# FINAL REPORT

Last Revised: April 2001

# A NEW LOOK AT AGRICULTURE

Redefining agriculture's role in our
economy, landscape, environment
& social culture

## Full Technical Document

# A Concept Paper
# to Stimulate a Dialog for Change

**A PROJECT FUNDED BY**
U.S. Department of Agriculture
Natural Resources Conservation Service;
Stewardship America, Inc.; and
South Florida Ecosystem Restoration Working Group

*prepared by*
***Craig Evans***
President
Stewardship America, Inc.

**on behalf of the Sustainable Agriculture Task Team**
**as a report to the**
**South Florida Ecosystem Restoration Working Group**

with input from over 100 ag leaders and producers

This Concept Paper explains why agriculture
is important to each one of us.

It also describes the obstacles faced by agriculture,
suggests more than 250 ways to overcome these obstacles,
and proposes 20 priority actions for immediate attention.

The original focus of the Concept Paper was on South Florida.
But it can be adapted to any state … and any county …
that helps produce our food and fiber.

Your comments and suggestions are welcomed.

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# Contents

***…very thorough … nothing left unturned … applicable to <u>all</u> Florida agriculture.***

-- Carl B. Loop, Jr.
President
Florida Farm Bureau Federation

See other reviewer comments in Appendix H.

# PART 1:

# INTRODUCTION

# How This Paper Was Developed

*A NEW LOOK AT AGRICULTURE* was created BY agricultural producers FOR agricultural producers. In meetings and workshops, ag owners and operators talked about the issues that are most important to them. These comments formed the basis for the first draft of this concept paper. The draft was then circulated to more than 100 ag owners, operators and leaders. As additional comments were received, *A New Look at Agriculture* was expanded and refined.

Next, *A New Look* was presented to the South Florida Ecosystem Restoration Working Group, a consortium of 28 federal, state and regional agencies, two Indian tribes and a representative from the governor's office. Copies were distributed to environmental organizations. Presentations were made to ag groups at the state and county levels, civic groups and the January 2000 Everglades Coalition meeting. Presentations also were made to state and county planners, staff members of the Florida Congressional delegation and the House and Senate Agriculture committees, and senior officials at the U.S. Department of Agriculture.

All of these comments were taken into consideration to ensure that the message that ag producers wanted to project came through loud and clear, but was done in a balanced way that would gain the attention of the public and other interest groups, encourage a recognition of the importance of agriculture, and inspire action by the policymakers and agencies who have the capacity – but not yet the will – to make the changes necessary to ensure a secure future for our nation's agricultural industry.

## Recommendations & Actions: Putting Them in Perspective

*This paper contains the ideas of many individuals with an interest and involvement in retaining agriculture. The statements and ideas contained in this paper do not necessarily reflect the views or recommendations of the individual agencies represented in the South Florida Ecosystem Restoration Working Group and Task Force.*

*Although agencies are given Priority Actions within the paper, these are merely suggestions. The agencies named are not required to take action; the Working Group and Task Force are offering these suggestions in a purely advisory role, and in the hopes that the agencies named will consider what roles they can play.*

*Several problems addressed in this paper are global in nature. However, that does not mean they do not have a place in the discussions about what individual agencies can do; in several cases, there are steps that can be taken – and should be considered – to help alleviate these issues.*

*It also should be noted that most of the suggested actions must be carried out in tandem with other policy actions in order to maintain a correct balance between agriculture, urban areas and the environment. No single action item will "correct" the variety of situations described in this paper; therefore, a combination of efforts and partnerships is required for sustaining agriculture and the other components of the ecosystem.*

*This paper, in addition to presenting needs and strategies, also targets specific agencies for action. A phased approach for Working Group approval (1st concepts; 2nd actions) is therefore suggested to help create more input and, therefore, more comfort and buy-in from the agencies involved. That way, disagreement over one specific item won't jeopardize support for the entire document.*

# PART 2:

# OVERVIEW

## Guiding Principles –
## A Global View

*I want to [*share*] a story about a boy – a very curious and inquisitive young boy – who had the opportunity to visit a submarine and was just fascinated at its ability to stay underwater for so long. So he asked the captain "What happens when submarines run out of fuel?" And the captain explained that they run on nuclear energy and can stay underwater for a decade or so.*

*"Well," the boy asked, "what happens when they run out of drinking water?" And the captain explained all the different distillation methods they had to make sea water potable.*

*The boy persisted. "Well, what happens when they run out of air?" And the captain told him about their oxygen tanks and so forth.*

*Finally, the boy asked. "So when do submarines come up?"*

*"That's easy," the captain said, "when we run out of food."*

*All the technology in the world can't replace food, the most fundamental of human needs. It's great to have fiber optic networks and high-definition televisions. But no one can create or use state-of-the-art innovations unless they eat their breakfast. It's as simple as that.*

-- Remarks by
Dan Glickman
Former Secretary of Agriculture, USDA
at World Ag Congress, St. Louis, MO
May 24, 1999

## Guiding Principles – A Local View

*Agriculture is part of our essential habitat, in exactly the same way that wetlands are an essential habitat for wading birds.*

-- Frank "Sonny" Williamson, Jr.
Williamson Cattle Company
Immediate past Chair, Governing Board,
South Florida Water Management District

*For agriculture to be sustainable, there must be a recognition that farming is part of a larger natural and human ecosystem, every element of which is interconnected and interdependent.*

-- John C. Folks
Environmental Administrator
Florida Department of Agriculture &
Consumer Services

*No regulation, land use plan, import duty, tariff, purchase of development right or other governmental policy will be able to sustain agriculture if it is not profitable for individual operators — and their suppliers — to remain in business.*

-- Caig Evans
President, Stewardship America, Inc.

## The underlying premise of this paper is:

***WITHOUT PROFIT, THERE WILL BE NO AGRICULTURE.***

**This paper also has three other key premises:**

1. **Agriculture, and the food and fiber it produces, is vital to our livelihood;**
2. **For this reason, losing agriculture, or allowing it to become fragmented, is not acceptable; and**
3. **Agriculture can be compatible with other land uses**.

These premises, in turn, generated five goals that must be accomplished to retain and sustain agriculture's *commodity* and *resource* values. These goals are described on the next page

# Purpose of this Paper

THE PURPOSE OF THE CONCEPT PAPER, "A New Look at Agriculture," is to take a new look at the role that agriculture plays in our economy, landscape and environment. It strives to underscore the importance of agriculture to our *personal* well-being as well as to the well-being of local and global economies.

**This paper is called "A New Look at Agriculture." That's because there is a tendency in our planning and policy making, and even our every day lives, to think of agriculture as expendable … if we even think of it at all.**

For this reason, the paper is directed particularly to policy makers in an effort to inform them of the consequences of their actions on agriculture, and to show them what actions can be taken to benefit all segments of society that rely agriculture.[1]

The concept paper describes the obstacles faced by agriculture and actions that can be taken to overcome them. These actions are grouped under two major headings:

## ECONOMICS

**Goal #1** **Improve profitability for producers**. ***Section 1*** identifies steps that can be taken to assure an economically viable agriculture for producers. These steps include developing new markets and new crops, improving trade policies, and improving consumer education

**Goal #2** **Create a conducive business climate** for the entire agriculture industry. ***Section 2*** identifies steps conducive to a strong agribusiness environment – including regulatory simplification and business inducements aimed at strengthening ag industries, suppliers and markets.

**Goal #3** **Ensure adequate infrastructure**. ***Section 3*** identifies the infrastructure needed for a viable agriculture industry – support for research, roads, airports, ports, rail lines and water management; improved labor policies; and constructive involvement in environmental restoration projects.

## ENVIRONMENT

**Goal #4** **Enhance environmental compatibility.** ***Section 4*** identifies production practices that enhance compatibility with the environment and promote private stewardship.

**Goal #5** **Integrate agriculture into the landscape.** ***Section 5*** identifies steps that federal, state and local governments can use to integrate agriculture into the landscape and retain the societal benefits that are derived from agriculture, such as water recharge, open space and wildlife habitats.

This paper also contains eight brief articles (in Part 3) that elaborate on several themes central to the future of agriculture. It is hoped this paper will provide you with a new understanding about agriculture – about how it affects you *personally*, every day and how you can become involved to help ensure a viable future for this critical industry.

*This paper originally was designed to stimulate dialogue regarding the problems and opportunities facing agriculture in Florida.*

*It can be adapted to other states and individual counties by eliminating references to the obstacles and actions that are specific to Florida and substituting them with the obstacles and actions that apply to your area.*

*Assistance on this can be obtained at:*
*http://privatelands.org/newlook/Pages/templates.htm*

# What Does this Mean to Me?

**FOOD**. IT'S A MATTER OF SURVIVAL. If you eat right, it also can be a source of great pleasure.

Like most Americans, you probably pay little attention to where your food comes from. You buy it at a store, order it at a restaurant, expect it to be safe, nutritious, affordable and ... mostly ... to be there.

*That's why the following message should concern you*.

U.S. farmers and ranchers are the world's most efficient food producers. As a result, Americans have more abundance and variety to choose from — and spend only 10.7 cents of every dollar earned on their food bill,[2] compared with over 51 cents in India, 33 cents in Mexico, 21 cents in Spain and 18 cents in Japan.[3] That gives us more money to spend on houses, cars, college educations and the things that bring us pleasure.

Moreover, the average U.S. farmer feeds almost 130 people every day.[4] That means that, for every farmer, 130 other people can be doctors, lawyers, teachers, business managers, entrepreneurs, artists and students.

But we are losing our farmers and ranchers. Rapidly. In Florida alone, almost 150,000 acres of productive agricultural land are converted to another use each year. That's over 17 acres an hour — or one acre every three and a half minutes.[5] & [6] As a result, we are relying more and more on food from other countries. From countries where, in many cases, our own State Department warns us to not eat the produce when we travel there.[7]

*We eat 3 times a day*, thanks to the farmers who grow our food. Yet our food could become more expensive and less safe in the very near future, because of current government attitudes toward our farmers and ranchers. As populations skyrocket in the developing, high birth nations that currently fill our supermarkets with cheap imports — and we lose our farms and ranches — we will be competing for the first time with the world's hungry billions for every meal we eat.

*We eat 3 times a day*. Yet we forget where our food comes from, because we are blessed with the world's most sophisticated food production and distribution system.

The world's population passed the 6 billion mark in October 1999.[8] It is projected to grow to 9 billion in the next 30 years, then begin to level off. That's 3 billion new mouths to feed! Yet there are currently huge unmet nutritional needs in much of the world. A statement prepared for the 1996 World Food Summit reports that 800 million people are currently underfed — and 2 billion are insufficiently

nourished.[9] That's almost *half* of the world's population! (In fact, in 1996, it *was* half of the world's population.) The United Nations Food and Agricultural Organization (FAO) also reports that arable land (that which is fit for cultivation) is diminishing at a rate of 10% per year in some developing nations because of soil erosion and spreading water scarcity.[10] & [11]

According to the FAO, current food production will have to DOUBLE just to maintain current rates of malnutrition in the world. To adequately feed tomorrow's people, it is estimated that current food production will have to increase by 174 percent — almost THREE TIMES![12]

These changes will have to occur in the span of just one generation — at a time when we are losing our farms ... and our farmers, who know how to grow safe, affordable, abundant food. At a time when the rest of the world is losing the land it needs to farm.

As one environmental leader recently noted: "Who is going to worry about a clean environment if there is no food on the table?"[13]

We have taken our food — and our farmers and ranchers — for granted far too long. This is more than a business problem or tax problem or regulatory problem for a few farmers or ranchers. *We eat 3 times a day*! The loss of our farms and ranches is a matter affecting our national interests. It also could very well become a matter of survival.

Agriculture is more than just another business venture — it is our food supply. It is more than just a value that enhances our quality of life — it is our life support system.[14] *Agriculture is the cornerstone of our civilization and society*.

Unfortunately, our government — at all levels — is driving farmers and ranchers out of business. Not on purpose. More by default. The effect, however, is the same. Every day, government policies, estate taxes and regulations whittle away at our farms. Profits disappear, competition for land and water intensifies, families are forced to sell land to satisfy estate taxes, farms are taken out of production to protect wildlife habitats and urban sprawl devours fields.

That's why each of us needs to:

- Help others to understand and appreciate importance of agriculture;
- Identify government policies that are working against agriculture; and
- Do everything we can to change these policies – and put new ones in place that will promote and encourage a viable agricultural industry.

