-owning residents say they would move to another county that does accommodate horses. Likewise, 94 percent of non-resident horse owners say they would not visit the County if there were no equestrian industry. According to a separate study conducted for the County (Thalheimer Research Associates, August

1994), direct expenditures on horse-related goods and services in the County by resident and non-resident horse owners was estimated to be \$133 million in 1993.

The three-county area produced approximately \$1.45 billion in agricultural products on approximately 554,000 acres of land in 1996. When the County equestrian industry is included, the three-county area generated approximately \$1.59 billion. The total income for agriculture represents approximately 1.5 percent of the total income from all sources, and employment represents approximately 3 percent for the total three-county area. South Florida agriculture also appears to contribute to local tax revenues, according to a 1995 study prepared by Farming for the Future. For every \$1 in taxes collected from agriculture, only approximately a \$0.12 is spent for infrastructure and services to support agriculture. In contrast, the residential development of the type considered for the Ag Reserve requires \$1.10 in services for every dollar in taxes collected.

Other benefits agriculture provides includes:

- A large pervious area that allows recharge to the surficial aquifer
- A buffer between urban/suburban land uses and the Loxahatchee Wildlife Preserve (Water Conservation Area No. 1)
- Scenic vistas surrounding the water conservation areas
- An opportunity to slow the rate of urban sprawl and incentives to keep urban/suburban development closer to the existing public infrastructure

The future outlook for agriculture was described for the various crop types. For winter vegetables such as tomatoes and green peppers, much of which are grown in the Ag Reserve, the future is described as dismal with continual contraction of acreage. This is primarily due to less-than-favorable United States trade policies such as NAFTA, and continuing high cost of production. In addition, the proposed phasing out of methyl bromide as a post-harvest/pre-planting soil fumigant used to kill nematodes will drastically effect winter vegetable farming. This is because no viable alternatives to methyl bromide have been identified to date. Nurseries and greenhouse crops, on the other hand, appear to have a bright future as long as local demand and the economy are strong. However, if water supply for household/commercial irrigation becomes restricted, the industry could contract to some extent.

The most promising way to ensure the survival of agriculture in South Florida is to promote profitable agricultural production. Not only do residual returns to land and risk have to be greater than zero, they have to be at least equal to the residual returns from selling the land to urban developers. Maintaining the urban service area limits, TDRs, PACE, agricultural protection zoning, and agricultural districts can be successful only if agriculture is profitable.

Finally, based on the research conducted, the following recommendations were made as a guide to help preserve agriculture. Each individual recommendation will not, by itself, preserve agriculture, but a combination of the recommendations will have a significant impact.

- Fair trade policies are needed to put U.S. agricultural production and marketing on an equal playing field with the production of other countries that export to U.S. markets.
- A Federal guest worker program is needed to provide for the orderly flow of immigrant farm workers into and out of the country.
- The Federal Government should enact and enforce a country-of-origin labeling law for all fruits and vegetables in fresh, canned, and frozen form. Similar laws exist for clothing, appliances, automobiles, and other consumer goods.
- Agricultural advisory review boards, similar to the Miami-Dade County Agricultural Practices Study Advisory Board, should have a permanent voice in the development of ordinances, regulations, and land use policies affecting agriculture.
- Funding for research and dissemination of best management practices and new crop varieties that protect the environment while increasing yield and reducing cost is essential if agriculture is expected to remain in South Florida.
- Where existing tax rates and permit fees to agriculture are higher than the actual government cost to serve agriculture, these taxes and fees should be lowered to reflect the actual cost.
- Implement methods that allow growers to keep their agricultural classifications for property tax purposes during longer periods of time when the land is not farmed, such as 3 to 4 years.
- Establish urban development boundaries and maintain them by promoting policies that encourage urban development and redevelopment of existing urban areas, such as the "Eastward Ho!" concept.
- Consider methods used by other government agencies, such PACE programs, TDR programs, and the like, in conjunction with the other recommendations described above, to help present agricultural lands.
- Consider promoting farmer markets in Miami-Dade and Broward Counties that are similar to that promoted in Palm Beach County. These markets could improve the visibility and importance of agriculture to the local government.
- If the promotion of "agri-tourism" is ever considered, bear in mind that for it to work, it must be profitable to the agricultural landowner.

Many of these recommendations are already being implemented by Palm Beach County and is indicative of the County's pro-active stance with respect to preserving agriculture.

## **Related Ongoing Studies**

### **Federal and State Programs**

The County is not alone in looking at the preservation of the Ag Reserve. The District, working in conjunction with the U.S. Army Corps of Engineers, has identified portions of the Ag Reserve as being suited for water resource management purposes including water



supply storage, water quality treatment, wetland enhancement, and stormwater attenuation as part of their Water Preserve Area project for the federally-mandated Comprehensive Review Study of the Central and Southern Florida Project (the Restudy). As a result of the preliminary work done on this project, the District has identified a need for approximately 900 acres within the Ag Reserve west of SR 7 that are suited for water resource management purposes and meet the anticipated needs of the Restudy. The actual footprint of the areas that will be sought by the District will not be known until the Comprehensive Plan for the Restudy is completed in 1999. The general area being considered for acquisition is shown in Exhibit 1-2.

## **Integrated Water Resources Strategy for Southeastern Palm Beach County**

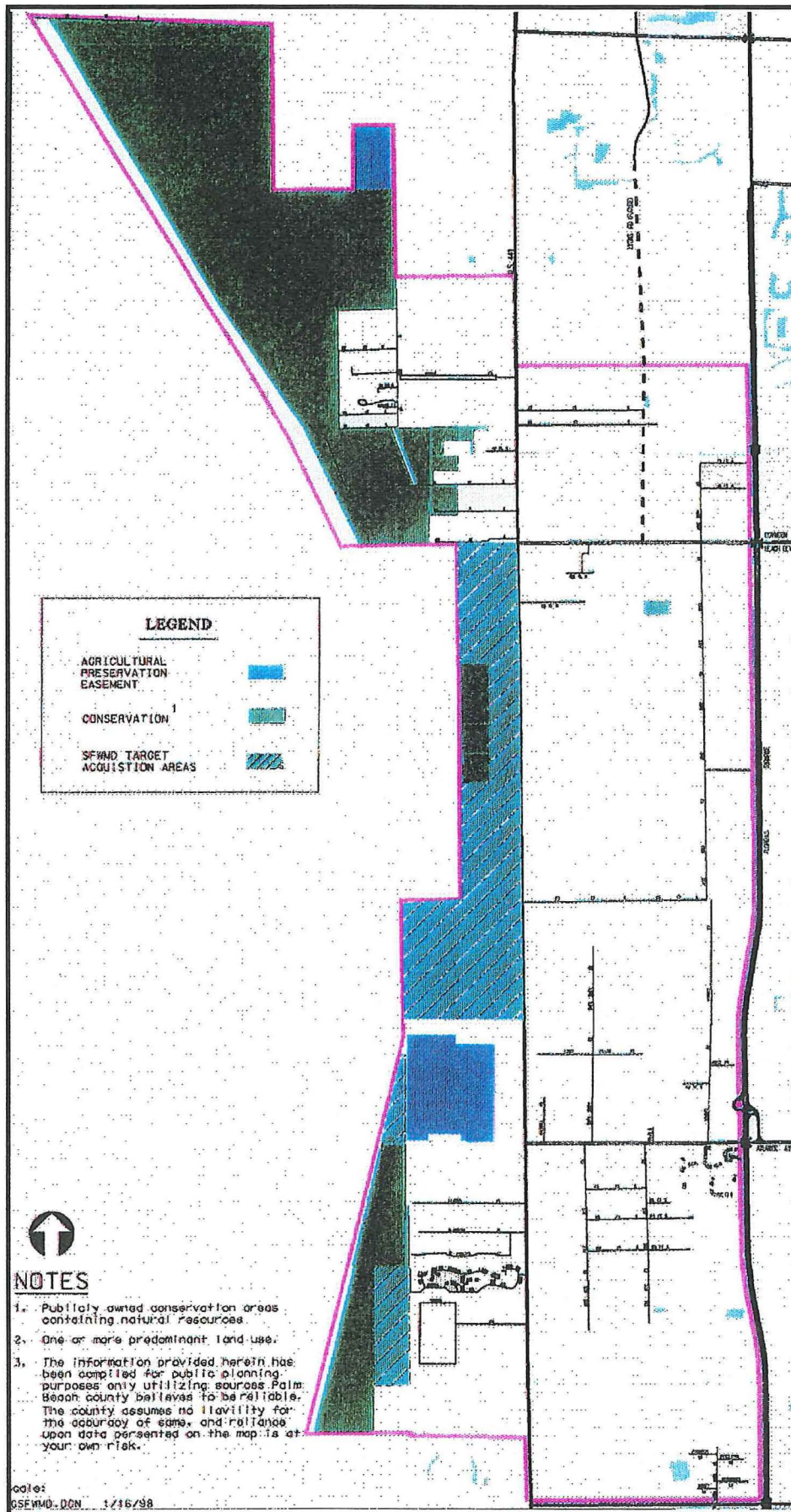
During 1997, the District worked with the County, other local government entities, and interest groups to develop the Lower East Coast Interim Water Supply Plan. During its development, the County (working closely with the District) recognized the need to take a closer look at the water resources of the southern end of its urban service area. The County's Water Utilities Department in cooperation with the District retained CH2M HILL to develop an Integrated Water Resources Strategy (IWRS) for Southeastern Palm Beach County. The study area extended from Southern Boulevard to the north to the south end of the County, and from the Loxahatchee Wildlife Refuge to the west and the coast to the east, and included the area of the Ag Reserve.

The effort was designed to allow public and interested stakeholder input into the process of deciding the types of water resources strategies to be implemented in the southeastern portion of the County. A Technical Advisory Committee (TAC) was developed, made up of local, County, State, and Federal government agencies, environmental interest groups, developers and local land owners, and agricultural industry representatives. The intent was to enlist values from the TAC and use its input to develop both the list of strategies to be evaluated and the criteria used to measure the performance of each of the strategies. Each strategy is made up of various combinations of water resources technologies such as those involving water supply, water storage and conservation and reclaimed water reuse. These combinations of technologies, or strategies, were then evaluated against a list of weighted objectives and criteria developed by the TAC.

The development of the IWRS for southeastern Palm Beach County is in its final stages, where the TAC has helped to narrow down the list of strategies to approximately eight that will require further quantitative analysis to be conducted by the District. The eight strategies include additional water supply, water storage, and reclaimed water reuse technologies, and the technical project team has identified suitable locations within the study area for implementing these strategies—some of which include the Ag Reserve area.

## **Existing Land Use**

There are seven major land use categories within Ag Reserve. As shown in Exhibit 1-3, as of January 1998, the predominant land use is agriculture, accounting for nearly 62 percent of the total area. Including equestrian uses as part of the agricultural uses increases this to almost two-thirds of the total acreage. A total of 781 acres have been preserved for agricultural easements, excluding equestrian uses, through the cluster development



**Exhibit 1-2**  
SFWMD Target Acquisition Areas

**Exhibit 1-3**

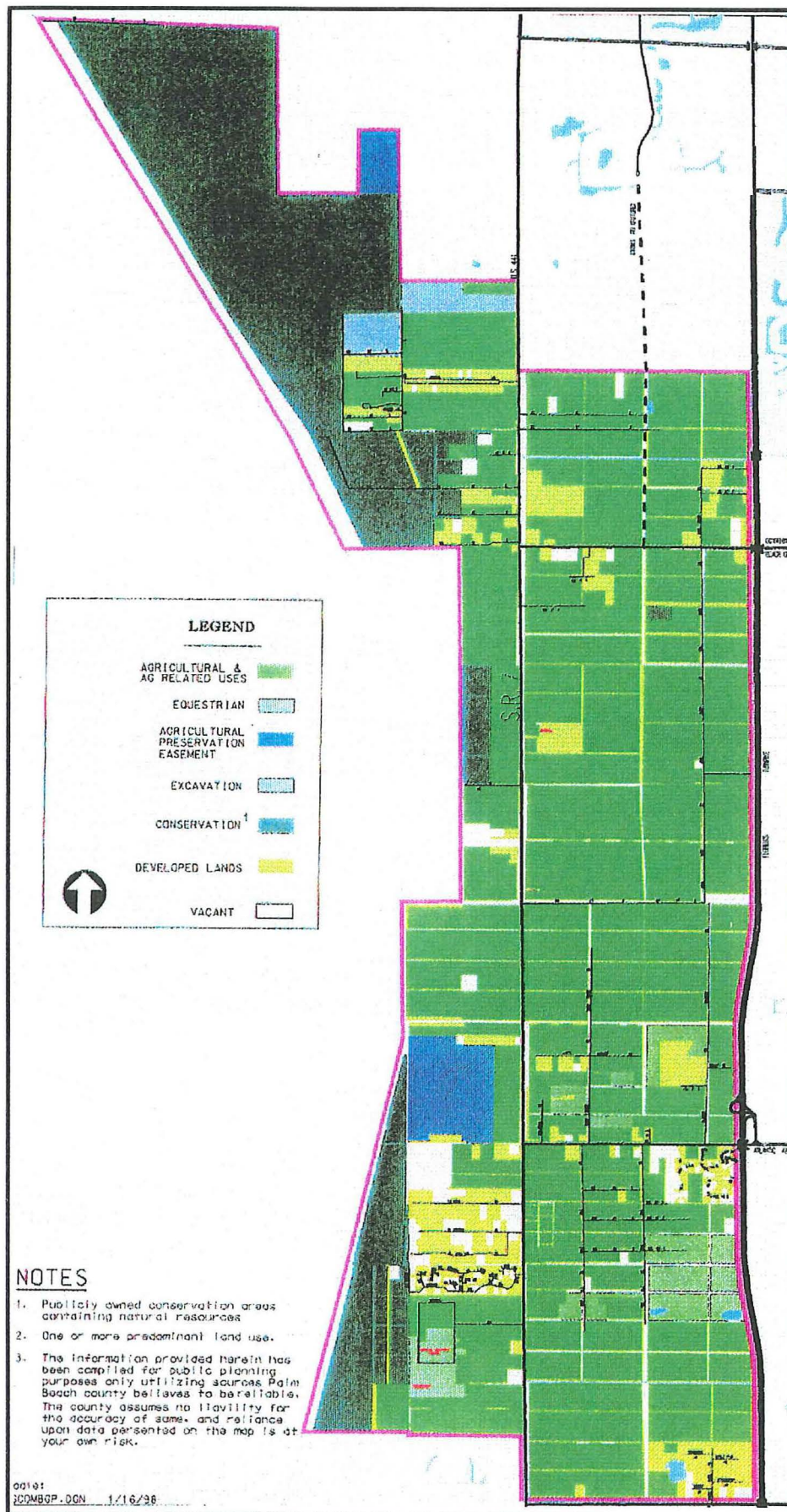
Existing Land Uses within the Ag Reserve (Source: County Planning Department)

Land Uses	Acreage	% of Total
Agriculture and Related Uses	12,913	61.7%
Equestrian	775	3.7%
Agricultural Easements	781	3.7%
Developed (Residential/Commercial)	1,558	7.4%
Excavation	232 <sup>a</sup>	1%
Conservation	4,151	19.8%
Vacant	591	2.8%
Total	20,923	

option within the Ag Reserve to permit the development of a PUD. Other than agricultural uses, the largest land use within the area is conservation, representing the nearly 20 percent of the Ag Reserve in public ownership.

The existing geographical distribution of uses within the Ag Reserve is depicted in Exhibit 1-4. As shown, most development has occurred in the southern area of the Ag Reserve, principally the area south of Atlantic Avenue. This development pattern becomes more obvious if the Delray Training Center, currently shown as an equestrian use, is considered residential development. Agricultural uses dominate the central portion of the Ag Reserve with conservation lands concentrated west of SR 7.





**Exhibit 1-4**  
Agricultural Reserve Existing Land Use Map

# Project Approach

The approach uses decision facilitation methods to develop a defensible consensus-based Masterplan for the Ag Reserve, and is divided into two parts: Part 1-Process Approach, and Part 2-Technical Approach.

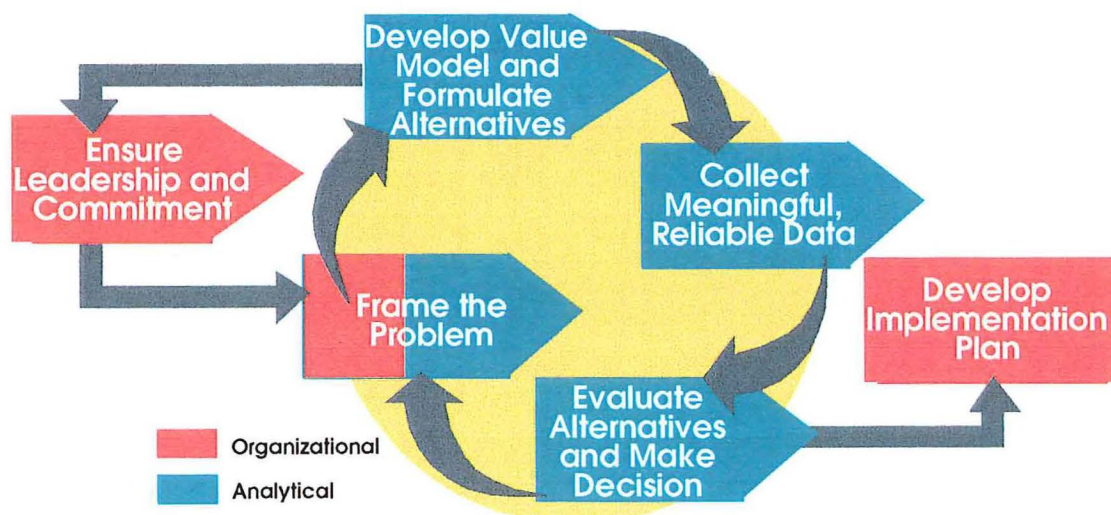
## Process Approach

The County has elected to develop this masterplan using a process intended to promote substantive participation by the public and a variety of state and local governmental agencies as well as representatives of key stakeholder groups with a clear vested interest in the plan.

A six-step process will be used to develop the masterplan. The six-step process combines principles from strategic planning, decision analysis, risk management, conflict mediation, and public involvement. This process provides the following benefits:

- Solves the right problem
- Increases the chances of success
- Mediates conflicts
- Saves money
- Analyzes risk
- Documents and communicates the decision process
- Overcomes barriers to implementation

The six steps illustrated in Exhibit 1-5 represent organizational and/or analytical processes, and are described below.



**EXHIBIT 1-5**  
Six-Step Decision Process

## **Step 1 - Establishing Leadership and Commitment**

The purpose of the first step is to develop organizational focus and assign individual leadership roles and responsibilities. The primary objectives are to establish a definitive decisionmaking process, create an effective organizational structure designed to address problems, and develop project momentum.

## **Step 2 - Framing the Problem**

After the leadership and commitment are established, the problem is framed to define and explicitly articulate the key needs and issues. The objective is to clearly identify program goals, external influences, resources, and the constraints that impact a project's success. This produces a clear, well-articulated vision of what the organization wants to achieve.

## **Step 3 - Developing Value Model and Formulating Alternatives**

The third step involves identifying the critical project success factors. This step uses a systematic process to determine objectives and values, which in turn, help to identify detailed data needs.

## **Step 4 - Collecting Meaningful and Reliable Data**

This step involves collecting specific, project-focused data to reduce or manage uncertainty in a way that is acceptable to peers, stakeholders, and decisionmakers. This process helps organizations concentrate on developing useful, reliable data, and in many cases, save energy expended on irrelevant or extraneous data gathering.

## **Step 5 - Evaluating Alternatives and Making Decisions**

Once sufficient data are available, the fifth step evaluates strategic alternatives and allows organizations to make optimal decisions. An optimal strategy is determined by incorporating known data and assessments or risk exposure (from unknown data and uncertainties) and comparing these to the IWRS's goals and objectives. In addition to evaluating alternatives, participants use this step as a checkpoint to reassess these alternatives before proceeding with the IWRS implementation.

After proceeding through the first five steps, it is important to return to the second step to ensure that the problem statement has been properly framed, and is addressed by the optimal alternative selected. If not, then the process needs to be addressed again until alignment is achieved between the final alternative and the problem statement.

## **Step 6 - Developing Implementation Plan**

The final step identifies all of the activities necessary to implement the optimal decision and develop a coherent, realizable plan to successfully manage these tasks. This step develops insight into program delivery mechanisms and helps organizations develop a management structure to address their most critical implementation needs.

The scope of work is designed to follow the six-step process, and will be referenced to the various steps as the IWRS is developed.



## Technical Approach

The technical approach is divided into two phases – Phase I – Conceptual Design Alternatives, and Phase II – Detailed Masterplanning. This and subsequent interim reports will describe the first of the two phases. The second phase will proceed following approval by the Board of County Commissioners (BCC) of the first phase.

Phase I is designed to allow input from the general public in developing goals and objectives for the Ag Reserve and three conceptual land use alternatives as described below:

- The first alternative assumes no changes to the existing plans. The currently allowable land use is one dwelling unit (DU) per 5 acres, which can be aggregated to 1 DU per acre under the 60/40 clustered development option east of SR 7/US 441. West of SR 7/US 441, development is also allowed at one unit per 5 acres, but can only be aggregated to 1 DU per acre under the 80/20 clustered development option.
- The second alternative will plan to balance existing agricultural use, planned water resource projects, and other environmental amenities with current and future development. It assumes that no public dollars are available from any source to facilitate land purchases within the Ag Reserve, and that it will require other processes and possibly land use configurations to make it feasible.
- The third alternative is similar to the second alternative; however, it assumes that \$100 million in public money will be available through a bond issue for land purchase.

Phase I involves a four prong approach:

- Developing a public involvement and community outreach program
- Enlisting public values and confirming objectives
- Creating a graphic depiction of three conceptual alternatives through a "design charrette" process
- Evaluating the alternatives and comparing them with the objectives

A critical element of this project approach is the input and community outreach efforts, which are designed to keep the public informed throughout the project and to incorporate their invaluable input into the process at key junctions. These efforts have included:

- **Agricultural Forum** – held on August 28<sup>th</sup>, 1998, at the Clayton Hutcheson Agricultural Center and designed to solicit input specifically from the landowners and farmers in the Ag Reserve regarding their issues and concerns about the Ag Reserve.
- **Public Workshop No. 1** – held on September 19<sup>th</sup>, 1998, also at the Clayton Hutcheson Agricultural Center, and designed to obtain input from a broader group, the public at-large, on their issues and concerns regarding the Ag Reserve (described in more detail in this Interim Report).
- **Public Workshop No. 2 – Design Charrette** – held on October 16<sup>th</sup> and 17<sup>th</sup>, 1998, again at the Clayton Hutcheson Agricultural Center, and designed to educate the public on the design charrette process and allow them "hands-on" input to the development of the conceptual land use alternatives (described in Interim Report No. 3).



- **Public Opinion Survey** – completed via telephone October 28<sup>th</sup> through the 31<sup>st</sup>, 1998, and designed to solicit additional input from an even broader cross-section of the County on the various issues and concerns regarding the Ag Reserve (described in Interim Report No. 3).
- **Fact Sheets, Updates to the Media, and information posted on the County's web site** – conducted throughout the project and designed to provide avenues for communication to the public.

Embedded into the above public involvement, is the second prong of the project approach – enlisting public values. Through the Ag Forum, the two public workshops, and the public opinion survey, input was solicited on the issues and concerns regarding the Ag Reserve that was translated to a set of values; i.e., what issues or features of Ag Reserve are important to the public? The information garnered from these public forums was compared with the purpose of the project, as established by the Board of County Commissioners, and was used to develop a set of objectives that will eventually be compared against each of the three land use alternatives. These objectives were then weighted to illustrate their relative importance, and criteria were developed to measure the alternatives against each objective (described in Interim Report No. 2).

The third prong of the project approach was intended to allow the public an opportunity to not only provide input regarding their issues and concerns in the Ag Reserve, but to actually “put pen to paper” and develop their perspective on how the Ag Reserve should look in 20 years. This was accomplished through a process called a design charrette, which, in small groups (10 or less), allows the public a “hands-on” opportunity to craft their vision of how the Ag Reserve should be developed. The rough drawings created by the public are then examined closely for common themes, and then are translated onto a final drawing or series of drawings (described in Interim Report No. 3).

Finally, the fourth prong of the project approach is to use the weighted objectives and criteria previously developed to evaluate how well each of the three land use alternatives meets the objectives and overarching goal or purpose of the project as established by the Board of County Commissioners. The results of the evaluation can be used to examine the benefits of the project and compare them with the relative costs (described in Interim Report No. 4).

# **Establishing Leadership and Commitment**

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To establish the appropriate leadership and commitment, groups involved in decision-making at all levels for this Masterplan need to be engaged throughout the project. Their involvement is critical to the success of the project and each must understand their role and commitment on the project. The five principal groups involved in the decision making process of this project include:

- Board of County Commissioners
- The Public
- Land Use Advisory Board
- The Working Group
- The Extended Working Group

Exhibit 1-6 illustrates the relationships of the above groups involved in the project and their respective roles. Their input into the project will be described in more detail through this and subsequent Interim Reports.

## **Board of County Commissioners**

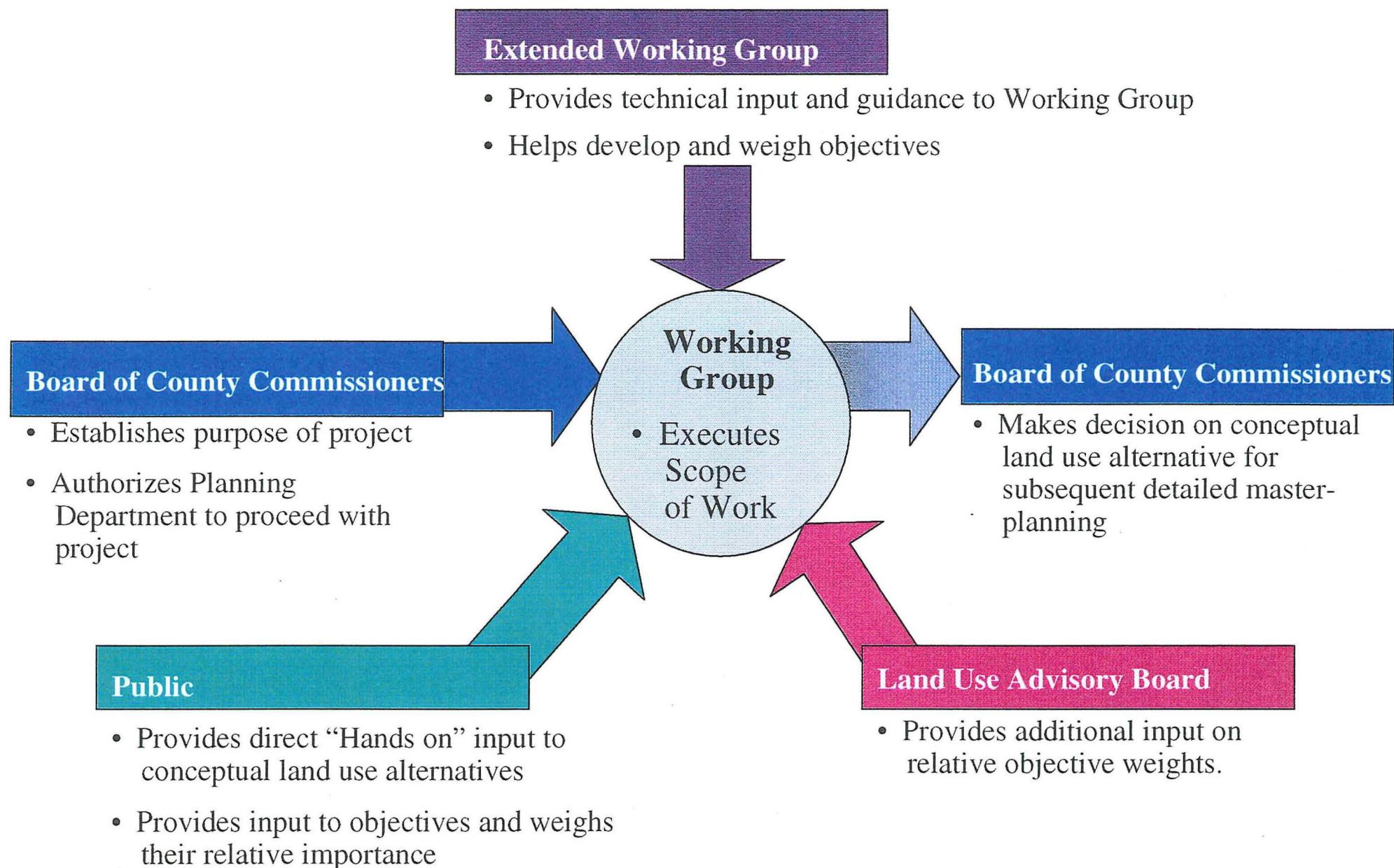
The Board of County Commissioners has illustrated their leadership and commitment by establishing the overall purpose of this masterplanning effort and by authorizing the County Planning Division to proceed with Phase I of the project. They will continue their leadership role when they make a decision on the final land use alternative developed in Phase I of the project and authorize proceeding with Phase II.

## **The Public**

Throughout the project, the public will have opportunities to engage directly into the project and establish their leadership and commitment to the project.

## **Land Use Advisory Board**

In addition, the Land Use Advisory (LUAB), made up of a relative diverse group of individuals charged by the County to help make decisions on future land use in the County, will provide additional input to the project and hence establish their leadership and commitment to the project as well.

**Exhibit 1-6**

Relationships of the Groups Involved in the Ag Reserve Masterplanning

## Working Group and Extended Working Group

To facilitate the technical development of the Master Plan for the Ag Reserve, the project team is divided into two primary working groups. The core Working Group is made up a representative of the County Planning Division, the District Planning Department, CH2M HILL, and Dover-Kohl & Partners. A second tier of professionals with specialized technical skills make up the Extended Working Group and include representatives from:

- County Planning Division
- SFWMD Planning Department
- Palm Beach County Agricultural Cooperative Extension Service
- Lake Worth Drainage District
- County Department of Public Affairs
- County Environmental Resources Management
- County Water Utilities Department
- County Attorney's Office
- County Parks Department
- Treasure Coast Regional Planning Council
- Florida Department of Community Affairs
- County Engineering Department
- County Zoning Division
- Metropolitan Planning Organization
- SFWMD Government and Public Affairs Department
- Extended Working Group Chartering Meeting

A chartering meeting was held on July 20, 1998, to initiate the Extended Working Group and begin opening discussions regarding the group's areas of expertise and developing common objectives for successful completion of the master planning effort. The following summarizes the key points raised and discussed during the meeting.

### Key Issues

Following introductions, a discussion was held to solicit the extended working group's opinion on key issues related to the Ag Reserve and included:

- Loss of agriculture in the reserve area
- Additional density/carrying capacity
- Cost to County to provide services
- Infrastructure (drainage, roads, etc.) in area if developed
- Comprehensive water resource strategy
- Overall planning vs. hap-hazard development (window of opportunity)
- Issues of sustaining agriculture
- Cultural and historical value
- Preserving and planning for open-space — aesthetics
- Tools to encourage/require aggregation of land (adjusted bullet spacing up to here)
- Impact of land use on other plans



- Everglades restoration and long-term water supplies
- Role of value of Ag Reserve in current and future land uses
- Vision that is acceptable and reliable for the future
- Purpose and benefits of the bond issue
- Land is still unique – drivers/issues have changed (external)
- Protection of private property rights while developing/planning effectively (trade-off of cost vs. policy)
- Interest of agriculture within Ag Reserve vs. those living outside the area
- What are tools that allow us to cluster or aggregate individual parcels
- Effect on other plans – Everglades Restoration and long-term water supply
- Defining the role of the Reserve as part of the future land use in the County – the vision has changed for the area
- Area is highly suitable for agricultural production – still valid reason to farm, but other pressures may force a tradeoff with this benefit
- Conflicting objectives – respect property rights vs. the layout of the plan
- Focuses more on the tradeoff

### **Purpose Exercise**

The meeting was then divided into two groups to discuss the overall purpose of the project from the perspective of the County and the District. An exercise was used to probe the two groups on the “purpose of the purpose,” with the intent of developing a higher level overarching purpose and verifying that the purpose in the scope of work is properly phrased.

Ideas Developed by the District:

- Master plan efficient in dealing with water resources, Everglades restoration, and water quality
- Develop a master plan that meets the District’s mission – regional water supplies and Everglades restoration

Ideas Developed by the County:

- Conduct a master plan that preserves and enhances agricultural activity, the environment, and water resources
- Clear expectations – flexibility, land use balance, good planning decisions
- Save time and money
- Meet people’s expectation and goals
- Serve the public

Based on the input gathered from the District and County, it appears the current purpose reflects their ideas.

## Guiding Principles

Discussion began on defining guiding principles for the Extended Working Group to incorporate into the master planning project, including:

- Role of the Extended Working Group – needs to extend outside this group and maintain contact with other interest groups
- Keeping the group informed – keep each other informed on the current issues as they develop
- Create a single point of contact – develop a media/outreach strategy plan and stick with it; premature release of information could be detrimental. This needs pinned down as soon as possible
- Commitment to live with process as a team and to meet deadlines
- Base decisions on sound data – assumptions need validated so that decision making can be more credible; must set aside preconceived notions and deal with facts
- Some things are difficult to quantify – e.g., “beauty”
- How important is this team approach? We are all in this together.
- Do not constrain our selves to the Ag Reserve only. Think broadly how we view our objectives – inter-governmental coordination, policies, etc.

## Criteria

Discussion proceeded with the group developing a preliminary list of criteria to be used to measure the performance of the conceptual land use alternatives.

- How trade-offs are determined
- Decision process – selective list of criteria helps us gather the appropriate data
- Make clear what the trade-offs are and what is most important
- Quantitative (natural scales) and qualitative (constructed scales) measures both will need to be established

A first cut of criteria were listed:

- Utility functions
- Percent area in greenspace
- Degree of public support
- Costs
- Acres in agriculture

- Percent change in development potential (e.g., densities, number of units)
- Implementable/feasible
- Impact on tax revenue
- Community acceptance
- Amount of additional storage
- How long will agriculture be sustainable
- Amount of habitat
- Degree of innovation
- Amount of linked or connected open space; any green space preserved (besides agriculture) – percentage?
- Level of service – costs/individual served
- Amount of area in water resources
- Property values
- Developable acres – equitable value
- Number of people
- Water quality

Following two subsequent Extended Working Group meetings, a preliminary list of key objectives and criteria were developed to measure the success of the three land use alternatives. The following is the preliminary list of objectives and criteria, and the associated performance measures that were proposed by the Extended Working Group. This list will be checked against the input provided by the public during the first public workshop, which is described in more detail below.

#### **Maximize Water Management Capability**

- Storage – acres of storage
- Amount of Impervious area (water quality, recharge)
- Amount of stormwater discharged to Lake Worth Drainage District canals
- Drainage adjacent to Water Preserve Areas

#### **Maximize Potential for Agricultural (including nurseries) and Equestrian Use**

- Total number of acres
- Size of aggregated parcels (median size per farm)
- Amount of appropriate buffer – may be different for different crops/uses
  - Row crops
  - Nurseries
  - Equestrian

### **Maximize Accessible Open Space (excluding wetlands and uplands, but including parks, greenways, and golf courses)**

- Acres in public ownership (easements, or only fee simple, etc.)
- Acres in private ownership
- Amount of connectivity

### **Maximize Environmental Resource Value (Wetlands and Uplands)**

- Acres of publicly-owned conservation or preserve lands
- Acres of privately-owned conservation or preserve lands under conservation easements or less than fee simple acquisition for preserve purposes
- Acres of open space lands, conservation lands, or preserve lands providing buffering of the Loxahatchee Wildlife Refuge and key water resource areas
- Connectivity of conservation or preserve lands
- Acres of land managed for exotic vegetation
- Acres of land available for environmental restoration

### **Minimize Costs/Impacts to Taxpayers**

- Infrastructure improvement costs (itemized by comp plan elements, plus schools and law enforcement)
- Land acquisition costs (lease back considerations)

### **Assumptions**

- Lands in public ownership will remain in open space
- Private property rights will be respected

### **Alternatives**

It was decided that the group needs to start with both ends of the spectrum with respect to land use—i.e., “no development” and “maximum build-out development.” This will allow us to bound the spectrum of our alternatives. Some of the ideas for the land use alternatives are described as follows:

- 100 percent Public Ownership
- Best alternative with public money—leverage public monies—decrease in densities
- Next best alternative that looks at TDRs within Ag Reserve—from north to south; buyout remaining agricultural land and develop a masterplan for the remaining Ag Reserve area
- No development west of SR 7, in exchange for one-to-one increased density (TDRs) east of SR 7
- Clustered development; breaks in the development pattern



- Status-Quo — based on densities
- No development west of SR 7, in exchange for triple increased density (TDRs) east of SR 7
- Status-Quo — based on its ability to be implemented
- Status-Quo with cleanup in the event 60:40 causes agriculture to sell out to development

Finally, the group decided to use some of the above ideas to develop the final list of land use alternatives. The final alternatives will be developed following the second public workshop design charette and will be presented as part of Interim Report No. 3.

# Public Workshop No. 1

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A part of the public outreach and involvement process, the first of two public workshops was held on September 19, 1998, at the Clayton Hutcheson Agricultural Center in West Palm Beach. The workshop was designed to educate the public on the proposed master planning effort and to enlist values from the public to determine what is most important to them with respect to the Ag Reserve.

Approximately 140 people participated in the public workshop, and were seated around several tables to encourage small group discussions. Appendix 1A includes a listing of those attending the workshop. A facilitator was assigned to each table to help facilitate discussion and provide guidance to the group to ensure compliance with the requirements of the discussions. A copy of the presentation made at the workshop is also included in Appendix 1A.

The workshop began with an introduction of the core working group and other distinguished officials from both the County and the District. The participants were then asked to introduce themselves to others seated with them at their table. Also, the individual table facilitators were asked to assign someone at the table to be a scribe and another person to be the spokesperson. The agenda was presented along with some rules and description of the structure of workshop.

## Workshop Purpose and Objectives

The purpose of the workshop was to determine what the public values most about the Ag Reserve and its future use.

Objectives of the workshop were:

- To continue outreach efforts demonstrating that the planning approach is unique and that public input and dialogue is central to the success of the project.
- To begin defining public issues, interests, and ideas that will shape the vision for the future of the Ag Reserve.
- To develop a vision statement for the Ag Reserve.
- To develop planning goals and objectives to measure success in meeting the vision.
- To establish preliminary weights to apply to the objectives.

## Potential Buildout of the Ag Reserve

In an effort to educate the public on what the Ag Reserve might look like in the future under current regulations, the County and Treasure Coast Regional Planning Council (TCRPC) prepared a series of "cut-and-paste" overlays depicting possible development in 2010 and 2020. The depiction highlighted some of the problems facing the County under the current

rules, and provided further justification of the need for masterplanning in the Ag Reserve. The 2020 scenario will be predated as the status quo alternative under a separate interim report, along with the other two alternatives.

## **Issues and Critical Success Factors**

Following a brief overview of the project and the process used to obtain public input, the participants were asked to list the issues they are concerned about or what the core working group needs to address in the planning process. The group was divided into 14 separate tables to allow small group discussions on the various topics to be discussed regarding the Ag Reserve. After several minutes of discussion at each table, several of the tables were asked to report back to the group on the issues they had developed.

A second small group exercise was conducted with the 14 tables to address critical success factors. The group was asked to identify five things that will answer, "In five to ten years, how will we know that we have been successful in preparing a plan for the future of the Ag Reserve?" After several minutes of discussion at each table, several of the tables were asked to report back to the group on the critical success factors they had developed.

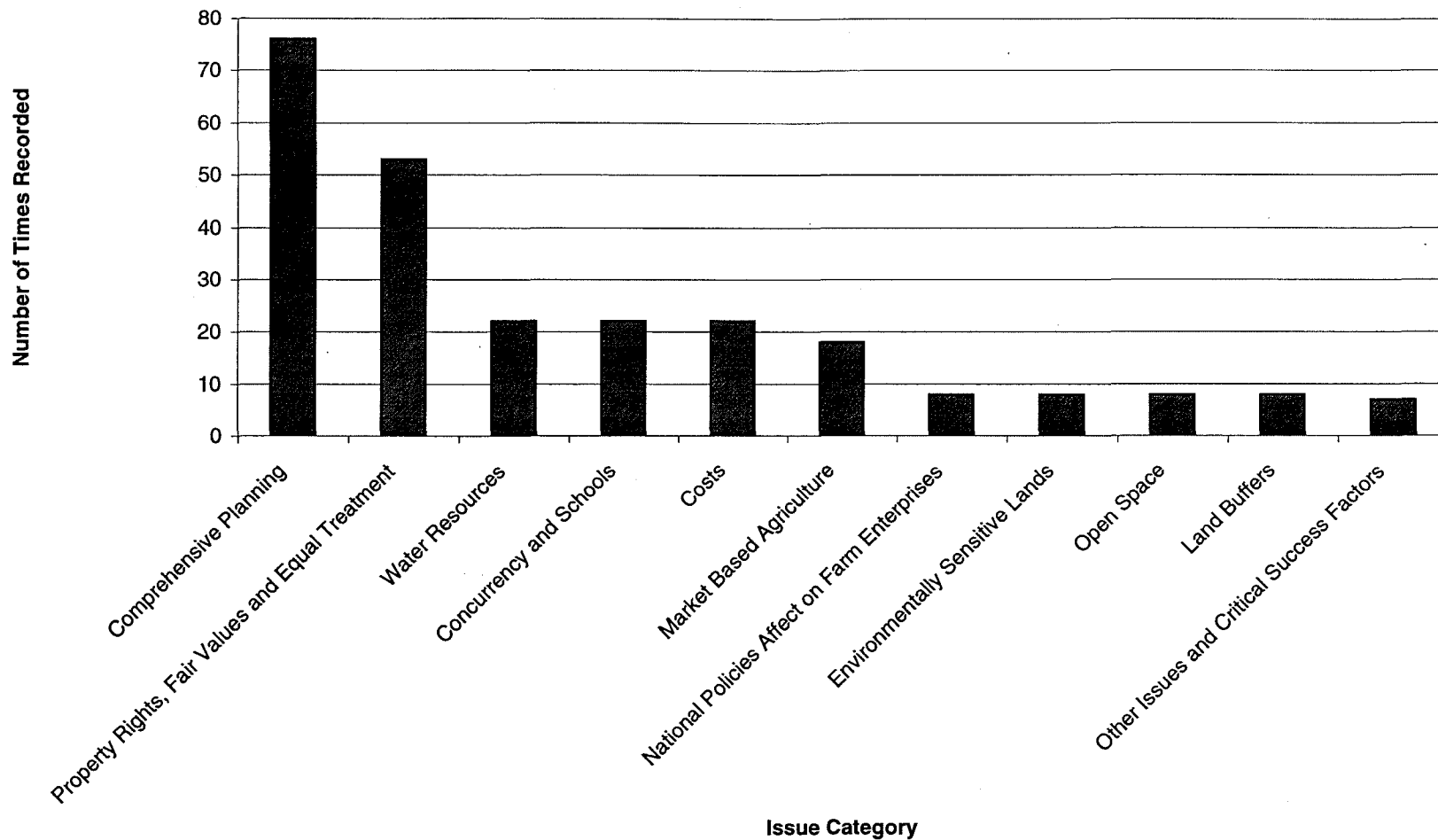
Based on the input provided by the participants, the issues were organized into a table and combined to help develop a series of common themes or issues outlined by the group. The total number of issues raised under each category was tallied and a distribution summary was prepared. The summary provided a distribution of the frequency an issue or critical success factor was mentioned for each of the above categories. Exhibit 1-7 provides a graphic representation of the categories listed and the number of times an issue or critical success factor was mentioned under each category.

Based on the referenced exhibit, the most frequently mentioned category of issues and critical success factors was comprehensive planning, followed by property rights, fair values and equal treatment, water resources, and concurrency and schools. The least frequent categories were environmentally sensitive lands, open space and land buffers. Appendix 1B contains a complete listing of the tables, the participants, specific issues and critical success factors raised at each table, and the calculated frequency each issue or critical success factor was raised. Note that in most cases exact wording, as recorded by each table, was used. However, in some cases discretion had to be used in interpreting the notes.

## **Objectives and Criteria**

Following completion of the issues and critical success factors, the participants were given a copy of a preliminary list of objectives and criteria developed by the Extended Working Group independently from the public, and were asked to provide input on them. An explanation was made to the participants that this list of objectives and criteria, modified based on public input, would be merged with the issues and critical success factors developed at the workshop.

After some discussion regarding the intent of the list, each group provided feedback on how they would modify the objectives and criteria. Suggested modifications are included in Appendix 1C.



**EXHIBIT 1-7**  
**Frequency of Issues Recorded at the**  
**First Public Workshop - September 19, 1998**



**CH2MHILL**

**Palm Beach County**  
**Agricultural Reserve Master Plan**



After careful consideration of the input provided by the public, the Extended Working Group will finalize a list of objectives and criteria and send them out to the participants. Participants will be asked to review the list and weigh them according to what is most important. Also, the Land Use Advisory Board (LAUB) will be asked to weigh in on the final list and provide input on the importance. Information obtained from these two groups will be compiled and integrated with the input of the Extend Working Group into a final list of weighted objectives and criteria. The final list of weighted objectives and criteria will be used to measure the benefits of the three land use alternatives being developed in a subsequent task.

# Summary and Conclusions

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The County has retained the services of CH2M HILL, Inc. to develop a master plan for the approximately 21,000-acre Ag Reserve located in southern Palm Beach County. The project is cooperatively funded by the District because of the importance of certain areas within the Ag Reserve being considered by the District for regional water resources purposes.

During the 1980s and through 1995, the County defined the Ag Reserve area and worked toward finding ways to preserve agriculture and thus limit the development potential. To facilitate the preservation of agriculture within the Ag Reserve, the 1989 Comprehensive Plan incorporated a variety of growth management tools. These tools included both mechanisms for the maintenance and enhancement of agriculture, such as the PACE program and TDR provisions, as well as development alternatives designed to ensure the preservation of open spaces by limiting development within defined areas. In addition, the BCC imposed a moratorium on growth in the Ag Reserve until studies could be completed that would address the viability of agriculture and examine potential development scenarios.

By 1995, the BCC lifted the moratorium on development and began allowing 1 DU per acre if clustered on 40 percent of the land, leaving 60 percent or a minimum of 150 acres in preserved open space (e.g., agriculture). This type of development was also limited to the east side of SR 7, with the west side remaining at 5 DU per acre. Since then, two developments have been approved for development under the 60/40 rule. As a result of these two development plans, the County has realized the flaws in the current regulations and the potential problems the current development trend will cause the County in infrastructure and services costs.

In January 1998, the National Audubon Society completed a report that examined the status and preservation of the agricultural industry in South Florida. Essentially, the report suggested that some current agricultural interests in Palm Beach County had a dismal future outlook, while others were more promising. Winter vegetable such as tomatoes and peppers were the least likely to remain in business for the long-term due to circumstances outside the control of local government. These uncontrollable circumstances include Federal trade policies like NAFTA and proposed EPA restrictions on the use of soil fumigants such as methyl bromide. However, the report did indicate that there remains significant potential for nurseries and greenhouse crops and the equestrian industry.

The County has elected to develop this masterplan using a process intended to promote substantive participation by the public and a variety of state and local governmental agencies as well as representatives of key stakeholder groups with a clear vested interest in the plan.

A six-step process will be used to develop the masterplan. The six-step process combines principles from strategic planning, decision analysis, risk management, conflict mediation, and public involvement.

- Establishing leadership and commitment through the various groups involved in the project

- Framing the problem which has been addressed in the purpose statement established by the BCC
- Developing value model and formulating alternatives
- Collecting meaningful and reliable data
- Evaluating alternatives and making informed decisions
- Developing implementation plan

This interim report will cover the first two steps within the next three covered by subsequent interim reports and the last step will be covered in Phase II.

As part of continuing to establish leadership and commitment, a public workshop was held on September 19, 1998, at the Clayton Hutcheson Agricultural Center in West Palm Beach. During the workshop, a presentation was made on the projected 2020 build out of the Ag Reserve under the current regulations. This presentation included a "cut-and-paste" visual of what the Ag Reserve might look like, and helped to point out the poor development pattern that would result to further demonstrate the need for the master planning effort. Along with an overview of the project purpose, objectives, scope of work, and the purpose and objectives of the public workshop, the stage was set for the participants to develop a series of issues and critical success factors that would be used to help guide the project. The issues would be used to assess what was most important to the public regarding the Ag Reserve, and the critical success factors that would be used to determine how the public might measure the success of the master planning effort.

The process was facilitated by having the workshop participants engage in small group discussions at 14 separate tables. The results of the discussions were presented to the entire group and the list of issues and critical success factors were recorded. A listing of all the issues and critical success factors was developed and grouped into a series of categories that represented the most important issues and critical success factors. Exhibit 1-8 is a summary of the top 10 issues based on the frequency mentioned for the tables.

#### **EXHIBIT 1-8**

##### **Summary of Issues Raised at the First Public Workshop for the Ag Reserve Master Plan**

1. There needs to be adequate comprehensive planning for future development.
2. There needs to be consideration of property rights, fair values for land, and equal treatment with the rest of the County.
3. Water resources need to be protected both for supply and water quality issues (e.g., prevent salt water intrusion).
4. Development needs to meet requirements for concurrency and schools.
5. The long-term cost of infrastructure and services, and overall cost to taxpayers needs to be considered.
6. Agriculture needs to be protected based upon market demand and type (i.e., cropland, nurseries, equestrian uses).
7. Policy makers must realize that national policies affect farm enterprises.
8. Environmentally sensitive areas need to be protected.
9. Open space needs to be preserved for parks, public access, and views of open space.
10. Housing and farm practices require adequate land buffers for protection of health and safety.

Note that the above issues are ranked in order based on frequency of occurrence, as defined by the number of individual tables that raised the issue.

Input generated from the background information and the public workshop will be used to refine the list of objectives and criteria that will ultimately be utilized to measure the performance of each of the three land use alternatives.

# References

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American Farmland Trust. *How to Retain Agriculture in the Agricultural Reserve, Enhance its Contribution to the Economy of Palm Beach County, & Save Taxpayers Money*. Prepared for Palm Beach County Board of County Commissioners, Palm Beach County, FL. 1993.

CH2M HILL, Inc. *Final Report for the Integrated Water Resources Strategy for Southeastern Palm Beach County*. Prepared for Palm Beach County Water Utilities Department and South Florida Water Management District. Under Development. 1998.

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Dames & Moore. *Task 2.1 - Land Use Suitability Analysis*. Prepared for Palm Beach County Board of County Commissioners, Palm Beach County, FL. 1991.

Dames & Moore. *Task 2.2 – Development of Alternative Scenarios, Related Strategies and Impact Assessment*. Prepared for Palm Beach County Board of County Commissioners, Palm Beach County, FL. 1992.

Hazen & Sawyer. *Status and Preservation of the Agricultural Industry in South Florida*. Report to the National Audubon Society – Everglades Conservation Office. 1998.

Palm Beach County Planning Division. *Phase III – Task I, Preliminary Report, Agricultural Reserve Study*. Prepared for Palm Beach County Board of County Commissioners, Palm Beach County, FL. 1993.

Palm Beach County Planning Division. *Staff Report, Ag Reserve Bond Issue*. Presented to the Palm Beach County Board of County Commissioners, Palm Beach County, FL. 1998.



APPENDIX 1A

**List of Attendees and Presentation Made at  
Public Workshop No. 1 – September 19, 1998**

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GIORIA  
MAIN 4

AG RESERVE PUBLIC WORKSHOPSATURDAY, SEPTEMBER 19, 19989:00 AM - 1 PM

Clayton Hutcheson Agriculture Center  
559 N. Military Trail, West Palm Beach, FL

NAME	ADDRESS	TELEPHONE NUMBER
1. Wilma Portman	139 Woodlands Rd. Palm Springs, FL 33461-1050	561-968-6719
✓ 2. Ron Crone	Lake Worth Drainage District	
✓ 3. Kathy Berks	8450 Whispering Oak Way West Palm Beach, FL 33411	561-753-2331
✓ 4. Bob Lawson & ✓ 5. Ted Sanders	Lawson, Noble & Web, Inc. 420 Columbia Drive West Palm Beach, FL 33409	684-6686
✓ 6. Nora Kavashanskmy	1456 Cold Springs Court Wellington, FL 33414	561-795-5460
7. Robert Lowyns	1401 Gallinule Drive Delray Beach, FL 33444	561-274-4644
8. Donald Bryan	Landowner in Ag. Reserve	954-971-9880
✓ 9. Charles Marqusee ✓ 10. Helga Marqusee	P. O. Drawer X Boca Raton, FL 33429	561-482-1045
✓ 11. Vicky Maguire	Same as above	Same as above
✓ 12. Dick Bowman ✓ 13. Billy Bowman	RR1, Box 295, Delray Beach, FL 33466	561-251-1232
✓ 14. Jim Marshall ✓ 15. Barbara Marshall	1423 N. Swinton Avenue, Delray Beach, FL 33444	561-272-9085
✓ 16. Jeff Snow	781 S. W. 2 <sup>nd</sup> Street, Boca Raton, FL 33486	561-395-3377
✓ 17. Kieran Kilday	1551 Forum Place, #100A West Palm Beach, FL 33401	561-689-5522

*Whitworth*

18-27 Glen Woodward, Tommy Woodward, Kim Woodward, Glen Woodward, Jr., Robert Chapman, Roz Hendrick, Carlos O'Casio, Sylvia Pugliesi, Peggy Leir, Don Rice	11400 State Road 7, Boynton Beach, FL 33437	561-364-8881
28. Steve Homrich	9901 State Road 7, Boynton Beach, FL 33437	561-734-2800
29. Fred Marrero	Atlas Peat & Soil	561-734-7300 FAX 561-734-3013
30. Elaine Usherson	Sierra Club Loxahatchee Grp. 44 East Court, Royal Palm Beach, FL 33411	561-798-8319
31. Ken Tooma	7495 W. Atlantic Avenue, Delray Beach, FL 33446	
32. Rosa Durando	10308 Heritage Farms, Lake Worth, FL 33467	965-2420
33. Lyle Thomas	5232 Woodstone Circle South, Lake Worth, FL 33463	Pager 561-854-5629
34. Bill Mazoni	4597 Saint Andrews Drive, Boynton Beach, FL 33436	561-732-9050
35. Gerald Defoe	142 Mockingbird Lane, Delray Beach, FL 33445	561-495-9412
36. Tottie Faulise	2001 SW 13 <sup>th</sup> Avenue, Apt. 104, Boynton Beach, FL 33426	561-736-6684
37. Jack Chrissy		954-782-5250
38. Mike Chrissy		
39. Lois Young	7187 Crystal Lake Drive West Palm Beach, FL 33411	561-689-7595
40. Steve Wolf	288 Z Smith Sunday Road	561-498-5600
41. Mitch Pavlick	Delray Beach, FL 33466	
42. Ted Annis	Anco Services (Landscape Contractor)	561-734-1991

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43. Mr. Valhaley	10932 Glen Eagles Road Boynton Beach, FL 33436	561-736-3749	X
44. Jim Brown	Mecca Farms	561-968-3605	
45. Louis Rodriguez	Lantana Road		
46. Press Tompkins			
47. Evelyn Elliott	847 Francis Street West Palm Beach, FL 33405	561-833-7676	
48. Thomas Yee	9851 Boynton Beach Blvd. Boynton Beach, FL 33437	561-732-0162	
49. Linda Hines	PBC School District	561-434-8935	
50. Harry Fix	Dept. of Planning & Real Est. 3320 Forest Hill Blvd., Ste. C 331 West Palm Beach, FL 33406		
51. Phil Haire	WBGF/WSWN P. O. Box 1505 Belle Glade, FL 33430	561-996-2063	X
52. John Whitworth	3926 Sherwood Blvd.,	561-498-3487	
53. Mary Whitworth	Delray Beach, FL 33445-5655		
54. Billy Dubois	921 SW 36 <sup>th</sup> Avenue Boynton Beach, FL 33435		
55. Dan Coffman	Equestrian Task Force	561-965-9001	X
56. Donald Rice	Farm Credit of South Florida		X
57. Joyce Rice	10055 Heritage Blvd. Lake Worth, FL 33467		X
58. Jim McGowan	1000 Clint Moore Road, #110 Boca Raton, FL 33487	561-997-5760	
59. Elivio Serrano		561-659-6800	X
60. Joseph Verdone	Carlton Fields	561-659-7070	
61. Michael Tammaro	P. O. Box 150 West Palm Beach, FL 33402		
62. Louise E. Buie	Democratic Black Caucus		
63. Mr. Feacher	1309 W. 30 <sup>th</sup> Street		
64. Mrs. Feacher	Riviera Beach, FL		
65. Larry Portnoy	1401 University Drive, #200	954-753-1730	
66. Alan Fant	Coral Springs, FL 33067		

67. Barbara Rienecker	609 N. C Street Lake Worth, FL 33460-2829	561-582-9724	X
68. Arthur Leibovit	Realtor/Horticulturist 230 Royal Palm Way Palm Beach, FL 33480	561-655-7885 FAC 561-655-7887	
69. Deidre Newton		561-659-9791 561-694-9191	
70. Erin Deady	National Audobon Society 940 Sweetwater Lane, Apt. 216 Boca Raton, FL 33436	561-362-0843 Office 305-371-6399	
71. Norma Cossey	6682 Paul Mar Drive	561-533-0034	
72. Murray Cossey	Lantana, FL 33462		
73. Scott Brown	P. O. Box 1616	561-346-3319	
74. James Alterman	Boynton Beach, FL 33425		
75. Douglas Astler			
76. William Rudnick	7947 Yorkshire Court Boca Raton, FL 33496	561-487-6727	X
77. Kurt Kimmelman	1048 Park Avenue Boca Raton, FL 33486	561-395-9055	X
78. Mr. Jarvis Merrick			X
79. Mrs. Jarvis Merrick			X
80. Mr. Ross Wood			X
81. Mrs. Ross Wood			X
82. Mr. Elton Sellars			X
83. Mrs. Elton Sellars			X
84. Mat Sexton	4400 PGA Blvd., Ste. 900 Palm Beach Gardens, FL 33410	561-624-4928	
85. Rocco Ceo	Consultant for National Audubon Society	305-371-6399 Office 305-662-2620	
86. Sylvia Cohen	544 N. W. 47th Avenue Delray Beach, FL 33445	561-498-0308	
87. Robert Bentz	1280 N. Congress Ave.	561-478-8501	
88. Jennifer Morton	Ste. 215 West Palm Beach, FL 33409	FAX 561-478-5012	



89. Jeff McDougal	14068 Smith Sunday Road Delray Beach, FL 33447	561-499-9485 or 561-995-5262
90. George H. McMurrain	13697 State Road 7 <del>Lake Worth, FL 33446</del> <i>Delray</i>	561-499-4176
91. David MacKay 92. Marlene MacKay	904 N. Swenton Avenue Delray Beach, FL 33444	561-278-5964
93. Ellen Tannehill	6388 Ranches Road Lake Worth, FL 33463	561-641-9598
94. Louis Irving 95. Mary Irving	Royal Palm Audubon Society	561-272-8597 FAX 561-272-9557
96. Shannon Walker 97. Another Person		
98. Ron Brame	P.O. Box 5559, Lake Worth, FL 33466	561-965-9001
99. Shelly Weil	925 Greensward Lane Delray Beach, FL 33455	561-496-0549
100. Richard Eckert	340 Highpoint Blvd., Apt. B Delray Beach, FL 33445	561-276-5866
101. Margaret Shushanni	Community Development Council of Palm Beach County	
102. Charlotte Nash 103. Dora Maris	League of Women Voters	
104. Lou Doffer	COBRA	
105. Eva Webb	Florida Farm Bureau	
106. Thomas Gallagher	W. Boca Community Council 8947 Escondido Way East Boca Raton, FL 33433	561-483-3012
107. Joseph Mulvehill 108. Guest	9821 Happy Hollow Road Delray Beach, FL 33446	561-499-1041
109. Jeff Weaver 110. George Weaver	871 E. Commercial Blvd. Ft. Lauderdale, FL 33334	954-771-4400
111. Linda Rine 112. David Miller	14865 Draft Horse Lane West Palm Beach, FL 334 4	965-790-4101

*Number  
changed  
10/98*

9

113. Maxine Guerrera		
114. Joseph J. Berdone		Office 659-7070 FAX 659-7368

/9-19agwk/kua

Future workshops October 16 &amp; October 17

✓ Toby Miller

✓ Hoskins

## Ag Reserve Public Workshop 9/19/98

## Sign in Sheet for Walk-ins

Name Address Phone  
 1. Mary Bedner 14186 Starkey Rd Delray 4993901  
 2. Steve Bedner " " "  
 3. ~~Ernest Swensen~~ 275 Arlington Dr Land 3519782  
 4. James Alderman 1714 Luke Dr, Delray Bch 369-2801  
 5. Ken Shuler 559 N. Military Trail, WPB 233-1718  
 6. Esther M. Murrain 227 Dixie Blvd. Delray 276-446  
 7. Cary Braswell 5450 Flamingo Pk R.D. Boynton 561-448300  
 8. Al DeMazzo 10817 Quail Covey Rd Boynton 33436  
 9. ~~John H. Hadden~~ 2006 S. Fed. Hwy Boynton Beach 33435 733-078  
 10. Brian M. Seymour 777 S. Flyer Dr, Suite 500 WPB 33401 65000  
 11. ~~Shirley Carson~~ 13121 Military Trail Delray 33484  
 12. Ruth Zauser 2100 SW 35 Ave. Delray Beach 33445  
 13. R. Hochberg Gold Coast Alder Ave 33482  
 2101 Corp Drive Boynton Beach  
 14. E. O. Smith USA 165 S. Newcombe WPB 33408  
 15. Jeff A. White West Boca Comm. Ctr 11364 Chiswick Way  
 B.R. 33428

Original  
from last  
two mts.  
Rose

## Ag Reserve Public Workshop 9/19/98

## Sign in Sheet for Walk-ins

3

Name	Address	Phone
16. OSCAR K. JOHNSON	611 NE 1/2 NOST POMPANO FLA	954 781 5534
17. X Alderman	1714 Jade Dr. Delray Beach	278-7757
18. MARK BEHAR	298 N.W. 11 <sup>th</sup> ST BOCA RATON	391-7356
19. Tim Hernandez	1350 E. Waput Center, Suite 200 Deerfield Beach, FL 33442	954 426-6100 x344
20. Karl Hauser	2100 SW 35 <sup>th</sup> Ave Delray Beach	33445
21. Michael Johnson	12539 ACORN DAIRY ROAD	33437
22. Olivier BERNARDINI	" " "	" "
23. Sylvia Cohen	544 NW 4 <sup>th</sup> Ave Delray	495.0308
24. Brett DuBois	85701 Townline Blvd Boynton Beach FL 33437	
25. Barbara Sandwell	2582 NW 23 <sup>rd</sup> Way, Boca Raton	989-8421
26. C/ & DOROTHY JACOBS	72 SW 10TH AVE BOCA RATON	33484
27. WALTER WEINER	5315 1/2 GARDEN AVE	582 9372
28. Raymond Burggraf	6101 Bear Creek Ct Lake Worth, FL 33467	
29. RICHARD ECKERT	340B HIGH POINT BLVD DELRAY BEACH, FL 33445	
30. Linda Cole	16396 7 <sup>th</sup> Ave NW Lorahatchee FL 33470	

## Ag Reserve Public Workshop 9/19/98

2

## Sign in Sheet for Walk-Ins

Name	Address	Phone
31. MARIL McCORMICK	4375 MAURICE DR DORRAN BEACH, FL.	361-499-7206
32. BILL DOUTNAT	Palm Beach Post	820-4432
33. DAGMAR BRAHNS		734-9338
34. LAURA GESELBRACHT	The Nature Conservancy, WPB	561/833-4220
35. ROSE MARIE LUX	1000 SW 26 <sup>th</sup> AVE BOYNTON	732-4739
36. CHARLOTTE CARRE	7 HARBOUR DR. S OCEAN RIDGE 35	737-8802
37. PAT WALKER	SFWMD	682-6302
38. <i>Clayton</i>		964/4329
39. HARVEY ROSENFELD	1200 Bear Island Drive WPB 33409	640-4810
40. HARRY ALPHEUS	9405 Listow Terr	Brynton Bch FL 33446
41. RAY LUTHE	WVD	641-3467
42.		
43.		
44.		
45.		



## **Welcome to the Agricultural Reserve Master Plan Workshop**

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**Clayton Hutcheson  
Agricultural Center  
September 19, 1998  
9:00 AM - 1:00 PM**

## **Rules for Today's Workshop**

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- Please keep food and drink outside; rest rooms are outside
- We need to respect everyone's opinion
- No such thing as a bad idea
- Looking for participation through a facilitated process - structured approach:
  - Part 1 - Information presentation
  - Part 2 - Group discussion/public input

## **Agenda**

---

- Welcome and Introductions
- Project Purpose
- Project Overview and Objectives
- Purpose of the Workshop
- Value Model, Goals, Objectives and Criteria
- Breakout Session Overview and Purpose
- Identifying Issue
- Defining Critical Success Factors

## **Agenda - (continued)**

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- Break - 10 minutes
- Creating a Vision Statement
- Developing Objective Weights
- Closing

## **Agricultural Reserve Master Plan Overview**

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- Purpose and Objectives
- Scope of Work
- Schedule

## **Purpose of the Agricultural Reserve Master Plan**

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“ To preserve and enhance agricultural activity and environmental and water resources in the Ag Reserve, and produce a master development plan compatible with these goals”

## **Problem Statement**

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- Unnecessary loss of valued resources in the Agricultural Reserve and a lack of mechanisms to prevent it

## **Objectives of the Agricultural Reserve Master Plan**

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- Obtain input from land owners, farmers, and the public at large
- Determine what the most important values are from the above input
- Develop land use alternatives that follow the project purpose and address the values developed
- Determine the benefit and costs of the alternatives and allow BCC to make informed decision

## **Scope of Work Incorporates a Four Prong Approach**

---

- Public Involvement and Community Outreach Program
- Enlisting Public Values
- Development of Multiple Patterns or "looks" in the Ag Reserve Under Three Scenarios
- Evaluation of the Various Patterns and Development of Benefits Vs. Costs

## **Public Input and Community Outreach**

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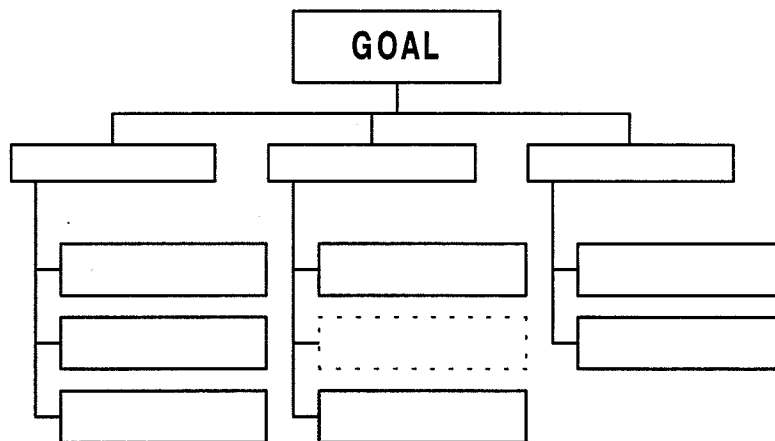
- Ag Forum - Completed and results published by end of next week
- Two Public Workshops
  - September 19th, 1998
  - October 16th & 17th, 1998 (Location TBA)
- Public Opinion Survey - November 20, 1998
- Fact Sheets, Updates to the Media, and information listed on the County's Web Site - [\*\*www.co.palm-beach.fl.us/News\*\*](http://www.co.palm-beach.fl.us/News) (Ag Reserve)



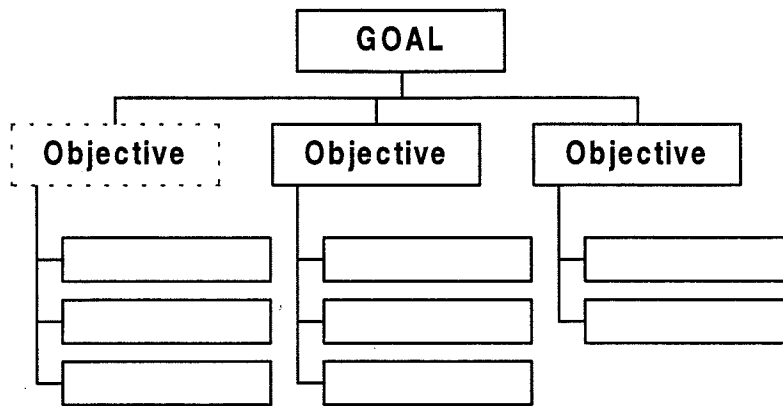
## Enlisting Public Values

- Input from public and private interest will generate a set of values - Ag Forum, Today's Workshop and Public Opinion Survey
- Values will then be translated into criteria and a value model developed
- The value model will be used to measure the performance of each of the land use alternatives

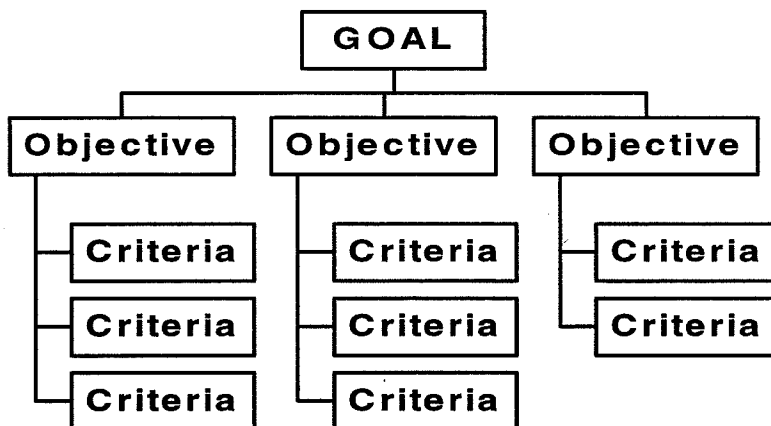
## Enlisting Public Values



## Enlisting Public Values



## Enlisting Public Values



## **Development of Land Use Patterns or "Looks" within the Ag Reserve**

---

- Based on three basic scenarios:
  - Status Quo
  - No Public Money
  - Public Money
- The "looks" will be generated with direct "hands-on" input from the public during the October 16th and 17th, 1998, Public Workshop

## **The Three Scenarios are Defined As:**

---

- **Status Quo** - What might it possibly look like under current land use regulations?
- **No Public Money** - How can we change the land use regulations to improve on the status quo scenario?
- **Public Money** - How might bond money help to improve on the above scenario?

## **Decision on Final Land Use Alternative**

---

- The three scenarios will be measured using the value model
- A list of benefits and costs to the County will be developed for each scenario
- The final three scenarios will be presented to the BCC on December 15, 1998
- A decision will be made that will initiate full masterplanning, and if needed, a potential bond referendum in March 1999

## **Schedule Allows Us to Make Decision by December 1998**

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- Key Milestone Dates:
  - August 27th - Ag Forum - Completed
  - **September 19th - Public Workshop - Today**
  - October 16th (PM) and 17th (AM) - Public Workshop
  - November 20th - Public Opinion Survey Completed
  - December 15th - BCC Meeting

## **Purpose of Today's Public Workshop**

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- To determine what the public values most about the Agricultural Reserve and its future use.

## **Objectives of Today's Public Workshop**

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- To continue outreach efforts demonstrating that the planning approach is unique and that public input and dialogue is central to the success of the project.
- To begin defining public issues, interests and ideas that will shape the vision for the future of the Ag Reserve
- To develop a vision statement for the Ag Reserve
- To develop planning goals and objectives to measure success in meeting the vision
- To establish preliminary weights to apply to the objectives

## **Break-Out Session Overview and Purpose**

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- Present Problem Statement
- Identify Issues
- Identify Critical Success Factors
- Develop of Vision Statement
- Develop Preliminary Objectives and Weight Importance

## **Procedures for the Breakout Sessions**

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- Facilitator will ask you to designate a scribe and a spokesperson
- Scribe will record your ideas as a group on the large pad on your table
- At the appropriate time, the spokesperson will report back to the entire group
- Facilitator is responsible for keeping the process moving and encouraging discussion from all the members

## **Problem Statement**

---

- Unnecessary loss of valued resources in the Agricultural Reserve and a lack of mechanisms to prevent it

## **Identification of Issues**

---

- Briefly list the issues you are most concerned about in the Agricultural Reserve
- Rules of this exercise:
  - Place your table number at the top of the sheet of paper
  - Try to describe at least 4-5 issues
  - Be concise and limit your issues to 4-5 words - not full sentences



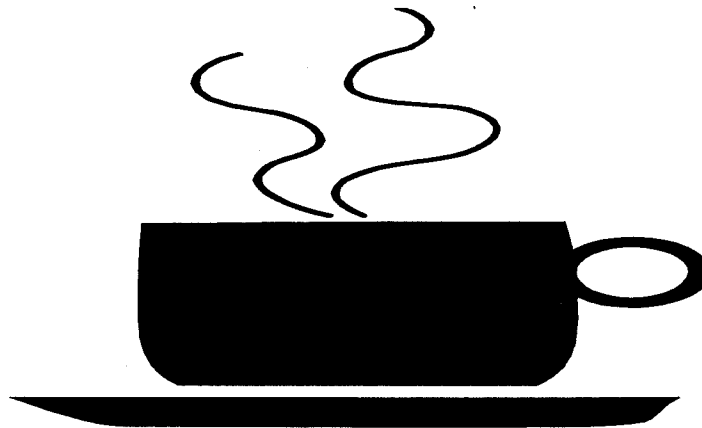
## **Identification of Critical Success Factors**

---

- Five things that will answer: "In five to ten years, how will we know that we have been successful in preparing a plan for the future of the Ag Reserve?"
- Rules of this exercise:
  - Place your table number at the top of the sheet of paper
  - Try to describe 5 ways to measure our success
  - Be concise and limit your issues to 4-5 words - not full sentences

## **Take 10 Minute Break**

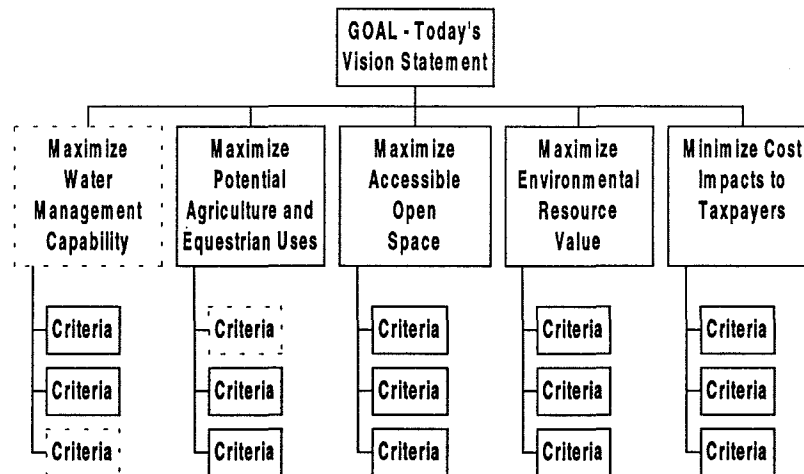
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## Discussion of Objectives and Weighting Exercise

- Facilitators to pass out list of objectives and criteria
- Discuss each of the objectives and describe proposed ways to measure them
- Solicit suggestions from small groups for changes to the objectives/criteria

## Suggested Objectives to Measure Success of the Project



## **Objective Weighting Exercise**

---

- Determine which of the objectives you believe is most important and place a 100 in the right hand column
- Relative to the most important objective, score the others from 0 - 100
- For example:
  - If a second objective is just as important, give it a 100
  - If it's half as important, give it a 50
  - And if it's not important at all, give it a 0

## **Objective Weighting Exercise**

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- Upon completion of weighting, turn in your score sheets to the facilitator
- Information will be compiled and published a week before the next public workshop
- Information will be used to guide the core working group in evaluations of the land use alternatives

## **Development of a Vision Statement**

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■ John Rogers

## **A Vision Statement...**

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- Describes the desired, ideal solution to the problem
- Is positive and inspiring
- Causes people to be willing to stretch their goals

## **What's Next?**

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- Document and publish results of workshop one week before the next workshop
- Conduct public opinion survey - November 20th, 1998
- Conduct public workshop to visualize master planning alternatives
  - October 16th, 5 PM - 9 PM
  - October 17th, 9 AM - 1 PM
  - Location to be determined

APPENDIX 1B

**Complete Listing of Issues and Critical  
Success Factors from Public Workshop No. 1 –  
September 23, 1998**

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# List of Issues and Critical Success Factors Developed at the Ag Reserve Public Workshop - 9/19/98

Issues and Critical Success Factors	Small Group Table Numbers														Totals
	1	2	3	10	11	12	14	15	16	19	20	21	22	23	
<b>Comprehensive Planning</b>															<b>76</b>
Balance between planning and property rights		1										1			2
New/improved density and development options										1					1
How density and intensity are applied												1			1
Density equal to bur. Lands											1				1
Removal artificial obstacles to development (60/40 option)													1		1
Avoid downside of urban sprawl			1										1		2
Adequate comprehensive planning for development - coordinated and balanced - mixed use - includes public facilities - pattern - defined - no clustering - not piecemeal	1	3	1	2	1	3	3	1	1		2	3	2	1	24
Accept and include development			1										1		2
Urban & Ag. Compatible				1											1
Tree lined roads and vistas						1									1
Balanced interests														1	1
Cemetery						1									1
Aesthetics							1								1
Self contained												1			1
Flexibility			1												1
Use of zoning, taxes, and bonds to secure established pattern	1						1								2
Self-contained, self-sustaining defined community	1		1		1					1	1				5
Aesthetics		1													1
One year - zoning/planning/design in place	1														1
Two years - progress report	1														1
Three years - master plan of land use	1														1
How long you wait at a stoplight		1													1
Diversity/differing levels of density		1								2				1	4
Quality of life enviable			1												1
Quality jobs (above and beyond service related) available in area			1												1
Decrease school crowding - reduce density?															1
Density and intensity of uses (same amt. Of farming)		1													1
Maintain current status				1											2
Evaluate and balance lands for best use and capacity											1				2
Build high-end homes/increase home ownership to increase tax base					1							1		2	4
Have planned communities been successfully developed?									1						1
No clustering										1					1
No TND's										1					1
Safety											1				1
Tree-lines sidewalks and trails												1			1
Public-owned land												1			1
Flexibility														1	1
<b>Property Rights, Fair Values and Equal Treatment</b>															<b>53</b>
Equity re: zoning regulations and densities w/areas outside ag reserve										1					1



# List of issues and Critical Success Factors Developed at the Ag Reserve Public Workshop - 9/19/98

Issues and Critical Success Factors	Small Group Table Numbers														Totals
	1	2	3	10	11	12	14	15	16	19	20	21	22	23	
Fair market value of land and transfers (equal treatment inside and outside Ag Reserve, no value deflation)	1		2	1		2	1	1	1		1				10
Preserve landowners value w/o development													1		1
Fair appraisal relative to land outside the reserve area (east and west of 441)		2													2
Why is 441 a boundary?		1													1
Private Property rights (east and west of 441, farmers not forced to farm, restoration of rights)		3	1			2	2	1	1	2			1	1	14
Zoning/Land use equity							1								1
Ability to sell at market price		1													1
Avoid litigation re: property rights					1										1
Fairness/non-discriminatory		1													1
Individual opinions of current property owners		1													1
Additional Density—West of #441	1			2		1			1					1	6
Equal density throughout the Ag. Reserve				1											1
TDRs; Expire Public Lands (Aquifer).					1										1
What plan will create max. jobs within county?														1	1
Density — 1-2 Units per acre East of 441												1			1
Equal Density — compared to USB								1			1	1			3
Want Ag. Reserve to look like rest of county												1			1
Master plan will increase value of property						1									1
Market-driven development													1		1
Impact of development on surrounding community													1		1
Maintain Status quo.						1						1			2
<b>Water Resources</b>															<b>22</b>
Maintain wetlands as they currently are			1							1					2
Maintain wellfield protection		1										1			2
Preserve water table level and aquifer recharge							1								3
Increase acreage for water storage											1				2
Don't foreclose on regional water resource management options. (everglades restoration) (Urban Wat	1												1		2
Reservoir built		1													1
No development west of 441.						1									1
Drainage Problems in area		1													1
Pretreat stormwater					1										1
Water quality							1			1		1		1	4
At what point do natural resources not support the population any longer														2	2
No natural resources to protect														1	1
<b>Concurrency and Schools</b>															<b>22</b>
Meet concurrency needs: e.g., transportation, utilities, parks, etc.	1	1				1			1	1	1		3		9
Adequate schools/mass transportation/services/infrastructure			1	1	1		1					1		1	6
Schools						1				1	1		1		4
Police and fire rescue		1				1				1					3

# List of Issues and Critical Success Factors Developed at the Ag Reserve Public Workshop - 9/19/98

Issues and Critical Success Factors	Small Group Table Numbers														Totals
	1	2	3	10	11	12	14	15	16	19	20	21	22	23	
<b>Costs</b>															<b>22</b>
How will \$ be raised to purchase all land Dev. Rts. In Ag Reserve intended to be preserved														1	1
Ad valorem taxes		1													1
Government to purchase all land															1
Planned approach for fair economic conditions (market)													1		1
Ad valorem taxes				1	1	1		1	1				1		6
Paying for infrastructure - who and how?					1				1				1		3
Management of land preserved (\$).					1										1
Ratio of increase of tax base/tax base enhancement						1		1					1		3
Compared to cost of services provided.						1									1
How \$ used? Is there a better use for \$?								1				1			2
The concept of a publicly funded bond issue to buy farm land seems to be a "turn off" in the public mind.									1						1
Effect on services														1	1
<b>Market Based Agriculture</b>															<b>18</b>
Respect concept of free markets/free enterprise									1						1
Only 2% of land in Ag. in PBC is in Ag. Reserve.					1										1
Viability/economics of farming		1													1
Equitable Distribution of preservation needs													1		1
Allow ag to find its own level either within or outside of reserve area			1											1	2
Increase number of students enrolled in ag training programs															1
Alter perception of food sources					1										1
Lack of understanding of Ag.				1											1
Preservation of Farming - enhance Ag - ID what needs to be preserved - answer why?		1					1	1				1	1		5
Preserve east and west of 441				1										1	2
Encourage Farmers and provide incentives to continue farming										1					1
Economic viability of Farming		1													1
<b>National Policies Affect on Farm Enterprises</b>															<b>8</b>
National policies effected veg. Crops; free enterprise/market dictates; not viable				1	1			1	1				2	1	7
Change NAFTA		1													1
<b>Environmentally Sensitive Lands</b>															<b>8</b>
Ag Reserve as environmentally sensitive area - define and protect		1		1	1	1	1	1	1				1		8
<b>Open Space</b>															<b>8</b>
Preserve open space				1	1		1					1		1	5
Preserve green space and open space (farms, parks, etc., public access, size and location)			1			1	1				1	1			5

# List of Issues and Critical Success Factors Developed at the Ag Reserve Public Workshop - 9/19/98

	Small GroupTable Numbers															
Issues and Critical Success Factors	1	2	3	10	11	12	14	15	16	19	20	21	22	23	Totals	
Define what green space is (i.e. open area, golf courses, what?) Equity for all!			1								1				2	
Maximize green space													1		1	
Land Buffers															8	
Buffer zones				1											1	
Completion/preservation of buffer zone	1				1										2	
Houses are incapable with Ag. - where to put new growth?				1	1	1	1								4	
Blend with surrounding areas											1				1	
Other Issues and Critical Success Factors															7	
Recognizing “No growth” sentiment. (in whole area/west of 441)					1	1									2	
Highest quality of life possible.						1									1	
Why is there no focus on macarthur land being sold? Preserve the MAC land not as reserve — (this is more Env. sensitive)														1	1	
Concern with liability (Farmers to Res.)							1								1	
Insurance CO’s exclude pollution							1								1	
Should the master plan harm the existing \$1.8 billion home bldg. industry annual payroll in PBC?														1	1	
Totals	10	29	15	17	18	24	19	10	12	15	14	20	24	22	257	

APPENDIX 1C

**Suggested Changes to Objectives and Criteria  
from Public Workshop No. 1 –  
September 19, 1998**

---

### Maximize Water Management Capability (Original Copy)

- Storage – acres of storage
- Amount of Impervious area (water quality, recharge)
- Amount of stormwater discharged to Lake Worth Drainage District canals
- Drainage adjacent to Water Preserve Areas

This group wanted this next part inserted before the original first part

- So are measure of development
- Begs question of good
- Not about where

### Maximize- BalanceWater Management Capability

- Storage – acres of storage (with 441)
- Amount of Impervious area (water quality, recharge)
- Amount of stormwater discharged to Lake Worth Drainage District canals
- Drainage adjacent to Water Preserve Areas both sides of road

### Maximize Traditions NIS/method the resolving

- Workplaces near homes
- Amount of perspective with avowbiggs

(had inserted this sub-part to be first topic before this next upcoming part)

### Maximize- Appropriate Water Management Capability/Consideration (planned new)

- Storage – acres of storage
- Amount of Impervious area (water quality, recharge)
- Amount of stormwater discharged to Lake Worth Drainage District canals
- Drainage adjacent to Water Preserve Areas/ millions of gallons per day
- Consumptive use of water

### Maximize- Balance Water Management Capability

- Storage – acres of storage
- Amount of Impervious area (water quality, recharge)
- Amount of stormwater discharged to Lake Worth Drainage District canals
- Drainage adjacent to Water Preserve Areas

### Maximize- Balance Water Management Capability

- Storage – acres of storage
- Amount of Impervious area (water quality, recharge)
- Amount of stormwater discharged to Lake Worth Drainage District canals
- Drainage adjacent to Water Preserve Areas

### Maximize- BalanceWater Management Capability

- Storage – acres of storage (necessary to support?)
- Amount of Impervious area (water quality, recharge)
- Amount of stormwater discharged to Lake Worth Drainage District canals
- Drainage adjacent to Water Preserve Areas

#### **Maximize Water Management Capability**

- Storage – acres of storage (necessary to support potential development needs and the moured septic)
- Amount of Impervious area (water quality, recharge)
- Amount of stormwater discharged to Lake Worth Drainage District canals (this would be reduced by on site retention through residential development)
- Drainage adjacent to Water Preserve Areas

#### **Maximize- Bounce Water Management Capability**

- Storage – acres of storage
- Amount of Impervious area (water quality, recharge)
- Amount of stormwater discharged to Lake Worth Drainage District canals
- Drainage adjacent to Water Preserve Areas

Define Connectivity Criteria/Purpose/Design (insert this before next part)

#### **Maximize Water Management Capability**

- Storage – acres of storage
- Amount of Impervious area (water quality, recharge)
- Amount of stormwater discharged to Lake Worth Drainage District canals
- Drainage adjacent to Water Preserve Areas
- Fair compensation to land owners

Insert this before the following part ( so this should be first part of documents)

#### **Assumptions**

- Lands in public ownership will remain in open space
- Private property rights will be maintained
- Land will be developed

#### **Maximize Water Management Capability This part is ok (just above part inserted here)**

- Storage – acres of storage
- Amount of Impervious area (water quality, recharge)
- Amount of stormwater discharged to Lake Worth Drainage District canals
- Drainage adjacent to Water Preserve Areas

#### **Maximize- Balance Water Management Capability**

- Storage – acres of storage
- Amount of Impervious area (water quality, recharge)
- Amount of stormwater discharged to Lake Worth Drainage District canals
- Drainage adjacent to Water Preserve Areas - MGPD

#### **Maximize Water Management Capability**

- Storage – acres of storage – necessary to support future development
- Amount of Impervious area (water quality, recharge)
- Amount of stormwater discharged to Lake Worth Drainage District canals and ultimately to the estuaries
- Drainage adjacent to Water Preserve Areas

#### **Maximize- Balance Water Management Capability**

- Storage – acres of storage
- Amount of Impervious area (water quality, recharge)
- Amount of stormwater discharged to Lake Worth Drainage District canals
- Drainage adjacent to Water Preserve Areas

#### **Maximize Traditional Neighborhood Development (Insert before following part)**

- Work places near homes
- Amount of dependence on cars

#### **Maximize- Appropriate Water Management Capability -(Consisted with Planned Community Development)}**

- Storage – acres of storage – amount of consumption of water
- Amount of Impervious area (water quality, recharge)
- Amount of stormwater discharged to Lake Worth Drainage District canals
- Drainage adjacent to Water Preserve Areas

#### **Maximize Water Management Capability**

- Storage – acres of storage
- Amount of Impervious area (water quality, recharge)
- Amount of stormwater discharged to Lake Worth Drainage District canals
- Drainage adjacent to Water Preserve Areas
- Amounts of water consumption

#### **Maximize Water Management Capability**

- Storage—acres of storage
- Amount of Impervious area (water quality, recharge)
- Amount of stormwater discharged to Lake Worth Drainage District canals
- Drainage adjacent to Water Preserve Areas/millions of gallon per day

#### **Maximize- BalanceWater Management Capability**

- Appropriate value for land uses planned



- Storage – acres of storage
- Amount of Impervious area (water quality, recharge)
- Amount of stormwater discharged to Lake Worth Drainage District canals
- Drainage adjacent to Water Preserve Areas

Are we missing an objective?

Are the measures good measures?

**Maximize Water Management Capability**

- ~~Storage – acres of storage~~
- Amount of Impervious area (water quality, recharge)
- Amount of stormwater discharged to Lake Worth Drainage District canals
- Drainage adjacent to Water Preserve Areas

**Maximize- Balance Water Management Capability**

- Storage – acres of storage
- Amount of Impervious area (water quality, recharge)
- Amount of stormwater discharged to Lake Worth Drainage District canals
- Drainage adjacent to Water Preserve Areas

Goal – Balance Development with Preservation – Ag Public Resources (insert this before next part)

**Maximize Water Management Capability - yes – not balance**

- Storage – acres of storage
- Potential development and needs of natural system
- Amount of Impervious area (water quality, recharge)
- Amount of stormwater discharged to Lake Worth Drainage District canals
- Drainage adjacent to Water Preserve Areas

**Maximize- Intact Balance Water Management Capability**

- Storage – acres of storage necessary to set and develop ecosystems
- Amount of Impervious area (water quality, recharge)
- Amount of stormwater discharged to Lake Worth Drainage District canals
- Drainage adjacent to Water Preserve Areas

(This is to be inserted before the following part)

Balance is Maximize

1. Must include:
2. Property rights
3. Water
4. OP
5. ERV

**Maximize Water Management Capability (Fine as is)**

- Storage – acres of storage
- Amount of Impervious area (water quality, recharge)
- Amount of stormwater discharged to Lake Worth Drainage District canals
- Drainage adjacent to Water Preserve Areas

**Maximize Potential for Agricultural (including nurseries) and Equestrian Use**

- Total number of acres
- ~~Size of aggregated parcels (median size per farm)~~
- Amount of appropriate buffer – may be different for different crops/uses
  - Row crops
  - Nurseries
  - Equestrian

**Maximize Potential for Agricultural (including nurseries) and Equestrian Use**

- Total number of acres – government purchase & lease back
- Size of aggregated parcels (median size per farm)
- Amount of appropriate buffer – may be different for different crops/uses
  - Row crops
  - Nurseries
  - Equestrian

**Maximize Potential for Agricultural (including nurseries) and Equestrian Use**

- ~~Total number of acres~~
- ~~Size of aggregated parcels (median size per farm)~~
- ~~Amount of appropriate buffer – may be different for different crops/uses~~
  - ~~Row crops~~
  - ~~Nurseries~~
  - Equestrian

**Maximize Potential for Agricultural (including nurseries) and Equestrian Use**

- Ag train school
- Government purchase

- Total number of acres
- Size of aggregated parcels (median size per farm)
- Amount of appropriate buffer – may be different for different crops/uses
  - Row crops
  - Nurseries
  - Equestrian
- Cobby fed for NAFTA change

#### Maximize Potential for Agricultural Market (including nurseries) and Equestrian Use

- Total number of acres
- Size of aggregated parcels (median size per farm)
- Amount of appropriate buffer – may be different for different crops/uses
  - Row crops
  - Nurseries
  - Equestrian

?