# The Many Values of Agriculture

SOME KEY ATTRIBUTES OF AGRICULTURE INCLUDE:

- **Economics:** Agriculture is a major component of the U.S. economy. The direct input to the national economy from the agricultural sector averages $90 billion annually. Jobs in agriculture and related industries account for 18 percent of all U.S. civilian employment. Overall, the food and fiber sector accounts for 15 percent of the Gross Domestic Product. In addition, the agricultural sector regularly generates a positive trade balance in excess of $11 billion.[15]

  Agriculture is important to the economies of many states as well. For example, agriculture is Florida's second most important industry, producing $18 billion in economic value each year.[16] It is the foundation for all other contributing economic segments — such as food wholesaling and retailing — that add another $35 billion to Florida's economy.[17] It also accounts for more than 500,000 jobs and generates a payroll of $10 billion per year.[18]

- **Open space:** About 402 million acres of the nation's total land area of 1,893 million acres are in federal ownership. Of the remaining land, almost 90% is devoted to agriculture and forestry. The largest group of private landowners is America's ranchers, who control 526 million acres of rangeland and pastureland -- 35% of all the non-federal land in the U.S. Second are farmers, who control 377 million acres plus 33 million acres enrolled in the USDA/NRCS's Conservation Reserve Program -- 27% of non-federal land. Third are timber companies and private woodland owners, who control 407 million acres -- also 27% of non-federal land. Together, these three groups of private landowners control 1,343 million acres -- 71% of the total U.S. land area.[19]

  Almost 8 million acres of Florida's total land area of 35 million acres is in public ownership. Of the remainder, 66% is devoted to agriculture and forestry.[20] The owners of these lands are the major stockholders in the state's future, since their lands include:

  - *every acre to be used for future development,*
  - *every acre to be protected, and*
  - *every acre to remain in agriculture & forestry*

These are the lands that will be needed to sustain the state's water resources, wildlife, open space and environment. They are the lands needed for future food and fiber production. And they are the lands that will provide the services for Florida's built environment.

- **Wildlife habitat/habitats for threatened and endangered species**: 75 percent of the nation's threatened and endangered plant and animal species are found on private agriculture and forestry lands. Some endangered plant species in Florida – Lakla's mint, for example -- are found only on private agricultural lands.[21]

**Agriculture offers many other values to society as well, including:**

- buffers between natural areas and urban areas
- a positive cash flow from ad valorem taxes due to ag's low demand for services
- an economically viable growth management tool that offers an alternative to public land purchases and the current tendency to develop every square foot of land near our urban areas[22], and
- traditional rural character; culture & values.

**When carried out with environmental compatibility in mind, agriculture also can provide for:**

- preservation of wetlands
- water storage
- ground water recharge
- water filtration
- flood control
- purification of air
- carbon sequestering[23]
- generation of oxygen
- soil creation, conservation and health
- decomposition of wastes
- forests and woodlands
- ambient healthful living conditions
- a healthful quality of life

Hence, agriculture produces not only our food and fiber and horticultural products, but can accommodate many important resource values as well.

Please see Appendix A for further discussion of how agriculture is unique as a land use because it has both a *commodity* value and *resource* value.

## How Would You Answer This Question?

*If there was an industry that was a major economic generator for your state,*
*an important part of the answer for future food needs,*
*a buffer between preserved natural systems and urban areas,*
*an integral part of a sustainable landscape,*
*and finally,*
*an industry adaptable to the environment*

*— what would you do to ensure its strength and continued presence?*

— Frank “Sonny” Williamson, Jr.
Williamson Cattle Company

*You have only to visualize a [state] whose agriculture is weak and struggling, ever diminishing in scope, vanishing here and there, leaving only houses packed together and rubbing raw against fragmented but "preserved" natural areas, and you will picture a nightmare we must avoid. Agriculture provides areas for open space, aquifer recharge, and wildlife habitat. It is that essential buffer between intense urban uses and preserved wetlands and natural areas.*

**But more than that ...**

*Our vision of ... agriculture must account for the coming global imperative to increase food production to meet the demands of a rapidly expanding population. It will mean that agriculture production must take center stage for protection in public policy, much as wetlands and remaining pristine uplands do now. It suggests that even here in the U.S. cheap food prices will fade into memory as scarcity and market forces adjust those prices upward.*

— Frank Williamson, Jr.

***We can't wait. The time for action is now ... before we lose more of our farms, or the skill of our farmers who know how to grow safe, affordable, abundant food.***

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This paper is designed to be a blueprint for action. It is still a draft (since its concepts are ever-evolving), so you still have an opportunity to influence its outcome.

*Your input is important … so we can craft a workable plan … for agriculture … for the environment … and the future of each county in the nation that produces our food and fiber.*

Information on how you can share ideas and suggestions – and obtain updated copies of "A New Look at Agriculture" – is given on page iv. You also can download copies at: http://privatelands.org/newlook/Pages/downloads.html

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# PART 3:

# CONTEXT

# National Themes

The focus of the concept paper is on South Florida. But it contains many topics that reach far beyond its intended area of focus. Comments from producers in other states have shown that many of the same topics resonate with ranchers and growers and the owners of woodlands and forests across the U.S.

This was underscored when results became available from five regional Private Land Conservation Forums, held in October 1999 by the U.S. Department of Agriculture (USDA) to discuss conservation issues affecting America's farm, forest and ranch lands. The forums were held in Oregon, Colorado, California, New York and Georgia. Each forum, hosted by a senior USDA official, consisted of an open dialogue with seven to eight panelists representing a cross-section of interests in private land conservation. Public comments from the audience followed the panelists.

Nearly 200 public statements were made at the forums. The following topics were raised time and time again.

Please note: the emphasis of the forums was on CONSERVATION, not economics or other issues. Hence, comments tended to focus on conservation. Nevertheless, comments about profits and regulations still figured prominently. These comments provide a useful yardstick to show which of the issues presented in this paper are specific to South Florida and which have national significance.

*"The American landscape is largely in private*

*owner*
*ship ..*
*the*
*future*
*of*
*Ameri*
*can*
*conser*
*vation*
*is*
*going*
*to be*
*deter*
*mined*

*by the conservation practices, the land ethics of the people that own and operate this private land."*

– **Jim Lyons, Undersecretary, Natural Resources and Environment, USDA**

The continued struggle to protect natural resources in the new millennium was a concern of many speakers at the Private Land Conservation Forums. Economic strains, including the pressure to sell land for development, were most often cited as the reason for increased fragmentation of forest and farm lands. Uncontrolled growth, wildlife over-population, and public land acquisitions – carried out without consideration for adequate staff resources and ongoing funding for proper management – also were cited as deleterious impacts on land preservation and water quality.

**Tax Relief**. Panelists and respondents at the forums repeatedly stated the importance of tax relief. While tax law reform was considered necessary to provide relief for private landowners who are practicing good conservation, many saw the need for tax relief in terms of the survival of family farms and small private forests. Examples include: elimination of capital gains and inheritance taxes so that land can be more easily maintained from generation to generation, tax exemptions for conservation payments, and tax credits for applying conservation practices.

*"Tax incentives should be used to encourage wise stewardship and permanent protection of private land ... income, estate and property tax incentives can make it easier for private landowners to choose conservation. These incentives can work*

*at federal, state, and local levels."*

– **Jim Howe, Director of Conservation Programs, Central and Western New York Chapter of The Nature Conservancy**

**Outreach to Landowners**. In general, participants believed that incentives should be strengthened to provide more opportunities for limited resource farmers. Some believed USDA's conservation programs should focus on family and small farms. Others feel rapidly changing patterns of land ownership and land use demand implementation of new and innovative programs to reach and address needs and concerns in growing rural communities. It was strongly recommended that the Secretary of Agriculture fully implement recommendations from the Civil Rights Action Team and the Commission on Small Farms to assist the under-served in achieving conservation on their land. Linking conservation with profits also was mentioned.

*"Outreach needs to be expanded because it helps establish two-way communication, builds trust where trust is weak and informs tribal people about government programs."*

– **Bobby Brunoe, Confederated Tribes of Warm Springs, General Manager, Natural Resources**

**Conservation Assistance**. Participants expressed concern about the lack of funding for existing conservation programs. The Environmental Quality Incentives Program, Wetland Reserve Program, Forestry Incentives Program, Stewardship Incentives Program, Conservation Reserve Program, and the Farmland Protection Program were specifically mentioned on numerous occasions. In addition, there was strong support for additional funding for technical assistance and research to support these programs and to carry out basic conservation activities at the field level.

*"(Technical support) is critically important and must be expanded as we think about improved conservation measures on the private lands in the next millennium."*

– **Garth Youngberg, Executive Director, Henry A. Wallace Institute for Alternative Agriculture**

*"I respectfully urge Secretary Glickman and the USDA to enhance the federal funding streams for both technical and financial assistance as they may be provided through these various programs."*

– **Rick Zimmerman, Deputy Commissioner, NY Department of Agriculture and Markets**

Some public comments indicate the direct relationship between conservation and

economics. Poor land management, including over-harvest and conversion to non-agricultural lands, results from the pressures of economics. A primary concern for many is providing private landowners with enough financial incentive to ensure some financial security so they can participate in a long term, meaningful way in conservation programs.

Most speakers made it clear that their ideas about conservation implementation are solutions to specific barriers created by current policies. Some speakers note additional barriers, including weak commodity prices, the disconnect in the public and policymaking consciousness between environment-based quality of life concerns and the role of private landowners as stewards, and the possibility that significant change will not occur until a crisis captures the public and political consciousness, as the Cuyahoga River fire did with respect to water pollution in the 1970s.

> "*As caretakers of the private lands, we know how to grow healthy crops, tall timber and raise livestock better than any nation on earth. However, society is demanding that we produce more than food and fiber. We are being asked to filter water as it enters our land and clean it before it reaches others who use it. We are being relied on to produce open space and viewscapes. Global warming research points to agriculture and timber as an ideal way to sequester carbon, offsetting that produced by industry and high population areas. We are also being asked to raise and harbor the fish and wildlife for everyone to enjoy. This is okay with us Mr. Secretary. We are eager to do our part to help society by producing more than just food and fiber. But we desperately need your help. We can't sell enough food and fiber now to keep the family farm and ranch alive so how do we offset the heavy costs of these other products? We need society to partner with us in meeting these goals."*
> – **Speaker from Resource Conservation District, Ames, Iowa** (#133)

**Stewardship Payments**. Profitability was considered key to conservation. It was believed that land stewardship would suffer given the present economic crisis in rural America. Most respondents support conservation. One theme that pervaded comments on private stewardship is that private landowners should not be made to bear the financial burden of conservation practices that the public demands and benefits from. The issue is how to make conservation fair and financially viable for private landowners. Support was expressed for use of stewardship payments as a means of providing income assistance to producers for the environmental

benefits they produce rather than the traditional price support and disaster payments. Such payments were considered an important part of the "green box" discussions now taking place as a part of the World Trade Organization negations. Strong support was expressed for legislation authorizing payments coupled with "safe harbor" provisions for those that practice good conservation.

> *"What goes on private lands for the most part is based upon economics, whether it be forestry or agriculture or recreation or other opportunities. (The) landowners themselves are the ones to get the job done. These programs are extremely important and helpful and we need to have them continue to be funded."*
> – **Joe Gergela, President, NY State Association of Conservation Districts and Executive Director, Long Island Farm Bureau**

**Farmland/Forestland Protection**. Participants expressed concern about the conversion of farmland and forestland to nonfarm uses, and the associated environmental and social consequences. Weak agricultural markets and ill-conceived federal programs, several participant claimed, have made the small farmer an endangered species, and led to fragmentation and over-development of the rural landscape. Tax law reform was cited as a major part of the solution to reduce such conversion.

> *"You can't argue about its [land] management if it's got houses planted on it."*
> – **Daniel Hall, Director, Forest Biodiversity Program, American Lands**

**Conservation Delivery**. There was a consensus that conservation partnerships, coordinated through a locally led conservation process, were critical in achieving conservation on private land. However, there were differences of opinion on the amount of regulation needed relative to voluntary efforts. There was a strong belief by most, however, that increased regulation would lead to extinction of the small family farm.

> *"Drastic cuts in funding and personnel have rendered technical assistance to farmers and ranchers in many states practically unavailable at a time when conservation needs are critical."*
> – **Bob Drake, Director, Texas and Southwestern Cattle Raisers Association; National Chair, Grazing Lands Conservation Initiative**

**Resource Protection**. Considerable public demand for natural resource protection

was expressed. Forum participants emphasized repeatedly water quality and wildlife habitat enhancement. Concern was expressed on numerous occasions that the U.S. Department of Agriculture was not providing adequate assistance on private grazing lands. Forest health on private forestland was raised as a concern.

*"The Farm Bill says one thing and that sets a whole array of regulations ... yet you [USDA] advocate locally led conservation efforts and sometimes the two really collide. We are faced with two sets of priorities that don't always match."*
– **Jim Toland, RC&D, California**

**Urban Conservation**. Forum participants were critical of USDA's lack of conservation assistance to urban landowners. USDA was perceived as delivering crop subsidies and food programs with little recognition about its conservation efforts. A few recognized the interconnectedness of rural and urban areas.