#### Maximize Potential for Agricultural (including nurseries) and Equestrian Use

- Total number of acres
- Size of aggregated parcels (median size per farm)
- Amount of appropriate buffer – may be different for different crops/uses
  - Row crops
  - Nurseries
  - Equestrian

For this part this group feels this and next two parts should be combined together it would look like this:

#### Maximize Potential for Agricultural (including nurseries) and Equestrian Use

- Total number of acres
- Size of aggregated parcels (median size per farm)
- Amount of appropriate buffer – may be different for different crops/uses
  - Row crops
  - Nurseries
  - Equestrian

Encourage Potential for Agricultural (including nurseries) and Equestrian Use, Maximize Accesible Open Space (excluding wetlands, uplands, but including parks, greenways, golf courses) and Environmental Resource Value (Wetlands and Uplands)

- Total number of acres
- Size of aggregated parcels (median size per farm)
- Amount of appropriate buffer – may be different for different crops/uses
  - Row crops

- Nurseries

- Equestrian

- Acres in public ownership (easements, or only fee simple, etc.)
- Acres in private ownership
- Amount of connectivity
- Acres of publicly owned conservation or preserve lands
- Acres of privately owned conservation or preserve lands under conservation easements or less than fee simple acquisition for preserve purposes
- Acres of open space lands, conservation lands or preserve lands providing buffering of the Loxahatchee Wildlife Refuge and key water resource areas]
- Connectivity of conservation or preserve lands
- Acres of land managed for exotic vegetation
- Acres of land available for environmental restoration

**Maximize Potential for Agricultural (including nurseries) and Equestrian Use**

- Total number of acres
- Productivity per acre
- Size of aggregated parcels (median size per farm)
- Amount of appropriate buffer – may be different for different crops/uses
  - Row crops
  - Nurseries
  - Equestrian
- NAFTA change
- Ag training school

**Maximize Potential for Agricultural (including nurseries) and Equestrian Use - out**

- Total number of acres
- Size of aggregated parcels (median size per farm)
- Amount of appropriate buffer – may be different for different crops/uses
  - Row crops
  - Nurseries
  - Equestrian

**Maximize- BalancePotential for Agricultural (including nurseries) and Equestrian Use**

- Total number of acres
- Size of aggregated parcels (median size per farm)
- Amount of appropriate buffer – may be different for different crops/uses
  - Row crops
  - Nurseries
  - Equestrian

**Maximize Potential for Agricultural (including nurseries) and Equestrian Use**

- Total number of acres

- Size of aggregated parcels (median size per farm) – abolish 80/20 (80% of 40 acres in appropriate)
- Amount of appropriate buffer – may be different for different crops/uses
  - Row crops – with one home per 10 acres is higher quality.
  - Nurseries – with one home per 10 acres is higher quality
  - Equestrian – with one home per 10 acres is higher quality
- Fair compensation to land owners
- Connectivity

#### **Maximize Market Driven Ag Potential for Agricultural (including nurseries) and Equestrian Use**

- Total number of acres – market driven
- Size of aggregated parcels (median size per farm) – market driven
- Amount of appropriate buffer – may be different for different crops/uses
  - Row crops – won't survive
  - Nurseries – consider the buffers won't need much (minimum)
  - Equestrian – consider the buffers won't need much (minimum)

#### **Maximize Potential for Agricultural (including nurseries) and Equestrian Use**

- Total number of acres
- Size of aggregated parcels (median size per farm)
- Amount of appropriate buffer – may be different for different crops/uses
  - Row crops
  - Nurseries
  - Equestrian

#### **Maximize Potential for Agricultural (including nurseries) and Equestrian Use**

- Total number of acres – market driven
- Size of aggregated parcels (median size per farm)
- Amount of appropriate buffer – may be different for different crops/uses
  - Row crops
  - Nurseries – minimal buffers
  - Equestrian – minimal buffers

#### **Maximize Potential for Agricultural (including nurseries) and Equestrian Use**

- Total number of acres – market driven
- Size of aggregated parcels (median size per farm)
- Amount of appropriate buffer – may be different for different crops/uses
  - Row crops?
  - Nurseries
  - Equestrian

**Maximize Potential- Balance Economic Potential and Development for Agricultural (including nurseries) and Equestrian Use**

- Total number of acres
- Size of aggregated parcels (median size per farm)
- Amount of appropriate buffer – may be different for different crops/uses
  - Row crops – ( ¼ mile)
  - Nurseries – (1/8 mile)
  - Equestrian – (few hundred feet)

**Maximize Potential for Agricultural (including nurseries) and Equestrian Use**

- Total number of acres
- Size of aggregated parcels (median size per farm) Productivity per acre
- Amount of appropriate buffer – may be different for different crops/uses
  - Row crops
  - Nurseries
  - Equestrian

**Maximize- Increase Potential for Agricultural (including nurseries) and Equestrian Use**

- Total number of acres
- Size of aggregated parcels (median size per farm)
- Amount of appropriate buffer – may be different for different crops/uses
  - Row crops
  - Nurseries
  - Equestrian
  - Aq training school

**Maximize- Desenters Potential for Agricultural (including nurseries) and Equestrian Use**

- Total number of acres
- Size of aggregated parcels (median size per farm)
- Amount of appropriate buffer – may be different for different crops/uses
  - Row crops
  - Nurseries
  - Equestrian
  - -Productivity of acre

**Maximize Potential for Agricultural (including nurseries) and Equestrian Use**

- Total number of acres
- Size of aggregated parcels (median size per farm)
- Amount of appropriate buffer – may be different for different crops/uses
  - Row crops
  - Nurseries
  - Equestrian

**Maximize Potential for Agricultural (including nurseries) and Equestrian Use**

- Total number of acres
- ~~Size of aggregated parcels (median size per farm)~~ Productivity per acre
- Amount of appropriate buffer – may be different for different crops/uses
  - Row crops
  - Nurseries
  - Equestrian

**Maximize Potential for Agricultural (including nurseries) and Equestrian Use- shouldn't be on ok list, allowed for market forcing, no subsidiary**

- Total number of acres
- Size of aggregated parcels (median size per farm)
- Amount of appropriate buffer – may be different for different crops/uses
  - Row crops
  - Nurseries
  - Equestrian

**Maximize Accessible Open Space (excluding wetlands, uplands, but including parks, greenways, golf courses)consumption of planned development**

- Acres in public ownership (~~easements, or only fee simple, etc.~~)
- Acres in private ownership (minimize include golf courses)
- Separate golf courses from open space reason
- Amount of connectivity (maximize)
- All golf courses must retain runoff

**Maximize Accessible Open Space (excluding wetlands, uplands, but including parks, greenways, golf courses)**

- Separate golf courses from open space measurements
- Acres in public ownership (easements, or only fee simple, etc.)
- Acres in private ownership
- Amount of connectivity

**Maximize-BalancedAccessible Open Space (don't excludeing wetlands, uplands (diversity Probability), but including parks, greenways, golf courses{separate})**

- Acres in public ownership (easements, or only fee simple, etc.)
- Acres in private ownership
- Amount of connectivity

**Maximize-BalanceAccessible Open Space (excluding wetlands, uplands, but including parks, greenways, golf courses)**

- Acres in public ownership (easements, or only fee simple, etc.)
- Acres in private ownership
- Amount of connectivity
- Connectivity et bike and pedestrian patus with similar patus in non-open space areas





One person seems to think this next part should be combined with the following part and it would look like this:

Maximize Accessible Open Space (~~excluding~~ ~~inclusivewetlands, uplands, but including parks, greenways, golf courses~~) 25% already set aside for wetlands

- Acres in public ownership (easements, or only fee simple, etc.)
- Acres in private ownership
- Amount of connectivity

....this would be combined with the Maximize Environmental Resource Value (Wetlands and Uplands) part.

Maximize ~~Balance~~ Accessible Open Space (~~excluding~~ ~~don't exclude wetlands, uplands, but including parks, greenways, golf courses~~) Include with Plan for Development

- Acres in public ownership (easements, or only fee simple, etc.)
- Acres in private ownership
- ~~• Amount of connectivity~~

?

Maximize Accessible Open Space (~~excluding~~ including wetlands, uplands, but including parks, greenways, golf courses)

- Acres in public ownership (easements, or only fee simple, etc.)
- Acres in private ownership
- ~~• Amount of connectivity~~
- Miles of linked open space

Maximize Accessible Open Space (~~excluding wetlands, uplands excluding preserves, but including parks, greenways, golf courses~~)

- Acres in public ownership (easements, or only fee simple, etc.)
- Acres in private ownership
- Amount of connectivity

Maximize Accessible Open Space (excluding wetlands, uplands, but including parks, greenways, golf courses)

- Acres in public ownership (easements, or only fee simple, etc.)
- Acres in private ownership
- Amount of connectivity

Maximize Accessible Open Space (excluding wetlands, uplands, but including parks, greenways, golf courses)

- Acres in public ownership (easements, or only fee simple, etc.)
- Acres in private ownership

- Amount of connectivity

**Maximize Environmental Resource Value (Wetlands and Uplands)**

- Acres of publicly owned conservation or preserve lands.
- Acres of privately owned conservation or preserve lands under conservation easements or less than fee simple acquisition for preserve purposes.
- Acres of open space lands, conservation lands or preserve lands providing buffering of the Loxahatchee Wildlife Refuge and key water resource areas.
- Connectivity of conservation or preserve lands.
- Acres of land managed for exotic vegetation.
- Acres of land available for environmental restoration

**Maximize Environmental Resource Value (Wetlands and Uplands)**

- Acres of publicly owned conservation or preserve lands.
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#### **Maximize Environmental Resource Value (Wetlands and Uplands)**

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- Connectivity of conservation or preserve lands.
- Acres of land managed for exotic vegetation.
- Acres of land available for environmental restoration

#### **Minimize Costs/Impacts to Taxpayers**

- Infrastructure improvement costs (itemized by comp plan elements, plus schools and law enforcement)
- Land acquisition costs (lease back considerations)

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- Infrastructure improvement costs (itemized by comp plan elements, plus schools and law enforcement)
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- Land acquisition costs (lease back considerations)

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- Infrastructure improvement costs (itemized by comp plan elements, plus schools and law enforcement)
- Land acquisition costs (lease back considerations)

#### **Minimize Costs/Impacts to Taxpayers**

- Infrastructure improvement costs (itemized by comp plan elements, plus schools and law enforcement)
- Land acquisition costs (lease back considerations)

#### **Assumptions**

- Lands in public ownership will remain in open space
- Private property rights will be maintained

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- Private property rights will be maintained

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**Assumptions**

- Lands in public ownership will remain in open space
- Private property rights will be maintained

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# **Agricultural Reserve Master Plan Interim Report No. 2**

## **Defining Objectives and Performance Criteria Measures**

Prepared for  
**Palm Beach County**  
**Planning, Zoning & Bidding Department**

October 1998

**CH2MHILL**

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# Introduction

As part of the development of a Master Development Plan (MDP) for the Agricultural Reserve in Palm Beach County, a six-step decision process is being used to help guide the process approach. The decision process, shown in Exhibit 2-1, depicts the six steps used and highlights the step *Develop Value Model and Formulate Alternatives*, the first part of which is described in this Interim Report. This step, defined as development of a value model, includes formulation of objectives, criteria, and performance measures.

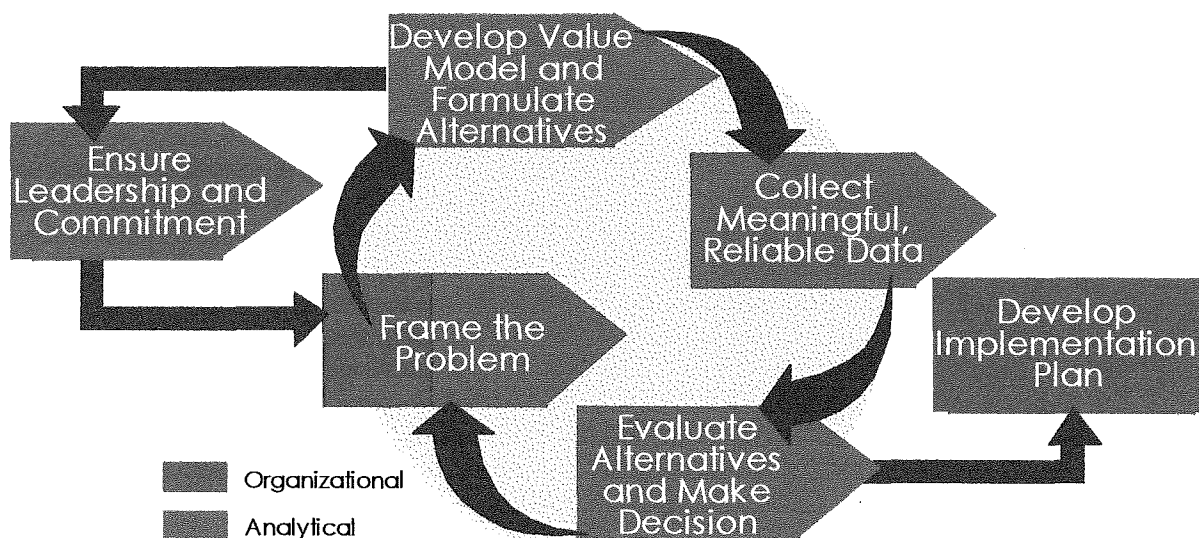


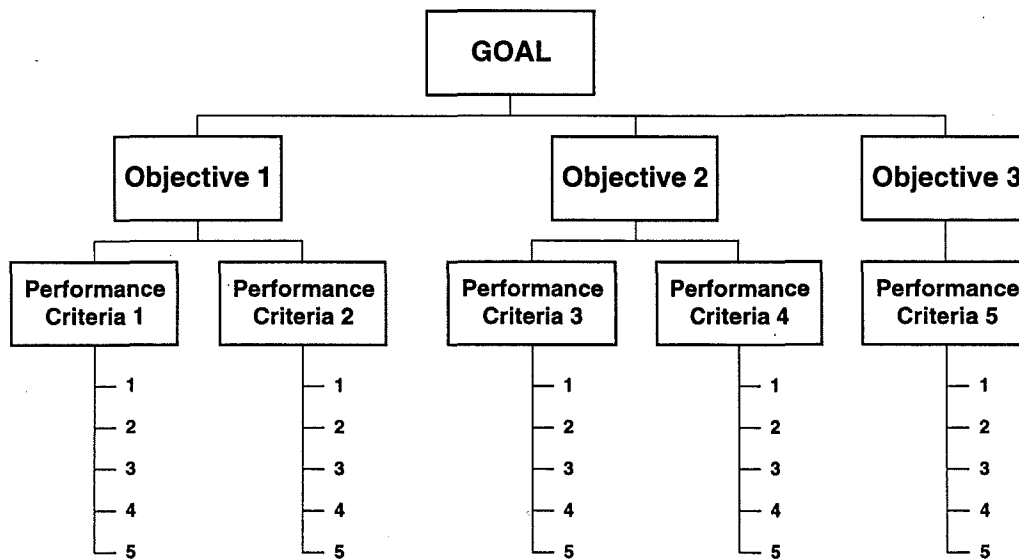
Exhibit 2-1  
Six-Step Decision Process

The purpose of developing objectives, criteria, and performance measures is to provide a framework for evaluating development alternatives that clearly reflect the purpose, values, and objectives of the project. After the objectives and criteria are developed, the next step is to weight the objectives and criteria in a manner that reflects their relative importance. In addition, performance measures are developed to provide a quantitative or qualitative method of scoring alternatives against each objective and criterion.

This Interim Report presents an introduction to the value model to be used to evaluate the land use alternatives, the objectives and criteria used in the value model, and a discussion of the relative weighting or importance of the objectives and criteria.

# Value Model

A value model provides a framework for defining the goals, objectives, and values as developed by the working group, using input from the various other groups. This value model starts by defining the overarching purpose or project goal/vision (i.e., what we're trying to achieve). Below the goal are the objectives, which generally represent the tangible, concrete issues or concerns of most importance. For each objective, a single or series of criteria (performance metrics) are developed to measure how well each objective accomplishes the overriding objective. This framework is defined as a value model and is depicted generically in Exhibit 2-2.



**EXHIBIT 2-2**  
Generic Value Model

As part of the value model development, a series of assumptions were formulated to provide a baseline for subsequent evaluation of the alternatives. These assumptions are considered the minimum criteria that must be in place when formulating the alternatives and were based on input from the Extended Working Group (EWG) (See Interim Report No.1 for makeup of EWG) and the public.

- Private property rights will be respected.
- Equestrian uses, nurseries, and specialty crops are the most feasible long-term agricultural uses in the Ag Reserve.
- Lands in public ownership will remain in open space.
- The amount of land that can be acquired with public funds will depend on the number of willing sellers and the cost of land.

- Concurrency requirements will be met.
- Design criteria for future development will minimize impacts to Lake Worth Drainage District (LWDD) canal system and the Lake Worth Lagoon.

Establishing these guiding principles was essential to developing alternatives and to determining the objectives, criteria, and performance measures. These assumptions were then compared with the input provided by the public at both the Ag Forum (August 27, 1998) and the first public workshop (September 19, 1998). Exhibit 2-3 illustrates the comparison of the assumptions with that input.

<b>Exhibit 2-3</b> Comparison of Master Plan Assumptions with Issues Raised by the Public		
<b>Assumptions</b>  What are considered givens?	<b>Issues Raised</b>	
	<b>Ag Forum (August 27, 1998)</b>	<b>Public Workshop—Top Ten Issues<sup>1</sup> (September 19, 1998)</b>
Private property rights will be respected	Provide Equal Treatment	2. There needs to be consideration of property rights, fair values for land, and equal treatment with the rest of the County.
	Provide Fair Value	
	Increase Land Values	
	Equal development rights throughout the County	
	Fair Market Conditions	
	Fairness to Owners	
Equestrian uses, nurseries, and specialty crops are the most feasible agricultural uses in the Ag Reserve	Farming While Profitable	7. Policy makers must realize that national policies affect farm enterprises.
Lands in public ownership will remain in open space		
Concurrency requirements will be met		4. Development needs to meet requirements for concurrency and schools.
The amount of land that can be acquired with public funds will depend on the number of willing sellers and the cost of land	Fair Market Conditions	
	Let Economics Determine Use	
Design criteria for future development will minimize impacts to LWDD canal system and the Lake Worth Lagoon	Conserve Water	
<sup>1</sup> Top ten issues represent those at the first public workshop. Numbers represent the ranked order of the issue based on frequency mentioned by the public (see Interim Deliverable No. 1)		

# Objectives and Criteria

## Goal and Objectives

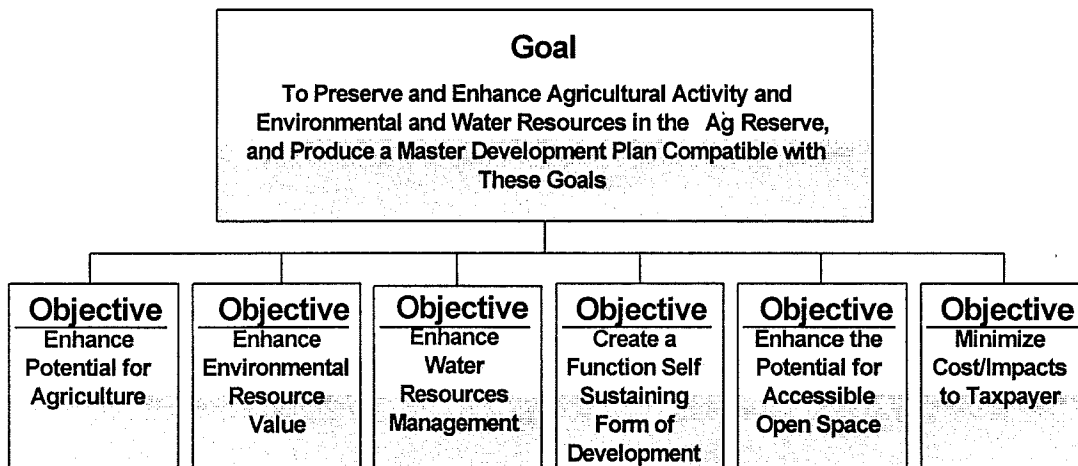
At the inception of this project, the Palm Beach County Board of County Commissioners (BCC) established the purpose of the master plan, which provided the basis for developing an overall goal statement for the value model.

*To Preserve and Enhance Agricultural Activity and Environmental and Water Resources in the Ag Reserve, and Produce a Master Development Plan Compatible with These Goals*

Also, the various groups who helped to provide input to the project developed a set of objectives or values that they felt were important to maintain throughout the project. The objectives, along with results from the public opinion survey and workshop, were used to formulate a set of primary objectives that define the Working Group's (WG's) and stakeholders' most important issues. These primary objectives are as follows:

- Enhance Potential for Agriculture, including Equestrian Uses
- Enhance Environmental Resource Value
- Enhance Water Management Capability
- Create a Functional, Self-Sustaining Form of Development
- Enhance Accessible Open Space
- Minimize Cost/Impacts to County-wide Taxpayers

Exhibit 2-4 shows the relationship between the value model goal and the six principal objectives.



**Exhibit 2-4**  
Value Model Developed for the Ag Reserve Master Plan

These objectives represent what is important about the Ag Reserve, and will be used measure the performance of each of the three land use alternatives. Unfortunately, it is almost impossible to achieve all of these objectives fully, and thus trade-offs need to be made when deciding on which alternative should proceed with continued masterplanning. In other words, no matter what alternative appears to meet the most objectives, it will never satisfy each one 100 percent.

## Criteria and Performance Measures

Performance criteria are needed to provide a quantitative measurement of how well the objectives are being met. Performance measures define how well a given project meets the program goals and objectives. The range of measurement is called a scale and may be unique to each criterion, depending on the item being measured.

For the Ag Reserve, specific criteria and performance measures were used to quantify the performance of each of the three alternatives against the six objectives. Exhibit 2-5 illustrates the criteria used for each of the objectives that were developed by the WG with assistance from the EWG.

Because of the conceptual nature of the three land use alternatives, many of the criteria could only be evaluated subjectively and could not be practically evaluated with a quantitative performance measure. The importance of whether the scale is quantitative or qualitative is not a key factor at this conceptual stage of the evaluation, as the intent of the value model is to evaluate the relative performance of each of the alternatives against each other.

### Exhibit 2-5

#### Criteria Used to Describe Objectives

Objective	Criterion
Enhance Potential for Agriculture	Potential Area in Agriculture Potential for Equestrian Trails
Enhance Environmental Resource Value	Amount of Preserve or Conservation Land Potential for Connectivity
Enhance Water Management Capability	Enhance Water Resources Area Amount of Impervious Area
Create a Functional, Self-Sustaining Form of Development	External Trip Generation Amount of Vistas Mix of Uses
Enhance Open Space	Accessible Recreational Open Space
Minimize Costs/Impacts to Taxpayers	Infrastructure and Services Costs Public Land Acquisition

As shown in Exhibit 2-6, performance measures can use numerical scales when a criterion is directly quantifiable or a verbal scale when metrics must incorporate qualitative assessments and/or expert opinion. The criteria of *Vistas Along Major Roads* and *Public Land Acquisition Cost* are examples of criteria that have numerical scales, measuring quantifiable

items such as percentage of road length that is a vista or dollars. However, *Potential for Connection of Conservation or Preserve Areas* is a criterion that is not easily quantifiable. For that criterion, a verbal scale is chosen based on the degree of connectivity, ranging from high to low.

#### Exhibit 2-6

##### Performance Measures Used to Evaluate Alternatives

Objective	Criterion	Performance Measure (Scale)
Enhance Potential for Agriculture	Potential Area in Agriculture	Degree (Minimum to Maximum)
	Potential for Equestrian Trails	Degree (Minimum to Maximum)
Enhance Environmental Resource Value	Amount of Preserve or Conservation Land	Degree (Minimum to Maximum)
	Potential for Connectivity	Degree (Minimum to Maximum)
Enhance Water Management Capability	Enhance Water Resources Area	Degree (Minimum to Maximum)
	Amount of Impervious Area	Percentage (3-15%)
Create a Functional, Self-Sustaining Form of Development	External Trip Generation	Number of Trips (10,000-17,000)
	Amount of Vistas	Percentage of Vistas Along Major Roads (0-100%)
	Mix of Uses	Number of Uses (1-6)
Enhance Open Space	Accessible Recreational Open Space	Degree (Minimum to Maximum)
Minimize Costs/Impacts to Taxpayers	Infrastructure and Services Costs	Degree of Cost per Person (Minimum to Maximum)
	Public Land Acquisition	Total Cost (\$5 to \$101 million)

A more detailed overview and definitions of the objectives, criteria, and performance measures used to evaluate the alternatives are provided in the following paragraphs.

### Enhance Potential for Agriculture

This objective was derived from the purpose statement as established by the BCC, and focuses on creating an MDP that offers the opportunity to enhance or preserve agriculture. Although previous studies and discussions with landowners and farmers in the Ag Reserve indicate that row crop farming (e.g., tomatoes, peppers, etc.) is probably not feasible in the long-term in the Ag Reserve (i.e., due to NAFTA and development pressures), other uses do have potential. These other uses, many of which are already in the Ag Reserve, include equestrian, nurseries and greenhouse crops, and specialty crops such as leechee nuts.

Criteria used to measure this objective include examining the potential of each of the land use alternatives to accommodate agriculture in general and to support equestrian trails. The potential is measured the amount of open space shown on the plans, the aggregated size of open space, and the ability of the open space to integrate with existing agricultural uses. Both of these criteria were assigned a relative subjective scoring of minimum (worst) to maximum (best).

### Enhance Environmental Resource Value

Enhancing environmental resource value is another objective that was derived from the purpose established by the BCC. This purpose of this objective was to examine opportunities in the Ag Reserve to preserve key, environmentally sensitive lands as

identified by the Palm Beach County Department of Environmental Resources Management (DERM).

There were essentially three parcels of environmentally sensitive land identified by the County DERM in the Ag Reserve, and the criteria used to measure this objective included the potential to preserve these parcels and the ability to provide connection between them. The connection relates to the amount of open space directly between the three parcels that would more easily allow habitat to migrate between the parcels, and not necessarily be isolated from each other. Similar to the above objective, these criteria are assigned a relative scoring of minimum (worst) to maximum (best).

### **Enhance Water Management Capability**

As with the first two objectives, enhancing water management capability is from the purpose statement and focuses on the water management features of each of the three plans. Water management features include the water preserve areas and reservoirs identified by the South Florida Water Management District (SFWMD) and the U.S. Army Corps of Engineers (USACOE) in their Restudy efforts, along with additional areas for wellfields and constructed wetlands to be used by the County water utilities department. The latter features were recommended as part of the Integrated Water Resources Strategy for Southeastern Palm Beach County, another cooperative effort between the County and SFWMD.

Enhancing water management capability is defined by two criteria: potential to enhance water resource areas and amount of impervious area. The first criterion relates to the ability of each of the plans to incorporate water management features proposed by the District and Palm Beach County Water Utilities. These features include:

- water preserve areas (WPA) on the west side of SR7/US441 designed to buffer the Loxahatchee National Wildlife Preserve from the encroaching development,
- a reservoir for storage located within the footprint of the WPAs,
- additional water supply wells, and
- constructed wetlands used to treat and reuse wastewater from the County's Southern Region Water Reclamation Facility located just east of the Florida Turnpike near the Ag Reserve.

As with the above two objectives, this criterion is assigned a relative scoring of minimum (worst) to maximum (best).

The second criterion is designed to examine the potential water quality impacts on the existing LWDD drainage system and relates to the estimated amount of imperviousness shown on each of the plans. The measure ranges from 3 percent (best) to 15 percent (worst), with the higher percentage representing an empirical amount of imperviousness that generally causes a marked degradation of surface water runoff quality.

### **Create a Functional, Self-Sustaining Form of Development**

During the first public workshop, it became clear that in addition to the three preceding criteria, additional attention needed to be paid to the form of development that will

eventually occur in the Ag Reserve. As a result, the fourth objective - Create a Functional, Self-Sustaining Form of Development, was developed. This objective focuses on the functionality of the development under each alternative, and how well it can serve itself with respect to employment centers, shopping, recreation, and services provided by the County to reduce the impact on surrounding areas.

Three criteria were developed to measure the three land use alternatives against this objective. The first criterion treats the entire Ag Reserve as an individual Planned Unit Development and examines the estimated external trip generation (peak hour) based on estimated number of units. Approximately 1 peak hour trip is generated for each unit of development, and based on this estimate, the range of additional trips created under each alternative ranges from 10,000 (best) to 17,000 (worst) peak hour trips.

A second criterion measures the amount of vistas expected to be created from each of the three alternatives. The criterion assumes that a vista would occur along the major north-south roads (i.e., SR7/US441 and Lyons Road) where no development or reservoir (due to the height of the levees) is present. The scores for this criterion is defined as a percentage of the length of these north-south roads and range from zero (worst) to 100 percent.

Finally, the third criterion describes the mix of uses expected to occur within each of the three alternatives and would include residential, commercial, office, institutional, recreational, and open space. The range of scores to be used to measure this criterion is from one (worst) to six (best) uses.

## **Enhance Open Space**

Enhancing open space was another objective developed from the first public workshop, and is designed to examine each alternative's ability to enhance open space potential. Open space is defined as publicly accessible open space such as public golf courses and parks, and excludes other features such as agriculture, environmentally sensitive lands, and water management areas, all of which are covered under the first three objectives.

## **Minimize Costs/Impacts to Taxpayers**

Another objective, that was brought up at the first public workshop, was to minimize costs/impacts to Countywide taxpayers. The types of costs or impacts considered include infrastructure and services costs, as well as public acquisition of land through a bond issue.

To fully evaluate the first criterion, *Infrastructure and Services Costs*, more information needs to be gathered and analyses completed as part of the phase II masterplanning. However, relative estimates of the magnitude of the infrastructure and services costs can still be made. Therefore, the evaluation of the infrastructure and services cost was focused on the relative impacts on the County's tax revenues and costs of the alternative plans for the Ag Reserve. This analysis evaluated the costs and revenues to the County under the alternative plans once they have been fully implemented, not during the intermediate periods. The analysis was generally focused on impacts on general governmental activities that are funded on a Countywide basis. Thus, schools, parks, the sheriff's office, roads and streets, and fire and rescue activities are evaluated, as were property tax revenues and impact fee revenues. Activities that are funded through an enterprise fund (water, sewer, and garbage) were not included in the analysis, as they are intended to be self-sufficient and thus would not place a burden on customers outside the Ag Reserve. In addition, most of the infrastructure capital



investment to serve these customers was assumed to be contributed by developers. Drainage costs were also not considered, as the drainage system to serve this area has already been constructed, and any additional needs arising from planned developments would be paid for by the developers. The relative scale for this criterion ranged from minimum impact/cost (best) to maximum impact/cost (worst).

The second criterion was simply the estimated cost to the County to purchase land in the Ag Reserve. The public land purchase costs associated with this criterion included not only the estimated \$100 million bond issued considered for buying land in the Ag Reserve, but also the County's estimated proportionate share of the land acquisition required to accommodate the proposed reservoir. The range of scores are from \$5 million (best) to \$101 million (worst).

## Comparison of Objectives with Public Input

Similar to the assumptions developed as part of this project, the six objectives were compared to the input provided by the public at both the Ag Forum and at the first Public Workshop. Exhibit 2-7 illustrates the comparison between the objectives and the issues raised by the public, and show that along with the assumptions, public input was respected and considered in the alternatives evaluation process.

<b>Exhibit 2-7</b> Comparison of the Ag Reserve Master Plan Objectives with Issues Raised by the Public		
<b>Objectives</b> What are we trying to achieve?	<b>Issues Raised</b>	
	<b>Ag Forum (August 27, 1998)</b>	<b>Public Workshop—Top Ten Issues<sup>1</sup></b> (September 19, 1998)
B. Enhance Potential for Agriculture (including nurseries) and Equestrian Use	Farming While Profitable	6. Agriculture needs to be protected based upon market demand and type (i.e., cropland, nurseries, equestrian uses)
		10. Housing and farm practices require adequate land buffers for protection of health and safety.
C. Enhance Environmental Resource Value (wetlands and uplands)		8. Environmentally sensitive areas need to be protected.
D. Enhance Water Management Capability	Conserve Water	3. Water resources need to be protected both for supply and water quality issues (e.g., prevent salt water intrusion)
A. Create a Functional, Self-Sustaining Form of Development	Planned, Balanced Development	1. There needs to be adequate comprehensive planning for future development.
	Self-Supportive Development	
	Creative, Planned Land Use	
	(Create) Well-Planned Communities	
	Balance Quality Development	
	Create Town Centers	
	Allow More Development	
	Increase TDR's West of 441	
	Provide Fair Density	

**Exhibit 2-7**

Comparison of the Ag Reserve Master Plan Objectives with Issues Raised by the Public

<b>Objectives What are we trying to achieve?</b>	<b>Issues Raised</b>	
	<b>Ag Forum (August 27, 1998)</b>	<b>Public Workshop—Top Ten Issues<sup>1</sup> (September 19, 1998)</b>
E. Enhance Accessible Open Space (including parks and public golf courses)	Provide Reasonable Green Space Consider Golf Courses, Lakes and Parks as Open Space	9. Open space needs to be preserved for parks, public access, and views of open space.
F. Minimize costs/impacts to Countywide taxpayers	Provide tax break, redo current system	5. The long-term cost of infrastructure and services and overall cost to taxpayers needs to be considered.
<sup>1</sup> Top ten issues represent those at the first public workshop. Numbers represent the ranked order of the issue based on frequency mentioned by the public (see Interim Deliverable No. 1)		

# Objectives and Criteria Weighting

After the value model has been defined with the appropriate goal, objectives, and performance criteria, the model is weighted to determine the relative importance of competing objectives and criteria. The weighting exercise helps establish the trade-offs that will need to be made in making the decision on the final alternative. Weighting also provides a means to assess the benefits of each strategy.

## Objective Weighting

The MDP value structure was weighted by members of the Land Use Advisory Board (LUAB), EWG, and general public who attended the second public workshop. A swing weighting technique was utilized. All of the performance objectives were listed on a voting sheet. The sheet contained the objective name, criteria, and the limits of the scale used to measure the criteria. A ranking sheet was distributed to each LUAB and EWG member and each participant in the second public workshop with the following instructions:

- Determine which objective is most important.
- That objective is assigned a value of 100 points.
- The remaining objectives are evaluated for order of importance and assigned a value between 0-100 relative to the most important; i.e. if the next criterion is half as important as the first, it is assigned 50 points.

A total of 78 individuals participated in the weighting exercise from the three groups - 13 from the LUAB, 15 from the EWG and 50 from the Public Workshop participants.

## Results of the Weighting

The LUAB and EWG members and Public Workshop Participants entered the weights on the provided ranking sheets. The sheets were collected and entered into an Excel spreadsheet that performed a statistical analysis of the objective weights from the participants. The results of the overall weighting from all three groups are displayed in Exhibit 2-8.

**Exhibit 2-8**  
Objective Weighting Results

Objective	Weights (0-100)			Average of All Participants
	LUAB	EWG	Public	
Create a Functional, Self-Sustaining Form of Development	90.8	85.2	78.8	82.9
Enhance Potential for Agricultural and Equestrian Use	74.1	57.7	40.9	50.2
Enhance Environmental Resources Value	79.8	66.1	51.6	59.8
Enhance Water Management Capability	83.4	76.7	57.3	66.2
Enhance Accessible Open Space	78.6	60.4	54.4	60.2
Minimize Costs/Impacts to Countywide Taxpayers	61.5	71.6	56.0	60.6

Exhibit 2-9 depicts these results graphically and indicates that although the absolute scoring of the three groups are different, the relative distribution of the scoring between the objectives were very similar. Appendix 2A contains the comparison of the weighting from the three groups, including averages, maximums, minimums, and standard deviations. The average scores for each of the groups are provided in the appendix as well.

The weights represent the average score of each objective. To ensure that equal representation was given to all parties involved in the weighting process, the average weights from all participants were used in the value model.

### **Distribution of Weights**

After tabulation of the weights from the three groups, the WG examined the distribution of scoring within the three groups to determine the amount of consensus there was on each objective. As was expected, some of the objectives, such as Creating a Functional, Self-Sustaining Form of Development and Enhancing Water Management Capability, were fairly consistent on the weighting within each of the three groups.

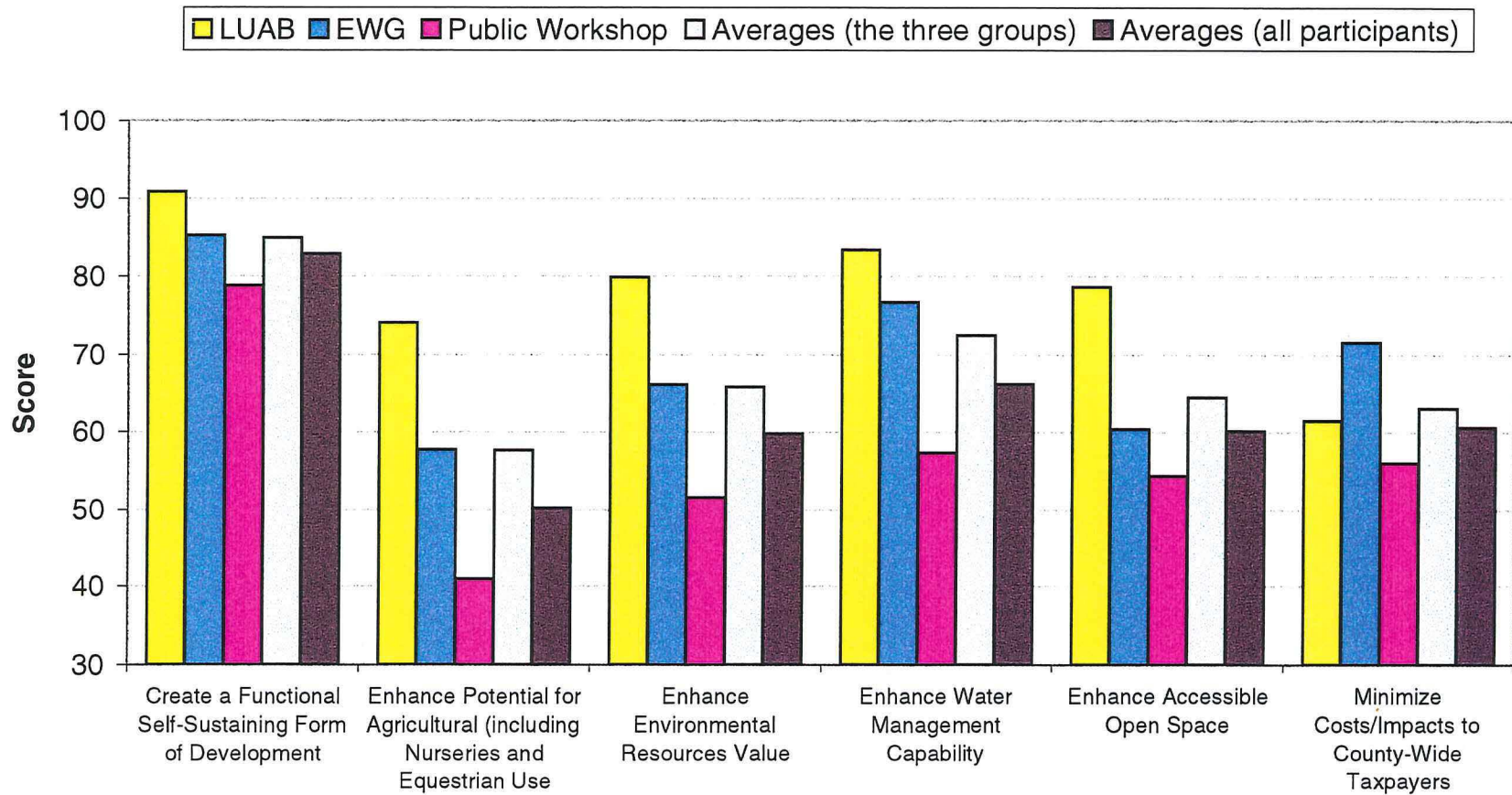
Exhibit 2-10 depicts an example of the distribution of the scoring on the Enhancing Water Management Capability objective. The graphic reveals the number of respondents in the EWG who weighted this objective within the various range of weights (e.g., 0-10, 11-20, etc.). More than 93 percent of the EWG weighted this objective greater than 50, while 80 percent weighted it greater than 70, which indicates that there was general consensus among the group that this was a relatively important objective.

On the other hand, with some of the other objectives, there was a greater disparity of weighting with some of the other objectives. As an example, Exhibit 2-11 depicts the broad distribution of weighting by the EWG for the Enhance Environmental Resource Value objective, indicating that there is a broader opinion of the importance of this objective. Appendix 2B contains the remainder of the distribution graphs for the six objectives as weighted by the three different groups. Although there was a broad distribution of weighting both between and within the three groups on several of the objectives, by examining the relative differences between the six objectives, there appears to be a close correlation between the three groups (see Exhibit 2-9). All three groups weighted Create a Functional, Self-Sustaining Form of Development and Enhance Water Management Capability as the most important and second most important objectives, respectively. The other four objectives were slightly different in weighted importance, but were still relatively close.

### **Weighting Normalization**

The average weights obtained from the three groups for the six objectives were normalized to represent a relative percentage of importance. The relative importance is determined by dividing each of the average objective weights (0-100) by the total of all the objective weights. Weights are then translated into a percentage (0% - 100%), which represents the importance of each objective relative to each other.

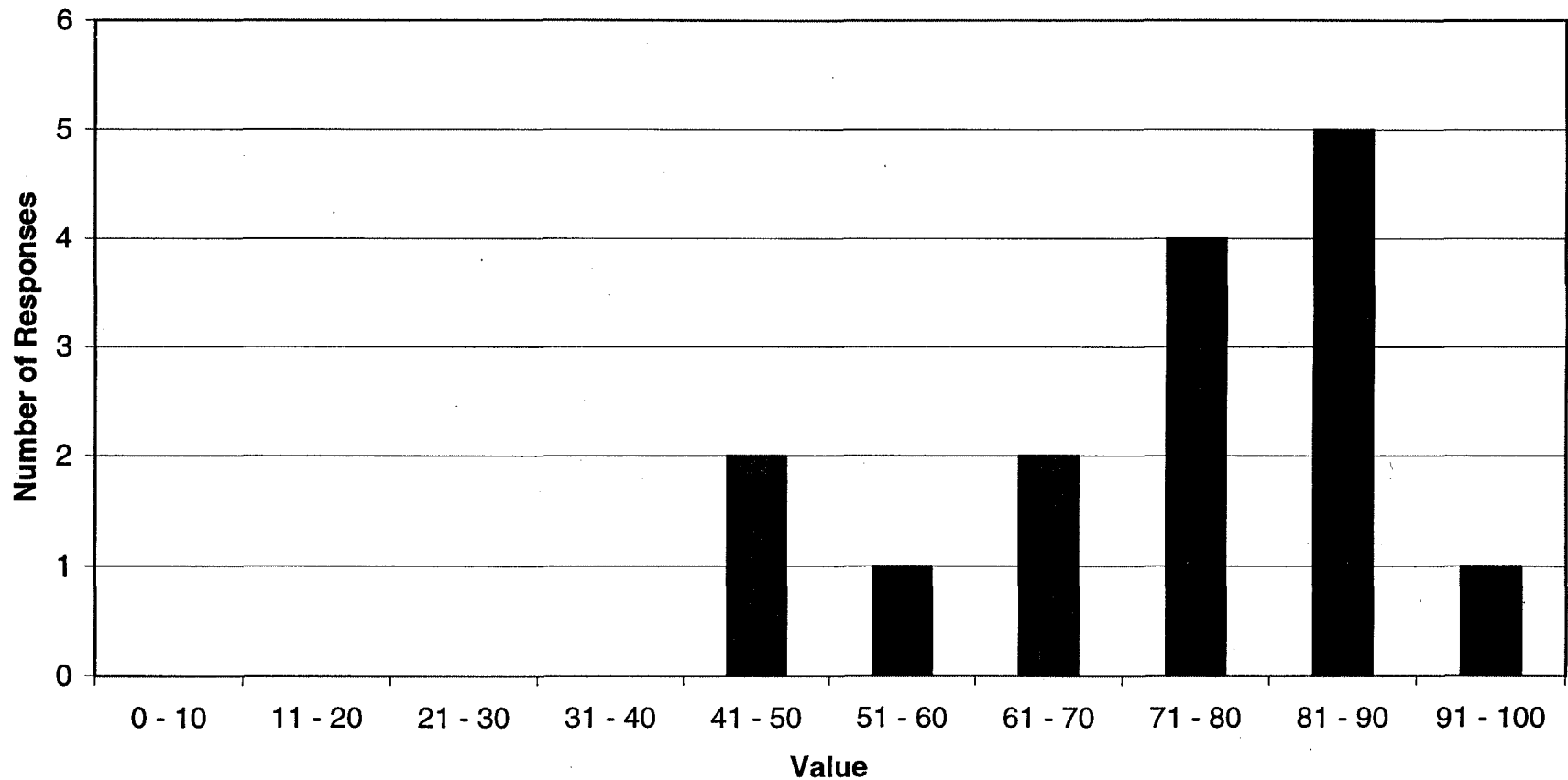
Exhibit 2-12 depicts the results of the normalization, which indicates that the most important objective is Create a Functional, Self-Sustaining Form of Development. The remaining five objectives all scored similarly in level of importance.



**EXHIBIT 2-9**  
**Comparison of Objective Weights**



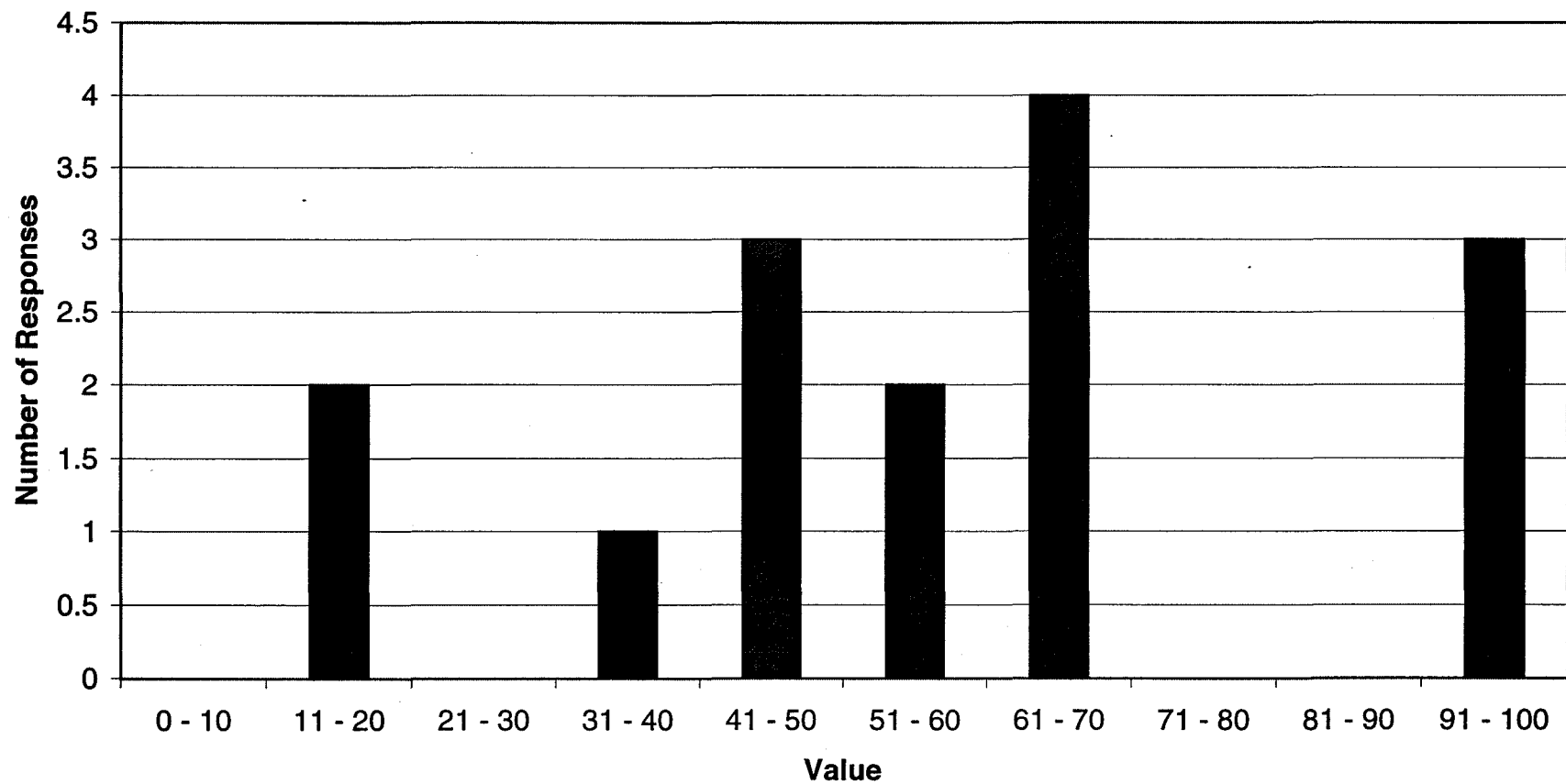
**Palm Beach County**  
**Agricultural Reserve Master Plan**



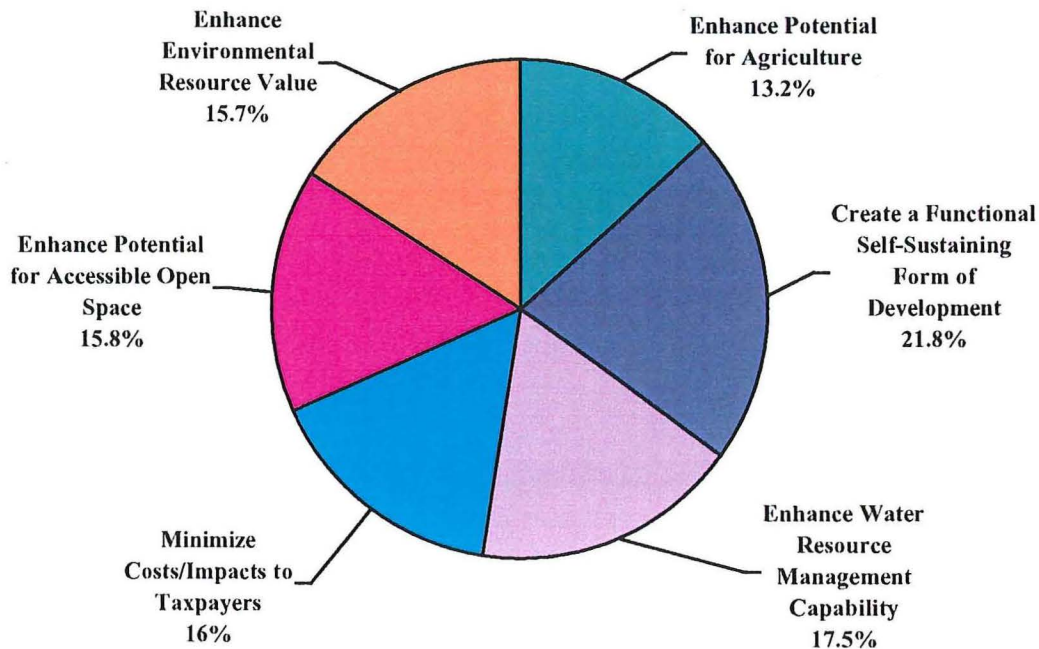
**EXHIBIT 2-10**  
**Distribution of EWG Weights for**  
**Objective - Enhance Water Management Capability**



**Palm Beach County**  
**Agricultural Reserve Master Plan**



**EXHIBIT 2-11**  
**Distribution of EWG Weights for**  
**Objective - Enhance Accessible Open Space**



**Exhibit 2-12**  
Normalization of Objective Weights

This means that when the three conceptual land use alternatives are evaluated, approximately 21 percent of the evaluation will be based on the objective Create a Functional, Self-Sustaining Form of Development, while 16 percent of our evaluation will be based on the objective Minimize Costs/Impacts to Taxpayers.

## Criteria Weighting

After the objectives were weighed, the EWG repeated the weighting process with the individual criterion used in scoring the alternatives. The most important criterion is assigned a score of 100, and the remaining criteria are assigned a weight relative to the most important. Criteria for each objective were scored independently from the others. The results of the criteria weighting are shown in the following Exhibit 2-13.

Appendix 2C contains the actual criteria weights provided by the EWG, along with the averages and distribution of weighting graphically depicted.

Similarly to the objective weights, the criteria weights were also normalized to provide a relative weighting between the individual criteria. Exhibit 2-13 also shows the relative normalized weighting of each of the criteria. These data, along with the weighted objectives, were used in the value model to evaluate the three conceptual land use alternatives.

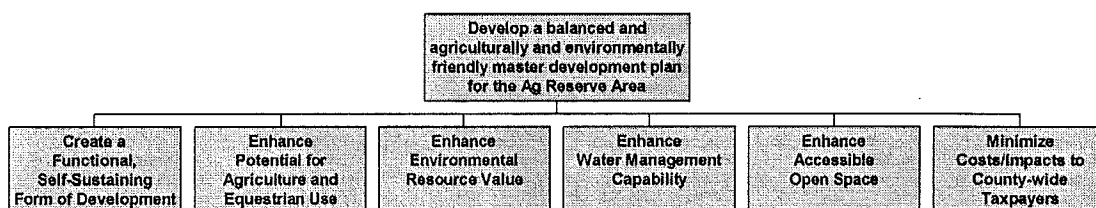


**Exhibit 2-13****EWG Criteria Weighting Results**

<b>Objective</b>	<b>Criteria</b>	<b>EWG Weight (1-100)</b>	<b>Normalized Weight</b>
Create a Functional, Self-Sustaining Form of Development	External Trip Generation	71.3	30.7%
	Vistas along Major Roads	67.3	29.0%
	Potential Mix of Uses	93.6	40.3%
Enhance Potential for Agricultural and Equestrian Uses	Potential for Area in Agriculture	72.3	45.7%
	Potential for Equestrian Trails	86.0	54.3%
Enhance Environmental Resources Value	Amount of Conservation or Preserve Area	94.0	55.9%
	Potential for Connectivity	74.0	44.1%
Enhance Water Management Capability	Potential for Enhancing Water Resources	100.0	61.4%
	Percent of Imperviousness	62.9	38.6%
Enhance Accessible Open Space	Potential for Accessible Recreational Open Space	100.0	100%
Minimize Costs/Impacts to County-wide Taxpayers	Infrastructure and Services Cost	86.7	53.7%
	Public Land Acquisition Cost	74.7	46.3%

# Summary and Conclusions

As part of the development of Master Development Plan for the Agricultural Reserve Area, a six-step decision process is being used to help guide the project team and the WG. This interim report describes the first part of the step titled *Develop Value Model and Formulate Alternatives*. The value model was developed through a series of WG and EWG meetings, a public opinion survey, and a public workshop. Insight gained from these efforts allowed the complete development of a value model that reflects the goal, objectives, and values expressed by the public. Exhibit 2-14 illustrates the value model to be used for subsequent evaluation of the conceptual land use alternatives.



**Exhibit 2-14**

Value Model for Evaluating the Ag Reserve Land Use Alternatives

The value model is made up of a goal statement, a series of objectives that must be met to satisfy the goal, and a set of performance criteria that are used to better define the objectives and allow more accurate evaluation of the proposed alternatives.

The next step in development of the value model was to assign criteria and performance measures to each of the objectives. These criteria and performance measures will be used to evaluate the proposed alternatives developed as part of this project. Some criteria are better quantified with a numerical scale, while others lend themselves more to qualitative scales that are based on professional judgement.

A set of assumptions was developed that reflected the minimum criteria that must be considered during development of the alternatives. These assumptions were developed with input from the EWG and public and include the following:

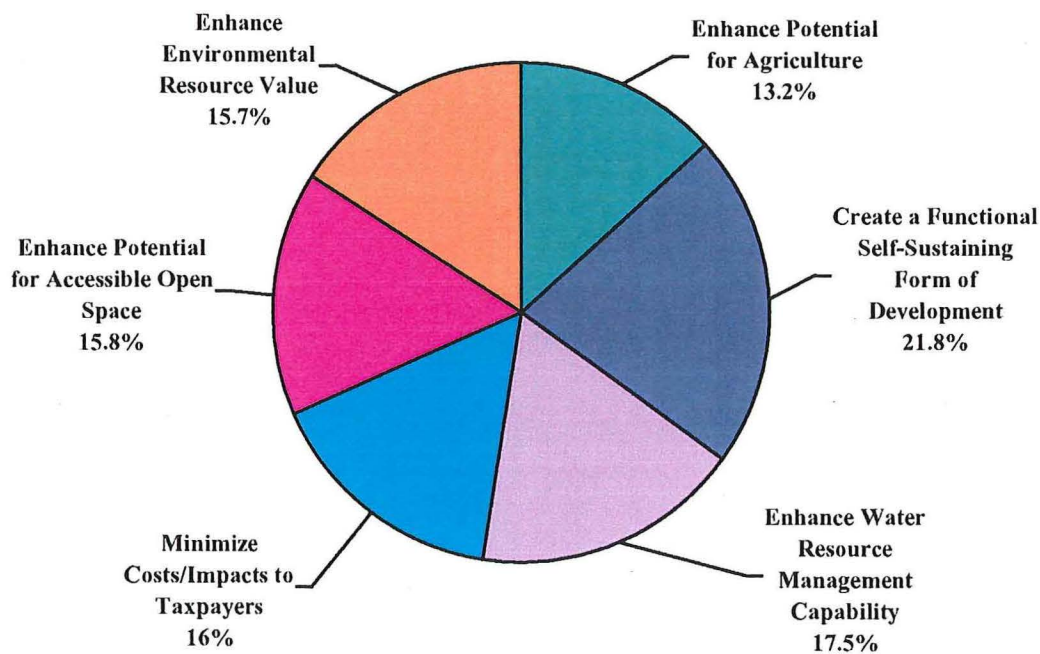
- Private property rights will be respected.
- Equestrian uses, nurseries, and specialty crops are the most feasible long-term agricultural uses in the Ag Reserve.
- The amount of land that can be acquired with public funds will depend on the cost of the land and the number of willing sellers.
- Lands in public ownership will remain in open space.
- Concurrency requirements will be met.

- Design criteria for future development will minimize impacts to LWDD canal system and the Lake Worth Lagoon.

Both the six objectives and assumptions were compared to the actual input provided by the public during both the Ag Forum and the first public workshop, and showed that public input was respected and considered in the alternatives evaluation process.

Each of the performance objectives and criteria shown in the value model were then ranked according to its relative importance to the EWG, LUAB, and general public. Each participant (EWG, LUAB, and second public workshop) was given the opportunity to rank the importance of the objectives relative to each other using a swing weighting technique. Swing weighting was accomplished by scoring the most important criteria with a 100 and then scoring the remaining objectives relative to the most important one (e.g., 20, 50, 65, etc.). The scoring from all participants was compiled and averaged and then presented to the EWG for review. The various criteria for each of the objectives were subsequently scored in a similar fashion by the EWG. Because of project time constraints, the results from a single criteria weighting process were used in the value model.

The final weighted ranking of the objectives is depicted in Exhibit 2-15, which shows that Create a Functional, Self-Sustaining Form of Development is by far the most important to all the stakeholders, while the remaining five objectives are of relatively similar importance.



**Exhibit 2-15**  
Normalization of Objective Weights

The criteria used to define the objectives were also weighted by the EWG, and combined with the objectives, will be used in the value model to evaluate the final three conceptual land use alternatives.

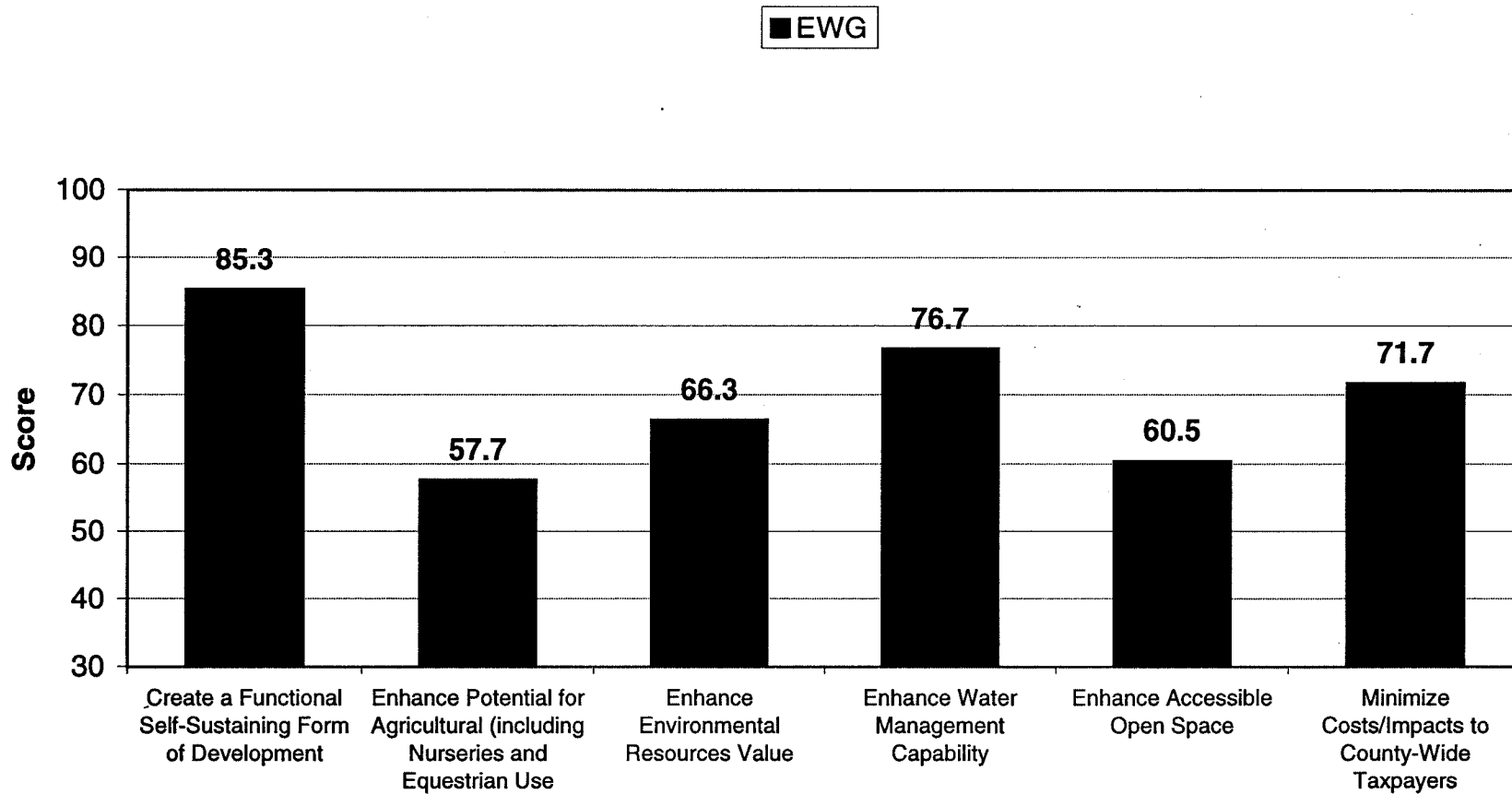
APPENDIX 2A

## **Results of Weighting Exercise and Comparison of the Three Groups**

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**Comparison Table - LUAB, EWG and Public Workshop Attendees**

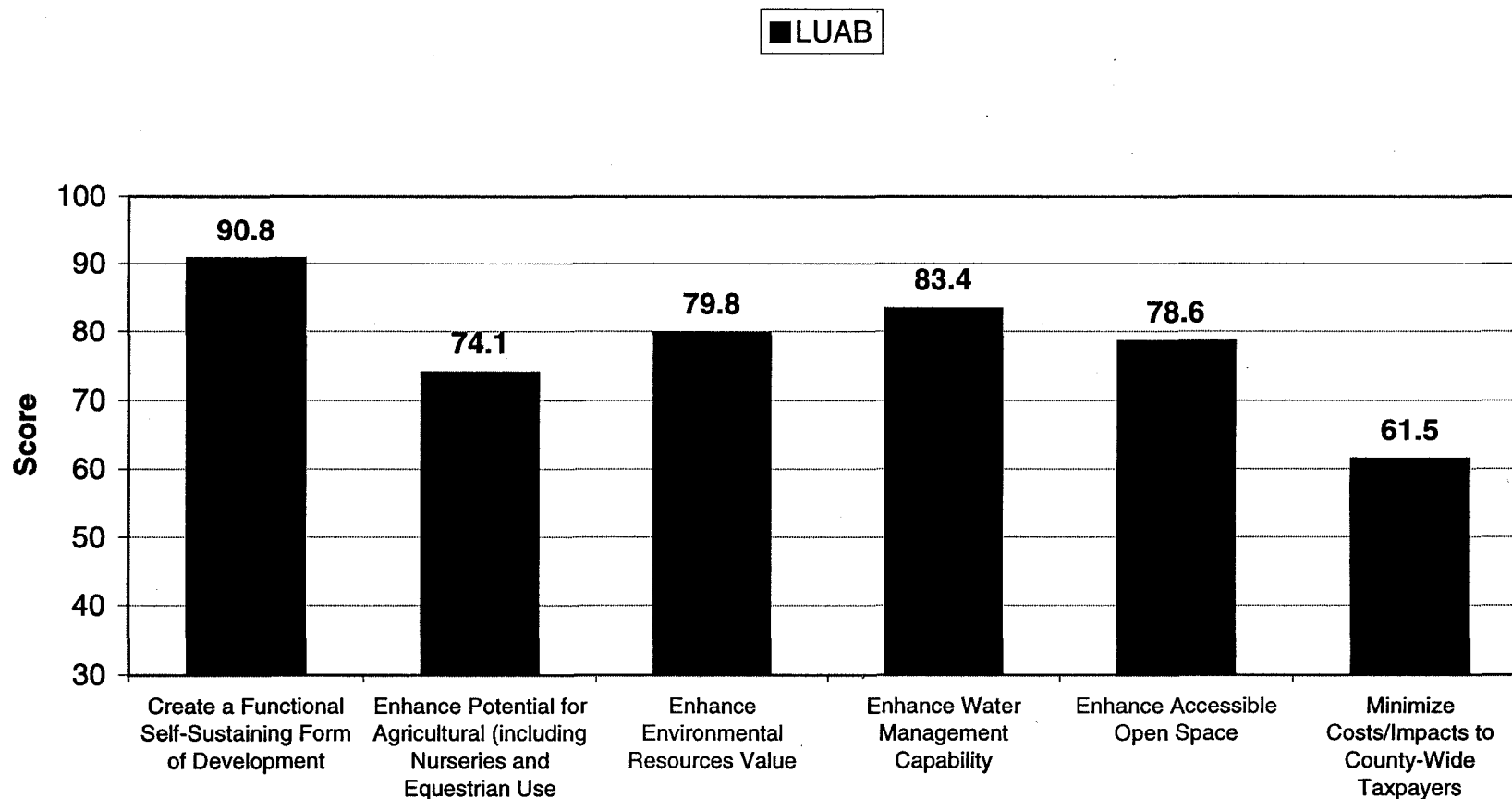
<b>Statistics for Each Group Polled</b>	<b>Create a Functional Self-Sustaining Form of Development</b>	<b>Enhance Potential for Agricultural (including Nurseries and Equestrian Use</b>	<b>Enhance Environmental Resources Value</b>	<b>Enhance Water Management Capability</b>	<b>Enhance Accessible Open Space</b>	<b>Minimize Costs/Impacts to County-Wide Taxpayers</b>
<b>Averages</b>						
LUAB	90.8	74.1	79.8	83.4	78.6	61.5
EWG	85.2	57.7	66.1	76.7	60.4	71.6
Public Workshop	78.8	40.9	51.6	57.3	54.4	56.0
<b>Averages (the three groups)</b>	<b>84.9</b>	<b>57.6</b>	<b>65.8</b>	<b>72.5</b>	<b>64.5</b>	<b>63.0</b>
<b>Averages (all participants)</b>	<b>82.9</b>	<b>50.2</b>	<b>59.8</b>	<b>66.2</b>	<b>60.2</b>	<b>60.6</b>
<b>Maximum</b>						
LUAB	100	100	100	100	96	97
EWG	100	95	100	95	97	100
Public Workshop						
<b>Averages</b>	<b>100</b>	<b>97.5</b>	<b>100</b>	<b>97.5</b>	<b>96.5</b>	<b>98.5</b>
<b>Minimum</b>						
LUAB	50	25	25	25	50	20
EWG	30	20	30	45	15	10
Public Workshop						
<b>Averages</b>	<b>40</b>	<b>22.5</b>	<b>27.5</b>	<b>35</b>	<b>32.5</b>	<b>15</b>
<b>Standard Deviation</b>						
LUAB	13.7	28.0	25.9	22.4	14.4	24.4
EWG	21.4	24.5	18.9	15.7	24.6	25.0
Public Workshop						
<b>Averages</b>	<b>17.5</b>	<b>26.2</b>	<b>22.4</b>	<b>19.0</b>	<b>19.5</b>	<b>24.7</b>



**FIGURE XX**  
**Average Objective Weighting for the EWG**



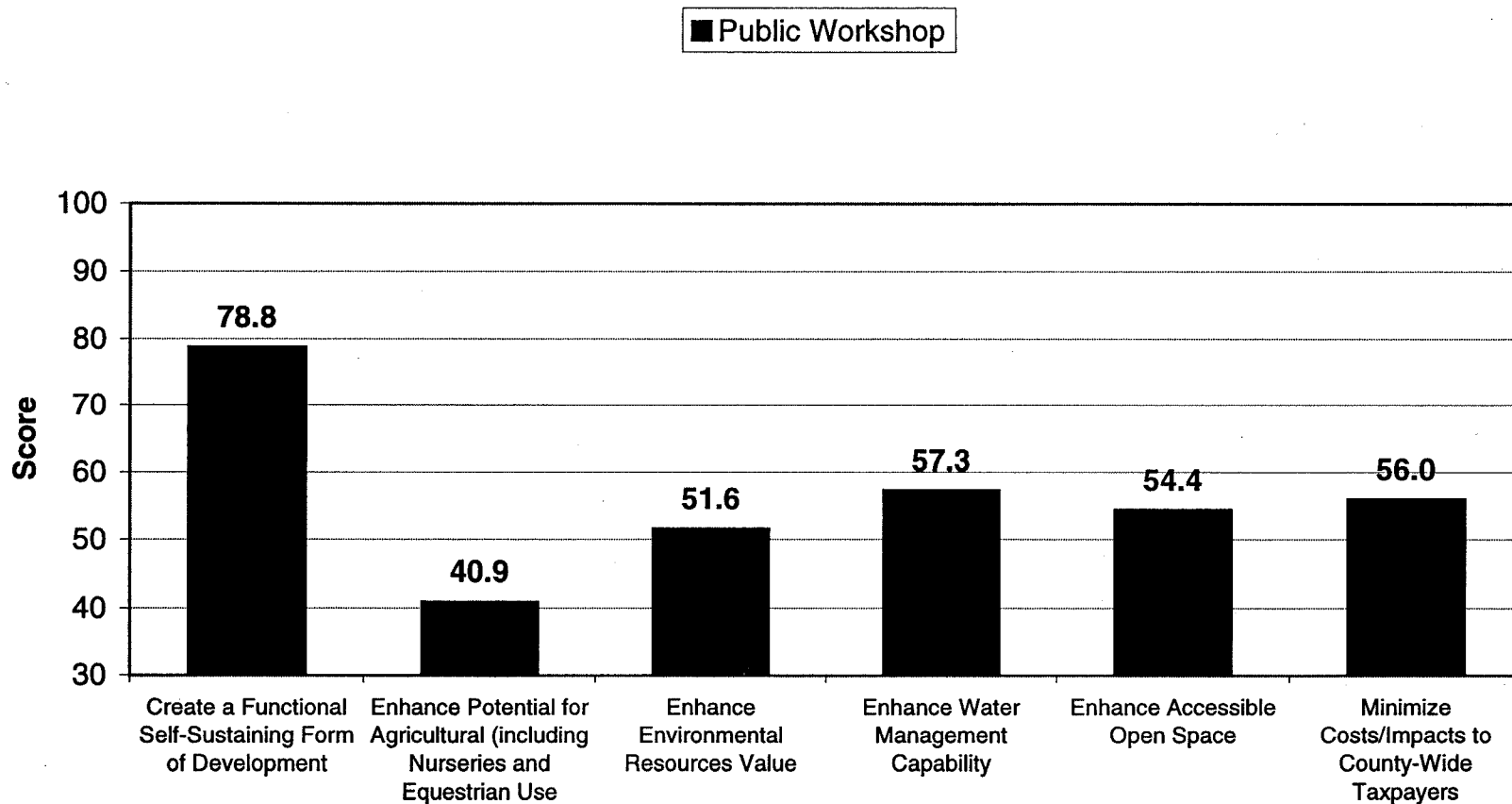
**Agricultural Reserve Master Plan  
Objective Weighting**



**FIGURE XX**  
Average Objective Weighting for the LUAB



**Agricultural Reserve Master Plan  
Objective Weighting**

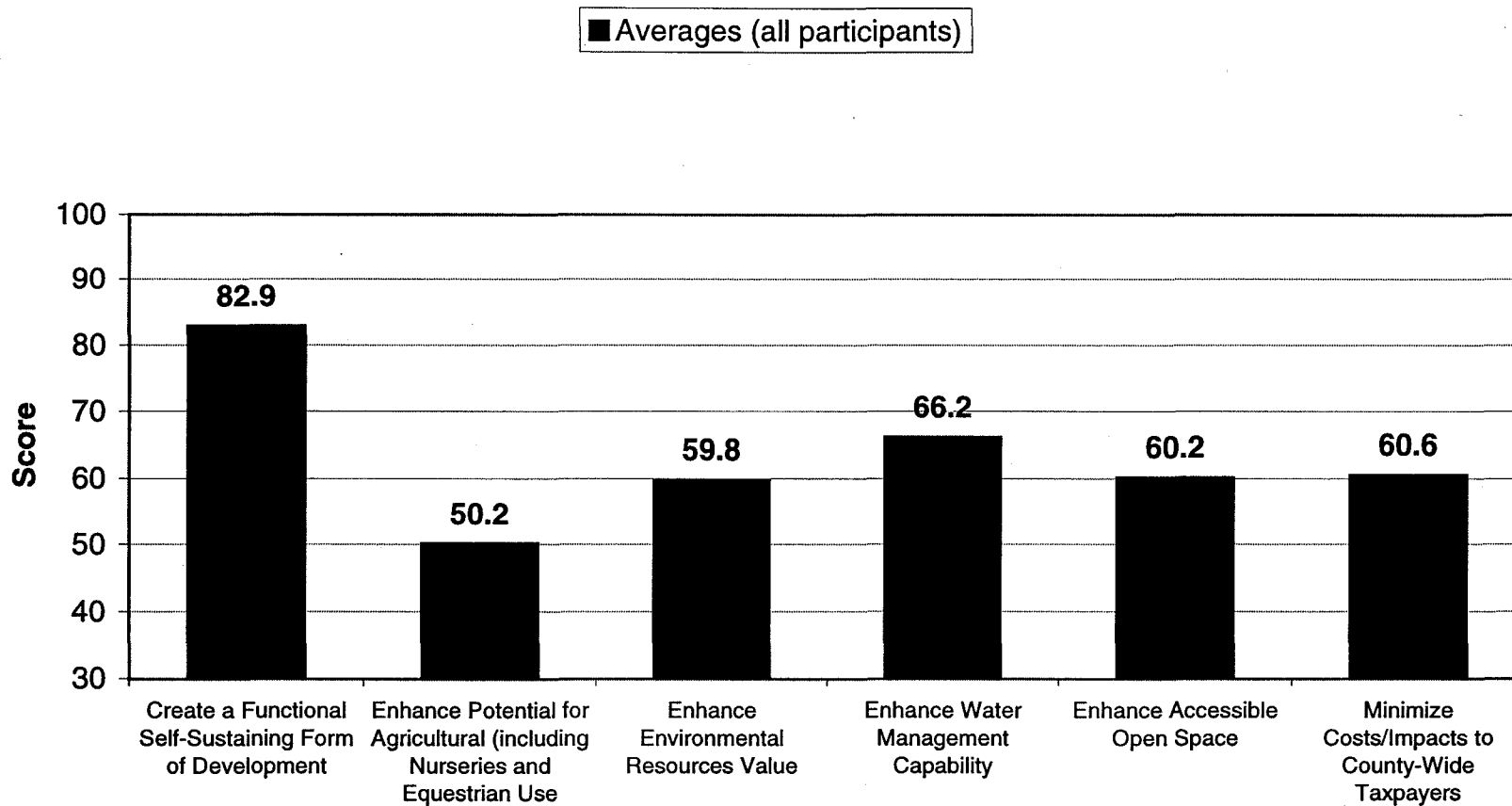


**FIGURE XX**  
**Average Objective Weighting for the Public Workshop**



**Agricultural Reserve Master Plan  
Objective Weighting**

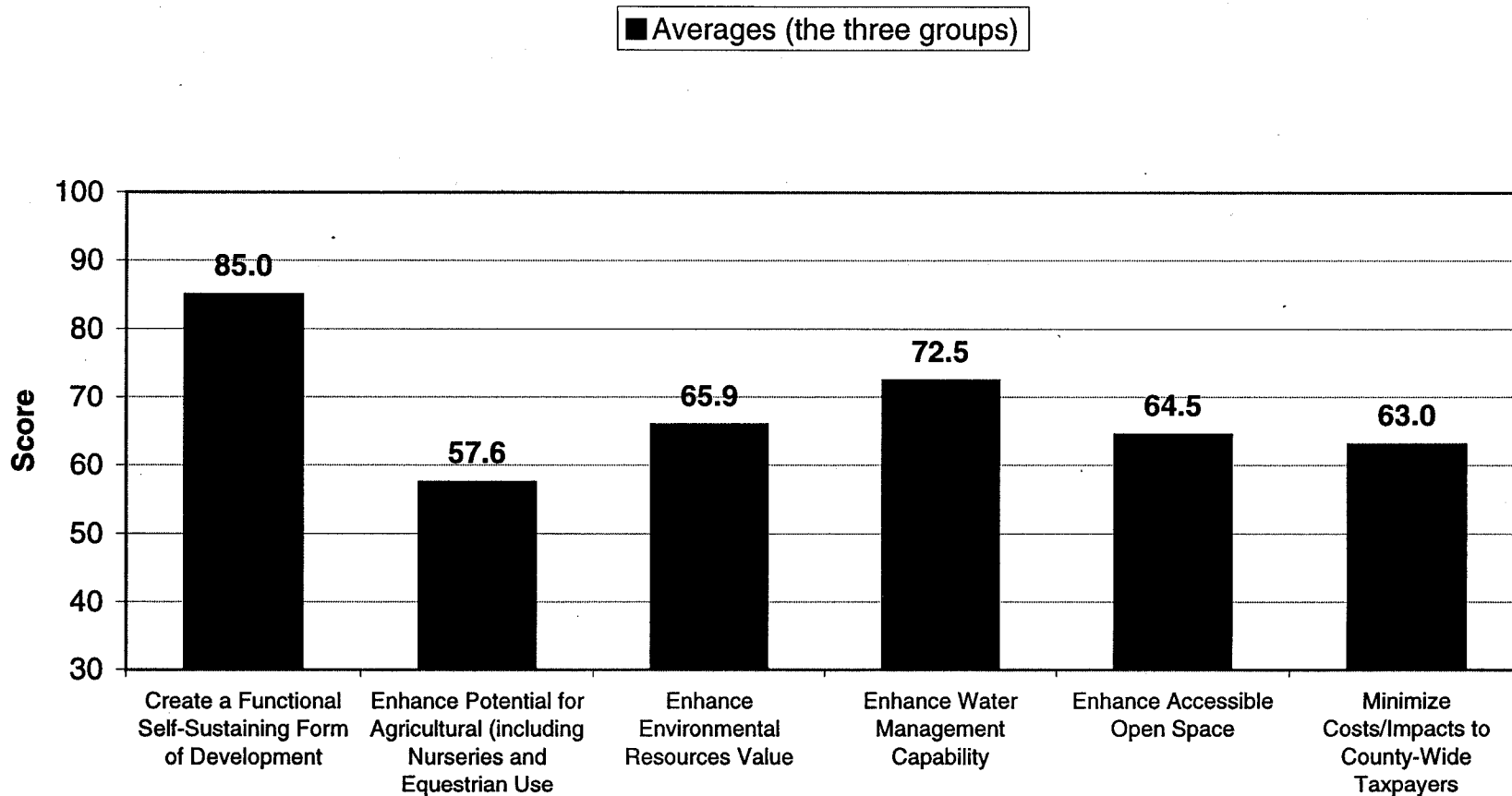




**FIGURE XX**  
Average Objective Weighting for All Participants



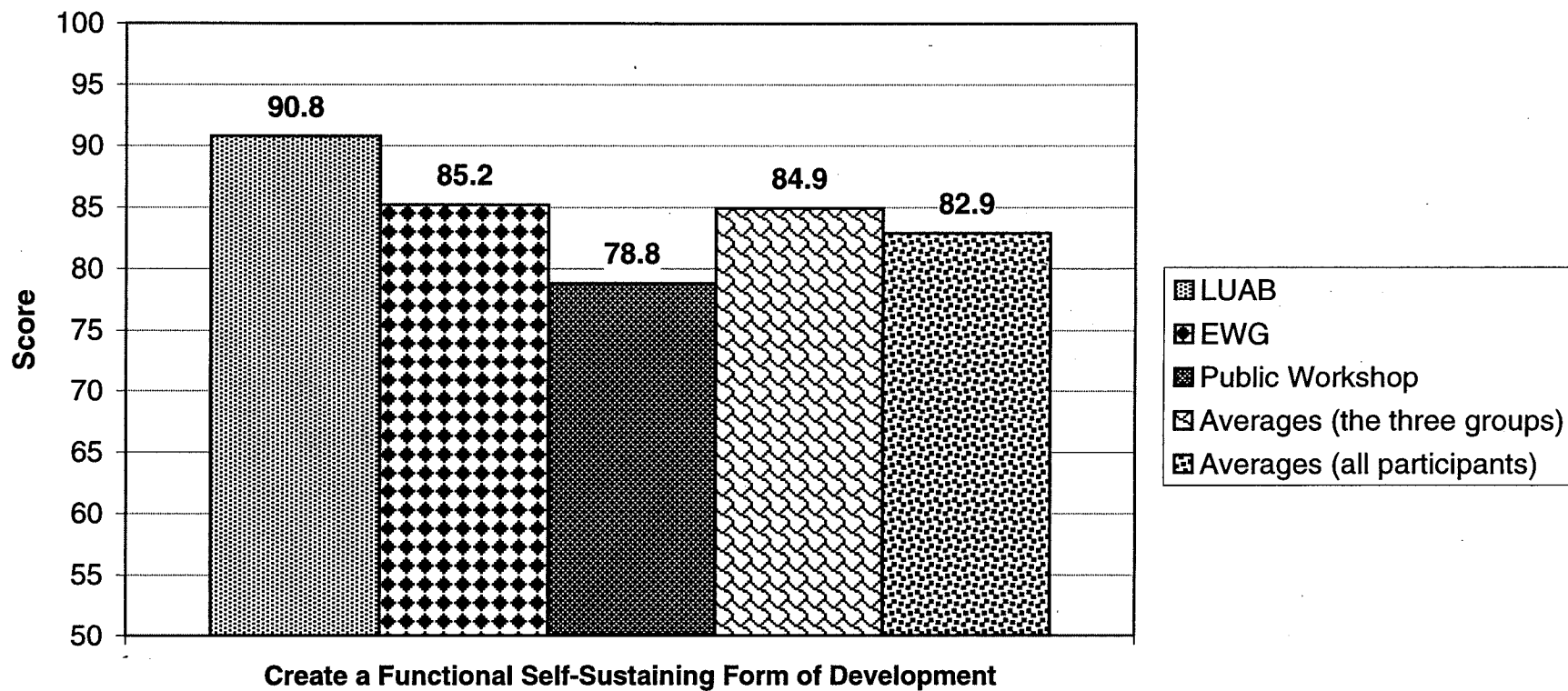
**Agricultural Reserve Master Plan  
Objective Weighting**



**FIGURE XX**  
Average Objective Weighting for the Three Groups



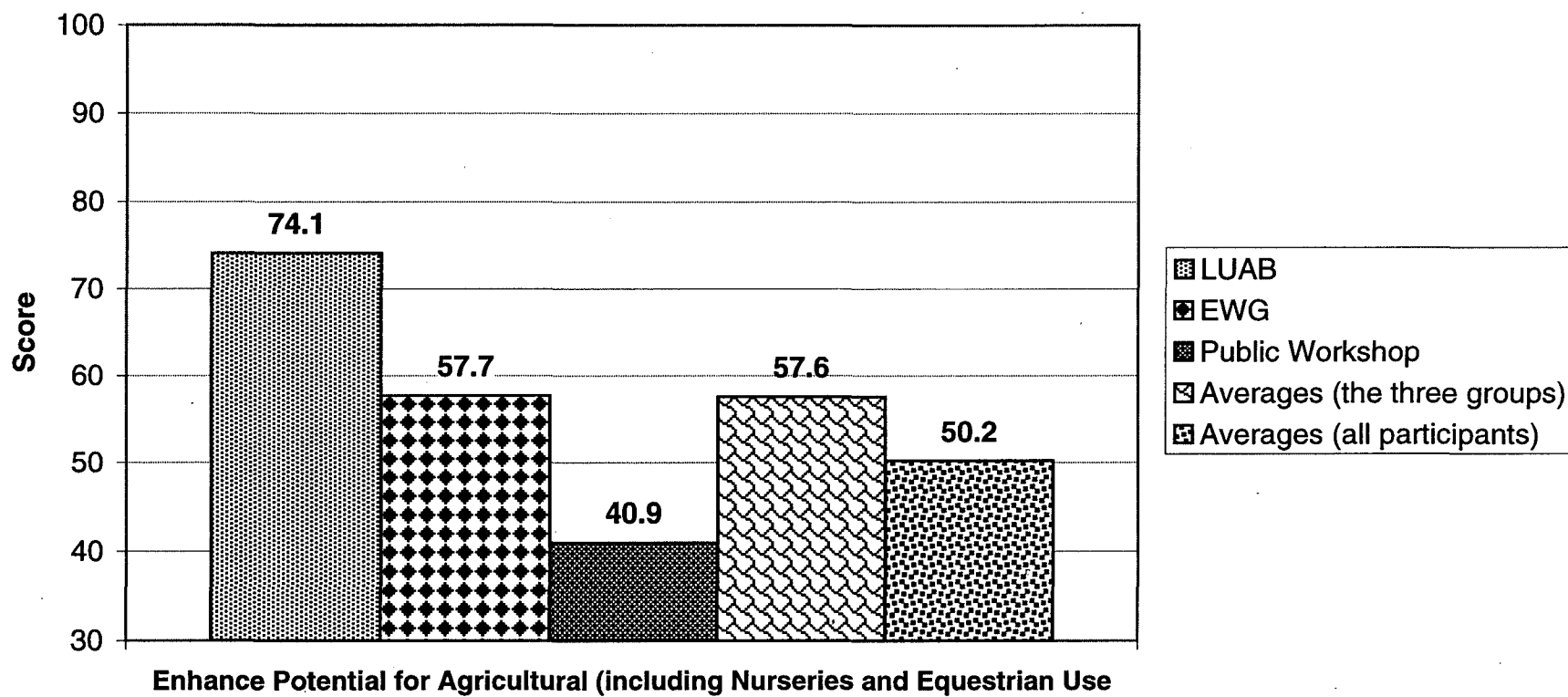
**Agricultural Reserve Master Plan  
Objective Weighting**



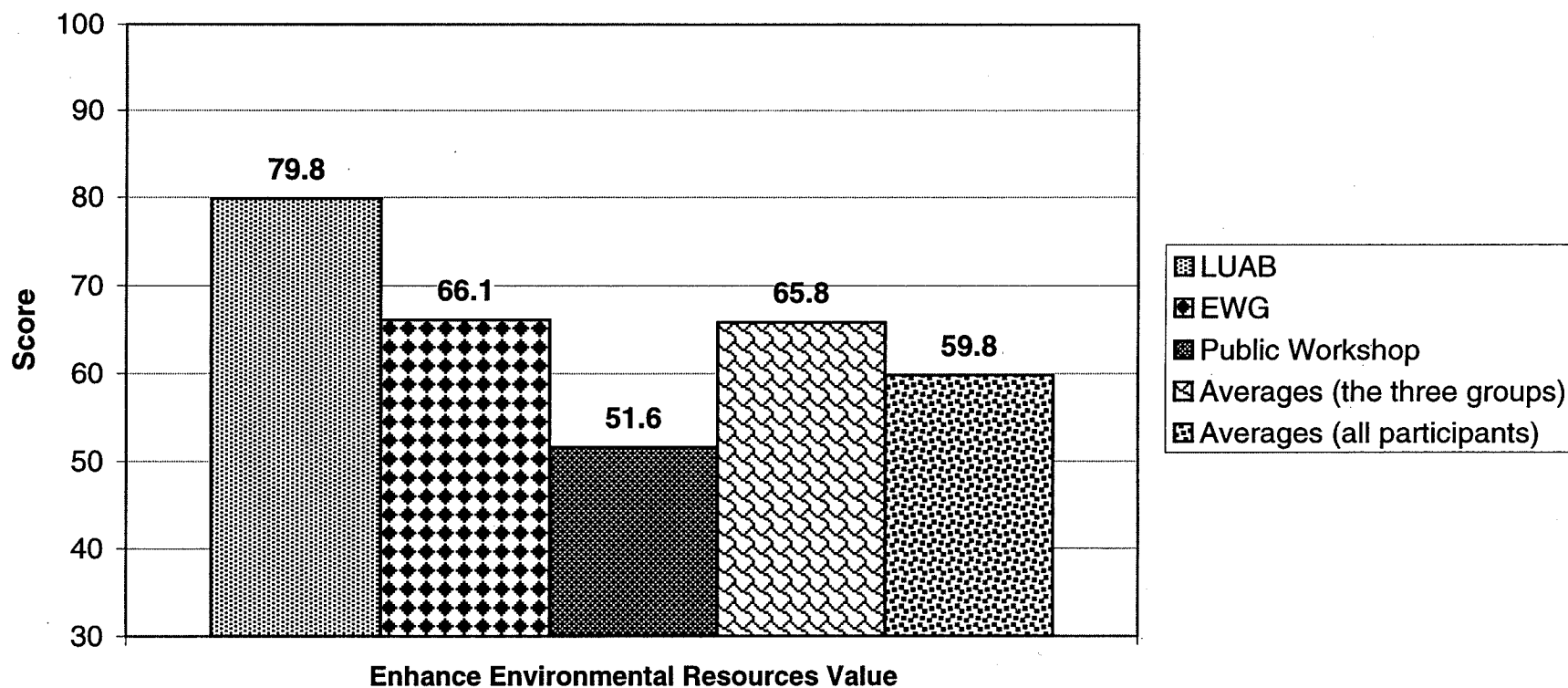
**FIGURE XX**  
**Create a Functional Self Sustaining Form of Development**



**Agricultural Reserve Master Plan  
 Comparison of Objective Weights**



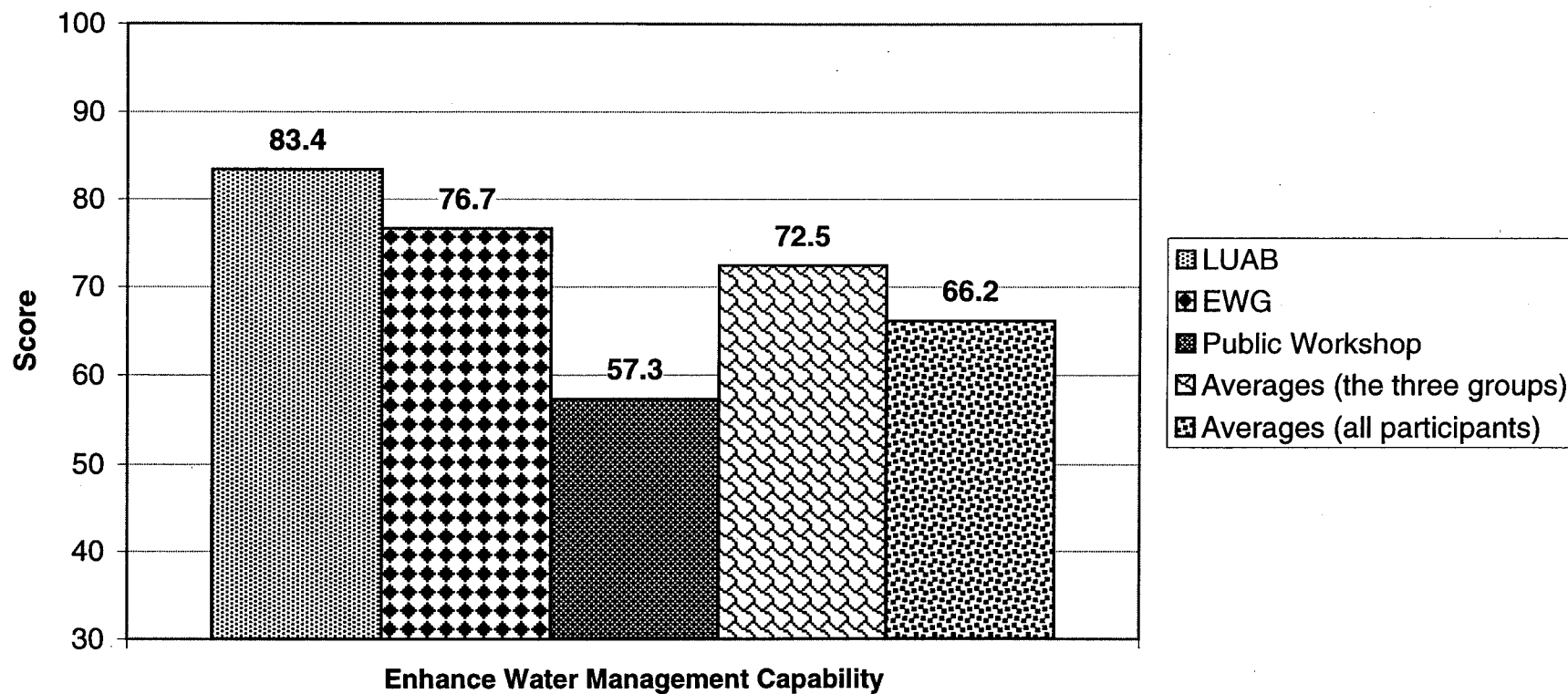
**FIGURE XX**  
**Enhance Potential for Agriculture**



**FIGURE XX**  
Enhance Environmental Resource Value



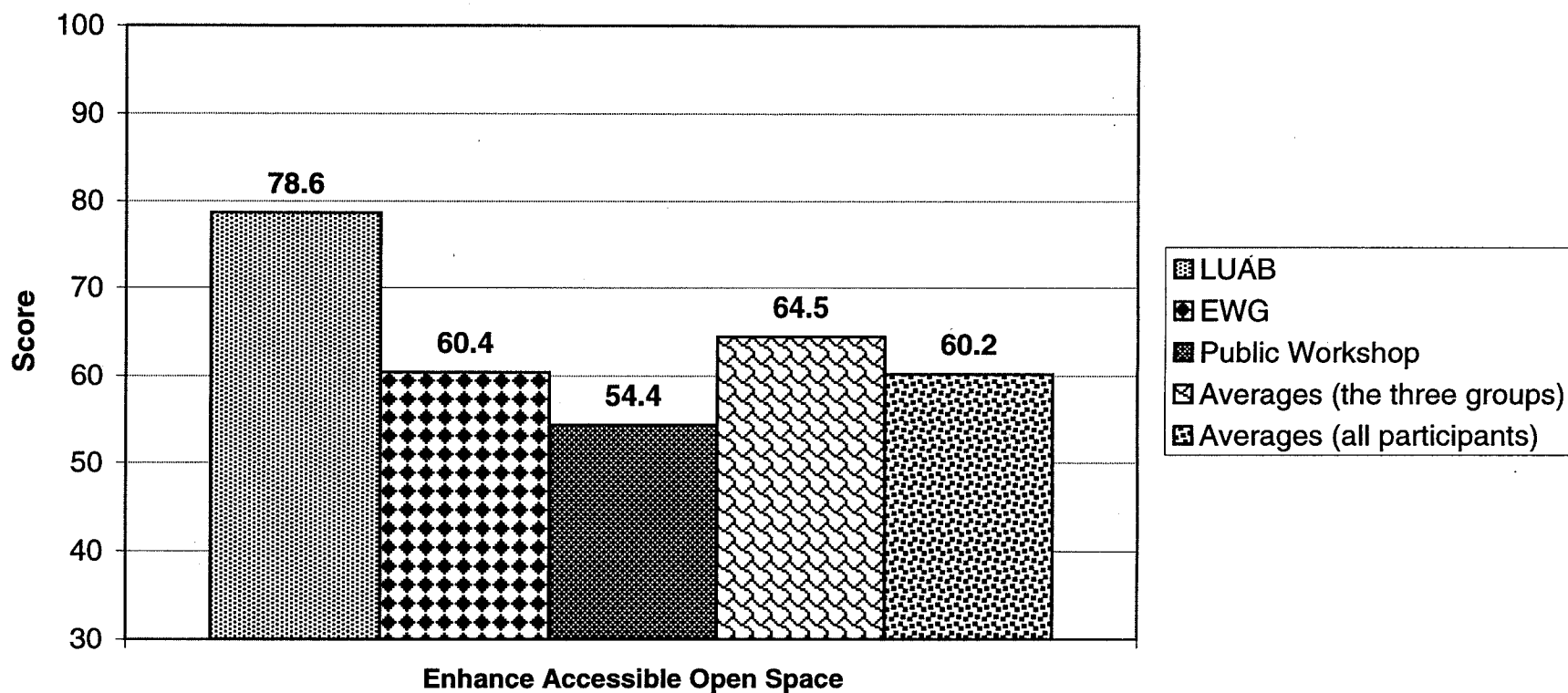
**Agricultural Reserve Master Plan  
Comparison of Objective Weights**



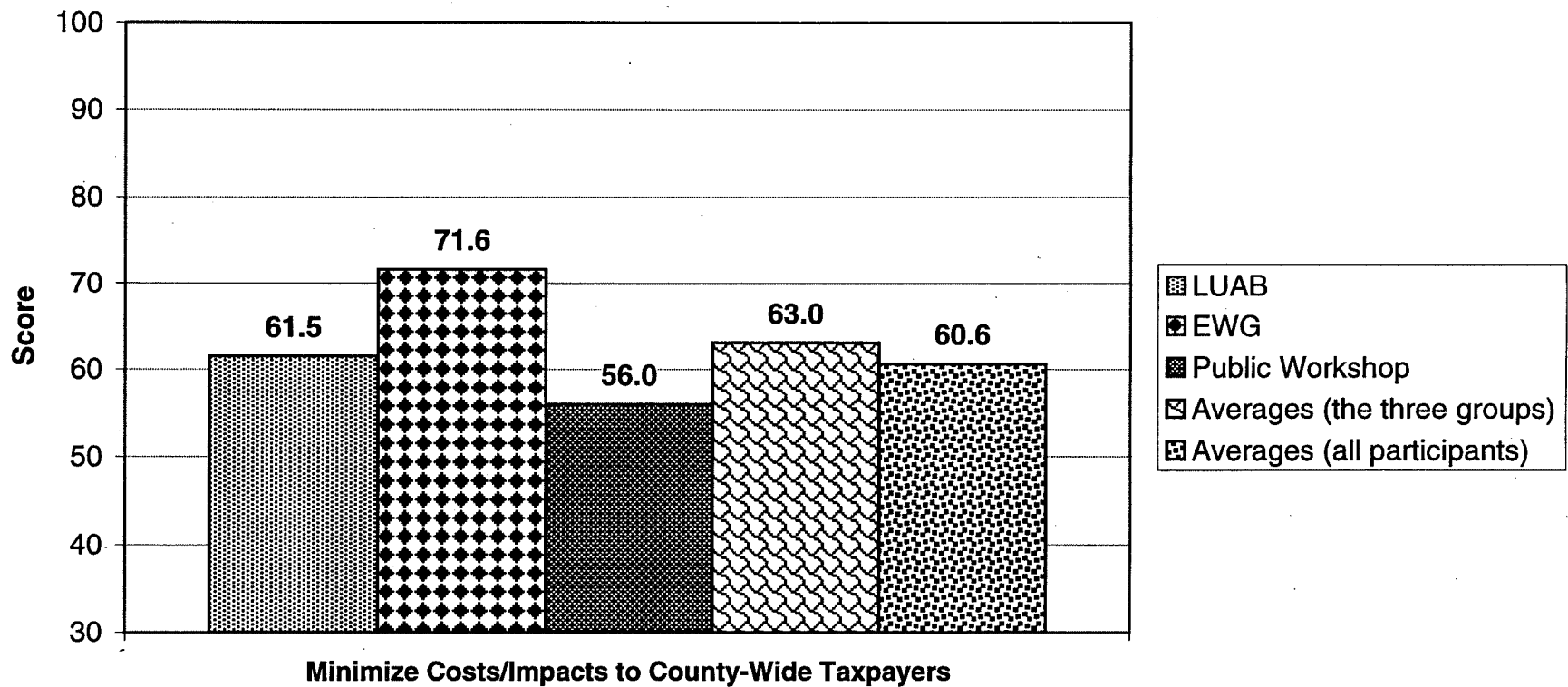
**FIGURE XX**  
**Enhance Water Resources Capability**



**Agricultural Reserve Master Plan**  
**Comparison of Objective Weights**



**FIGURE XX**  
Enhance Accessible Open Space



**FIGURE XX**  
Minimize Costs/Impacts to Taxpayers



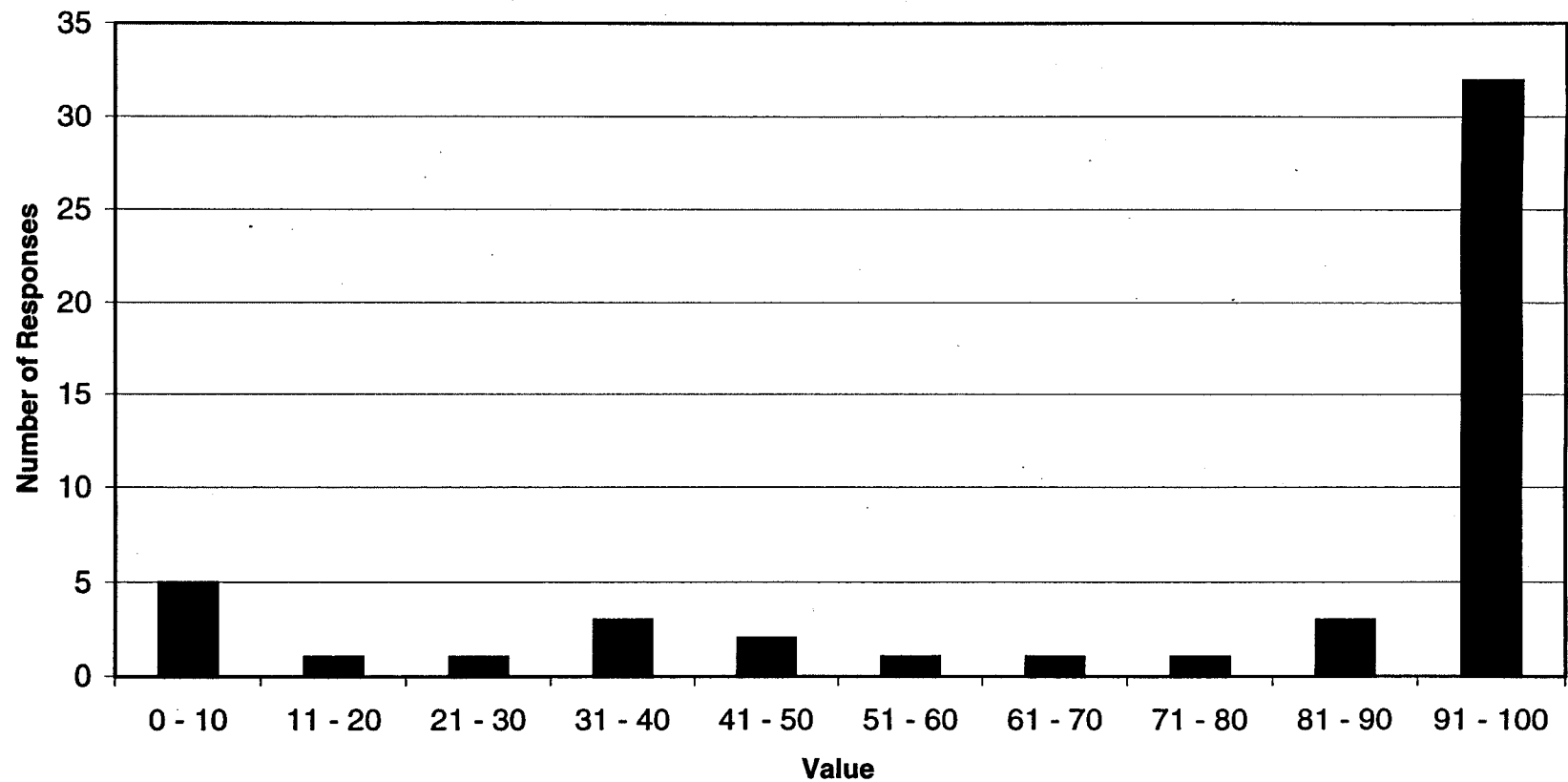
**Agricultural Reserve Master Plan  
Comparison of Objective Weights**



APPENDIX 2B

## **Distribution of Objective Weights**

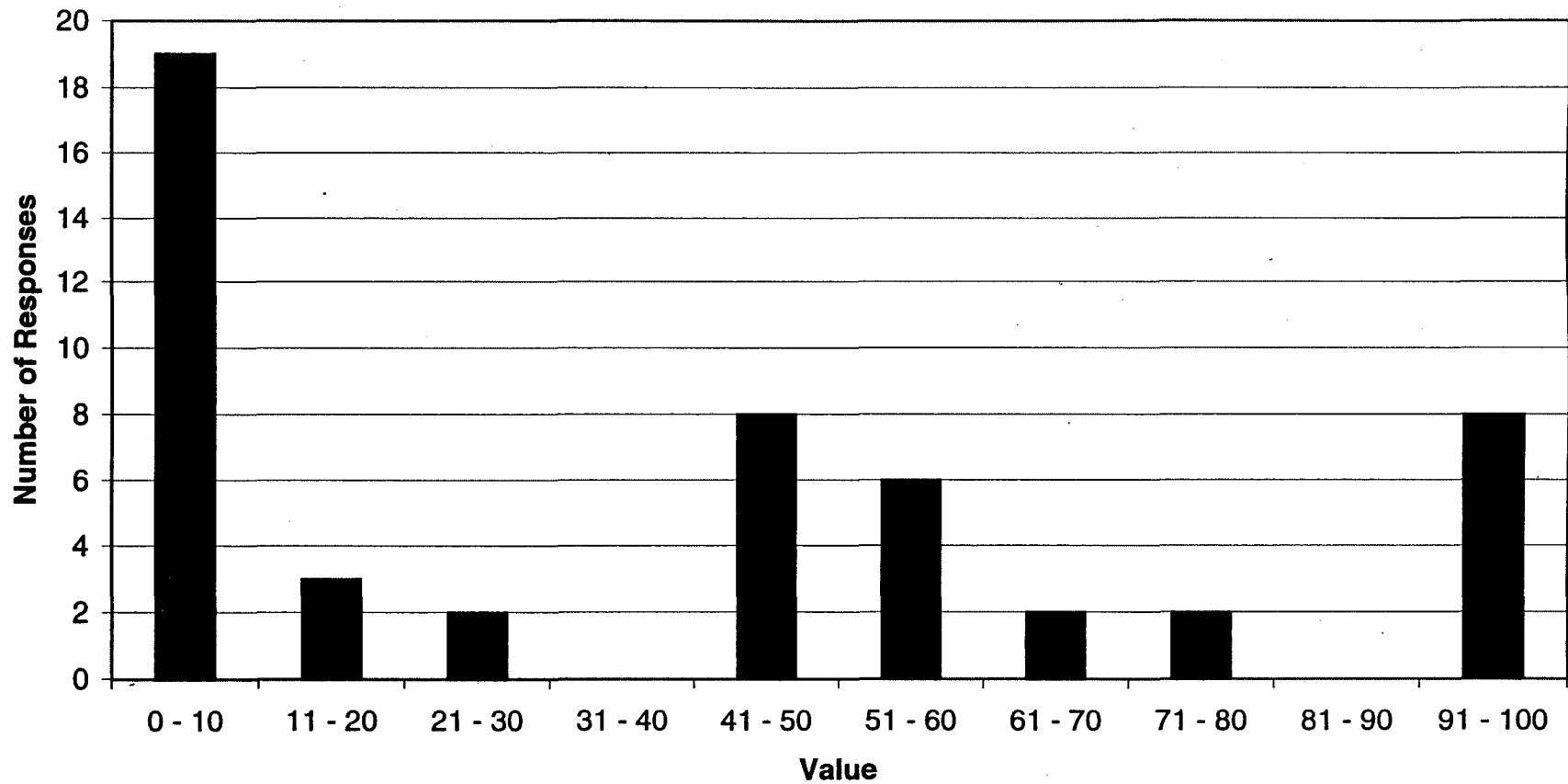
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**FIGURE**  
**Objective: Create a Functional Self-Sustaining Form of Development**



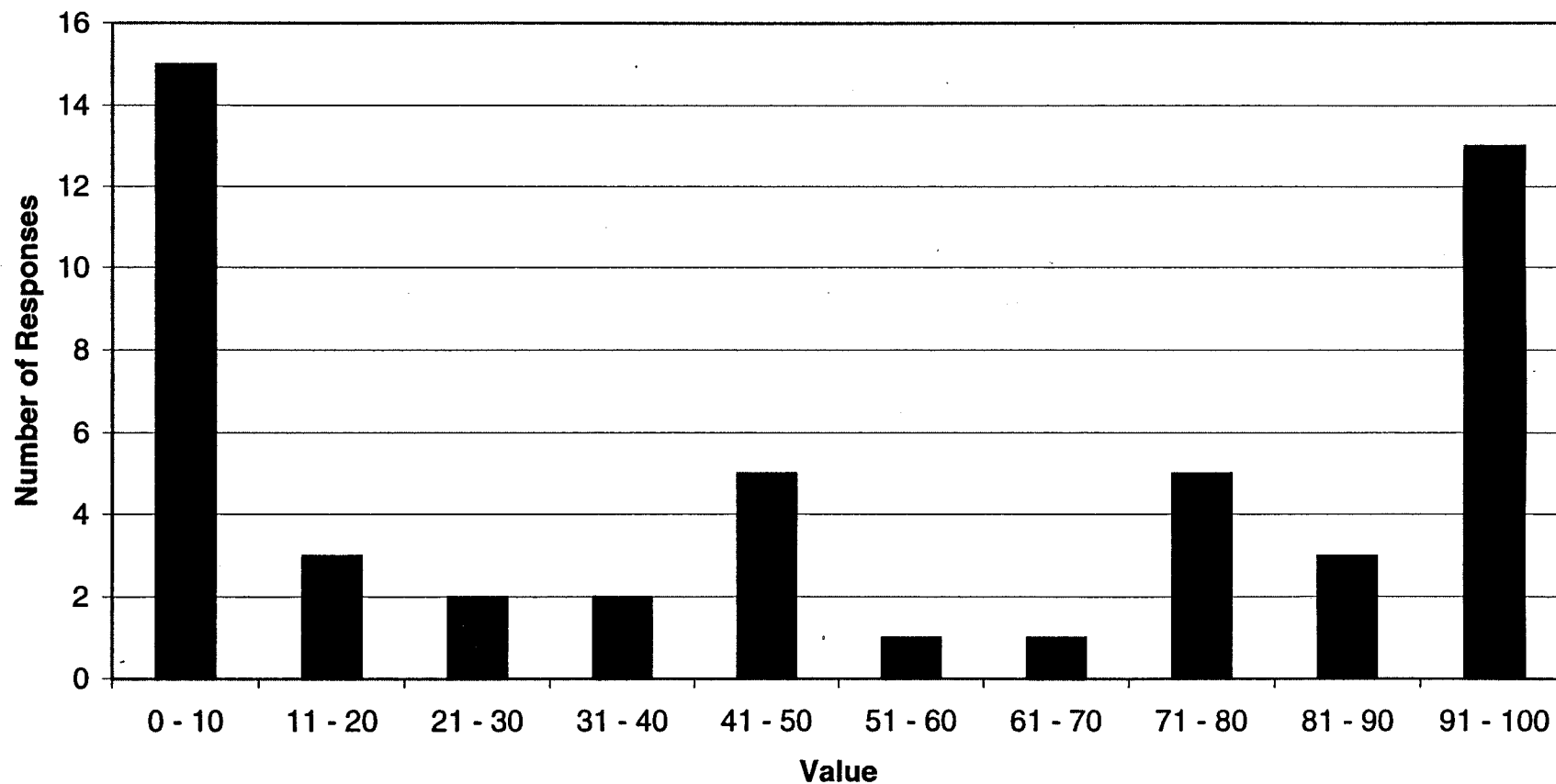
**Agricultural Reserve Master Plan  
Public Workshop Attendee**



**FIGURE**  
**Objective: Enhance Potential for Agricultural and Equestrian Use**



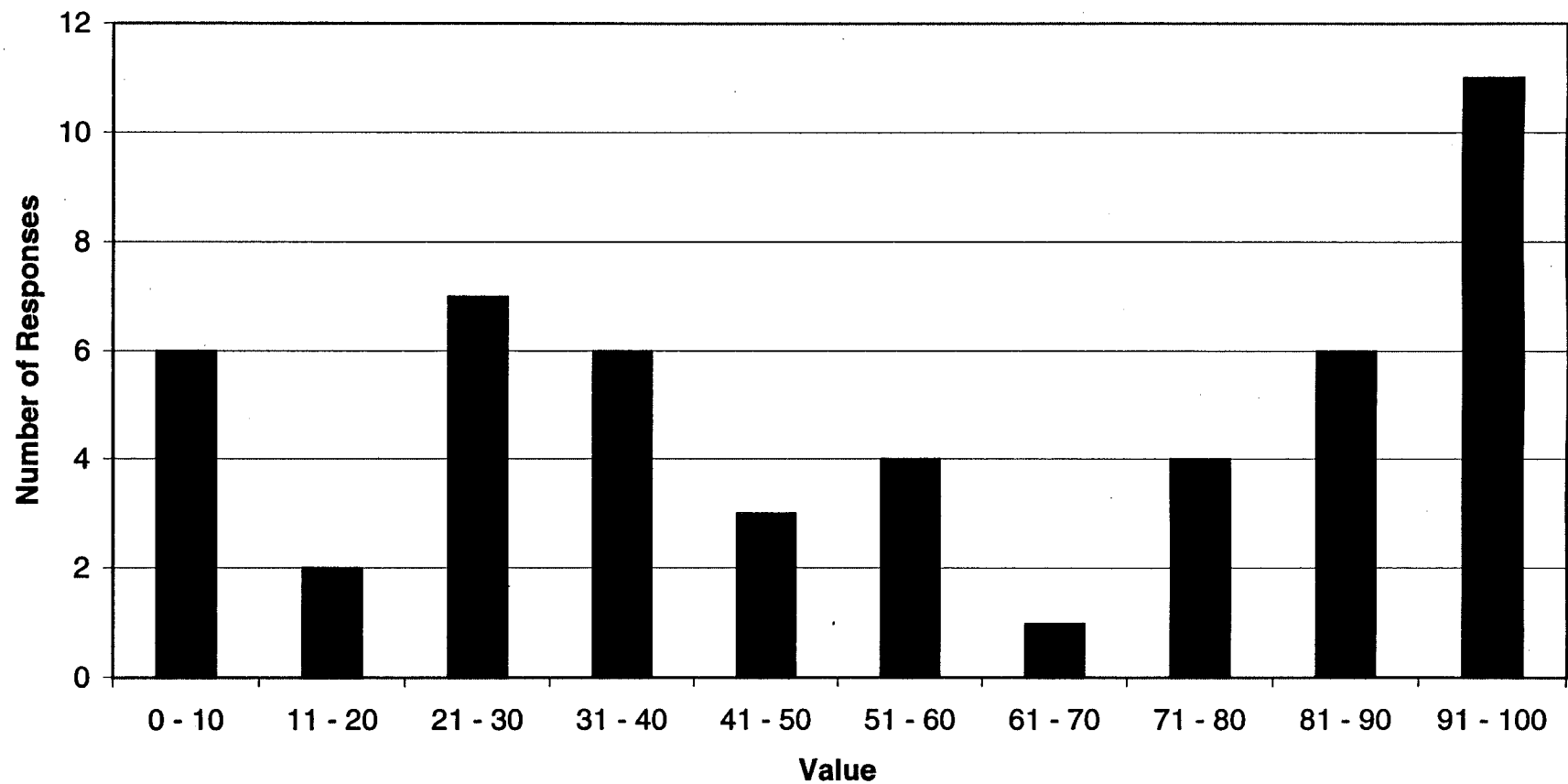
**Agricultural Reserve Master Plan  
Public Workshop Attendee**



**FIGURE**  
**Objective: Enhance Environmental Resource Value**



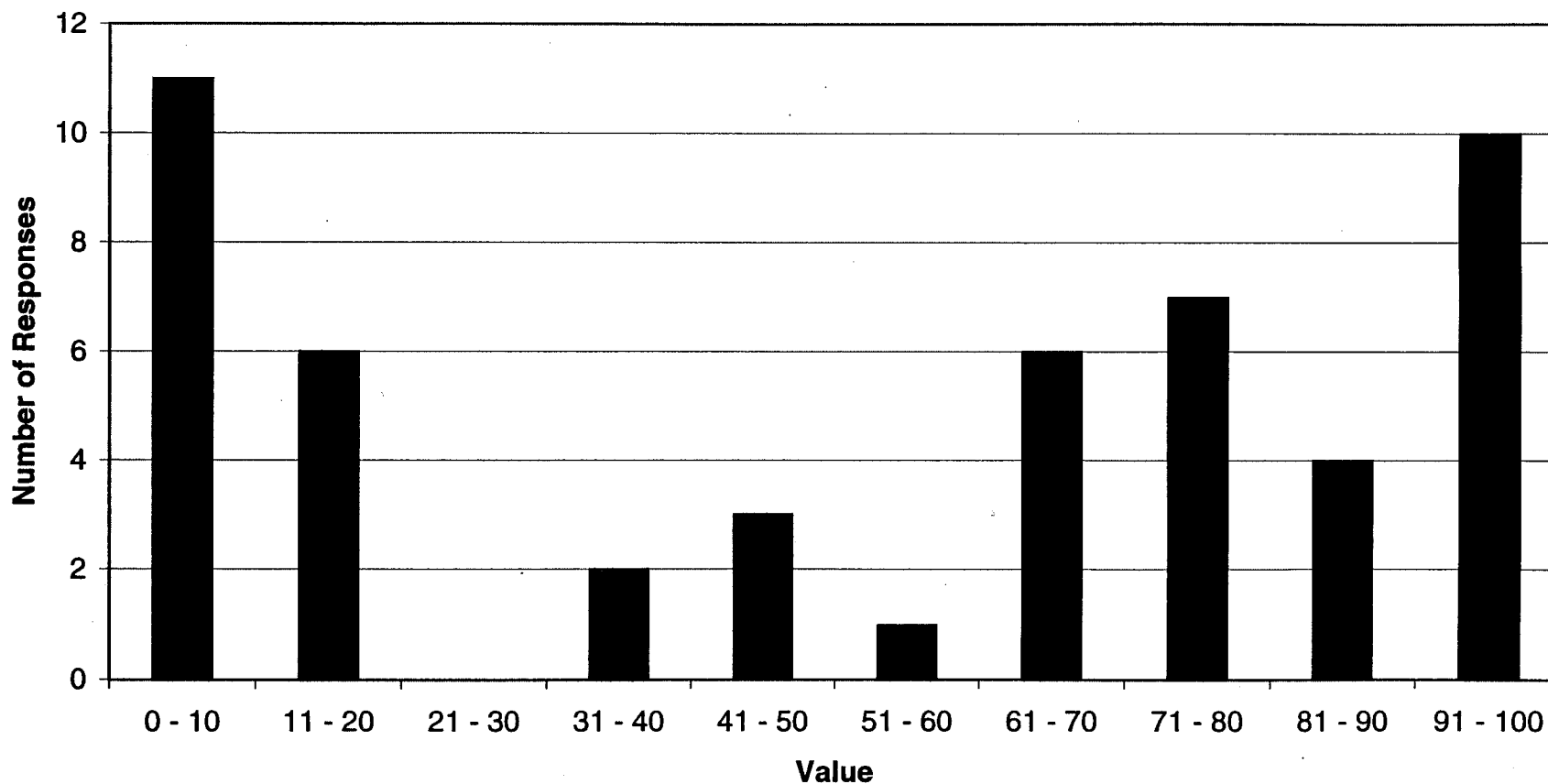
**Agricultural Reserve Master Plan  
Public Workshop Attendee**



**FIGURE**  
**Objective: Enhance Water Management Capability**



**Agricultural Reserve Master Plan  
Public Workshop Attendee**

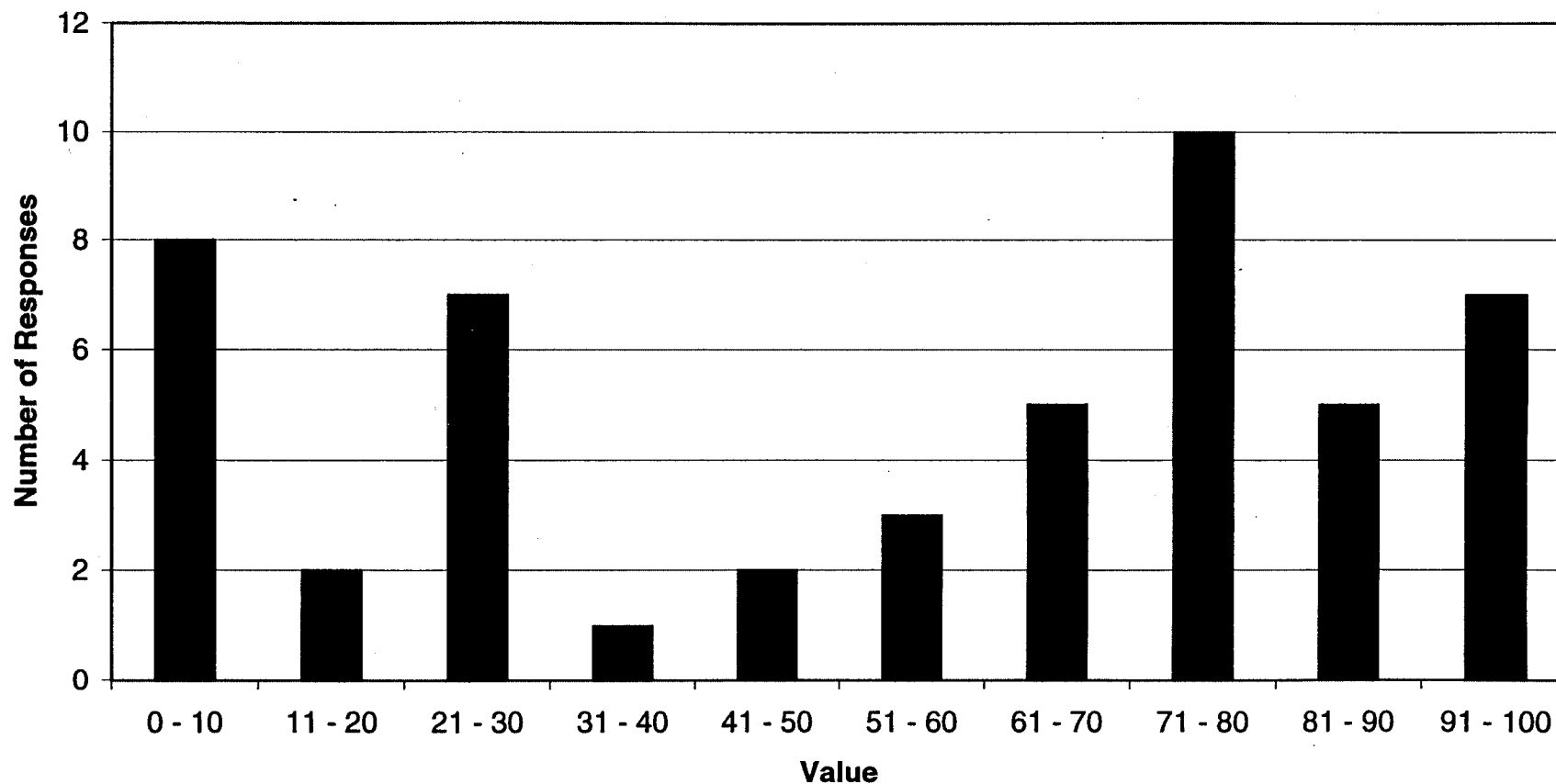


**FIGURE**  
**Objective: Enhance Accessible Open Space**



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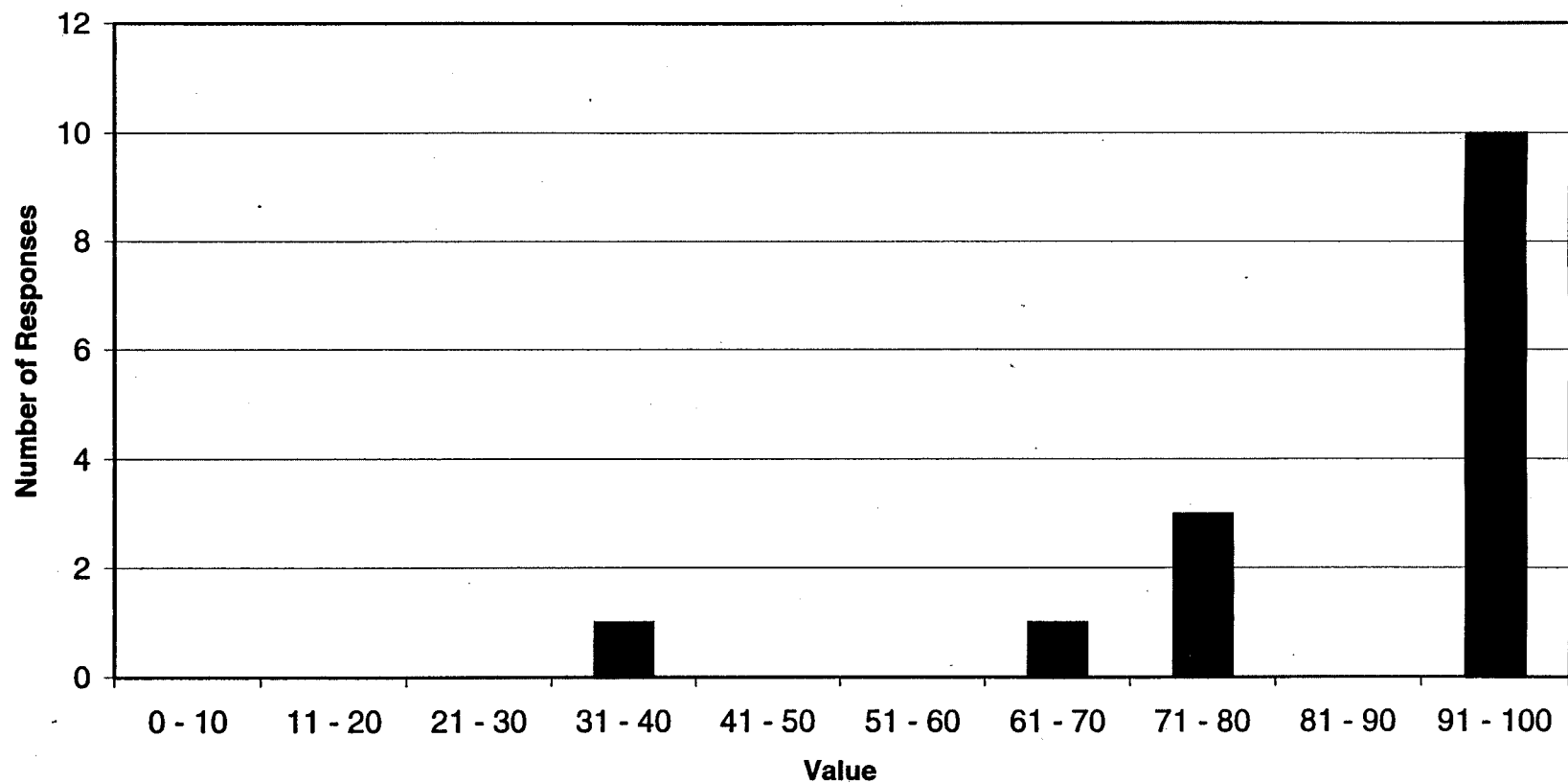
**Agricultural Reserve Master Plan  
Public Workshop Attendee**



**FIGURE**  
**Objective: Minimize Costs/Impacts to Taxpayers**



**Agricultural Reserve Master Plan  
Public Workshop Attendee**

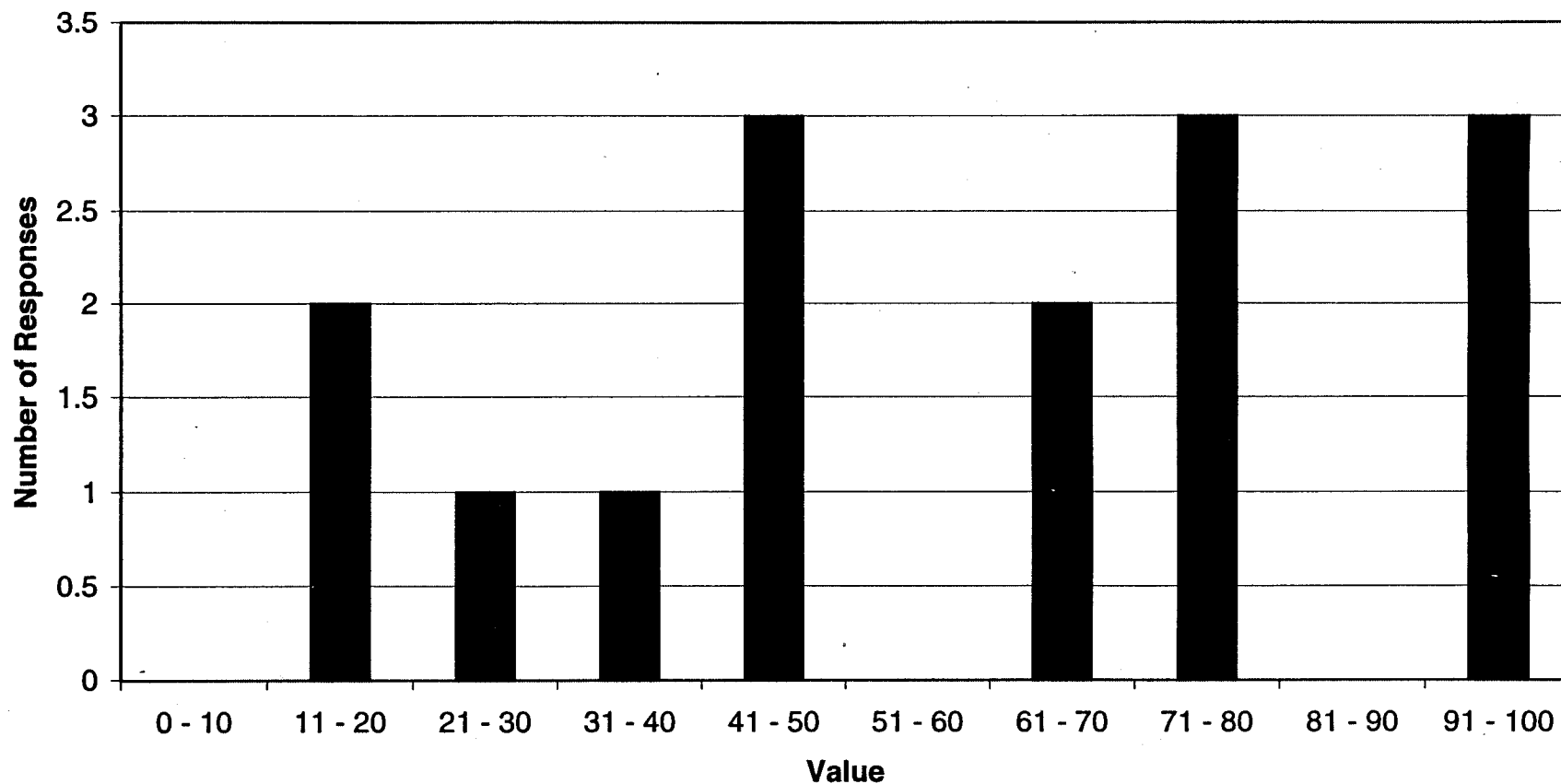


**FIGURE**  
**Objective: Create a Functional Self-Sustaining Form of Development**



**Agricultural Reserve Master Plan  
Extended Working Group**

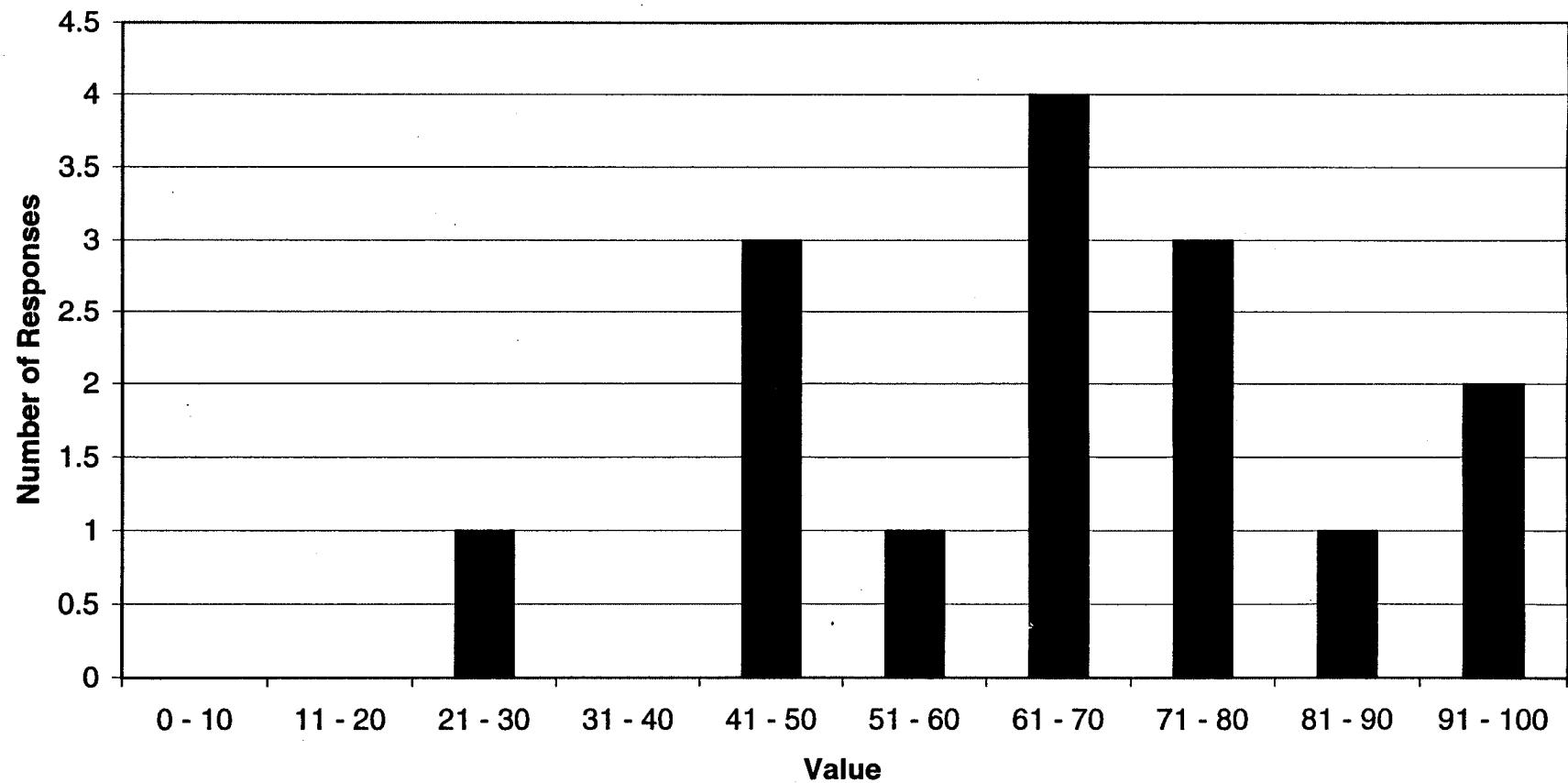




**FIGURE**  
**Objective: Enhance Potential for Agricultural and Equestrian Use**



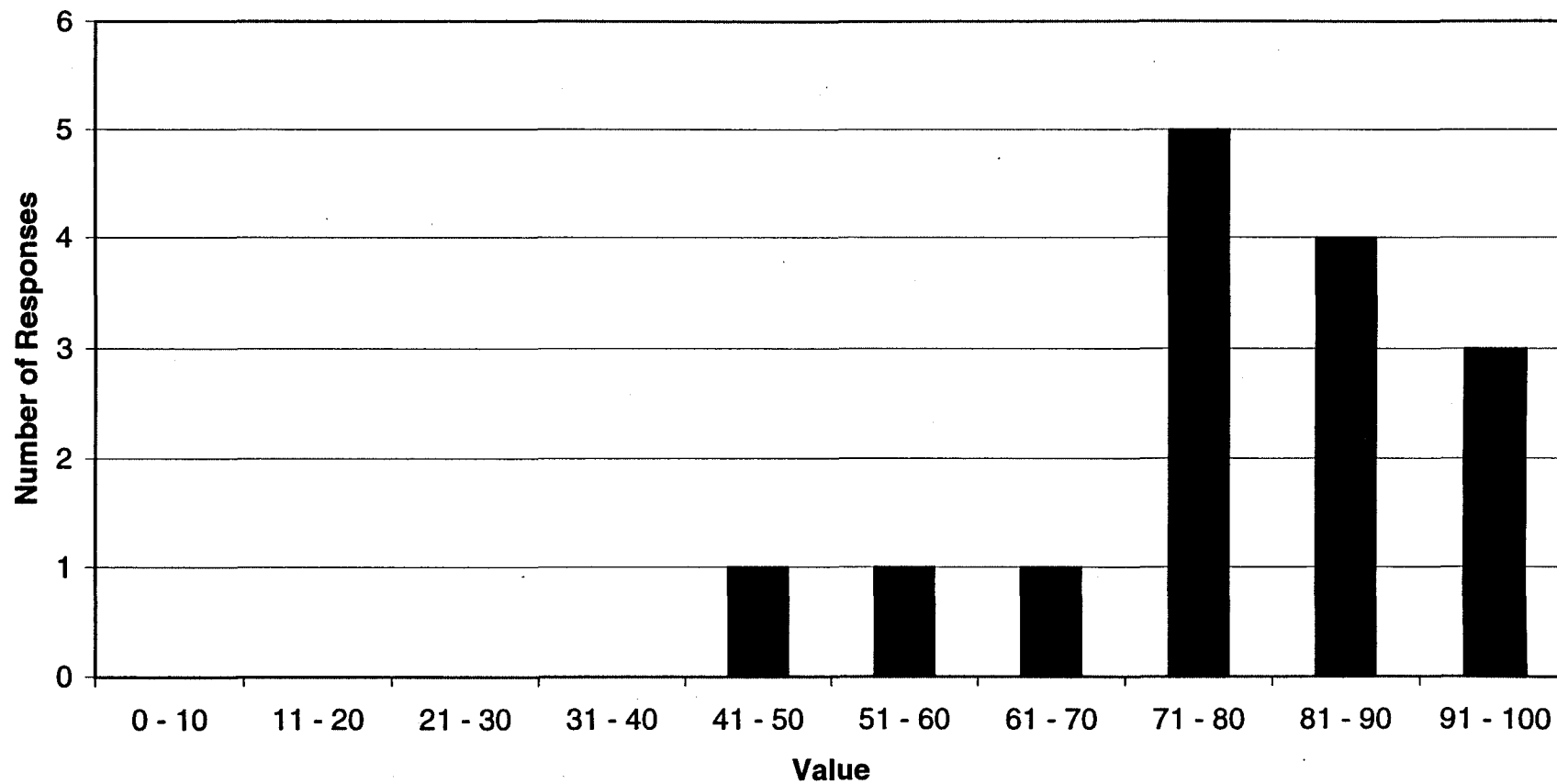
**Agricultural Reserve Master Plan  
Extended Working Group**



**FIGURE**  
**Objective: Enhance Environmental Resource Value**



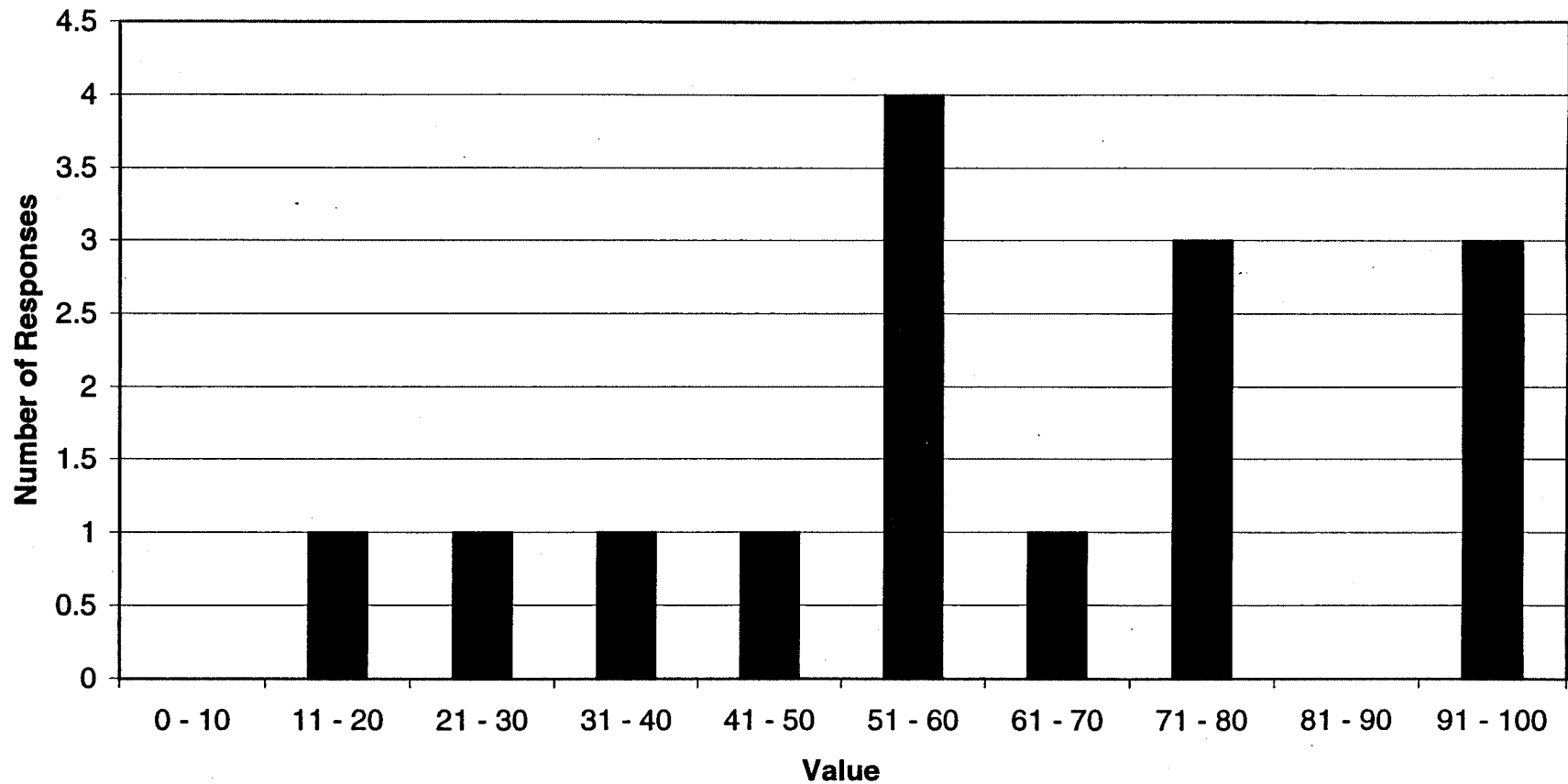
**Agricultural Reserve Master Plan  
Extended Working Group**



**FIGURE**  
**Objective: Enhance Water Management Capability**



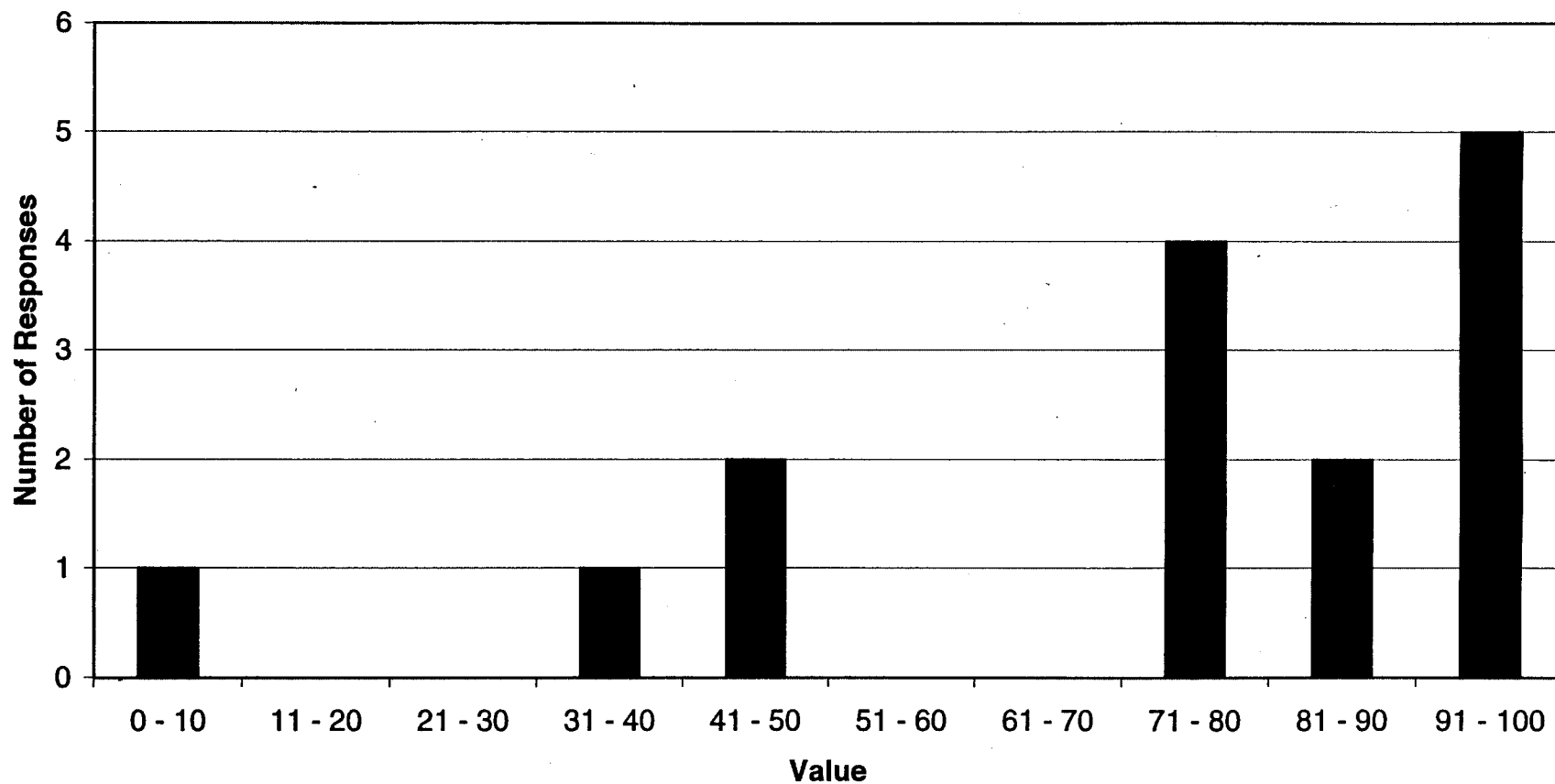
**Agricultural Reserve Master Plan  
Extended Working Group**



**FIGURE**  
**Objective: Enhance Accessible Open Space**



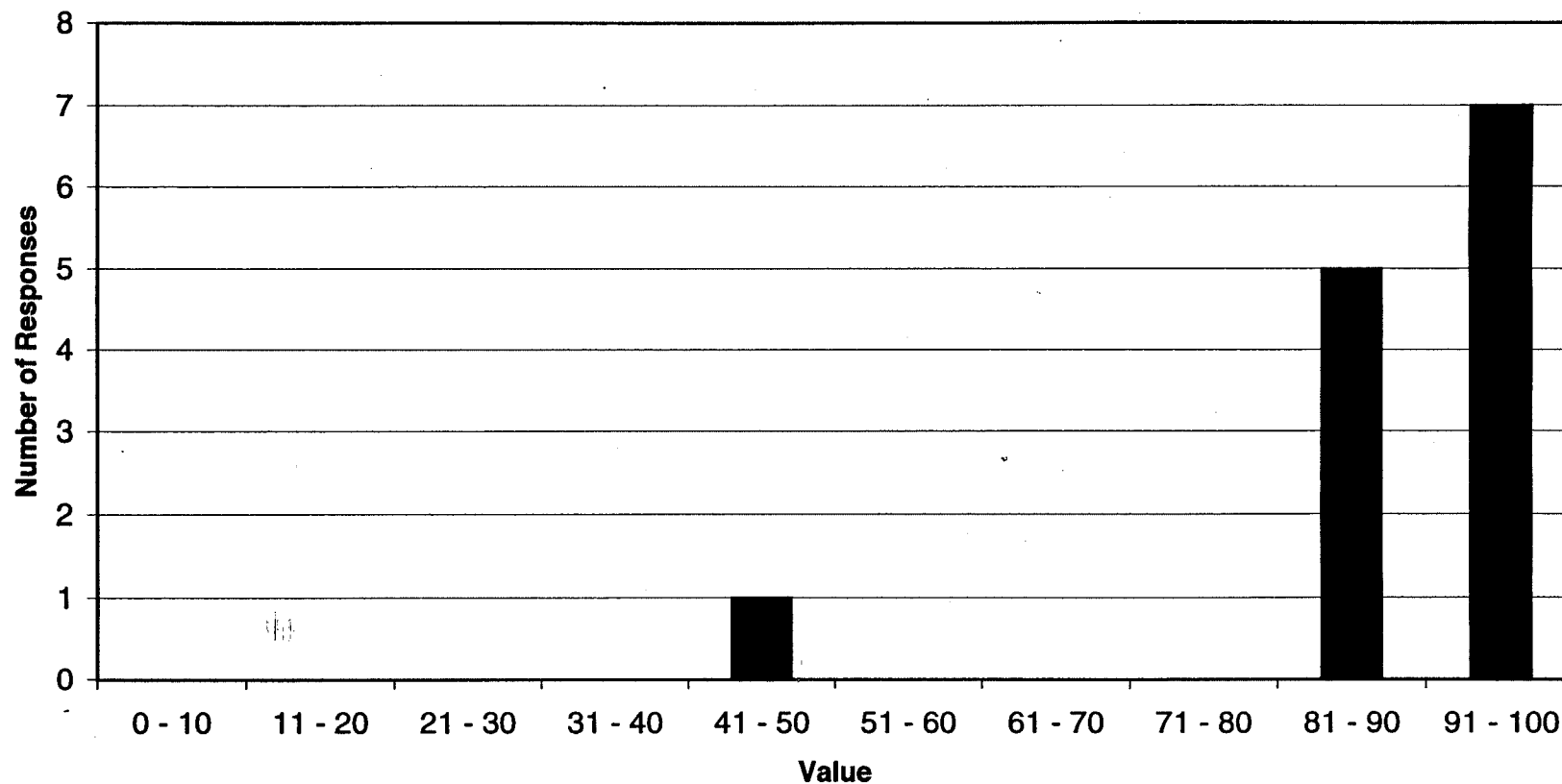
**Agricultural Reserve Master Plan  
Extended Working Group**



**FIGURE**  
**Objective: Minimize Costs/Impacts to Taxpayers**



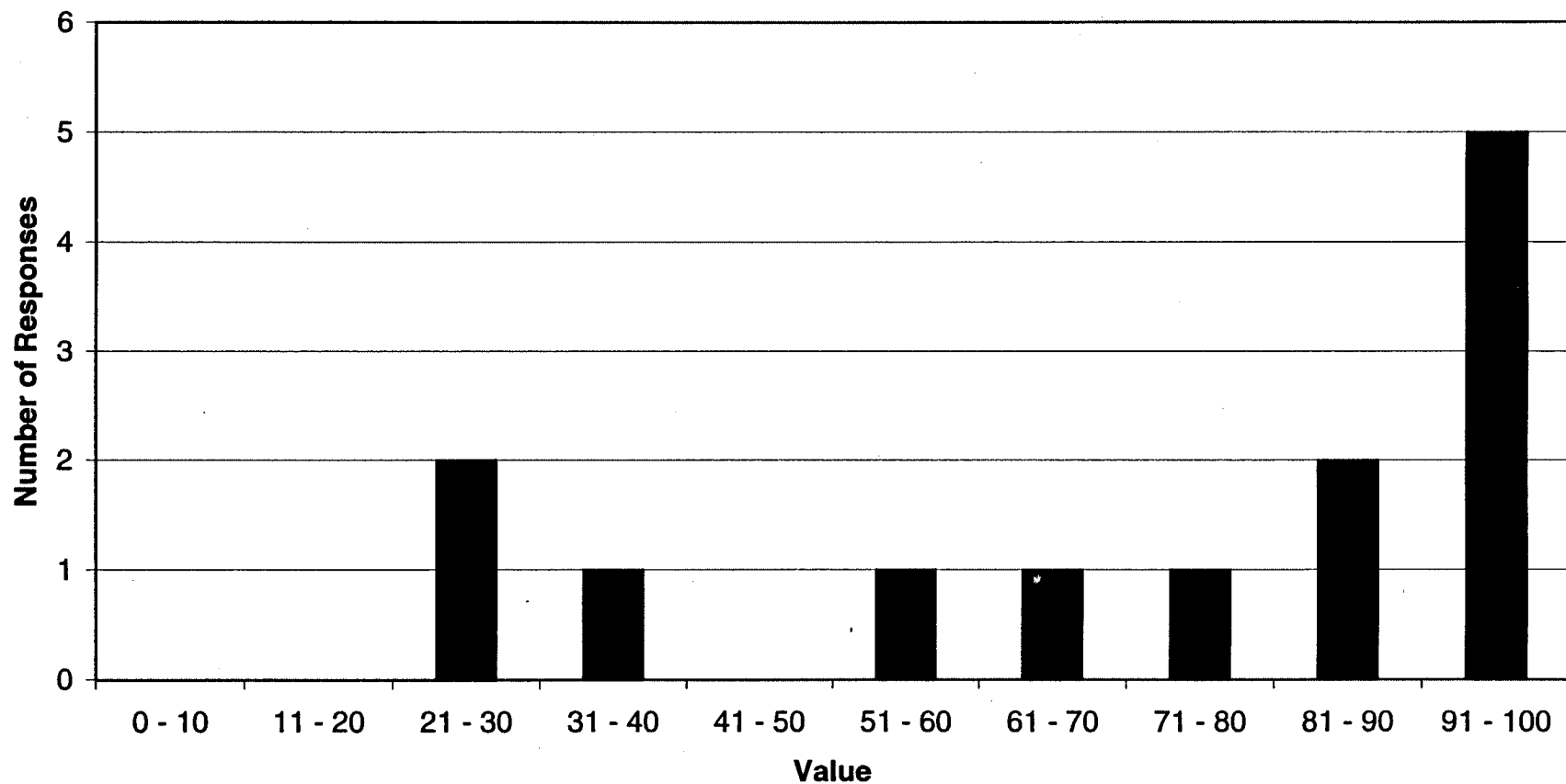
**Agricultural Reserve Master Plan  
Extended Working Group**



**FIGURE**  
**Objective: Create a Functional Self-Sustaining Form of Development**



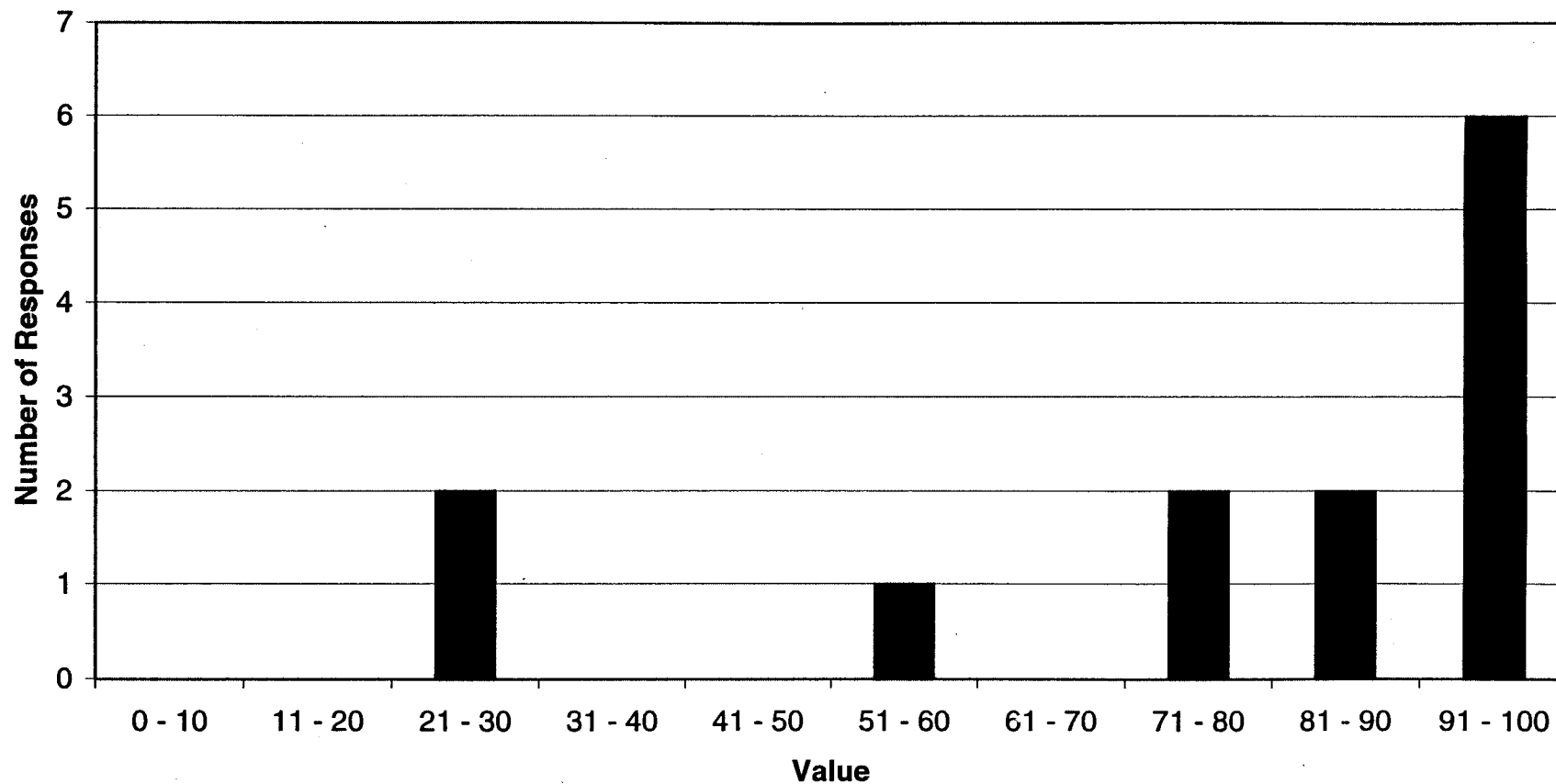
**Agricultural Reserve Master Plan**  
**Land Use Advisory Board**



**FIGURE**  
**Objective: Enhance Potential for Agricultural and Equestrian Use**



**Agricultural Reserve Master Plan  
Land Use Advisory Board**

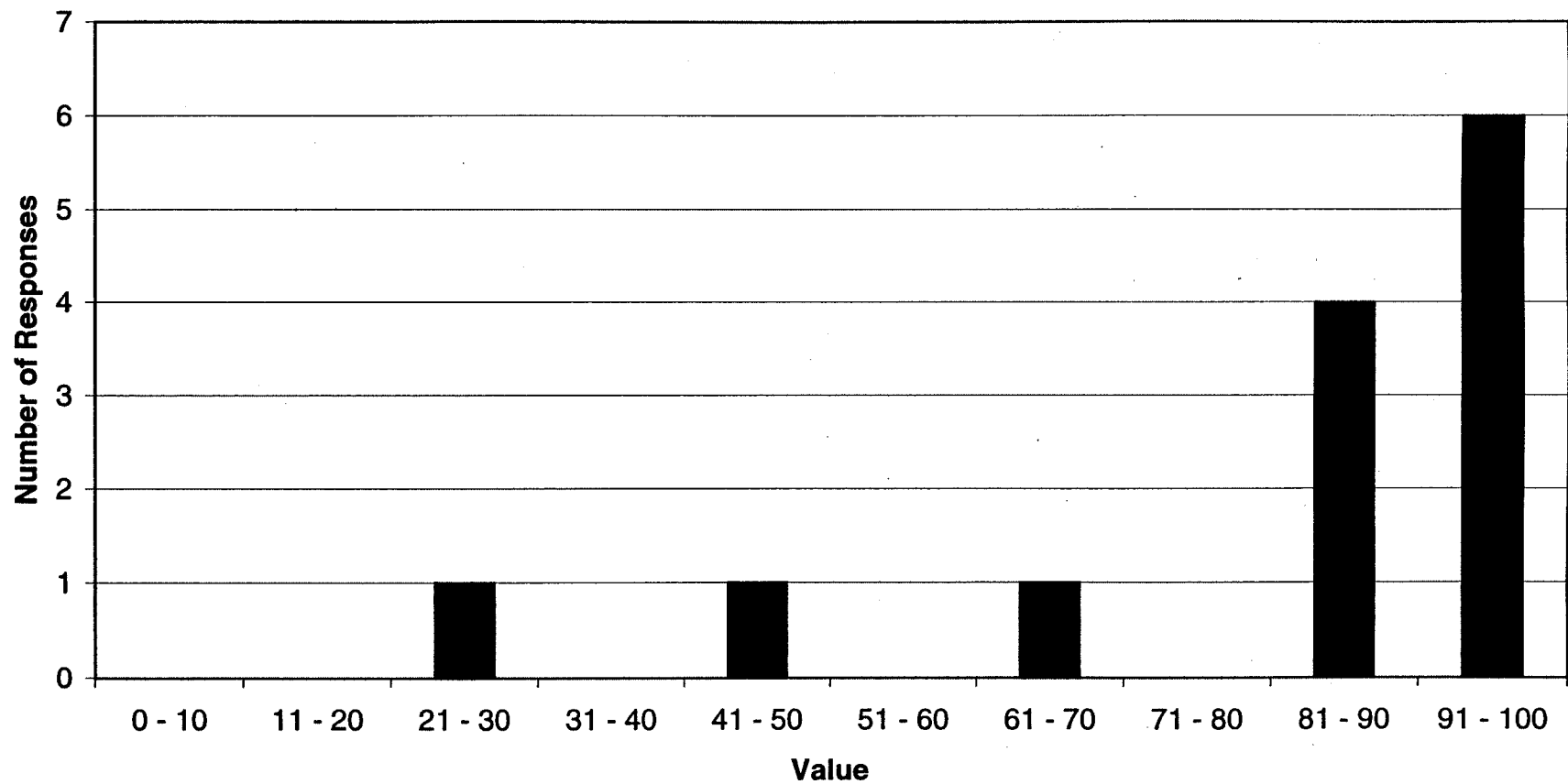


**FIGURE**  
**Objective: Enhance Environmental Resource Value**



**Agricultural Reserve Master Plan  
Land Use Advisory Board**

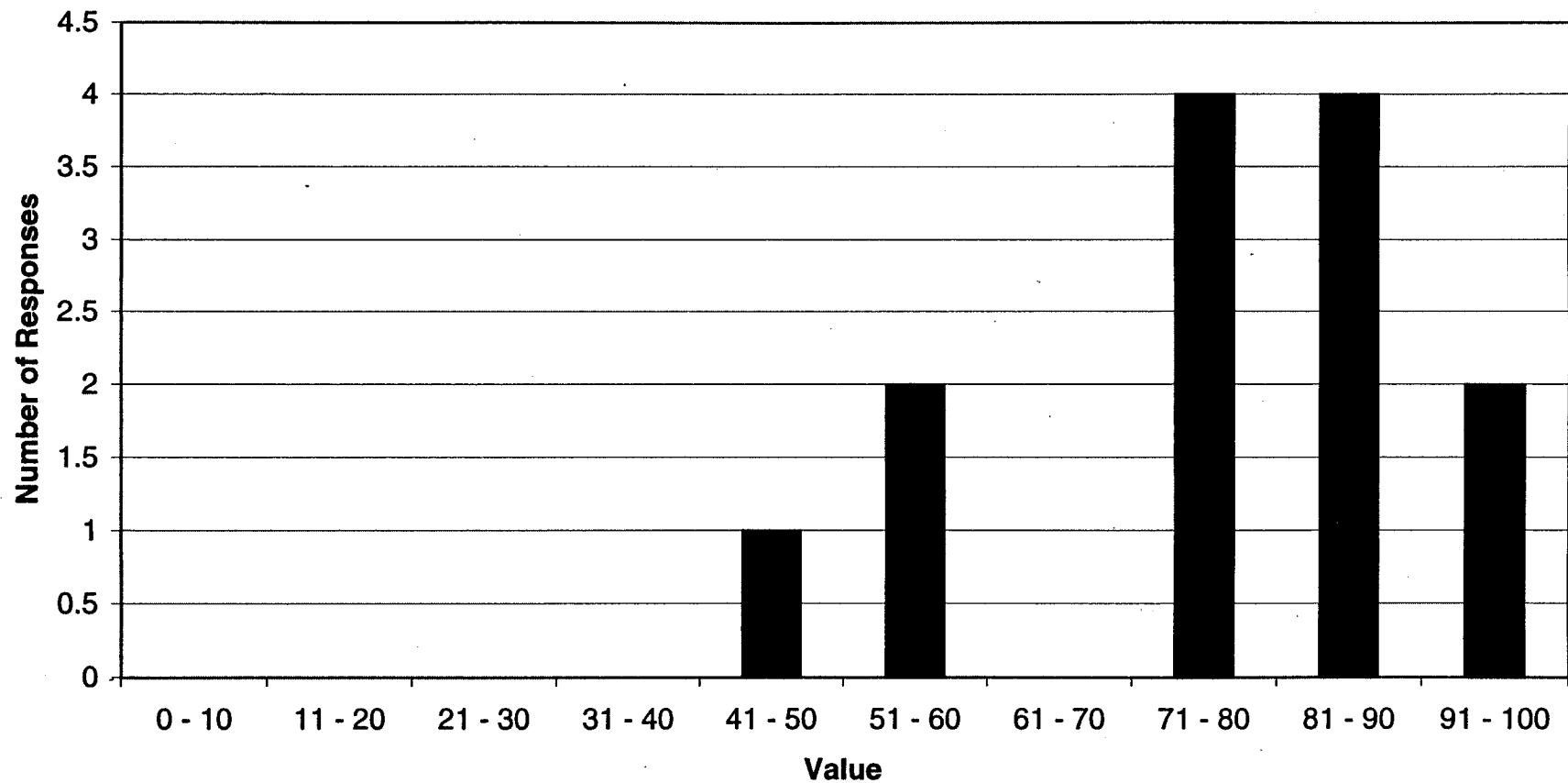




**FIGURE**  
**Objective: Enhance Water Management Capability**



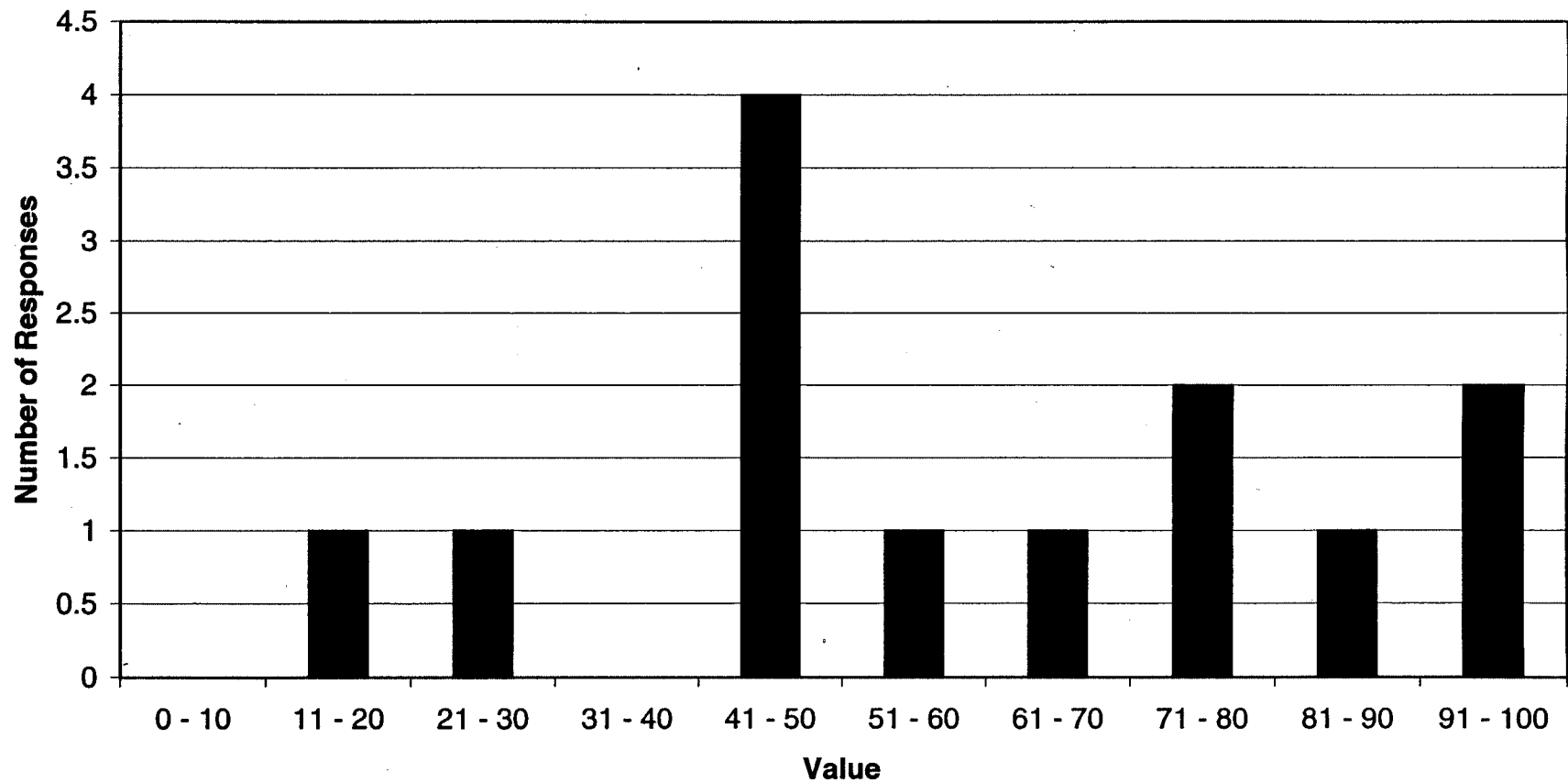
**Agricultural Reserve Master Plan  
Land Use Advisory Board**



**FIGURE**  
**Objective: Enhance Accessible Open Space**



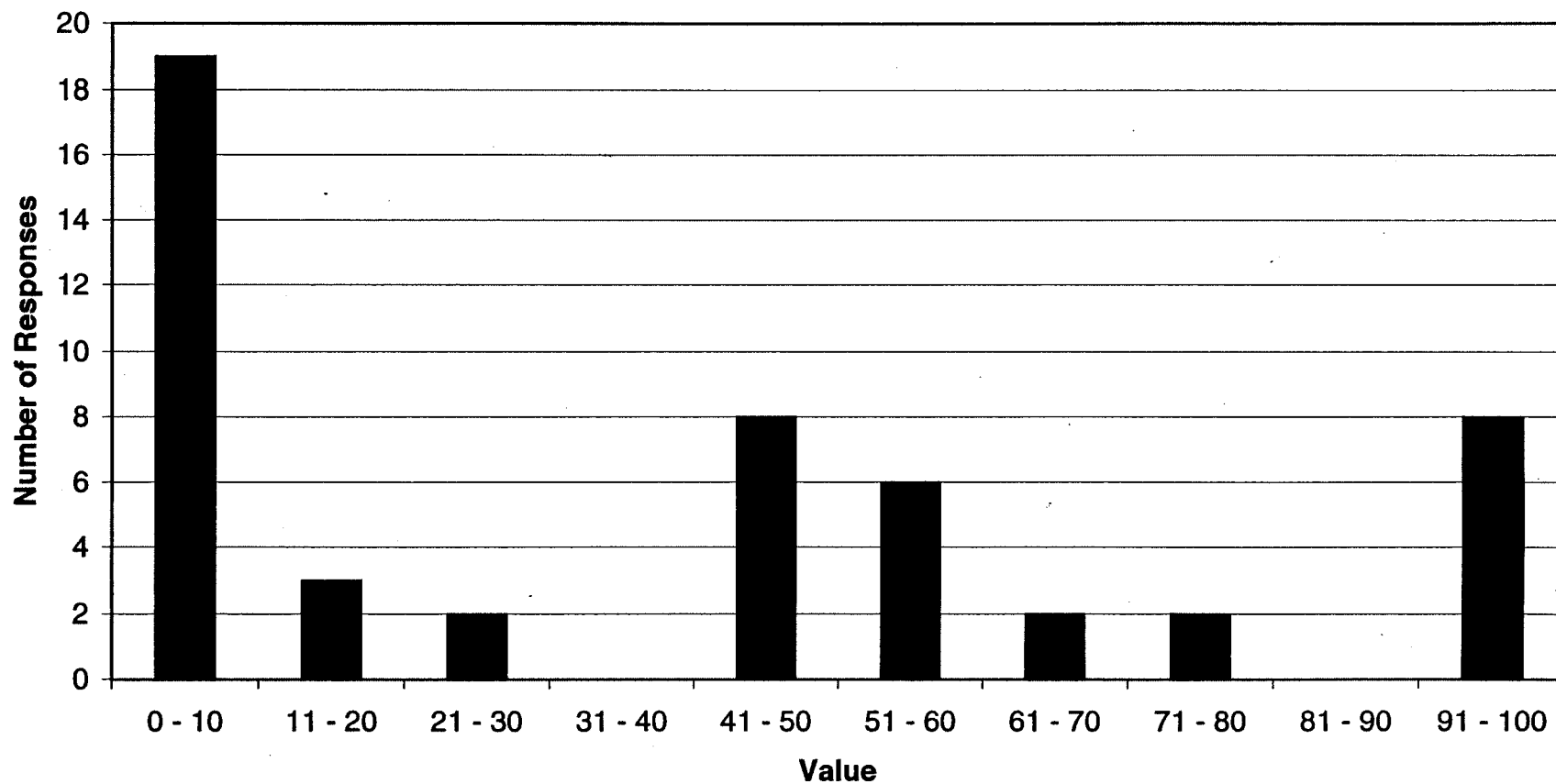
**Agricultural Reserve Master Plan**  
**Land Use Advisory Board**



**FIGURE**  
**Objective: Minimize Costs/Impacts to Taxpayers**



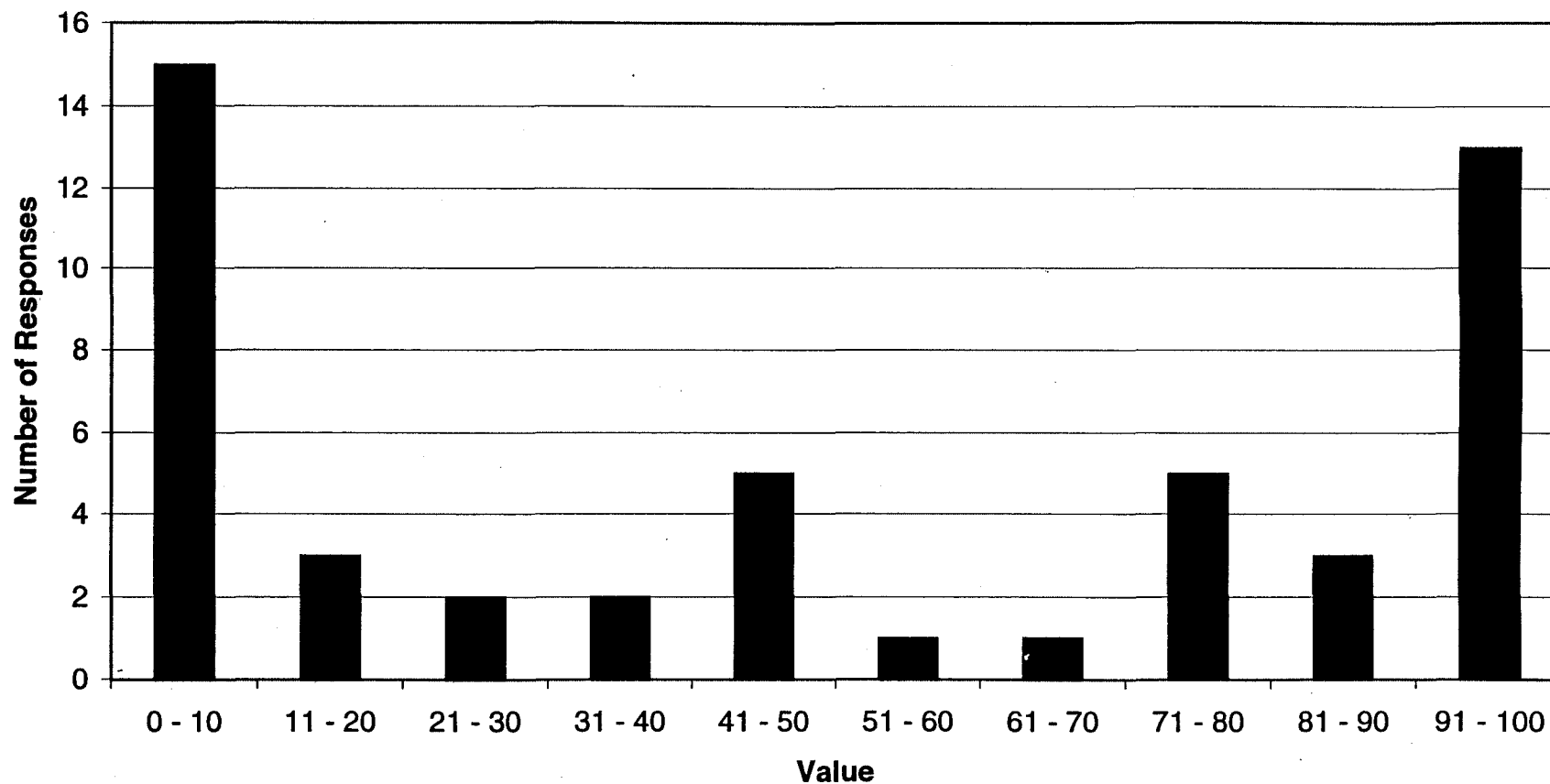
**Agricultural Reserve Master Plan  
Land Use Advisory Board**



**FIGURE**  
**Objective: Enhance Potential for Agricultural and Equestrian Use**



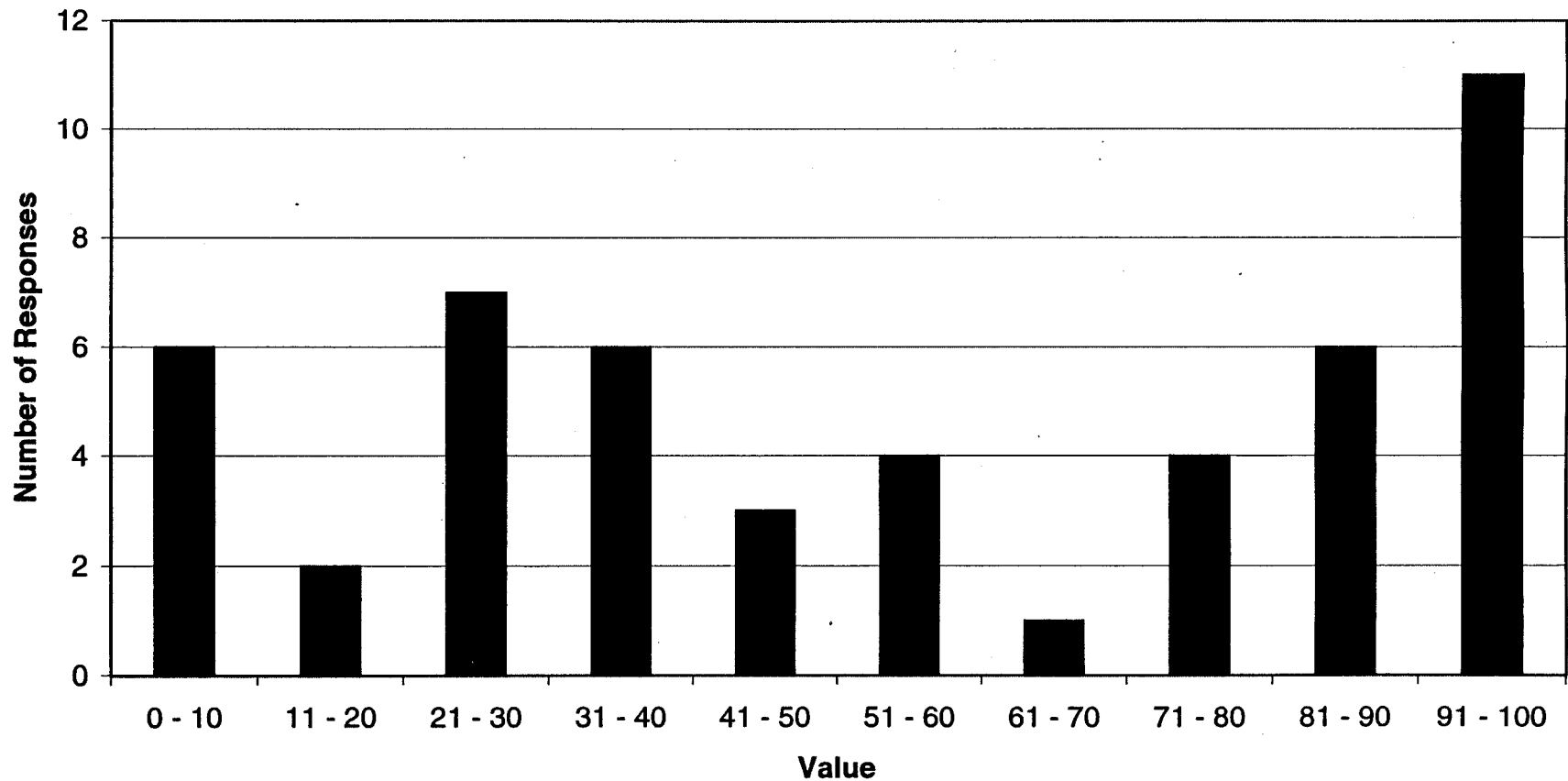
**Agricultural Reserve Master Plan**  
**Public Workshop Attendee**