*"I believe urban landowners should be encouraged to share responsibility for meeting overall public goals for habitat recovery and water quality."*
– **Clair Clock, Dairy Farmer, Biologist, Conservation Tour Leader**

**Private Property Rights**. Concern for the protection of private property rights and the taking of those rights for conservation on private land were expressed. Most participants believed that the private landowner should take responsibility for land stewardship with minimal federal government involvement and regulation.

*"It has been said numerous times that if [private landowners] don't have enough economic viability, we're not going to be there to conserve the resources."*
– **Steve Stinson, Tree Farmer, Lewis County, Washington**

**Collaboration**. Both panelists and respondents agree that collaboration is important for conservation of private lands, and needs to occur between all levels of government, tribes, local organizations and landowners. A common theme is lack of consistency, particularly among federal agencies, programs and regulations. Some advocate USDA dialogue with other agencies. One person recommends interagency barriers to collaboration be removed as soon as possible. Some respondents had specific recommendations for collaboration.

*"The turf issue should be irrelevant or transparent to people. The people want answers, they want help, they want support."*
– **Milan Rewerts, Director of Cooperative Extension, Colorado**

**State University**

A wealth of additional information is available on the Private Land Conservation Forums via the Internet:

- "Executive Summary of Private Land Conservation Forums: Analysis of Verbal Content" – http://www.nhq.nrcs.usda.gov/CCS/Forum_al.html.
- "Analysis of Verbal and Written Comment: Private Land Conservation Forums and the National Conservation Summit" – http://www.nhq.nrcs.usda.gov/CCS/anritvrb.html . Contains quotes from participants on each of the specific themes listed above.
- "Executive Summary of the Atlanta Private Land Conservation Forum: Analysis of Verbal Content" – http://www.nhq.nrcs.usda.gov/CCS/Forum_At.html.
- "Executive Summary of the Denver Private Land Conservation Forum: Analysis of Verbal Content" – http://www.nhq.nrcs.usda.gov/CCS/Forum_De.html.
- "Executive Summary of the Portland Private Land Conservation Forum: Analysis of Verbal Content" – http://www.nhq.nrcs.usda.gov/CCS/Forum_Po.html.
- "Executive Summary of the Sacramento Private Land Conservation Forum: Analysis of Verbal Content" – http://www.nhq.nrcs.usda.gov/CCS/Forum_Sa.html
- "Executive Summary of the Syracuse Private Land Conservation Forum: Analysis of Verbal Comment" – http://www.nhq.nrcs.usda.gov/CCS/Forum_Sy.html
- "Analysis of Verbal Comments: USDA National Summit on Private Land Conservation, Ames, Iowa, December 7, 1999" – http://nhq.nrsc.usda.gov/CCS/analverb.html.

# Key to Acronyms

Here are the key players who will carry out priority actions described in the following pages. Please use this table to help decipher their acronyms.

| ACRONYM | NAME |
|---|---|
| **ARS** | U.S Department of Agriculture, Agricultural Research Service |
| **CES** | Florida Center for Environmental Studies |
| **DCA** | Florida Department of Community Affairs |
| **DEP** | Florida Department of Environmental Protection |
| **DOACS** | Florida Department of Agriculture and Consumer Services |
| **DOE** | Florida Department of Education |
| **DOL** | Florida Department of Labor |
| **EPA** | U.S. Environmental Protection Agency |
| **ERS** | U.S Department of Agriculture, Economic Research Service |
| **FAO** | United Nations Food and Agriculture Organization |
| **FDOT** | Florida Department of Transportation |
| **FFBF** | Florida Farm Bureau Federation |
| **FWC** | Florida Fish and Wildlife Conservation Commission |
| **HRS** | Florida Department of Health & Rehabilitative Services |
| **IFAS** | University of Florida, Institute of Food and Agricultural Sciences |
| **INS** | U.S. Immigration and Naturalization Service |
| **IRS** | Internal Revenue Service |
| **IWAC** | Invasive Weed Awareness Coalition |
| **NEWTT** | South Florida Ecosystem Restoration Task Force's Noxious Exotic Weed Task Team |
| **NRCS** | U.S Department of Agriculture, Natural Resources Conservation Service |

| | |
|---|---|
| **OTTED** | Governor's Office on Tourism, Trade and Economic Development |
| **SFERTF** | South Florida Ecosystem Restoration Task Force |
| **SFERWG** | South Florida Ecosystem Restoration Working Group |
| **USACOE** | U.S. Army Corps of Engineers |
| **USDA** | U.S Department of Agriculture |
| **USFWS** | U.S. Fish & Wildlife Service |
| **WMDs** | Water Management Districts |

**OTHER ACRONYMS**

| **ACRONYM** | **NAME** |
|---|---|
| **BMPS** | BEST MANAGEMENT PRACTICES |
| **CERP** | COMPREHENSIVE EVERGLADES RESTORATION PLAN |
| **CRP** | USDA CONSERVATION RESERVE PROGRAM |
| **EQIP** | USDA ENVIRONMENTAL QUALITY INCENTIVES PROGRAM |
| **GATT** | URUGUAY ROUND OF GLOBAL AGRICULTURAL TRADE & TARIFF AGREEMENTS |
| **NAFTA** | NORTH AMERICAN FREE TRADE AGREEMENT |
| **WRP** | USDA WETLAND RESERVE PROGRAM |

# DEFINITIONS

SOME TERMS USED IN THE NEXT SECTION OF THIS REPORT MAY NOT BE FAMILIAR TO THE AVERAGE READER, ESPECIALLY IN THE AGRICULTURAL CONTEXT IN WHICH THEY ARE USED. THE FOLLOWING TERMS ARE DEFINED BELOW:

"MINOR CROP"
"VERTICAL INTEGRATION"
"CONSOLIDATION"
"VERTICAL PRICING"
"VERTICAL PRICING INDICES"
"INFRASTRUCTURE"

**"MINOR CROP"**- A CROP PRODUCED ON LESS THAN 300,000 ACRES NATIONWIDE. BY THIS DEFINITION, ALL CROPS OTHER THAN THE FOLLOWING ARE MINOR CROPS: ALMOND, APPLE, BARLEY, CANOLA, CARROT, CORN (FIELD AND SWEET), COTTON, GRAPES, HAY (ALFALFA AND OTHER), LETTUCE, OATS, ORANGES, PEANUTS, PECANS, POPCORN, RICE, RYE, SNAP BEANS, SORGHUM, SOYBEAN, SUGARCANE, SUGARBEETS, TOBACCO, TOMATOES, SUNFLOWER AND WHEAT.

SOURCE: FOOD QUALITY PROTECTION ACT OF 1996, H. R. 1627
http://www.ecologic-ipm.com/minorcp_2.html

*AN ALTERNATIVE DEFINITION FROM THE U. S. HOUSE COMMITTEE ON AGRICULTURE:*

**"MINOR CROPS"** - CROPS THAT MAY BE HIGH IN VALUE BUT THAT ARE NOT WIDELY GROWN. MANY FRUITS, VEGETABLES, AND TREE NUTS COME UNDER THIS DEFINITION.

http://agriculture.house.gov/glossary/minor_crops.htm

**"VERTICAL INTEGRATION"** - THE INTEGRATING OF SUCCESSIVE STAGES OF THE PRODUCTION AND MARKETING FUNCTIONS UNDER THE OWNERSHIP OR CONTROL OF A SINGLE MANAGEMENT ORGANIZATION.

SOURCE: U. S. HOUSE COMMITTEE ON AGRICULTURE
http://agriculture.house.gov/glossary/vertical_integration.htm

**"CONSOLIDATION"** - CONTINUING CONCENTRATION OF OWNERSHIP AND CONTROL OF THE FOOD SYSTEM.

SOURCE: WILLIAM HEFFERNAN, DEPARTMENT OF RURAL SOCIOLOGY, UNIVERSITY OF MISSOURI-COLUMBIA, CONSOLIDATION IN THE FOOD AND AGRICULTURE SYSTEM, REPORT TO THE NATIONAL FARMERS' UNION, FEBRUARY, 1999. http://www.greens.org/s-r/gga/heffernan.html

*AN ALTERNATIVE DEFINITION FROM THE U. S. HOUSE COMMITTEE ON AGRICULTURE:*

IN AGRICULTURE AND OTHER ECONOMIC SECTORS, **CONSOLIDATION** USUALLY IS A REFERENCE TO THE TREND FROM NUMEROUS SMALLER-SIZED OPERATIONS TOWARD FEWER AND LARGER ONES. CONSOLIDATION CAN LEAD TO HIGHER CONCENTRATION.
http://agriculture.house.gov/glossary/consolidation.htm

**"VERTICAL PRICING"** - IN GENERAL, VERTICAL PRICING REFERS TO THE TRANSMISSION OF PRICES BETWEEN LEVELS IN THE MARKETING CHAIN. A RECENT COMPREHENSIVE GRASSROOTS ASSESSMENT OF RESEARCH AND EDUCATIONAL PRIORITIES IDENTIFIED "LACK OF MARKETING ALTERNATIVES" AS THE KEY CONSTRAINT TO MORE SUSTAINABLE AGRICULTURAL SYSTEMS IN THE SOUTHERN UNITED STATES

(WORSTELL, J.V. 1995. "SOUTHERN FUTURES: OPPORTUNITIES FOR SUSTAINABLE AGRICULTURAL SYSTEMS," SPECIAL REPORT, DELTA LAND AND COMMUNITY, INC. ALMYRA, ARKANSAS.)
SEE: JOHN E. IKERD, "THE ROLE OF MARKETING IN SUSTAINABLE AGRICULTURE" http://www.ssu.missouri.edu/faculty/jikerd/papers/stl-mkt.htm

SEE ALSO THE U. S. DEPARTMENT OF AGRICULTURE'S BRIEFING ROOM, FOOD MARKETING AND PRICE SPREADS:
HOW ERS MEASURES MARKETING AND PRICE SPREADS
http://www.ers.usda.gov/briefing/foodpricespreads/how/

**"VERTICAL PRICING INDICES"** - A VERTICAL PRICING INDEX GENERALLY TAKES THE CONSUMER EXPENDITURE ON FOOD AND CALCULATES THE FARM VALUE OF FOOD AS A PERCENT OF CONSUMER EXPENDITURES. SEE THE LINK BELOW TO A USDA WEB-SITE SHOWING CHANGE IN FARM SHARE OF CONSUMER FOOD EXPENDITURES OVER TIME.
http://www.ers.usda.gov/briefing/foodpricespreads/bill/table1.htm

**"INFRASTRUCTURE"** LONG DEFINITION - "IN ORDER TO PRESERVE AND PROTECT AGRICULTURE ... IT IS NECESSARY TO ENSURE THAT THERE IS SUFFICIENT AMOUNT OF FARM LAND IN AN AREA TO SUPPORT NEARBY PRODUCERS. EVERY NON-FARM USE IN AN EXCLUSIVE FARM USE ZONE TAKES SOME LAND OUT OF PRODUCTION. AS LAND GOES OUT OF PRODUCTION IT BECOMES MORE DIFFICULT FOR THE INFRASTRUCTURE TO STAY IN PLACE. AS THE INFRASTRUCTURE BEGINS TO CRUMBLE IT NARROWS THE OPTIONS FOR THE PRODUCTION ON THE AGRICULTURE LAND. THAT IN TURN INCREASES PRESSURE FOR NON-FARM DEVELOPMENT. AS THE PRESSURE GROWS FOR NON-FARM DEVELOPMENT IT BECOMES MORE AND MORE DIFFICULT TO PRESERVE AND PROTECT AGRICULTURE IN THAT AREA."

SOURCE AGRICULTURAL INFRASTRUCTURE PROJECT, OREGON FARM BUREAU
http://www2.bus.orst.edu/students/B/BASFL033/website/

**"INFRASTRUCTURE"** SHORT DEFINITION - THOSE NON-AGRICULTURAL ACTIVITIES WHICH SUPPORT AGRICULTURE, DIRECTLY OR INDIRECTLY, EITHER BY SUPPLYING INPUTS TO AGRICULTURAL PRODUCERS OR BY PROVIDING MARKETS FOR

AGRICULTURAL COMMODITIES.

*– THANKS IS DUE TO DICK MARCH, ECONOMIST FOR SOUTH FLORIDA WATER MANAGEMENT DISTRICT, WEST PALM BEACH, FLORIDA, FOR OBTAINING THE INFORMATION FOR THESE DEFINITIONS. DICK ALSO SUGGESTS THE FOLLOWING WEBSITE – "SUSTAINABLE AGRICULTURE: DEFINITIONS AND TERMS" FROM THE NATIONAL AGRICULTURAL LIBRARY – FOR DEFINITIONS OF OTHER TERMS OFTEN USED IN AN AGRICULTURAL CONTEXT:*
http://www.nal.usda.gov/afsic/AFSIC_pubs/srb9902.htm

# *PROPOSED COURSE OF ACTION*

*IT IS RECOMMENDED THAT YOU SET UP ONE-DAY FORUMS TO DISCUSS EACH OF THE FIVE CHALLENGES FACING AGRICULTURE – IMPROVING PROFITABILITY, CREATING A CONDUCIVE BUSINESS CLIMATE, PROVIDING ADEQUATE INFRASTRUCTURE, SUPPORTING AND ENCOURAGING ENVIRONMENTAL COMPATIBILITY, AND INTEGRATING AGRICULTURE INTO THE LANDSCAPE – USING THE FIVE SECTIONS OF THIS REPORT AS THE BASIS FOR THESE DISCUSSIONS.*

*COMPLETE INSTRUCTIONS ON HOW YOU CAN DO THIS CAN BE FOUND ON THE PROJECT WEBSITE AT* http://us-farm.com/templates.html

*THE FORUMS SHOULD FOCUS, FIRST, ON CONCEPTS AND, SECOND, ON ACTIONS. A PROPOSED FORMAT IS AS FOLLOWS:*

1. *INVITE POLICY MAKERS, AG PRODUCERS, AG LEADERS, AND REPRESENTATIVES OF KEY GOVERNMENT AGENCIES TO GIVE FORMAL PRESENTATIONS, OFFERING INSIGHTS, COMMENTS AND SUGGESTIONS FOR ACTIONS, BASED ON THE SECTION OF THE REPORT UNDER DISCUSSION.*

1. *HOLD A FACILITATED DISCUSSION BETWEEN THE PRESENTERS AND INVITED PARTICIPANTS TO CONSIDER AND REACH CONSENSUS ON:*

   - *STATEMENTS DESCRIBING OBSTACLES;*
   - *CONCEPTS UNDERLYING THE PRIORITY ACTIONS;*
   - *STEPS OUTLINED UNDER EACH PRIORITY ACTION;*
   - *AGENCIES AND PRIVATE GROUPS RESPONSIBLE FOR CARRYING OUT PRIORITY ACTIONS.*

2. *MAKE LIST OF SUPPORTING DOCUMENTATION THAT IS NEEDED AS A SUPPLEMENT TO THE STATEMENTS OF OBSTACLES AND PRIORITY ACTIONS.*

3. *REFINE ACTION PLAN – MEASURABLE OUTCOMES, WHO IS RESPONSIBLE, WHAT WILL BE DONE BY WHAT DATE.*

4. *APPOINT A COMMITTEE TO OVERSEE PROGRESS ON IMPLEMENTING ACTIONS AND MAKE QUARTERLY REPORT BACK TO THE PARTICIPANTS.*

# *PART 4:*

## *CONDITIONS, ACTIONS, BENEFITS*

# *1The First Component for Success: Producer Profitability*

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**GUIDING PRINCIPLE:**

*Without profit, there will be no agriculture.*

**POINT TO KEEP IN MIND:**

*"An old family friend who was in the sugar business for over 45 years once told me that he was not in the business of growing and harvesting sugar cane, or in the business of producing and refining sugar, but in the business of making a profit."*

– Anonymous

**ANOTHER POINT:**

*Our young people are providing a good indicator of trouble ahead: Very few are choosing to enter agriculture. The capital investment is too high, the work too hard, the risk too high, the business and political climate too unstable, the regulations too many and too complex, international markets too uncertain, and the probability of consistently making a profit too low. Thus, agriculture is not attractive when compared with other career opportunities young people can choose.*

**CHALLENGE:**

***Improve profitability for producers***.

## CURRENT CONDITION:

Here are the major obstacles that stand in the way of producer profitability.

*Note:* Participants need to decide which obstacles are due to functioning of the free market system and which of the remainder are due to factors within the purview of the participants to address. To assist in making this determination, obstacles that result from free market forces are indicated by a bracketed notation: [Free market factor].[24] It is important to read all obstacles, however, to fully understand the conditions under which agriculture operates, so that actions to address one issue do not exacerbate other problems or create new obstacles.

1. **Agriculture is a price taker, not a price maker**. Increases in operating costs — caused, for example, by governmental policies and regulations — cannot be passed on to the consumer, as occurs with other industries, but must come out of the bottom line. [Free market factor]

2. **Very little of the retail food dollar goes to the producer**. Here is a sample of Florida agricultural products, showing the price the producer receives compared with the retail price paid by the consumer.[25] [Free market factor]

| Item | Farmer Receives | Consumer Pays | Percent Received by Farmer |
|---|---|---|---|
| Grapefruit | $ 0.04 | $ 1.27 | 3% |
| Peanuts - 16 oz. | $ 0.34 | $ 2.09 | 16% |
| Honey Bear - 12 oz. | $ 0.38 | $ 1.99 | 19% |
| Sugar - 2 lb. | $ 0.36 | $ 0.98 | 37% |
| Strawberries - quart | $ 0.65 | $ 1.59 | 41% |
| Plant - 4 inches | $ 0.85 | $ 1.78 | 48% |
| Potato Chips | $ 0.03 | $ 0.55 | 5% |
| Baby Carrots - 1 lb. | $ 0.20 | $ 1.25 | 16% |
| New Red Potatoes - 5 lb | $ 0.65 | $2.50 | 26% |
| Crook Neck Yellow Squash - l lb | $ 0.25 | $1.00 | 25% |
| Valencia Oranges - l lb | $ 0.23 | $ 1.62 | 14% |
| Beef - 1 lb | $ 0.68[26] | $ 4.50 | 15% |
| **TOTAL** | **$ 4.66** | **$ 21.12** | **22%** |

1. **Agriculture is a risky business.** Weather, disease, pests, overproduction and

foreign dumping all can turn a promising crop into a loss. Even the day a product reaches market can make the difference between a profit or loss. Virtually none of these variables can be accurately predicted at the beginning of a growing season. [Free market factor]

2. **For most producers, there is no "safety net."** Florida produces 253 different agricultural commodities, of which only eight — milk, sugar, tobacco, peanuts, cotton, feed corn, soybeans and feed grains — qualify for any type of price support or loan guarantee.[27] For the rest, the market sets their price, and that price is constantly fluctuating.

   Please note: The intent here is not to advocate for price supports,[28] but to emphasize that the majority of Florida farmers and ranchers are *not* subsidized or paid "not to grow" some crops, a common misconception. Instead, they are subject to all the vagaries of the global market place. Which leads to the next obstacle ...

3. **Foreign competition has seriously cut into profits** and, for some sectors of the agricultural industry, eliminated them. [Free market factor]

4. **Foreign producers are not held to the same standards as American producers.** Public policies allow foreign producers to sell products in the American marketplace and compete head to head on price, even though these producers do not have to abide by American food safety laws, labor laws, environmental regulations or restrictions on chemical use, including the use of chemicals that have been banned in the U.S. because of human health concerns. As a result, the American producer is held to a higher standard, which adds greatly to the costs of production, yet the foreign producer is allowed free access to our market where the American producer is often undercut on price ... and put out of business.[29]

5. .**Agriculture is not included in most of the mainstream economic development or business development efforts conducted at the state or county level**. Very few effective efforts are being made by economic development or business development agencies to attract — or retain — industries built on local agriculture (such as packers and processors) or to diversify and expand the produce, commodities and products that can produced in the region.[30]

6.**The market value of land reflects its speculative and development values, but does not assign a value for the land's food production capabilities or any of its natural amenities**. This greatly affects the decisions a landowner makes on how land is used. The result is a tendency to eliminate the features from the land for which the lowest value is assigned — wetlands, wildlife habitat and open pastures — and to convert land to the economic activities for which the highest value is

assigned — shopping centers, commercial centers and houses. The rising cost of land, which is skewed away from agriculture and toward development, prices many farming activities out of existence whenever development draws near. Hence, as a direct result of the way in which land is appraised and valued, we almost predetermine that the last crop will be asphalt. The ramifications of this issue are explored more fully in Excerpt 6 - "How Much are Resource Values Worth?" and Excerpt 16 - "The Economics of Land Use," available for download at http://us-farm.com/download.htm. [Free market factor]

7.**The number and complexity of regulations — and their cost — has increased dramatically, and cut heavily into profits.** In an effort to offset market forces that could lead to a degraded environment, regulatory requirements are applied as a brake to prevent the destruction of wetlands, wildlife habitats and other environmental values. The costs of complying with the myriad regulations that resulted have become a large administrative and financial burden that has been a contributing factor, if not a key factor, in the failure of some farming operations. Regulations also are discussed in the next section, under *Creating a Conducive Business Climate*, and in Excerpt 7 (available for download at http://us-farm.com/download.htm).

Several people in regulatory agencies questioned this point and asked for documentation. Excerpt 7, which summarizes a study on the impact of regulations on agricultural operations in Hillsborough County, Florida,[31] goes a long way toward explaining and documenting this issue. Suggestions on how to deal with it are included in the Priority Actions of Section 2, *Business Climate.*

8. At the same time, **agricultural landowners and operators receive very little credit and no compensation for the stewardship services they provide** as the custodians of wetlands, open space, wildlife habitats, endangered species, recharge areas for public drinking water supplies and the other environmental values and attributes their properties provide for the public.[32]

9. **There is a widespread lack of awareness and appreciation for agriculture and the many amenities it provides** to local and state economies, the environment, the appearance of our landscape and the safety, abundance and low price of our food supply. Several persisting myths about agriculture undermine public perception of the industry. This makes the public and policymakers almost incapable of recognizing — and taking — the kinds of steps necessary to ensure a thriving agricultural industry that is well integrated into all economic and business development programs, the market value of land, land use and infrastructure planning, environmental protection solutions, and our daily lives.

And, in part, because of these obstacles:

10. **The agricultural industry is undergoing rapid consolidation.** Pat Cockrell, Director of Ag Policy for the Florida Farm Bureau, says. "We all feel warm about the family farm, yet public policy causes the opposite effect — closing of family farms and forcing an 'industrialization' of farms to meet agency expectations. Nationally ... the industrialized farms are the agricultural producers. Smaller may simply be a rural way of life/culture."

The massive trend toward industrialization and the consolidation of ownership is examined by Charles C. Geisler, a professor in the Department of Rural Sociology at Cornell University, in a paper entitled, "Working Lands and Working People: Coupling Smart Growth with Smart Ownership." The paper, presented in the opening plenary session of the Keep America Growing Conference in Philadelphia on June 7, 1999, is available for download at http://www.farmland.org/kag/pdffiles/papers/002.pdf.

Geisler states:

> "*Numerous forces contributed to the exodus of farmers. One was a natural aging process ... Another factor has been the price received by farmers for their products ... The old saying rings ever truer: you can make a small fortune in farming if you start with a large fortune ... With the help of formidable technologies, farmer productivity exploded by 1,300 percent between 1940 and 1989.*[33] *But abundance hurts. Prices fall, farmers scramble for greater efficiencies, more land, or both. They are urged to get big or get out, and many do the latter*.
>
> "*A 1997 Civil Rights Unit within USDA cited long-term bias in federal farm polices of many kinds towards minority farmers as a reason for their collapse. A special commission report followed in 1998, entitled 'A Time to Act.' It found widespread indifference and discrimination towards not only minority farmers, but small farms in general. Areas of significant neglect included*
>
> - *"farm foreclosure polices*
> - *"underfunding of assistance programs, and*
> - *"entrenched large farm bias in*
>
> - *"credit,*
> - *"price supports,*
> - *"federal tax policy,*
> - *"labor laws,*

< *"farmworker subsidies, and*

< *"other less obvious areas."*

The paper continues, saying: *"The commission characterized our remaining 2,000,000 farms by annual gross sales and concluded that 6 percent (or 123,000 farms) receive roughly 60 percent of gross receipts – the consequence of a historically uneven playing field."*

Other statistics cited in the paper underscore this trend

C *"As a recent USDA publication points out, roughly half of the United States outside of Alaska is agricultural land (or 930,000,000 acres).*

C *"The 1997 Census of Agriculture tells a [revealing] story about the separation of ownership and control. Today, half our agricultural land is owned by persons not farming it ... One out of two agland owners, in other words ... are landlords and not farm operators. Roughly two thirds are 60 years old. Many live away from the farmland they own. In their hands, the prospects of land conversion is more of a business calculation and estate planning endgame than an occupational decision*

C *"What about farm operators as opposed to farm owners? They, too, are in transition. For the first time in the history of the Agricultural Census, the production of our food and fiber rests in the hands of less than a million full-time farmers. Though there were approximately two million farmers enumerated in 1997, only half of these listed farming as their sole occupation. In other words, one out of two farm operators are 'footloose' when it comes to their farming commitment. They have diverse, nonfarm occupational and ownership interests which, depending on tomorrow's land or commodity markets, will precipitate further vacancies in [our increasingly empty farmland].*

C *"The ownership story doesn't end there. Whether or not owners are operators and operators are committed to full-time farming, a small fraction of the already depleted number of owners decide the future of the agricultural landscape.*

C *"Recall that 930 million acres of agricultural land are at stake.*

C *"Widely dispersed farm ownership still existed in the 1970s...*

C *"'A Time to Act' reports an attrition of 300,000 farmers [in the 16 year period] since 1981, a decline surely reflecting the farm crisis of the 1980s.*

C *"By 1991 USDA researchers were reporting that the largest 4 percent (124,000 owners) held 47 percent of all farmland and 25 percent of all value in farms.*[34] ***We have, then, a situation in which a population roughly the size of Boise, Idaho, owns nearly half the agricultural land in the United States and controls its fate. "***

[Emphasis added.]