**FIGURE**  
**Objective: Enhance Environmental Resource Value**



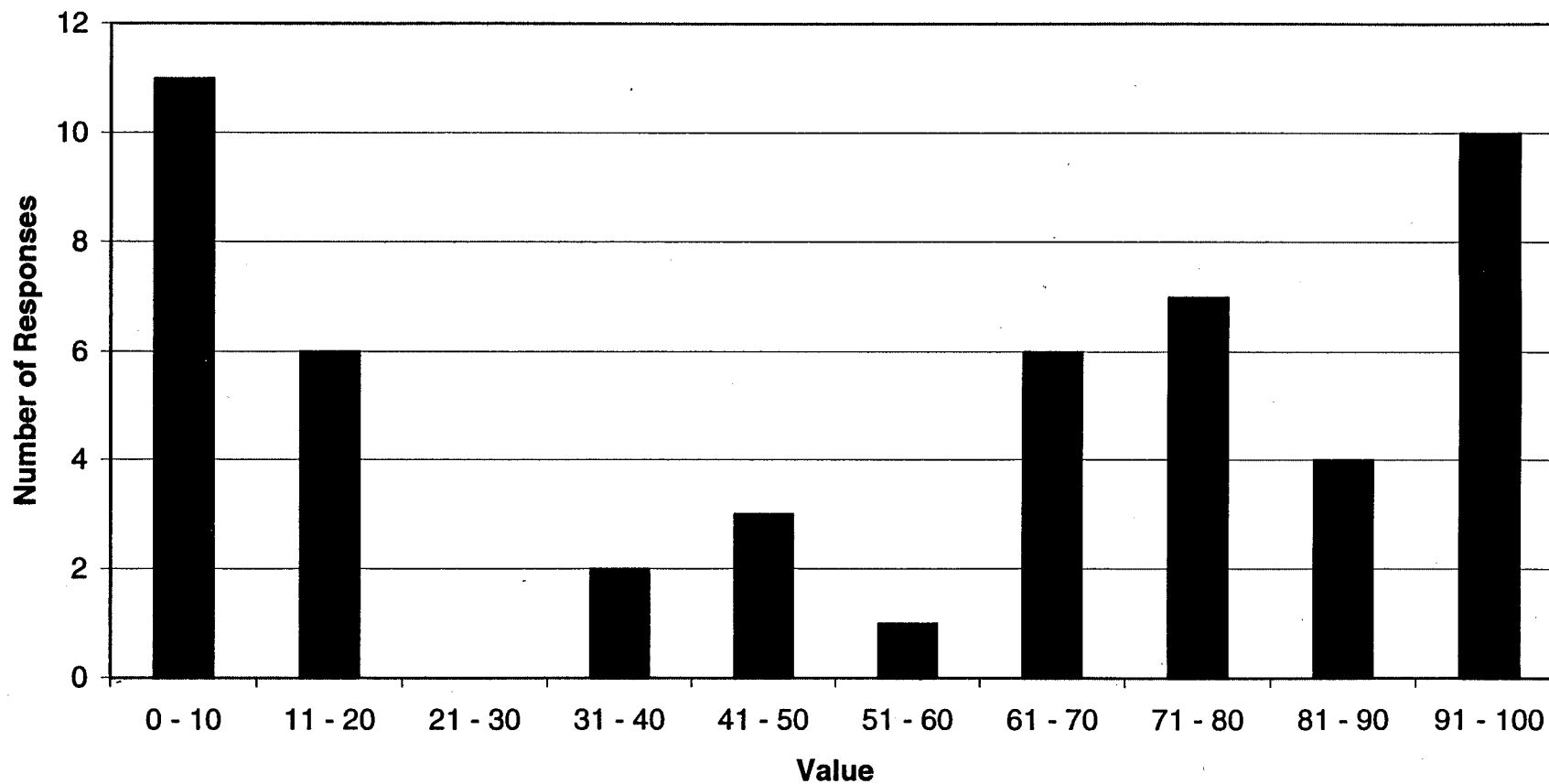
**Agricultural Reserve Master Plan  
Public Workshop Attendee**



**FIGURE**  
**Objective: Enhance Water Management Capability**



**Agricultural Reserve Master Plan  
Public Workshop Attendee**

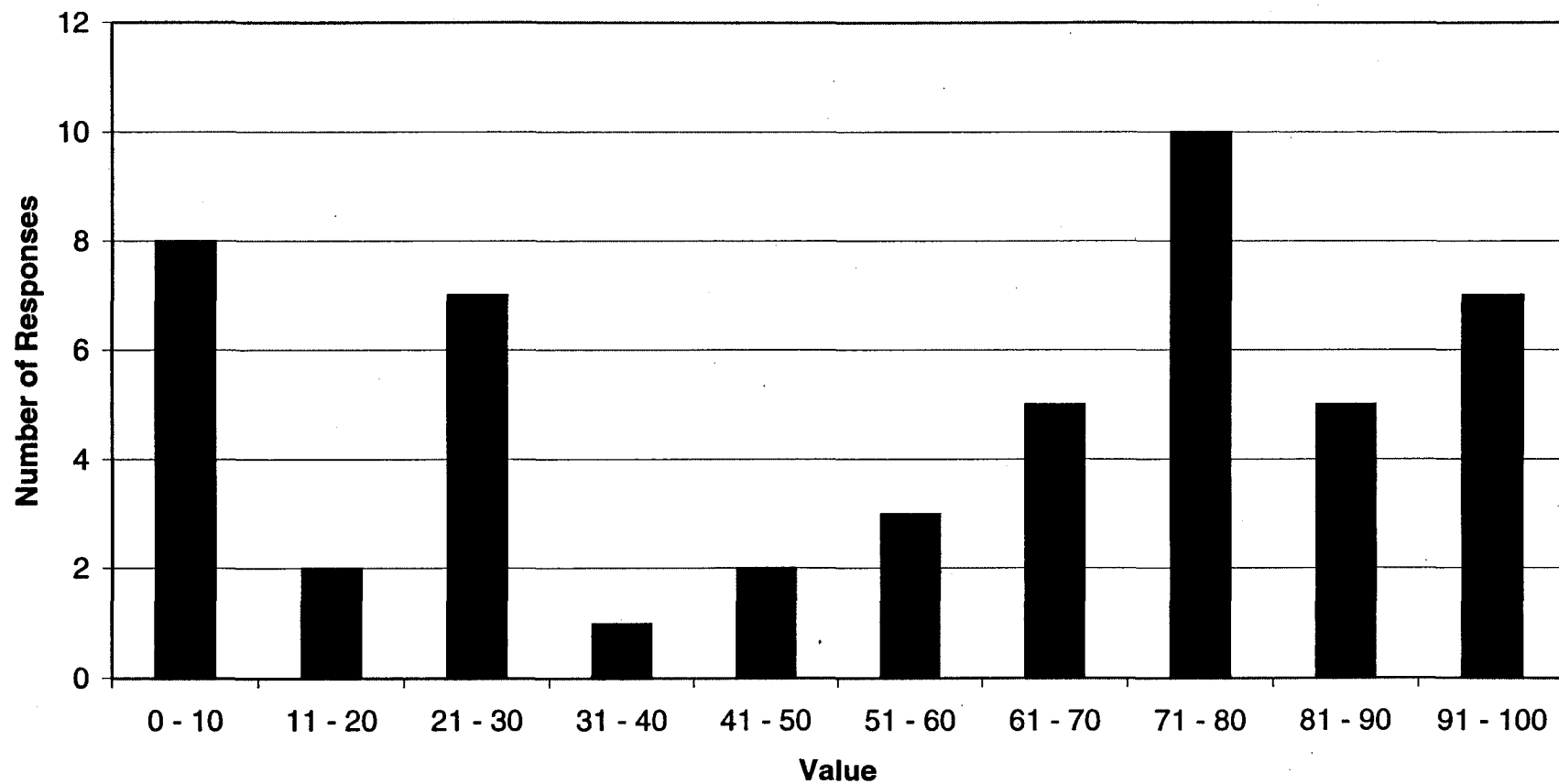


**FIGURE**  
**Objective: Enhance Accessible Open Space**



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**Agricultural Reserve Master Plan  
Public Workshop Attendee**



**FIGURE**  
**Objective: Minimize Costs/Impacts to Taxpayers**



**Agricultural Reserve Master Plan**  
**Public Workshop Attendee**



APPENDIX 2C

## **Results of Criteria Weighting by the EWG**

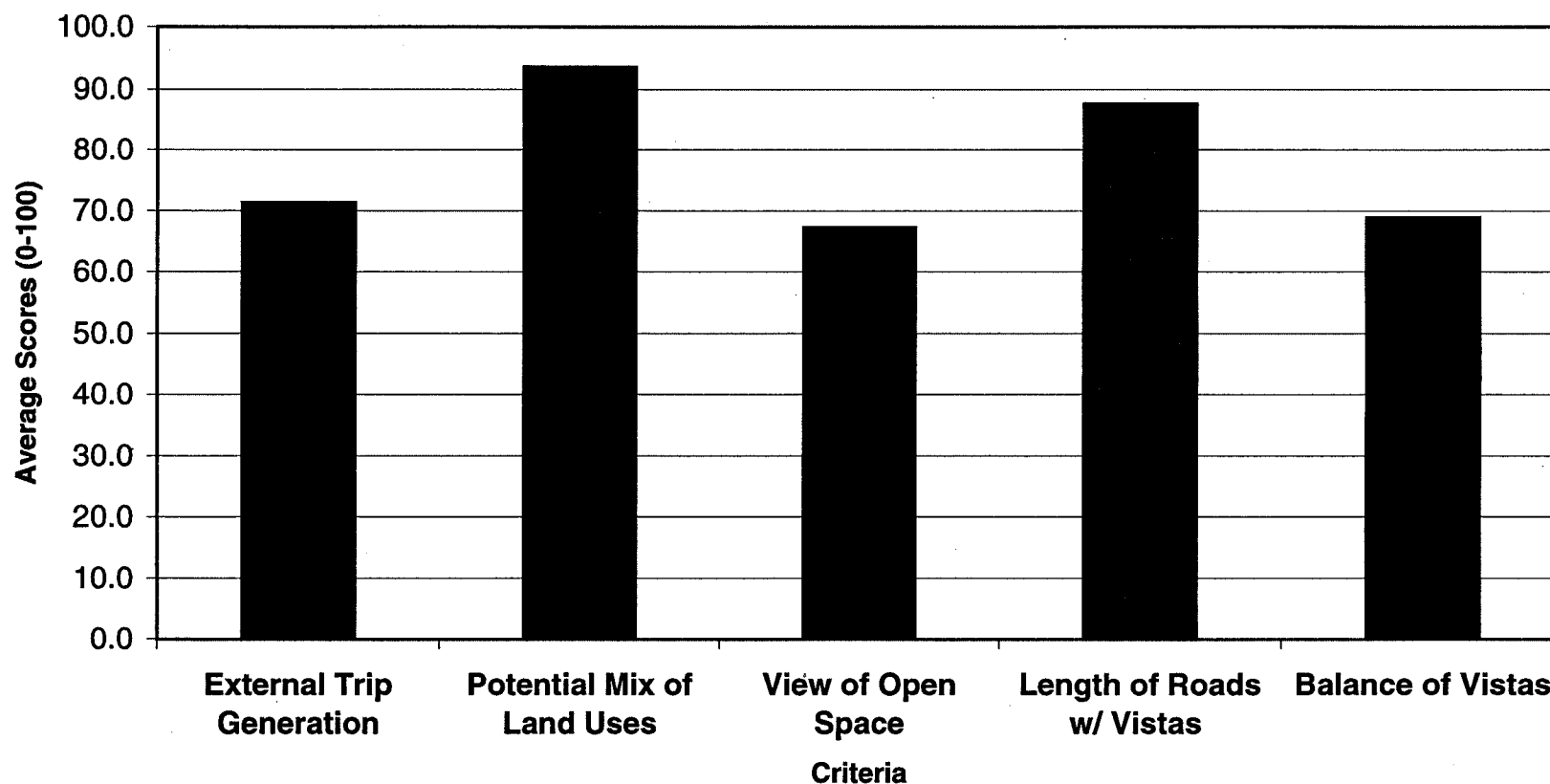
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Ag Reserve Masterplan

Objectives

EWG Member	Affiliation	Create a Functional Self-Sustaining Form of Development					Enhance Potential for Agricultural (including nurseries) and Equestrian Use		Enhance Environmental Resou	
		External Trip Generation	Potential Mix of Land Uses	View of Open Space	Vistas Along Major Roads		Total Potential for Agriculture	Potential for Equestrian Trails	Amount of Conservation or Preserve Lands	Average Aspect Ratio of Preserve Lands
					Length of Roads w/ Vistas	Balance of Vistas				
Don Grund	PBC Parks	80	100	70	90	100	0	100	100	95
Ronald Crone	LWDD	40	100	20	100	20	10	100	30	50
Rich Walesky	PBC ERM	50	50	100	70	100	80	100	100	50
Linda Hoppes	PBC PZ&B	90	100	80	100	60	100	70	100	60
Tim Granowitz	PBC Parks	85	100	75	55	100	100	50	80	90
Dan Cary	SFWMD	100	99	50	50	60	50	100	100	75
Dominic Sims	PBC PZ&B	70	80	100	100	80	80	100	100	70
Frank Duke	PBC PZ&B	80	100	60	50	100	75	100	100	75
Mike Buscha	TCRPC	50	100	75	100	75	100	50	100	50
P.K. Sharma	SFWMD	80	100	75	100	80	100	90	100	90
Rick Nevulis	SFWMD	80	100	40	100	50	100	80	100	40
Pat Walker	SFWMD	80	100	60	100	40	100	75	100	50
Henry Blittaker	SFWMD	35	100	95	100	85	100	75	100	40
A. Hctor	PBC PZ&B	50	100	25	100	35	40	100	100	5
Ray Liberti	PBCWUD	100	75	85	100	50	50	100	100	70
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										
average		71.3	93.6	67.3	87.7	69.0	72.3	86.0	94.0	60.7
minimum		35.0	50.0	20.0	50.0	20.0	0.0	50.0	30.0	5.0
maximum		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	95.0
standard deviation		21.1	14.4	25.0	20.3	26.3	34.5	18.3	18.4	23.7

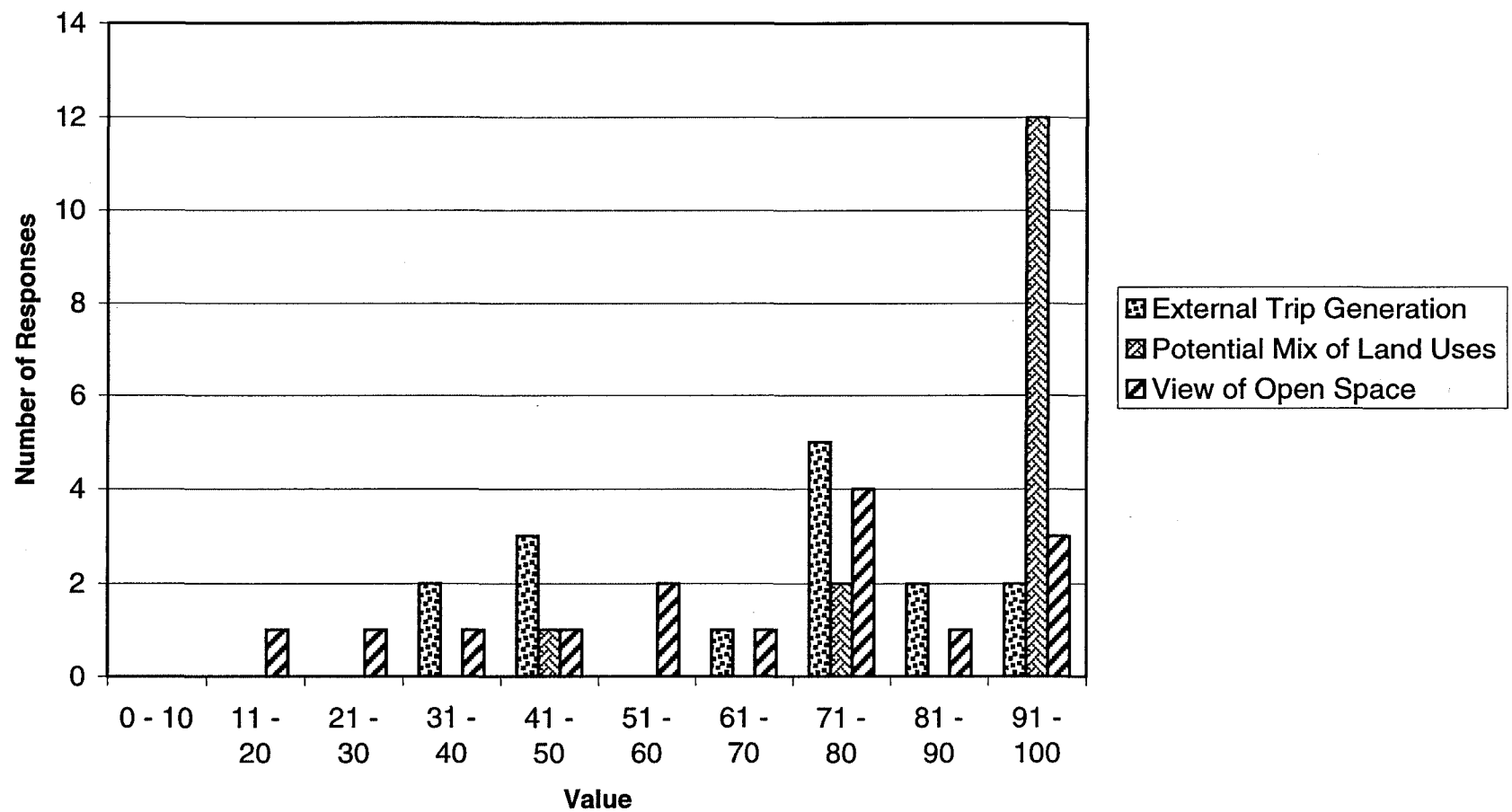
	Resources Value		Enhance Water Management Capability		Enhance Accessible Open Space	Minimize Costs/Impacts to County-Wide Taxpayers	
EWG Member	Affiliation	Potential Ability to Connect Conservation or Preserve Lands	Total Water Resources Area	Amount of Impervious Area	Total Area in Accessible Recreational Open Space	Publicly Paid Infrastructure and Services	Public Land Acquisition
Don Grund	PBC Parks	95	100	95	100	100	90
Ronald Crone	LWDD	100	100	95	100	100	80
Rich Walesky	PBC ERM	70	100	80	100	80	100
Linda Hoppes	PBC PZ&B	80	100	70	100	70	100
Tim Granowitz	PBC Parks	100	100	90	100	100	90
Dan Cary	SFWMD	75	100	25	100	50	100
Dominic Sims	PBC PZ&B	90	100	80	100	100	50
Frank Duke	PBC PZ&B	60	100	40	100	100	75
Mike Buscha	TCRPC	50	100	50	100	100	50
P.K. Sharma	SFWMD	80	100	80	100	100	60
Rick Nevulis	SFWMD	60	100	30	100	100	60
Pat Walker	SFWMD	80	100	0	100	100	50
Henry Bittaker	SFWMD	80	100	99	100	100	15
A. Hocht	PBC PZ&B	10	100	30	100	50	100
Ray Liberti	PBCWUD	80	100	80	100	50	100
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
average		74.0	100.0	62.9	100.0	86.7	74.7
minimum		10.0	100.0	0.0	100.0	50.0	15.0
maximum		100.0	100.0	99.0	100.0	100.0	100.0
standard deviation		22.9	0.0	31.1	0.0	20.9	26.1



**FIGURE XX**  
**Average Criteria Scores for Create a Functional Self-Sustaining Form of Development**



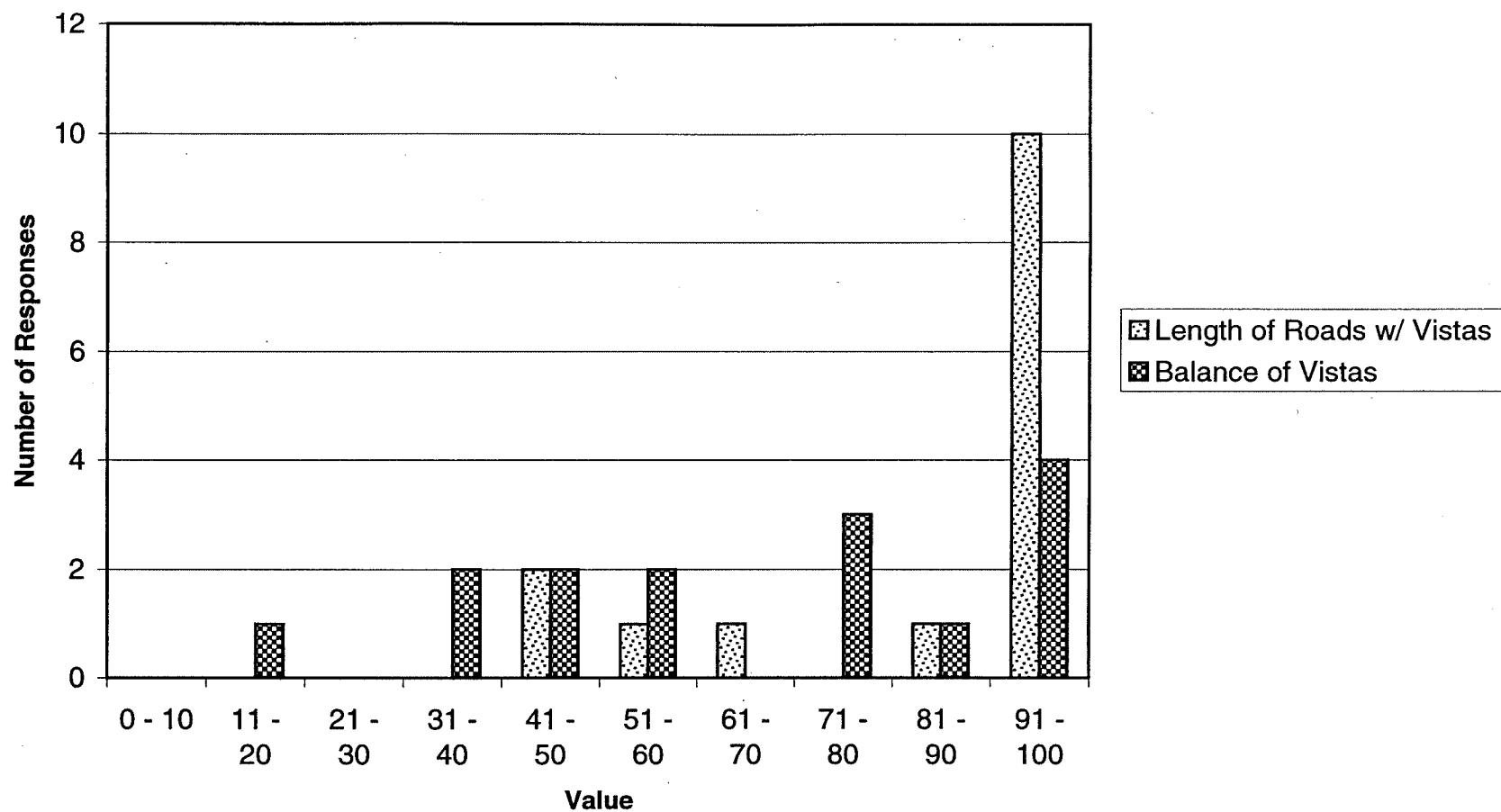
**Agricultural Reserve Master Plan**  
**Extended Working Group Scoring of Criteria**



**FIGURE XX**  
**Objective: Create a Functional Self-Sustaining Form of Development**



**Agricultural Reserve Master Plan**  
**Extended Working Group Scoring of Criteria**

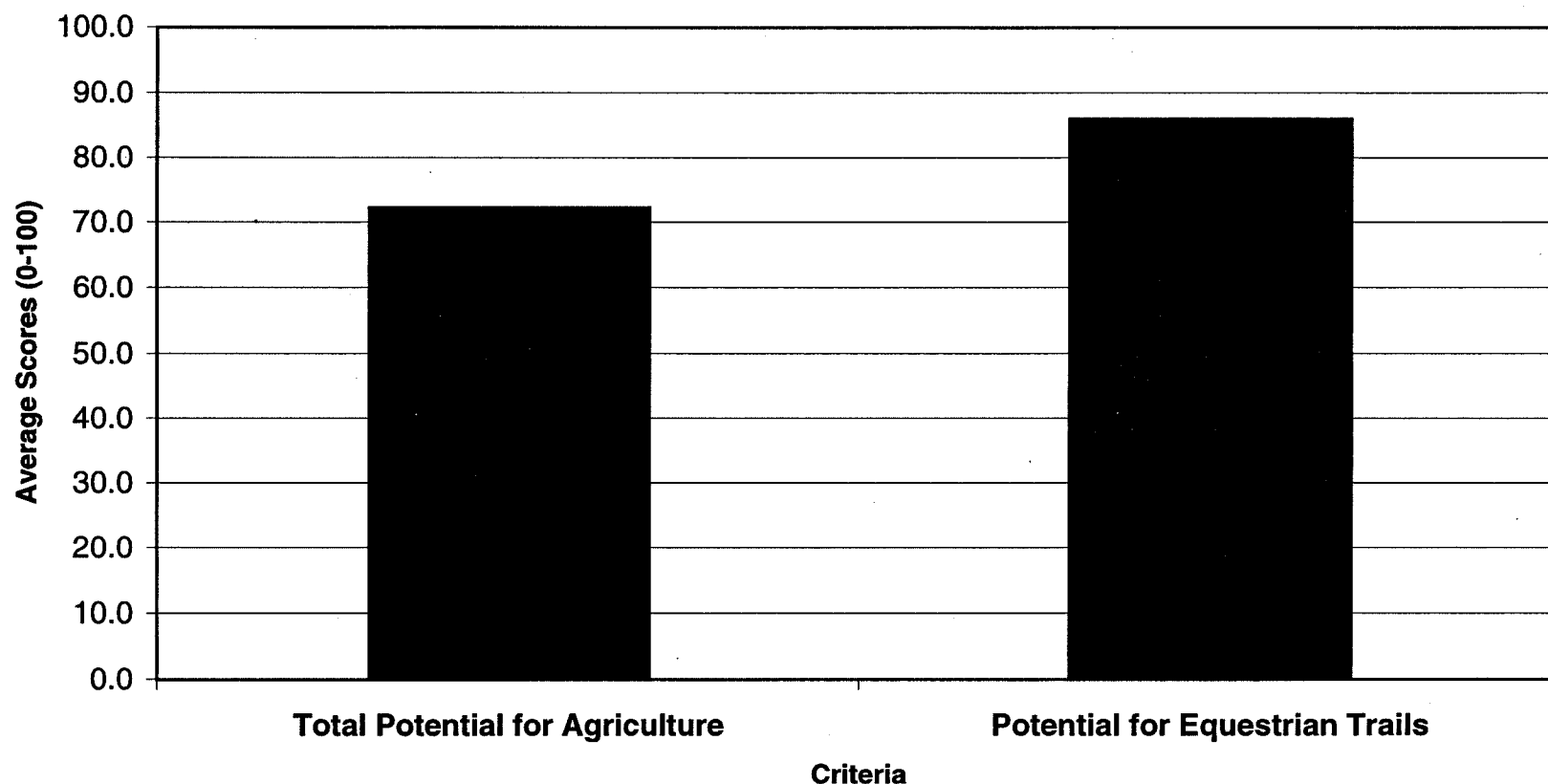


**FIGURE XX**  
Criteria; Views of Open Space



**CH2MHILL**

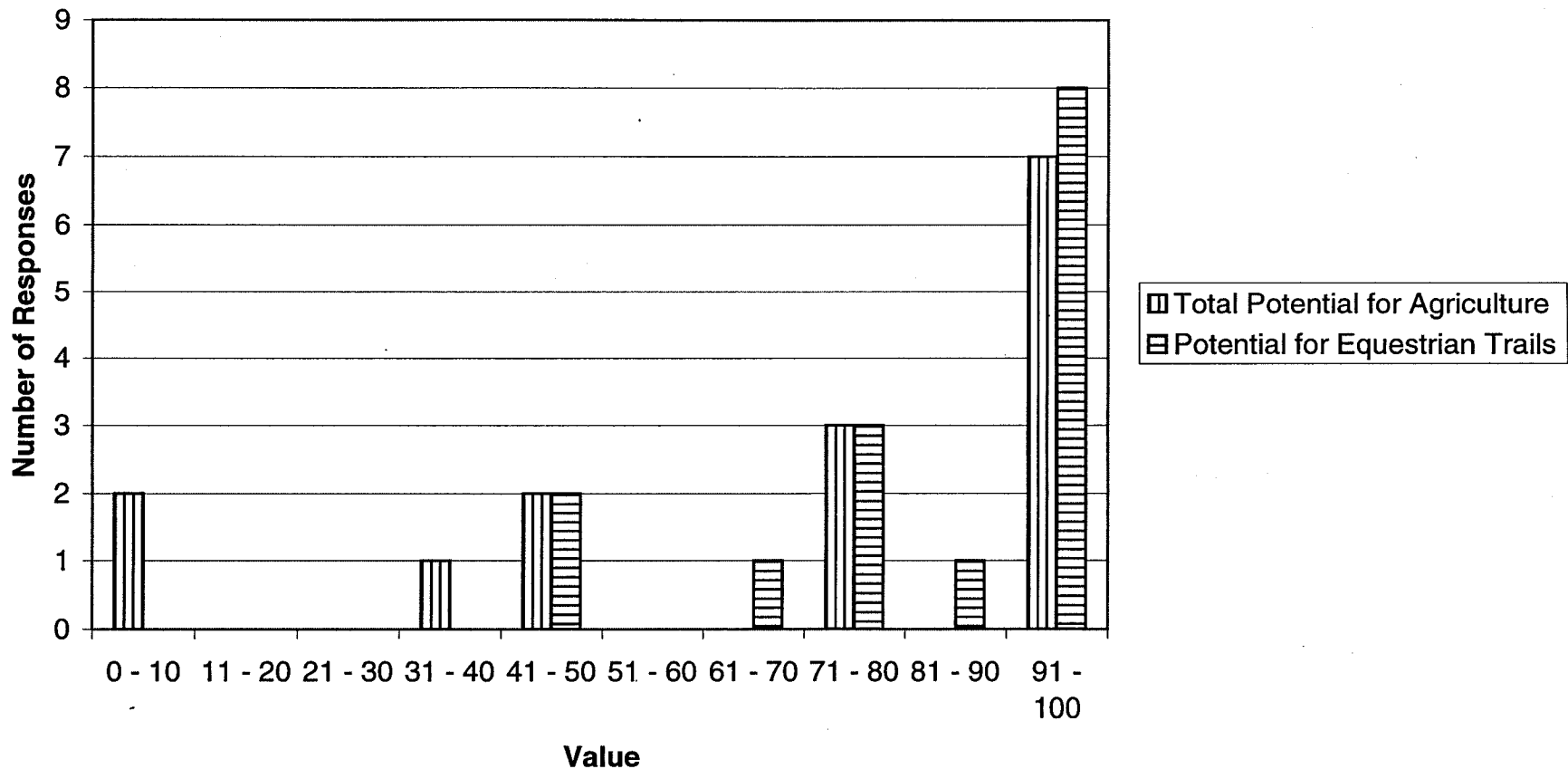
**Agricultural Reserve Master Plan  
Extended Working Group Scoring of Criteria**



**FIGURE XX**  
**Average Criteria Scores for Potential for Agricultural Use**



**Agricultural Reserve Master Plan**  
**Extended Working Group Scoring of Criteria**



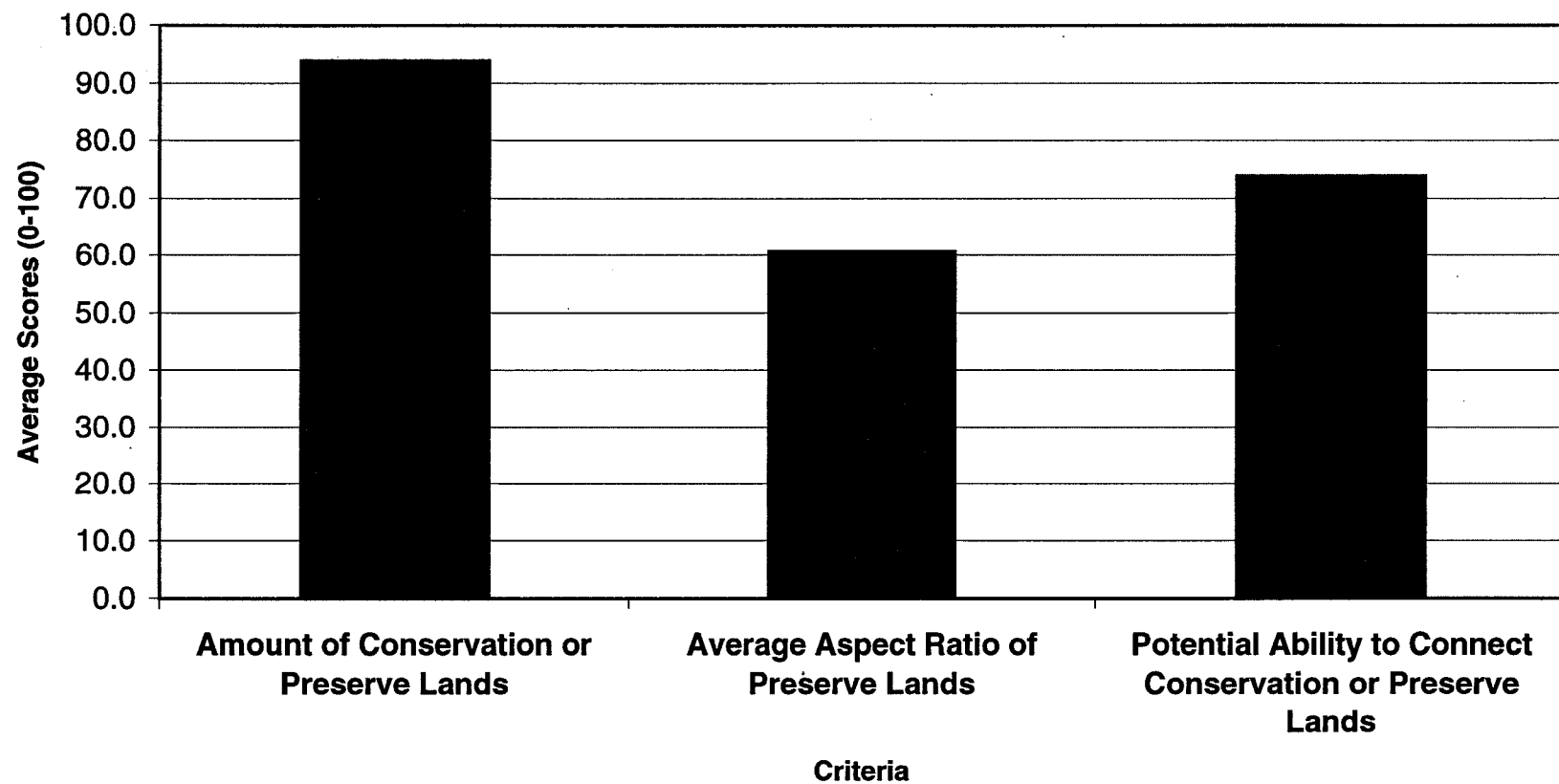
**FIGURE 2-3**  
**Objective: Enhance Potential for Agricultural and Equestrian Use**



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**Agricultural Reserve Master Plan**  
**Extended Working Group Scoring of Criteria**

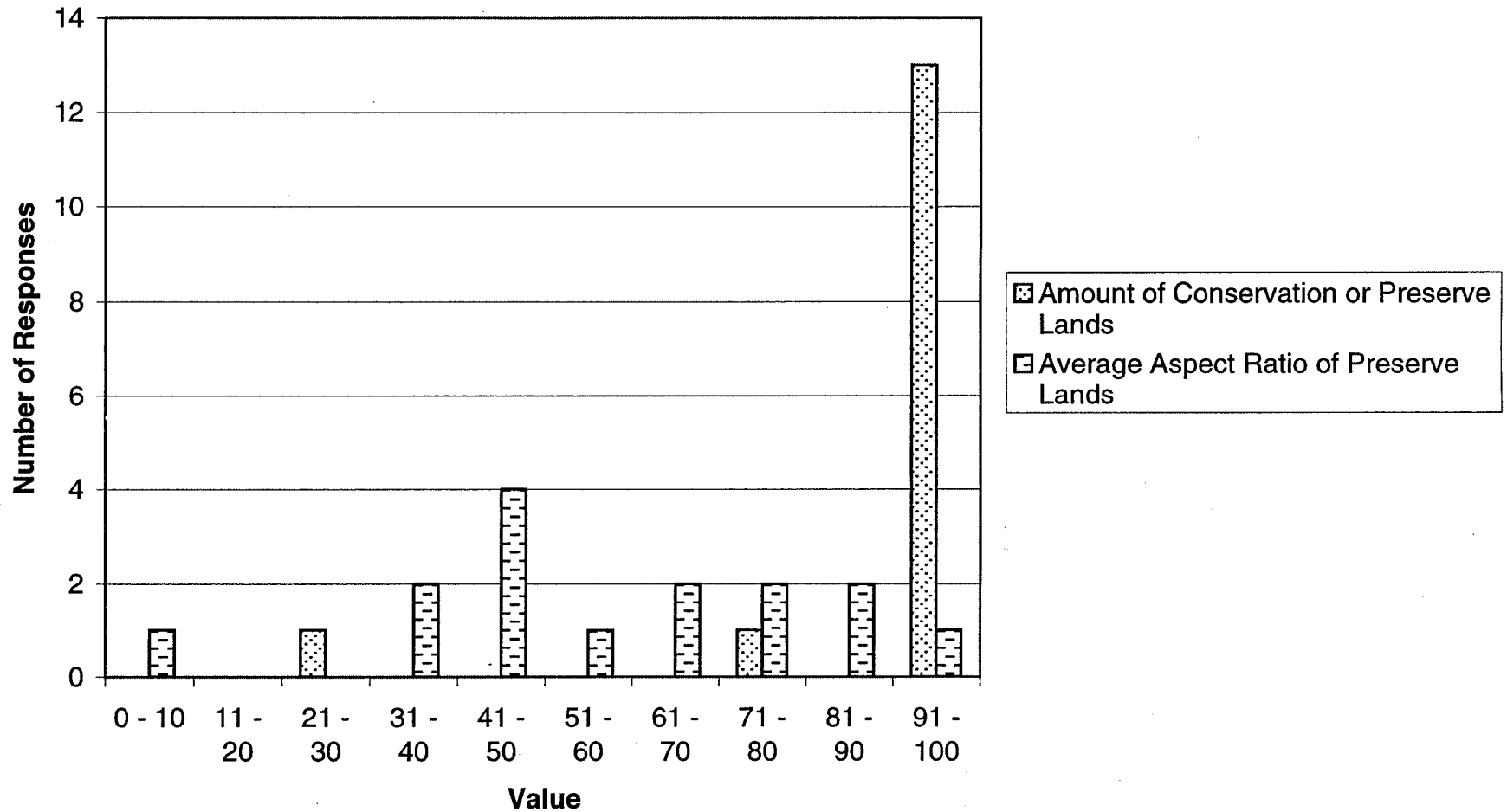




**FIGURE XX**  
**Average Criteria Scores for Environmental Enhancement**



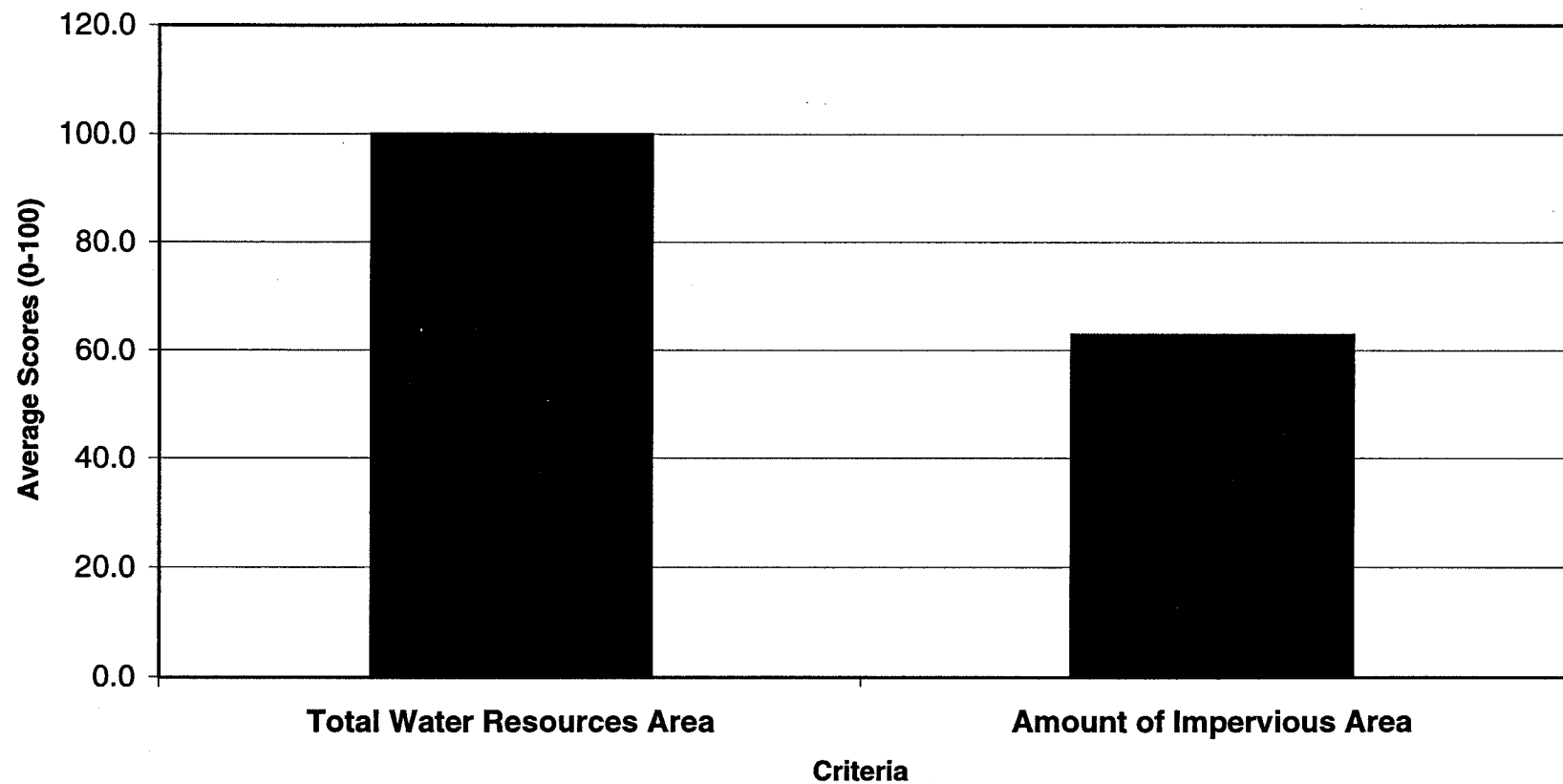
**Agricultural Reserve Master Plan**  
**Extended Working Group Scoring of Criteria**



**FIGURE XX**  
Objective: Enhance Environmental Resource Value



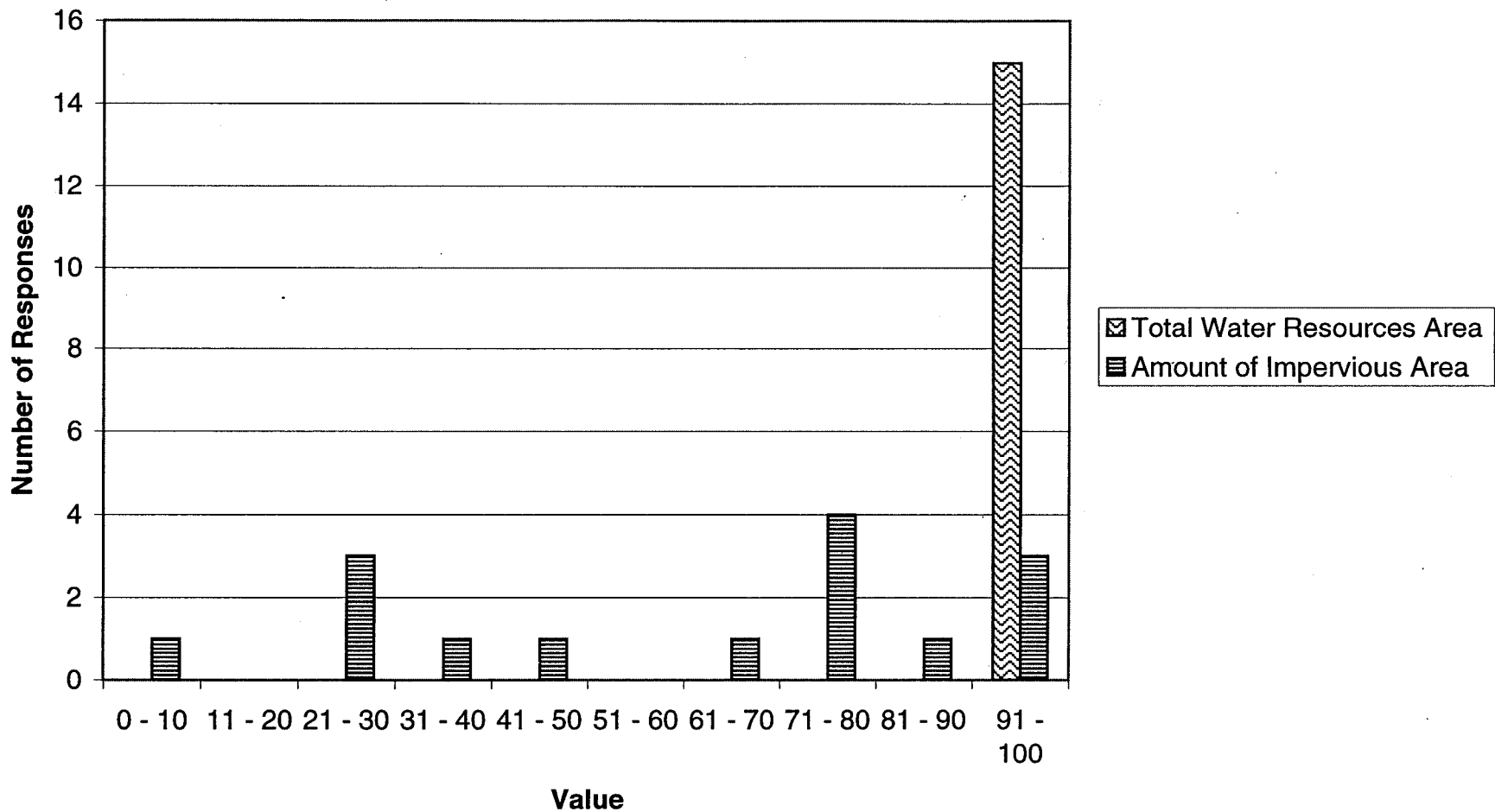
**Agricultural Reserve Master Plan  
Extended Working Group Scoring of Criteria**



**FIGURE XX**  
**Average Criteria Scores for Water Resource Management**



**Agricultural Reserve Master Plan**  
**Extended Working Group Scoring of Criteria**

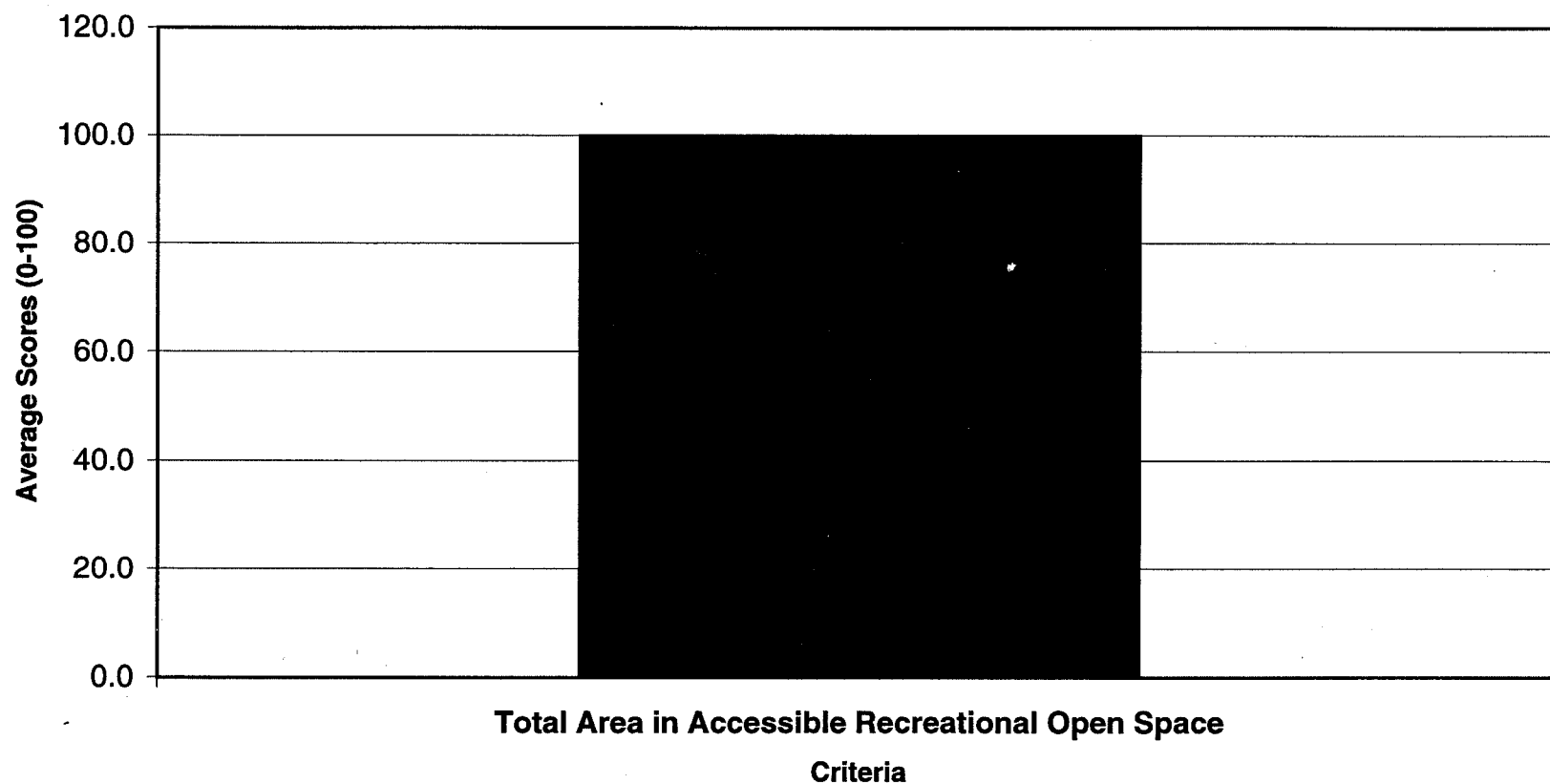


**FIGURE XX**  
**Objective: Enhance Water Management Capability**



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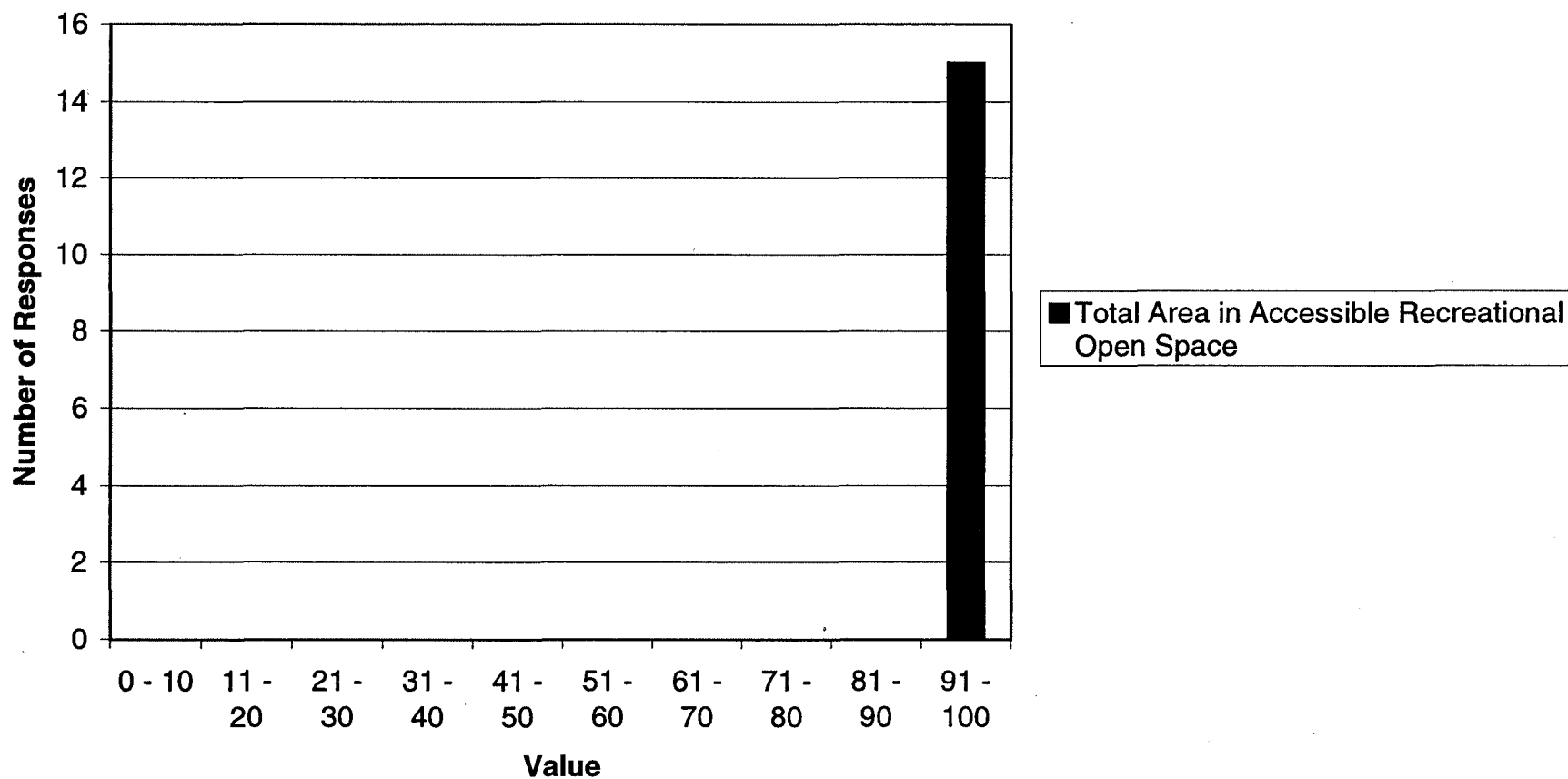
**Agricultural Reserve Master Plan  
 Extended Working Group Scoring of Criteria**



**FIGURE XX**  
**Average Criteria Scores for Accessible Open Space**



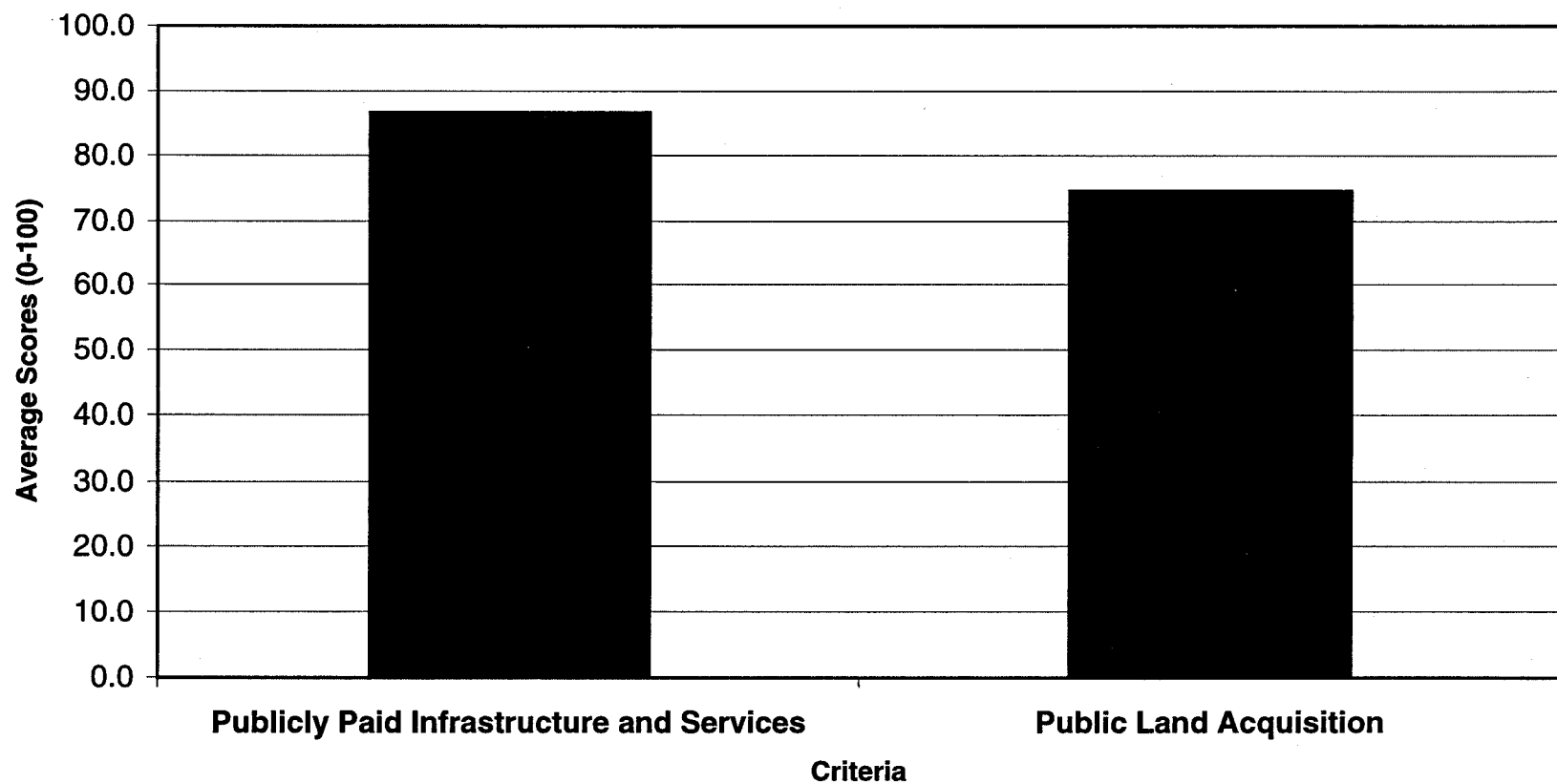
**Agricultural Reserve Master Plan**  
**Extended Working Group Scoring of Criteria**



**FIGURE XX**  
**Objective: Enhance Accessible Open Space**



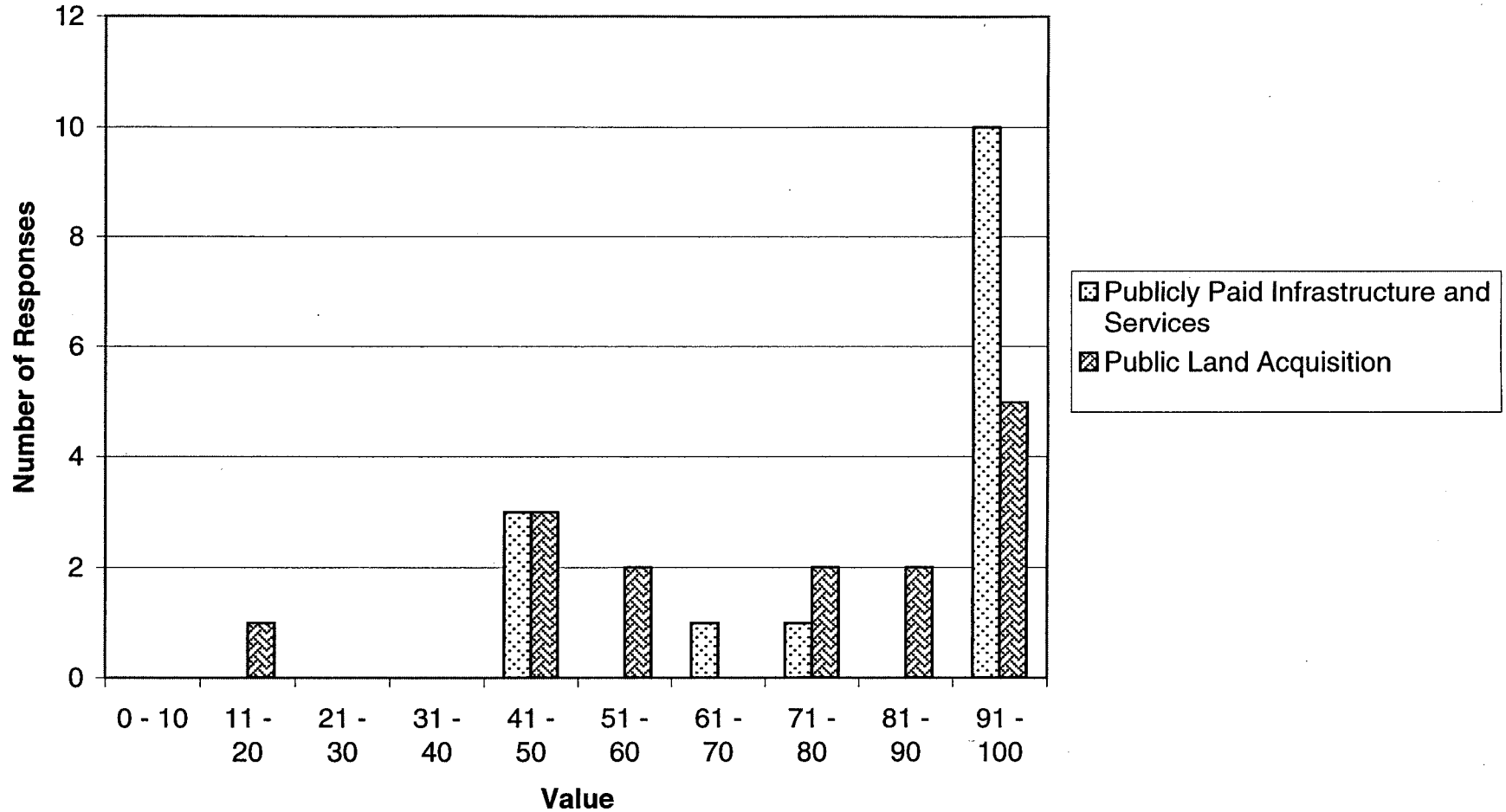
**Agricultural Reserve Master Plan  
Extended Working Group Scoring of Criteria**



**FIGURE XX**  
**Average Criteria Scores for Minimize Cost/Impacts to County Taxpayers**



**Agricultural Reserve Master Plan**  
**Extended Working Group Scoring of Criteria**



**FIGURE XX**  
**Objective: Minimize Costs/Impacts to Taxpayers**



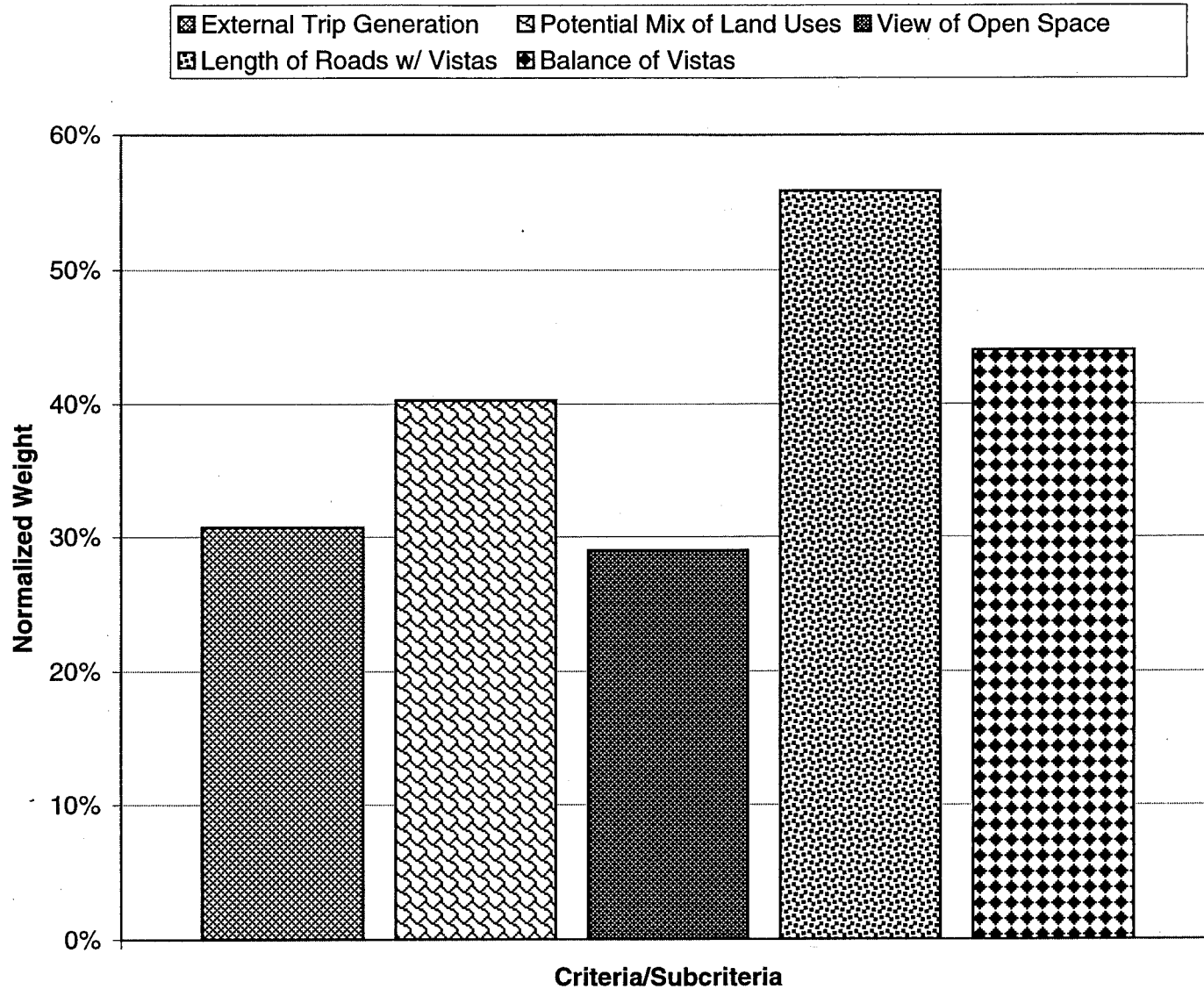
**CH2MHILL**

**Agricultural Reserve Master Plan  
 Extended Working Group Scoring of Criteria**



## Extended Working Group Criteria Scoring and Normalized Weights

Objectives	Criteria/Subcriteria	EWG	
		Actual Scores	Normalized Weights
Create a Functional Self-Sustaining Form of Development	External Trip Generation	71.3	30.7%
	Potential Mix of Land Uses	93.6	40.3%
	View of Open Space	67.3	29.0%
	Totals	232.3	1.0
	Length of Roads w/ Vistas	87.7	56.0%
	Balance of Vistas	69.0	44.0%
	Totals	156.7	1.0
Enhance Potential for Agriculture (including nurseries) and Equestrian Use	Total Potential for Agriculture	72.33	45.7%
	Potential for Equestrian Trails	86.00	54.3%
	Totals	158.3	1.0
Enhance Environmental Resources Value	Amount of Conservation or Preserve Lands	94.00	41.1%
	Average Aspect Ratio of Preserve Lands	60.67	26.5%
	Potential Ability to Connect Conservation or Preserve Lands	74.00	32.4%
	Totals	228.7	1.0
Enhance Water Management Capability	Total Water Resources Area	100.00	61.4%
	Amount of Impervious Area	62.93	38.6%
	Totals	162.9	1.0
Enhance Accessible Open Space	Total Area in Accessible Recreational Open Space	100.00	100.0%
Minimize Costs/Impacts to County-Wide Taxpayers	Publicly Paid Infrastructure and Services	86.67	53.7%
	Public Land Acquisition	74.67	46.3%
	Totals	161.3	1.0

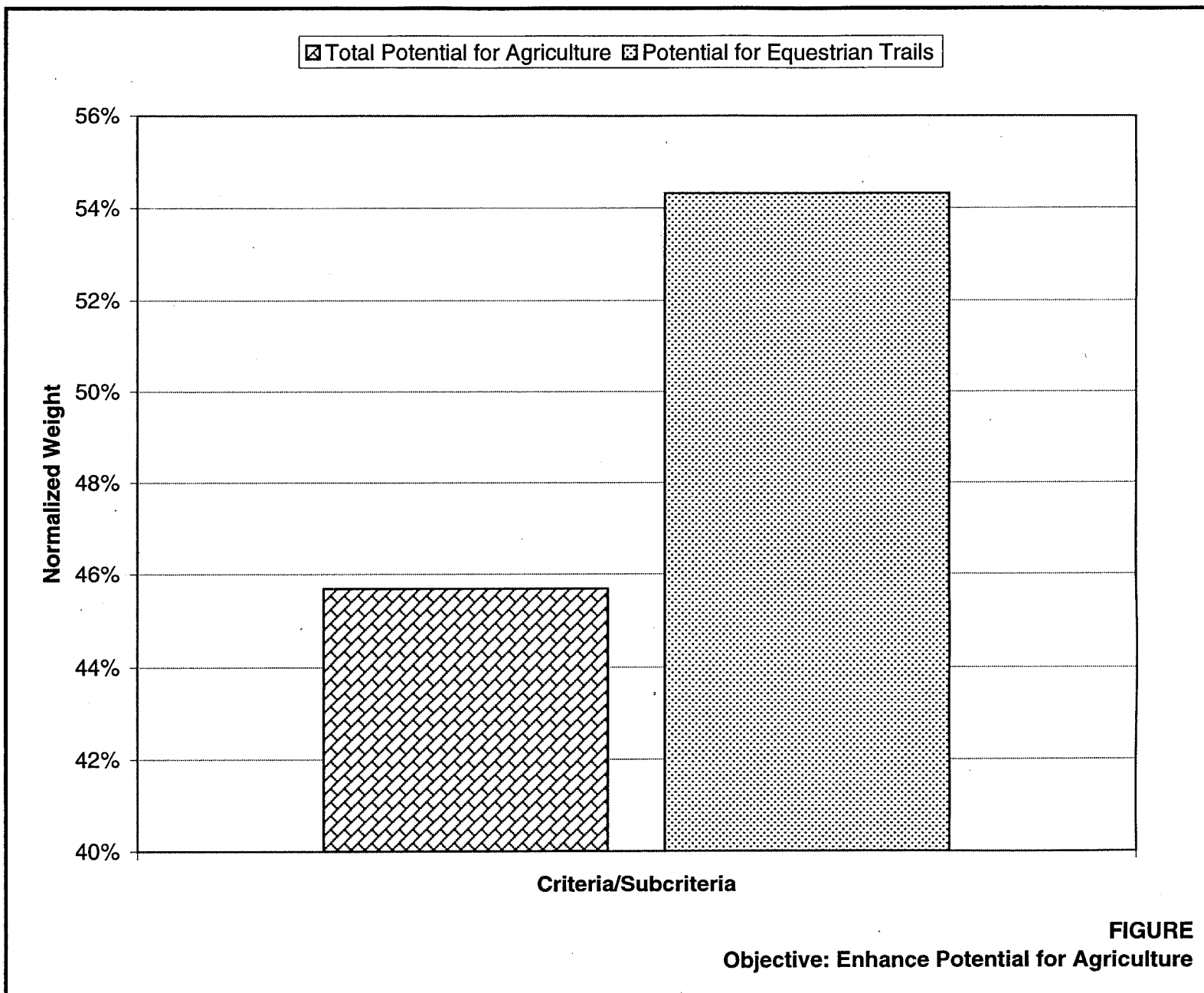


**FIGURE**  
Objective: Functional Form of Development



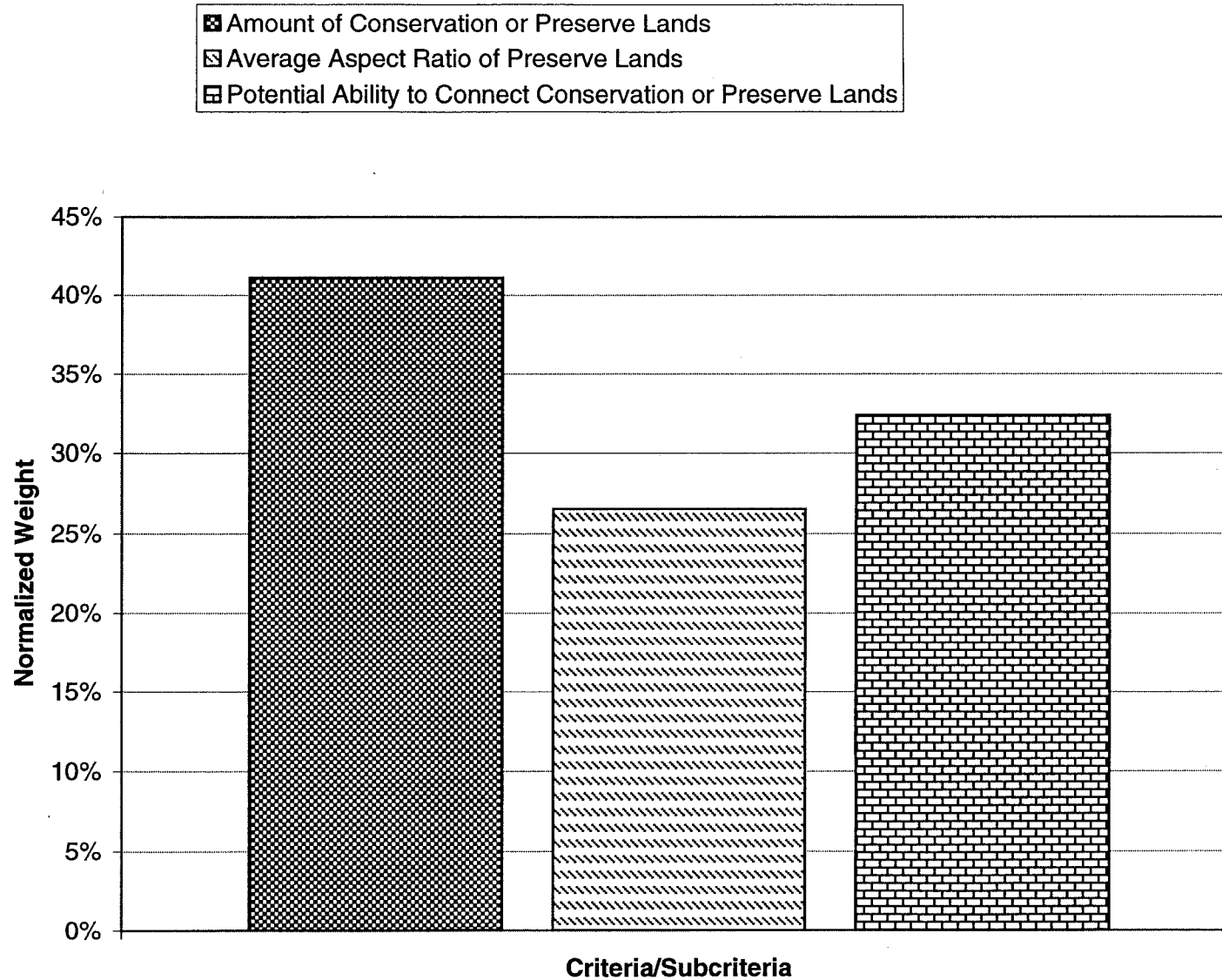
**CH2MHILL**

**Agricultural Reserve Master Plan**  
**Normalized Criteria Weights - Extended Working Group**



**CH2MHILL**

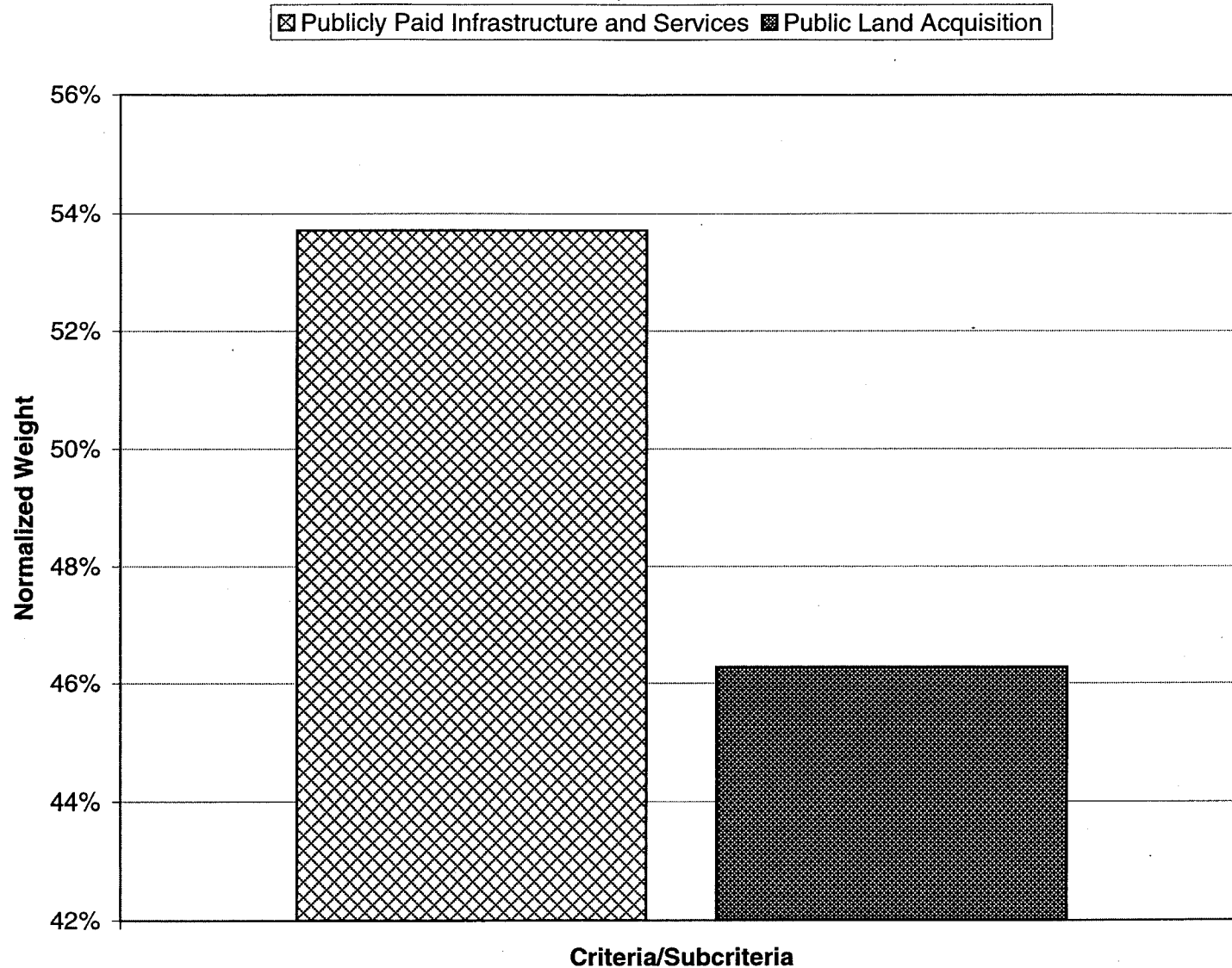
**Agricultural Reserve Master Plan  
Normalized Criteria Weights - Extended Working Group**



**FIGURE**  
**Objective: Enhance Environmental Resource Value**

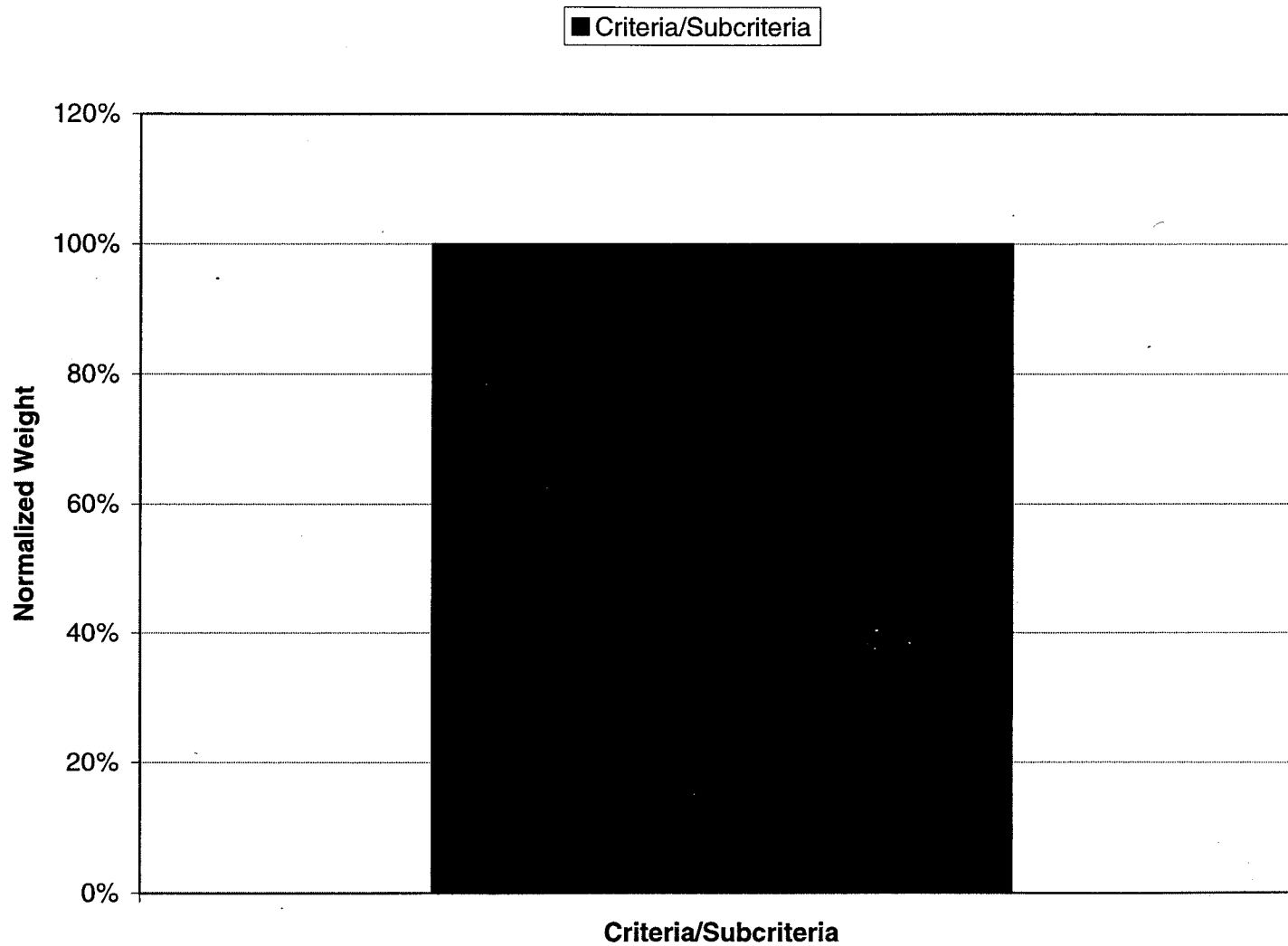


**Agricultural Reserve Master Plan**  
**Normalized Criteria Weights - Extended Working Group**



**FIGURE**  
Objective: Minimize Costs/Impacts to Taxpayers

# Total Area in Accessible Recreational Open Space

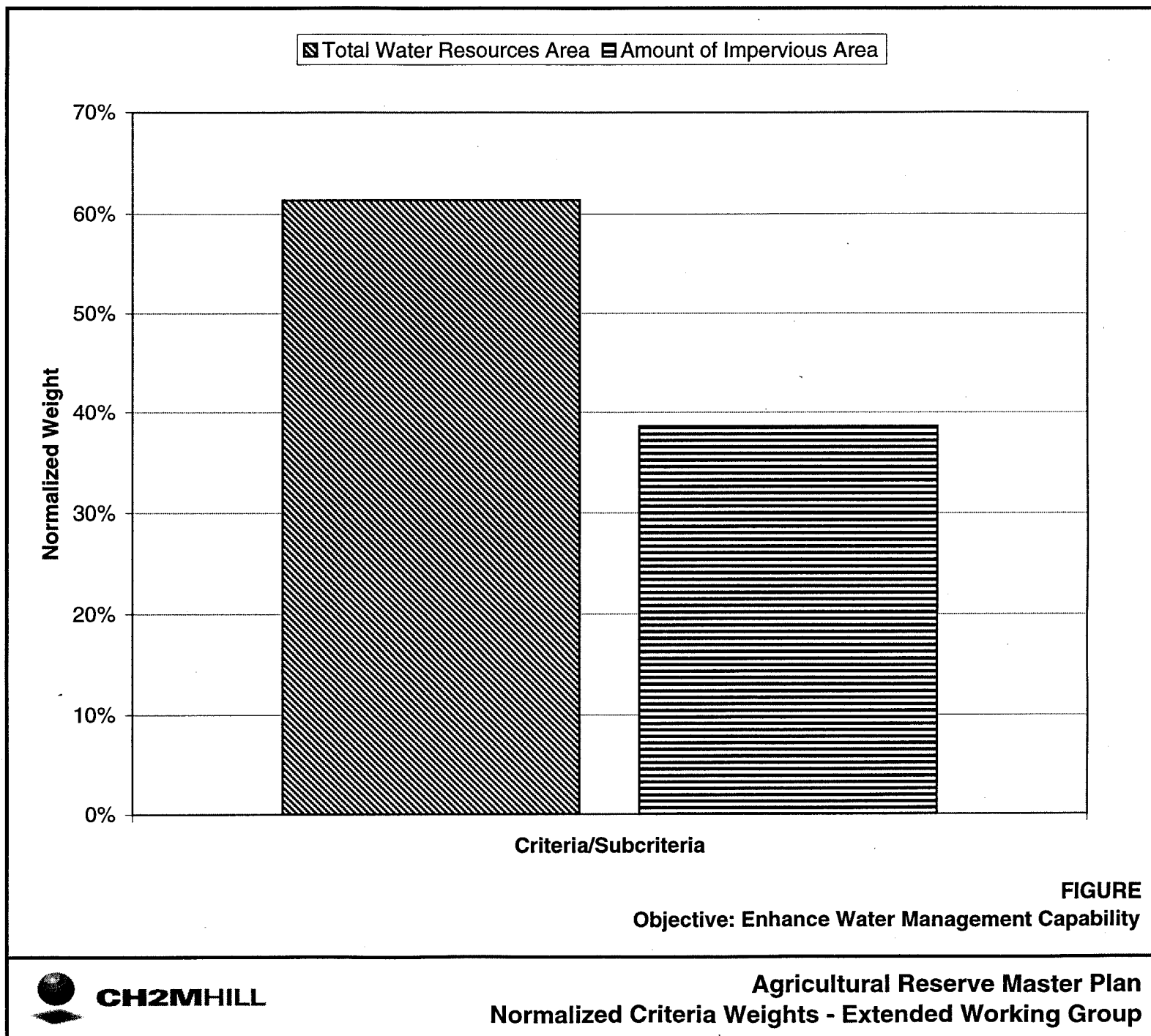


**FIGURE**  
**Objective: Enhance Accessible Open Space**



**CH2MHILL**

**Agricultural Reserve Master Plan**  
**Normalized Criteria Weights - Extended Working Group**



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# **Agricultural Reserve Master Plan Interim Report No. 3 Development of Alternatives**

Prepared for  
**Palm Beach County**

November 1998

**CH2MHILL**  
in association with  
Dover, Kohl & Partners



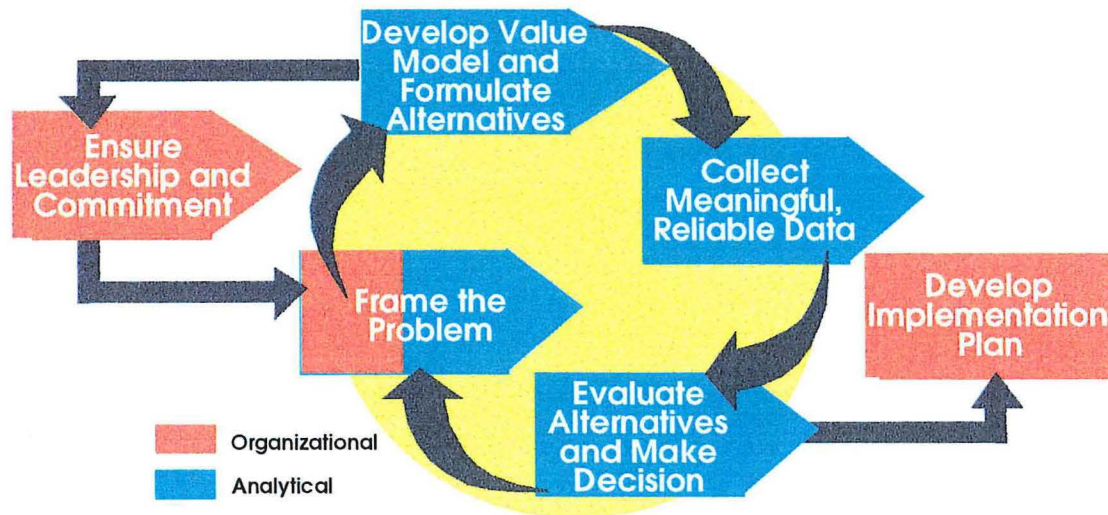
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# Introduction

Continuing on the six-step decision process, this Interim Report describes the process used to develop the final three conceptual land use alternatives and is the latter part of the step titled *Developing Value Model and Formulating Alternatives*. Exhibit 3-1 depicts the six-step process and the relationship of this step to the others.



**Exhibit 3-1**  
Six-Step Decision Process

This portion of the project involved developing maps of the three land use alternatives, to help to provide a visualization of how the three land use patterns might look. These three conceptual land use are described as follows.

- **Status Quo** – this alternative assumes that the current land use regulations remain intact, and that the Ag Reserve will develop out under the 60/40.
- **No Bond** – this alternative will plan to balance existing agricultural use, planned water resource projects, and other environmental amenities with current and future development. It assumes that no public dollars are available from any source to facilitate land purchases within the Ag Reserve, and that other processes and possibly land use configurations will be required to make it feasible.
- **Bond** – this alternative is similar to the No Bond scenario; however, it assumes that public money will be available for land purchase. While it is anticipated that this alternative will need support from public sources to maintain land values, the amount of public dollars that may be necessary is assumed to be \$100 million.

The Status Quo Alternative was initially developed by County Planning Division staff, with assistance from the Treasure Coast Regional Planning Council (TCRPC) and South Florida Water Management District (SFWMD) Planning staff. The other two alternatives were developed through the Design Charrette process with extensive input from the public. All three alternatives were created using a similar format for agriculture, environmentally sensitive lands, water resources features, open space, and urban development to provide an equitable comparison between them. Also, the project purpose statement, as established by the Palm Beach County Board of County Commissioners (BCC), and the underlying assumptions were used to guide the development of the three alternatives.

## Status Quo Alternative

This alternative was presented at the first public workshop and will be used as the baseline alternative from which to compare the other alternatives (see Interim Report No. 1).

The Status Quo Alternative was created by:

- Assuming approximately 3,000 units are already built or approved for development
- Assuming approximately 14,000 acres of land are available for development, which at 1 dwelling unit (DU) per acre, would account for approximately 14,000 additional DUs
- Using the existing Ag Reserve land use regulations
- Examining ownership patterns to identify those properties qualifying for 60/40
- Identifying 40 percent of the land as developed on each of these properties, and assuming they develop one at a time, so there is little to no opportunity to adjoin adjacent development or remaining 60 percent open space
- Utilizing the 60/40 rule to cluster development rights from the west side of SR 7/US 441 into logical locations, which was discussed at the public workshop as a very likely possibility. This is because of the less expensive land west of SR 7/US 441, which could more readily be purchased by developers on the east side to account for the needed 60 percent open space requirement.

Exhibit 3-2 illustrates the Status Quo Alternative using the above provisions, and only represents one possible configuration under the current regulations.

Features of this plan include:

- Other than Ag Reserve-related uses, all new development will be residential only
- Car trips will extend outside of the Ag Reserve for daily needs
- Open spaces are smaller and less contiguous
- SFWMD reservoir is shown as currently envisioned, but no land has been purchased at this time
- New developments are isolated from each other



Palm Beach County Agricultural Reserve  
F L O R I D A




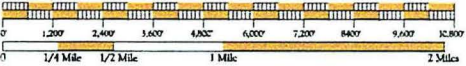
"Status Quo" Alternative

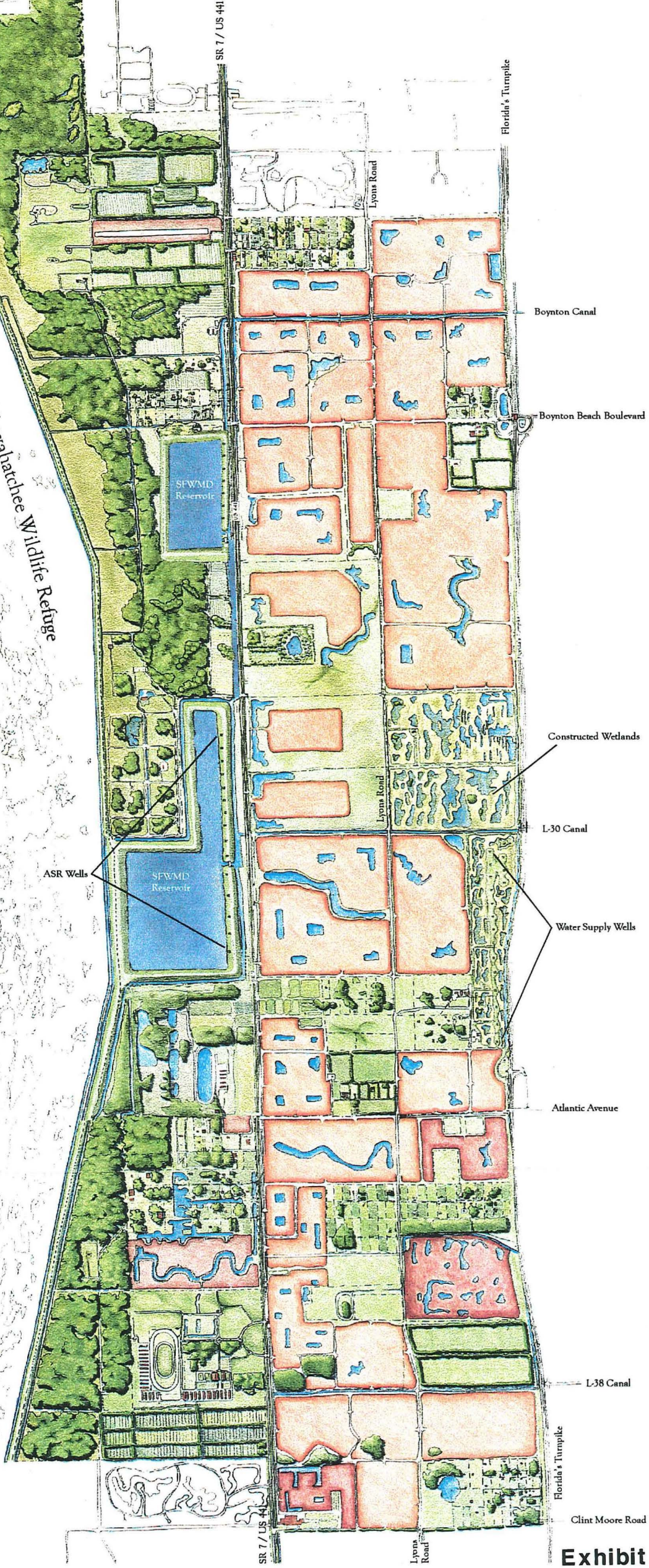
DRAFT

**This map is conceptual:**  
It is meant to guide future efforts, showing possible build-out and land conservation scenarios within the Palm Beach County Agricultural Reserve. The boundaries between developed areas and green areas are not intended to be hard and set. They may be configured differently as the plan is refined and when development actually occurs. Areas colored green may contain agricultural uses other than those illustrated including but not limited to: equestrian facilities, nurseries, row crop farms, cattle ranching, raising farm animals, fruit groves/orchards, wildlife preserves, recreational facilities, and golf courses.

**Legend:**

- Proposed land for future development
- Land with existing development approvals
- Mixed-use town centers
- Typically properties developed at one unit per 5 acres
- Land for agriculture and open space
- Canals and lakes
- Roads

  
  
  
Draft Date: January 5, 1999  
SCALE 1" = 1,200'  




**Exhibit 3-2**  
Conceptual "Status Quo" Alternative



- A portion of the 60-percent cluster option centrally located along the Florida Turnpike to accommodate constructed wetland and new water supply wells
- Total number of dwelling units would be approximately 17,000 (3,000 existing and 14,000 new)

Other configurations of the land use could occur depending on how and when the land would be purchased, aggregated, and/or developed.

## Public Workshop Design Charrette

Unlike the Status Quo, the other two alternatives were developed with extensive input from the public through a Public Workshop Design Charrette. The workshop was held on October 16<sup>th</sup> and 17<sup>th</sup>, 1998, at the Clayton Hutcheson Agricultural Center. More than 130 people attended the workshop, including land owners and farmers in the Ag Reserve, special interest groups, developers, homeowner groups, and the public at-large.

The purpose of the Public Workshop Design Charrette was to ensure public input into the design concepts that will be used to formulate the final two conceptual land use alternatives. Specific objectives of the workshop were:

- To continue outreach efforts demonstrating that the planning approach is unique and that public input and dialogue are central to the success of the project
- To educate and provide the public an understanding of the County's and other agencies' needs within the Ag Reserve
- To educate the public on possible land use concepts to be incorporated into the land use of the Ag Reserve
- To begin development concepts on paper for incorporation into our future land use alternatives

The first day of the workshop was held to educate the workshop participants on the Design Charrette process and what the expectations should be of the participants. A list of participants and presentation materials is provided in Appendix 3A. Also, individuals from the following organizations made short presentations to the workshop attendees regarding their specific interest in the Ag Reserve and answered questions from the workshop attendees.

**Equestrian Industry** – the equestrian industry discussed the various types of equestrian uses, their impact on the economy, compatibility with other land uses, and interest in developing additional facilities in the Ag Reserve. This was presented to educate the workshop attendees about other viable agricultural uses and to express their interest in the Ag Reserve for possible future equestrian facilities.

**SFWMD** – SFWMD focused discussions on the status and results of the U.S. Army Corps of Engineers Restudy and the need for additional Water Preserve Areas and reservoirs along the western portion of the Ag Reserve to buffer the Arthur R. Marshall Loxahatchee Wildlife Refuge. Also, this group described how, as an example, the C-111 Basin in northern Dade and southern Broward County used the water features present in the basin as an amenity

for future development. This was presented to help workshop attendees visualize how they may be able to use the existing waterways in the Ag Reserve as an amenity.

**County Water Utilities Department** – County Water Utilities Department presented the needs of the County with respect to water supply and resources. The information presented was a part of the Integrated Water Resources Strategy for Southeastern Palm Beach County, and described the various water supply and resources technologies the County is examining and where in the Ag Reserve these technologies would be constructed. Water supply and resources features considered in the Ag Reserve include additional surficial aquifer water supply wells and constructed wetlands for reuse of wastewater from the County's Southern Region Wastewater Reclamation Facility, similar to the 40-acre Wakodahatchee Wetland located just east of the Ag Reserve area.

The second day of the Design Charrette was dedicated to actually "putting pen to paper" and developing a number of alternatives from the workshop participants. The workshop began with a brief overview of the previous night's presentation and discussion of what is planned for the design charrette. Appendix 3B contains a copy of the presentation material made on the second day of the Public Workshop Design Charrette.

The 130-plus people were organized around 16 tables with a trained facilitator and designer at each. A number of technical experts from the Working Group and Extended Working Group (EWG) were available for each of the tables as resources on various topics from water management to traffic issues. First, the workshop participants were asked to work together at each table to come up with a plan by keeping in mind the overall purpose of the project. Second, after completion of the first drawing, the participants were asked how they could improve on the first plan if the County had \$100 million to spend on land purchases. Upon completion of the rough drawings, a representative from each table presented the key features of their plan to the entire group.

Appendix 3C contains a list of the participants, facilitators, and experts who participated in the Design Charrette, along with examples of maps created by the public. Finalization of the last two alternatives will be described further in Interim Report No. 4.

# Public Opinion Survey

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A public opinion survey was conducted, somewhat independent of the work being conducted on the masterplanning effort. During the course of the masterplanning effort, a number of individuals representing interest groups, homeowners associations, landowners and farmers in the Ag Reserve, and developers participated in the Ag Forum and the public workshops. As a result, the public input provided on the masterplanning effort was focused on a relatively small group of taxpayers in the County – those who showed a keen interest. Therefore, the public opinion survey was conducted to compare with the input provided by the small group of interested parties, and confirm that the direction the project was heading made sense to a broader group of taxpayers.

Specifically, the intent of the survey was to solicit opinions from the general public regarding:

- Quality of Life in Palm Beach County
- Growth-Related Issues
- The Ag Reserve
- A Bond Referenda

## Description of Survey Process

The Glenney Group was retained by CH2M HILL to complete the public opinion survey by conducting 400 telephone interviews with Palm Beach County residents. The interviews were conducted between October 28, 1998, and October 31, 1998, and were drawn from a random-sample universe, balanced by geographic segment (zip code aggregate). The statistical margin of error was 4.9 percent at a 95 percent confidence level.

## Results of the Survey

### General Findings

Palm Beach County residents are very happy about living here and, generally, are quite pleased with the way their government handles the issues they care about.

- 70.3 percent of respondents rate the county as an excellent or good place to live.
- 69.1 percent have very or somewhat favorable feelings toward their County Commission (with only 24.1 percent negative).
- A majority of respondents give high marks to their quality of life in terms of
  - Recreation (64.8 percent excellent or good)
  - Cultural activities (57.3 percent excellent or good)
  - Availability/safety of water supply (51.8 percent excellent or good)

- 38 percent rate environmental protection as "excellent or good"; 38.3 percent rate it as only average.
- A plurality rate their quality of life as "average" on
  - Safety from crime (42.8 percent average)
  - Growth management (41.5 percent average)
  - Reasonable taxes (40.3 percent)
- Schools draw the lowest quality of life rankings:
  - 20.3 percent say very poor or poor
  - 23.3 percent say average
  - 20.8 percent say good to excellent

Respondents say the number one problem facing the county is growth (22.3 percent), followed by crime (19.5 percent), and schools (17.0 percent). No other issues were volunteered in more than single-digit percentages.

### Growth-Related Issues

Despite their high favorable rating for the County Commission, a plurality of respondents gave the Commission only an average performance rating on the following issues.

Issue	Very Poor/Poor	Average	Good/Excellent
Managing growth	24.8%	42.3%	19.8%
Keeping taxes reasonable	21.5%	43.3%	27.3%
Protecting the environment	21.3%	39.0%	29.5%

Integrating the answers to growth-related questions, it is noteworthy that respondents have a reasonable attitude toward growth and understand its inevitability and relationship to the economy. When forced to choose sides, however, they will always come down on the side of the environment. And they believe that county government already does a very good job of protecting the environment.

When asked to choose one of the following two statements, here are the results:

- 43.8% Growth is good and should be encouraged.
- 37% Continued growth is bad and should be discouraged.

In a similar pairing of contrasting statements, the results were:

- 58.3% We need to protect our environment, even at the expense of economic opportunities that might come from growth.
- 31.8% We need to encourage planned growth, even at the expense of some environmental concerns.

### The Ag Reserve

The sample split in half in terms of having read or heard anything about the Ag Reserve: 45.8 percent said they had, 46.5 percent said they had not (7.8 percent were not sure). With



this in mind, it is important to note that there is about a 50/50 mix of somewhat informed and completely uninformed answers, which is fairly typical on most public policy questions.

The findings are as follows:

- To allow the Ag Reserve to "develop just like the rest of the county" is not an option; only 12.6 percent supported it. 70.4 percent said the County should limit the amount of development that can occur in the Ag Reserve.
- A plurality (49 percent) said they favor using taxpayer money to buy land to limit development in the Ag Reserve (33 percent are opposed, 18 percent don't know). This is a good number for the County in contemplating a referendum.
- When asked to prioritize the objectives for the Ag Reserve master plan set by the working committee, the results are consistent with other views expressed about growth and the environment. In order of ranking as "very important" (10 on a scale of 1 to 10), respondents' priorities are:

1. Enhancing water resources	46.3 percent
2. Preserving environmentally sensitive lands, such as wetlands and uplands	41.0 percent
3. Minimizing costs to taxpayer	34.8 percent
4. Making more green spaces open to the public	28.8 percent
5. Enhancing agricultural use	22.3 percent
6. Providing a mix of uses	15.3 percent

Some comments on the above responses:

- They are consistent with responses to the other questions, for example, prioritizing water and the environmentally sensitive lands over minimizing costs to taxpayers is consistent with the answer to the paired questions about protecting the environment even at the expense of economic opportunities...and the positive response to using taxpayer funds to limit development of the Ag Reserve.
- Green spaces are not a top priority because respondents already rate their green space/recreational opportunities higher than some other measures of quality of life.
- The mixed use question is lowest because it is an intellectual concept, not an emotional one like "protecting the environment", and because looking at consistency in the poll environmental, preservation is a stronger value than economic development.

## Bond Referenda

When asked to indicate which of the three possible proposals they would be most likely to support, voters said:

- |  |              |
|--|--------------|
| • \$100 million for Ag Reserve                     | 29 percent   |
| • \$25 million for parks and recreation            | 28 percent   |
| • \$50 million for environmentally sensitive lands | 19.5 percent |

Responses to each of the three elements individually were:

- \$100 million for Ag Reserve 38 percent YES  
49 percent NO  
14 percent NOT SURE
- \$25 million for Parks and Recreation 42 percent YES  
46 percent NO  
12 percent NOT SURE
- \$50 million for Environmentally-Sensitive Lands 34 percent YES  
54 percent NO  
12 percent NOT SURE

Additional detail on the survey results are included in Appendix 3D.

## Comparison with Goal and Objectives

The results of the survey were compared to the overarching goal or purpose of the project and the underlying objectives used in the value model. The survey results seem to support the majority of the purpose statement relating to “enhancing environmental and water resources”, but is not as supportive of “enhancing agriculture”. This may be because approximately 50 percent of the surveyed respondents had not heard anything about the Ag Reserve and were not familiar with its importance to agriculture. Because of the relatively uniformed nature of the respondents and the nature of the question asked, it becomes difficult to compare the survey results directly with the relative importance of the six objectives developed previously (see Interim Report No. 2). However, it does appear that minimizing costs to taxpayers may be more important to the general public than the more informed EWG, Land Use Advisory Board (LUAB), and Public Workshop participants.

# Summary and Conclusions

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The three conceptual land use alternatives were visually depicted on maps and are described as follows:

**Status Quo** – this alternative assumes that the current land use regulations remain intact, and that the Ag Reserve will develop out under the 60/40.

**No Bond** – this alternative will plan to balance existing agricultural use, planned water resource projects, and other environmental amenities with current and future development. It assumes that no public dollars are available from any source to facilitate land purchases within the Ag Reserve, and that other processes and possibly land use configurations will be required to make it feasible.

**Bond** – this alternative is similar to the “No Bond” scenario; however, it assumes that public money will be available for land purchase. While it is anticipated that this alternative will need support from public sources to maintain land values, the amount of public dollars that may be necessary is assumed to be \$100 million.

The Status Quo Alternative was initially developed by County Planning Division staff, with assistance from the TCRPC and SFWMD Planning staff. The other two alternatives were developed through the Design Charrette process with extensive input from the public. All three alternatives were created using a similar format for agriculture, environmentally sensitive lands, water resources features, open space, and urban development to provide an equitable comparison between them. Also, the project purpose statement, as established by the BCC, and the underlying assumptions were used to guide the development of the three alternatives.

The Design Charrette process was used to both provide information and solicit input directly from the public on what the Ag Reserve should look like in approximately 20 years. Several technical experts from CH2M HILL, the County, SFWMD, and other governmental agencies, along with professional facilitators, were on hand to assist the public workshop participants in the development of the maps. Sixteen maps were developed by the public and presented to the workshop participants so that everyone could understand how each map was developed. Information from these maps will be used to develop the final two conceptual land alternatives and will be presented in a subsequent interim report.

Finally, a public opinion survey was conducted to solicit opinions from the general public on:

- Quality of Life in Palm Beach County
- Growth-Related Issues
- The Ag Reserve
- A Bond Referenda

The survey concluded that most people are pleased with the quality of life in Palm Beach, except for schools, and that the number one problem is growth, followed by crime and

schools. Despite a favorable rating for the BCC, a plurality of respondents gave the BCC only an average performance rating on:

- Managing Growth
- Keeping Taxes Reasonable
- Protecting the Environment

Approximately half of the respondents had not heard or read anything about the Ag Reserve. With that in mind, a plurality of the respondents said they favored using taxpayer money to buy land to limit development in the Ag Reserve. In contrast, however, when asked about spending \$100 million for acquisition of the land in the Ag Reserve, more were inclined to vote against, whereas a slight majority said they support a \$25 million bond for Parks and Recreation. They were also somewhat opposed to spending \$50 million on environmentally sensitive lands.

The results of the survey were then compared to the overall purpose and goal of the project, as established by the BCC, and to the six objectives used to evaluate the three land use alternatives. Essentially, the public favored enhancing environmental and water resources of the Ag Reserve, but indicated a lower priority for enhancing agricultural use or green-space. This may have been because of the number of respondents who did not understand the importance of the Ag Reserve for agriculture and open space and who were already quite pleased with the quality of life relative to recreation. It also appears that minimizing costs to taxpayers may be more important to the general public than what's been seen from the more informed EWG, LUAB and Public Workshop participants.

APPENDIX 3A

**List of Participants and Presentation Material  
from the First Day of the Public Workshop  
Design Charrette**

---

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15	Adam Hochberg	732-5159	732-4454
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17	BILL RUDNICK	487-6727	451-4941
16	SCOTT BROWN	346-3319	
17	B.J. McCormick	494-7206	494-7206
17	Nancy Astor		
18	ARTHUR B. LEIBOVIT	655-7885	655-7887
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17	Mark Ellis	894-4737	
17	PAT MCKEOWN	496-4129	
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<del>16</del>	<del>Samuel P. ...</del>	<del>501-449-2907</del>	
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16 TOM PORTER

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Total  
(116)

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Bert Mehl, Pres Alliance of Delray

7632 Mansfield Hollow Delray Beach Fla 33446 ✓

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**Welcome to the Agricultural  
Reserve Master Plan Design  
Charrette Workshop - Part 1**

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**Clayton Hutcheson  
Agricultural Center  
October 16th, 1998  
7:00 PM - 9:00 PM**

**Workshop Schedule**

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■ **Tonight - 7:00 PM - 9:00 PM**

Introduction and overview of Design Charrette  
Workshop

■ **Tomorrow - 9:00 AM - 2:00 PM**

Design Charrette

## **Tonight's Agenda**

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- Welcome and Introductions
- Project Purpose and Objectives
- Project Overview
- Overview of the Last Workshop
- Purpose and Objectives of this Workshop
- Land Use Design Concepts
- Examples of Uses in the Ag Reserve
- Equestrian Potential
- Regional Water Management Needs
- Subregional Needs - Integrated Water Resources Strategy for Southeastern Palm Beach County
- Closing Comments

## **Purpose of the Agricultural Reserve Master Plan**

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As established by the Board of County Commissioners...

" To preserve and enhance agricultural activity and environmental and water resources in the Ag Reserve, and produce a master development plan compatible with these goals"

## **Objectives of the Agricultural Reserve Master Plan**

---

- Obtain input from land owners, farmers, and the public at large
- Determine what the most important values are from the above input
- Develop land use alternatives that follow the project purpose and address the values developed
- Determine the benefits and preliminary costs of the alternatives and allow BCC to make informed decision

## **Scope of Work is Divided Into Two Phases**

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- Phase I - Development of Preliminary Land Use Alternatives
- Phase II - Detailed Masterplanning of the selected land use alternative

## **Phase I Incorporates a Four Prong Approach**

---

- A Public Involvement and Community Outreach Program
- Enlisting Public Values
- **Development of Conceptual Alternatives or "looks" in the Ag Reserve Under Three Scenarios**
- Evaluation of the Various Patterns and Comparison of Benefits Vs. Estimated Costs

## **Public Input and Community Outreach**

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- Ag Forum - Completed
- Two Public Workshops
  - **September 19th, 1998 - completed**
  - **October 16th & 17th, 1998**
- Public Opinion Survey - November 20, 1998
- Fact Sheets, Updates to the Media, and information listed on the County's Web Site - **[www.co.palm-beach.fl.us/News](http://www.co.palm-beach.fl.us/News) (Ag Reserve)**

## **Enlisting Public Values**

---

- Input from public and private interest has helped us generate a set of values - Ag Forum, the last Public Workshop, the Land Use Advisory Board, and the Public Opinion Survey
- Values have been translated into objectives and criteria and a value model developed
- The value model will be used to measure the performance of each of the land use alternatives

## **Development of Conceptual Land Use Patterns or "Looks" within the Ag Reserve**

---

- Based on three basic scenarios:
  - Status Quo
  - No Public Money
  - Public Money
- The "looks" will be generated with direct "hands-on" input from the public during tomorrow's Design Charrette Workshop

## **Decision on Final Land Use Alternative**

---

- The three scenarios will be measured using the value model
- A list of benefits and estimated costs to the County will be developed for each scenario
- The final three scenarios will be presented to the BCC on December 15, 1998
- A decision will be made that will initiate Phase II - more detailed masterplanning, and if needed, a potential bond referendum for March 1999

## **Project Process Overview**

---

- Five groups involved in providing input to the project:
  - Board of County Commissioners
  - Working Group
  - Extended Working Group
  - Land Use Advisory Board
  - Public



## **Role of the Board of County Commissioners**

---

### ■ Phase I

- Establish the purpose of the master planning effort
- Make decision on final land use alternative to conduct more detailed masterplanning

### ■ Phase II

- Approve the completed Master Plan

## **Role of the Working Group**

---

- Made up of the County and South Florida Water Management District Planning Staff and CH2M HILL
- Responsible for executing the scope of work

## **Role of the Extended Working Group**

---

- Made up of additional technical staff from:
  - County Offices of Planning, Zoning, and Building, Water Utilities, Public Affairs, Attorney, Environmental Resources Management, Engineering and Parks
  - South Florida Water Management District
  - Lake Worth Drainage District
  - County Cooperative Extension Service
  - Florida Department of Community Affairs
  - Metropolitan Planning Organization
  - Treasure Coast Regional Planning Council
- Responsible for providing technical input and guidance to the Working Group

## **Role of the Public**

---

- Made up of land owners, farmers, special interest groups and the public at large
- Provides input to the land use alternatives being developed
- Provides input on objectives and criteria used to measure the success of the land use alternatives developed

## **Relationships of the Four Groups to the Project**

---

- **Board of County Commissioners** establish purpose and authorize scope of work
- **Working Group** executes scope of work
- **Extended Working Group and Public** provide input to the process
- **Working Group** incorporates input, develops and evaluates conceptual land use alternatives
- **Board of County Commissioners** decides on land use alternative for subsequent detailed masterplanning

## **Overview of the Last Public Workshop**

---

- Obtained public input on issues related to the future of the Ag Reserve
- Obtained input on how the public would measure the success of the master planning effort
- Obtained input on a draft list of objectives and criteria that was developed independently by the Extended Working Group

## **Results of Last Public Workshop**

---

- Lists of issues and measures of success were compiled, categorized, and analyzed
- A list of key issues were developed based on the frequency they were mentioned
- The list of assumptions, objectives, and criteria were modified

## **Top Ten Issues Raised at the First Public Workshop**

---

- | .There needs to be adequate comprehensive planning for future development.
- | .There needs to be consideration of property rights, fair values for land, and equal treatment with the rest of the County.
- | .Water resources need to be protected both for supply and water quality issues (e.g., prevent salt water intrusion).
- | .Development needs to meet requirements for concurrency and schools.
- | .The long term cost of infrastructure and services, and overall cost to taxpayers needs to be considered..

## **Top Ten List of Issues (continued)**

---

- | Agriculture needs to be protected based upon market demand and type (i.e., cropland, nurseries, equestrian uses).
- | .Policy makers must realize that national policies affect farm enterprises.
- | .Environmentally sensitive areas need to be protected.
- | .Open space needs to be preserved for parks, public access, and views of open space.
- | .Housing and farm practices require adequate land buffers for protection of health and safety.

## **Modified Assumptions of the Master Planning Process**

---

- Private property rights will be respected
- Lands in public ownership will remain in open space
- Design criteria for future development will minimize impacts to Lake Worth Drainage District canal system and the Lake Worth Lagoon
- The amount of land that can be acquired with public funds will depend on the number of willing sellers and the cost of land
- Concurrency requirements will be met

### **Modified Objectives for Measuring Performance of Land Use Alternatives**

---

- Create a Functional Self-Sustaining Form of Development
- Enhance Potential for Agriculture (including nurseries) and Equestrian Use
- Enhance Environmental Resource Value
- Enhance Water Management Capability
- Enhance Accessible Open Space
- Minimize Cost/Impacts to County-Wide Taxpayers

### **Purpose of the Public Workshop and Design Charrette**

---

- To ensure public input into the design concepts that will be used to formulate the land use alternatives

## **Objectives of the Public Workshop and Design Charrette**

---

- To continue outreach efforts demonstrating that the planning approach is unique and that public input and dialogue is central to the success of the project.
- To educate and provide the public an understanding of the County's and other agencies' needs within the Ag Reserve
- To educate the public on possible land use concepts to be incorporated into the land use of the Ag Reserve
- To begin developing concepts on paper for incorporation into our future land use alternatives

## **Land Use Design Concepts**

---

**Introduce Joe Kohl**

## **What's in Store for Tomorrow's Design Charrette?**

---

- Introduction to the Charrette process and ground rules
- Public will help to put "pen to paper" with ideas developed in small groups
- Opportunity to present each table's ideas to the whole group
- Description of the next steps



APPENDIX 3B

## **Presentation Material from the Second Day of the Public Workshop Design Charrette**

---

**Welcome to the Agricultural  
Reserve Master Plan Design  
Charrette Workshop - Part 2**

---

**Clayton Hutcheson  
Agricultural Center  
October 17th, 1998  
9:00 AM - 2:00 PM**

**Today's Agenda**

---

- Welcome and Introductions
- Overview of Friday Night's Presentation
- Introduction of Design Charrette Process and Ground Rules
- Design Charrette at Individual Tables
- Finish up Designs at Each Table and Break for Lunch
- Individual Table Presentations
- Closing Comments

## **Introductions**

---

- List of Facilitators
- List of Technical Experts

## **Purpose of the Agricultural Reserve Master Plan**

---

As established by the Board of County Commissioners...

“ To preserve and enhance agricultural activity and environmental and water resources in the Ag Reserve, and produce a master development plan compatible with these goals”

## **Objectives of the Agricultural Reserve Master Plan**

---

- Obtain input from land owners, farmers, and the public at large
- Determine what the most important values are from the above input
- Develop land use alternatives that follow the project purpose and address the values developed
- Determine the benefit and preliminary costs of the alternatives and allow BCC to make informed decision

## **Scope of Work is Divided Into Two Phases**

---

- Phase I - Development of Preliminary Land Use Alternatives
- Phase II - Detailed Masterplanning of the selected land use alternative

## **Phase I Incorporates a Four Prong Approach**

---

- A Public Involvement and Community Outreach Program
- Enlisting Public Values
- **Development of Conceptual Alternatives or "looks" in the Ag Reserve Under Three Scenarios**
- Evaluation of the Various Patterns and Comparison of Benefits Vs. Estimated Costs

## **Project Process Overview**

---

- Five groups involved in providing input to the project:
  - Board of County Commissioners
  - Working Group
  - Extended Working Group
  - Land Use Advisory Board
  - Public

## **Relationships of the Five Groups to the Project**

---

- **Board of County Commissioners** establish purpose and authorize scope of work
- **Working Group** initiates scope of work
- **Extended Working Group, Land Use Advisory Board and Public** provide input to the process
- **Working Group** incorporates input, develops and evaluates conceptual land use alternatives
- **Board of County Commissioners** decides on land use alternative for subsequent detailed masterplanning

## **Results of Last Public Workshop**

---

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- | .The long term cost of infrastructure and services, and overall cost to taxpayers needs to be considered..

## **Top Ten List of Issues (continued)**

---

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- | .Policy makers must realize that national policies affect farm enterprises.
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- | .Open space needs to be preserved for parks, public access, and views of open space.
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---

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- The amount of land that can be acquired with public funds will depend on the number of willing sellers and the cost of land
- Concurrency requirements will be met

## **Modified Objectives**

---

- Create a Function Self-Sustaining Form of Development
- Enhance Potential for Agriculture (including nurseries) and Equestrian Use
- Enhance Environmental Resource Value
- Enhance Water Management Capability
- Enhance Accessible Open Space
- Minimize Cost/Impacts to County-Wide Taxpayers



## **Overview of Individual Presentations**

---

- Equestrian industry
  - Variety of equestrian types
  - County-wide equestrian needs
- Regional water management needs
  - US Army Corp of Engineers Comprehensive Review Study
  - Water Preserve Areas
- Subregional water management needs
  - Integrated water resources strategy
  - Includes a variety of water resource technologies

## **Purpose of the Public Workshop and Design Charrette**

---

- To ensure public input into the design concepts that will be used to formulate the land use alternatives

## **Objectives of the Public Workshop and Design Charrette**

---

- To continue outreach efforts demonstrating that the planning approach is unique and that public input and dialogue is central to the success of the project.
- To educate and provide the public an understanding of the County's and other agencies needs within the Ag Reserve
- To educate the public on possible land use concepts to be incorporated into the land use of the Ag Reserve
- To begin developing concepts on paper for incorporation into our future land use alternatives

## **Introduction to Design Charrette Process and Ground Rules**

---

**Introduce Joe Kohl**

## **What's Next?**

---

- Develop the three land use alternatives using input from this weekend's Design Charrette
- Complete the public opinion survey
- Measure the three land use alternatives against the objectives and criteria
- Develop estimated costs to County for each of the three alternatives
- Evaluate alternatives and present to BCC on December 15th, 1998

APPENDIX 3C

**List of Participants, Facilitators, and Experts  
Attending the Public Workshop Design  
Charrette and Examples of Maps Created by the  
Participants**

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# Participants at the Public Workshop Design Charrette

---

## List of Facilitators/Table Number

### Dover-Kohl, TCRPC, PBC, and SFWMD Planning Departments

Joe Kohl – Lead Facilitator  
Debbie Ahmari -1  
Sergio Vazquez - 2  
Robert Gray - 3  
David Rodriguez – 4  
James Dougherty – 5  
Trent Greenan – 6  
Roxanna Greenan - 7  
Marcela Camblor - 8  
Jorge Perez – 9  
Luis VanCotthem – 10  
Issac Hoyos – 11  
P.K. Sharma – 12  
Beth Miller – 13  
John Higgins – 14  
John Pancoast – 15  
Maryam Mashayekhi – 16  
Michael Busha - 17

## List of Technical Experts

### Water Resources Issues

Jeff Needle/SFWMD  
Dawn Reid/SFWMD  
Dan Cary/SFWMD  
Fred Rapach/PBCWUD  
Tim Sharp/CH2M HILL

### Environmental

Jon VanArnam/PBCERM  
Chuck Cisco/PBCERM

### Transportation

Dan Weisberg/PBC Engineering  
Paul Larson/MPO

### Planning

Frank Duke/PBCPZ&B

Linda Hoppes/PBCPZ&B

Henry Bittaker/SFWMD

### Agriculture

Clayton Hutcheson/PBC Cooperative Extension Service

Dick March/SFWMD

### Participants

Table 1

Table 2

Table 3

Table 4

Table 5

Table 6

Table 7

Table 8

Table 9

Table 10

Table 11

Table 12

Table 13

Table 14

Table 15

Table 16

Table 17

## Table Facilitation

### Palm Beach County Agricultural Reserve Area

#### INSTRUCTIONS:

1. AFTER JOE SAYS "GO!," PARTICIPANTS WILL BE SETTling INTO CHAIRS, PASS AROUND A SIGN IN SHEET, ASK FOR NAME, PHONE NUMBER, AND FAX NUMBER.
2. ASK EVERYONE TO INTRODUCE THEMSELVES AND GIVE A ONE OR TWO SENTENCE EXPLANATION OF WHY THEY ARE HERE TODAY OR WHAT THEIR INTEREST IS. THE INTRODUCTIONS MUST BE BRIEF.
3. DESIGNATE A SPOKESPERSON FROM THE TABLE TO PRESENT TO THE LARGER GROUP. THE VOLUNTEER WILL GIVE A 5 MINUTE RECAP OF WHAT THE TABLE DISCUSSED AND DECIDED TO THE WHOLE ASSEMBLY. THE SPOKESPERSON CAN NOT BE THE FACILITATOR.
4. EXAMINE THE SITE PLAN LETTING THE PARTICIPANTS IDENTIFY STREETS, NATURAL FEATURES, BUSINESSES, ETC. LOOK OVER THE LEGEND TO IDENTIFY THE COLORS ON THE BASE MAP.
5. PROCEED WITH THE DISCUSSION AND START TO DRAW. SOME TALKING POINTS TO HELP MOVE THE CONVERSATION ALONG ARE LISTED BELOW.
6. AT THE END OF THE TABLE DRAWING SESSION, WE WOULD LIKE TO GET TWO MAPS FROM EACH TABLE. THE FIRST ONE SHOWS A BALANCE OF EVERYONE'S CONCERNS FROM THE TABLE. THE SECOND ONE SHOWS HOW THAT PLAN WOULD CHANGE IF THE GOVERNMENT BOUGHT \$100 MILLION OF LAND FOR PRESERVATION.
7. USE THE LUNCH BREAK TO FINISH UP OR REDRAW THE PLANS TO MAKE THEM READ FROM ACROSS THE ROOM.

#### Talking Points:

1. Where are the natural features (wetlands, canals, stands of trees, etc.) that are worth preserving? Should any of these natural features be exploited for public access or community interest? (Parks, nature trails, etc)
2. Within the Agricultural Reserve, can you identify smaller areas that have their own identity? These areas "feel" like smaller communities or neighborhoods. Your table participants might make different suggestions for these individual areas if they can help you identify them.
3. Is there a historical or identifiable center to the area? The center may be a country store, feed store, or meeting place. Is this something worth preserving or enhancing in some way? Is there or should there be more than one center?
4. What areas, if any, do you feel should remain with an agricultural use? Identify what types of agriculture should be used on that land.
5. What areas, if any, do you feel should be restored to a natural landscape? Are there particular habitats worth restoring?
6. What areas, if any, do you feel should be developed? What type of development should be built there. What should the character of the development be like? How many houses and commercial buildings should be built there? Should there be rural villages instead of suburban sprawl?
7. What areas, if any, do you feel should be reserved for water management?
8. Does anyone have other ideas about what to do with this land?
9. Is there an image or character that is worth preserving for the area. If so, what are the physical features that create this character. Identify these features on the plan.
10. Are there any characteristics about the Agricultural Reserve which are unpleasant and should be changed.
11. Is there anything else that has not been talked about yet?

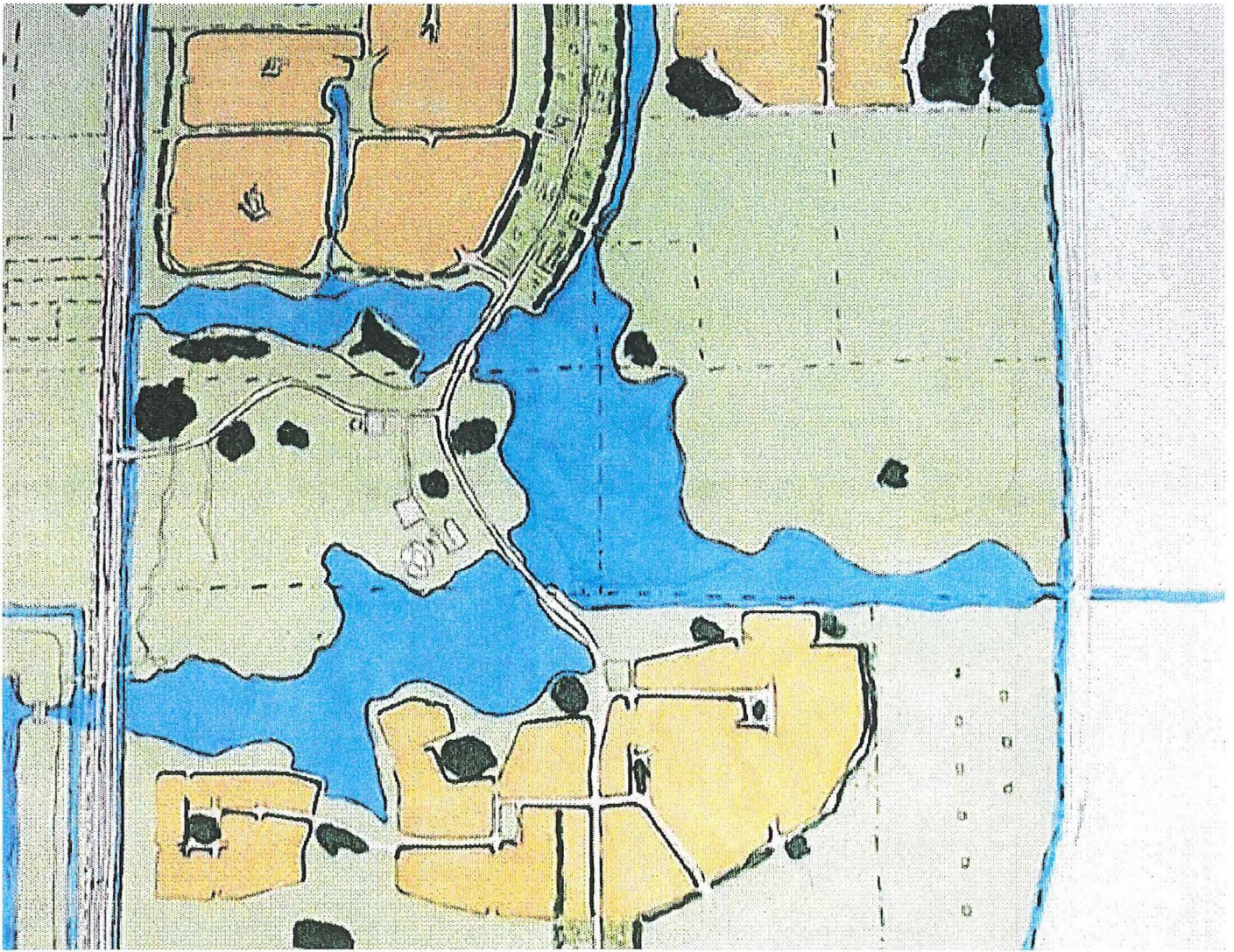




Core Area

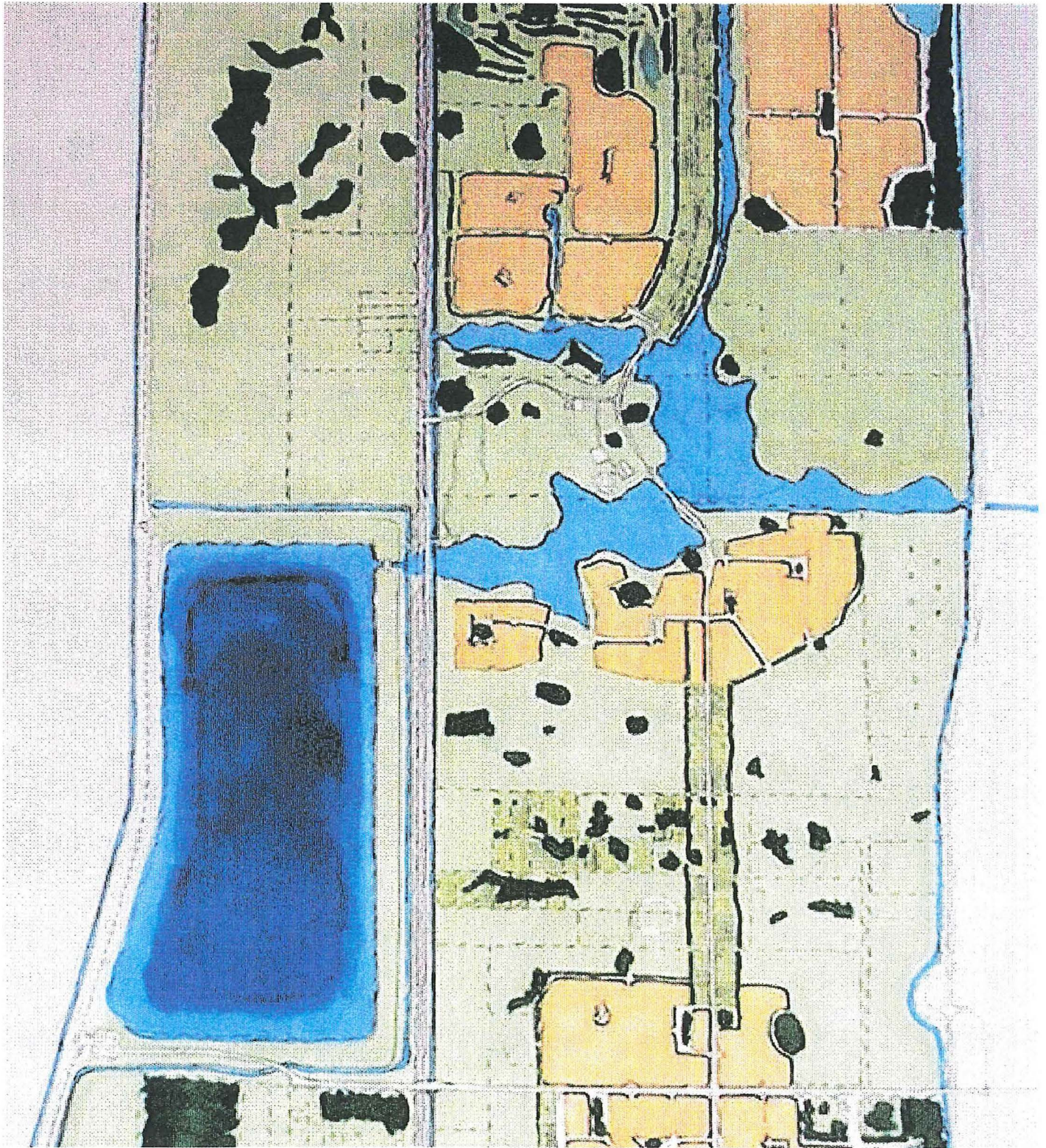






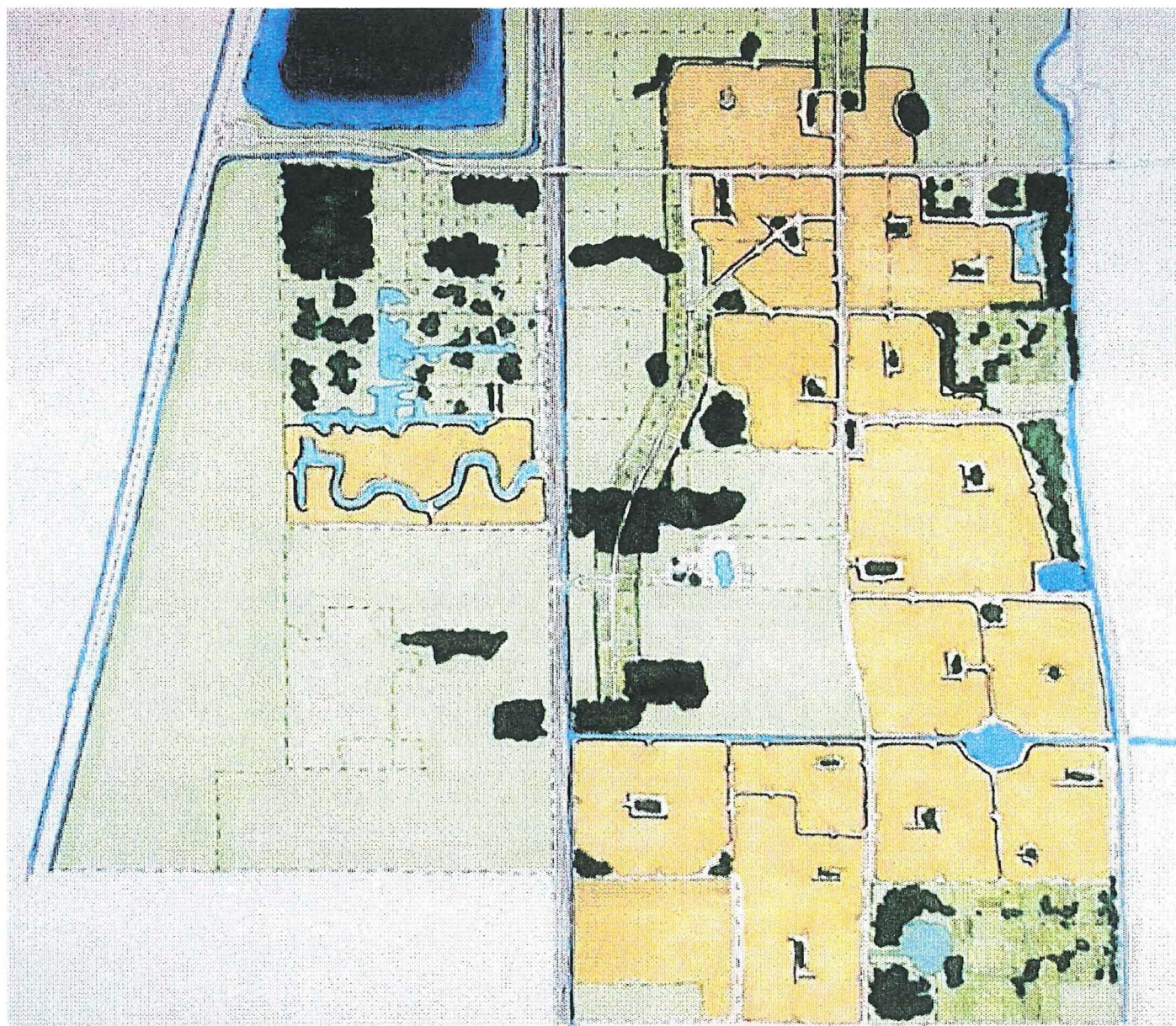
Sapphire Neck





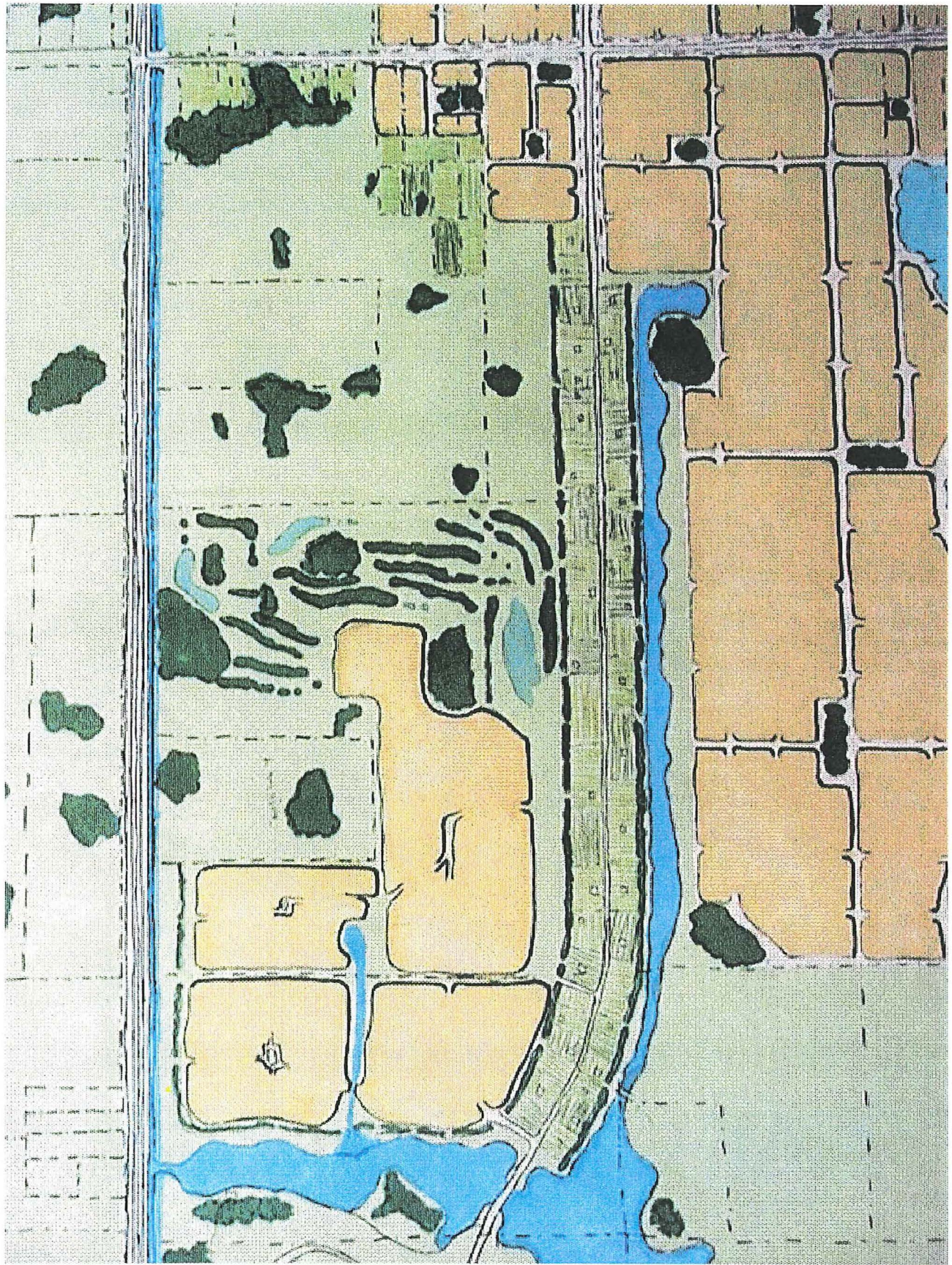
Sapphire Wide with WPA





South of Atlantic





Equestrian Ranch Corridor





Table drawing 1

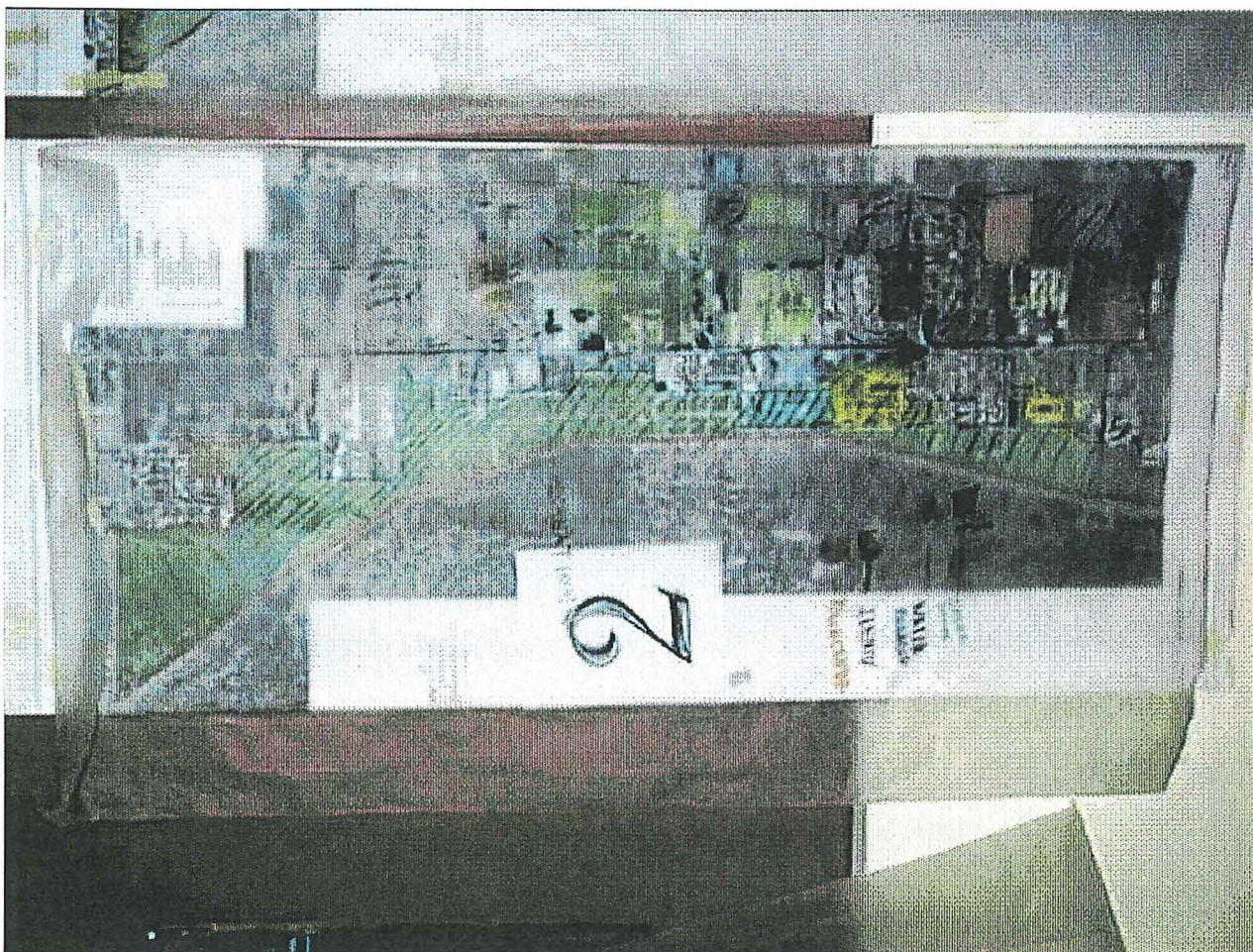


Table drawing 2







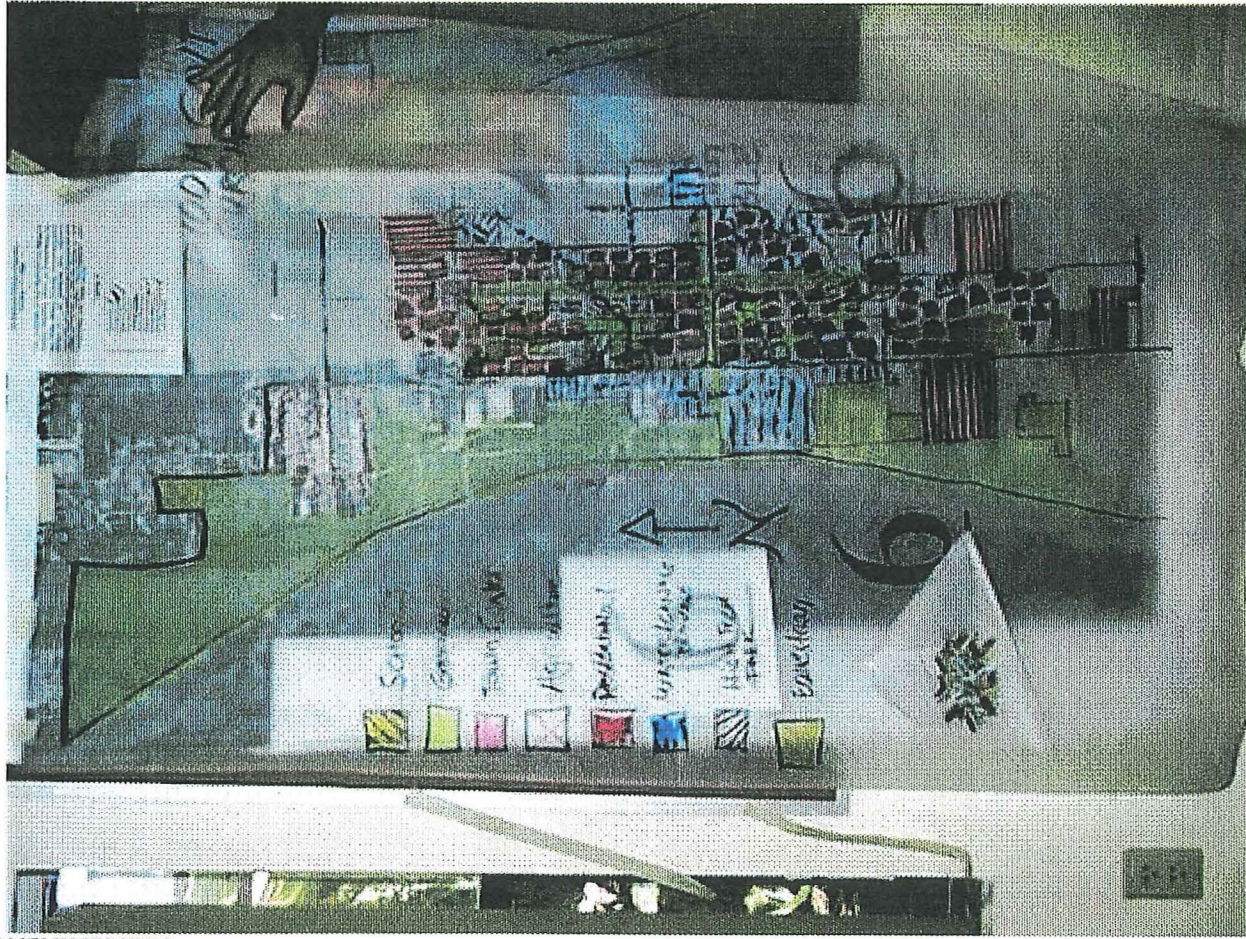


Table drawing 6

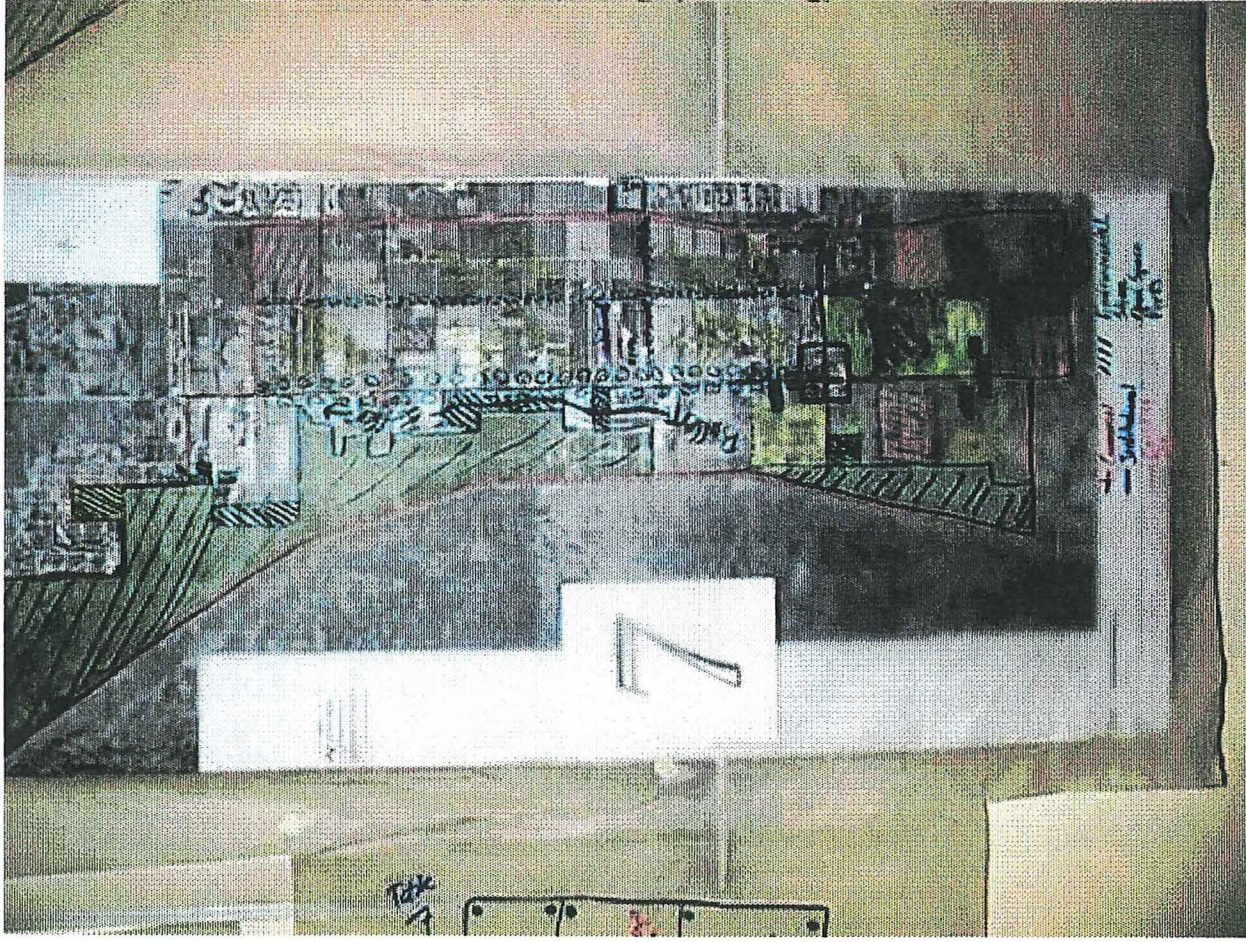


Table drawing 7a



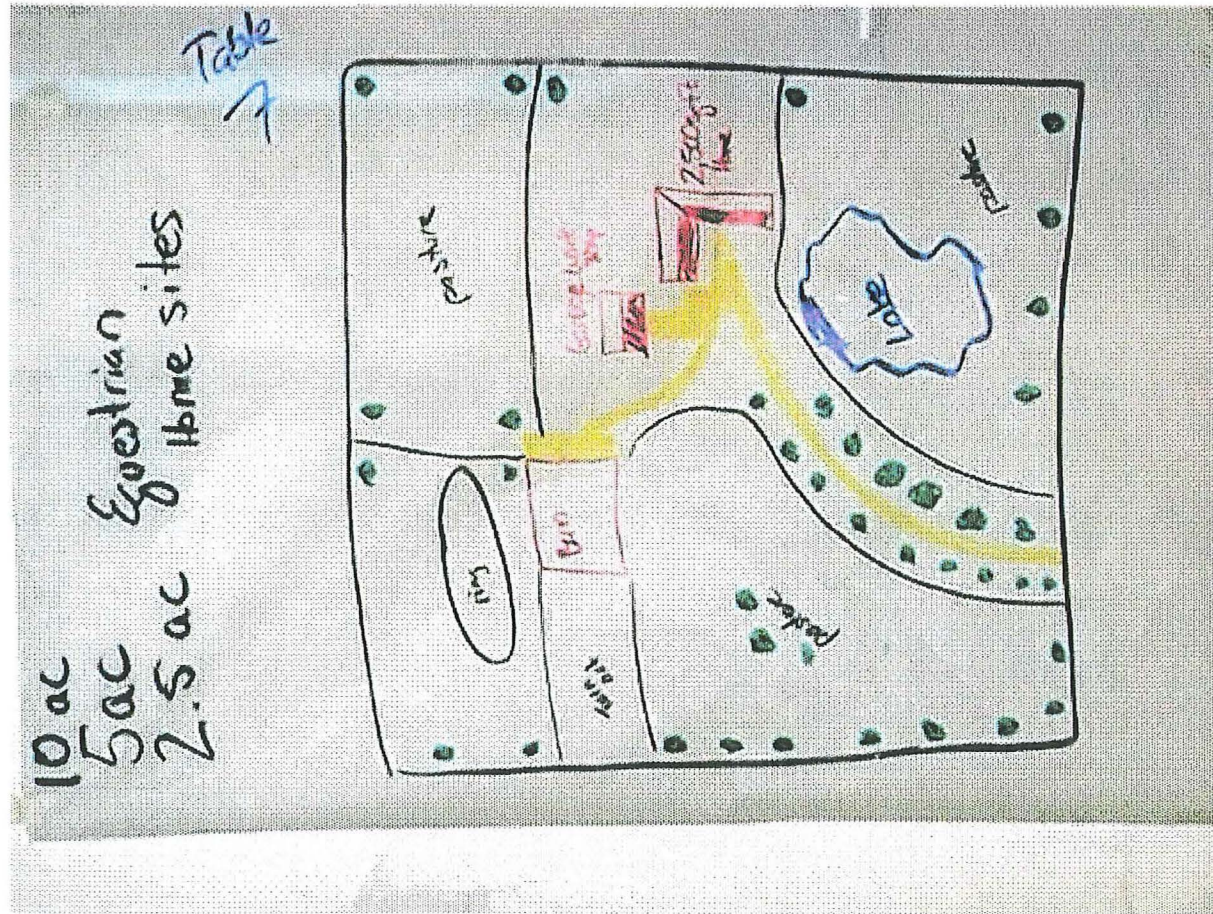


Table drawing 7b

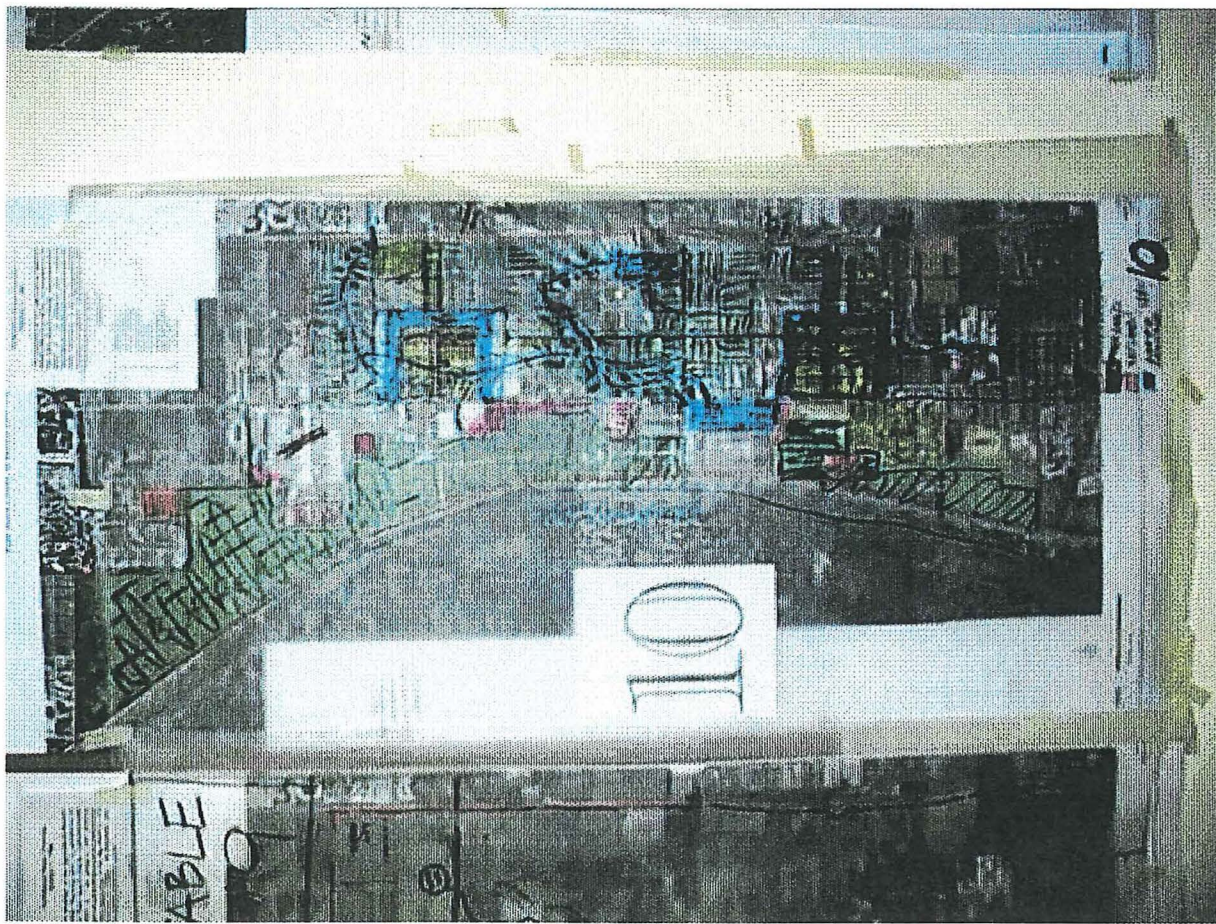


Table drawing 10





Table drawing 11



Table drawing 12a



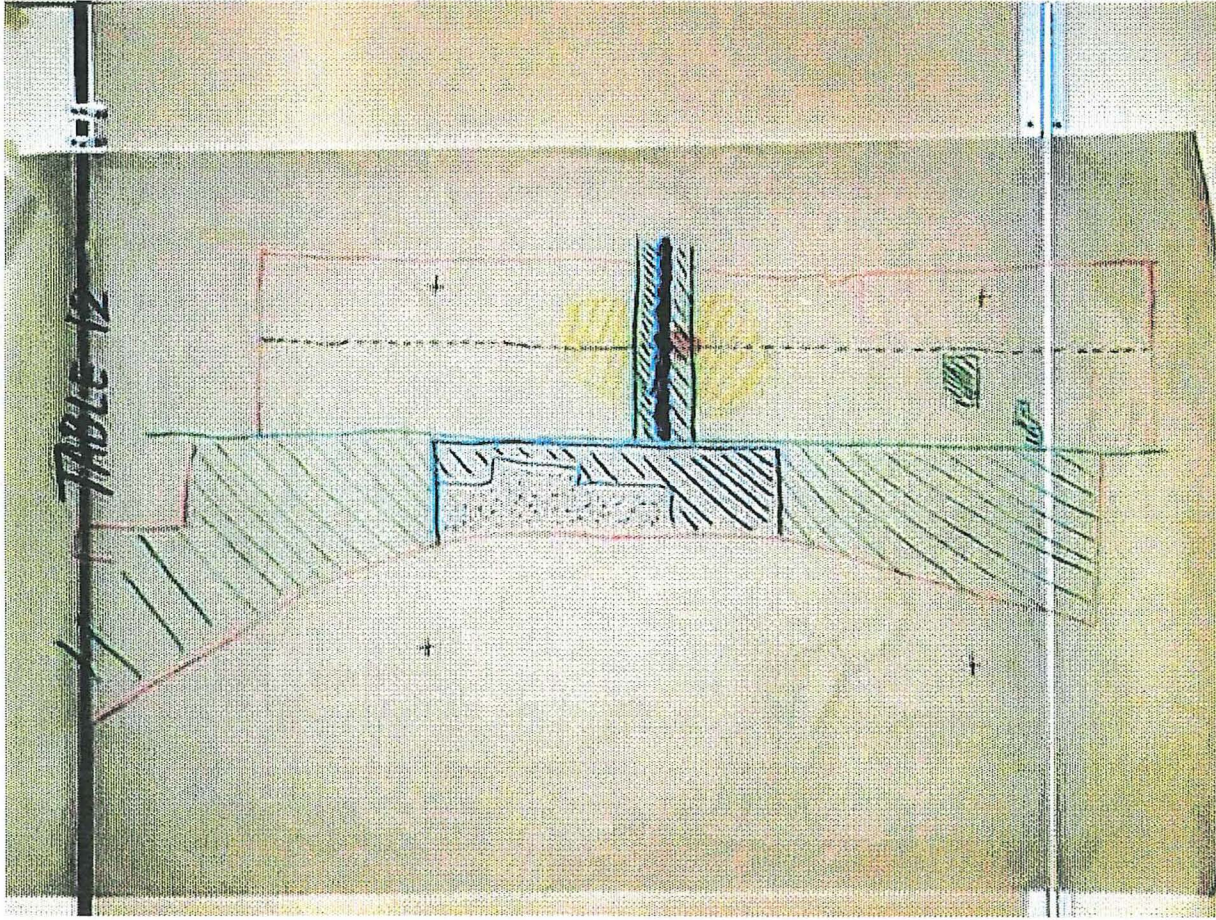


Table drawing 12b

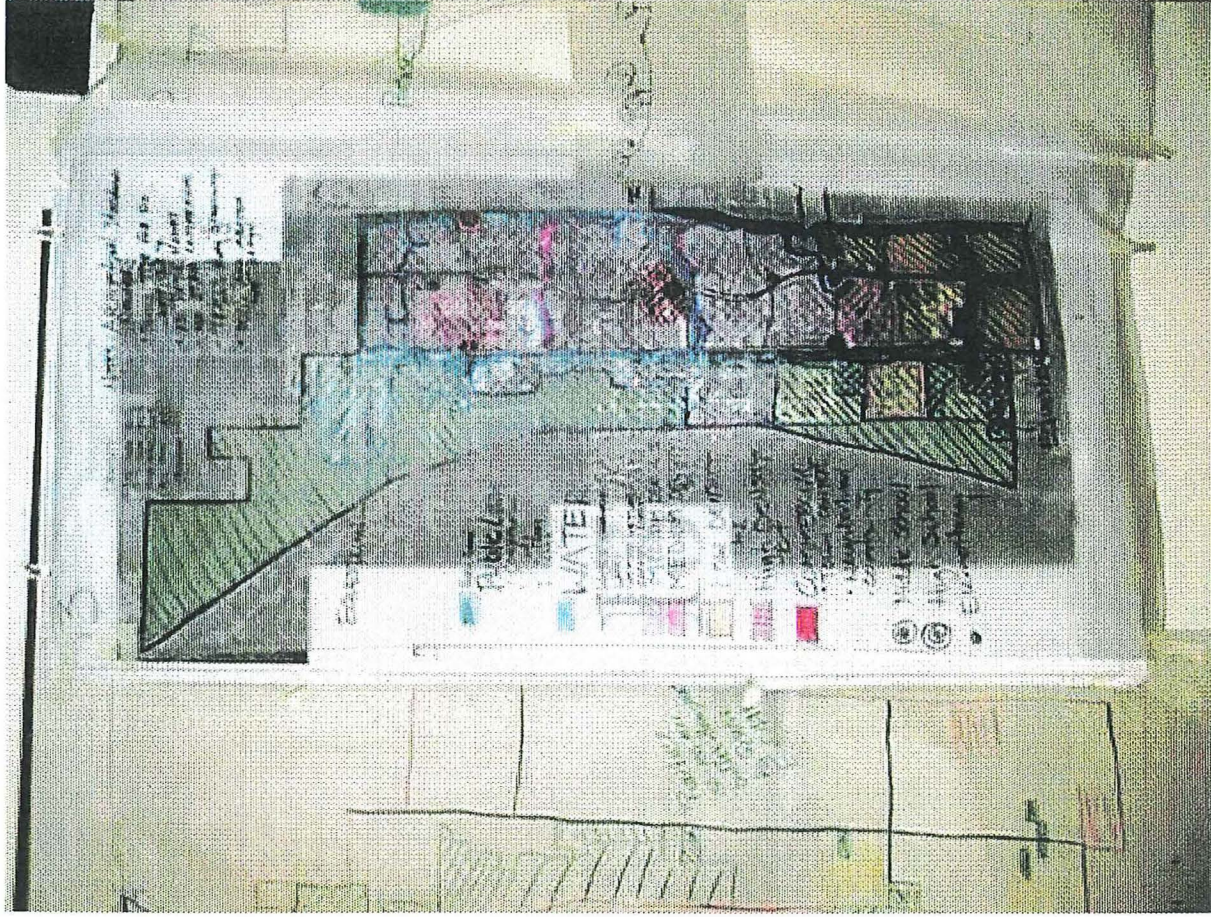


Table drawing 13



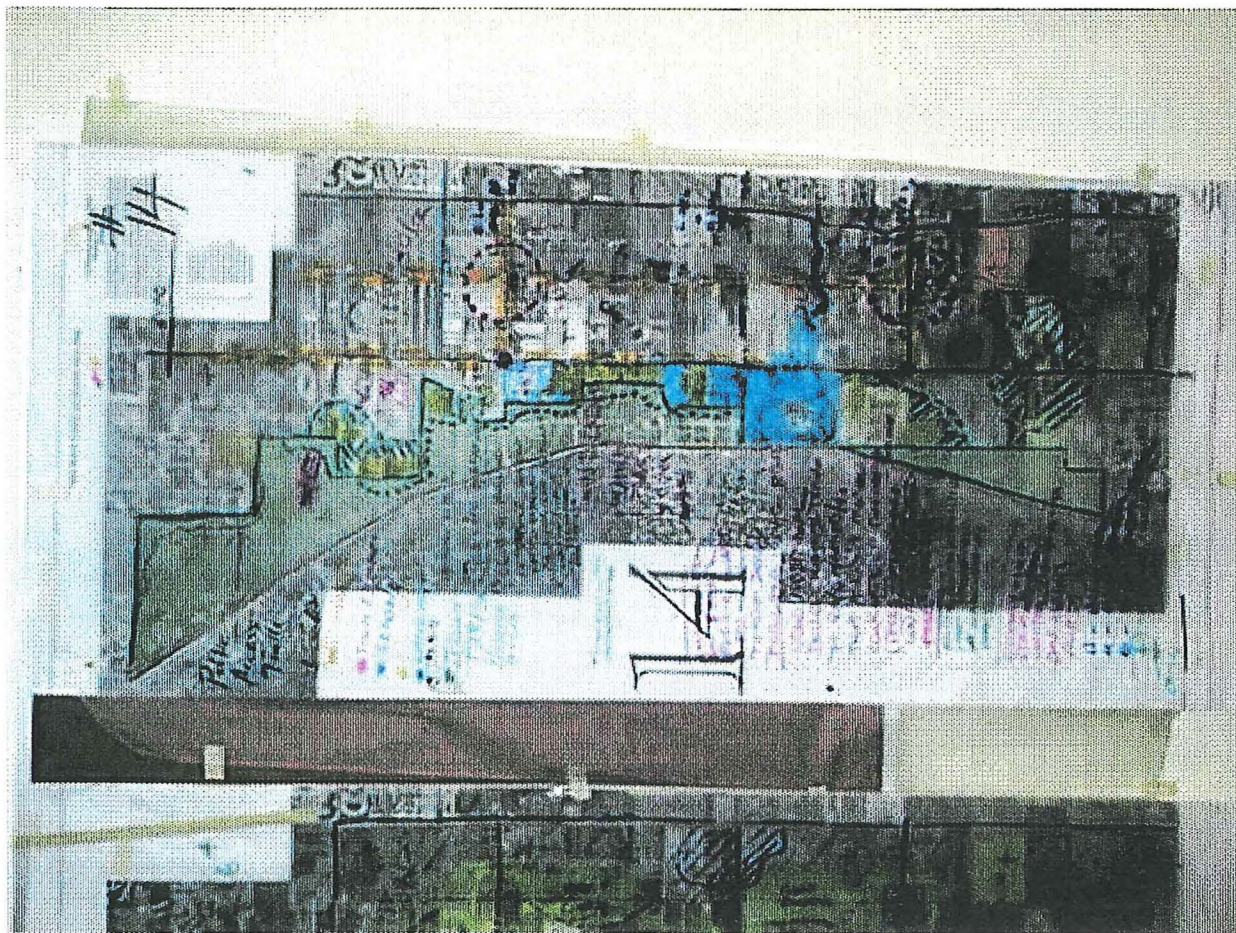


Table drawing 14

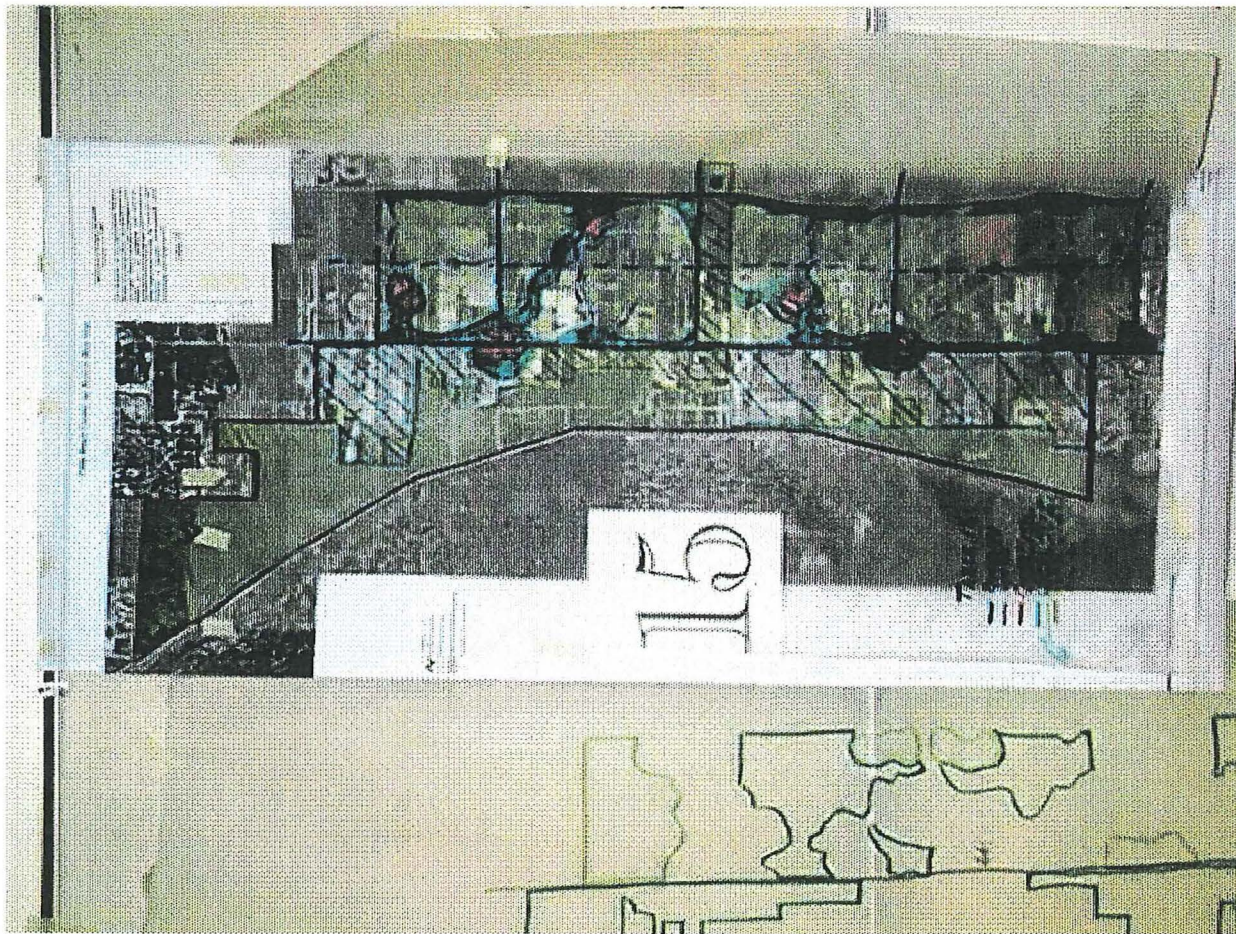


Table drawing 15



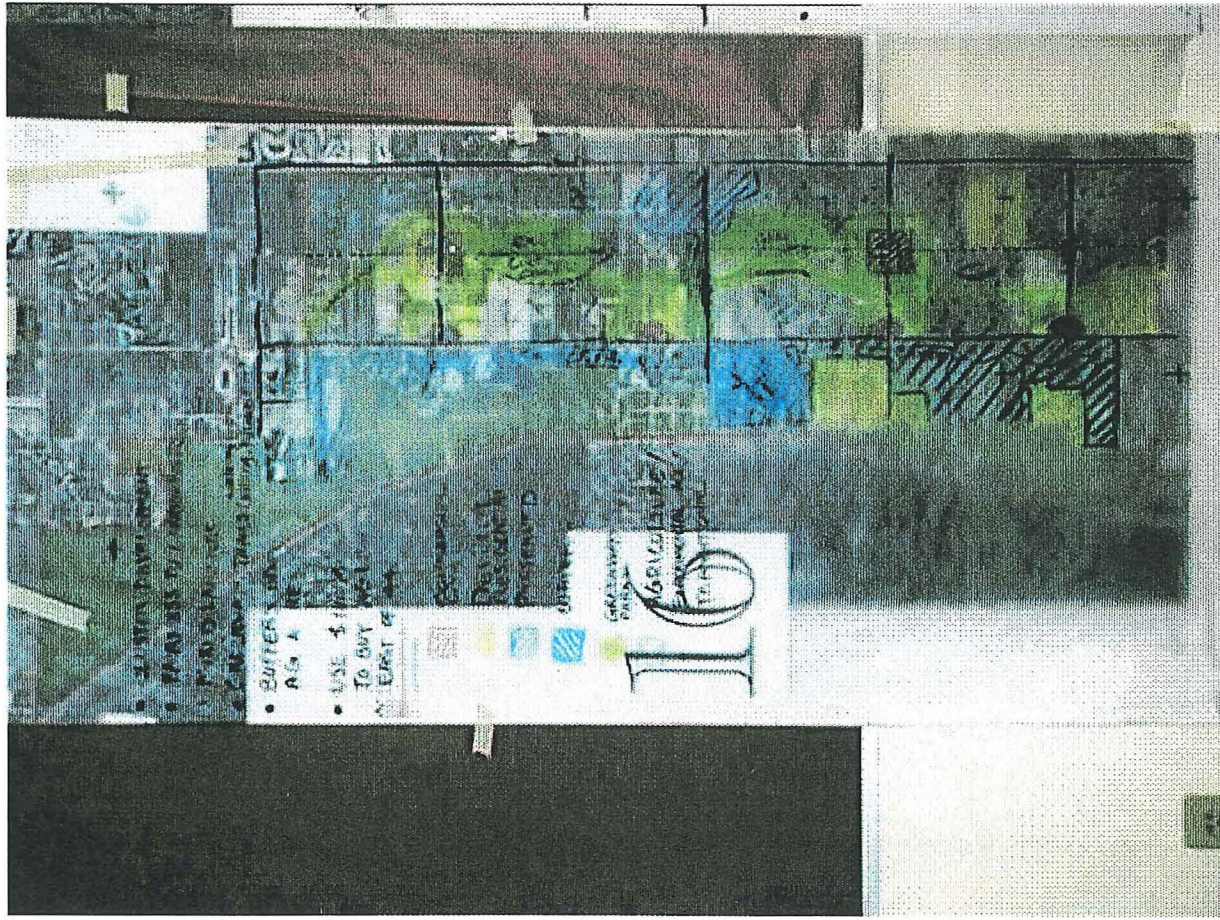
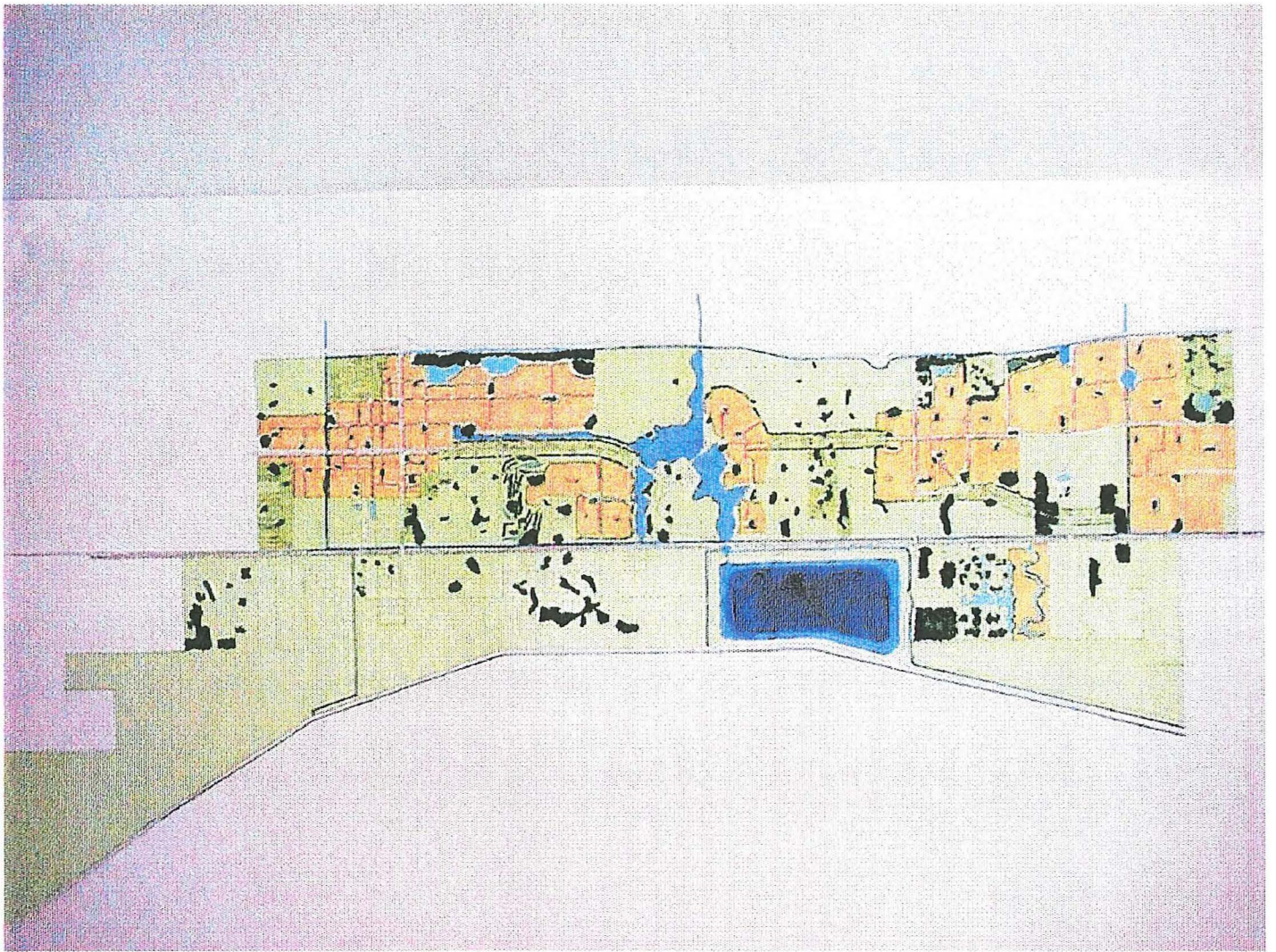