C The situation has not improved. A July 17, 1998 article in *The New York Times* reported that farm debt in 1998 reached $172 billion, the highest since the height of the farm crisis in 1985. Since then, articles in the *New York Times* and other papers have continued to chronicle the economic struggles and losses of land that are devastating farmers across the nation (see Excerpt 9 - "An American Tragedy," available for download at http://us-farm.com/download.htm)

C Federal estate tax laws also exacerbate this problem, since they remove land from individuals and families and abet consolidation by corporate and nonfarm entities. See Excerpt 17 - "The Case for Eliminating Estate Taxes."

C As a result: *"Ownership units have grown in acres, assets, and market share at the expense of their neighbors. A starkly bimodal ownership structure is the result. The newly consolidated unit ... typical in many parts of the U.S. today, may rest legally in the hands of an individual, a family corporation, or an institutional owner (insurance company, bank, corporation, religious order, university, or estate)*

C *"At the national level, food manufacturing concentration [also] is nothing less than breathtaking. By the early 1980s, 56 out of 98 food manufacturing industries had four-firm concentration levels of 40 percent or more ... Oligopoly in the national food system has forged ahead, apparently immune to anti-trust legislation ... commodities such as beef, pork, broilers, turkeys, animal feed, flour, corn, soybean and ethanol are exceedingly concentrated."*

C Consequently: *"... many million farmers have been evacuated from their lands, and ... American agriculture has been diluted almost beyond recognition by depressed*

*ratios of people-to-land and by changing ownership realities for those who remain on the land.*

- *"As the farm population has tumbled, farm operator numbers have diminished as have the number of committed, full-time farmers. Their working lands have been consolidated by owners who don't farm, live elsewhere, and who have significant nonfarm interests."*
- *"Such a structure,"* Geisler says: *"is a poor shield against farmland conversion and eventual sprawl."*
- It also puts this nation's entire farm production system at risk.

Here's why:

13. **Offshore producers have large economic advantages.** With the current costs of land, regulations, labor and administration, it is impossible to produce here more cheaply than the offshore competition.

14. **A major consolidation of buyers is underway.** "Walmart is now a huge and growing buyer of product. These buyers do not care about anything except for prices and consistent quality. Made in the US is a marketing slogan."[35] As Pat Cockrell points out: A study by "Dr. Pat Byrne," Institute of Food and Agricultural Sciences (IFAS) at the University of Florida, "shows that imports are more profitable for stores." [Free market factor]

Moreover:

15. **Inadequate crop insurance puts producers at risk.** Many growers do not have crop insurance. It is too expensive and encourages in-state competition outside of historic market windows. In some cases, growers cannot even get the cost of their premium back if the whole crop is not destroyed. Yet one heavy wind storm, a few hours of below-freezing temperatures or a pest infestation can wipe out a crop and leave a grower in debt.[36]

16. **The phase out of minor crop pesticides has hurt many producers, the American consumer and, in some cases, the environment.** Eliminating the use of chemicals that have a negative effect on human health and the environment is a good idea. Unfortunately, while the idea is good, the way it has been carried out is not. According to U.S. Environmental Protection Agency rules, all pesticides, fungicides and herbicides used on crops must go through a rigorous testing program to be relicensed and remain on the market. These tests can take two or three years to complete and cost as much as $2 or $3 million for each compound and/or chemical to ensure it does not pose a risk to human health or the environment. That may be financially feasible for chemicals that are in widespread use and generate millions of dollars in annual revenues for chemical producers. Thus most chemicals used on major

commodity crops — such as wheat, soybeans and corn – have been tested and relicensed.

The same, however, is not true for chemicals used on so-called "minor crops." This includes virtually all fruits and vegetables grown in the U.S. These crops are the mainstay of Florida agriculture, accounting for half of all revenues produced by agriculture in the state.[37] Although fruits and vegetables make up a large part of our diet and U.S. agricultural production, the category as a whole is broken down into a large variety of "minor crops" — tomatoes, peppers, squash, radishes, grapefruit and so on — each with different growing requirements, and each with different chemical needs. Moreover, Florida's climate is different from any other place in the continental United States, posing unique challenges with diseases, pests and fungi that are not widespread in the country. Hence, the market is very limited for some chemicals upon which Florida agriculture is dependent.

As a result, the EPA program has unwittingly eliminated many chemicals from the market that had no discernable affect on human health or the environment. This is because the annual revenues generated from many "minor crop" chemicals — especially those important just to Florida growers — simply could not justify the expenses of the testing program. Hence, many chemicals were eliminated without any testing. In many cases, no substitute is available for these chemicals. This has led to increased crop damage and losses (thus adding to a grower's costs, and pushing that grower closer to going out of business). In other cases, the substitute does not work as well and, while its environmental impact may be within "acceptable limits," it has a greater impact than the chemical it is replacing, because more must be used to get the same result of the more effective, targeted chemical it replaced.

This is a case where the public interest was not served by requiring chemical companies to pay for the relicensing and testing program. Instead, the public should have paid for the testing to ensure benign chemicals remained on the market, undesirable chemicals were phased out and adequate research was conducted to find workable substitutes for the chemicals being removed to avoid the "unintended consequences" of additional environmental damage and the unnecessary dislocations that have occurred within the industry.[38]

17. **The introduction of exotic pests and diseases threatens crops, foreign and domestic markets, and ultimately, Florida's economy.** Mike Stuart, Executive Vice President of Florida Fruit & Vegetable Association in Orlando says: "Significant increases in international trade and tourism have resulted in more than just added products and people in the state. The exotic pests and diseases that often accompany shipments and passengers threaten crops, access to foreign and domestic markets, and, ultimately, Florida's economy. The Medfly, citrus canker, heartwater disease, and tropical sode apple are but of few of the dozens of exotic pests that threaten the state. It has been estimated that in

the past four years, foreign plant and animal pests and diseases have cost the state and the agricultural industry over $140 million in control and research costs. Sales losses experienced by the industry due to the presence of these pests is estimated to be well over $670 million during that period. It is estimated that sales losses in excess of $1 billion would be incurred annually by the industry if these pests were to spread statewide."[39]

18. **The politics of agriculture and food plays a major role our ability properly understand – and address – these issues.** One reviewer observed: "I wonder why Florida, one of the 10 largest agriculture states in the U.S., is not represented in the Senate Ag Committee and only once in the House Ag Committee. Agriculture is our second most important industry in this state, yet our senators sit on Environment and Public Works, or Veterans Affairs, or Finance, or Select Intelligence rather than Ag. Maybe that's the reason why in the 1996 Government Ag Payment Program, Florida ranked 35th with $22M while Texas received $765M; Kansas $554M; Iowa $501M; Nebraska $389M: California $293M; and Arkansas $361M."

Phyllis Mofson, from the Legislative Committee on Intergovernmental Relations of the Florida Legislature, asks: "If food is as central and demanded a commodity as you describe (and no one would dispute that it is), and if the mark-up is so high, and if regulations and all the other constraints put on American farmers are so onerous: why are food prices in the U.S. still so low?

She goes on to say: "You state that the farmer is unable to pass on many costs to the consumer as in most other industries, but you don't explain why. It is hard to intuitively grasp the economics; in the free market (and you argue that subsidies, price supports, and other governmental interventions in the free market are not major forces in Florida's agricultural industry), low price connotes high supply and over-abundance, and does not convey threatened scarcity, or even value."

*Response:* Good questions. The answer, in all cases is: it's a global economy. There is an abundance of product available from around the world (not all grown to U.S. standards, but never mind). The wholesale buyers set the price they will pay, not the producer. As noted above, under the obstacle, **A major consolidation of buyers is underway**: "These buyers do not care about anything except for prices and consistent quality ... [and] A study by Dr. Pat Byrne ... shows that imports are more profitable for stores."

## CONCLUSIONS

**Need to find ways to:**

1. Improve opportunities for **profitability**, especially for small- and medium-size producers

2. Initiate **economic development** efforts to retain and capitalize on existing agricultural activities

3. Expand **marketing** to increase sales of agricultural products from the region.

4. Address **trade** imbalances to ensure that all foreign produce meets American food safety and environmental standards so the region's producers can operate on a "level playing field"

5. Reduce the impact on profitability caused by 1) **invasive plants, pests and diseases** that often accompany shipments and passengers coming into the state and 2) the loss of **"minor crop" tools**

6. Examine the effects of **consolidation** on small- and medium-size producers and the nation's food security and identify policies that put small- and medium-size producers and the region's continued ability to maintain its food production capability at risk

7. Improve **education** of consumers and policy makers to expand awareness about where food comes from; what it takes to have a safe, affordable and abundant food supply; current threats to the region's agricultural productivity; and the underlying premise that *agriculture is a vital to sustaining our lives*.

## PRIORITY ACTIONS

### 1. PROFITABILITY:

***Conclusion:*** Need to find ways to improve opportunities for profitability, especially for small- and medium-size producers.

***Suggested Actions:*** Here are several ways in which this might be done, using South Florida as an area to test prototype programs:

***A) Find ways to return more of the retail price to the producer***

**1) Develop strategies to:**

a) **Explore** new ways to add value to existing crops and products, new ways to sell existing crops and products, new markets and new commodities, and specialty crops and products that can be produced;

< Contributing action recommended by NRCS:

*Action:* Identify new/more profitable crops

*Responsible:* ARS - R&D
*Duration:* Long term (2+ years)

b) **Emphasize** opportunities for diversification through producing specialty foods; targeting new markets and niche markets; growing new crops; processing Caribbean and off-shore produce; and expanding key segments of the tropical fruit industry, equine industry, aquaculture industry and other existing industries.

c) **Expand** visibility of South Florida produce at trade shows;

d) **Improve** technical assistance, communications, information delivery, media relations, resource coordination.

< Contributing action recommended by NRCS:

*Action:* Increase NRCS staffing
*Responsible:* NRCS
*Duration:* Short term (1-2 years)

*Action:* Provide technical assistance
*Responsible:* NRCS
*Duration:* Short term (1-2 years)

*Action:* Provide economics training for conservation planners
*Responsible:* NRCS
*Duration:* Long term (2+ years)

e) **Promote** diversification. Agricultural operations that specialize in a single commodity are vulnerable to economic shocks caused by low prices or bad weather. Diversification — through planting new crops, shifting to a different mix of crops and livestock, developing new products or services, or targeting new markets — can reduce risk and increase profits. (Note: As Ferdinand F. Wirth, Ph.D., points out that: "the discussion on 'Diversification' should recognize that it can be very difficult for farmers to diversify, especially if they have been involved with large scale single commodity agriculture. Farmers make huge capital investments in highly specialized equipment, which can often only be used on one or two types of crops. Major efforts to promote diversification will have to include lots of technical expertise to identify compatible crops and financial assistance to farmers [low interest loans, etc.] to help with the purchase of additional equipment." Also, an industry insider points out, "Farmers farm what they know and what they like to farm, and sometimes forget to consider what the market will bear.")

f) **Benefit** all types and sizes of agricultural operations.

However, a high priority should be given to helping small farms, family farms and minority farmers, who often are at a disadvantage in competing with large corporate farms and rarely have the resources necessary to match the actions that corporate farms can take on their own behalf. Public perception and support of this effort also is likely to be more positive if an emphasis is given to the help that is given to small farms, while help given corporate farms is downplayed.

See Endnote[40]

One industry specialist says: "Innovative Ag industries have taken over many of the middleman's functions to deal with the problem identified in the statement that 'Agriculture is a price taker, not a price maker.' I am aware that only large corporate ag industries have the financial resources to attempt this type of venture, so the solution might be in the consolidation of comparable production units into cooperatives that can be formed specifically for one or more functions. They can be formed to control overproduction; for marketing or distribution; or even as a promotional tool. This will mean more control over the price of the product and it will create a competitive atmosphere in the value-added side of the business."[41]

**2) Expand opportunities for growing and using biocrops to:**

a) produce power,

a) produce "bioproducts," including biodegradable plastics and plant-based activators for chemicals and solvents, to replace petroleum products
b) provide for carbon sequestering
c) provide environmental clean up and phytoremediation services that can be sold to utilities, municipalities and many industries (using plants to filter and clean up storm water, municipal waste, absorb leachates from landfills and turn toxins into clean biomass)
d) address on-farm and off-farm environmental issues
e) stimulate rural economic development,
f) reduce regulatory burdens on agriculture.

Details on these opportunities are contained in a strategic plan jointly prepared by the U.S. Department of Agriculture and U.S. Department of Energy and released on December 11, 2000 The

strategic plan, entitled "Fostering the Bioeconomic Revolution in Biobased Products and Bioenergy" was developed in response to Executive Order 13134 and The Biomass Research and Development Act of 2000. It sets forth a series of ambitious steps for increasing the use of biofuels in generating energy and in using plant material to create a broad range of "bioproducts," including replacements for petroleum-based activators used in many chemical compounds on the market. This document should be reviewed for potential commercial applications in the county.

**3) Consider prototype programs to:**

a) **Encourage** grocery chains to use their vertical pricing indices and other pricing data to develop consumer profiles to show how people buy products. Use this information to determine what types of point-of-sale displays are most effective. Also, encourage Florida chains to compete with each other in providing produce grown to American standards, on providing access to fresh local produce and on “giving back” a percentage of proceeds to Florida producers to help take steps to implement production practices to improve food safety and improve compatibility with the environment.

b) **Give consumers an option** to donate $1, $3 or $5 at the checkout counter to support South Florida producers in their efforts to pay the extra costs of ensuring food safety, fair labor practices, and environmental compatibility, as set forth in U.S. and Florida laws. Give consumers an option to make an *additional* $1, $3 or $5 per shopping trip donation to help producers implement BMPs and conservation practices that exceed the standards set by U.S. and Florida laws. Also, consider instituting utility & phone bill check offs for the same purpose. These funds should go into a dedicated fund to pay the costs of helping producers implement BMPs and establish Integrated Operating Plans (per Priority Actions in the next section) to reduce operating costs.

i) Again, emphasize the benefits this will provide to small farms, family farms and minority farmers, in helping them remain in business and compete with large corporate farms and foreign producers.

***Recommendation:***

*Who:* Florida Department of Agriculture (DOACS) Marketing Division; Enterprise Florida; Governor’s Office on Tourism, Trade and Economic Development (OTTED) and University of Florida, Institute of Food and Agricultural Sciences (IFAS), in cooperation with ag

groups.
*What:* **Profitability hinges on a number of factors. Need major statewide effort to identify and address these factors. DOACS should initiate a major coordinated effort to link up with Enterprise Florida, OTTED and IFAS to analyze and improve on existing strategies and develop new strategies and prototype programs to improve profitability. These strategies and programs should be designed to:**

- **improve profitability for producers, with an emphasis on small- and medium-size producers, and**
- **return more of the retail price to producers.**

## 2. ECONOMIC DEVELOPMENT:

***Conclusion:*** Need to find ways to initiate economic development efforts to retain and capitalize on existing agricultural activities.

***Suggested Actions:*** Here are several ways in which this might be done:

***A) Assist in implementing recommendations of Florida's Growth Management Study Commission regarding the promotion of rural economic development*** (see recommendation 83; "A Liveable Florida for Today and Tomorrow," Florida's Growth Management Study Commission, Final Report, February 15, 2001, p. 39, available for download at http://www.floridagrowth.org). These recommendations include:

**1) Establish a technology outreach program** to support rural local governments, farmers and small businesses in taking advantage of the Internet and other technology advances.

**2) Amend the revenue sharing provisions of Chapter 212, Florida Statutes, to provide a disproportionate increase in the allocation of state revenue to rural counties** in recognition of their inherently lower ad valorem tax base.

**3) Consider initiatives to assist rural communities in developing and diversifying local economies** such as:

c) directing Enterprise Florida and the Office of Tourism Trade and Economic Development to include rural

communities in their outreach efforts for expanded and improved economic development;

d) supporting and further publicizing the Main Street Program (Department of State);

e) offering technical assistance and other support services for small business development and entrepreneurial activity in rural areas;

f) encouraging environmentally sensitive eco_tourism and heritage tourism in rural areas;

***g)*** capitalizing on and enhancing the sustainability features of rural areas, including local food production, environmental resources and the potential for distributed energy resource technologies.

***B) Create strategies to engage local economic development agencies in recognizing and expanding on the economic value of agriculture to South Florida.***

**1) Gather information on the economic contributions of agriculture** to the region as a whole and to each county economy in South Florida;

**2) Explore ways in which this value can be expanded and more of each food dollar can be captured by local economies** (one way this can be done is by adding value to each commodity by taking additional steps after harvest to prepare the product for market – say, by adding facilities to pack and ship fresh tomatoes and/or to turn tomatoes that do not meet fresh market standards into tomato paste, salsa or another product that's ready to use by a restaurant or ready to sell on a grocer's shelf);

**3) Foster the development of businesses** that will add value to existing crops and products, offer new ways of selling existing crops and products, open new markets, grow specialty crops, and/or produce new commodities and products;

**4) Emphasize local opportunities** for adding value to existing crops and products; growing specialty foods; processing Caribbean and off-shore produce; establishing new markets, niche markets and new crops; and expanding tropical fruit industry, equine industry, aquaculture industry and other existing industries.

**5) Improve support to individual owners and operators** who wish to establish and expand agricultural operations;

**6) Expand visibility of South Florida produce** at conventions and trade shows;

**7) Promote the region's agricultural heritage**, the diversity of its agricultural products, and the importance of these products to consumers in Florida, the U.S., Canada and the rest of the world.

***C) Consider launching prototype programs to:***

**1) Establish cooperatives** to assist small- and medium-size growers;

**2) Offer inducements and incentives** to ag-related businesses and suppliers that are willing to expand, diversity or locate in South Florida.

[Note: It will be important that these steps are carried out with full cooperation and input from the agricultural industry. Thomas E. Rew, General Manager of Hayman's 711 Ranch says: "While I welcome any help we can get to increase ... demand, I believe it must come from within the industry. I'm not sure I'm comfortable with the idea of asking government to encourage the expansion of any agricultural enterprise."

[Tim W. Williams also commented on this approach. He agreed that agriculture and its importance to the economy should be ACKNOWLEDGED by all existing economic development agencies and efforts in the state. But his fear is that, when some well-meaning person or agency who knows nothing about agriculture tries to help, agriculture often ends up worse off than when it is ignored.

[Instead, Williams feels that economic development efforts should be established that are targeted specifically to agriculture — and are operated by people intimately familiar with agriculture. They should be devoted to carrying out the approaches listed above. These efforts should be given the full cooperation of all existing economic development agencies, and provided with as much financial and promotional support as possible.]

***Recommendation:***

*Who:* Florida Department of Agriculture (DOACS) Marketing Division; Enterprise Florida; Governor's Office on Tourism, Trade and Economic Development (OTTED) and University of Florida, Institute of Food and Agricultural Sciences (IFAS), in cooperation with ag groups.

*What:* **Need coordinated regional effort. DOACS should map out strategy to link up with Enterprise Florida, OTTED, IFAS and every economic development agency in South Florida to create and support concrete steps to expand the economic contribution of agriculture to the region.**

**3. <u>MARKETING</u>:**

***Conclusion:*** Need to find ways to expand marketing to increase sales of local agricultural products**.**

***Suggested Actions:*** Here are several ways in which this might be done:

*A)* ***Create a strategy for implementing end-to-end market development:***

**1)** identify opportunities in as many markets as possible;
**2)** identify market needs and requirements;
**3)** identify delivery methods;
**4)** identify and recruit growers, packers and processors who will participate;
**5)** provide financing and training to help growers, packers and processors tailor products to meet specific market needs;
**6)** create a promotional campaign to launch market entry;
**7)** monitor the market to ensure that needs and requirements are being met, with feedback to growers, packers and process; and
**8)** create an ongoing promotional campaign.[42]

***B)*** ***Create a strategy to provide improved information to producers on market needs and demands***, emphasizing the advantages of catering to the consumer, and providing help in matching production with demand to avoid overproduction.

**As part of this strategy, IFAS should consider using its new long-range strategy, Florida FIRST, to work in cooperation with DOACS and the U.S. Department of Agriculture, Agricultural Research Service (ARS), Economic Research Service (ERS) and Natural Resources Conservation Service (NRCS), to provide producers with focused market research to give them detailed information on demand, quantities needed, prices and quality requirements**, i.e: What will sell where? What should be planted when? How should crops be staggered? This should include:

**1)** **Identify marketing opportunities** through targeted consumer markets: What do consumers need, what would they like, how much will they pay?

**2)** **Provide research on commodity marketing strategies**: How should products be produced, packaged and promoted to meet — or create — consumer demand, and beat the competition? Use consumer surveys, focus groups, test marketing to determine: What can producers do to get a marketing edge?

< Contributing action recommended by U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS)

*Action:* Focus agricultural research on marketing
*Responsible:* USDA, Agricultural Research Service (ARS) and IFAS
*Duration:* Long term (2+ years)

**3) Conduct research on market development**

< Contributing action recommended by NRCS:

*Action:* Develop international markets for agricultural products
*Responsible:* USDA, DOACS
*Duration:* Long term (2+ years)

**4) Encourage more grower input into research agenda**.

As Rick Roth says: "Land grant colleges need to:

a) Do more ag research with dollars tied to specific demands of society,
b) Change focus from production to marketing,
c) Educate ag students why public relations is critical to industry survival."

See comment from Ferdinand F. Wirth, Ph.D., explaining what the state and producer groups can do to ensure that university research is driven by producer needs, rather than grant opportunities, under Endnote[43].

***C) Funding strategies also should be developed to pursue these ideas.***

Cattle producers voted to have one dollar collected for each head of cattle sold. This money is put in a national trust fund and distributed to promote beef. As Jim Strickland, of Cattlemen Manatee in Myakka, Florida, says: "It seems to work, judging by our number crunchers. However, our market share is not going to change drastically. Perhaps we need some method to use our dollars to promote the ideas listed here. Not just the idea of selling beef, but marketing ourselves to the public as an economical benefit to our environment."

Other Florida farmers also have taken a portion of their profits to develop domestic markets. Two excellent examples are the Department of Citrus and the tomato committee.

Jim Handley, Executive Director of Florida Cattlemen's Association, concurs. Some commodity groups do an excellent job promoting the sale of their products to consumers. But, he says, much more must be done to educate consumers about *agriculture*. Handley suggested creating a coalition of ag groups to create of pool of dollars to carry out a unified, coordinated marketing blitz covering *all* food products and the *values* of agriculture.

***Recommendation:***

*Who:* Florida Department of Agriculture (DOACS) Marketing Division; Enterprise Florida; Governor's Office on Tourism, Trade and Economic Development (OTTED) and University of Florida, Institute of Food and Agricultural Sciences (IFAS).

*What:* **Need major regional effort. DOACS should take the lead in working with Enterprise Florida, OTTED and IFAS to develop a marketing strategy for agriculture, and ensure the dedication of the resources necessary to give special consideration and assistance to agriculture, commensurate with the importance of agriculture to the economies of South Florida and the state**.

< Identified as a possible task for assistance from the Governor's Commission for the Everglades

**4. <u>TRADE</u>:**

***Conclusion:*** Need to find ways to address trade imbalances to ensure that all foreign produce meets American food safety and environmental standards so South Florida producers can operate on a "level playing field"

***Suggested Actions:*** Here are several ways in which this might be done, using South Florida as a test case:

***B)*** ***Consider steps to ensure the American public receives products that meet all U.S. food safety requirements, labor laws, environmental regulations and restrictions on chemical use.***

***C)*** ***Consider requiring that all produce brought into U.S. meet the same requirements as those imposed on American growers — or relax restrictions on American growers***.

***C)*** ***Consider banning products that do not meet these requirements.***

As Tim W. Williams notes: "The playing field is not level, as long as a national policy empowers foreign AG production and disadvantages our state."

***D)*** ***As a first step, consider developing a prototype program with a stamp, certificate or 'green label' for products that meet all U.S. laws.*** The stamp, certificate or label would tell consumers that: "This product was grown at extra expense to meet all U.S. food safety requirements, labor laws, environmental regulations and restrictions on chemical use." ***Also, develop a second stamp, certificate or label for products produced using best***

***management practices or grown with some environmental benefit***. The labels would be attached to all consumer packaging to provide an environmental OK or prove compliance with environmental stewardship/BMP practices. Like a ... 'Fresh from Florida,' or 'grown with the environment in mind' label.[44]

In theory, theses marks would add value by encouraging consumers to choose these products over other similarly priced products that are not labeled, thus boosting sales at the retail level.

This strategy should place particular emphasis on *food safety.* U.S. laws are designed to ensure food safety. Consumers also are concerned with and respond to food safety concerns.

This strategy also would place market forces on foreign growers to meet U.S. laws, and could do more to bring them into compliance with these laws than any other actions that might be taken through trade legislation to encourage compliance. Nevertheless ...