Table drawing 16



Table drawing 17





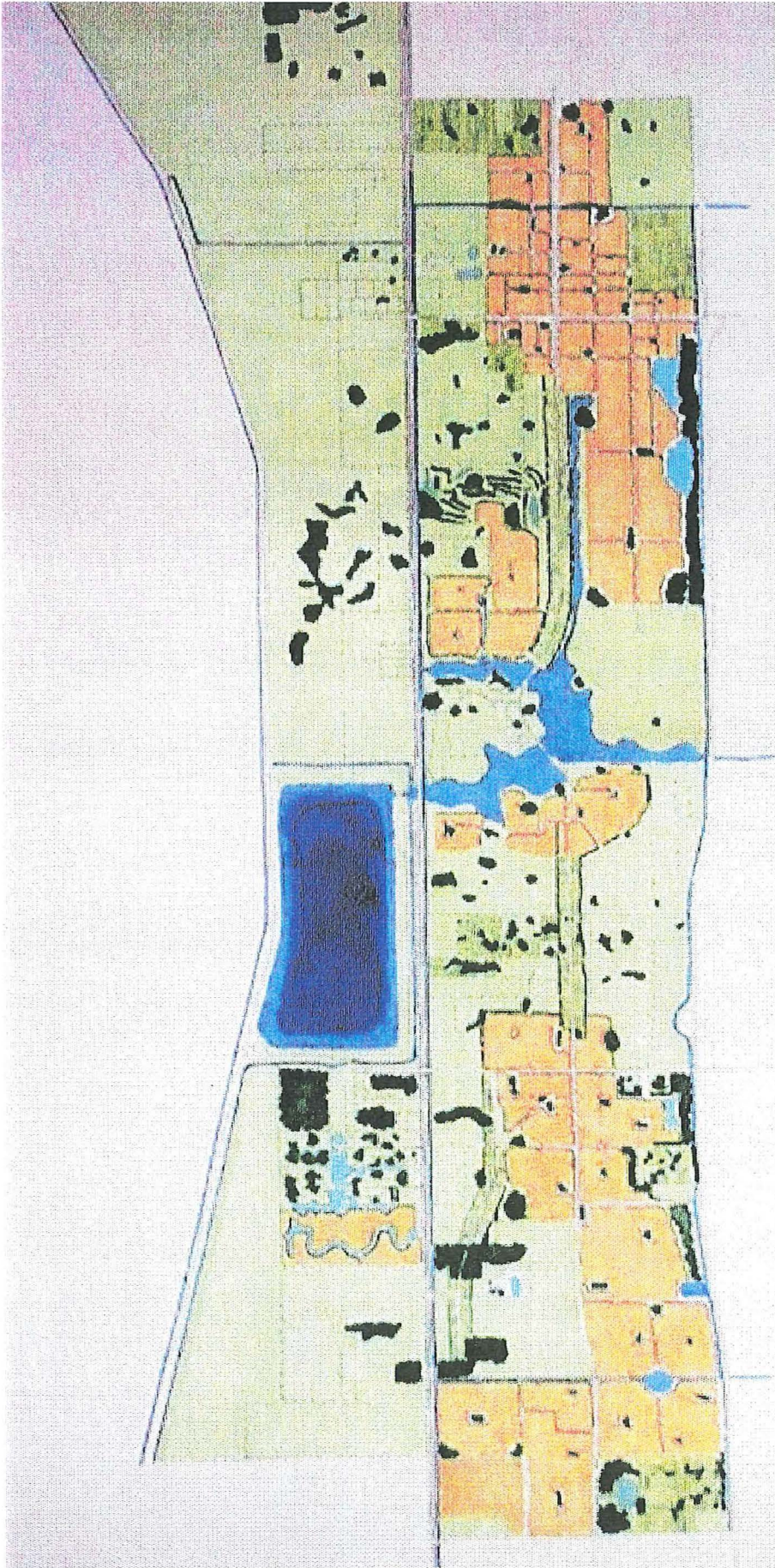
Final Plan Wide





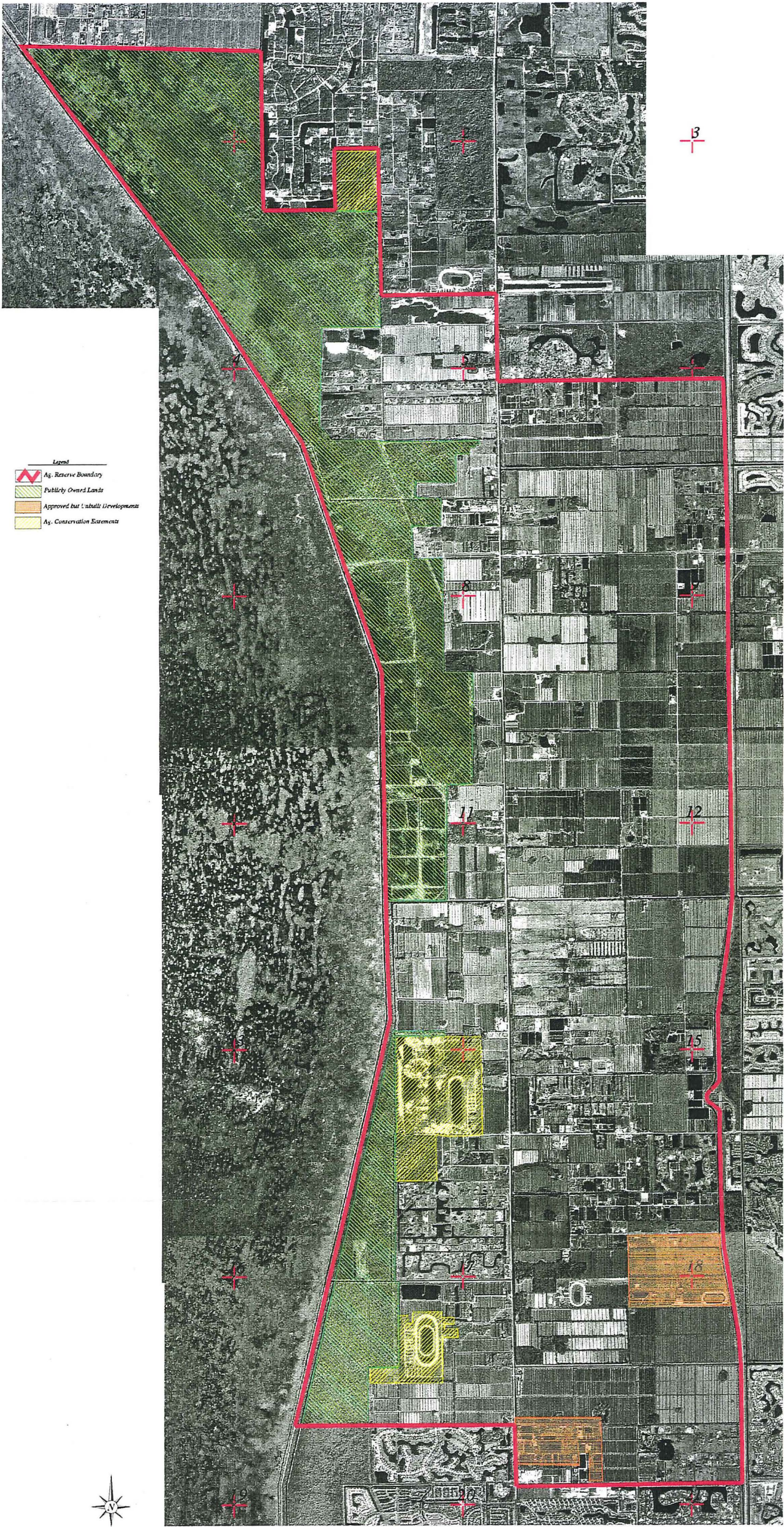
Final Plan Wide 2





Final Plan Wide for Power Point



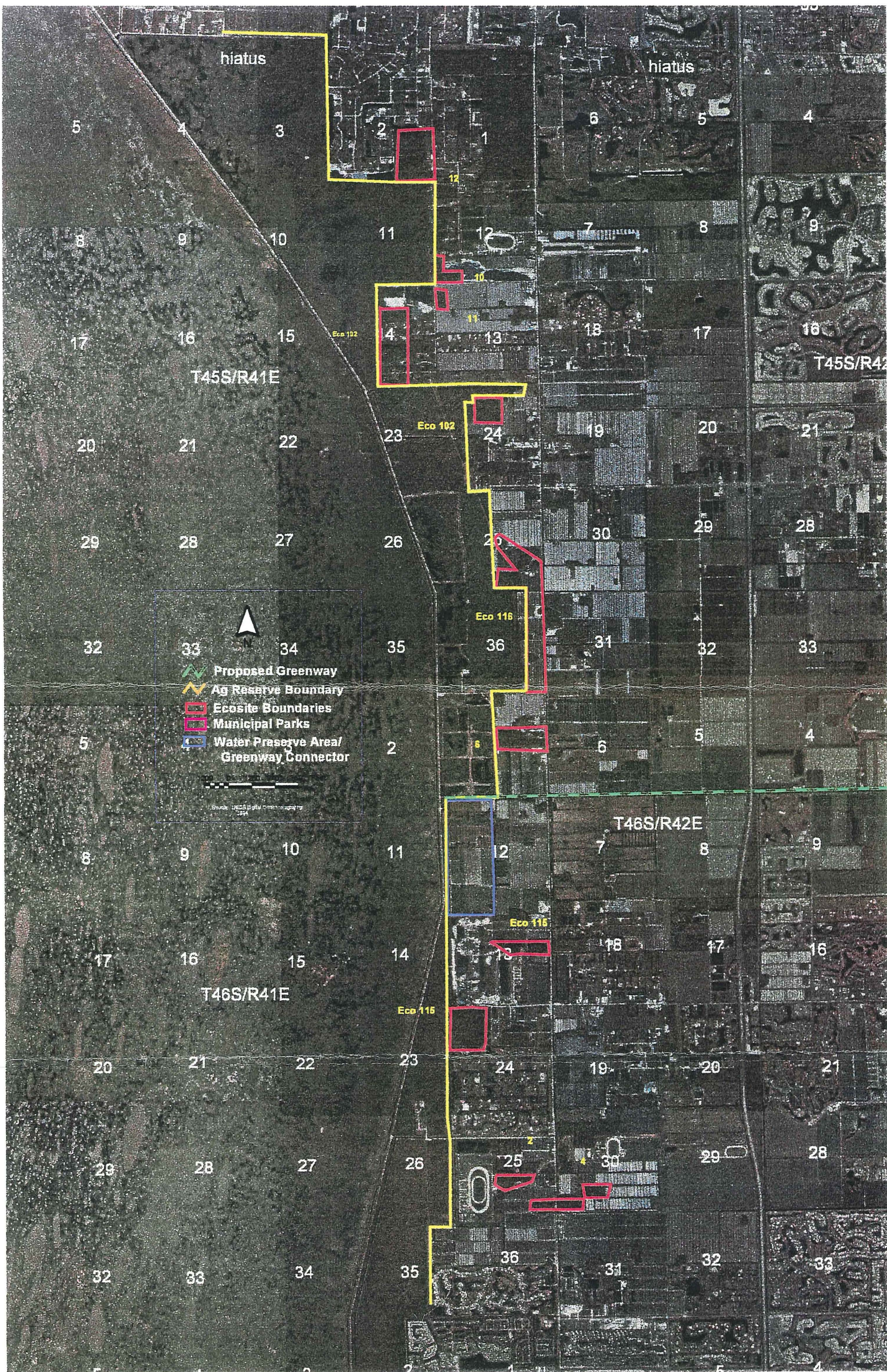


- Legend
- Ag Reserve Boundary
  - Publicly Owned Lands
  - Approved but Unbuilt Developments
  - Ag Conservation Easements



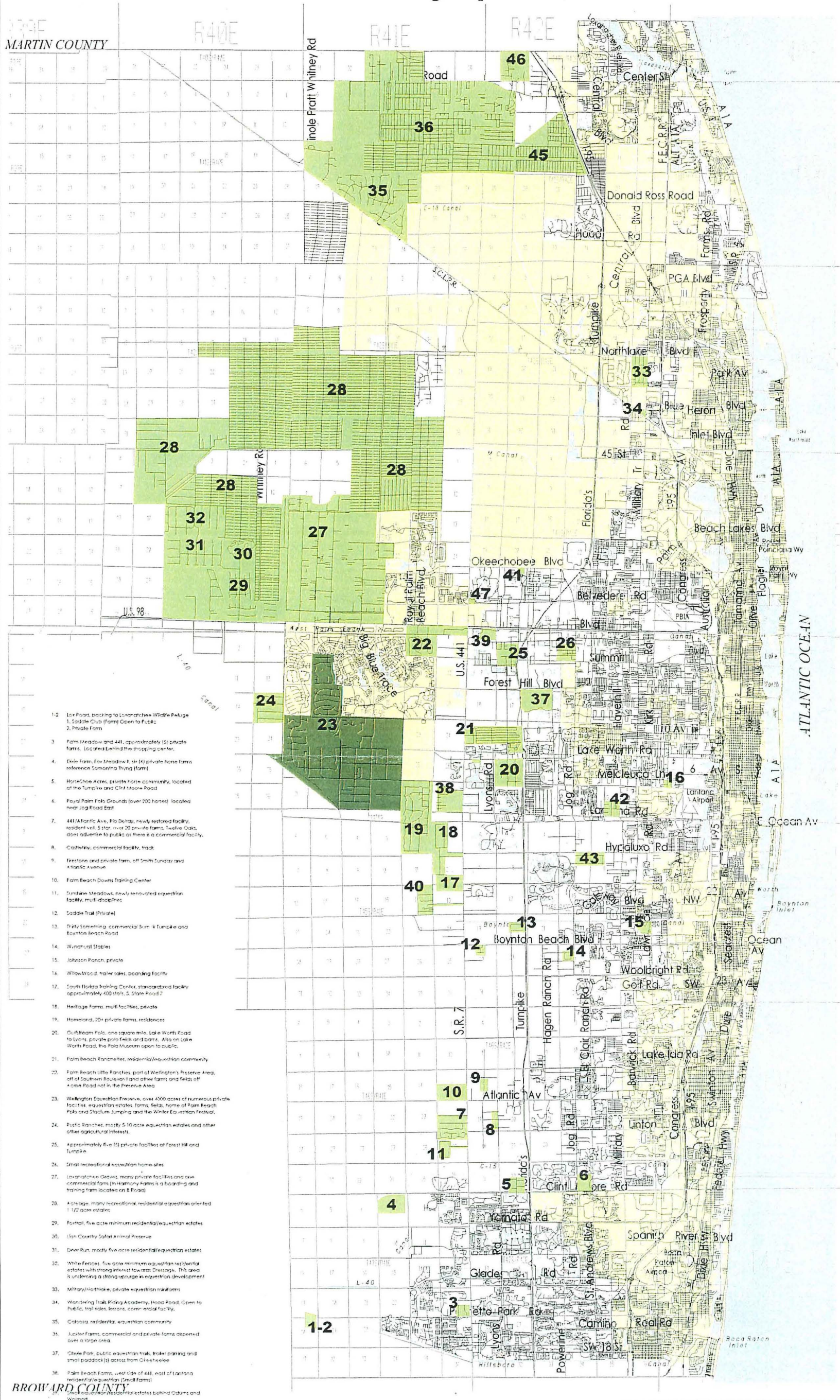
SCALE: 1" = 1100'







# Palm Beach County Equestrian Sites

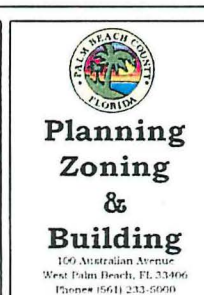
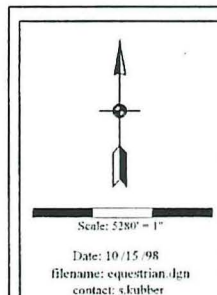


- 1-2. Lox Road, backing to Loxatchew Wildlife Refuge  
1. Saddle Club (Farm) Open to Public  
2. Private Farm
3. Palm Meadows and 441, approximately 150 private farms. Located behind the shopping center.
4. Dixie Farm, Fox Meadows II, six (6) private horse farms reference Samantha Thym (Farm)
5. Horsechew Acres, private horse community, located at the Turnpike and Clint Moore Road
6. Royal Palm Polo Grounds (over 200 horses) located near Jog Road East
7. 441 Atlantic Ave, Rio Delray, newly restored facility, residential, 5 star, over 20 private farms, twelve Oaks, does advertise to public as there is a commercial facility.
8. Castaway, commercial facility, track
9. Preston and private farm, off Smith Sunday and Atlantic Avenue
10. Palm Beach Downs Training Center
11. Sunshine Meadows, newly renovated equestrian facility, multi disciplines
12. Saddle Trail (Private)
13. Dixie Farming, commercial, turnpike and Boynton Beach Road
14. Windward Stables
15. Johnston Ranch, private
16. Willowood, trailer sales, boarding facility
17. South Boka Training Center, standardized facility, approximately 400 stalls, 5, State Road 7
18. Heritage Farms, multi facilities, private
19. Homestead, 20+ private farms, residences
20. Gulfstream Polo, one square mile, Lake Worth Road to Lyons, private polo fields and barns. Also on Lake Worth Road, the Polo Museum open to public.
21. Palm Beach Ranchettes, residential/equestrian community
22. Palm Beach Little Ranches, part of Wellington's Preserve Area, off of Southern Boulevard and other farms and fields off of Krome Road not in the Preserve Area
23. Wellington Equestrian Preserve, over 4000 acres of numerous private facilities, equestrian estates, farms, fields, home of Palm Beach Polo and Stadium Jumping and the Winter Equestrian Festival.
24. Public Ranches, mostly 5-10 acre equestrian estates and other agricultural interests.
25. Approximately five (5) private facilities of Forest Hill and Turnpike
26. Small recreational equestrian home sites
27. Loxatchew Acres, many private facilities and one commercial farm (in Harmony Farms is a boarding and training farm located on S Road)
28. Akrage, many recreational, residential equestrian oriented 1 1/2 acre estates
29. Fortall, five acre minimum residential/equestrian estates
30. Lion Country Safari Animal Preserve
31. Deer Run, mostly five acre residential/equestrian estates
32. White Fences, five acre minimum equestrian residential estates with strong interest toward Dressage. This area is undergoing a strong upgrade in equestrian development
33. Military/Northlake, private equestrian estates
34. Wandering Trails Riding Academy, Hood Road, Open to Public, trail rides, lessons, commercial facility.
35. Calissa, residential, equestrian community
36. Jupiter Farms, commercial and private farms dispersed over a large area.
37. Dixie Park, public equestrian trails, trailer parking and small paddock(s) across from Okeechobee
38. Palm Beach Farms, west side of 441, east of Lantana (near Palm Meadows) (Small Farms)
39. Small equestrian residential estates behind Ocala and Walnut
40. Oprey Pond Road, small farms south of Boka Training Center.
41. Roger Dean Stables, Saddle and breeding and training facilities, on Okeechobee Boulevard
42. Lantana, Joshua Farms
43. Hypoluxa and Jog Road, small farms and private facilities
45. Palm Beach County Estates, 1 1/4 acre parcels, small recreational farms
46. Oakwood Estates, 5 acre parcels, residential equestrian
47. Palm Beach County Mounted Horse Showgrounds

BROWARD COUNTY

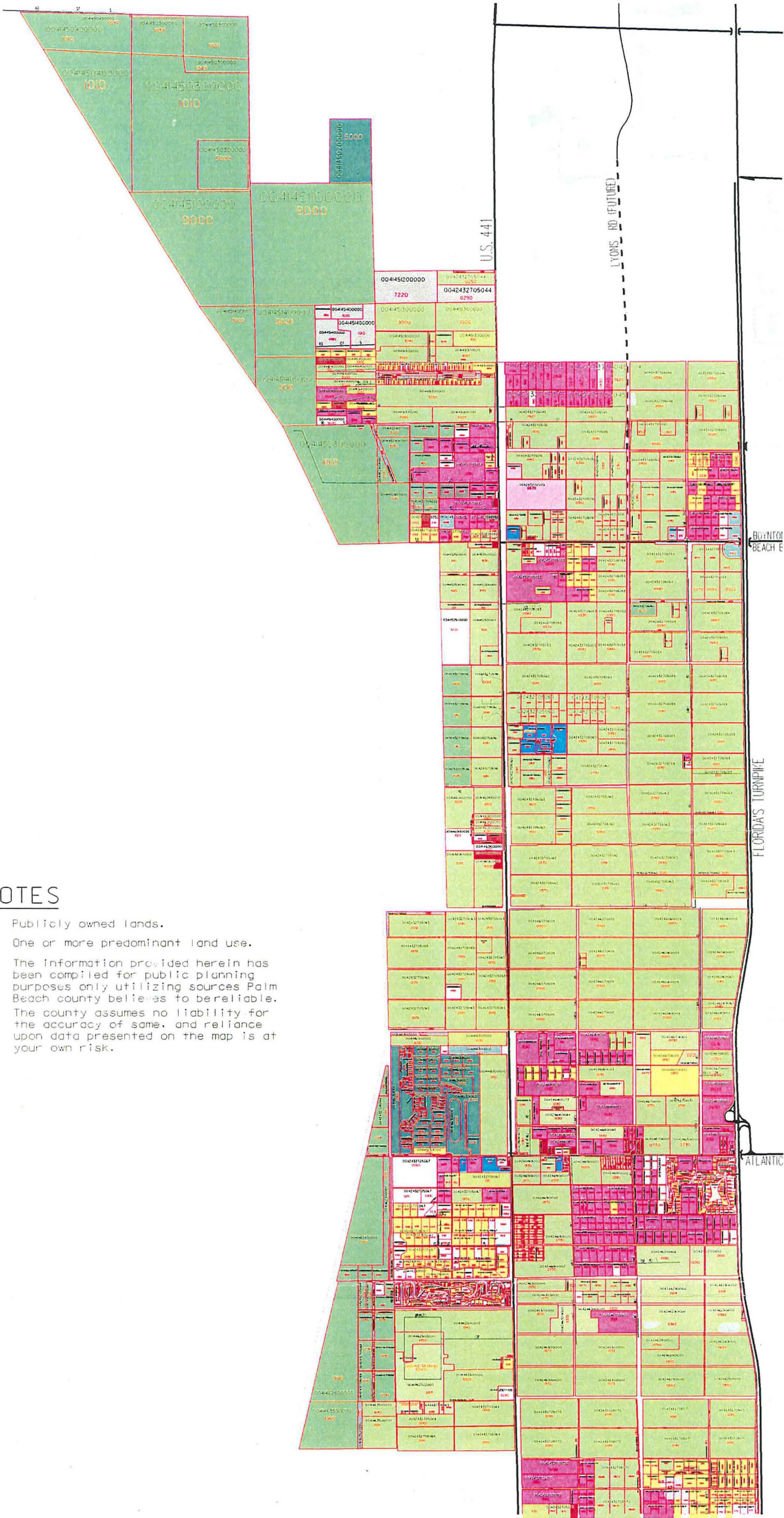
Municipal Areas

NOTE: MAP IS NOT OFFICIAL, FOR PRESENTATION PURPOSES ONLY





Ag Reserve Existing Land Use



NOTES

- 1. Publicly owned lands.
- 2. One or more predominant land use.
- 3. The information provided herein has been compiled for public planning purposes only utilizing sources Palm Beach county believes to be reliable. The county assumes no liability for the accuracy of same, and reliance upon data presented on the map is at your own risk.

NOTE: MAP IS NOT OFFICIAL, FOR PRESENTATION PURPOSES ONLY

Agricultural-Cultivated	Excavation	Multi-Family	Mobile Home
Agricultural Related	Commercial	Recreation/Open Space	Vacant
Nurseries	Conservation <sup>1</sup>	Single Family	
Equestrian	Industrial	Utilities/Transporation Communication	
Agricultural Preservation Easement	Institutional	Mix <sup>2</sup>	

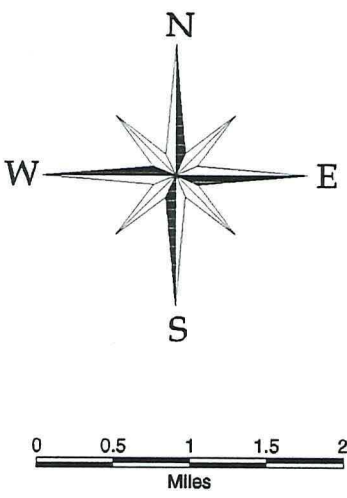
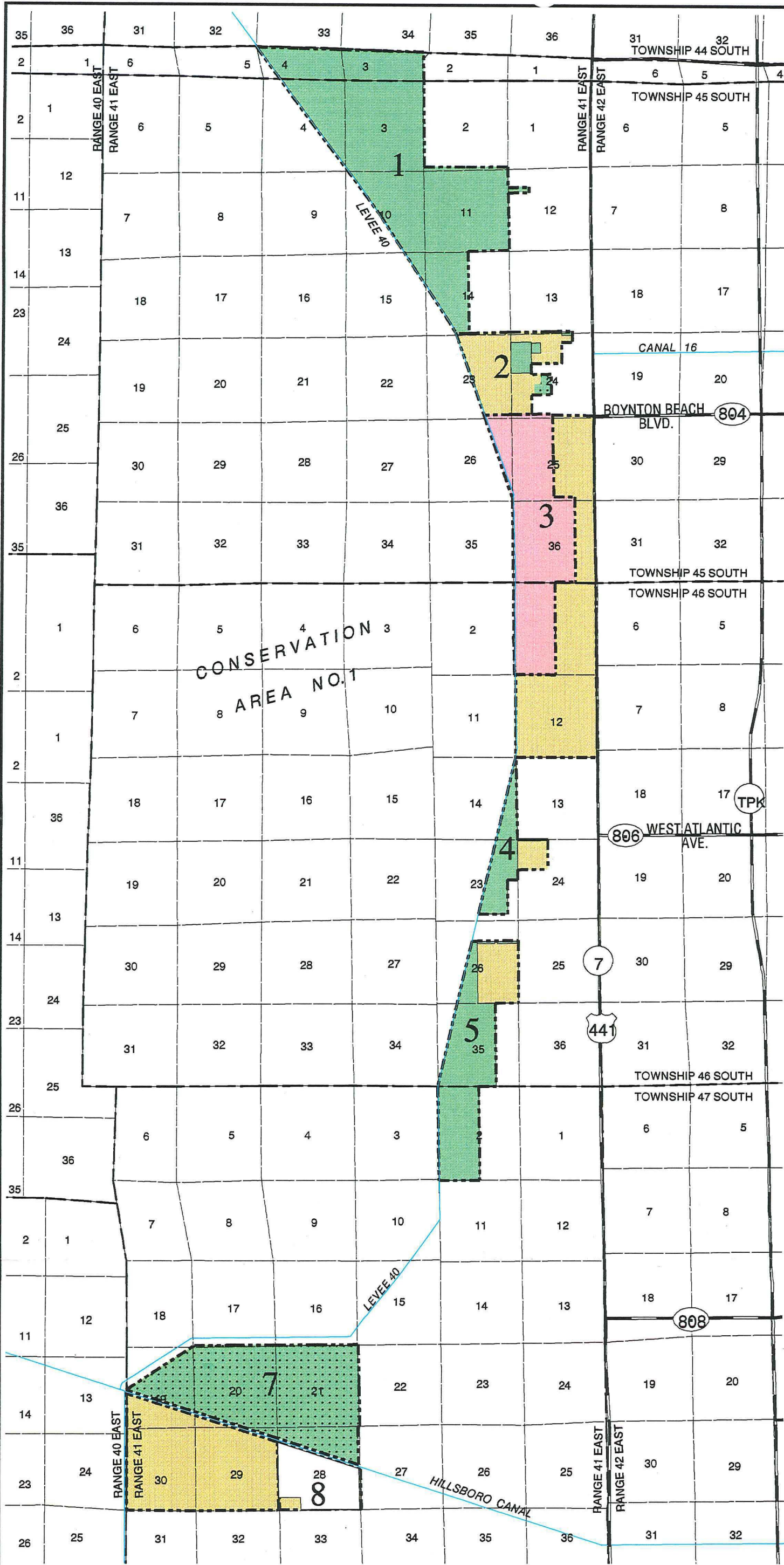
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Revision Date: 01/16/98 cd  
Filename: agexh98.dgn  
Contact: c.dibella

**Planning  
Zoning  
&  
Building**

100 Australian Avenue  
West Palm Beach, FL 33406  
Phone# (561) 233-5060



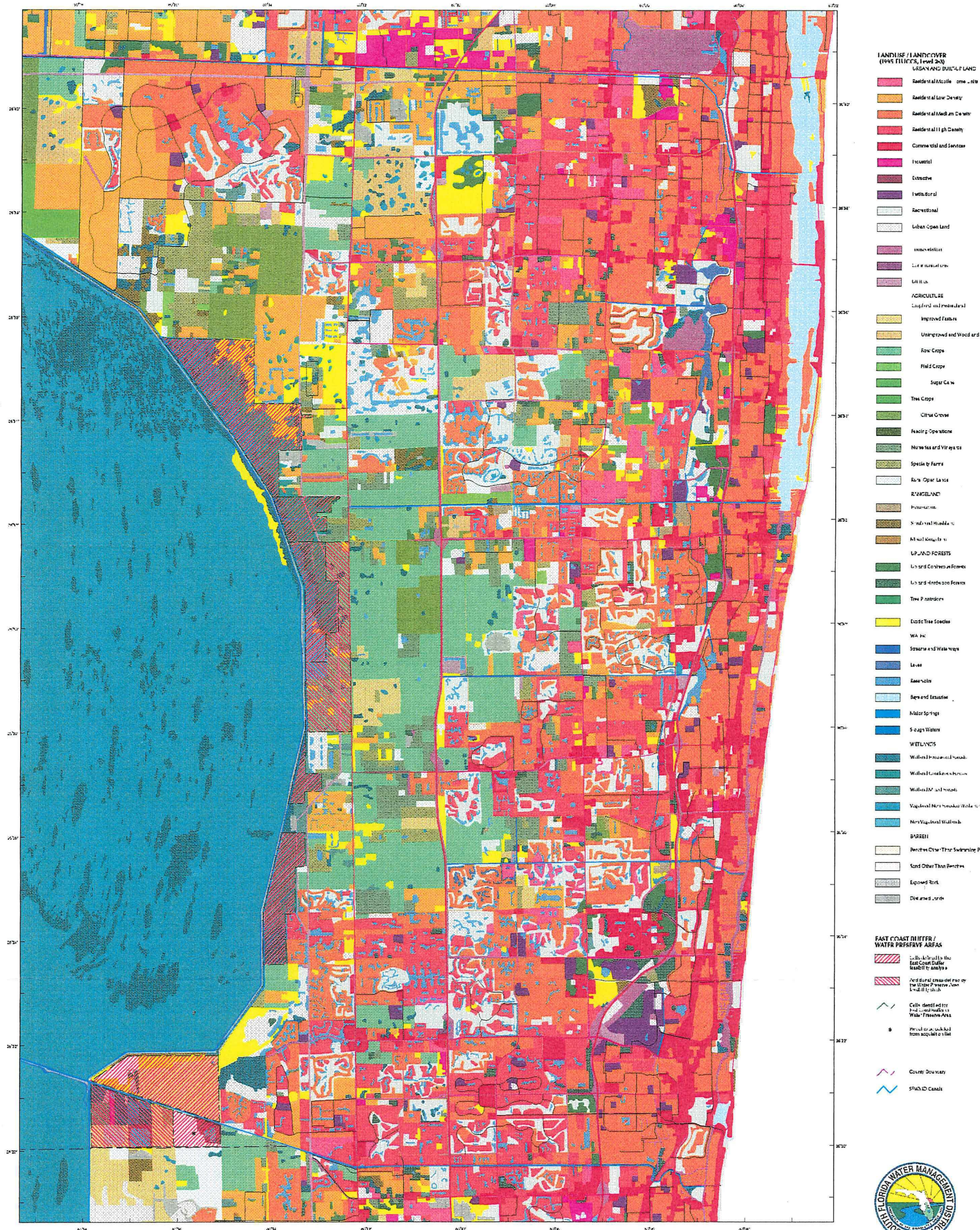


**East Coast Buffer /  
Water Preserve Areas  
Palm Beach County**

- Acquired Lands
- Acquired with Federal Farm Bill Participation
- Potential Acquisition
- U.S. Fish & Wildlife
- Properties Withdrawn from SOR Acquisition Plan



**Integrated Water Resource Strategy  
for Southeastern Palm Beach County**



Research in South Florida Water Management District  
 3000 W. U.S. 1, Suite 100, Fort Lauderdale, FL 33309

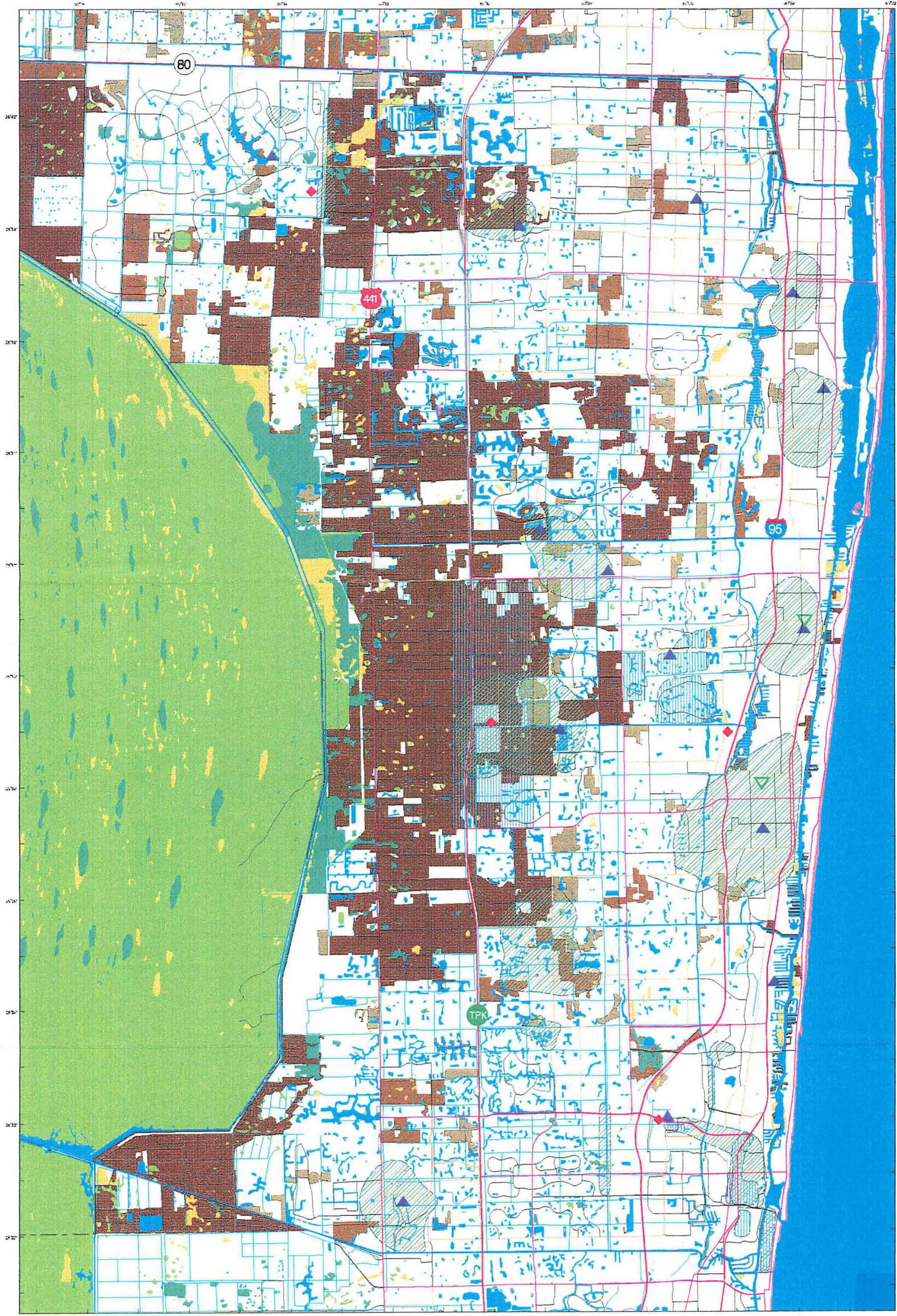
est de voir, plutôt que d'être, une "nature".

Reg. 305, water management was (including W.P.T.s and S.C.P. cells) and also in the area of related coordination with the Civil Rule on claims and a process of Chapter 3 of the F.R. Stat., including but not limited to water supply, cave operation, environmental restoration, water quality improvement, flood protection, water storage, seepage management, and wind and air movement mitigation.

\* This map is a conceptual tool used for project development only. This map is not self-executing or binding, and does not otherwise affect the interests of any person, including any vested rights or existing uses of real property.



Integrated Water Resource Strategy  
for Southeastern Palm Beach County



SUITABLE LANDS FOR STORAGE,  
Based on 1995 Land Use/Landcover

- Cordgrass areas from 70 to 100 acres
- Cordgrass areas from 10 to 70 acres
- Cordgrass areas greater than 100 acres

NATURAL WETLANDS INVENTORY  
VEGETATION CLASSES

- Open Water
- Emergent
- Shrub/Tree
- Wetland
- Upland

Water Use

- Water of considerable surface residence time
- Areas subject to tidal influence
- Wetland flow way
- Natural water storage

Water Use

- Water Treatment Plant
- Wastewater Treatment Plant
- ASR Wells

County Boundary

- SPWMD Canals

Water Use by Information

from 1995-2000

1. 1995-2000 Water Use Data

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APPENDIX 3D

## **Results of Public Opinion Survey**

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# The Glenney Group

P.O. Box 2646 • West Palm Beach, FL 33402  
(561) 832-2853 • (561) 832-5708 Fax

## EXECUTIVE SUMMARY

### Methodology

The Glenney Group completed 400 telephone interviews with Palm Beach County residents between Wednesday, October 28, 1998 and Saturday, October 31, 1998 drawn from a random-sample universe, balanced by geographic segment (zip code aggregate). The statistical margin of error is 4.9% at a 95% confidence level.

### General Findings

Palm Beach County residents are very happy about living here and, generally, are quite pleased with the way their government handles the issues they care about.

- \* 70.3% of respondents rate the county as an excellent or good place to live.
- \* 69.1% have very- or somewhat favorable feelings toward their County Commission (with only 24.1% negative).
- \* A majority of respondents give high marks to their quality of life in terms of
  - Recreation (64.8% excellent or good)
  - Cultural activities (57.3% excellent or good)
  - Availability/safety of water supply (51.8% excellent or good)
- \* 38% rate environmental protection as "excellent or good"; 38.3% rate it as only average.
- \* A plurality rate their quality of life as "average" on
  - Safety from crime (42.8% average)
  - Growth management (41.5% average)
  - Reasonable taxes (40.3%)
- \* Schools draw the lowest quality of life rankings:
  - 20.3% say very poor or poor
  - 23.3% say average
  - 20.8% say good to excellent

Respondents say the number one problem facing the county is growth (22.3%), followed by crime (19.5%) and schools (17.0%). No other issues were volunteered in more than single-digit percentages.

### Growth-Related Issues

Despite their high favorable rating for the County Commission, a plurality of respondents gave the Commission only an average performance rating on the following issues.

Issue	Very Poor/Poor	Average	Good/Excellent
Managing growth	24.8%	42.3%	19.8%
Keeping taxes reasonable	21.5%	43.3%	27.3%
Protecting the environment	21.3%	39.0%	29.5%

Integrating the answers to growth-related questions, it is noteworthy that respondents have a reasonable attitude toward growth and understand its inevitability and relationship to the economy. When forced to choose sides, however, they will always come down on the side of the environment. And they believe that county government already does a very good job protecting the environment.

When asked to choose one of the following two statements, here are the results:

- 43.8% Growth is good and should be encouraged.
- 37% Continued growth is bad and should be discouraged.

In a similar pairing of contrasting statements, the results were:

- 58.3% We need to protect our environment, even at the expense of economic opportunities that might come from growth.
- 31.8% We need to encourage planned growth, even at the expense of some environmental concerns.

### The Ag Reserve

Our sample split in half in terms of having read or heard anything about the Ag Reserve: 45.8% said they had, 46.5% said they had not (7.8% were not sure). So one thing to remember about the subsequent specific questions is that we have about a 50/50 mix of somewhat informed and completely uninformed answers -- about what we would get on most public policy questions.

Here are the salient findings:

- To allow the Ag Reserve to "develop just like the rest of the county" is not an option; only 12.6% supported it. 70.4% said the county should limit the amount of development that can occur in the Ag Reserve.
- A plurality (49%) said they favor using taxpayer money to buy land to limit development in the Ag Reserve. (33% are opposed, 18% don't know.) This is a VERY GOOD number for the county in contemplating a referendum.
- When asked to prioritize the objectives for the Ag Reserve master plan set by the working committee, the results are consistent with other views expressed about growth and the environment. In order of ranking as "very important" (ten on a scale of one to ten), respondents' priorities are:

1.	Enhancing water resources	46.3%
2.	Preserving environmentally-sensitive lands such as wetlands and uplands	41.0%
3.	Minimizing costs to taxpayers	34.8%
4.	Making more green spaces open to the public	28.8%
5.	Enhancing agricultural use	22.3%
6.	Providing a mix of uses	15.3%

Some comments on the above responses:

- \* They are consistent with responses to the other questions; for example, prioritizing water and the environmentally-sensitive lands over minimizing costs to taxpayers is consistent with the answer to the paired questions about protecting the environment even at the expense of economic opportunities . . . and the positive response to using taxpayer funds to limit development of the Ag Reserve.
- \* Green spaces are not a top priority because respondents already rate their green space/recreational opportunities higher than some other measures of quality of life.
- \* The mixed use question bombs because it is an intellectual concept, not an emotional one like "protecting the environment" and because -- again, looking at consistency in the poll -- environmental preservation is a stronger value than economic development.

## The Referenda

When asked to indicate which of the three possible proposals they would be most likely to support, voters said:

- |   |  |       |
|---|--|-------|
| * | \$100 million for Ag Reserve                     | 29%   |
| * | \$25 million for parks and rec                   | 28%   |
| * | \$50 million for environmentally-sensitive lands | 19.5% |

Responses to each of the three elements individually were:

- |   |  |                                   |
|---|--|-----------------------------------|
| * | \$100 million for Ag Reserve                     | 38% YES<br>49% NO<br>14% NOT SURE |
| * | \$25 million for parks and rec                   | 42% YES<br>46% NO<br>12% NOT SURE |
| * | \$50 million for environmentally-sensitive lands | 34% YES<br>54% NO<br>12% NOT SURE |



ANALYSIS OF CROSS-TABULATION OF SURVEY  
October 28 - 31, 1998

This memo enhances the findings in the Executive Summary, which was based solely on the aggregate number of responses without regard to demographic and geographic cross-tabulations. Please note that we have commented upon a particular question or response ONLY when one or more demographic or geographic group's response is (a) significantly (that is, more or less than 5%) different from the total sample, or (b) was not what we would expect in terms of that group's values or history.

QUALITY OF LIFE

Of the nearly one-third (32%) of respondents who said their quality of life is excellent, 58% are over 65. The positive rating on the quality of life scale consistently rises with age -- the older you are, the happier you are with your life in Palm Beach County. We might note, however, that younger residents -- who are slightly less happy and less consistent in their answers -- represent less informed responses to the specific questions about quality of life (below).

-- Managing growth.

While a plurality (42%) of the total sample gave their quality of life "average" marks in terms of managing growth, and 31% rated growth management as "good" to "excellent," two geographic segments disagreed.

Residents of the southeast and southwest are more concerned about growth than are residents in other parts of the county. It is likely that southeasterners are feeling crowded already, and southwesterners are dizzy with current and proposed development.

-- Reasonable taxes.

40% of respondents rated the reasonability of taxes as "average" and 36% said "good" to "excellent."

However, residents in the west showed marked tax sensitivity, as did African Americans. And 35% of those between 36 and 45 years old said "poor" to "very

in this category.



This makes sense -- ad valorem taxes are going up in Wellington and if the Acreage incorporates, taxes will rise. Moreover, 36 - 45-year-olds are raising families while not quite at the peak of their earning years -- so they're feeling the pinch.

-- Environmental protection.

While a plurality of respondents rated environmental protection as "good" to "excellent" (39%), residents in the north and the southwest are slightly more likely to grant lower ratings.

-- Recreational opportunities.

A majority (65%) give the highest ratings to recreational opportunities. However, African Americans and people between 36 and 55 (the parenting years) believe there is room for improvement.

-- Safety from crime.

While most people (43% of total) rated safety from crime as "average," residents in the southeast are worried: 31% said "poor" or "very poor" in this category.

-- Water supply.

22% of people age 56-65 ranked water availability and safety as "poor" or "very poor," compared with only 14% of the total. A clear majority (52%) feel fine about water issues.

## NUMBER ONE ISSUE

When asked to volunteer the number one issue facing the county, residents polled said:

Growth	22%
Crime	20%
Schools	17%

-- Those who chose "growth" as the top priority are:

\* Youngest and oldest:

18-25 years old  
46-65 years old (tied with "schools")  
Over 65

- \* Men more than women
- \* Residents in the north, southeast and southwest
- Those who said "crime" are:
  - \* 26-35 years old
  - \* African American
  - \* Live in the central part of the county (highly populated municipalities where crime is highest)
- Those who said "schools" are:
  - \* 36-45 years old (parenting years)
  - \* 46-65 years old (tied with "growth")
  - \* Women more than men
  - \* Residents of the western part of the county (which is primarily young families with children in school)

#### COUNTY COMMISSION PERFORMANCE

More than two-thirds of respondents rated the County Commission's job performance as "very" to "somewhat favorable," with 46-55 year olds and residents in the west giving the Commission especially high marks. Men, however, were less complimentary -- 30% gave the Commission unfavorable ratings.

On the specific issue performance questions:

- \* African Americans and 18-25 year olds rated the Commission the most negatively on keeping taxes reasonable, while 65+ year olds rated them best.
- \* 56-65 year olds gave the lowest ratings on protecting the environment, while those who live in the west were the most satisfied.

#### CONTRASTING GROWTH QUESTIONS

On the first polarizing question about growth, the pro-growth statement drew 7 points higher support than did the pure no-growth question, but 19% could not make the choice.

A: Growth is good and should be encouraged.

Total: 44%

- Tie among 36-45 year olds
- North, west, central and southwest segments

B. Continued growth is bad and should be discouraged.

Total: 37%

- 18-25 year olds
- Tie among 36-45 year olds

The next set of questions, which introduced the environmental equation, yielded a majority for environmental protection and only 10% were not able to choose.

A. We need to protect our environment, even at the expense of economic opportunities that might come from growth.

Total: 58%

- All ages 26+
- Strongest among 46-55 year olds
- Consistent in all regions

B. We need to encourage planned growth, even at the expense of some environmental concerns.

Total: 32%

- 18-25 year olds strongest

#### AG RESERVE PRIORITIES

The screening question at the beginning of the Ag Reserve sequence is important because, although we did not drop those who had not heard or read about the Ag Reserve, their responses should be read as uninformed and, with an education campaign, could change.

-- Awareness of the Ag Reserve.

YES Total: 46%

All ages 46+  
Strongest 46-55 years old

White  
West, southeast, southwest (most)

NO            Total:      47%

Under 46 years old  
African American  
North, central parts of county

-- Development questions.

The question of limiting development in the Ag Reserve drew a resounding "yes" (70%) with no demographic or geographic groups opposing. On the question of spending taxpayer money to buy land to limit development, however, African Americans and residents 18-25 were the most opposed.

NOTE:        These two groups are the least  
              informed and our sample size was not  
              large enough to be statistically significant.

-- Priorities for master planning.

\* Enhance agriculture.

Plurality:      22% very important

Weakest:        18-25 year olds

\* Preserve environmentally-sensitive lands.

Plurality:      41% very important

Strongest:      36-55, 65+  
                  White  
                  Southeast, southwest

Weakest:        18-25 year olds

\* Enhancing water resources.

Plurality:      46% very important

Strongest:      Over 46  
                  White  
                  Women  
                  Southwest



Weakest: North  
Hispanic, African American  
18-25 year olds

\* More green spaces.

Plurality: 29% very important

Strongest: 18-25 year olds  
65+  
White  
Southwest

\* Minimizing taxpayer cost.

Plurality: 35% very important

Strongest: 56+  
Southwest

Weakest: Under 35 years old  
North, west

\* Mix of uses.

Plurality: 19% NOT AT ALL IMPORTANT  
(15% rated VERY IMPORTANT)

Not at all: Southeast, southwest

Very important: 56-65 year olds  
Non-whites  
Southwest

## REFERENDUM QUESTIONS

We asked the referendum questions in two ways: first, asking them to choose or prioritize among the three; then asking a "yes" or "no" question for each element individually.

-- Choice of three proposed questions:

\* \$100 million for Ag Reserve.

Total first choice: 29%

Plurality: 26-35 year olds  
Men  
West, southeast

\* \$25 million for parks and rec.

Total first choice: 28%

Plurality: 36-55 year olds  
Non-whites  
Women  
North, central, southwest

\* \$50 million for environmentally-sensitive lands.

Total first choice: 19.5%

Plurality: 18-25 year olds

-- Individual ballot question vote:

\* \$100 million for Ag Reserve.

Total support: 37.8%

Strongest: 26-35 year olds (58%)  
Southeast, southwest

Total oppose: 48.5%

Strongest: 18-25 year olds  
36-55 year olds  
Non-whites

\* \$50 million for parks and rec.

Total support: 41.8%

Strongest: 26-35 year olds  
46-55 year olds  
African Americans  
Women

Total oppose: 46.3%

Strongest: 18-25 year olds  
36-45 year olds  
Whites  
North, southwest

\* \$25 million for environmentally-sensitive lands.

Total support: 33.5%

Strongest: 46-55 year olds  
Southwest

Total oppose: 54.3%

Strongest: 18-25 year olds  
36-45 year olds  
Non-whites  
North, central

## APPENDIX

Hello, (name of person called), this is (your name), calling from Market Opinion Research. We are talking with some families about a variety of issues that affect your area. I am wondering if I could have a few minutes to ask you some questions. Your answers would be most helpful.

1. First, on a scale of 1 to 5, with 5 being the very best rating you could give; a 3 would be about average; and a 1 is the very worst rating you could give, how would you rate Palm Beach County as a place to live?

1 - Very poor	1%
2 - Poor	5%
3 - Average	24%
4 - Good	38%
5 - Excellent	32%

2. Using the same scale, how would you rate your quality of life in terms of....

	Very Poor	Poor	Average	Good	Excellent	CR	DK
a. schools	7%	14%	23%	14%	7%	7%	29%
b. managing growth	9%	14%	42%	21%	10%	2%	4%
c. reasonable taxes	10%	12%	40%	25%	11%	0%	3%
d. environmental protection	7%	12%	38%	28%	11%	2%	4%
e. recreational opportunities	3%	6%	21%	34%	31%	2%	4%
f. safety from crime	8%	17%	43%	20%	11%	1%	1%
g. availability and safety of water supply	4%	10%	32%	32%	20%	1%	3%
h. cultural activities	5%	8%	24%	34%	24%	2%	5%

3. In your opinion, what is the number one problem or concern facing Palm Beach County today -- the one you would look to county government to solve?

1 - Growth	22%
2 - Crime	20%
3 - Schools	17%
4 - Taxes	6%
5 - Traffic	4%

4. Generally speaking, how do you feel about the Palm Beach County Commission; would you say your feelings are very favorable, somewhat favorable, somewhat unfavorable, or very unfavorable?

1- Very Favorable	7%
2- Somewhat Favorable	62%
3 - Somewhat unfavorable	21%
4 - Very Unfavorable	3%



5. On a scale of 1 to 5, with 5 being the best rating and 1 the worst, how would you rate the County Commission's performance on the following issues:

	Very Poor	Poor	Average	Good	Excellent	CR	DK
a. managing growth	8%	17%	42%	17%	3 %	3%	11%
b. keeping taxes reasonable	8%	14%	43%	22%	5 %	0%	8%
c. protecting the environment	6%	16%	39%	23%	7 %	1%	9%

6. Which of these two statements is closer to what you believe?

A - Growth is good and should be encouraged	44%
B - Continued growth is bad and should be discouraged.	37%
C - Neither (DO NOT READ)	19%

7. Which of these two statements is closer to what you believe?

A - We need to protect our environment, even at the expense of economic opportunities that might come from growth;	58%
B - We need to encourage planned growth, even at the expense of some environmental concerns.	32%
C - Neither (DO NOT READ)	10%

8. Now I'm going to ask some questions specifically about the area we call the Ag Reserve, which is about 21,000 acres in the southern part of Palm Beach County. Have you read or heard anything lately about the Ag Reserve?

1-Yes	46%
2- No	47%
3- Not Sure	8%

Beginning in 1980, county planning has designated this area as a reserve, with emphasis on agriculture and restrictions on the number of houses. From 1989 to 1995, the county imposed a moratorium on development, pending further study. Only two developments have been approved since 1995. Now the county has initiated a process to develop a master plan for this area.

9. From what you know about Ag Reserve, which of these statements is closer to what you believe:

A - The Ag Reserve should be allowed to develop just like the rest of the county;	13%
B - The county should limit the amount of development that can occur in the Ag Reserve.	70%
C - Neither (DO NOT READ)	17%



10. Would you be in favor of using taxpayer money to buy land to limit development in the Ag Reserve?

1- Favor	49%
2- Oppose	33%
3- Undecided (Don't Read)	18%

11. On a scale of 1 to 10, with 10 being very important and 1 being not at all important, please rate the following as if you were setting priorities for a master plan for the Ag Reserve?

	1	2	3	4	5	6	7	8	9	10
A. Enhancing agricultural use, with emphasis on nurseries and equestrian areas.	8%	2%	4%	4%	17%	9%	9%	15%	4%	22%
B. Preserving environmentally sensitive lands such as wetlands and uplands.	6%	1%	1%	3%	9%	5%	5%	15%	9%	41%
C. Enhancing water resources.	3%	1%	1%	3%	6%	5%	6%	12%	12%	46%
D. Making more green spaces open to the public, such as parks and golf courses.	9%	3%	2%	5%	12%	8%	8%	14%	5%	29%
E. Minimizing costs to taxpayers.	6%	1%	4%	3%	19%	6%	5%	10%	6%	35%
F. Providing a mix of uses within Ag Reserve that includes homes, jobs, schools, shopping, and recreation.	19%	8%	7%	5%	18%	4%	5%	11%	3%	15%

12. There may be some proposals on your ballot in March to spend taxpayer money on parks and recreation projects, acquiring environmentally sensitive lands and preserving a portion of the Ag Reserve. If the election were held today, would you support...

A - Spending \$100 million to preserve a portion of the Ag reserve, which would cost the average household about \$13 million dollars a year.

38%-Support	49%-Oppose	14%-Not sure
-------------	------------	--------------

B - Spending \$25 million -- or about \$3 dollars a year for the average household -- for parks and recreation projects.

42%-Support      46%-Oppose      12%-Not Sure

C - Spending \$50 million to purchase environmentally-sensitive lands, which would cost about \$6 dollars more a year for the average household.

34%-Support      54%-Oppose      12%-Not Sure

13. How long have you been a resident of Palm Beach County?

1 - Less than one year	2%
2 - 1-5 years	17%
3 - 6-10 years	21%
4 - 11-15 years	18%
5 - more than 15 years	40%

14. What part of the country are you originally from? (READ LIST)

1 - North	46%
2 - South	19%
3 - East Coast	18%
4 - Mid West	12%
5 - West Coast	4%

15. Did you grow up in a urban, suburban or rural community?

1- Urban	35%
2- Suburban	43%
3- Rural	22%

16. Which of the following age categories do you fall under?

1- 18-25 years old	4%
2- 26-35 years old	9%
3- 36-45 years old	14%
4- 46-55 years old	14%
5 - 56-65 years old	16%
6 - Over 65 years old	40%
7 - REFUSED	4%

17. Are you a homeowner or do you rent your home?

1- Own the home	88%
2- Rent the home	12%

18. Finally, are you a registered voter in Palm Beach County?

1- Yes	89%
2- No	11%

19. RACE

1 - White	87%
2 - African American	5%
3 - Hispanic	5%
4 - Other	4%

20. GENDER

1-Male	46%
2-Female	54%

21. ZIP CODE

1. North	13%
2. West	16%
3. Central	30%
4. S. East	26%
5. S. West	16%

ANALYSIS OF CROSS-TABULATION OF SURVEY  
October 28 - 31, 1998

This memo enhances the findings in the Executive Summary, which was based solely on the aggregate number of responses without regard to demographic and geographic cross-tabulations. Please note that we have commented upon a particular question or response ONLY when one or more demographic or geographic group's response is (a) significantly (that is, more or less than 5%) different from the total sample, or (b) was not what we would expect in terms of that group's values or history.

QUALITY OF LIFE

Of the nearly one-third (32%) of respondents who said their quality of life is excellent, 58% are over 65. The positive rating on the quality of life scale consistently rises with age -- the older you are, the happier you are with your life in Palm Beach County. We might note, however, that younger residents -- who are slightly less happy and less consistent in their answers -- represent less informed responses to the specific questions about quality of life (below).

-- Managing growth.

While a plurality (42%) of the total sample gave their quality of life "average" marks in terms of managing growth, and 31% rated growth management as "good" to "excellent," two geographic segments disagreed.

Residents of the southeast and southwest are more concerned about growth than are residents in other parts of the county. It is likely that southeasterners are feeling crowded already, and southwesterners are dizzy with current and proposed development.

-- Reasonable taxes.

40% of respondents rated the reasonability of taxes as "average" and 36% said "good" to "excellent."

However, residents in the west showed marked tax sensitivity, as did African Americans. And 35% of those between 36 and 45 years old said "poor" to "very poor" in this category.



This makes sense -- ad valorem taxes are going up in Wellington and if the Acreage incorporates, taxes will rise. Moreover, 36 - 45-year-olds are raising families while not quite at the peak of their earning years -- so they're feeling the pinch.

-- Environmental protection.

While a plurality of respondents rated environmental protection as "good" to "excellent" (39%), residents in the north and the southwest are slightly more likely to grant lower ratings.

-- Recreational opportunities.

A majority (65%) give the highest ratings to recreational opportunities. However, African Americans and people between 36 and 55 (the parenting years) believe there is room for improvement.

-- Safety from crime.

While most people (43% of total) rated safety from crime as "average," residents in the southeast are worried: 31% said "poor" or "very poor" in this category.

-- Water supply.

22% of people age 56-65 ranked water availability and safety as "poor" or "very poor," compared with only 14% of the total. A clear majority (52%) feel fine about water issues.

#### NUMBER ONE ISSUE

When asked to volunteer the number one issue facing the county, residents polled said:

Growth	22%
Crime	20%
Schools	17%

-- Those who chose "growth" as the top priority are:

\* Youngest and oldest:

18-25 years old  
46-65 years old (tied with "schools")  
Over 65



- \* Men more than women
- \* Residents in the north, southeast and southwest
- Those who said "crime" are:
  - \* 26-35 years old
  - \* African American
  - \* Live in the central part of the county (highly populated municipalities where crime is highest)
- Those who said "schools" are:
  - \* 36-45 years old (parenting years)
  - \* 46-65 years old (tied with "growth")
  - \* Women more than men
  - \* Residents of the western part of the county (which is primarily young families with children in school)

#### COUNTY COMMISSION PERFORMANCE

More than two-thirds of respondents rated the County Commission's job performance as "very" to "somewhat favorable," with 46-55 year olds and residents in the west giving the Commission especially high marks. Men, however, were less complimentary -- 30% gave the Commission unfavorable ratings.

On the specific issue performance questions:

- \* African Americans and 18-25 year olds rated the Commission the most negatively on keeping taxes reasonable, while 65+ year olds rated them best.
- \* 56-65 year olds gave the lowest ratings on protecting the environment, while those who live in the west were the most satisfied.

#### CONTRASTING GROWTH QUESTIONS

On the first polarizing question about growth, the pro-growth statement drew 7 points higher support than did the pure no-growth question, but 19% could not make the choice.

A: Growth is good and should be encouraged.

Total: 44%

- Tie among 36-45 year olds
- North, west, central and southwest segments

B. Continued growth is bad and should be discouraged.

Total: 37%

- 18-25 year olds
- Tie among 36-45 year olds

The next set of questions, which introduced the environmental equation, yielded a majority for environmental protection and only 10% were not able to choose.

A. We need to protect our environment, even at the expense of economic opportunities that might come from growth.

Total: 58%

- All ages 26+
- Strongest among 46-55 year olds
- Consistent in all regions

B. We need to encourage planned growth, even at the expense of some environmental concerns.

Total: 32%

- 18-25 year olds strongest

#### AG RESERVE PRIORITIES

The screening question at the beginning of the Ag Reserve sequence is important because, although we did not drop those who had not heard or read about the Ag Reserve, their responses should be read as uninformed and, with an education campaign, could change.

-- Awareness of the Ag Reserve.

YES Total: 46%

All ages 46+  
Strongest 46-55 years old

White  
West, southeast, southwest (most)

NO            Total:      47%

Under 46 years old  
African American  
North, central parts of county

-- Development questions.

The question of limiting development in the Ag Reserve drew a resounding "yes" (70%) with no demographic or geographic groups opposing. On the question of spending taxpayer money to buy land to limit development, however, African Americans and residents 18-25 were the most opposed.

NOTE:        These two groups are the least informed and our sample size was not large enough to be statistically significant.

-- Priorities for master planning.

\* Enhance agriculture.

Plurality:      22% very important

Weakest:        18-25 year olds

\* Preserve environmentally-sensitive lands.

Plurality:      41% very important

Strongest:      36-55, 65+  
White  
Southeast, southwest

Weakest:        18-25 year olds

\* Enhancing water resources.

Plurality:      46% very important

Strongest:      Over 46  
White  
Women  
Southwest

Weakest: North  
Hispanic, African American  
18-25 year olds

\* More green spaces.

Plurality: 29% very important

Strongest: 18-25 year olds  
65+  
White  
Southwest

\* Minimizing taxpayer cost.

Plurality: 35% very important

Strongest: 56+  
Southwest

Weakest: Under 35 years old  
North, west

\* Mix of uses.

Plurality: 19% NOT AT ALL IMPORTANT  
(15% rated VERY IMPORTANT)

Not at all: Southeast, southwest

Very important: 56-65 year olds  
Non-whites  
Southwest

## REFERENDUM QUESTIONS

We asked the referendum questions in two ways: first, asking them to choose or prioritize among the three; then asking a "yes" or "no" question for each element individually.

-- Choice of three proposed questions:

\* \$100 million for Ag Reserve.

Total first choice: 29%

Plurality: 26-35 year olds  
Men  
West, southeast

\* \$25 million for parks and rec.

Total first choice: 28%

Plurality: 36-55 year olds  
Non-whites  
Women  
North, central, southwest

\* \$50 million for environmentally-sensitive lands.

Total first choice: 19.5%

Plurality: 18-25 year olds

-- Individual ballot question vote:

\* \$100 million for Ag Reserve. :

Total support: 37.8%

Strongest: 26-35 year olds (58%)  
Southeast, southwest

Total oppose: 48.5%

Strongest: 18-25 year olds  
36-55 year olds  
Non-whites

\* \$50 million for parks and rec.

Total support: 41.8%

Strongest: 26-35 year olds  
46-55 year olds  
African Americans  
Women

Total oppose: 46.3%

Strongest: 18-25 year olds  
36-45 year olds  
Whites  
North, southwest



\* \$25 million for environmentally-sensitive lands.

Total support: 33.5%

Strongest: 46-55 year olds  
Southwest

Total oppose: 54.3%

Strongest: 18-25 year olds  
36-45 year olds  
Non-whites  
North, central

## APPENDIX

Hello, (name of person called), this is (your name), calling from Market Opinion Research. We are talking with some families about a variety of issues that affect your area. I am wondering if I could have a few minutes to ask you some questions. Your answers would be most helpful.

1. First, on a scale of 1 to 5, with 5 being the very best rating you could give; a 3 would be about average; and a 1 is the very worst rating you could give, how would you rate Palm Beach County as a place to live?

1 - Very poor	1%
2 - Poor	5%
3 - Average	24%
4 - Good	38%
5 - Excellent	32%

2. Using the same scale, how would you rate your quality of life in terms of....

	Very Poor	Poor	Average	Good	Excellent	CR	DK
a. schools	7%	14%	23%	14%	7%	7%	29%
b. managing growth	9%	14%	42%	21%	10%	2%	4%
c. reasonable taxes	10%	12%	40%	25%	11%	0%	3%
d. environmental protection	7%	12%	38%	28%	11%	2%	4%
e. recreational opportunities	3%	6%	21%	34%	31%	2%	4%
f. safety from crime	8%	17%	43%	20%	11%	1%	1%
g. availability and safety of water supply	4%	10%	32%	32%	20%	1%	3%
h. cultural activities	5%	8%	24%	34%	24%	2%	5%

3. In your opinion, what is the number one problem or concern facing Palm Beach County today -- the one you would look to county government to solve?

1 - Growth	22%
2 - Crime	20%
3 - Schools	17%
4 - Taxes	6%
5 - Traffic	4%

4. Generally speaking, how do you feel about the Palm Beach County Commission; would you say your feelings are very favorable, somewhat favorable, somewhat unfavorable, or very unfavorable?

1 - Very Favorable	7%
2 - Somewhat Favorable	62%
3 - Somewhat unfavorable	21%
4 - Very Unfavorable	3%



5. On a scale of 1 to 5, with 5 being the best rating and 1 the worst, how would you rate the County Commission's performance on the following issues:

	Very Poor	Poor	Average	Good	Excellent	CR	DK
a. managing growth	8%	17%	42%	17%	3 %	3%	11%
b. keeping taxes reasonable	8%	14%	43%	22%	5 %	0%	8%
c. protecting the environment	6%	16%	39%	23%	7 %	1%	9%

6. Which of these two statements is closer to what you believe?

A - Growth is good and should be encouraged	44%
B - Continued growth is bad and should be discouraged.	37%
C - Neither (DO NOT READ)	19%

7. Which of these two statements is closer to what you believe?

A - We need to protect our environment, even at the expense of economic opportunities that might come from growth;	58%
B - We need to encourage planned growth, even at the expense of some environmental concerns.	32%
C - Neither (DO NOT READ)	10%

8. Now I'm going to ask some questions specifically about the area we call the Ag Reserve, which is about 21,000 acres in the southern part of Palm Beach County. Have you read or heard anything lately about the Ag Reserve?

1-Yes	46%
2- No	47%
3- Not Sure	8%

Beginning in 1980, county planning has designated this area as a reserve, with emphasis on agriculture and restrictions on the number of houses. From 1989 to 1995, the county imposed a moratorium on development, pending further study. Only two developments have been approved since 1995. Now the county has initiated a process to develop a master plan for this area.

9. From what you know about Ag Reserve, which of these statements is closer to what you believe:

A - The Ag Reserve should be allowed to develop just like the rest of the county;	13%
B - The county should limit the amount of development that can occur in the Ag Reserve.	70%
C - Neither (DO NOT READ)	17%

10. Would you be in favor of using taxpayer money to buy land to limit development in the Ag Reserve?

1- Favor	49%
2- Oppose	33%
3- Undecided (Don't Read)	18%

11. On a scale of 1 to 10, with 10 being very important and 1 being not at all important, please rate the following as if you were setting priorities for a master plan for the Ag Reserve?

	1	2	3	4	5	6	7	8	9	10
A. Enhancing agricultural use, with emphasis on nurseries and equestrian areas.	8%	2%	4%	4%	17%	9%	9%	15%	4%	22%
B. Preserving environmentally sensitive lands such as wetlands and uplands.	6%	1%	1%	3%	9%	5%	5%	15%	9%	41%
C. Enhancing water resources.	3%	1%	1%	3%	6%	5%	6%	12%	12%	46%
D. Making more green spaces open to the public, such as parks and golf courses.	9%	3%	2%	5%	12%	8%	8%	14%	5%	29%
E. Minimizing costs to taxpayers.	6%	1%	4%	3%	19%	6%	5%	10%	6%	35%
F. Providing a mix of uses within Ag Reserve that includes homes, jobs, schools, shopping, and recreation.	19%	8%	7%	5%	18%	4%	5%	11%	3%	15%

12. There may be some proposals on your ballot in March to spend taxpayer money on parks and recreation projects, acquiring environmentally sensitive lands and preserving a portion of the Ag Reserve. If the election were held today, would you support...

A - Spending \$100 million to preserve a portion of the Ag reserve, which would cost the average household about \$13 million dollars a year.

38%-Support	49%-Oppose	14%-Not sure
-------------	------------	--------------

B - Spending \$25 million -- or about \$3 dollars a year for the average household -- for parks and recreation projects.

42%-Support      46%-Oppose      12%-Not Sure

C - Spending \$50 million to purchase environmentally-sensitive lands, which would cost about \$6 dollars more a year for the average household.

34%-Support      54%-Oppose      12%-Not Sure

13. How long have you been a resident of Palm Beach County?

1 - Less than one year	2%
2 - 1-5 years	17%
3 - 6-10 years	21%
4 - 11-15 years	18%
5 - more than 15 years	40%

14. What part of the country are you originally from? (READ LIST)

1 - North	46%
2 - South	19%
3 - East Coast	18%
4 - Mid West	12%
5 - West Coast	4%

15. Did you grow up in a urban, suburban or rural community?

1- Urban	35%
2- Suburban	43%
3- Rural	22%

16. Which of the following age categories do you fall under?

1- 18-25 years old	4%
2- 26-35 years old	9%
3- 36-45 years old	14%
4- 46-55 years old	14%
5 - 56-65 years old	16%
6 - Over 65 years old	40%
7 - REFUSED	4%

17. Are you a homeowner or do you rent your home?

1- Own the home	88%
2- Rent the home	12%



18. Finally, are you a registered voter in Palm Beach County?

1- Yes	89%
2- No	11%

19. RACE

1 - White	87%
2 - African American	5%
3 - Hispanic	5%
4 - Other	4%

20. GENDER

1-Male	46%
2-Female	54%

21. ZIP CODE

1. North	13%
2. West	16%
3. Central	30%
4. S. East	26%
5. S. West	16%

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# **Agricultural Reserve Master Plan Interim Report No. 4**

## **Evaluating the Alternatives**

Prepared for  
**Palm Beach County**

December 1998

**CH2MHILL**

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# **Agricultural Reserve Master Plan Interim Report No. 4 Evaluating the Alternatives**

Prepared for  
**Palm Beach County**

December 1998

**CH2MHILL**  
in association with  
Dover, Kohl & Partners

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## Appendix

- 4A Presentation Material from the BCC Workshop – January 8, 1999

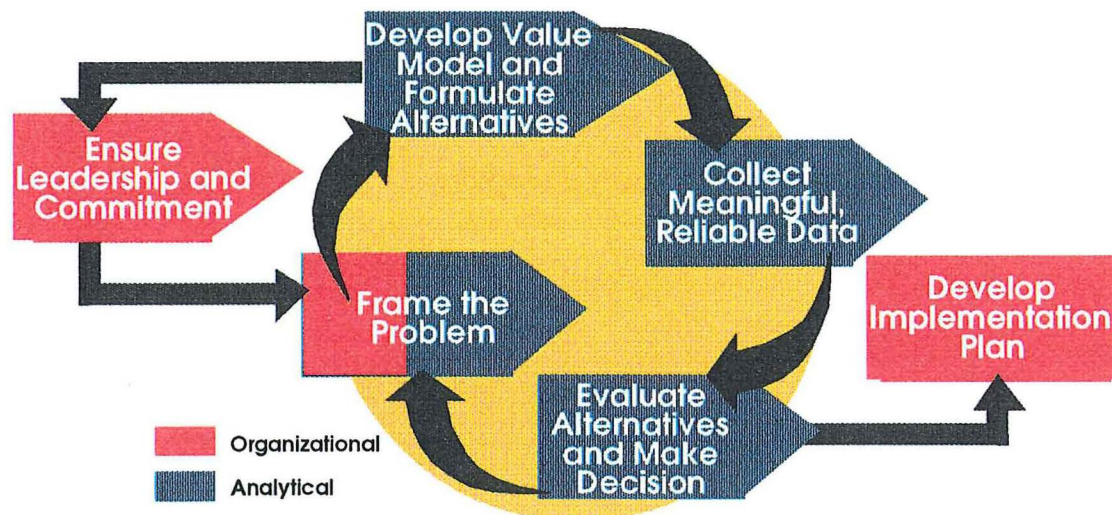
## Exhibit

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The next steps in the six-step decision process are to finalize the Alternatives, collect the necessary data, and evaluate the Alternatives against the value model. Exhibit 4-1 depicts relationship between these steps and shows that, after the Alternatives are evaluated, there still needs to be a check with the original problem statement or purpose statement to make sure the recommended Alternative meets the stated objectives.



### EXHIBIT 4-1 Six-Step Decision Process

This Interim Report presents the results of the visual depiction of the No Bond and Bond Alternatives guided by the input provided by the public, the purpose statement, and the assumptions developed for the project. The three conceptual land use Alternatives will then be evaluated against the six primary objectives and supporting criteria and performance measures, and the results presented. The results will be further analyzed to provide insight on the Alternatives' performance against the objectives and criteria, and sensitivity to the overall weighting. Finally, the results from the Palm Beach County Board of County Commissioners (BCC) workshop held January 7, 1998, will be presented and summarized.

# Conceptual Alternatives

---

This section describes the three conceptual land use Alternatives, but focuses more on the development of the No Bond and Bond Alternatives and the features of each.

The three conceptual land use Alternatives to be evaluated include:

**Status Quo** – this Alternative assumes that the current land use regulations remain intact, and that the Ag Reserve will develop out under the 60/40.

**No Bond** – this Alternative will plan to balance existing agricultural use, planned water resource projects, and other environmental amenities with current and future development. It assumes that no public dollars are available from any source to facilitate land purchases within the Ag Reserve, and that other processes and possibly land use configurations will be required to make it feasible.

**Bond** – this Alternative is similar to the No Bond Alternative; however, it assumes that public money will be available for land purchase. While it is anticipated that this Alternative will need support from public sources to maintain land values, the amount of public dollars that may be necessary is assumed to be \$100 million.

The Status Quo Alternative was initially developed by County Planning Division staff, with assistance from the Treasure Coast Regional Planning Council (TCRPC) and South Florida Water Management District (SFWMD) Planning staff. The other two Alternatives were developed through the Design Charrette process with extensive input from the public (see Interim Report No. 3).

All three Alternatives were created using a similar format for agriculture, environmentally sensitive lands, water resources features, open space, and urban development to provide an equitable comparison between them. Also, the project purpose statement, as established by the BCC,

*"To preserve and enhance agricultural activity and environmental and water resources in the Ag Reserve, and produce a master development plan compatible with these goals."*

and the underlying assumptions,

- Private property rights will be respected.
- Equestrian uses, nurseries, and specialty crops are the most feasible long-term agricultural uses in the Ag Reserve.
- Lands in public ownership will remain in open space.
- The amount of land that can be acquired with public funds will depend on the number of willing sellers and the cost of land.
- Concurrency requirements will be met.

- Design criteria for future development will minimize impacts to Lake Worth Drainage District (LWDD) canal system and the Lake Worth Lagoon.

were used to guide the development of the three Alternatives.

## No Bond Alternative

After completion of the Public Workshop Design Charrette, the Working Group (WG) sorted the drawings prepared by the workshop participants (see Interim Report No. 3) from those with the most open space to those with the most development. The WG then spent several days working with members of the Extended Working Group (EWG) to develop two conceptual Alternatives that reflect the extensive input from the workshop participants. In almost all of the drawings, several common themes or features of the maps were noticed:

- The area west of SR 7/US 441 was designated as preserve or conservation lands for the County or SFWMD and was assumed to not be developed.
- A reservoir located west of SR 7/US 441 was configured in rectangular shape, as opposed to the longer shape proposed by the SFWMD in the Restudy.
- A central waterway around the LWDD L-30 canal was depicted.

Two neighborhood centers, centered around Boynton Beach Boulevard and west Atlantic Avenue, were also depicted. The majority were depicted around Lyons Road, while others placed it around SR 7/US 441.

The proposed No Bond Alternative was created by:

- Using the ideas from the workshop participants
- Examining properties that qualified for 60/40
- Grouping developments along neighboring property lines
- Moving development rights from the west side of SR 7/US 441 to the east side, with incentives provided to allow more units (approximately 1.5 dwelling units per acre [DU/acre]) to be transferred
- Increasing the number of DUs by approximately 3,000 units

Exhibit 4-2 depicts the final draft of the No Bond Alternative assuming the above provisions. Features of this plan include:

- Coastal waterway along L-30 Canal as an amenity that may be paid for by private developers
- Curving Lyons Road between Boynton Beach Boulevard and west Atlantic Avenue as a parkway/rural type road
- Neighborhood centers (providing a mix of land uses)
- Interconnected neighborhoods



Palm Beach County Agricultural Reserve  
F L O R I D A

No Bond Alternative

DRAFT

**This map is conceptual:**  
It is meant to guide future efforts, showing possible build-out and land conservation scenarios within the Palm Beach County Agricultural Reserve. The boundaries between developed areas and green areas are not intended to be hard and set. They may be configured differently as the plan is refined and when development actually occurs. Areas colored green may contain agricultural uses other than those illustrated including but not limited to: equestrian facilities, nurseries, row crop farms, cattle ranching, raising farm animals, fruit groves/orchards, wildlife preserves, recreational facilities, and golf courses.

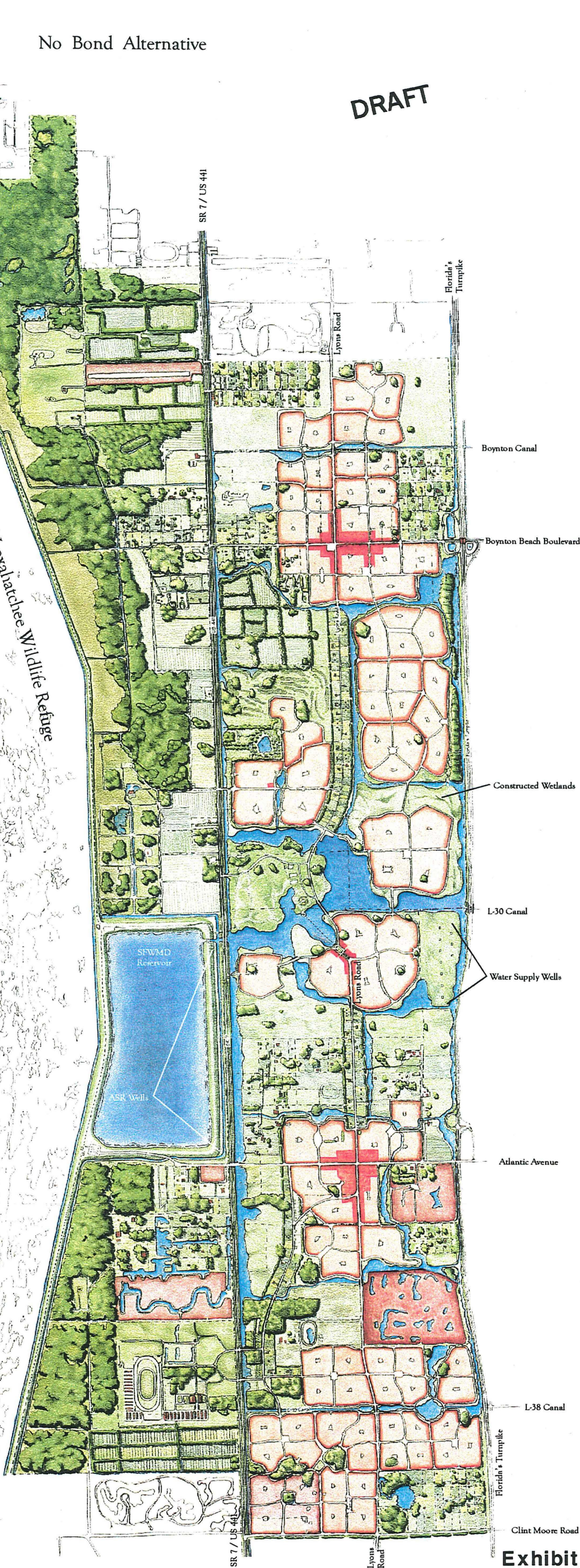
**Legend:**

- Proposed land for future development
- Land with existing development approvals
- Mixed-use town centers
- Typically properties developed at one unit per 5 acres
- Land for agriculture and open space
- Canals and lakes
- Roads

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DOVER KOHL & PARTNERS  
town planning

Draft Date: December 14, 1998  
SCALE: 1" = 1,200'

0 1,200' 2,400' 3,600' 4,800' 6,000' 7,200' 8,400' 9,600' 10,800'  
0 1/4 Mile 1/2 Mile 1 Mile 2 Miles





- Reduction in car trips if daily needs are met within the Ag Reserve
- Reduction in car trips if there is the opportunity for walking, bike riding, and horseback riding
- Open spaces are larger and more contiguous
- Shape of SFWMD reservoir is more efficient
- Area centrally located along Florida Turnpike reserved for future water supply wells
- Total number of DUs would be approximately 20,000 units (3,000 existing and 17,000 new)

## Bond Alternative

The proposed Bond Alternative was created by:

- Using the ideas from the public workshop participants and using the No Bond Alternative as the baseline
- Assuming that the County will purchase up to \$100 million in land (not development rights) from willing sellers with a fee simple title
- Assuming that the County will have to pay market prices for the land
- Assuming the \$100 million would enable the County to acquire 2,000 to 4,000 acres, which could be used for agriculture and open space
- Choosing to centralize land purchases to accomplish a large contiguous tract of land where development pressure and access to roads are lower

Exhibit 4-3 depicts the final draft of the Bond Alternative assuming the above provisions. Features of this plan include those presented for the No Bond Alternative, along with the following:

- Greatest opportunity for preserving the potential for agriculture and open space
- Future development focused around Boynton Beach Boulevard, around west Atlantic Avenue, and further south where the land is expected to be more expensive
- Large contiguous open space in the central part where land is more conducive to agriculture and open space
- Fewer residents = less traffic congestion inside and outside the Ag Reserve
- Linked LWDD canal system: one to the north and one to the south
- Two District County Parks: one to the north and one to the south
- A more efficient form with two distinct communities
- Central areas set aside near the Florida Turnpike for future water supply wells, with potential for constructed wetlands

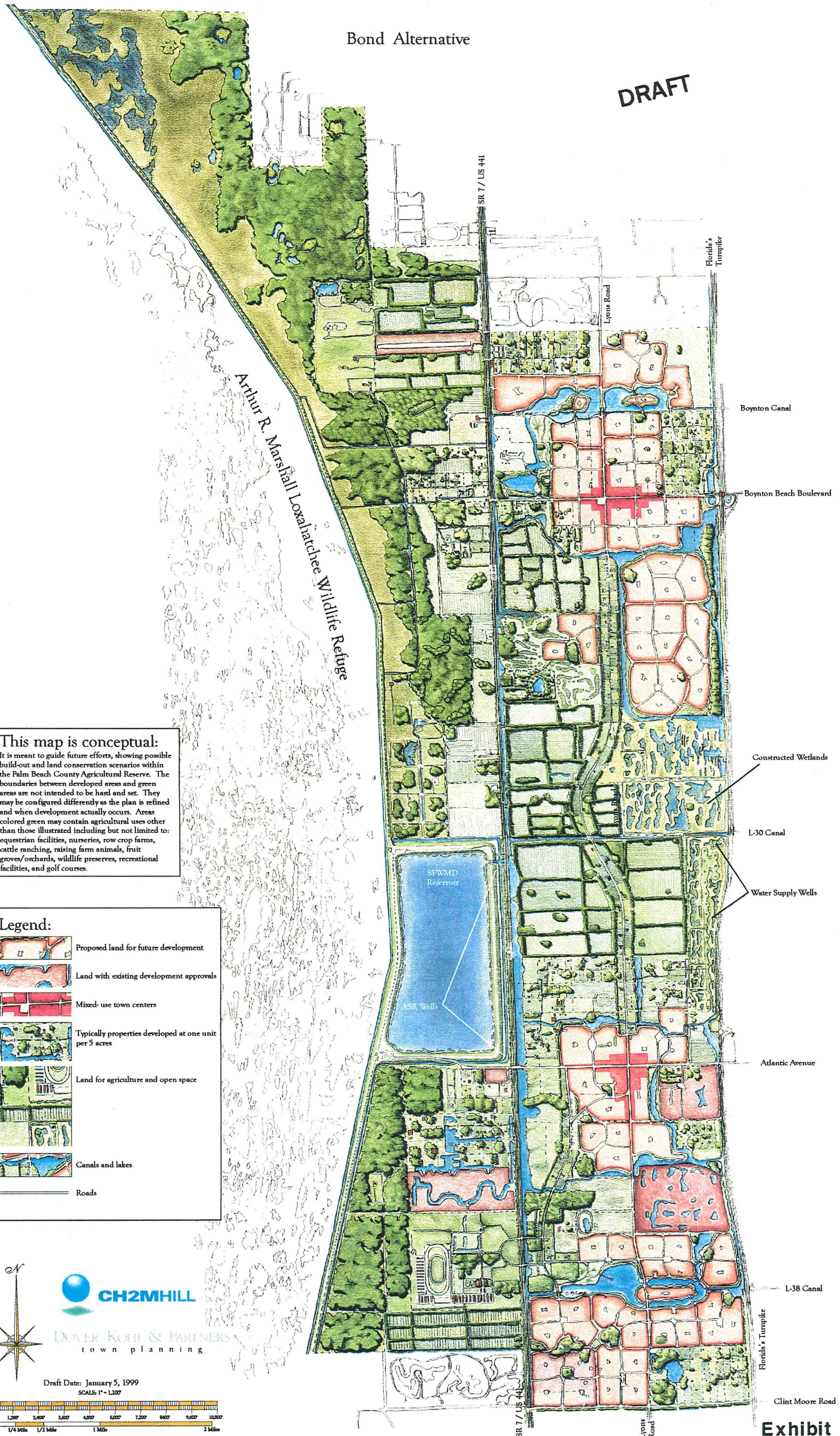


# Palm Beach County Agricultural Reserve

## F L O R I D A

Bond Alternative

DRAFT



### This map is conceptual:

It is meant to guide future efforts, showing possible build-out and land conservation scenarios within the Palm Beach County Agricultural Reserve. The boundaries between developed areas and green areas are not intended to be hard and set. They may be configured differently as the plan is refined and when development actually occurs. Areas colored green may contain agricultural uses other than those illustrated including but not limited to: equestrian facilities, nurseries, row crop farms, cattle ranching, raising farm animals, fruit groves/orchards, wildlife preserves, recreational facilities, and golf courses.

### Legend:

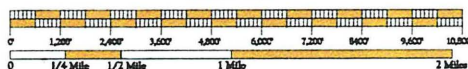
- Proposed land for future development
- Land with existing development approvals
- Mixed-use town centers
- Typically properties developed at one unit per 5 acres
- Land for agriculture and open space
- Canals and lakes
- Roads



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town planning

Draft Date: January 5, 1999  
SCALE 1" = 1,200'



**Exhibit 4-3**

"Bond" Conceptual Land Use Alternative



- The total number of DUs would be approximately 16,000 to 18,000 units (3,000 existing and 13,000 to 15,000 new)

## Features of the Alternatives

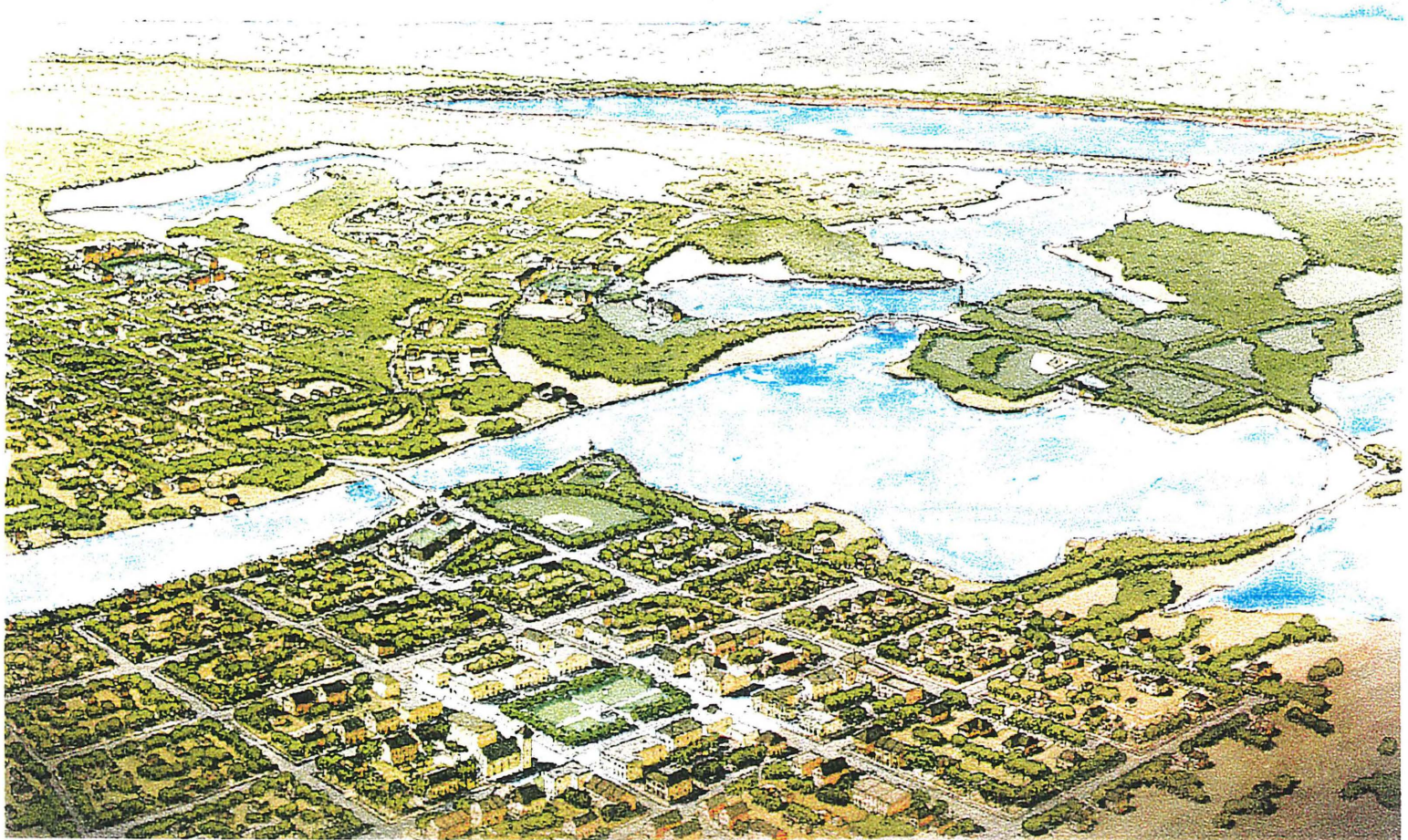
Some of the unique features of these Alternatives are presented in Exhibit 4-4. A system of connected lakes and canals, aligned with the existing LWDD canal system, is depicted in both Alternatives. These interconnected lake systems can provide wet detention for future development, additional recharge to the surficial aquifer, greater opportunity for recreation such as canoeing and fishing, additional waterfront properties, extended and restored habitats for the nearby ecosystems, and is aesthetically pleasing.

Other features include neighborhood centers that have a mix of neighborhood-serving shops, offices, civic institutions, and houses. Civic buildings anchor neighborhood squares and serve as landmarks for the community. Mixed-use shop-front buildings contain shops and offices. Parking is behind the buildings to enhance the pedestrian experience. And places to live surround the stores and offices to offer residents the choice to walk or ride bicycles to get to their daily needs or to work.