***E)*** ***"Ensure that future trade agreements include provisions to standardize key agricultural inputs***, such as ag chemical regulations. [Also] allow labor to travel freely across borders in free trade zones."[45]

F) ***Give consumers clear choices between local, domestic and foreign grown products***. Consider product labeling to indicate point of origin for all foreign products. Provide South growers with option of labeling to promote the products of a specific county or region. Consider point-of-sale displays to clearly indicate all products that are grown in the U.S. and South Florida. Also, consider point-of-sale displays to provide consumers with information about growing practices in each region where products for sale originate.

No ag leaders or producers who commented on this paper disagreed with country-of-origin labeling. In fact, Rick Roth suggested that "new trade agreements should be conditional on implementation of country of origin labeling."

Ferdinand F. Wirth, Ph.D., however, disagrees. See his comments — and a rebuttal — under Endnote[46]. Dr. Wirth says: "The better approach (discussed under ... 'Education'[below]) is to clearly identify local produce and develop point-of-sale materials to encourage consumers to buy local food products when they are available. The government can also produce buyers guides for stores and restaurants listing all local growers who have the capability to sell directly to the stores. The growers can also be provided with guides listing the buyers for all stores and restaurants which have indicated that they are willing and able to buy locally. This type of program was developed jointly by the states of Delaware, Maryland, and Virginia to promote sales of local food products from the Delmarva Peninsula. The program, known as the 'Shore-to-

Store' program was funded by the USDA, under the Federal-State Marketing Improvement Program (FSMIP)."

Art Kirstein also weighed in on this subject, saying: "We live in a global economy in which the U.S. must lead. I think that we must, for political and economic reasons, continue to support trade treaties that attempt to eliminate all trade barriers. The NAFTA treaty keeps coming up throughout [this] report. The reality is that the U.S. has had a net positive agriculture trade balance against Mexico since the inception of the treaty. In a time when we have few net positive balances because of trade, this is important. It is also the reality that our ag exports to Mexico are primarily in coarse grains, soybeans, and cotton that are not produce in Florida and our imports are approximately 43% in fresh and processed fruit and vegetables. Since NAFTA, the single biggest import item from Mexico has been fresh vegetables, represented in 1998 with $1.47 billion. Before we attempt to put up barriers such as 'a level playing field,' child labor and 'country of origin' legislation, let's address our advantages in production, distribution, financing, proximity to market, etc. We must remember that some of Mexico's advantages are a result of monetary devaluations and need for hard currency to meet their international debt commitments. And let's not forget the corn farmer in Nebraska who depends on this export market."

Allyn L. Childress, AICP, a staff member for the South Florida Ecosystem Working Group, says: "The paper targets the Task Force with developing a list of actions to be implemented in regards to international trade. Is this a valid action of the Task Force? It is not clear whether Florida would be a 'test case' and serve as an example for other regions. Would South Florida agricultural products be the focus, or would it be for national products?"

Good questions. Suggestions?

***Recommendation:***

*Who:* The South Florida Ecosystem Restoration Task Force (SFERTF), with support from DOACS, OTTED and USDA.

*What:* **Need to initiate actions at the state and federal levels. SFERTF, with support from DOACS, OTTED and USDA, should develop a list of state actions and federal actions that can be implemented, within the context of current laws and consistent with international trade agreements, to ensure that South Florida producers can operate on a "level playing field."**[47]

< Identified as a possible task for assistance from the Governor's Commission for the Everglades

## 4. INVASIVE SPECIES CONTROL/LOSS OF "MINOR CROP" TOOLS

***Conclusion:*** Need to find ways to reduce the impact on profitability caused by exotic and invasive plants, pests and diseases that often accompany shipments and passengers coming into the state

***Suggested Actions:*** Here are several ways in which this might be done:

***A) "Need special emphasis on detection and interdiction of exotic plants, insects and pests."[48] As Mike Stuart says:***

**1) "Reducing the impact of foreign plant and animal pests and diseases will require significant improvements in exclusion, detection and eradication methods.**

**2) "State and federal government agencies that are responsible for protecting agriculture from the introduction of exotic pests must be provided sufficient resources at key points of entry, such as port facilities.**

**3) "Penalties must be significantly increased for those who knowingly smuggle contraband products.**

**4) "And, the traveling public must be better educated about the consequences of bringing potentially infested fruits, vegetables, meat products and other possible hosts into the state."**

***B) These objectives should be incorporated into a well-coordinated, statewide effort that acts cooperatively, collectively, and decisively to address the problems of invasive and noxious species:***

**1) Adopt, or coordinate with strategy being developed by the South Florida Ecosystem Restoration Task Force's Noxious Exotic Weed Task Team (NEWTT)[49]:**

a) Concept 1: *Organize, Coordinate & Plan:* Marshall statewide actions and resources on invasive exotic plants to provide integrated, consistent, cost efficient and effective weed management;

b) Concept 2: *Prevent, Detect & Assess:* Prevent the development of new and eradicate incipient weed populations in natural areas;

c) Concept 3: *Assess, Control, Manage & Restore:* Reduce the impact, and contain the distribution of existing significant weed problems;

d) Concept 4: *Inform, Advise & Educate:* Generate internal and external support and awareness for invasive exotic plant/species control and management

***Recommendation:***

*Who:* NRCS, working in cooperation with the South Florida Ecosystem Restoration Task Force's Noxious Exotic Weed Task Team (NEWTT) and University of Florida, Institute of Food and Agricultural Science's (IFAS) Woking Group on Invasive Plants.

*What:* **Need major statewide effort. NRCS should initiate strategies to reduce the impact on profitability caused by exotic and invasive plants, pests and diseases that often accompany shipments and passengers coming into the state.**[50]

***Two contributing actions recommended by NRCS are:***

C **Allow grazing as a management tool to control exotics on lands enrolled in all USDA programs, including Conservation Reserve Program (CRP) and Wetland Reserve Program (WRP**).

*Responsible:* NRCS *Duration:* Short term (1-2 years)

C **Increase NRCS staff.**

*Responsible:* NRCS *Duration:* Short term (1-2 years)

< Part of additional staff would be dedicated to enrolling additional lands in the USDA's Environmental Quality Incentives Program (EQIP) to provide cost-sharing assistance in controlling exotics.

Also:

**LOSS OF "MINOR CROP" TOOLS:**

*Who:* NRCS, IFAS, ARS and ERS.

*What:* **Need to initiate actions at the federal level.**

C **NRCS should work with IFAS and ARS to fund research on natural and chemical control of pests, diseases and fungi to replace "minor crop" chemicals eliminated from market by the EPA's relicensing program, including the chemicals needed to control exotic plants, pests and diseases.**

< Identified as a possible task for assistance from the Governor's Commission for the Everglades.

C **NRCS also should work with IFAS and ERS to fund research on bio-engineering for production and drought resistance, better no-till and multi-crop systems, and environmental interfaces.**

**6. CONSOLIDATION:**

***Conclusion:*** Need to find ways to examine the effects of consolidation on small- and medium-size producers and the nation's food security and identify policies that put small- and medium-size producers and South Florida's continued ability to maintain its food production capability at risk

***Suggested Actions:*** Here are several ways in which this might be done in South Florida**:**

***A) An interagency mission statement should be established, recognizing that:***

- Consolidation has occurred, not because of a conscious choice, but because of disparate events, policies and crises.
- There has been very little meaningful discussion about what consolidation means to our economy, landscape, environment and national food security, and what we want to do about it.
- A lot of our choices already have been made for us.
- Now is the time for a thorough discourse. We cannot stand back and pretend that everything will work out for the best, since today's market has been greatly influenced by the policies already in place – and these policies may not be leading us in the direction we wish to go.

***B) A review should be conducted of all policies that lead to consolidation and the agencies responsible for these policies.*** Prime areas of investigation should include:

- Food prices received by producers (and the degree to which governmental policies influence these prices),
- Availability of capital,
- Availability of new technology,
- Funding of assistance programs,
- Environmental regulations (see Section 2, *Business Climate*, and Appendix C - "The Problems with Regulations"),
- Land use regulations, especially those regarding development in rural areas (see Section 5, *Integrating Agriculture Into the Landscape,* and Appendix),
- Land valuation (see Appendix B - "How Much are Natural Resources Worth?"http://us-farm.com/download.htm),
- Farm foreclosure polices, and
- Any entrenched large farm bias in:
  - credit,
  - price supports,
  - federal tax policy, including estate taxes (see Appendix G - "The Case for Elimina

Estate Taxes"),

- < labor laws (see Section 3, *Providing Adequate Infrastructure*, Labor),
- < farm worker subsidies, and
- < other policy areas.

***C) A review should be conducted of existing statistics to identify and quantify the impacts of consolidation*** on our economy, landscape, environment and national food security;

***D) An interagency memorandum of understanding should be established setting forth a coordinated vision and plan of action to address consolidation;***

***E) A strategy should be created for implementing changes in the policies that contribute to consolidation***; and

***F) Recommendations should be developed for policy actions that are needed to address this issue in the 2002 Farm Bill.***

***Recommendation:***

*Who:* South Florida Ecosystem Restoration Task Group (SFERTG), working with Florida Department of Agriculture and Consumer Services (DOACS), Florida Department of Community Affairs (DCA) and United States Department of Agriculture (USDA).

*What:* **Need to initiate actions at the state and federal levels. SFERTG, working through DOACS, DCA and USDA should identify all the factors at the state and federal levels that lead to consolidation; investigate the implications represented by consolidation to our economy, landscape, environment and national food security; identify policies under the control of each agency that contribute to consolidation; determine if steps need to be taken to change these policies; and develop a comprehensive, coordinated strategy for addressing consolidation and its impacts**.

**7. <u>EDUCATION</u>:**

***Conclusion:*** Need to find ways to improve education of consumers and policy makers to expand awareness about where food comes from; what it takes to have a safe, affordable and abundant food supply; current threats to South Florida's agricultural productivity; and the underlying premise that *agriculture is a vital part of the infrastructure that is necessary to sustain our lives*

***Suggested Actions:*** Here are several ways in which this might be done:

A) ***Consider establishing a public policy that acknowledges the value of agriculture to the economy, the environment, the appearance of our landscape and our very survival.*** This policy could be the cornerstone of efforts to secure funding, agency resources and directives to carry out actions to improve producer profitability, establish a level playing field for Florida producers, deal effectively with exotics, fund educational efforts and create a conducive business climate (described in the next section).

***B)*** ***Encourage all Florida supermarket chains to participate in consumer education*** to increase public awareness on food safety, stress buying food grown to American standards (in compliance with U.S. laws) and promote local produce when available. The campaign should help each store feature specific products and specials to increase sales (so the store will have a vested interest in the campaign, since it will benefit the store's bottom line). Also, the campaign should give the first chain to participate a public relations advantage over other chains by allowing it to seize a lead in enhancing food safety and food quality by educating consumers about the origins of their grocery products and promoting produce grown to American standards.

1) Self space is at a premium so, instead, air space should be used for banners, product information and hang-down video monitors. Also, the educational campaign can be combined with cooking demonstrations, cooking classes, and classes in shopping and choosing the best ingredients.

***C)*** ***Provide support and information for all campaigns***, including displays, posters, videos, information for an ongoing story of our food: how it's grown, who grows it, how it gets to our tables.

1) The same advertising agencies used to stop teen smoking could be recruited to raise awareness of the public about the value of agriculture.

2) If you want to get people to care, focus on the health/food safety aspects – those are the motivating factors for consumers. Get people to understand why U.S. standards are important to their health – what health problems could result from eating unsafe produce? Advertise this in the supermarket. Need a wide-scale campaign in supermarkets. Get dieticians involved. People care about what they put in their bodies. They just need to know first.

3) Continue conservation education, with a focus on the benefits of agriculture.

***D)*** ***As Gail C. Stern says: "EDUCATE, EDUCATE, EDUCATE*** ... our future depends on a truly informed public. Start at the elementary school levels. Keep in mind what a child learns he brings home to his parents. This also includes more incentives from the ag sector such as contests, scholarships and rewards for understanding ag's importance to everyones' future. This then spills from the public sector, the voting sector, to our politicians.

1) Barbara Miedema, of the Sugar Cane Growers Cooperative, notes that: "the University of Florida has a wonderful ag education program going in Palm Beach County. It's called project SOAR (Sharing Our Agricultural Roots). School gardens have been located on several elementary and middle school campuses. This provides hands_on educational opportunity for many students who knew little or nothing about farm activities. I would encourage you to contact Dr. Richard Raid at 561-996_3062 for more details on how the program works and how it can be augmented or used to reach some of your goals."

2) Rick Roth also suggests that existing programs can — and should — be expanded. As he says: "Education dollars need to be spent for 'Ag in the Classroom' programs."

3) In addition, Roth says: "The Cooperative Extension Service needs to move forward to provide some public relations functions; i.e., educate the public as to the benefits of [a] strong ag industry that will remain competitive by recommitting public dollars for ag research to solve society's 'problems' with ag production and keep Florida ag competitive."