# Palm Beach County Agricultural Reserve

## F L O R I D A

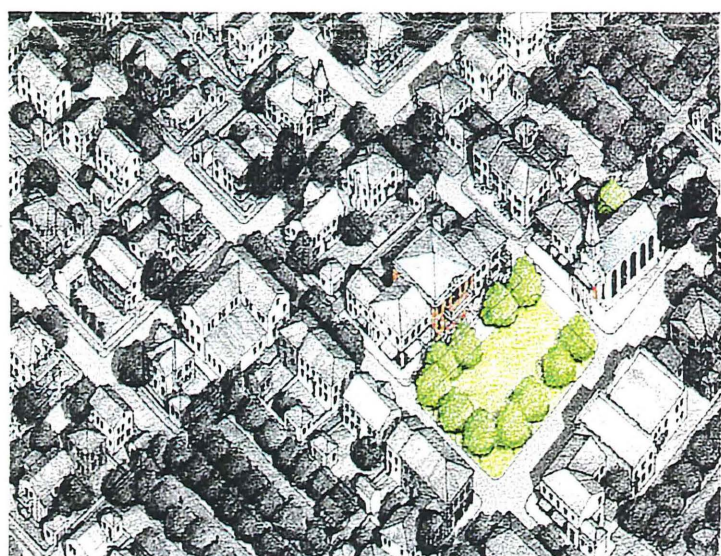


A system of connected lakes and canals among and between neighborhoods:

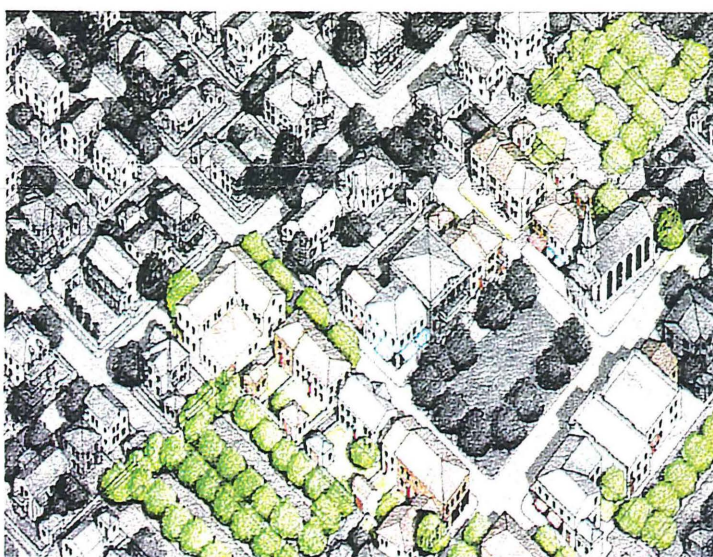
- improves water management,
- provides greater recreation, especially for canoeing and fishing,
- improves property values,
- Provides restored habitat for the natural Florida ecosystem, and
- looks nice.



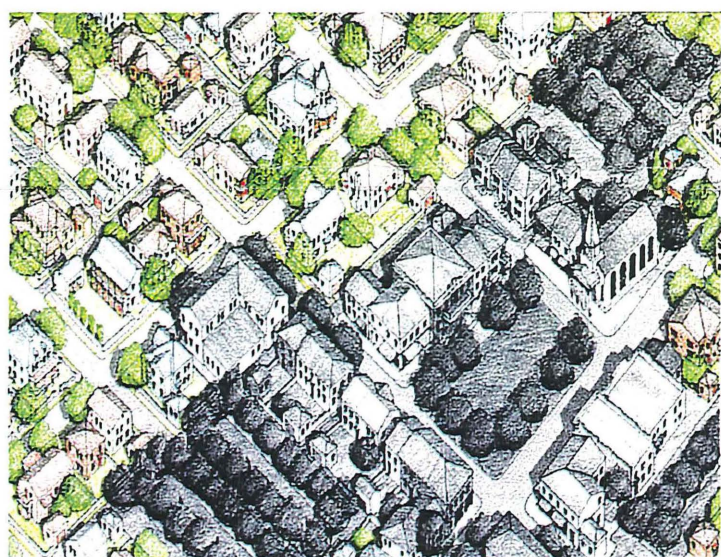
Town Centers have a mixture of neighborhood serving shops, offices, civic institutions and houses.



Civic buildings anchor neighborhood squares and serve as landmarks for the community.



Mixed-use shopfront buildings contain shops and offices. Parking is behind buildings to enhance the pedestrian experience.



Places to live surround the stores and offices to offer residents the choice to walk or ride bikes to get their daily needs or to walk to work.



DOYLE KIM & PARTNERS  
town planning

**Exhibit 4-4**

Features of the "No Bond" and "Bond" Alternatives



# Alternatives Evaluation Process

## Value Model Example Setup

The value model (see Interim Report No. 2) was input into a commercially available software package called Criterium Decision Plus (CDP). The software has a user-friendly graphical interface and makes the decision process more efficient with the capability to make changes in real-time. The tool utilizes the value structure developed by the WG and incorporates the assigned objective and criteria weights. The program translates the value model into a form referred to as a hierarchy and shows the connections between the goal, objectives, performance criteria, and the Alternatives.

Once the hierarchy is created, the user may input the weights for the objectives and criteria. The software automatically normalizes the weights between zero and one so that the blocks in each level (goal, objectives, criteria, etc.) of the hierarchy add up to the block they are connected to in the previous level. In addition, the sum of all the blocks in each level, other than the strategy level, must be less than or equal to one. For example, the goal level consists of one block or goal statement and receives a normalized or accumulated weight of one. If the hierarchy contains three objectives connected to the goal level, then the sum of the normalized weights of the objectives is equal to the normalized goal weight of one.

A simple example of buying a car may be used to gain a clear understanding of the tool's required input and calculations. Assume a family of three is providing input on the decision, and they have created a list of criteria that will be used to rate the different cars they are considering. The criteria they have chosen are *Performance*, *Style*, *Cost*, and *Safety*, and they will be deciding between a Porsche, Chevrolet, or Honda. The hierarchy the family created is depicted in Exhibit 4-5. For simplicity, their hierarchy does not contain an objectives level.

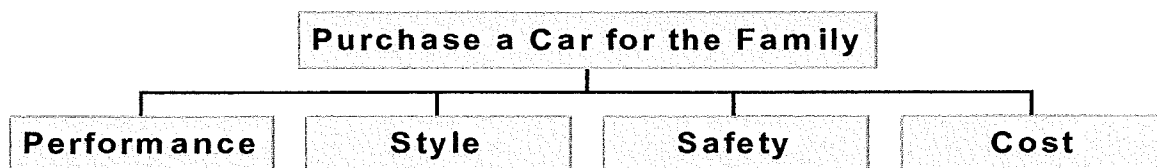


Exhibit 4-5  
Car Example Value Hierarchy

The family used the swing weighting technique to weight the criteria in the hierarchy. Exhibit 4-6 shows the results of the family's weighting exercise.

**Exhibit 4-6**  
Criteria Weighting Calculation Table—Car Example

	Performance	Style	Safety	Cost
<b>Mom</b>	10	50	100	80
<b>Dad</b>	100	80	90	80
<b>Child</b>	50	100	50	10
<b>Averages</b>	<b>53.3</b>	<b>76.7</b>	<b>80.0</b>	<b>56.7</b>

The average weights are input into the decision model. The software normalizes the weights by taking each criterion average and dividing it by the sum of the criteria weights. The results of the normalization process are depicted in Exhibit 4-7:

**EXHIBIT 4-7**  
Criteria Weighting Normalization—Car Example

Criteria	Average Criteria Weights	Normalized Criteria Weight	Percent of Decision
<b>Performance</b>	53.3	0.20	20%
<b>Style</b>	76.7	0.29	29%
<b>Safety</b>	80.0	0.30	30%
<b>Cost</b>	56.7	0.21	21%
<b>Total</b>	<b>266.7</b>	<b>1.0</b>	<b>100%</b>

The normalized weight can then be translated into the percent of the decision. Because the *Performance* criterion has a weight of 0.20, it contributes to 20 percent of the decision. The most important and, therefore, highest weighted criterion, *Safety*, makes up 30 percent of the decision.

As the hierarchy grows in complexity, the normalization process changes slightly. When new levels are added to the hierarchy and more columns between the goal and strategies are created, the normalized or accumulated weight gains an extra calculation step. For example, assume that the *Cost* criterion is broken down into two sub-criteria: *Initial Cost* and *Maintenance Cost*. The family weights these sub-criteria independently, and the average weights for *Initial Cost* and *Maintenance Cost* are 85.6 and 53.2, respectively. The accumulated weights for *Initial Cost* and *Maintenance Cost* would be equal to 0.13 and 0.08, respectively. These are computed by normalizing the sub-criteria weights and multiplying them by the accumulated weight of *Cost* from the previous level. Mathematically, the accumulated weight for *Initial Cost* is calculated as follows in equation (1):

$$AW_{IC} = \left( \frac{W_{IC}}{W_{IC} + W_{MC}} \right) \times AW_C \quad \text{or} \quad AW_{IC} = \left( \frac{85.6}{85.6 + 53.2} \right) \times 0.21 \quad (1)$$

Note that the sum of the accumulated weights of the sub-criteria is equal to the accumulated weight of the *Cost* criterion. After the weights have been entered and internally normalized by CDP, the strategies, or cars the family are considering, need to be rated or scored.



## Example Scoring Procedures

The process of scoring allows the user to compare the strategies against each of the criterion they are directly connected to in the hierarchy. Each criterion must be assigned a scale that is used to measure the benefit (or lack thereof) or success of a particular strategy. The assigned scales may be verbal or numerical, and the user can select from a list of default scales or create a new one. A better understanding of the scales and scoring can be gained by revisiting the car example.

As depicted in the car example hierarchy, the structure includes four criteria that are directly connected to the last level of the Alternatives (car choices). All three of the strategies will have to be scored for all four criteria. Exhibit 4-8 lists the ranges of the scales assigned to each criterion.

**EXHIBIT 4-8**  
Range of Criteria Scales – Car Example

Criteria	Scales
Performance	Maximum (best) to Minimum (worst)
Style	Finest (best) to Unsatisfactory (worst)
Safety	Consumer Reports Ranking, 1 (best) to 20 (worst)
Costs	\$10,000 (best) to \$50,000 (worst)

The scale for *Performance* is one of the default verbal scales. A pull-down menu with the scores ranging from minimum to maximum is located next to each strategy (car), and the user makes a selection from the list. The scale assigned to *Style* is also a default verbal scale, and each strategy has a pull-down menu with the appropriate range of scores associated with it.

The numerical scales for *Cost* and *Safety* were created by the user because the default numerical scales did not represent the measure of these criteria. To score the strategies for the *Cost* criterion, the user must enter a number between \$10,000 and \$50,000; there is no pull-down menu available to denote the numerical score. The same holds true for the *Safety* criterion.

The scores that are entered into the model, either verbal or numerical, are also internally mapped into a normalized score between zero and one. A score at the top, or best, end of the scale would translate into a one, such as maximum for the *Performance* scale. A score at the worst end of the scale would be internally converted to a zero. The software automatically assumes that a higher score is mapped closer to one. The use of a value function ensures that each end of the scale is correctly mapped between zero and one. For example, the *Cost* criterion scale has a higher number associated with the worst score. By default, the program would translate a score of \$50,000 into a one. The value function must be changed to a negative slope to map a score of \$50,000 as a zero and a score of \$10,000 as a one. The *Safety* criterion also requires a value function with a negative slope to correct the default assumption of CDP.

After the scales have been assigned with the appropriate value functions, the strategies can be scored. The results of the scoring for the car example are depicted in Exhibit 4-9. The family scored the car as a group with the best available data or knowledge.

**EXHIBIT 4-9**  
Scores—Car Example

Criteria	Strategies		
	Porsche	Chevrolet	Honda
Performance	Maximum	Low	Moderate
Style	Excellent	Below average	Average
Cost	\$48,000	\$12,000	\$25,000
Safety	10.0	8.0	4.0

The decision scores can be reviewed when all of the strategies are scored in CDP. If the model only contains one level between the goal and strategies like the car example, CDP has a simple formula to calculate the decision score. It is computed by summing the product of the normalized weight of each criterion and the normalized score of each strategy with respect to that criterion. For a simple model like this one, the normalized weight of each criterion is equal to the accumulated weight. A mathematical representation of the decision score is as follows in equation (2):

$$D_s = \sum_{C=1}^N NW_c NS_s^c \quad (2)$$

As the value structure becomes more complex, such as the one developed for the Master Development Plan, the decision scores are calculated with the accumulated weights of the objectives and criteria that are directly connected to the Alternatives. The formula is as follows in equation (3):

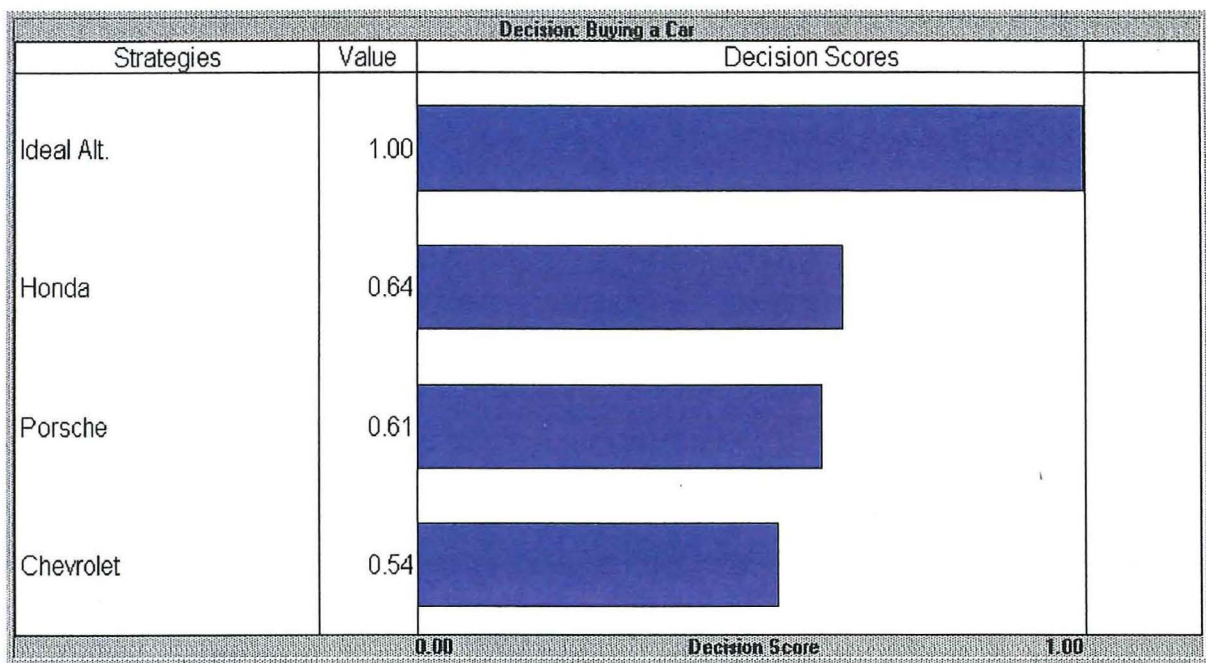
$$D_s = \sum_{C=1}^N AW_c NS_s^c \quad (3)$$

The C subscript and superscript refer to both the objective and criteria directly connected to the Alternatives.

## Example Results

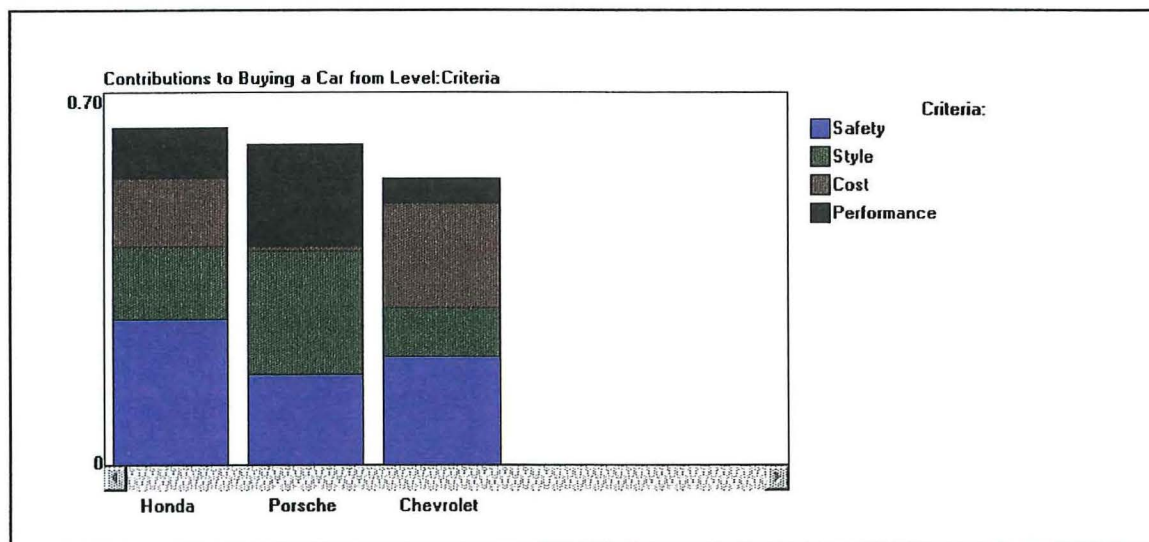
The decision scores internally calculated by CDP are presented in both a tabular and graphical form. The user may also sort the results from highest to lowest score and include a comparison of the strategies' scores with the ideal Alternative. The ideal Alternative is the "perfect" Alternative that receives the highest score possible for each of the respective criterion or sub-criterion. The ideal Alternative in the car example and the Master Development Plan value model will always receive a perfect score of one.

The decision scores for the car example are depicted in Exhibit 4-10. Based on the weight that the family placed on each criterion and the scores they gave each strategy, the Honda receives the highest decision score of 0.64. The Porsche is not far behind with a score of 0.61, but both are trailing behind the ideal Alternative. The family may choose to examine other strategies or cars that will score closer to the ideal Alternative, or they may decide to buy a Chevrolet because it is within their budget. It is important to realize that the software is not making the decision; it is merely a tool to help a person or group find a solution that best captures the decisionmakers' values.



**EXHIBIT 4-10**  
Decision Scores—Car Example

To visualize why the Honda received the highest decision score, the family may examine the contributions to the decision score by the criteria. Exhibit 4-11 shows the contributions by criteria. Because the *Safety* criterion comprises 30 percent of the decision, and Honda received a high score for this criterion, it contributes to a large portion of the overall score for Honda. Likewise, Porsche was highly rated for the *Style* and *Performance* criteria, but the weight of these criteria was not high enough to move Porsche in front of Honda. Lastly, the Chevrolet scored well for the *Cost* criterion, but its mediocre scores for the remaining criteria left it in last place.



**EXHIBIT 4-11**  
Contributions by Criteria—Car Example

# Results of Alternatives Evaluation

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## Scoring Alternatives

After closely examining the three conceptual land use Alternatives, each was scored against the criteria developed to measure performance against the six objectives. Exhibit 4-12 provides a summary of the scoring, along with the assumptions made when assigning values to the three Alternatives. The scores, whether quantitative or qualitative, are entered into the CDP model similar to the individual objective and criteria weights. The model then normalizes the scores and converts them to a simple range of zero to one. The best score in the range for each criteria would translate to a one, while the worst score in the range would translate into a zero. The software automatically assumes that a higher score is mapped closer to one.

## Results of the Scoring

For the value model set up to evaluate the three Alternatives, the decision scores are calculated with the accumulated weights of the objectives and criteria, and are directly connected to the Alternatives. The formulas in CDP, presented in the previous section, were then used to calculate the final results.

After all of the weighting and scoring is entered into the CDP model, the results of the final scores of the three conceptual land use Alternatives are displayed graphically. Exhibit 4-13 depicts the results of the scoring and indicates that the Bond Alternative scored the highest with 0.72, followed by the No Bond Alternative with a score of 0.61, and finally the Status Quo Alternative with a score of 0.34.

The above scores generally reflect the percentage of the objectives and criteria, according to their relative weights and scoring, that are met by the three Alternatives—e.g., the Bond Alternative meets approximately 72 percent of the objectives, while Status Quo Alternative only meets 34 percent.

## Contributions by Objective and Criteria

By examining the contributions of the objectives and criteria to the overall scores for the three Alternatives, the reasons why both the Bond and No Bond Alternatives score higher than the Status Quo Alternative and why the Bond Alternative scores higher than the No Bond Alternative can be visualized. Exhibit 4-14 illustrates the contributions of each of the six objectives to the overall scores of the three Alternatives.

Exhibit 4-14 depicts the final scores of the three Alternatives on the left side of the graph, along with the contribution of the six objectives to those scores. From this exhibit, the Bond and No Bond Alternatives scored higher than the Status Quo Alternative because they

Exhibit 4-12 Basis of Alternative Scoring						
Objective	Criteria	Performance Measure (Scale)	Assumptions	Basis for Scoring		
				Status Quo	No Bond	Bond
Enhance Potential for Agriculture	Potential Area in Agriculture	Degree (Minimum to Maximum)	Potential for agriculture includes all uses such as nurseries, equestrian, row and specialty crops.	Current zoning restrictions limit the area and location of land for agriculture. In addition, most of the open space shown on the map has minimal access to roads. Because of these restrictions, it was felt that only a <b>minimum</b> potential for agriculture exists.	It is anticipated that no more area will be available for agriculture under this alternative but that zoning restrictions will be modified to allow for an increased potential of agriculture along major roads. This resulted in a <b>moderate</b> score for potential agriculture.	An increase in area available for agriculture and anticipated modifications to the zoning code allow for an increase over the No Bond Alternative in the potential for agriculture. This alternative is scored as <b>high</b> .
	Potential for Equestrian Trails	Degree (Minimum to Maximum)	The estimated potential for equestrian was based on the amount of agriculture and open space shown.	Current zoning restrictions limit the area and location of land available for equestrian trails. Because of these restrictions, it was felt that only a <b>low</b> potential for equestrian trails exists.	Although no more area will be available for equestrian trails, anticipated modifications to zoning restriction and planned development will increase access to the trails. Thus, this alternative scores as <b>high</b> .	An increase in area and access for equestrian trails exists under this alternative. Therefore, the alternative scores as having a <b>maximum</b> potential for equestrian trails.
Enhance Environmental Resource Value	Amount of Preserve or Conservation Land	Degree (Minimum to Maximum)	The desired level for conservation or preservation of land is based on the limited parcels of land identified by PBC ERM.	Current zoning restrictions and a lack of planned development result in a low potential to preserve the existing parcels, but combined with the possibility of additional constructed wetlands for wastewater reuse in the Ag Reserve results in a <b>moderate</b> degree of land being conserved or preserved.	Anticipated modifications to the zoning restrictions and a planned system of development result in a <b>moderate</b> amount of land being conserved or preserved.	Anticipated modifications to the zoning restrictions, a planned system of development, and addition of constructed wetlands for wastewater reuse result in a <b>high</b> amount of land being conserved or preserved.



**Exhibit 4-12**
**Basis of Alternative Scoring**

Objective	Criteria	Performance Measure (Scale)	Assumptions	Basis for Scoring		
				Status Quo	No Bond	Bond
Enhance Environmental Resource Value (cont'd.)	Potential for Connectivity	Degree (Minimum to Maximum)	Potential for connectivity describes the chance that the conservation/preserve lands will be connected. It is assumed that the greater the amount of open space, the higher the potential for connectivity.	Current zoning restrictions and the lack of planned development result in a <b>low</b> potential for connectivity.	Anticipated modifications to the zoning restrictions and a planned system of development result in a <b>moderate</b> potential for conservation/preserve lands to be connected.	An increase in open space as well as anticipated zoning modifications and planned development will allow for a <b>high</b> potential of connectivity between conservation/preserve lands.
Enhance Water Management Capability	Enhance Water Resources Area	Degree (Minimum to Maximum)	Water resources area includes all area for storage (i.e., reservoirs, water preserve areas, lakes, etc.), wellfields, and constructed wetlands.	Lesser appropriate areas exist for constructed wetlands under this alternative. A wellfield could be built but would be subject to land uses proposed along the Turnpike. Also the proposed reservoir has a poor aspect ratio. These elements combine to give a <b>moderate</b> score.	Anticipated zoning modifications and planned development increase the potential areas for wellfields and provide a desirable aspect ratio for the reservoir. Also, the constructed waterway along the L-30 Canal provides a recharge benefit to the County wellfields. This alternative scores as <b>high</b> .	Anticipated zoning modifications and planned development increase the appropriate areas for constructed wetlands and for wellfields and provide a desirable aspect ratio for the reservoir. However, this alternative does not have the recharge benefit of the constructed waterway. This alternative scores as <b>high</b> .
	Amount of Impervious Area	Percentage (3-15%)	Increased impervious area has been shown to increase the pollutant loading carried in runoff. This results in a degraded water quality. The amount of imperviousness was calculated by multiplying the percentage of developed land in the area by an imperviousness factor.	Percentage of land shown with development is approximately 36%; imperviousness factor is 20%. Percent impervious is <b>7%</b> .	Percentage of land shown with development is approximately 25%; imperviousness factor is 25% because of the clustered development pattern. Percent impervious is <b>6%</b> .	Percentage of land shown with development is approximately 20%; imperviousness factor is 25% due to the clustered development pattern. Percent impervious is <b>5%</b> .

**Exhibit 4-12****Basis of Alternative Scoring**

Objective	Criteria	Performance Measure (Scale)	Assumptions	Basis for Scoring		
				Status Quo	No Bond	Bond
Create a Functional, Self-Sustaining Form of Development	External Trip Generation	Number of Trips (10,000-17,000)	A peak hour trip generation is estimated at one trip per unit.	The peak hour trip generation is 14,000. Because of current zoning restrictions, all trips will be made external to the Ag Reserve Area (Area). Therefore, the number of external trips equals <b>14,000</b> .	The peak hour trip generation is 17,000. Internal trips will account for 20% of the total trips. Therefore, the number of external trips equals <b>13,600</b> .	The peak hour trip generation is 15,000. Internal trips will account for 20% of the total trips. Therefore, the number of external trips equals <b>12,000</b> .
	Amount of Vistas	Percentage of Vistas Along Major Roads (0-100%)	Open space is defined as space not bordered by development or reservoir levee length.	The ratio of open space length to total road length along US 441 and Lyons Road is <b>45%</b> .	The ratio of open space length to total road length along US 441 and Lyons Road is <b>62%</b> .	The ratio of open space length to total road length along US 441 and Lyons Road is <b>70%</b> .
	Mix of Uses	Number of Uses (1-6)	Typical zoning codes identify six major uses that may be seen in the Area: residential, limited commercial, office, recreational, institutional, and agriculture/open space.	Because of the limited amount of commercial use and the presence of a post office, it was scored as 0.5. Residential scored 1 and agricultural scored 1 for a total score of <b>2.5</b> .	All of the identified zoning uses are permissible. Total score equals <b>6</b> .	All of the identified zoning uses are permissible. Total score equals <b>6</b> .
Enhance Open Space	Accessible Recreational Open Space	Degree (Minimum to Maximum)	Accessible recreational open space includes parks and golf courses.	Current zoning restrictions prohibit the development of recreational open space in the Area. Therefore, this alternative scores a <b>minimum</b> .	Concurrency requirements for parks will be met in the alternative, but there is only limited area for additional recreational open space. This alternative scores as <b>moderate</b> .	Concurrency requirements for parks will be met for this alternative. With the County's purchase of 2,000 to 3,000 acres, the greater undeveloped areas provide the opportunity for more recreational open space so this alternative scores <b>high</b> .

**Exhibit 4-12**
**Basis of Alternative Scoring**

Objective	Criteria	Performance Measure (Scale)	Assumptions	Basis for Scoring		
				Status Quo	No Bond	Bond
Minimize Costs/Impacts to Taxpayers	Infrastructure and Services Costs	Degree of Cost per Person (Minimum to Maximum)	Costs for schools, parks, libraries, police, and emergency services were considered, but the costs for water, sewer, and garbage were not as they are considered to be enterprise funds and self-supporting. It was assumed that drainage costs would be the same for all alternatives.	The cost under this alternative will be <b>maximum</b> because all concurrency requirements will have to be met outside of the Area. Increases in land prices and expected number of services required because of response time and distance due to these restrictions are anticipated. Additionally, the sprawl nature of the development increases infrastructure costs.	Concurrency requirements will increase under this alternative because of the increase in the number of units allowed. However, concurrency can be met within the Area. Also, the developments are less spread out than the Status Quo alternative. The per person cost is expected to be less than the Status Quo and was scored as a <b>high</b> .	Concurrency requirements under this alternative will be close to the Status Quo alternative and can be met within the Area. Also, the developments are even less spread out than the No Bond alternative. Therefore, this alternative would cost less than the No Bond alternative and was scored as <b>moderate</b> .
	Public Land Acquisition	Total Cost (\$0 to \$101 million)	In all alternatives the SFWMD must purchase the land for the reservoir. It is expected that Palm Beach County will bear 20% of this cost in the form of increased property taxes.	<b>\$5 million</b> required to purchase the larger amounts of land needed for the reservoir. This land amount is larger because of the proposed design.	<b>\$1 million</b> required to purchase lands for the reservoir.	<b>\$101 million</b> to acquire as much public land as possible and meet reservoir land requirements.

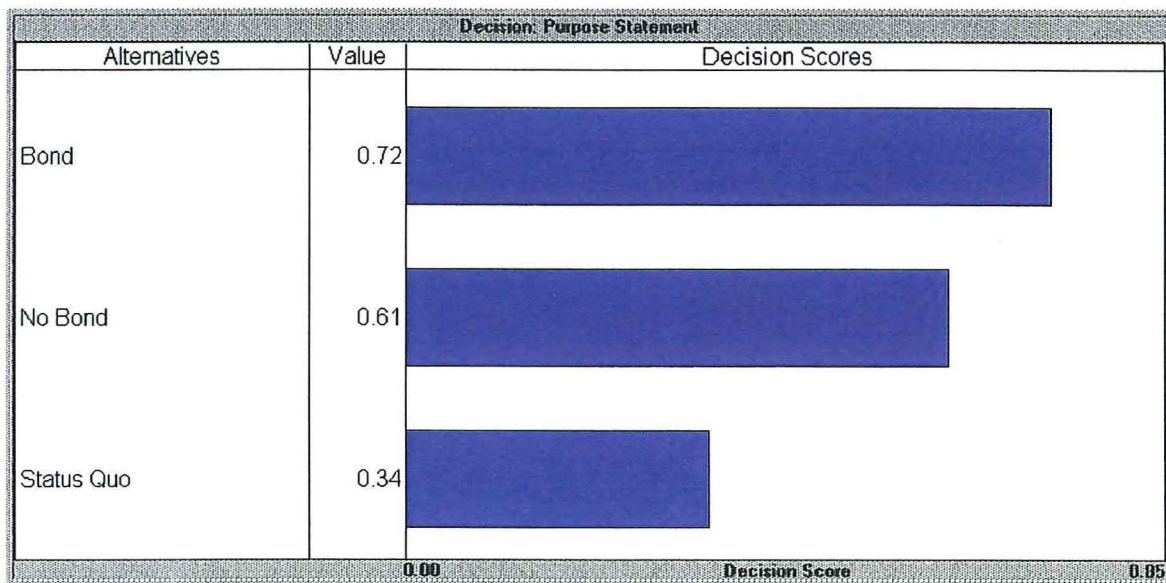


EXHIBIT 4-13  
Results of Alternatives Evaluation

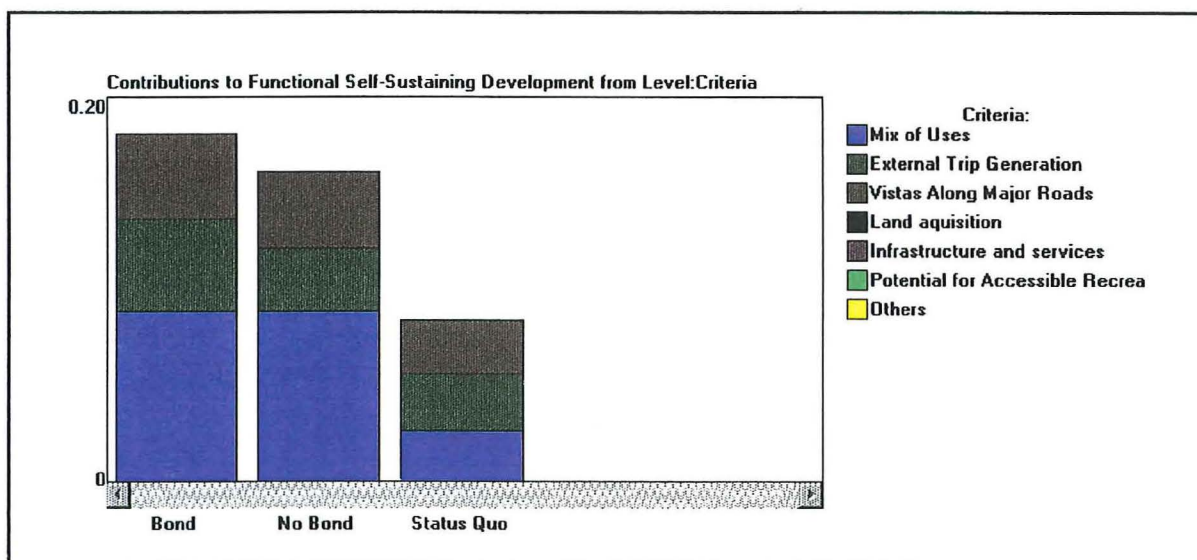


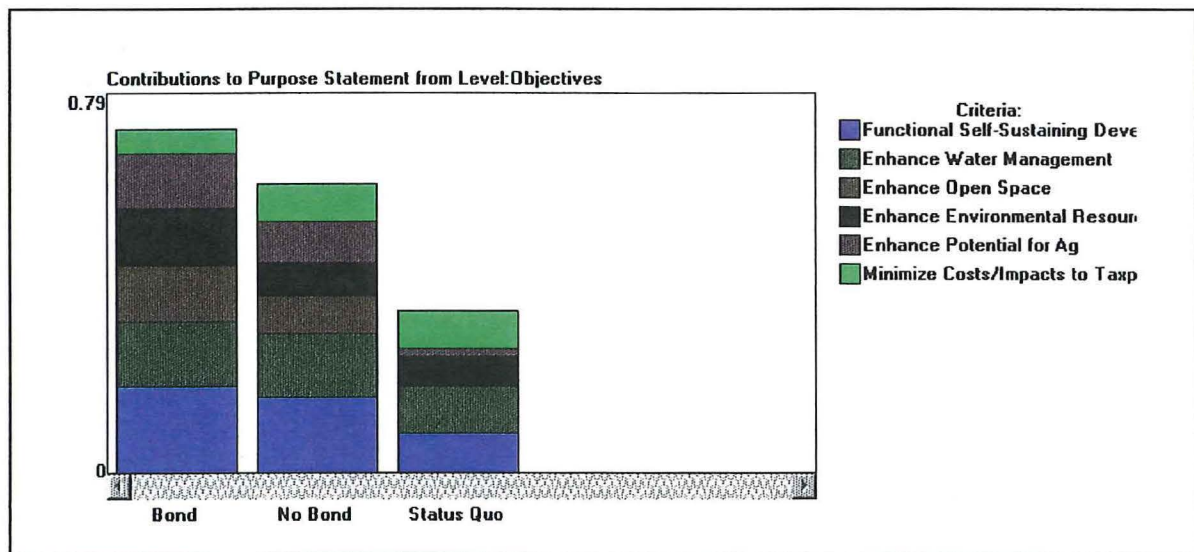
EXHIBIT 4-14  
Contribution of the Objectives to the Overall Scores

performed better on all of the objectives except for Enhance Environmental Resource Value (black) and Minimize Costs/Impacts to Taxpayers (bright green). The No Bond Alternative was approximately the same on Enhance Environmental Resource Value and the Bond Alternative did not perform as well on Minimize Costs/Impacts to Taxpayers because of the \$100 million bond issued required to purchase 2,000 to 3,000 acres of land. The No Bond

Alternative performed better than the Status Quo Alternative on Minimize Costs/Impacts to Taxpayers because the amount of land needed by SFWMD for the reservoir in the Ag Reserve was less than the amount shown under the Status Quo Alternative, which reflects the SFWMD's current configuration. The improved reservoir configuration in both the Bond and No Bond Alternatives reduces the estimated proportionate costs that might have to be contributed by the County.

With respect to the differences between the Bond and No Bond Alternatives, it appears that the Bond Alternative provided a marked improvement in Enhancing Potential for Agriculture (brown), Environmental Resource Value (black), and Open Space (purple). On the other hand, a less marginal improvement in the Functional, Self-Sustaining Form of Development (blue) occurs, while virtually no improvement was made to Enhance Water Management Capability (dark green).

The same graphic can be shown to depict the relative contributions of the individual criteria to each of the objectives. Exhibit 4-15 depicts one example of the criteria contributions to the objective - Create a Functional, Self-Sustaining Form of Development.



**Exhibit 4-15**

Contributions of Criteria to Objective - Create a Functional, Self-Sustaining Form of Development

Exhibit 4-15 shows that both the Bond and No Bond Alternative perform better than the Status Quo Alternative on Create a Functional, Self-Sustaining Form of Development because they both have a greater mix of uses and greater vistas along the major roads. The No Bond and Status Quo Alternatives are approximately the same on external trip generation because although the No Bond Alternative provides for more community-serving uses within the Ag Reserve, there are more total units. The Bond Alternative performs better on this objective than the No Bond Alternative because the number of external trips are reduced as a result of the reduced number of units, and the amount of vistas along the major roadways are slightly more because of the land being purchased by the County for open space and agricultural uses. Appendix 4A contains additional graphs showing more detail on the relative contributions by criteria to each of the remaining objectives.



## Sensitivity

Because the weights of the objectives and criteria drive the scoring and contributions by criteria, a sensitivity analysis was run to see how much the weights of each objective would have to change to cause a change in the highest scoring alternative (see Exhibit 4-16). The sensitivity analysis indicates that the only objective that is sensitive to its weight is Minimize Costs/Impacts to Taxpayers.

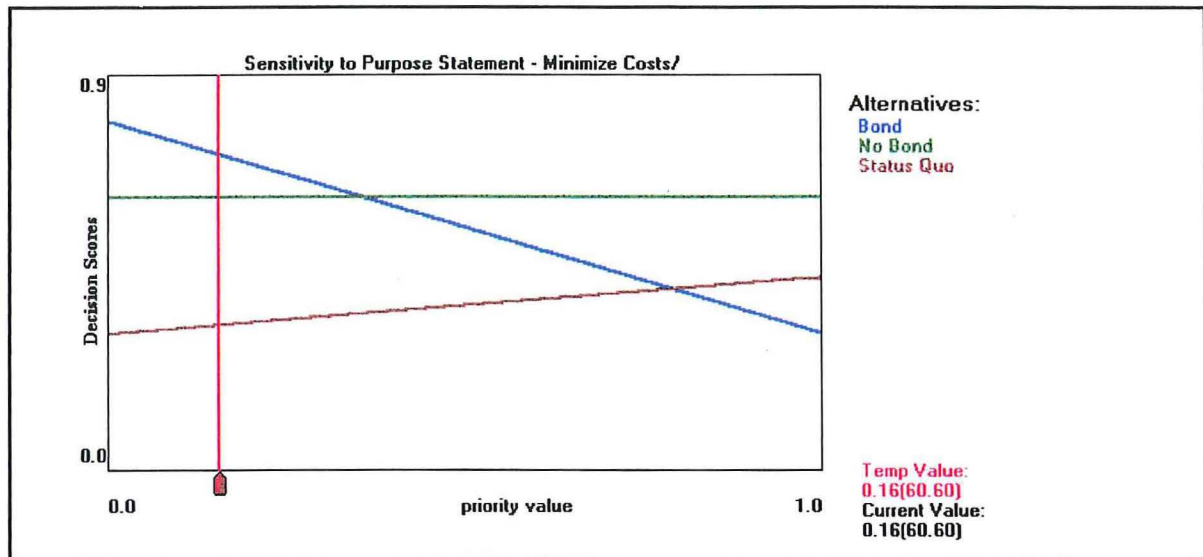
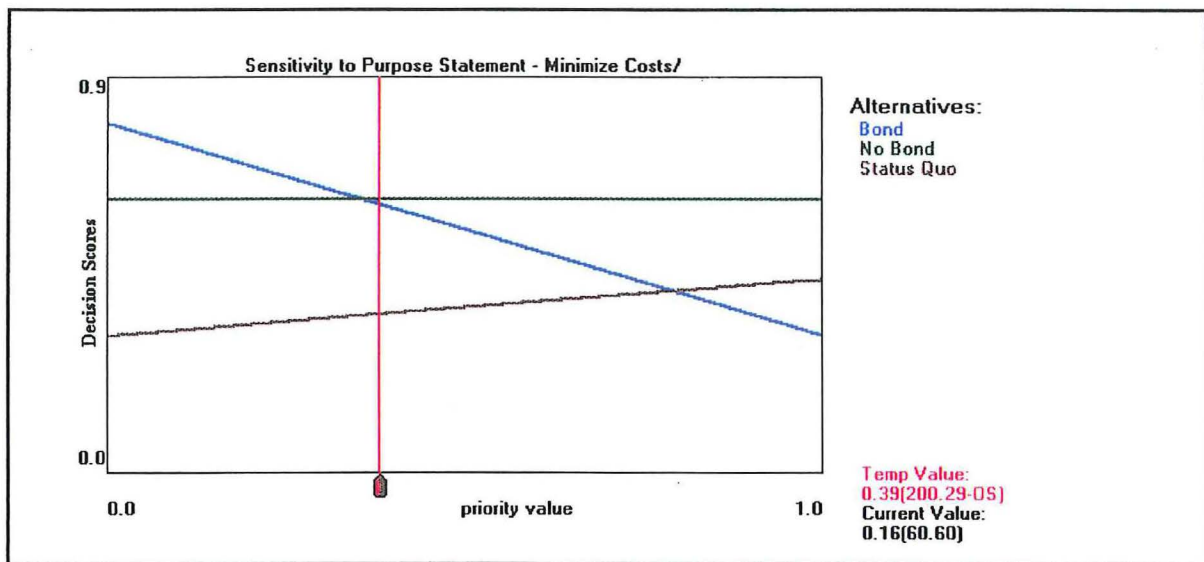


EXHIBIT 4-16

Sensitivity of Objective – Minimize Costs/Impacts to Taxpayers

The left axis on Exhibit 4-16 is the overall decision scores for the three Alternatives relative to the bottom axis that describes the weighting of the objective Minimize Costs/Impacts to Taxpayers. As shown by the red vertical line and the label on the bottom titled "Current Value", this objective has a weight of 0.16, which represents a 16 percent contribution to the overall evaluation of the three Alternatives. The intersection between the red vertical line and the other lines representing the three Alternatives (Blue = Bond, Green = No Bond, and Brown = Status Quo).

By moving the red vertical line either left or right of its current position, the weight of the objective (shown as the label "Temp Value") changes, along with the final scoring of the three Alternatives (as shown by the intersection of the lines). Exhibit 4-17 shows what would happen to the final scoring if the weight of the objective Minimize Costs/Impacts to Taxpayers changed from a 16 percent contribution to the evaluation to 39 percent; the No Bond Alternative (green line) would score the highest. Because the Status Quo Alternative (brown line) never crosses the other two Alternatives, the Status Quo Alternative would never score the highest regardless of the relative weight of this objective.



#### EXHIBIT 4-17

Results of Modifying Weight of Objective – Minimize Costs/Impacts to Taxpayers

Because the Cost/Impacts to Taxpayers objective appears to be the most sensitive, and because of the uncertainty related to the Infrastructure and Services Costs for the three conceptual Alternatives, additional sensitivity analysis was conducted with the scoring. The infrastructure and services costs of the three plans are described as "Maximum" for the Status Quo Alternative, "High" for the Bond Alternative, and "Moderate" for the No Bond Alternative. Although the complete costs to the taxpayers of the infrastructure and services for these plans cannot be estimated, the relative difference between the three plans can be estimated.

Exhibit 4-18 provides a conceptual summary analysis of the infrastructure and services costs expected for the three plans. Note that costs for roads, water and sewer, solid waste, and drainage are expected to be generally covered by impact fees, rates, and connection fees, and non-ad valorem taxes specific to residents in the Ag Reserve. Also, ad valorem tax revenue and impact fees to be generated by each Alternative cannot be estimated because of the limited detail provided in each of the three Alternatives.

Where costs to Countywide taxpayers can be estimated, such as fire-rescue or school or park construction, which is based on estimated population served, an estimate of the costs for each Alternative is provided. However, other tangible costs, such as land acquisition and school busing, and less tangible costs, such as sheriff and fire-rescue response time, cannot be estimated with the level of detail that is presented in the three conceptual land use Alternative. Therefore, a relative ranking was used to show the difference between the three plans. So that all cost categories can be compared, a simple relative ranking system of one (best) to three (worst) was used. Based on the relative ranking applied to each Alternative for each cost category, it appears that the Bond Alternative potentially provides the lowest infrastructure and services costs, and that the other two Alternatives are approximately the same.

**Exhibit 4-18****Potential Relative Infrastructure and Services Costs for the Ag Reserve Master Plan Alternatives**

<b>Infrastructure and Services Categories</b>	<b>Status Quo (~17,000 Units)</b>	<b>No Bond (~20,000 units)</b>	<b>Bond (~16,000 units)</b>
<b>Schools</b>	Seven elementary schools, two middle schools, and one high school	Eight elementary schools, three middle schools, and one high school	Same as Status Quo Alternative
<b>Land Acquisition</b>	Highest because properties would be outside Ag Reserve – ranks a 3	Next lowest because less expensive land could be used in the Ag Reserve and could be combined with parks – ranks a 2	Lowest because fewer schools needed than No Bond, and because land is bought inside the Ag Reserve and could be combined with parks – ranks a 1
<b>Construction</b>	About \$190 Million – ranks a 1	About \$220 million – ranks a 2	About \$190 million – ranks a 1
<b>Busing</b>	Highest because all schools outside Ag Reserve – ranks a 3	Next lowest because schools in Ag Reserve, but requires more busing because of increased population – ranks a 2	Lowest because schools in Ag Reserve, and requires possibly less busing because of lower population – ranks a 1
<b>Sheriff</b>	Requires 98 officers	Requires 115 officers	Requires 92 officers
<b>Officers</b>	Next to lowest cost because of population served – ranks a 2	Highest costs because more officers needed – ranks a 3	Lowest cost because of least population served – ranks a 1
<b>Response Time</b>	Slowest response time because residents are more spread out – ranks a 3	Next quickest response time because population is clustered, but some is spread out – ranks a 2	Quickest response time because population is clustered – ranks a 1
<b>Fire-Rescue</b>	Requires 5 Stations	Requires 6 Stations	Requires 5 Stations
<b>Land Acquisition</b>	Highest cost because properties outside Ag Reserve – ranks a 3	Next lowest cost because new sites inside Ag Reserve, but requires more stations – ranks a 2	Lowest cost because new sites inside Ag Reserve, and may not require as many stations as No Bond Alternative – ranks a 1
<b>Construction and Equipment Cost</b>	Approximately \$7 million – Ranks a 1	Approximately \$8 million – Ranks a 2	Approximately \$7 million – Ranks a 1
<b>Operating Costs</b>	Approximately \$6 million annually – Ranks a 1	Approximately \$7 million annually – Ranks a 2	Approximately \$6 million annually – Ranks a 1
<b>Response Time</b>	Slowest because most stations are outside Ag Reserve – ranks a 3	Next slowest response time because although stations in the Ag Reserve, residents are still somewhat spread out – ranks a 2	Quickest response because most stations are in the Ag Reserve and residents are centered more around town centers – ranks a 1
<b>Parks</b>	No District or Regional Parks in the Ag Reserve – would still require approximately 153 acres of regional parks, and 62 acres of district parks outside ag reserve and 16 acres of beach parks – total 231 acres	One central park that is assumed to meet comp plan requirements for Regional and District parks. Still require 19 acres of beach parks – total 271 acres	Two smaller parks fulfilling requirements for Regional and District parks. Still require 15 acres for beach parks – total 217 acres.

**Exhibit 4-18****Potential Relative Infrastructure and Services Costs for the Ag Reserve Master Plan Alternatives**

<b>Infrastructure and Services Categories</b>	<b>Status Quo (~17,000 Units)</b>	<b>No Bond (~20,000 units)</b>	<b>Bond (~16,000 units)</b>
<b>Land Acquisition</b>	Per acre land costs would be higher because land would all be outside Ag Reserve – ranks a 3	Next lowest because land is purchased at a lower price in the Ag Reserve, – ranks a 2	Lowest because number of acres is less and land is purchased at a lower price in the Ag Reserve – ranks a 1.
<b>Regional, District, and Beach Park Construction Cost (a)</b>	Approximately \$22 million – ranks a 2	Approximately \$26 million – ranks a 3	Approximately \$21 million – ranks a 1
<b>Park O&amp;M Costs</b>	Approximately \$500,000 annually – ranks a 2	Approximately \$600,000 annually – ranks a 3	Approximately \$500,000 annually – ranks a 2
<b>Estimated Total Impact (lower score is better)</b>	<b>27</b>	<b>27</b>	<b>13</b>

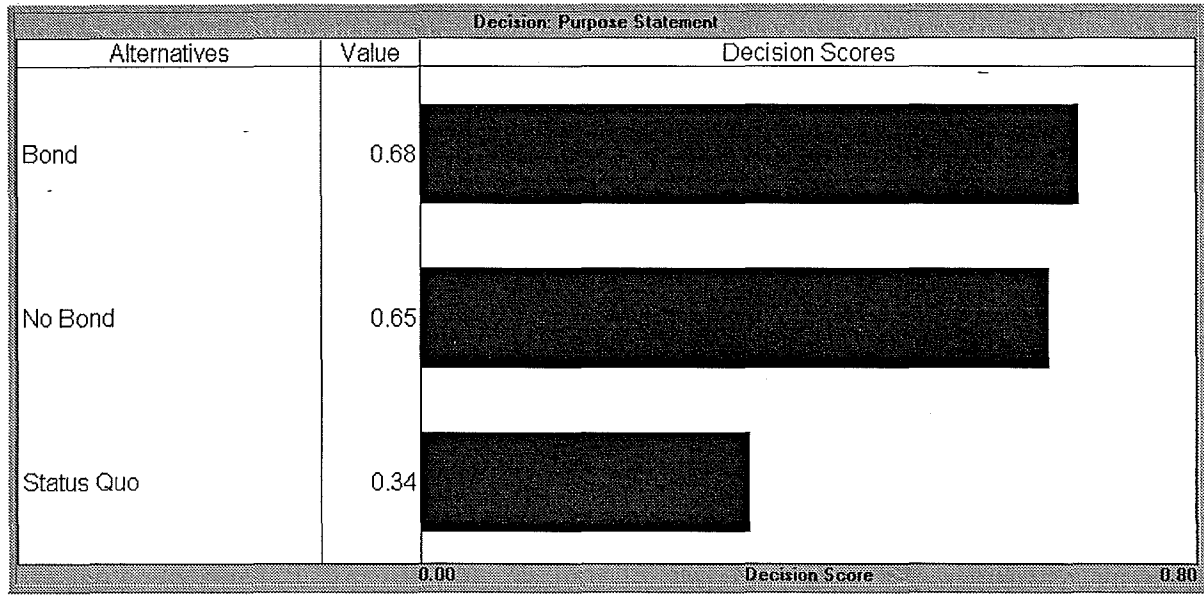
**Infrastructure and Services Costs and Revenues Not Included**

<b>Roads</b>	Cannot estimate roads because it has not been determined the number of lanes for each road and whether other roads not shown (such as Flavor Pict or Linton Blvd.) will be needed. Also, the amount of impact fees cannot be estimated until approximate square footage for the various land uses to be proposed is known. And the impact fees would only be assessed on the developers in the Ag Reserve and not the taxpayers at large.
<b>Water and Wastewater Utilities</b>	This is an enterprise fund and recovers costs for infrastructure and services through its rates and connection fees. This would also generally only impact those who will develop and/or reside in the Ag Reserve. General increases in rates across the County may occur if substantial capital improvements are required, but cannot be estimated at this time.
<b>Solid Waste</b>	This is also an enterprise fund that recovers the costs for solid waste collection and disposal through a non-ad valorem assessment on the property owners annual tax bill. This would also generally only impact those who will develop and/or reside in the Ag Reserve. The solid waste disposal costs will not differ between this area and the rest of the County, or between the alternatives. While the solid waste collection costs could be somewhat more expensive per unit for the alternatives where homes are more spread out, as opposed to being concentrated around a town center(s), this cost difference is not expected to be significant.
<b>Drainage</b>	The infrastructure for drainage in the area is in place and is being managed effectively by the Lake Worth Drainage District. Any additional drainage requirements would generally be handled internally by each of the developments, or regionally if incentives are in place to develop regional retention/detention areas. Therefore, costs would be borne primarily by the developers/residents in the Ag Reserve.

**Notes:**

a) Park construction cost estimates include estimated beach land acquisition costs. Regional and District land acquisition costs are not included.

To determine the impact of the relative costs for infrastructure and services to the overall evaluation of the Bond and No Bond Alternatives, the scores for each were modified. In the event that the above relative analysis was incorrect, and in fact the Bond Alternative was actually twice as expensive as the No Bond Alternative, the overall scores of the objectives would change slightly. Exhibit 4-19 illustrates what the final results would be with the modified infrastructure and services costs.



**EXHIBIT 4-19**

Revised Results of Alternatives Evaluation – Sensitivity to Infrastructure/Services Costs

Even if the infrastructure and services costs for the Bond Alternative were twice the No Bond Alternative, the Bond Alternative still has a higher decision score.



# Board of County Commissioners Workshop

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On January 8, 1999, the BCC met at a land use workshop to listen to presentations and discuss the selection of the land use Alternative to be considered for subsequent master-planning. The workshop began with Mr. Frank Duke, Director of Planning Division, who provided a brief history and introduction to the project, and who then turned it over to Ms. Linda Hoppes. Ms. Hoppes introduced and thanked the members of the WG and the EWG, and then introduced representatives from CH2M HILL and Dover-Kohl. CH2M HILL and Dover-Kohl made a presentation on the process used in the project, the development of the Alternatives, and finally the evaluation of the Alternatives. A copy of the presentation is included in Appendix 4A. After the presentation, Mr. Duke made the Planning Division's recommendation that the BCC should choose between the No Bond and Bond Alternatives, as they are clearly superior to the Status Quo Alternative.

After the presentation and recommendation, the Commissioners engaged in discussion regarding the two recommended plans. In summary, there was concern expressed by several of the commissioners of the increased number of units depicted by the No Bond Alternative, and that the County would be increasing the development potential, but then buying them back in the Bond Alternative and reducing the units back down to the Status Quo level. One suggestion by the BCC was to purchase the land west of U.S. 441/S.R.7 with part of the \$100 million and then buy additional land further east with the remainder of the money. The development units west of U.S. 441/S.R. 7 would then be retired, reducing the total number of units in the Ag Reserve to below the Status Quo Alternative.

After discussion, the BCC agreed to proceed with the \$100 million Bond Alternative, but to include it with the \$50 million bond proposed to purchase Environmentally Sensitive Lands. They also asked the County Planning Division to revise the Bond Alternative to purchase land west of U.S. 441/S.R. 7 and reduce the number of units below the Status Quo. The BCC also authorized CH2M HILL to proceed with Phase II of the scope of work, which included more detailed masterplanning of the selected Bond Alternative.

# Summary and Conclusions

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Three conceptual land use Alternatives were developed to reflect the following:

**Status Quo** – this Alternative assumes that the current land use regulations remain intact, and that the Ag Reserve will develop out under the 60/40.

**No Bond** – this Alternative will plan to balance existing agricultural use, planned water resource projects, and other environmental amenities with current and future development. It assumes that no public dollars are available from any source to facilitate land purchases within the Ag Reserve, and that other processes and possibly land use configurations will be required to make it feasible.

**Bond** – this Alternative is similar to the No Bond Alternative; however, it assumes that public money will be available for land purchase. While it is anticipated that this Alternative will need support from public sources to maintain land values, the amount of public dollars that may be necessary is assumed to be \$100 million.

The Status Quo Alternative was initially developed by County Planning Division staff, with assistance from TCRPC and SFWMD Planning staff. The other two Alternatives were developed through the Design Charrette process with extensive input from the public. All three Alternatives were created using a similar format for agriculture, environmentally sensitive lands, water resources features, open space, and urban development to provide an equitable comparison between them. Also, the project purpose statement and underlying assumptions were used to guide the development of the three alternatives.

Several common themes from the Public Workshop Design Charrette were used by the WG to develop the No Bond Alternative. These themes were carried through the Bond Alternative, which included the County purchasing 2,000 to 3,000 acres in the central portion of the Ag Reserve to preserve additional agriculture and open space where development pressure is the least. Features of the No Bond and Bond Alternative include a system of connected lakes and canals, neighborhood centers, mixed uses, and residential areas surrounding the neighborhood centers, which allow the residents to walk or ride bicycles to get to their daily needs or to work.

The three Alternatives were evaluated using the value model that describes the overall goal and objectives off the planning effort. Exhibit 4-20 depicts the value model used to measure the performance of the three Alternatives.

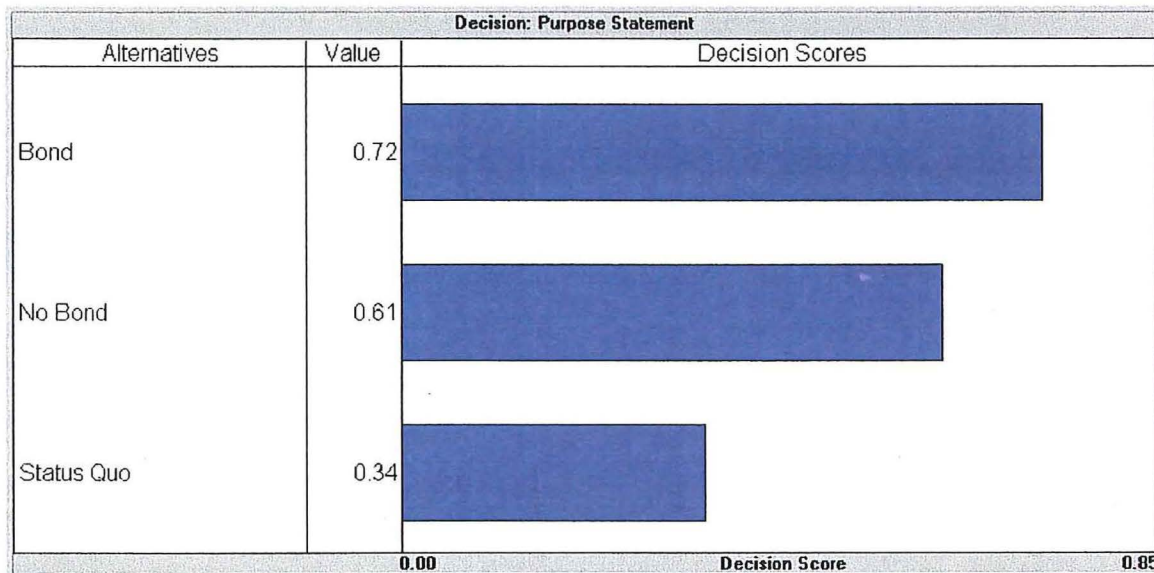


#### EXHIBIT 4-20

Value Model for Evaluating the Ag Reserve Land Use Alternatives

The objectives were further described using more specific criteria and performance measures.

Weights applied to each of the objectives and criteria were entered into CDP, along with the scoring of the alternatives for each of the criteria and performance measures. The program automatically normalizes the weights and individual criteria scores, and calculates the overall score for each of the three alternatives. The overall score is a normalized value and represents the percentage of the objectives and criteria that are met by each of the alternatives. Exhibit 4-21 presents the results of the evaluation of the three alternatives.



#### EXHIBIT 4-21

Results of the Alternatives Evaluation

The results indicate that the Bond Alternative meets 72 percent of the objectives and criteria, the No Bond Alternative meets 61 percent, and the Status Quo Alternative only meets 34 percent. The contributions of the objectives to the overall scores of the three Alternatives

provides a better understanding of why the Bond Alternative scored better than the No Bond and Status Quo Alternatives. Except for Minimizing Impacts/Costs to Taxpayers, all of the objectives contributed to the better performance of the Bond Alternative over the No Bond and Status Quo Alternatives. Enhancing Potential for Agriculture, Environmental Resource Value, and Open Space contributed to the Bond Alternative scoring higher than the No Bond Alternative, with minimal additional contributions from Enhancing Water Management Capability and Create a Functional, Self-Sustaining Form of Development.

Sensitivity analyses were conducted to determine how the overall objective weights would have to be changed for the No Bond or Status Quo Alternatives to score the highest. The only objective sensitive to the weighting was Minimizing Impacts/Costs to Taxpayers, and indicated that the overall weight or importance of this objective would have to increase from 16 percent to 39 percent for the No Bond Alternative to score higher than the Bond Alternative. The sensitivity analysis also revealed that regardless of the weighting of the six objectives, the Status Quo Alternative would never score the highest.

After a presentation and recommendation made to the BCC on January 8, 1999, by the County Planning Division, CH2M HILL, and Dover-Kohl, the BCC discussed their issues and concerns relative to both the No Bond and Bond Alternatives. Following discussion, the BCC agreed to proceed with the \$100 million Bond Alternative, but to include it with the \$50 million bond proposed to purchase Environmentally Sensitive Lands. They also asked the County Planning Division to revise the Bond Alternative to purchase land west of U.S. 441/S.R. 7 and reduce the number of units below the Status Quo Alternative. As a result, CH2M HILL was authorized to proceed with Phase II of the scope of work that included more detailed masterplanning of the selected Bond Alternative.

APPENDIX 4A

**Presentation Material from the  
BCC Workshop  
January, 1999**

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## ***Overview of the Palm Beach County Agricultural Reserve Master Plan Project - Phase I***

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*Presented to*  
The Board of County Commissioners  
January 7, 1999



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## ***Purpose of the Agricultural Reserve Master Plan***

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As established by the Board of County  
Commissioners...

“To preserve and enhance agricultural activity  
and environmental and water resources in the  
Ag Reserve, and produce a master  
development plan compatible with these  
goals”



## *Scope of Work is Divided Into Two Phases*

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- Phase I - Development of Preliminary Land Use Alternatives
- Phase II - Detailed Masterplanning of the selected land use alternative

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## *Five Groups Provided Input to Phase I of the Project*

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- Board of County Commissioners
- Public
- Land Use Advisory Board
- Working Group
- Extended Working Group

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## *Role of the Board of County Commissioners*

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- Phase I
  - Establish the purpose of the master planning effort
  - Make decision on final land use alternative to conduct more detailed masterplanning
- Phase II
  - Approve the completed Master Plan



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## *Role of the Public*

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- Made up of land owners, farmers, special interest groups and the public at large
- Provided input to the land use alternatives being developed
- Provided input on assumptions and objectives used to measure the success of the land use alternatives developed



## *Role of Land Use Advisory Board*

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- Provided input to the weighting of the objectives

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## *Role of the Working Group*

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- Made up of the County and South Florida Water Management District Planning Staff and CH2M HILL
- Responsible for executing the scope of work

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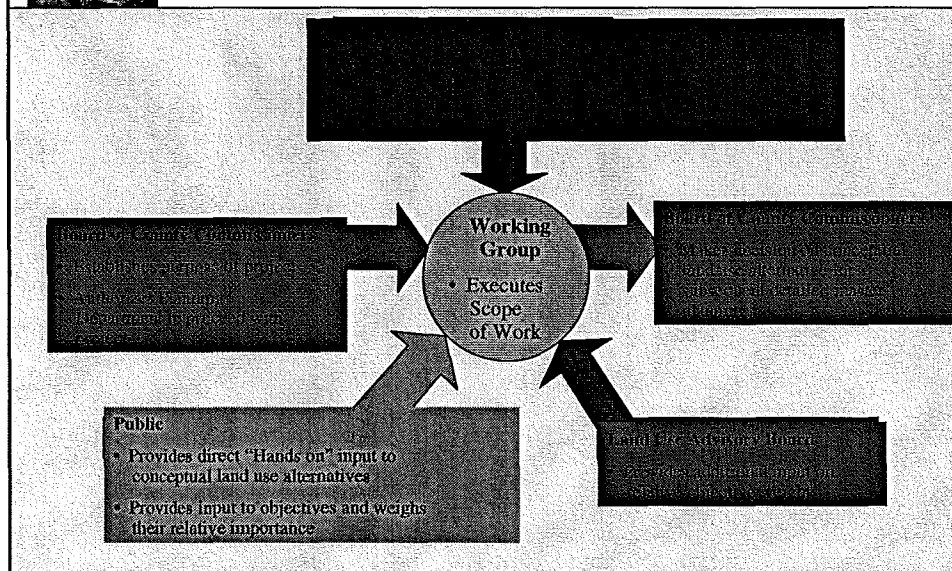
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## *Role of the Extended Working Group*

- Made up of additional technical staff from:
  - County Offices of Planning, Zoning, and Building, Water Utilities, Public Affairs, Attorney, Environmental Resources Management, Engineering and Parks
  - South Florida Water Management District
  - Lake Worth Drainage District
  - County Cooperative Extension Service
  - Florida Department of Community Affairs
  - Metropolitan Planning Organization
  - Treasure Coast Regional Planning Council
- Responsible for providing technical input and guidance to the Working Group



## *Relationship of the Five Groups*







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## ***Relationships of the Five Groups to the Project***

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- **Board of County Commissioners** established purpose and authorize scope of work
- **Working Group** executes scope of work
- **Extended Working Group, Land Use Advisory Board and Public** provided input to the process
- **Working Group** incorporated input, developed and evaluated conceptual land use alternatives
- **Board of County Commissioners** decides on land use alternative for subsequent detailed masterplanning



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## ***Phase I Incorporated a Four Prong Approach***

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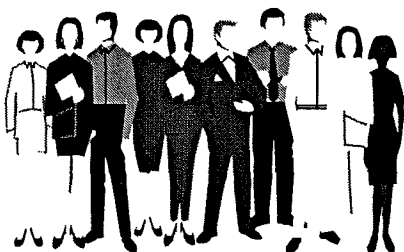
- A Public Involvement and Community Outreach Program
- Enlisting Public Values and Confirming Objectives
- Graphic Depiction of Three Conceptual Alternatives
- Evaluation of the Alternatives and Comparison with the Objectives



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## *Public Input and Community Outreach were Used to Enlist Values*

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- Agricultural Forum
- Two Public Workshops
- County-wide Public Opinion Survey
- Fact Sheets, Updates to the Media, and information listed on the County's Web Site



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## *Top Ten Issues Raised at the First Public Workshop*

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## *Top Ten List of Issues (continued)*

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## *As a Result of the Public Input, Several Underlying Assumptions Were Made*

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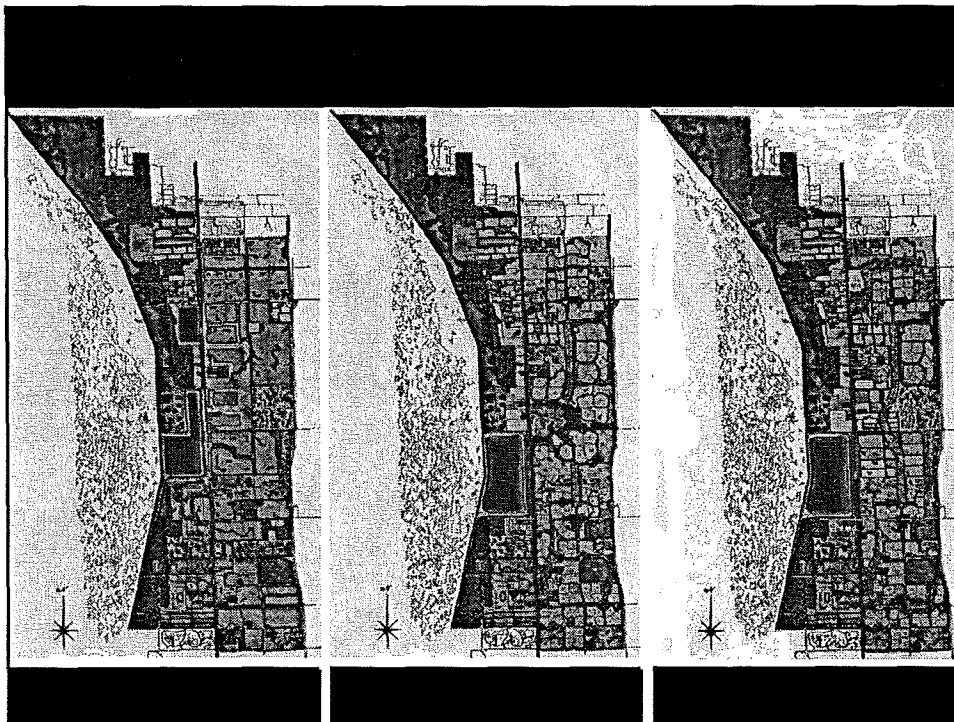
- Private property rights will be respected
- Equestrian uses, nurseries and specialty crops are the most feasible long-term agricultural uses in the Ag Reserve
- Lands in public ownership will remain in open space
- The amount of land that can be acquired with public funds will depend on the number of willing sellers and the cost of land
- Concurrency requirements will be met
- Design criteria for future development will minimize impacts to Lake Worth Drainage District canal system and the Lake Worth Lagoon

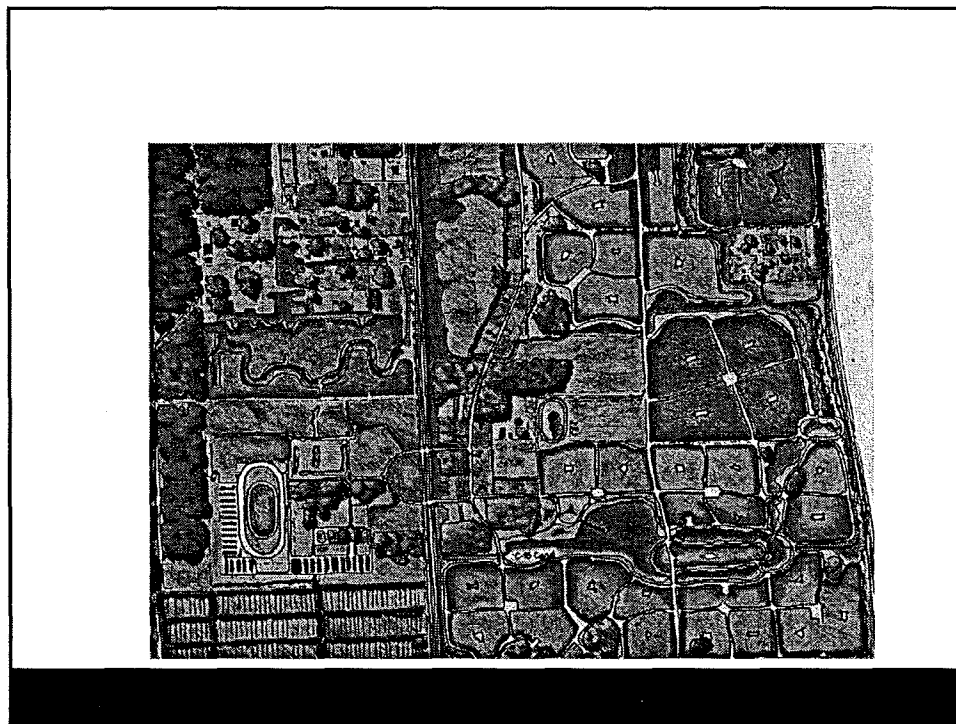
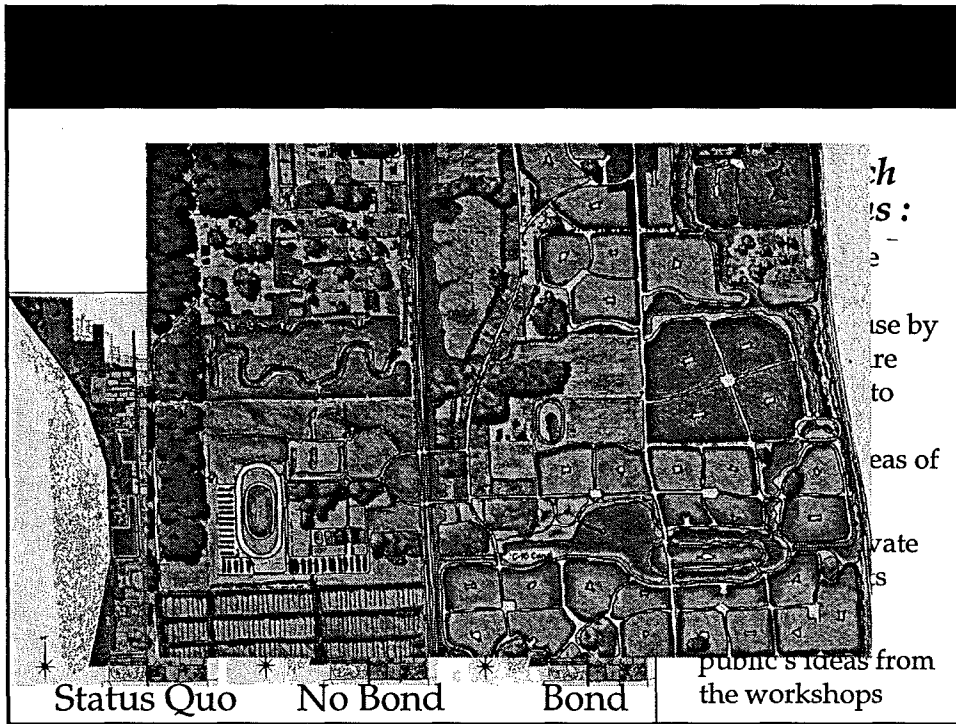


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## *Development of Conceptual Land Use Patterns within the Ag Reserve*

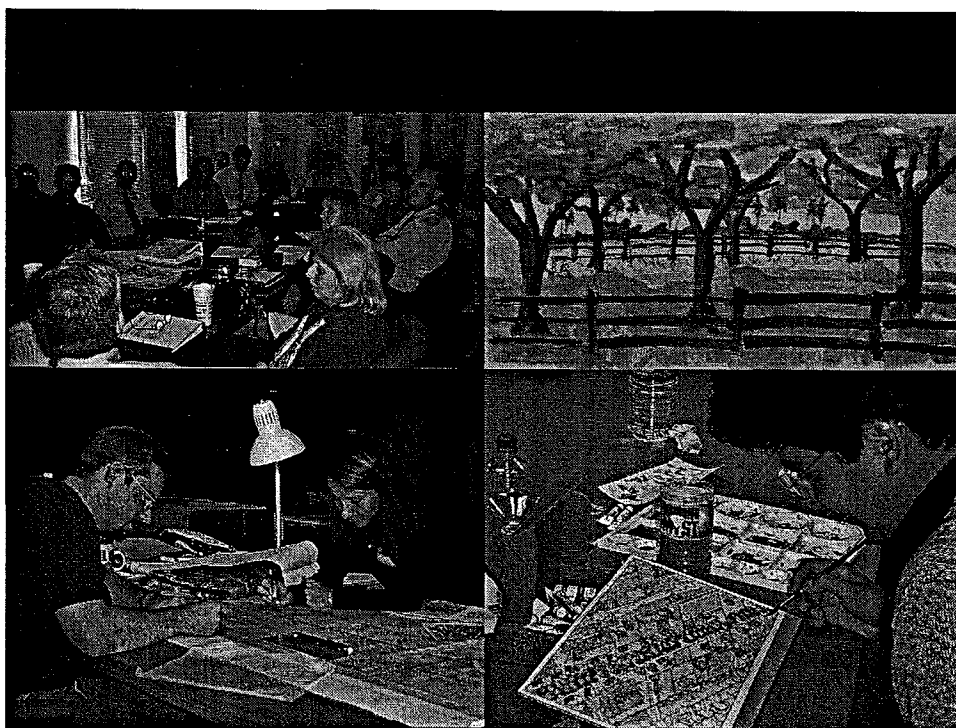
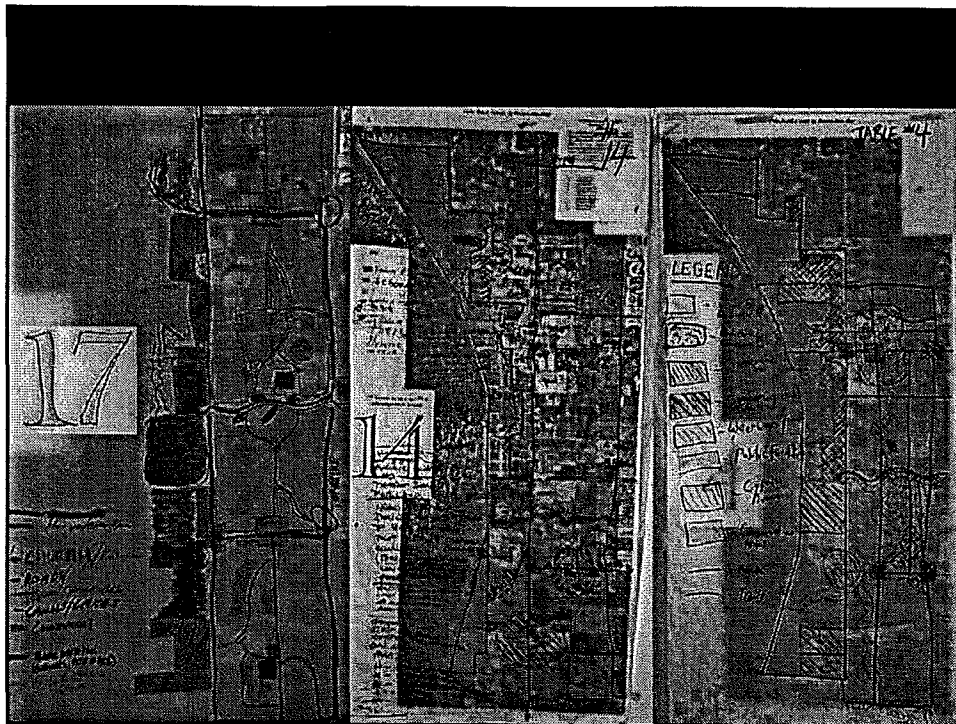
- Based on three basic scenarios:
  - “Status Quo”
  - No Public Purchase of Land (“No Bond”)
  - Public Purchase of Land (“Bond”)
- Driven by the purpose statement, as established by the BCC, and the underlying assumptions

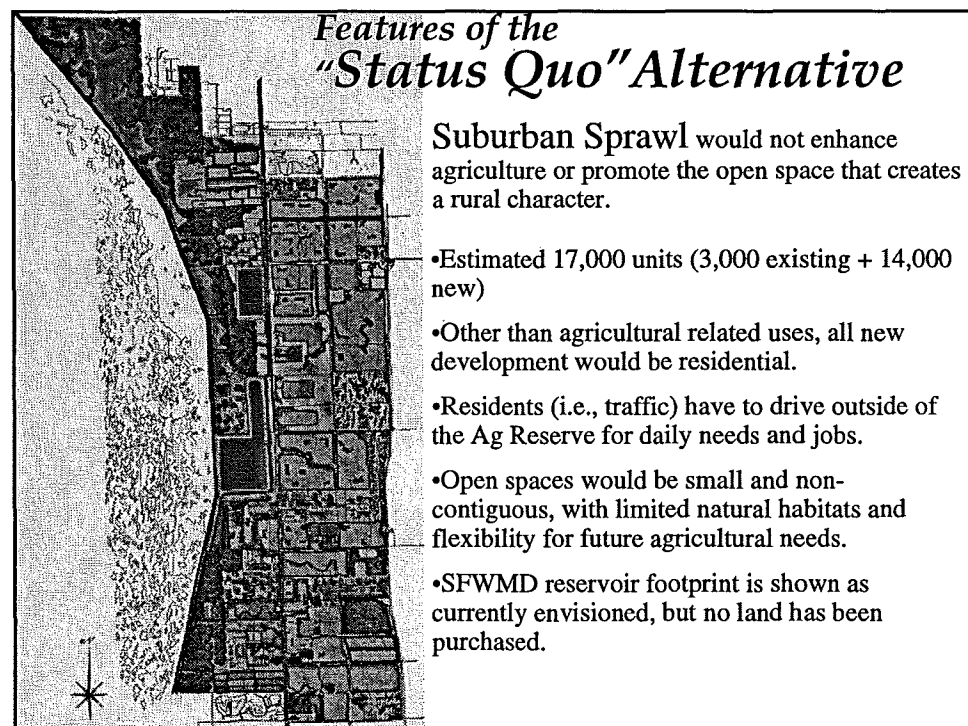
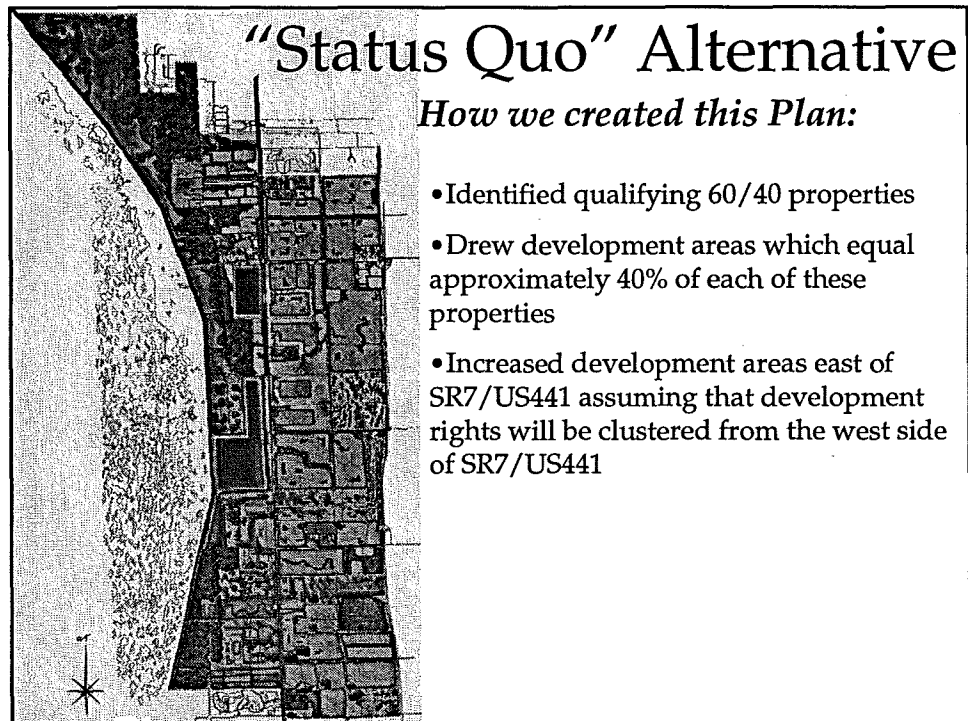








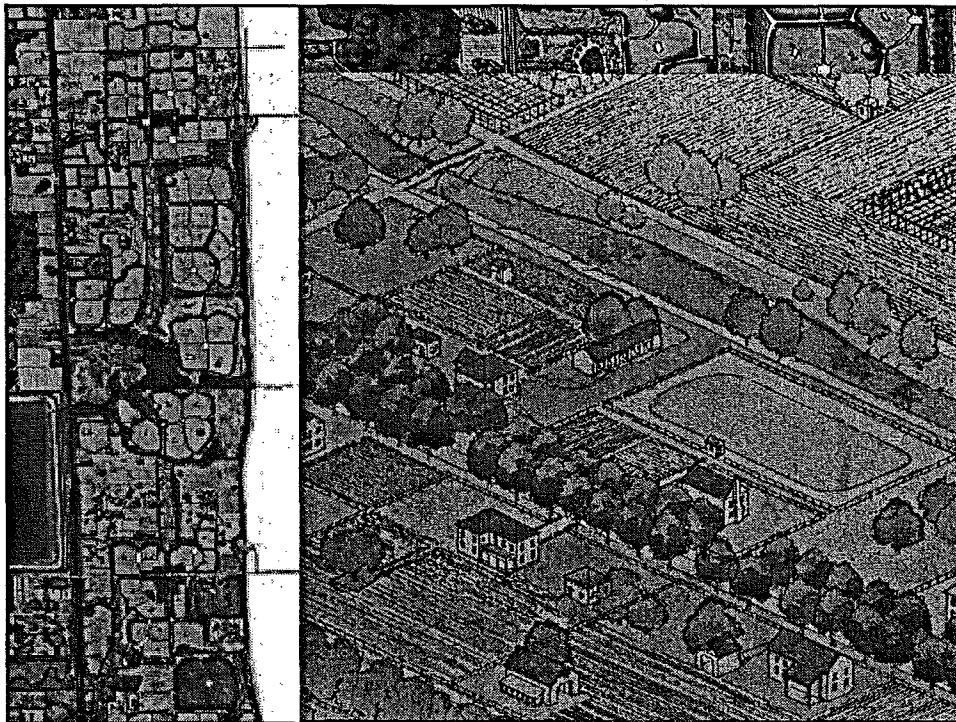
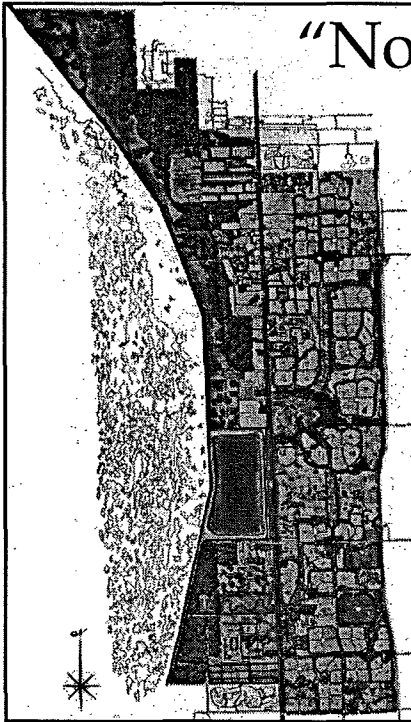


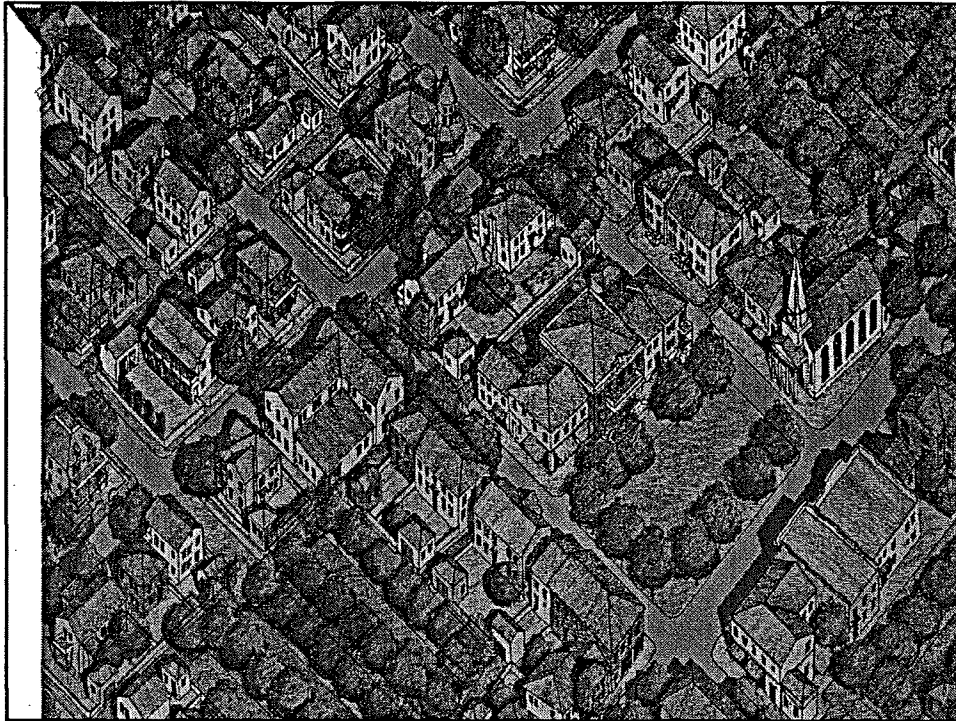


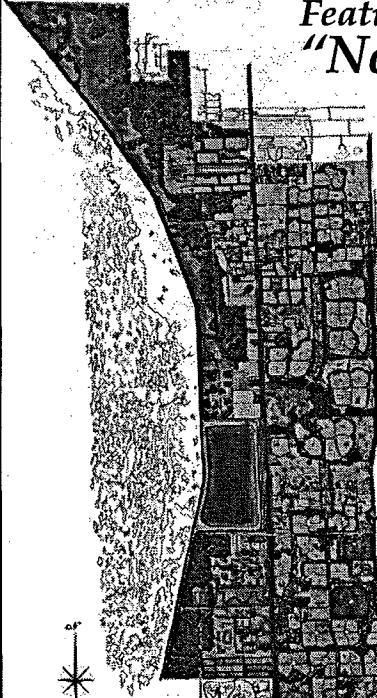
## "No Bond" Alternative

### *How we created this Plan:*

- Identified qualifying 60/40 properties
- Drew development areas which equal approximately 40% of each of these properties, but placed new developments along neighboring property lines which may not happen in the Status Quo
- Increased development areas east of SR7/US441 assuming that additional development rights will be clustered from the west side of SR7/US441
- Added features from the ideas created by the 130+ people who attended the public workshops





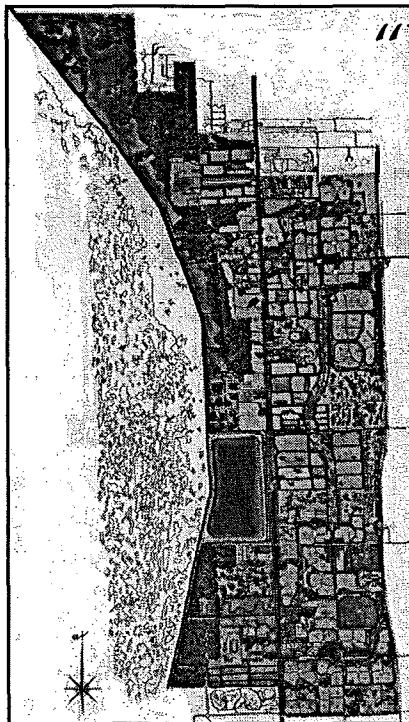


### *Features of the "No Bond" Alternative*

**Optimizes Open Space** to enhance agriculture and rural character; and turn water resources into an amenity.

- **Estimated 20,000 units** (3,000 existing; 17,000 new)
- **Larger Contiguous Open Spaces** would increase natural habitat and flexibility for existing and future agricultural uses.
- **Interconnected Water Ways** would provide scenic views, provide recreational boating and fishing, enhance water resources, and increase adjacent property values.
- **Curving Lyons Road**, north of Atlantic Ave, would create a scenic drive.
- **County Park** east of SR7/US441 would give local and regional access to recreational open space and facilities.
- **Neighborhood Centers** would provide land uses other than residential.
- **Interconnected accessible neighborhoods** would reduce traffic within and outside the Ag Reserve.

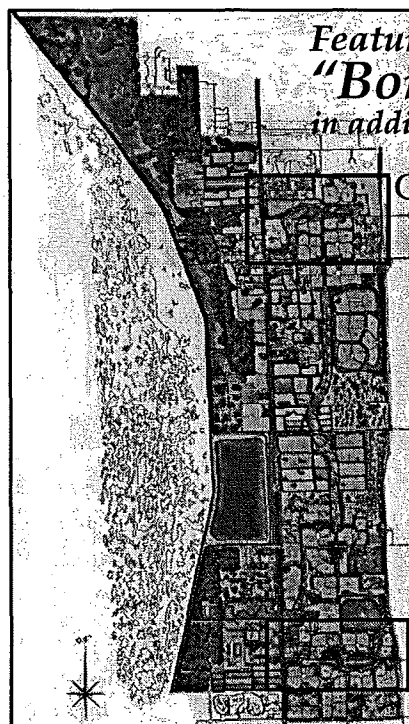




## “Bond” Alternative

*How we created this Plan:*

- Started with the “No Bond” Alternative
- Assumed that Palm Beach County will purchase land, not development rights
- Centralized land purchases where development pressure and access to roads is less.



## Features of the “Bond” Alternative

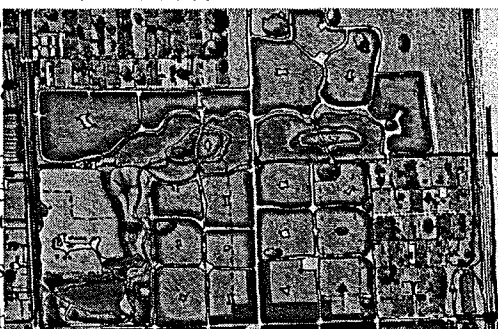
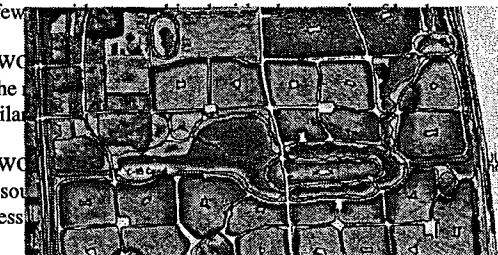
*in addition*

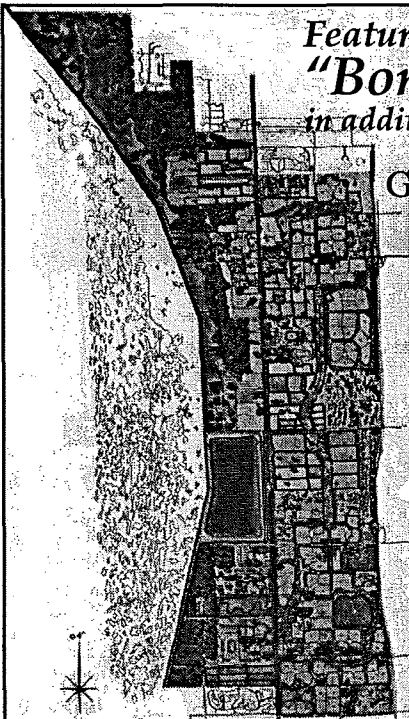
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both inside and outside of the Ag Reserve because there would be few

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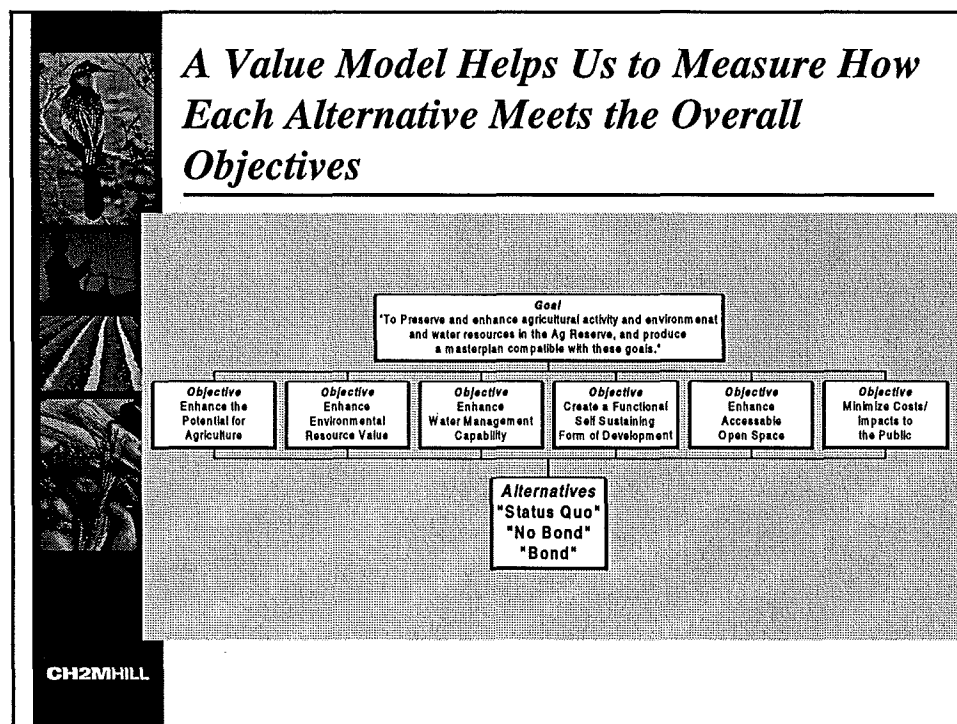





### Features of the "Bond" Alternative in addition to the "No Bond" Alternative:

#### Greatest Opportunity for Open Space

- There would be greater flexibility for existing and future agricultural uses by purchasing a large contiguous open space in the middle of the Ag Reserve.
- Estimated 16,000 units (3,000 existing; 13,000 new)
- There would be Reduced Traffic Congestion: both inside and outside of the Ag Reserve because there would be fewer residents combined with a better mix of land uses.
- Two Interconnected Water Ways would be located in the northern and southern development areas, providing similar benefits as in the "No Bond" Alternative.
- Two County Parks located one to the north and one to the south, east of SR7/US441, would give local and regional access to recreational open space.





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## *Criteria and Performance Measures Were Used to Quantify the Objectives*

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**Objective**  
Enhance  
Potential for  
Agriculture



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## *Criteria and Performance Measures Were Used to Quantify the Objectives*

---

**Objective**  
Enhance  
Environmental  
Resource Value



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## *Criteria and Performance Measures Were Used to Quantify the Objectives*

**Objective**  
Enhance  
Water Management  
Capability



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## *Criteria and Performance Measures Were Used to Quantify the Objectives*

**Objective**  
Create a Functional  
Self Sustaining  
Form of Development



## *Criteria and Performance Measures Were Used to Quantify the Objectives*

---

**Objective**  
Enhance  
Accessible  
Open Space

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## *Criteria and Performance Measures Were Used to Quantify the Objectives*

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**Objective**  
Minimize Costs/  
Impacts to  
the Public

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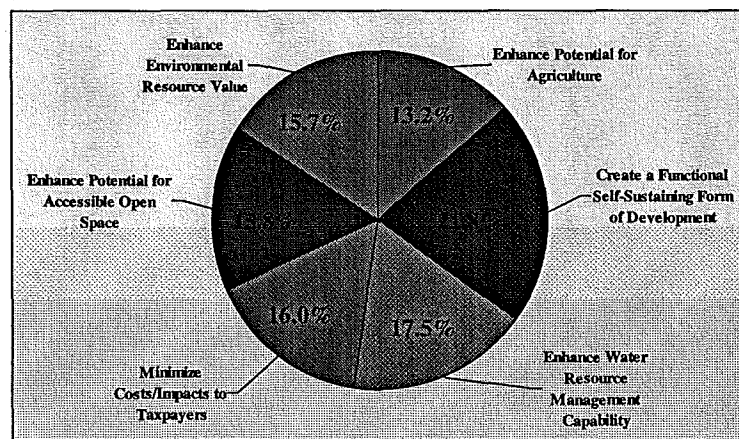
### *Weighting of the Objectives was Necessary to Understand their Relative Importance*

- The relative importance of the six objectives were weighted by:
  - Land Use Advisory Board
  - Extended Working Group
  - Second Public Workshop Attendees
- Results of the relative weighting exercise showed that results from all three groups were similar
- Public opinion survey results were compared with the objective weighting



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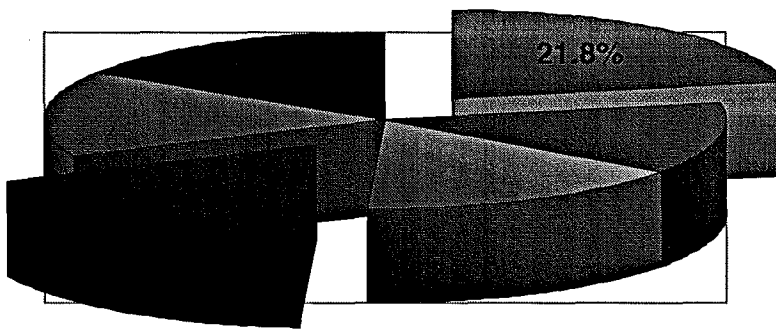
### *Relative Percent Contribution of the Objectives - As Weighted By All Participants*





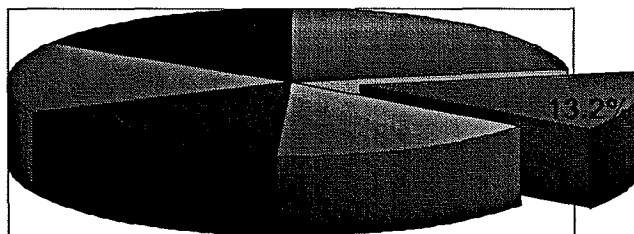
## *Two of the Objectives Were Consistently Weighted the Highest*

- Create a Functional Self-Sustaining Form of Development
- Enhance Potential for Agricultural (Including Nurseries and Equestrian Use)
- Enhance Environmental Resources Value
- Enhance Water Management Capability
- Enhance Accessible Open Space
- Minimize Costs/Impacts to County-Wide Taxpayers



## *In Most Cases Enhancing Potential for Agriculture Was the Least Important Objective*

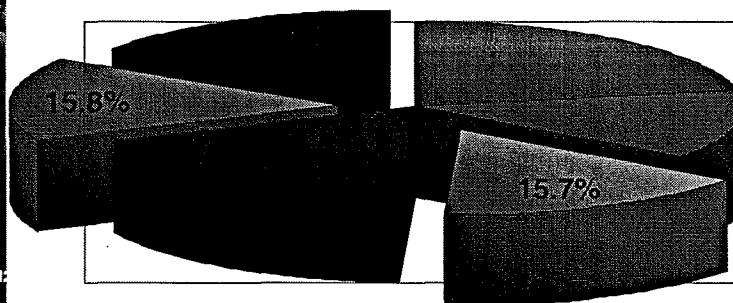
- Create a Functional Self-Sustaining Form of Development
- Enhance Potential for Agricultural (Including Nurseries and Equestrian Use)
- Enhance Environmental Resources Value
- Enhance Water Management Capability
- Enhance Accessible Open Space
- Minimize Costs/Impacts to County-Wide Taxpayers



CH2M HILL

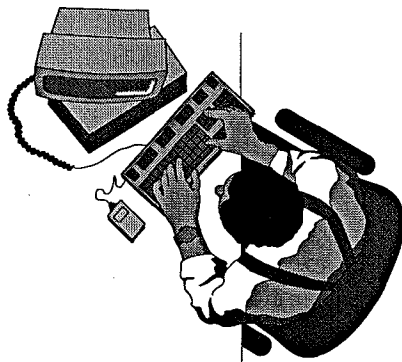
## *The Other Three Objectives Were Relatively Close in Percent Contribution*

- Create a Functional Self-Sustaining Form of Development
- Enhance Potential for Agricultural (including Nurseries and Equestrian Use)
- Enhance Environmental Resources Value
- Enhance Water Management Capability
- Enhance Accessible Open Space
- Minimize Costs/Impacts to County-Wide Taxpayers



CH2

## *Analysis of the Three Land Use Alternatives*



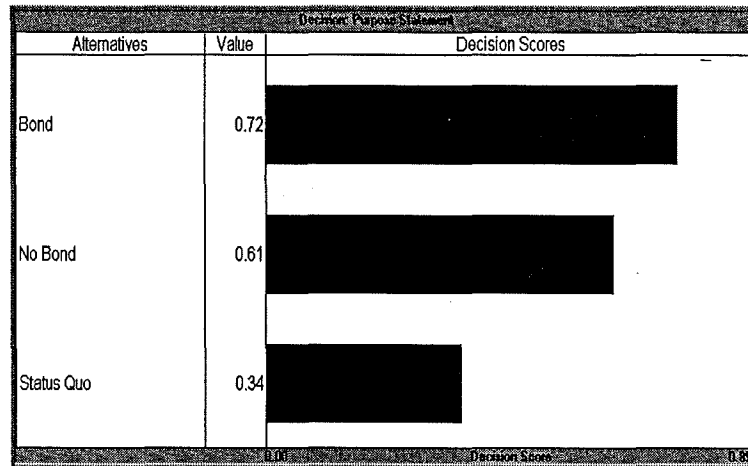
- The three alternatives were measured using the value model and weighted objectives/criteria
- Results indicate which alternative most closely satisfies all the weighted objectives

CH2MHILL



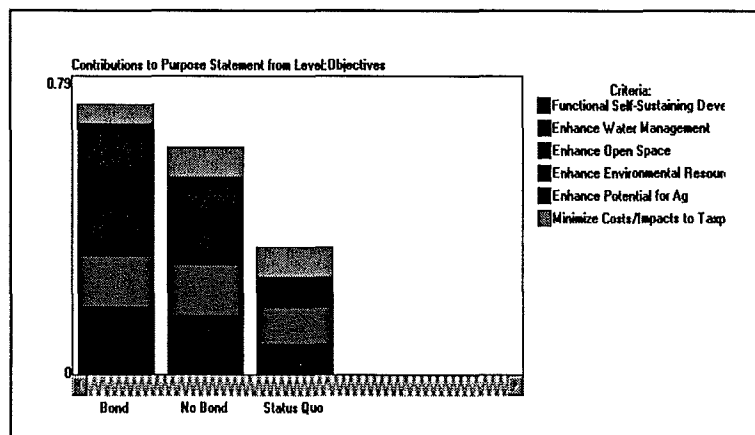
CH2MHILL

## *The "Bond" Alternative Scored the Highest Against the Six Objectives*



CH2MHILL

## *Contributions of the Objectives to the "Bond" Alternative's Score*





CH2MHILL

## *Summary and Conclusions*

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- Input to the project was received from several groups of stakeholders
- “Status Quo” land use alternative was developed under existing rules
- The other two alternatives were developed with “hands-on” input from the public
- All three alternatives were evaluated against the weighted objectives of the project
- The “Bond” Alternative met the highest percentage of the objectives, followed by “No Bond” and then “Status Quo”



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*Report*

# **Agricultural Reserve Masterplan Phase I Summary Report**

Prepared for  
**Palm Beach County**

December 1998

**CH2MHILL**

In association with  
Dover, Kohl & Partners

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# Introduction and Background

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In July 1998, the Palm Beach County Board of County Commissioners (BCC) authorized CH2M HILL to proceed with the development of a Masterplan for the Agricultural Reserve (Ag Reserve) area in south-central Palm Beach County (County). The masterplanning effort is a cooperatively funded agreement between the County and the South Florida Water Management District (District).

This is a summary report of the first phase of the masterplanning effort. Phase I is scheduled for completion at the end of December 1998; the results will be presented to the BCC on January 7, 1999. The second phase, depending on the results of Phase I and the decision by the BCC, is scheduled to be completed by the end of May 1999.

The following provides an overview of the Ag Reserve area and of the tasks associated with the masterplanning effort.

## Location

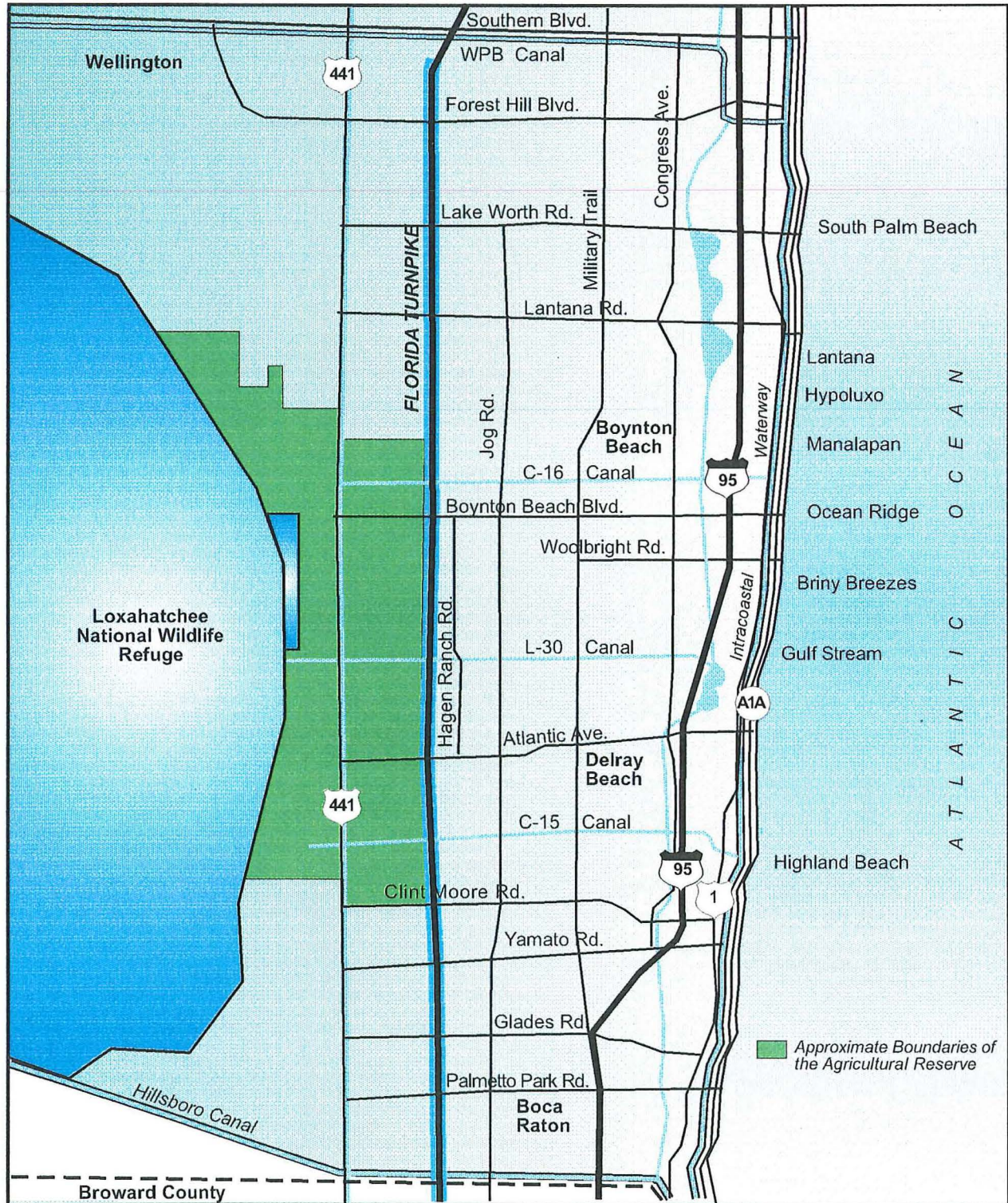
The Ag Reserve encompasses 20,923 acres, generally located between Hypoluxo Road (extended) to the north and Clint Moore Road to the south, and west of Florida's Turnpike to the Arthur R. Marshall Loxahatchee National Wildlife Area (Water Conservation Area 1). Exhibit 1 shows the location of the Ag Reserve within Palm Beach County.

## Background and History

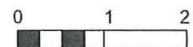
During the 1980s and through 1995, the County defined the Ag Reserve area and worked toward finding ways to preserve agriculture and thus limit the development potential. To facilitate the preservation of agriculture within the Ag Reserve, the 1989 Comprehensive Plan incorporated a variety of growth management tools. These tools included both mechanisms for the maintenance and enhancement of agriculture, such as the Purchase of Agricultural Conservation Easements (PACE) program and Transfer of Development Rights (TDR) provisions, as well as development alternatives designed to ensure the preservation of open spaces by limiting development within defined areas. In addition, the BCC imposed a moratorium on growth in the Ag Reserve until studies could be completed that would address the viability of agriculture and examine potential development scenarios.

By 1995, the BCC lifted the moratorium on development and began allowing 1 dwelling unit (DU) per acre if clustered on 40 percent of the land, leaving 60 percent or a minimum of 150 acres in preserved open space (e.g., agriculture). This type of development was also limited to the east side of State Route (SR) 7, with required frontage along specific roads. Since then, two developments have been approved under the 60/40 rule. As a result of these two development plans, the County has realized the flaws in the current regulations and the potential problems the current development trend will cause the County in infrastructure and services costs.





Approximate Scale in Miles



**Exhibit 1**  
Location of Agricultural Reserve



In January 1998, the National Audubon Society completed a report that examined the status and preservation of the agricultural industry in South Florida. Essentially, the report suggested that some current agricultural interests in Palm Beach County had a dismal future outlook, while others were more promising. Winter vegetables such as tomatoes and peppers were the least likely to remain in business for the long-term due to circumstances outside the control of local government. These uncontrollable circumstances include federal trade policies like NAFTA and proposed EPA restrictions on the use of soil fumigants such as methyl bromide. However, the report did indicate that there remains significant potential for nurseries and greenhouse crops. In addition, Palm Beach County was acknowledged as having a large equestrian industry.

## Related Ongoing Studies

The County is not alone in looking at the preservation of the Ag Reserve. The District, working in conjunction with the U.S. Army Corps of Engineers, has identified portions of the Ag Reserve as being suited for water resource management purposes, including water supply storage, water quality treatment, wetland enhancement, and stormwater attenuation, as part of the Water Preserve Area project for the federally-mandated Comprehensive Review Study of the Central and Southern Florida Project (the Restudy). As a result of the preliminary work done on this project, the District has identified a need for approximately 1,660 acres within the Ag Reserve west of SR 7 that are suited for water resource management purposes and meet the anticipated needs of the Restudy. The actual footprint of the areas that will be sought by the District will not be completely known until the Comprehensive Plan for the Restudy is finalized in 1999. The general area being considered for acquisition is west of SR 7/US 441 approximately along the center of the western edge of the Ag Reserve.

During 1997, the District worked with the County, other local government entities, and interest groups to develop the Lower East Coast Interim Water Supply Plan. During the development of this plan, the County (working closely with the District) recognized the need to take a closer look at the water resources of the southern end of its urban service area. The County's Water Utilities Department in cooperation with the District retained CH2M HILL to develop an Integrated Water Resources Strategy (IWRS) for southeastern Palm Beach County. The study area, which extended southward from Southern Boulevard to the southern end of the County, and eastward from the Loxahatchee Wildlife Refuge to the coast, included the area of the Ag Reserve.

The development of the IWRS for southeastern Palm Beach County is in its final stages, where the TAC has helped to narrow down the list of strategies to approximately eight that will require further quantitative analysis to be conducted by the District. The eight strategies include additional water supply, water storage, and reclaimed water reuse technologies, and the technical project team identified suitable locations within the study area for implementing these strategies—some of which include the Ag Reserve area.

## Existing Land Use

There are seven major land use categories within the Ag Reserve. As shown in Exhibit 2, as of January 1998, the predominant land use is agriculture, accounting for nearly 62 percent of the total area. Including equestrian uses as part of the agricultural uses increases this to almost two-thirds of the total acreage. A total of 781 acres have been preserved for agricultural easements, including equestrian uses, through the cluster development option within the Ag Reserve to permit the development of a PUD. Other than agricultural uses, the largest existing land use within the area is conservation, representing the nearly 20 percent of the Ag Reserve in public ownership.

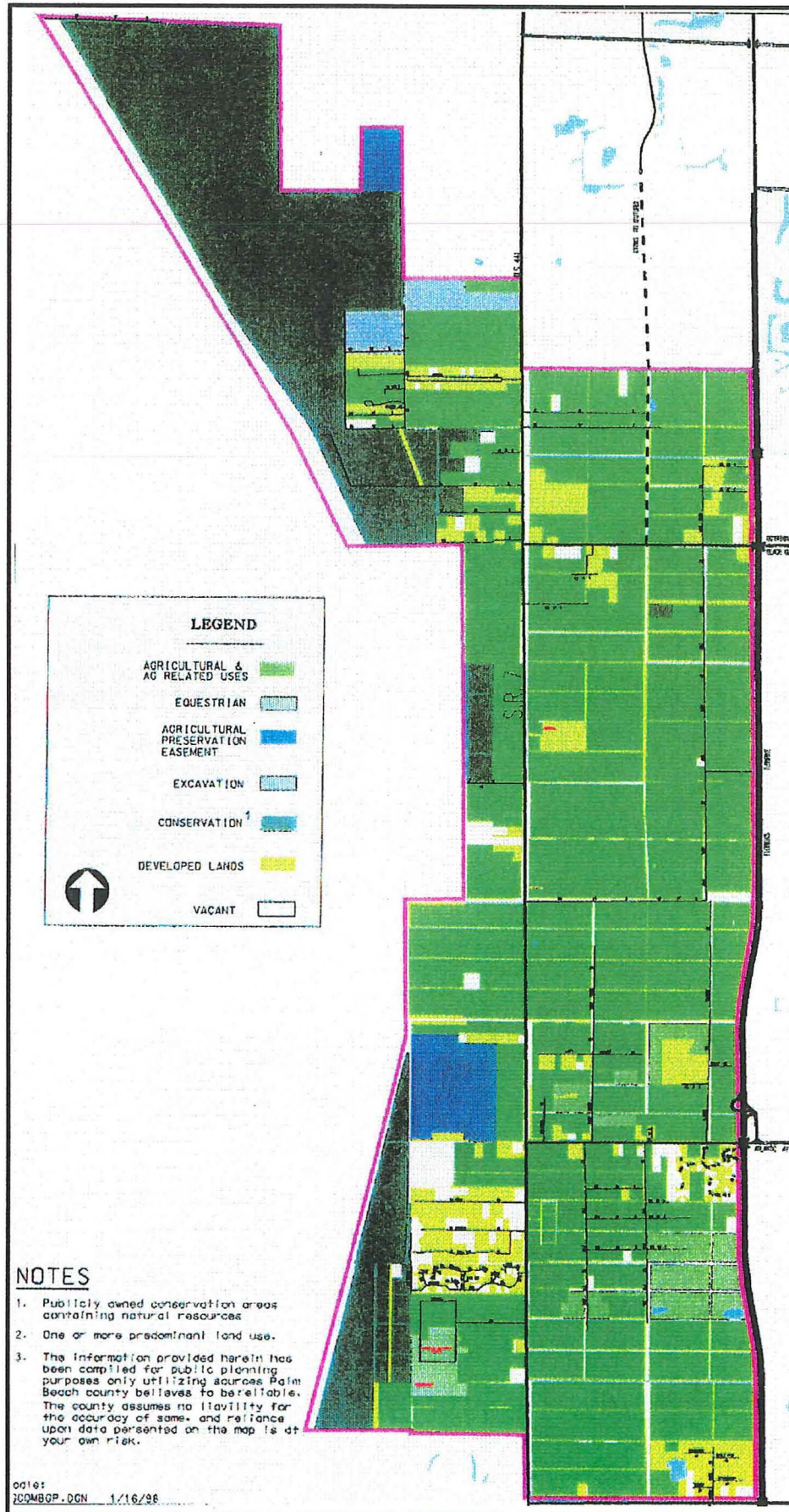
### Exhibit 2

Existing Land Uses within the Ag Reserve (Source: County Planning Department)

Land Uses	Acreage	% of Total
Agriculture and Related Uses	12,913	61.7%
Equestrian	775	3.7%
Agricultural Easements	781	3.7%
Developed (Residential/Commercial)	1,558	7.4%
Excavation	232 <sup>a</sup>	1%
Conservation	4,151	19.8%
Vacant	591	2.8%
Total	20,923	

The Delray Training Center represents a 397-acre approved planned unit development. It reduces the equestrian acreage to 546 acres (2.6% of the total area) and increases the developed acreage to 1,955 acres (9.3% of the area).

The existing geographical distribution of uses within the Ag Reserve is depicted in Exhibit 3. As shown, most development has occurred in the southern area of the Ag Reserve, principally the area south of Atlantic Avenue. This development pattern becomes more obvious if the Delray Training Center, currently shown as an equestrian use, is considered residential development. Agricultural uses dominate the central portion of the Ag Reserve with conservation lands concentrated west of SR 7.



**Exhibit 3**  
Agricultural Reserve Existing Land Use Map

# Purpose and Objectives

---

As established by the BCC, the purpose of the Ag Reserve masterplanning process is to preserve and enhance agricultural activity and environmental and water resources in the Ag Reserve, and produce a master development plan compatible with these goals." Throughout the project, this purpose statement was used to guide the masterplanning effort.

The key objectives of the project essentially follow the approach and scope of work and are as follows:

- Obtain input from landowners, farmers, and the public at large.
- Determine what the most important values are from the above input.
- Develop land use alternatives that follow the project purpose and address the values developed.
- Determine the benefits and relative costs of the alternatives and allow the BCC to make an informed decision.

# Project Approach

---

The approach is a step-by-step process, in which decision facilitation methods are used to develop a defensible consensus-based Masterplan for the Ag Reserve. The approach is divided into two phases: Phase I—Conceptual Design Alternatives, and Phase II—Detailed Masterplanning.

Phase I is designed to allow input from the general public in developing goals and objectives for the Ag Reserve and three conceptual land use alternatives as described below:

- The first alternative assumes no changes to the existing plans. The currently allowable land use is one dwelling unit (DU) per 5 acres, which can be aggregated to 1 DU per acre under the 60/40 clustered development option east of SR 7/US 441. West of SR 7/US 441, development is also allowed at one unit per 5 acres, but can only be aggregated to 1 DU per acre under the 80/20 clustered development option.
- The second alternative will plan to balance existing agricultural use, planned water resource projects, and other environmental amenities with current and future development. It assumes that no public dollars are available from any source to facilitate land purchases within the Ag Reserve, and that it will require other processes and possibly land use configurations to make it feasible.
- The third alternative is similar to the second alternative; however, it assumes that \$100 million in public money will be available through a bond issue for land purchase.

Phase I involves a four prong approach:

- Developing a public involvement and community outreach program
- Enlisting public values and confirming objectives
- Creating a graphic depiction of three conceptual alternatives through a “design charrette” process
- Evaluating the alternatives and comparing them with the objectives

A critical element of this project approach is the input and community outreach efforts, which are designed to keep the public informed throughout the project and to incorporate their invaluable input into the process at key junctions. These efforts have included:

- **Agricultural Forum** – held on August 28<sup>th</sup>, 1998, at the Clayton Hutcheson Agricultural Center and designed to solicit input specifically from the landowners and farmers in the Ag Reserve regarding their issues and concerns about the Ag Reserve.
- **Public Workshop No. 1** – held on September 19<sup>th</sup>, 1998, also at the Clayton Hutcheson Agricultural Center, and designed to obtain input from a broader group, the public at-large, on their issues and concerns regarding the Ag Reserve.
- **Public Workshop No. 2 – Design Charrette** – held on October 16<sup>th</sup> and 17<sup>th</sup>, 1998, again at the Clayton Hutcheson Agricultural Center, and designed to educate the public on the



design charrette process and allow them “hands-on” input to the development of the conceptual land use alternatives.

- **Public Opinion Survey** – completed via telephone October 28<sup>th</sup> through the 31<sup>st</sup>, 1998, and designed to solicit additional input from an even broader cross-section of the County on the various issues and concerns regarding the Ag Reserve.
- **Fact Sheets, Updates to the Media, and information posted on the County’s web site** – conducted throughout the project and designed to provide avenues for communication to the public.

Embedded into the above public involvement, is the second prong of the project approach—enlisting public values. Through the Ag Forum, the two public workshops, and the public opinion survey, input was solicited on the issues and concerns regarding the Ag Reserve that was translated to a set of values; i.e., what issues or features of Ag Reserve are important to the public? The information garnered from these public forums was compared with the purpose of the project, as established by the Board of County Commissioners, and was used to develop a set of objectives that will eventually be compared against each of the three land use alternatives. These objectives were then weighted to illustrate their relative importance, and criteria were developed to measure the alternatives against each objective.

The third prong of the project approach was intended to allow the public an opportunity to not only provide input regarding their issues and concerns in the Ag Reserve, but to actually “put pen to paper” and develop their perspective on how the Ag Reserve should look in 20 years. This was accomplished through a process called a design charrette, which, in small groups (10 or less), allows the public a “hands-on” opportunity to craft their vision of how the Ag Reserve should be developed. The rough drawings created by the public are then examined closely for common themes, and then are translated onto a final drawing or series of drawings.

Finally, the fourth prong of the project approach is to use the weighted objectives and criteria previously developed to evaluate how well each of the three land use alternatives meets the objectives and overarching goal or purpose of the project as established by the Board of County Commissioners. The results of the evaluation can be used to examine the benefits of the project and compare them with the relative costs.

# Groups Involved in Phase I

---

Five groups were involved in providing input and actually developing and evaluating the three land use alternatives. These groups included:

- Palm Beach County Board of County Commissioners (BCC)
- Public
- Working Group
- Extended Working Group (EWG)
- Land Use Advisory Board (LUAB)

The BCC essentially established the purpose of the masterplanning effort and authorized the County Planning Division to proceed with Phase I of this masterplanning effort. Also during Phase I, the BCC is responsible for making an informed decision based on results developed in this first phase, on which alternative to pursue with subsequent, more detailed masterplanning.

Input from the public is an important element of this project, and therefore a number of individuals, including landowners and farmers in the Ag Reserve, special interest groups, developers, homeowner groups, and the public at-large, have provided valuable input to the process. They have provided input not only in the actual development of the land use alternatives, but also in the development and weighing of the objectives used to measure the performance of each alternative.

To facilitate the development of the Masterplan for the Ag Reserve, two working groups were established. The core Working Group is made up of representatives of the County Planning Division, the South Florida Water Management District (SFWMD) Planning Department, CH2M HILL, and Dover-Kohl & Partners. This group is charged with implementing the scope of work and presenting the results to the BCC.

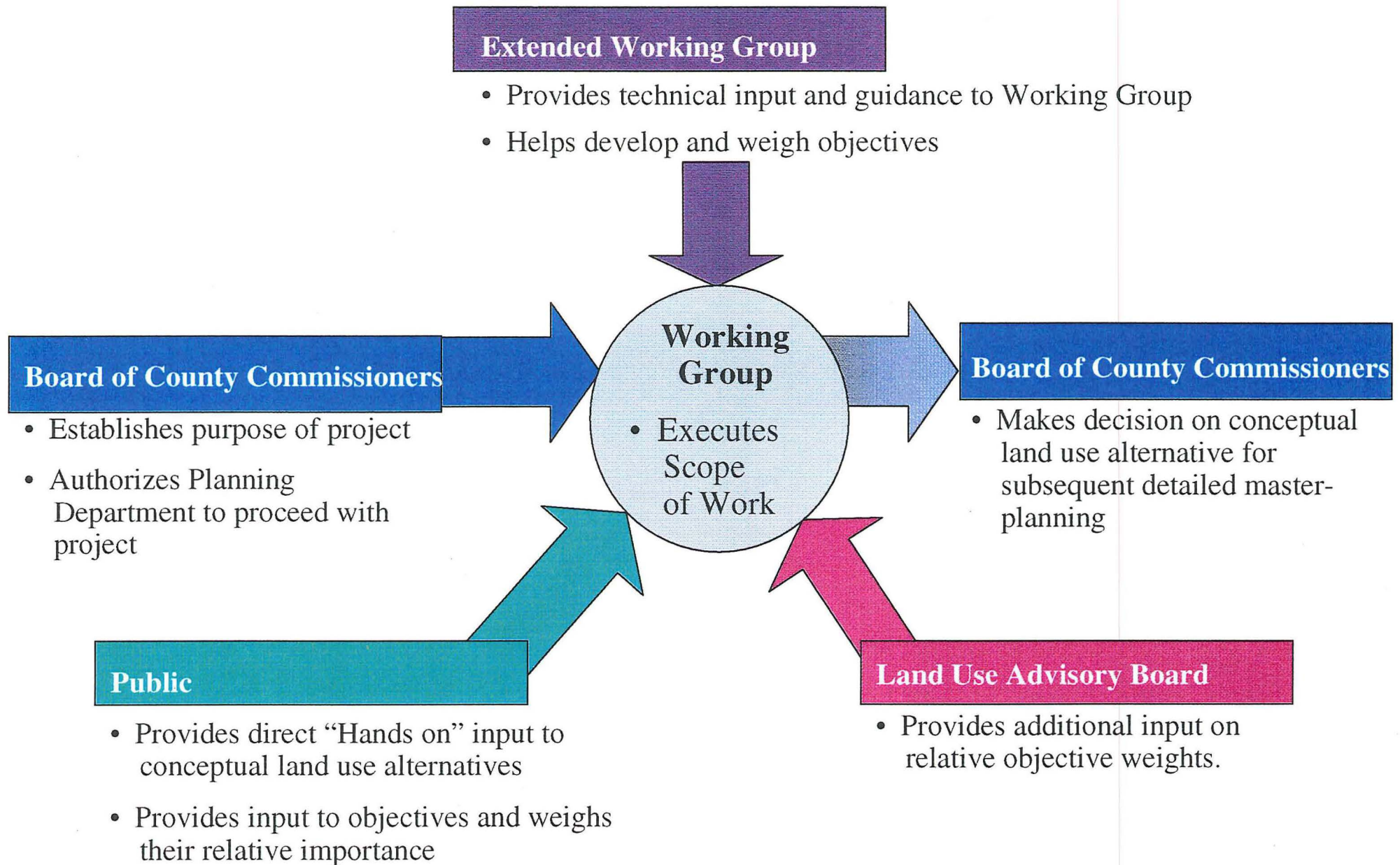
A second tier of professionals with specialized technical skills make up the Extended Working Group (EWG), which includes representatives from:

- |  |  |
|--|--|
| • County Planning Division                                     | • County Parks Department                        |
| • SFWMD Planning Department                                    | • Treasure Coast Regional Planning Council       |
| • Palm Beach County Agricultural Cooperative Extension Service | • Florida Department of Community Affairs        |
| • Lake Worth Drainage District                                 | • County Engineering Department                  |
| • County Department of Public Affairs                          | • County Zoning Division                         |
| • County Environmental Resources Management                    | • Metropolitan Planning Organization             |
| • County Water Utilities Department                            | • SFWMD Government and Public Affairs Department |
| • County Attorney's Office                                     |  |

The EWG is responsible for providing additional technical input and guidance to the working group.

Finally, the Land Use Advisory Board (LUAB) is made up of a diverse group of individuals from around the County who are constantly involved in land use decisions around the County. The LUAB's input was primarily used during the weighting of the principal objectives.

Exhibit 4 provides a graphic illustration of the relationships of the five groups to the project.

**Exhibit 4**

Relationships of the Groups Involved in the Ag Reserve Masterplanning

# Issues Raised by the Public

---

As part of the public outreach and involvement process, the first of two public workshops was held on September 19, 1998, at the Clayton Hutcheson Agricultural Center in West Palm Beach. The workshop was designed to educate the public on the proposed masterplanning effort and to enlist values from the public to determine what is most important to them with respect to the Ag Reserve.

During the workshop, a presentation was made on the projected 2020 build-out of the Ag Reserve under the current regulations. This presentation included a "cut-and-paste" visual of what the Ag Reserve might look like, and helped to point out the poor development pattern that would result to further demonstrate the need for the masterplanning effort. Along with an overview of the project purpose, objectives, scope of work, and the purpose and objectives of the public workshop, the stage was set for the participants to develop a series of issues and critical success factors that would be used to help guide the project. The issues would be used to assess what was most important to the public regarding the Ag Reserve, as well as what critical success factors would be used to determine how the public might measure the success of the masterplanning effort.

The process was facilitated by having the approximately 140 workshop participants engage in small group discussions at separate tables. The results of the discussions were presented to the entire group and the list of issues and critical success factors were recorded. A listing of all the issues and critical success factors was developed and grouped into a series of categories that represented the most important issues and critical success factors. Exhibit 5 is a summary of the top 10 issues based on how frequently they were mentioned by the small groups.

## Exhibit 5

### Summary of Issues Raised at the First Public Workshop for the Ag Reserve Masterplan

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1. There needs to be adequate comprehensive planning for future development.
  2. There needs to be consideration of property rights, fair values for land, and equal treatment with the rest of the County.
  3. Water resources need to be protected both for supply and water quality issues (e.g., prevent salt water intrusion).
  4. Development needs to meet requirements for concurrency and schools.
  5. The long-term cost of infrastructure and services, and overall cost to taxpayers needs to be considered.
  6. Agriculture needs to be protected based upon market demand and type (i.e., cropland, nurseries, equestrian uses).
  7. Policy makers must realize that national policies affect farm enterprises.
  8. Environmentally sensitive areas need to be protected.
  9. Open space needs to be preserved for parks, public access, and views of open space.
  10. Housing and farm practices require adequate land buffers for protection of health and safety.
- 

Note that the above issues are ranked in order based on frequency of occurrence, as defined by the number of individual tables that raised the issue.



Input generated from the public workshops was used to refine the list of objectives and criteria that will ultimately be utilized to measure the performance of each of the three land use alternatives.

As a result of the input from all of the groups involved, the following list of underlying assumptions was developed to help guide the development of the land use alternatives:

- Private property rights will be respected.
- Equestrian uses, nurseries, and specialty crops are the most feasible long-term agricultural uses in the Ag Reserve.
- Lands in public ownership will remain in open space.
- The amount of land that can be acquired with public funds will depend on the number of willing sellers and the cost of land.
- Concurrency requirements will be met.
- Design criteria for future development will minimize impacts to Lake Worth Drainage District canal system and the Lake Worth Lagoon.

# Development of the Conceptual Land Use Alternatives

---

The development of the conceptual land use alternatives included the following:

**Status Quo** – this alternative assumes that the current land use regulations remain intact, and that the Ag Reserve will develop out under the 60/40.

**No Bond** – this alternative will plan to balance existing agricultural use, planned water resource projects, and other environmental amenities with current and future development. It assumes that no public dollars are available from any source to facilitate land purchases within the Ag Reserve, and that other processes and possibly land use configurations will be required to make it feasible.

**With Bond** - this alternative is similar to the “No Bond” scenario; however, it assumes that public money will be available for land purchase. While it is anticipated that this alternative will need support from public sources to maintain land values, the amount of public dollars that may be necessary is assumed to be \$100 million.

The Status Quo alternative was initially developed by County Planning Division staff, with assistance from the Treasure Coast Regional Planning Council (TCRPC) and SFWMD Planning staff. The other two alternatives were developed through the Design Charrette process with extensive input from the public. All three alternatives were created using a similar format for agriculture, environmentally sensitive lands, water resources features, open space, and urban development so as to provide an equitable comparison between them. Also, the project purpose statement, as established by the BCC, and the underlying assumptions were used to guide the development of the three alternatives.

## Status Quo Alternative

The “Status Quo” alternative was created by:

- Assuming approximately 3,000 units are already built or approved for development
- Assuming approximately 14,000 acres of land are available for development, which at 1 DU per acre, would account for approximately 14,000 additional DUs
- Using the existing Ag Reserve land use regulations
- Examining ownership patterns to identify those properties qualifying for 60/40
- Identifying 40 percent of the land as developed on each of these properties, and assuming they develop one at a time, so there is little to no opportunity to adjoin adjacent development or remaining 60 percent open space

- Utilizing the 60/40 rule to cluster development rights from the west side of SR 7/US 441 into logical locations, which was discussed at the public workshop as a very likely possibility. This is due to the less expensive land west of SR 7/US 441, which could more readily be purchased by developers on the east side to account for the needed 60 percent open space requirement.

Exhibit 6 illustrates the "Status Quo" alternative using the above provisions, and only represents one possible configuration under the current regulations.

Features of this plan include:

- Other than Ag Reserve related uses, all new development will be residential only
- Car trips will extend outside of the Ag Reserve for daily needs
- Open spaces are smaller and less contiguous
- SFWMD reservoir is shown as currently envisioned, but no land has been purchased at this time
- New developments are isolated from each other
- A portion of the 60-percent cluster option centrally located along Turnpike to accommodate constructed wetland and new water supply wells
- Total number of swelling units would be approximately 17,600 (3,000 existing and 14,000 new)

Other configurations of the land use could occur depending on how and when the land would be purchased, aggregated, and/or developed.

## Public Workshop Design Charrette

Unlike the Status Quo, the other two alternatives were developed with extensive input from the public through a Public Workshop Design Charrette. The workshop was held on October 16<sup>th</sup> and 17<sup>th</sup>, 1998, at the Clayton Hutcheson Agricultural Center. Over 130 people attended the workshop, including a good mix of land owners and farmers in the Ag Reserve, special interest groups, developers, homeowner groups, and the public at-large.

The purpose of the Public Workshop Design Charrette was to ensure public input into the design concepts that will be used to formulate the final two conceptual land use alternatives. Objectives of the workshop were:

- To continue outreach efforts demonstrating that the planning approach is unique and that public input and dialogue are central to the success of the project
- To educate and provide the public an understanding of the County's and other agencies' needs within the Ag Reserve
- To educate the public on possible land use concepts to be incorporated into the land use of the Ag Reserve
- To begin development concepts on paper for incorporation into our future land use alternatives






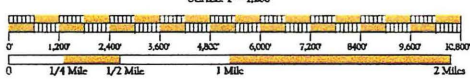
Palm Beach County Agricultural Reserve  
F L O R I D A

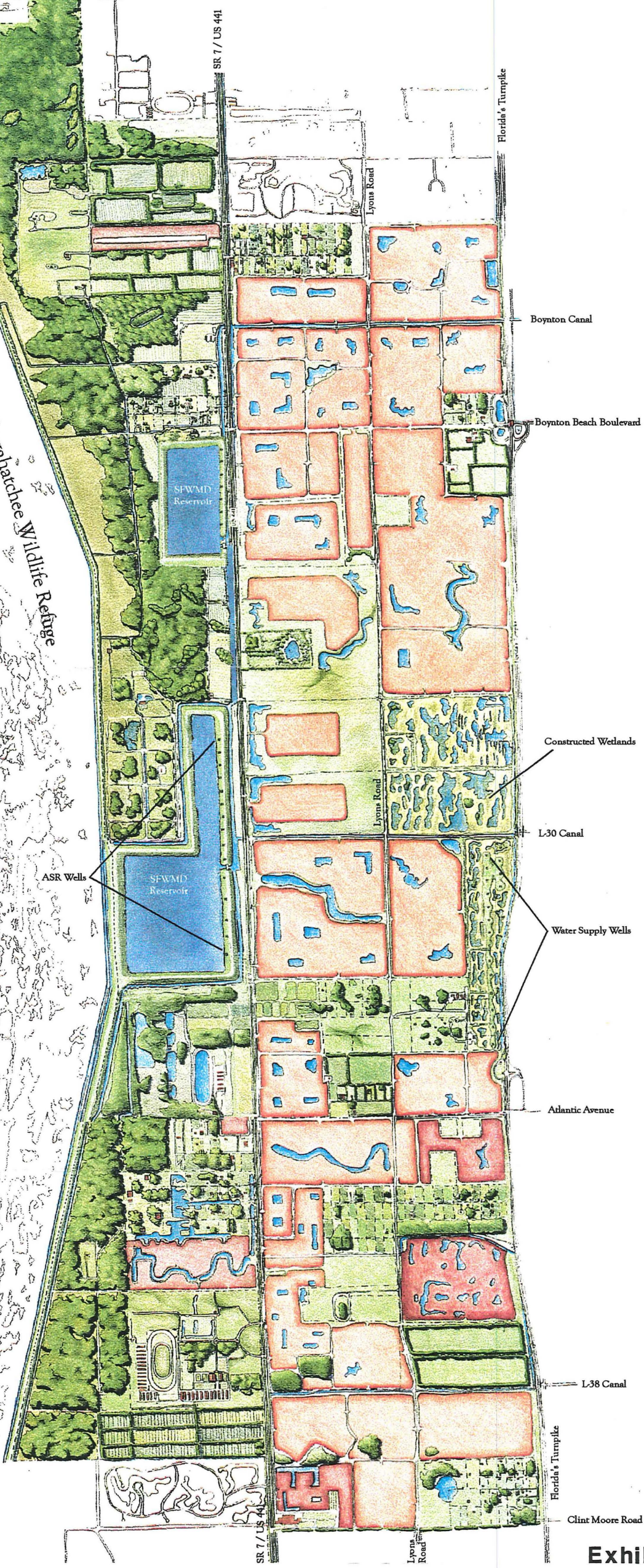
"Status Quo" Alternative

**This map is conceptual:**  
It is meant to guide future efforts, showing possible build-out and land conservation scenarios within the Palm Beach County Agricultural Reserve. The boundaries between developed areas and green areas are not intended to be hard and set. They may be configured differently as the plan is refined and when development actually occurs. Areas colored green may contain agricultural uses other than those illustrated including but not limited to: equestrian facilities, nurseries, row crop farms, cattle ranching, raising farm animals, fruit groves/orchards, wildlife preserves, recreational facilities, and golf courses.

**Legend:**

- Proposed land for future development
- Land with existing development approvals
- Mixed-use town centers
- Typically properties developed at one unit per 5 acres
- Land for agriculture and open space
- Canals and lakes
- Roads

  
  
  
Draft Date: January 5, 1999  
SCALE: 1" = 1,200'  




**Exhibit 6**  
Conceptual "Status Quo" Alternative



The first day of the workshop was held to educate the workshop participants on the Design Charrette process and what the expectations should be of the participants. Also, individuals from the following organizations made short presentations to the workshop attendees regarding their specific interest in the Ag Reserve and answered questions from the workshop attendees.

**Equestrian Industry** – the equestrian industry discussed the various types of equestrian uses, their impact on the economy, compatibility with other land uses and interest in developing additional facilities in the Ag Reserve. This was presented to educate the workshop attendees about other viable agricultural uses and to express their interest in the Ag Reserve for possible future equestrian facilities.

**SFWMD** – SFWMD focused discussions on the status and results of the U.S. Army Corps of Engineers Restudy and the need for additional Water Preserve Areas and reservoirs along the western portion of the Ag Reserve to buffer the Arthur R. Marshall Loxahatchee Wildlife Refuge. Also, this group described how, as an example, the C-111 Basin in northern Dade and southern Broward County used the water features present in the basin as an amenity for future development. This was presented to help workshop attendees visualize how they may be able to use the existing waterways in the Ag Reserve as an amenity.

**County Water Utilities Department** - County Water Utilities Department presented the needs of the County with respect to water supply and resources. The information presented was a part of the Integrated Water Resources Strategy for Southeastern Palm Beach County, and described the various water supply and resources technologies the County is examining and where in the Ag Reserve these technologies would be constructed. Water supply and resources features considered in the Ag Reserve include additional surficial aquifer water supply wells and constructed wetlands for reuse of wastewater from the County's Southern Region Wastewater Reclamation Facility, similar to the 40-acre Wakodahatchee Wetland located just east of the Ag Reserve area.

The second day of the Design Charrette was dedicated to actually "putting pen to paper" and crafting a number of alternatives from the workshop participants. The 130-plus people were organized around 16 tables with a trained facilitator and designer at each. A number of technical experts from the Working Group and Extended Working Group were available for each of the tables as resources on various topics from water management to traffic issues. First, the workshop participants were asked to work together at each table to come up with a plan by keeping in mind the overall purpose of the project. Second, following completion of the first drawing, the participants were asked how they could improve on the first plan if the county had \$100 million to spend on land purchases. Upon completion of the rough drawings, a representative from each table presented the key features of their plan to the entire group.

Following completion of the Public Workshop Design Charrette, the working group sorted the drawings from those with the most open space to those with the most development. The working group then spent several days working with members of the Extended Working Group to craft two conceptual alternatives that reflect the extensive input from the workshop participants. In almost all of the drawings, several common themes or features of the maps were noticed:



- The area west of SR 7/US 441 was designated as preserve or conservation lands for the County or SFWMD and was assumed to not be developed
- A reservoir located west of SR 7/US 441, but configured in rectangular shape, as opposed to the longer shape proposed by the SFWMD in the Restudy
- A central water way around the LWDD L-30 canal was depicted
- Two neighborhood centers, centered around Boynton Beach Boulevard and West Atlantic, were also depicted. The majority were depicted around Lyons Road, while others placed it around SR 7/US 441.

### **“No Bond” Alternative**

The proposed “No Bond” alternative was created by:

- Using the ideas from the workshop participants
- Examining properties that qualified for 60/40
- Grouping developments along neighboring property lines
- Moving development rights from the west side of SR 7/US 441 to the east side, with incentives provided to allow more units (approximately 1.5 DU/acre) to be transferred
- Increasing the number of dwelling units by approximately 3,000 units

Exhibit 7 depicts the final draft of the “No Bond” alternatives assuming the above provisions. Features of this plan include:

- Coastal water way along L-30 canal as an amenity that may be paid for by private developers
- Curving Lyons road between Boynton Beach Boulevard and West Atlantic Avenue as a parkway/rural type road
- Neighborhood centers (providing a mix of land uses)
- Interconnected neighborhoods
- Reduction in car trips if daily needs are met within the Ag Reserve
- Reduction in car trips if there is the opportunity for walking, bike riding, and horseback riding
- Open spaces are larger and more contiguous
- Shape of SFWMD reservoir is more efficient
- Area centrally located along Turnpike reserved for future water supply wells
- Total number of dwelling units would be approximately 20,000 units (3,000 existing and 17,000 new)










F L O R I D A

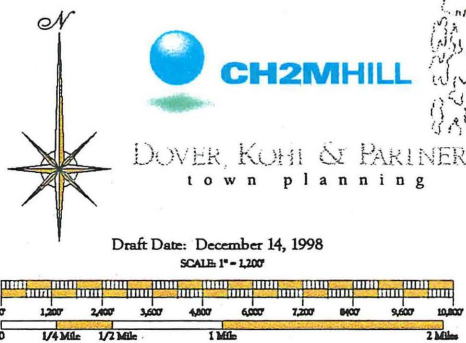
### No Bond Alternative

This map is conceptual:

It is meant to guide future efforts, showing possible build-out and land conservation scenarios within the Palm Beach County Agricultural Reserve. The boundaries between developed areas and green areas are not intended to be hard and set. They may be configured differently as the plan is refined and when development actually occurs. Areas colored green may contain agricultural uses other than those illustrated including but not limited to: equestrian facilities, nurseries, row crop farms, cattle ranching, raising farm animals, fruit groves/orchards, wildlife preserves, recreational facilities, and golf courses.

Legend:

- |   |  |
|---|--|
|  | Proposed land for future development                   |
|  | Land with existing development approvals               |
|  | Mixed-use town centers                                 |
|  | Typically properties developed at one unit per 5 acres |
|  | Land for agriculture and open space                    |
|  | Canals and lakes                                       |
|  | Roads  |



Draft Date: December 14, 1998

SCALE: 1" = 1,200'

## Exhibit 7

## "No Bond" Conceptual Land Use Alternative



## **"Bond" Alternative**

The proposed "Bond" alternative was created by:

- Using the ideas from the public workshop participants and using the "No Bond" alternative as the baseline
- Assuming that the County will purchase up to \$100 million in land (not development rights) from willing sellers with a fee simple title
- Assuming that the County will have to pay market prices for the land
- Assuming the \$100 million would enable the County to acquire 2,000 to 4,000 acres which could be used for agriculture and open space.
- Choosing to centralize land purchases to accomplish a large contiguous tract of land where development pressure and access to roads are lower

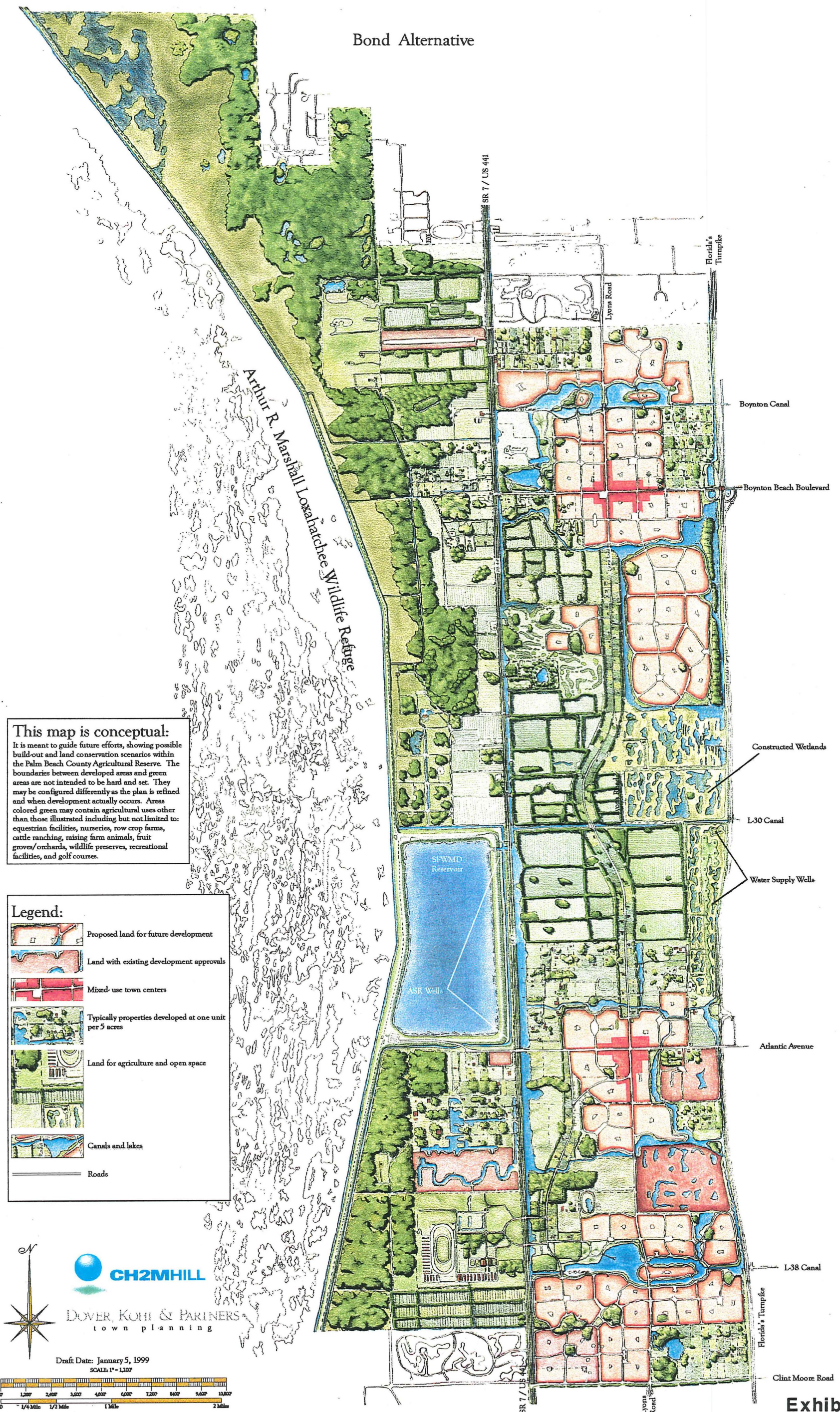
Exhibit 8 depicts the final draft of the "Bond" alternative assuming the above provisions. Features of this plan include those presented for the "No Bond" alternative, along with:

- Greatest opportunity for preserving the potential for agriculture and open space
- Future development focused around Boynton Beach Boulevard, around west Atlantic Avenue, and further south where the land is expected to be more expensive
- Large contiguous open space in the central part where land is more conducive to agriculture and open space
- Fewer residents = less traffic congestion inside and outside the Ag Reserve
- Linked LWDD canal system: one to the north and one to the south.
- Two District County Parks: one to the north and one to the south
- A more efficient form with two distinct communities
- Central areas set aside near Turnpike for future water supply wells, with potential for constructed wetlands
- The total number of dwelling units would be approximately 16,000 to 18,000 units (3,000 existing and 13,000 to 15,000 new)



F L O R I D A











### Bond Alternative



This map is conceptual:

It is meant to guide future efforts, showing possible build-out and land conservation scenarios within the Palm Beach County Agricultural Reserve. The boundaries between developed areas and green areas are not intended to be hard and set. They may be configured differently as the plan is refined and when development actually occurs. Areas colored green may contain agricultural uses other than those illustrated including but not limited to: equestrian facilities, nurseries, row crop farms, cattle ranching, raising farm animals, fruit groves/orchards, wildlife preserves, recreational facilities, and golf courses.

Legend:

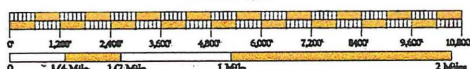
- |   |  |
|---|--|
|  | Proposed land for future development                   |
|  | Land with existing development approvals               |
|  | Mixed-use town centers                                 |
|  | Typically properties developed at one unit per 5 acres |
|  | Land for agriculture and open space                    |
|  |  |
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DOVER, KOHL & PARTNERS  
town planning

Draft Date: January 5, 1999

SCALE: 1" = 1,200'



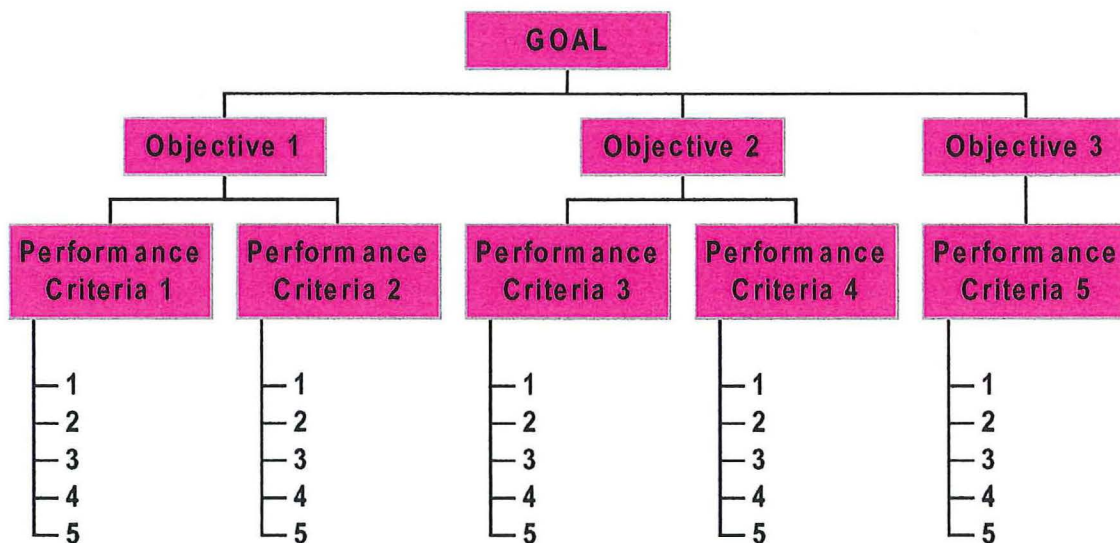
## Exhibit 8

## "Bond" Conceptual Land Use Alternative



# Development of a Value Model

A value model provides a framework for defining the goals, objectives, and values as developed by the working group, using input from the various other groups. This value model starts by defining the overarching purpose or project goal/vision (i.e., what we're trying to achieve). Below the goal are the objectives, which generally represent the tangible, concrete issues or concerns of most importance. For each objective, a single or series of criteria (performance metrics) are developed to measure how well each objective accomplishes the overriding objective. This framework is defined as a value model and is depicted generically in Exhibit 9.



**Exhibit 9**  
Generic Value Model

## Goals and Objectives

At the inception of this project, the BCC established the purpose of the masterplan, which provided the basis for developing an overall goal statement for the value model.

Also, the various groups help to provide input to the project developed a set of objectives or values that they felt were important to maintain throughout the project. The objectives, along with results from the public opinion survey and workshop, were used to formulate a set of primary objectives that define the WG's and stakeholders' most important issues. These primary objectives are as follows:

- Enhance Potential for Agriculture, including Equestrian Uses
- Enhance Environmental Resource Value
- Enhance Water Management Capability



- Create a Functional, Self-Sustaining Form of Development
- Enhance Accessible Open Space
- Minimize Cost/Impacts to County-wide Taxpayers

Exhibit 10 shows the relationship between the value model goal and the six principal objectives.



**Exhibit 10**  
Value Model – Objectives

## Criteria and Performance Measures

Performance criteria are needed to provide a quantitative measurement of how well the objectives are being met. Performance measures define how well a given project meets the program goals and objectives. The range of measurement is called a scale and may be unique to each criterion, depending on the item being measured.

For the Ag Reserve, specific criteria and performance measures were used to quantify the performance of each of the three alternatives against the six objectives. Exhibit 11 illustrates the criteria used for each of the objectives that were developed by the Working Group with assistance from the Extended Working Group.

Because of the conceptual nature of the three land use alternatives, many of the criteria could only be evaluated subjectively and could not be practically evaluated with a quantitative performance measure. The importance of whether the scale is quantitative or qualitative is not a key factor at this conceptual stage of the evaluation, since the intent of the value model is to evaluate the relative performance of each of the alternatives against each other.

**Exhibit 11**

## Criteria Used to Describe Objectives

Objective	Criteria
Enhance Potential for Agriculture	Potential Area in Agriculture Potential for Equestrian Trails
Enhance Environmental Resource Value	Amount of Preserve or Conservation Land Potential for Connectivity
Enhance Water Management Capability	Enhance Water Resources Area Amount of Impervious Area
Create a Functional, Self-sustaining Form of Development	External Trip Generation Amount of Vistas Mix of Uses
Enhance Open Space	Accessible Recreational Open Space
Minimize Costs/Impacts to Taxpayers	Infrastructure and Services Costs Public Land Acquisition

Three examples of criteria and performance measures used in the evaluation of the three alternatives are shown in Exhibit 12:

**Exhibit 12**

## Example Performance Criteria

Criteria	Performance Measure	Scale
<i>Vistas Along Major Roads</i>	Percentage	0-100%
<i>Public Land Acquisition Cost</i>	Dollars	\$0 to \$101 Million
<i>Potential for Connection of Conservation or Preserve Areas</i>	Degree of Connectivity	High to Low

As shown in Exhibit 12, performance measures can use numerical scales when a criterion is directly quantifiable or a verbal scale when metrics must incorporate qualitative assessments and/or expert opinion. The criteria of Vistas Along Major Roads and Public Land Acquisition Cost are examples of criteria that have numerical scales, measuring quantifiable items such as percentage of road length that is a vista or dollars. However, Potential for Connection of Conservation or Preserve Areas is a criterion that is not easily quantifiable. For that criterion, a verbal scale is chosen based on the degree of connectivity, ranging from high to low. Exhibit 13 provides a summary of the objectives, criteria, and performance measures used to rate the performance of the three alternatives.

**Exhibit 13****Performance Measures Used to Evaluate Alternatives**

<b>Objective</b>	<b>Criteria</b>	<b>Performance Measure (Scale)</b>
Enhance Potential for Agriculture	Potential Area in Agriculture	Degree (Minimum to Maximum)
	Potential for Equestrian Trails	Degree (Minimum to Maximum)
Enhance Environmental Resource Value	Amount of Preserve or Conservation Land	Degree (Minimum to Maximum)
	Potential for Connectivity	Degree (Minimum to Maximum)
Enhance Water Management Capability	Enhance Water Resources Area	Degree (Minimum to Maximum)
	Amount of Impervious Area	Percentage (3-15%)
Create a Functional, Self-sustaining Form of Development	External Trip Generation	Number of Trips (10,000-17,000)
	Amount of Vistas	Percentage of Vistas Along Major Roads (0-100%)
	Mix of Uses	Number of Uses (1-6)
Enhance Open Space	Accessible Recreational Open Space	Degree (Minimum to Maximum)
	Infrastructure and Services Costs	Degree of Cost per Person (Minimum to Maximum)
Minimize Costs/Impacts to Taxpayers	Public Land Acquisition	Total Cost (\$0 to \$101 million)

**Weighting of Objectives and Criteria**

After the value model has been defined with the appropriate goal, objectives, and performance criteria, the structure should be weighted to determine the relative importance of competing objectives and criteria. The weighting exercise helps establish the trade-offs the group is willing to make among objectives and criteria, and it provides a means to assess the benefits of each strategy.

The Ag Reserve Masterplan value model was weighted by members of the Land Use Advisory Board (LUAB), Extended Working Group (EWG), and general public who attended the second public workshop. A swing weighting technique was utilized. All of the performance objectives were listed on a voting sheet. The sheet contained the objective name, criteria, and the limits of the scale used to measure the criteria. Each participant was then asked to determine which objective was most important to him, assign it a 100, and then rank the objectives relative to the most important objective. For example, if an objective was half as important it would be weighted a 50.

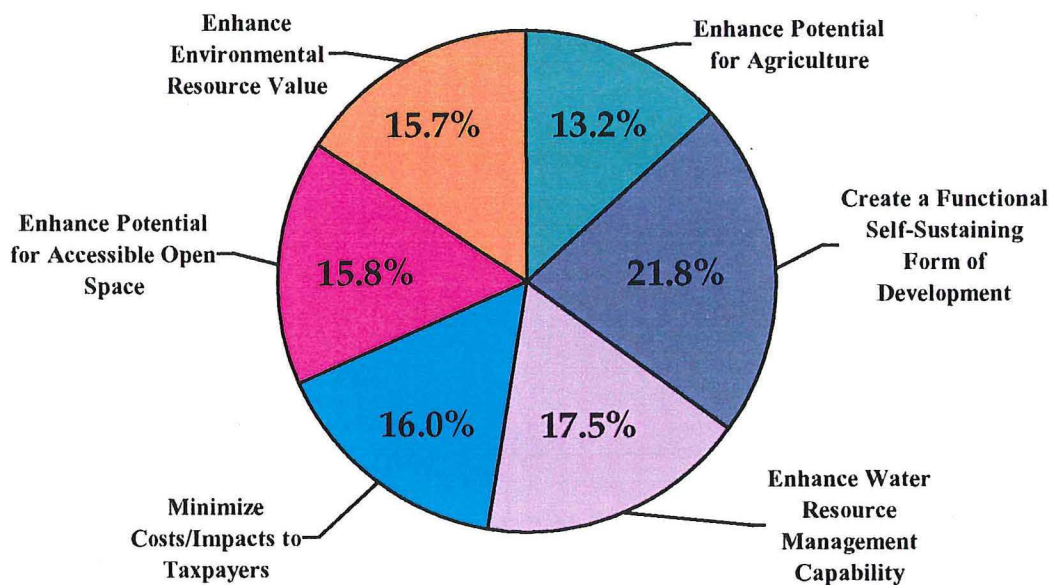
The results of the overall weighting from all three groups are displayed in Exhibit 14.

**Exhibit 14****Objective Weighting Results**

<b>Objective</b>	<b>Weights</b>			<b>Average of All Participants</b>
	<b>LUAB</b>	<b>EWG</b>	<b>Public</b>	
Create a Functional, Self-sustaining Form of Development	90.8	85.2	78.8	82.9
Enhance Potential for Agricultural and Equestrian Use	74.1	57.7	40.9	50.2
Enhance Environmental Resources Value	79.8	66.1	51.6	59.8
Enhance Water Management Capability	83.4	76.7	57.3	66.2
Enhance Accessible Open Space	78.6	60.4	54.4	60.2
Minimize Costs/Impacts to County-wide Taxpayers	61.5	71.6	56.0	60.6

The weights represent the average score of each objective. In order to ensure that equal representation was given to all parties involved in the weighting process, the average weights from all participants were used in the value model.

The average weights obtained from the three groups for the six objectives were normalized to represent a relative percentage of importance. Exhibit 15 depicts the results of the normalization, which indicate that the most important objective is creating a *Functional, Self-Sustaining Form of Development*. The remaining five objectives all scored similarly in level of importance.



**Exhibit 15**  
Relative Percentage of Importance of the Objectives

After the objectives were weighed, the EWG repeated the weighting process with the individual criteria used in scoring the alternatives. The most important criterion is assigned a score of 100, and the remaining criteria are assigned a weight relative to the most important. Criteria for each objective were scored independently from the others. The results of the criteria weighting are shown in the following Exhibit 16.

**Exhibit 16****Criteria Weighting Results**

<b>Objective</b>	<b>Criteria</b>	<b>EWG Weight</b>	<b>Normalized Weight (%)</b>
Create a Functional Self-Sustaining Form of Development	External Trip Generation	71.3	30.7
	Vistas along Major Roads	67.3	29.0
	Potential Mix of Uses	93.6	40.3
Enhance Potential for Agricultural and Equestrian Uses	Potential for Area in Agriculture	72.3	45.7
	Potential for Equestrian Trails	86.0	54.3
Enhance Environmental Resources Value	Amount of Conservation or Preserve Area	94.0	55.9
	Potential for Connectivity	74.0	44.1
Enhance Water Management Capability	Potential for Enhancing Water Resources	100.0	61.4
	Percent of Imperviousness	62.9	38.6
Enhance Accessible Open Space	Potential for Accessible Recreational Open Space	100.0	100
Minimize Costs/Impacts to County-wide Taxpayers	Infrastructure and Services Cost	86.7	53.7
	Public Land Acquisition Cost	74.7	46.3

Similarly to the objective weights, the criteria weights were also normalized so as to provide a relative weighting between the individual criteria. The above table also shows the relative weighting of each of the criteria. These, along with the weighted objectives, will be used in the value model to evaluate the three conceptual land use alternatives.



# Evaluation of the Alternatives

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## Value Model Setup

The value model was constructed using a commercially available software package called Criterium Decision Plus (CDP). The software has a user-friendly graphical interface and makes the decision process more efficient with the capability to make changes in real-time. The tool utilizes the value model and incorporates the assigned objective and criteria weights. The program translates the value structure into a form referred to as a hierarchy and shows the connections between the goal, objectives, performance criteria, and the alternatives.

Once the hierarchy is created, the user may input the weights for the objectives and criteria. The software automatically normalizes the weights between zero and one so that the blocks in each level (goal, objectives, criteria, etc.) of the hierarchy add up to the block they are connected to in the previous level. In addition, the sum of all the blocks in each level, other than the strategy level, must be less than or equal to one. For example, the goal level consists of one block or goal statement and receives a normalized or accumulated weight of one. If the hierarchy contains three objectives connected to the goal level, then the sum of the normalized weights of the objectives is equal to the normalized goal weight of one.

## Scoring the Alternatives

The process of scoring allows the user to compare the alternatives against each of the criteria they are directly connected to in the hierarchy. Each criterion must be assigned a scale that is used to measure the benefit (or lack thereof) or success of a particular alternative. The assigned scales may be verbal or numerical, and the user can select from a list of default scales or create a new one. Exhibit 17 depicts the scoring used to measure each alternative against the criteria and objectives, along with a brief description of the reasons for the assigned scores.

The scores that are entered into the model, either verbal or numerical, are also internally mapped into a normalized score between zero and one. A score at the top, or best, end of the scale would translate into a one. A score at the worst end of the scale would be internally converted to a zero. The software automatically assumes that a higher score is mapped closer to one. The decision scores can be reviewed when all of the strategies are scored in CDP.

For the value model set up to evaluate the three alternatives, the decision scores are calculated with the accumulated weights of the objectives and criteria that are directly connected to the alternatives. The formula is as follows:

$$D_s = \sum_{C=1}^N AW_C NS_s^C$$

**Exhibit 17****Basis of Alternative Scoring**

Objective	Criteria	Performance Measure (Scale)	Assumptions	Basis for Scoring		
				Status Quo	No Bond	Bond
Enhance Potential for Agriculture	Potential Area in Agriculture	Degree (Minimum to Maximum)	Potential for agriculture includes all uses such as nurseries, equestrian, row and specialty crops.	Current zoning restrictions limit the area and location of land for agriculture. In addition, most of the open space shown on the map has minimal access to roads. Because of these restrictions, it was felt that only a <b>minimum</b> potential for agriculture exists.	It is anticipated that no more area will be available for agriculture under this alternative but that zoning restrictions will be modified to allow for an increased potential of agriculture along major roads. This resulted in a <b>moderate</b> score for potential agriculture.	An increase in area available for agriculture and anticipated modifications to the zoning code allow for an increase over the No Bond Alternative in the potential for agriculture. This alternative is scored as <b>high</b> .
	Potential for Equestrian Trails	Degree (Minimum to Maximum)	The estimated potential for equestrian was based on the amount of agriculture and open space shown.	Current zoning restrictions limit the area and location of land available for equestrian trails. Because of these restrictions, it was felt that only a <b>low</b> potential for equestrian trails exists.	Although no more area will be available for equestrian trails, anticipated modifications to zoning restriction and planned development will increase access to the trails. Thus, this alternative scores as <b>high</b> .	An increase in area and access for equestrian trails exists under this alternative. Therefore, the alternative scores as having a <b>maximum</b> potential for equestrian trails.
Enhance Environmental Resource Value	Amount of Preserve or Conservation Land	Degree (Minimum to Maximum)	The desired level for conservation or preservation of land is based on the limited parcels of land identified by PBC ERM.	Current zoning restrictions and a lack of planned development result in a low potential to preserve the existing parcels, but combined with the possibility of additional constructed wetlands for wastewater reuse in the Ag Reserve results in a <b>moderate</b> degree of land being conserved or preserved.	Anticipated modifications to the zoning restrictions and a planned system of development result in a <b>moderate</b> amount of land being conserved or preserved.	Anticipated modifications to the zoning restrictions, a planned system of development, and addition of constructed wetlands for wastewater reuse result in a <b>high</b> amount of land being conserved or preserved.

**Exhibit 17**
**Basis of Alternative Scoring**

Objective	Criteria	Performance Measure (Scale)	Assumptions	Basis for Scoring		
				Status Quo	No Bond	Bond
Enhance Environmental Resource Value (cont'd.)	Potential for Connectivity	Degree (Minimum to Maximum)	Potential for connectivity describes the chance that the conservation/preserve lands will be connected. It is assumed that the greater the amount of open space, the higher the potential for connectivity.	Current zoning restrictions and the lack of planned development result in a <b>low</b> potential for connectivity.	Anticipated modifications to the zoning restrictions and a planned system of development result in a <b>moderate</b> potential for conservation/preserve lands to be connected.	An increase in open space as well as anticipated zoning modifications and planned development will allow for a <b>high</b> potential of connectivity between conservation/preserve lands.
Enhance Water Management Capability	Enhance Water Resources Area	Degree (Minimum to Maximum)	Water resources area includes all area for storage (i.e., reservoirs, water preserve areas, lakes, etc.), wellfields, and constructed wetlands.	Lesser appropriate areas exist for constructed wetlands under this alternative. A wellfield could be built but would be subject to land uses proposed along the Turnpike. Also the proposed reservoir has a poor aspect ratio. These elements combine to give a <b>moderate</b> score.	Anticipated zoning modifications and planned development increase the potential areas for wellfields and provide a desirable aspect ratio for the reservoir. Also, the constructed waterway along the L-30 Canal provides a recharge benefit to the County wellfields. This alternative scores as <b>high</b> .	Anticipated zoning modifications and planned development increase the appropriate areas for constructed wetlands and for wellfields and provide a desirable aspect ratio for the reservoir. However, this alternative does not have the recharge benefit of the constructed waterway. This alternative scores as <b>high</b> .
	Amount of Impervious Area	Percentage (3-15%)	Increased impervious area has been shown to increase the pollutant loading carried in runoff. This results in a degraded water quality. The amount of imperviousness was calculated by multiplying the percentage of developed land in the area by an imperviousness factor.	Percentage of land shown with development is approximately 36%; imperviousness factor is 20%. Percent impervious is 7%.	Percentage of land shown with development is approximately 25%; imperviousness factor is 25% because of the clustered development pattern. Percent impervious is 6%.	Percentage of land shown with development is approximately 20%; imperviousness factor is 25% due to the clustered development pattern. Percent impervious is 5%.

**Exhibit 17****Basis of Alternative Scoring**

<b>Objective</b>	<b>Criteria</b>	<b>Performance Measure (Scale)</b>	<b>Assumptions</b>	<b>Basis for Scoring</b>		
				<b>Status Quo</b>	<b>No Bond</b>	<b>Bond</b>
Create a Functional, Self-Sustaining Form of Development	External Trip Generation	Number of Trips (10,000-17,000)	A peak hour trip generation is estimated at one trip per unit.	The peak hour trip generation is 14,000. Because of current zoning restrictions, all trips will be made external to the Ag Reserve Area (Area). Therefore, the number of external trips equals <b>14,000</b> .	The peak hour trip generation is 17,000. Internal trips will account for 20% of the total trips. Therefore, the number of external trips equals <b>13,600</b> .	The peak hour trip generation is 15,000. Internal trips will account for 20% of the total trips. Therefore, the number of external trips equals <b>12,000</b> .
	Amount of Vistas	Percentage of Vistas Along Major Roads (0-100%)	Open space is defined as space not bordered by development or reservoir levee length.	The ratio of open space length to total road length along US 441 and Lyons Road is <b>45%</b> .	The ratio of open space length to total road length along US 441 and Lyons Road is <b>62%</b> .	The ratio of open space length to total road length along US 441 and Lyons Road is <b>70%</b> .
	Mix of Uses	Number of Uses (1-6)	Typical zoning codes identify six major uses that may be seen in the Area: residential, limited commercial, office, recreational, institutional, and agriculture/open space.	Because of the limited amount of commercial use and the presence of a post office, it was scored as 0.5. Residential scored 1 and agricultural scored 1 for a total score of <b>2.5</b> .	All of the identified zoning uses are permissible. Total score equals <b>6</b> .	All of the identified zoning uses are permissible. Total score equals <b>6</b> .
Enhance Open Space	Accessible Recreational Open Space	Degree (Minimum to Maximum)	Accessible recreational open space includes parks and golf courses.	Current zoning restrictions prohibit the development of recreational open space in the Area. Therefore, this alternative scores a <b>minimum</b> .	Concurrency requirements for parks will be met in the alternative, but there is only limited area for additional recreational open space. This alternative scores as <b>moderate</b> .	Concurrency requirements for parks will be met for this alternative. With the County's purchase of 2,000 to 3,000 acres, the greater undeveloped areas provide the opportunity for more recreational open space so this alternative scores <b>high</b> .

**Exhibit 17****Basis of Alternative Scoring**

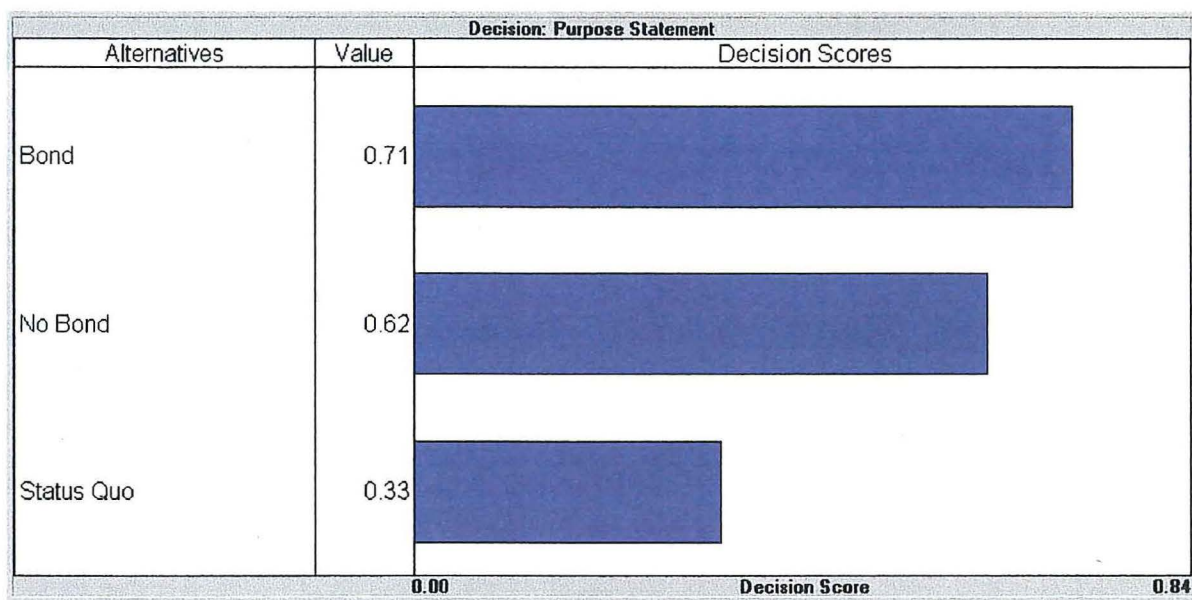
Objective	Criteria	Performance Measure (Scale)	Assumptions	Basis for Scoring		
				Status Quo	No Bond	Bond
Minimize Costs/Impacts to Taxpayers	Infrastructure and Services Costs	Degree of Cost per Person (Minimum to Maximum)	Costs for schools, parks, libraries, police, and emergency services were considered, but the costs for water, sewer, and garbage were not as they are considered to be enterprise funds and self-supporting. It was assumed that drainage costs would be the same for all alternatives.	The cost under this alternative will be <b>maximum</b> because all concurrency requirements will have to be met outside of the Area. Increases in land prices and expected number of services required because of response time and distance due to these restrictions are anticipated. Additionally, the sprawl nature of the development increases infrastructure costs.	Concurrency requirements will increase under this alternative because of the increase in the number of units allowed. However, concurrency can be met within the Area. Also, the developments are less spread out than the Status Quo alternative. The per person cost is expected to be less than the Status Quo and was scored as a <b>high</b> .	Concurrency requirements under this alternative will be close to the Status Quo alternative and can be met within the Area. Also, the developments are even less spread out than the No Bond alternative. Therefore, this alternative would cost less than the No Bond alternative and was scored as <b>moderate</b> .
	Public Land Acquisition	Total Cost (\$0 to \$101 million)	In all alternatives the SFWMD must purchase the land for the reservoir. It is expected that Palm Beach County will bear 20% of this cost in the form of increased property taxes.	<b>\$5 million</b> required to purchase the larger amounts of land needed for the reservoir. This land amount is larger because of the proposed design.	<b>\$1 million</b> required to purchase lands for the reservoir.	<b>\$101 million</b> to acquire as much public land as possible and meet reservoir land requirements.



The C subscript and superscript refer to both the objective and criteria directly connected to the alternatives.

## Results

After all of the weighting and scoring is entered into the CDP model, the results of the final scores of the three conceptual land use alternatives are displayed graphically. Exhibit 18 depicts the results of the scoring and indicates that the "Bond" alternative scored the highest with 0.71, followed by "No Bond" with a score of 0.62, and finally the "Status Quo" alternative with a score of 0.33.

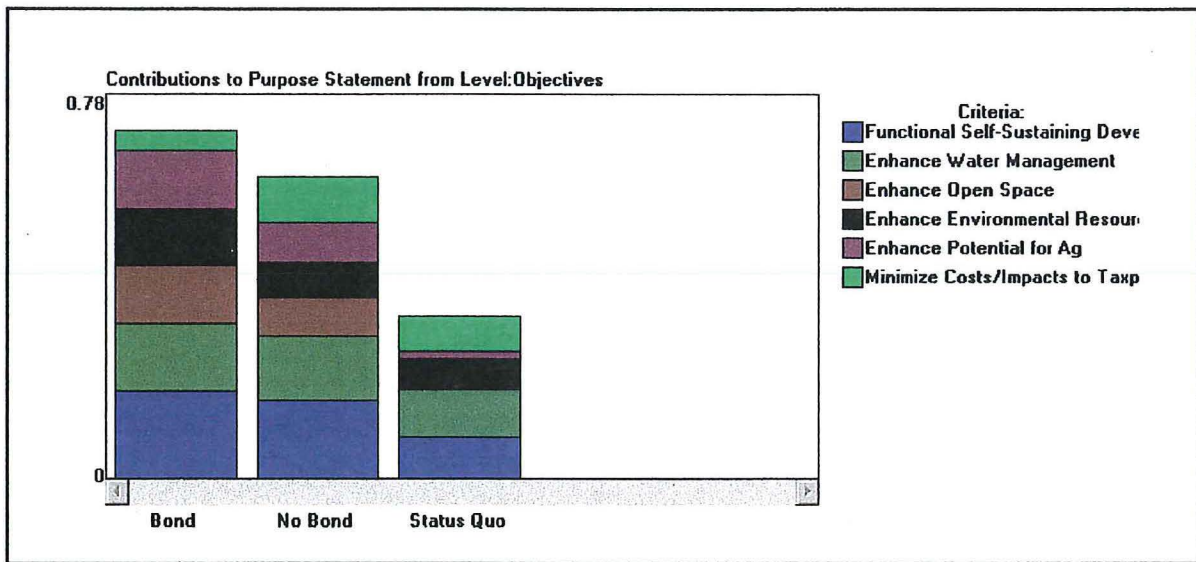


**Exhibit 18**  
Alternative Scoring

The above scores generally reflect the percentage of the objectives, according to their relative weights and scoring, that are met by the three alternatives—e.g., the "Bond" alternative meets approximately 71 percent of the objectives, while "Status Quo" only meets 33 percent.

## Contributions by Objective and Criteria

By examining the contributions of the objectives and criteria to the overall scores for the three alternatives, the reasons why the "Bond" alternative scores higher than the "No Bond" alternative can be visualized. Exhibit 19 illustrates the contributions of each of the six objectives to the overall scores of the three alternatives.



### Exhibit 19

Contribution of the Objectives to the Overall Scores

From this graphic it can be seen that the "Bond" alternative provided a marked improvement over the "No Bond" alternative in enhancing potential for agriculture, environmental resource value, and open space, while a less marginal improvement in the functionality and self-sustainability of the development was seen. Virtually no improvement was made to enhancing water management capability. Costs, on the other hand, were a much smaller contributor to the "Bond" alternative score, essentially due to the County spending \$100 million more to purchase 2,000 to 4,000 acres of land.

## Sensitivity

Because the weights of the objectives and criteria drive the scoring and contributions by criteria, a sensitivity analysis was run to see how much the weights of each objective would have to change to cause a change in the highest scoring alternative. The sensitivity analysis indicated that the only objective that is sensitive to its weight is Minimize Costs/Impacts to Taxpayers. By changing its contribution to the decision from 16 percent to 39 percent, the "No Bond" alternative would score highest. However, the "Status Quo" alternative would never score the highest no matter what the weights were on the six objectives.

Since the Cost/Impacts to Taxpayers objective appears to be the most sensitive, and because of the uncertainty related to the Infrastructure and Services Costs for the three conceptual alternatives, additional sensitivity analysis was conducted with the scoring. Currently the infrastructure and services costs of the three plans are described as "Maximum" for the "Status Quo" alternative, "High" for the "Bond" alternative, and "Moderate" for the "No Bond" alternative. Although we cannot estimate the actual total costs to the taxpayers of the infrastructure and services for these plans, we can estimate the relative difference between the three plans. Because of the higher number of car trips travelling outside of the Ag Reserve, the higher costs of land to build schools and parks, the costs to serve the more sprawling development with water and sewer, and the higher costs to provide fire rescue

the costs to serve the more sprawling development with water and sewer, and the higher costs to provide fire rescue and sheriff services from outside the Ag Reserve, "Status Quo" is by far the highest cost alternative. Providing a more functional self-sustaining form of development by clustering the neighborhoods and commercial centers, and providing the necessary commercial, institutional, and recreational uses to serve the residents in the Ag Reserve, the other two alternatives are clearly less expensive to serve. Therefore, as a test, if it is assumed that the cost to service the "No Bond" alternative was the same, and not higher, than the "Bond" alternative, the analysis still shows that the "No Bond" scores the highest against the six objectives and their relative weights.

# Conclusions

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The following summarizes the conclusions of the first phase of the Ag Reserve Masterplan:

- Input to the project was received from several different groups ranging from the BCC's establishment of the project purpose statement to individual land owners, farmers and special interest groups providing direct input to the development of the conceptual alternatives and the importance of the objectives.
- The "Status Quo" alternative was developed under existing rules, but does make some assumptions about clustering of development rights from the west side of SR 7/US 441 to the east, and that developments will be built one at a time. The "Status Quo" conceptual alternative is only one version of what could possibly be built under the current regulations.
- The "No Bond" and "Bond" conceptual alternatives were initiated with direct "hands on" input from the public, with guidance from the purpose statement and the underlying assumptions.
- All three conceptual land use alternatives were evaluated against the objectives that were developed, and were weighted by several groups.
- The "Bond" alternative met the highest percentage of the objectives. Not until the weight for the objective Cost/Impacts to Taxpayers increased from its current 16 percent to 39 percent did the "No Bond" alternative score the highest.

Therefore, unless the weighted importance of Cost/Impacts to Taxpayers is increased to at least 39 percent, the "Bond" alternative seems to satisfy the highest percentage of the objectives and hence comes closest to satisfying the purpose of this project.