4) Finally, Sarah Longino, daughter of B.T. and Jane Longino, of Longino Ranch outside Arcadia, says: "I am a high school biology teacher in Orlando. It has long concerned me that students are so unaware of the origins of their food. The old commercial in which the two cute little boys determined that milk 'comes from Publix' is, unfortunately, too realistic ... People truly don't seem to realize the sources of all of their food __ it does NOT come from Publix."

5) Sarah Longino goes on to say: "An area in which to address this is the public schools. The Florida State Standards for science have recently been completed for grades K_12. These include a series of science strands that are to be taught to all students. Specific grade and subject benchmarks (objectives) are being developed within each of these strands. Providing agriculturally_oriented materials that are geared to these benchmarks might be a good way to make some headway with the younger generation. Teachers are usually more receptive to 'ready

to use, already fit the standards' materials than they are to vague suggestions and reams of factual information. Support of Ag programs in schools might be another way to help.

***Recommendation:***

*Who:* DOACS, IFAS, USDA, Florida Farm Bureau Federation (FFBF) and other commodity groups and institutions, as appropriate.

*What:* **Need major statewide effort, possibly launched with a prototype program in South Florida. DOACS, IFAS, USDA, FFBF and other commodity groups and institutions should consider cooperating together to develop educational campaigns to improve awareness of and appreciation of agriculture, and create a more informed consumer.** The educational campaigns should involve supermarkets, restaurants, schools, food sections of newspapers and all appropriate media. Specific environmental organizations also should be targeted for educational efforts.

## OTHER POSSIBLE ACTIONS

*The following are some other ideas that people have suggested.*

**Profitability**

T Gail C. Stern, Palm Beach County Horse Industry Council, says: "Putting more of the economic return in the hands of the growers is essential. The middle man's pricing is a large factor in survivability."

T Rick Roth of Roth Farms in Belle Glade, Florida, says: "Farm cooperatives are the way to allow small landowners to stay competitive." Pat Cockrell of the Florida Farm Bureau Federation agrees. But, he adds, "We should not look at co-ops as outdated or only for the small producer ... Florida's natural citrus co-op helps all sizes of growers."

T Provide low-cost loans, training and technical assistance to help producers take full advantage of current technology, information systems, computer software geared to their businesses and operations, and the Internet.

**Promote:**

T *Business planning and capital investment.* Preparing a business plan can allow farmers and ranchers to examine a range of strategies to increase profits. Canada has a national program that provides incentives for farmers to develop business plans through cost-sharing and grants. A new Massachusetts program gives farmers access to a team of agricultural, economic and environmental consultants. Team members assess farm operations and make recommendations to improve performance. Farmers may receive state grants for capital improvements based on their business plans. Problem is, farmers must in turn agree to sign five- or ten-year covenants restricting

development of their land. Tim W. Williams took exception to this. As he says: " It is prudent to develop a business plan, not prudent to voluntarily give up development potential, unless very well compensated. Same old story ... Loaded gun for trinkets?"

T "Conduct research to determine changes that need to be made in estate tax and other tax laws to be competitive with foreign producers."[51] (See Section 5, Priority Actions, Tax Issues.)

T Address market value of land. Provide means to compensate landowners and producers for other values of the land. Pay producers for the environmental benefits derived from agriculture activity or management. Pay for the stewardship services producers provide to society for managing wetlands, wildlife habitats and controlling exotics: the payment per acre would be the same amount the public would pay for these services if land was in public ownership. See Endnote[52] (Also, see Section 5, Priority Action 1: "Landowner Equity")

T Provide better crop insurance. *Insure farmers, not the crop.* A crop insurance system in Canada is worth exploring. Growers pay in a percentage of the revenues received in good years. In bad years, they receive a payment equal to their average income during a good year.[53]

T "Fix crop insurance by forcing growing regions back into traditional time slots."[54]

**Economic Development**

T Integrate agriculture into all economic development efforts at the state and county levels.

**Promote:**

T *Planning for agricultural viability.* Some local governments are incorporating agricultural business strategies into their traditional economic development plans. Four local governments in Maryland employ economic development specialists who advise farmers on new products, services, marketing strategies and management techniques to increase profitability.

T *New products and marketing strategies.* State and local governments and agricultural organizations are helping growers create and market specialty products such as cheese, wine, preserves and sauces, potato chips and cereals. These products can be sold year-round and some can be marketed through the mail. Several states are investigating the feasibility of public commercial kitchens that could serve as incubators for farm-based food business.[55]

T Provide financing for start up farm operations. [There was not complete agreement on this. Rick Roth says: "Farm Credit does a very good job lending money to viable farmers. Government, state or county, should not lend money to first time farmers. This is a private industry function."]

Also: see Section 2, Other Possible Actions, All Policy Areas.

**Marketing**

**Promote:**

T *Direct marketing.* Growers who market agricultural products directly to customers usually receive higher prices than farmers and ranchers who sell wholesale. Counties and towns can encourage the development of agricultural retail businesses by specifically permitting roadside stands, pick-your-own operations, nurseries and other agricultural uses in their zoning bylaws. Many communities also have developed and distributed maps showing the location of farm stands, pick-your-own operations and farmers' markets, and some have posted signs directing drivers to farm businesses.

Ferdinand F. Wirth, Ph.D., Assistant Professor of Food and Resource Economics at the University of Florida's Indian River Research and Education Center, notes that: "There is a general belief that farmers selling direct will make more profit by capturing some of the monies normally retained by various marketing middlemen (wholesalers, brokers, etc.). This is not necessarily true! There are a number of marketing functions that must be performed if food is to flow successfully from producer to consumer. These marketing functions, normally performed by middlemen, include exchange functions (buying and selling), physical functions (storage, transportation, processing), and various facilitating functions (standardization, financing, risk-bearing, marketing intelligence gathering). All of these functions must be performed by someone, and there are costs associated with these marketing functions. If farmers want to sell direct, they have to have the physical and financial capability and resources to perform these marketing functions."

T *Marketing to restaurants and food retailers*. A growing number of natural and specialty food stores are expressing interest in selling local farm products. Several nonprofit organizations are working to establish links between growers and chefs. Encouraging restaurants to use local produce and meats and promote them on their menus may help build a retail customer base for both local farms and dining establishments. Contact with restaurants and food retailers also helps keep farmers informed about trends in the food industry.

T *Farmers' markets.* Farmers' markets can be a boon to small and medium-size growers, since they give growers access to a large base of customers. Most markets are open-air public spaces where farmers gather to sell homegrown products. The markets are good for the city as well as the farmers, as they attract customers who patronize other downtown businesses.

Large growers usually sell their produce by the truckload. The time and labor involved in handling smaller quantities is not cost effective. However, with farmer-operated local distribution centers, truckloads of produce can be distributed to vendors at farmers' markets, street vendors and local restaurants, thus allowing farm

operations of all sizes to benefit from direct marketing opportunities — and to provide the community with a supply of fresh local produce.

As Gail C. Stern points out: "In certain areas of California, open air markets have stone floors and booths centered around an open social/eating area. Booths around this area support the purchase of local fresh fruits and vegetables. Restaurants cook local fresh fruits, vegetables, seafoods and meats and educate the public on a personal basis as to the benefits of home grown foods. Support booths include culinary shops offering hard to find food items such as spices and cooking utensils. This could be expanded to Florida, showcasing our wonderful diversity of growers and products."

T *Community supported agriculture.* Community supported agriculture is a relatively new form of direct marketing. CSA farm customers pay for a share of the harvest at the beginning of the year and receive a weekly bundle of vegetables and fruits throughout the growing season. This system takes some of the risk out of farming and shifts the time that growers must spend on marketing to the beginning of the year. Some organizations are working to build CSA networks that would allow individual growers to offer a larger selection of farm products to their customers.[56]

The problem with direct marketing, selling to restaurants, farmers markets and community supported agriculture is that these strategies are usually appropriate only for small farmers. And, as Pat Cockrell of the Florida Farm Bureau Federation points out, "Government has already forced out the small farmer. Most large operations don't have time [for these strategies] ... [There is] no way to really impact the industry. This works around the edges."

T *Develop funding strategies to pursue these ideas.* Tim W. Williams picked up on this thought by suggesting that "we should do more with the powers of the Capper Volstead Act and other vehicles to collectively market and share information/marketing power. The Capper Volstead Act is the federal law allowing agricultural cooperatives to operate outside the anti trust laws. This law allows the 'cooperative structure' to exist ... Sunkist, Golden Gem, etc. The Florida Fruit and Vegetable Association also has set up numerous 'marketing exchanges' using powers available through the CVA. These exchanges work fairly well and could even improve if given the opportunity . I believe this vehicle and others available should be explored and applied to all ag in Florida. We must find a way to command more return to the grower. Whether we raise chicken, corn, avocados, tropical fish, or boniato, there must be a better marketing tool available."

**Education**

T Encourage local restaurants and stores to feature local produce, and to provide information about the origins of the produce they use — even including profiles and visits by the growers who produce the foods being used, and listing farms and farmers on menus.

T Encourage restaurants to feature specials with fresh ingredients produced by "farmers

of the week." All ingredients in meals listed, with information on where ingredients come from. Effort made to increase patrons' "food appreciation" by showing connection between each dish that is made, the people who grow and produce its ingredients, the places where the ingredients come from and the effort and care that go into producing, harvesting, processing and preparing the ingredients in each dish — from farm to table. "Farmers of the Week" prominently displayed through posters, displays, videos and/or live appearances. Part of restaurant proceeds could even go to the "Farmers of the Week."

(There is not complete agreement on this approach. Rick Roth says: "Farmer of the week program [is] too time consuming for the benefits.")

T Establish chain of "farm stores" in shopping malls with specialty foods and gift foods; gallery with wildlife and nature photos taken on ranches and farms (from Bud Adams, for example), photos of food and farms, farmer of the week photos and drawings; products from conservation, farm and ranch organizations; publications from conservation, farm and ranch organizations; information on conservation, farm and ranch organizations; web site links to conservation, farm and ranch organizations; membership sign ups for conservation, farm and ranch organizations; food nutrition and safety information; and ongoing story of our food: how it's grown, who grows it, how it gets to our tables.

T Provide business management training and market training for producers.

T Rick Roth also suggests that "federal dollars [should be made available] to do public service announcements extolling the benefits of a democratic society with an economic system based on private property rights and capitalism."

T Produce a primer on the economics of growing things. What are the imperatives? Investment, risk, burdens, opportunities for profit?

T Promote agri-tourism. Several state and local governments offer workshops for farmers who are interested in developing recreational businesses. Nature-based tourism and agricultural tourism are growing rapidly in popularity. Entrepreneurial growers can offer educational opportunities in conjunction with their regular operations and generate new sources of revenue.

T Sponsor special events to highlight agriculture's role in the economy, environment and landscape and feature selected products.

T Include agriculture in the expansion of Ft. Lauderdale's Museum of Science and Discovery.[57]

**Other Suggestions**

T William K. Crispin, a Dade County attorney representing owners and operators in production agriculture, says: "Agriculture's role in carbon sequestration,[58] carbon as a

new agricultural commodity, needs to be [given] more emphasis ... The USDA's recently issued Economic Analysis of U.S. Agriculture and the Kyoto Protocol makes a good case for production agriculture to gain economic benefits from carbon sequestration; the public relations benefits are another huge benefit. Certainly Florida being a state whose exposure to the effects of global warming is terrific ought to be a leader on this subject." Crispin goes on to note that "The South Dade Soil & Water Conservation District is establishing a carbon sequestration pilot project on agricultural lands it manages."

T "Levy a tax on imported Ag products similar to the bed tax and redistribute the income from the tax to the Ag operators in each county, with a percentage going to research and a percentage going to low interest loans/beginning farmer (5 years or less). Use county Farm Service Administration (FSA) to administer the program. Take a percentage of the ad valorem taxes and do the same thing."[59]

T "Beef up Ag disparagement laws."[60]

T Develop a national food security policy.

As William K. Crispin points out: the nation's Farm Bills "historically have been titled the Food Security Act, [de]noting that the production of food and fiber within the country has been an area of national security."

Crispin also notes we should bear in mind that Florida Statutes, Section 604.001, states:

1. *It is the public policy of this state and the purpose of this Act to achieve and maintain the production of agricultural commodities for food and fiber as an essential element for the survival of mankind.*

2. *The production of agricultural commodities in this state is a large and basic industry that is important to the health and welfare of the people and to the economy of the state.*

3. *A sound agricultural industry in this state requires the efficient and profitable use of water and energy and many other natural, commercial, and industrial resources.*

4. *The efficient and profitable use of energy and water resources in agricultural production in this state is often difficult to achieve because of problems that are not well known or fully understood by the people, such as weather, climatic changes, and market conditions.*

5. *It is important to the health and welfare of the people of this state and to the economy of the state that additional problems are not created for growers and ranchers engaged in the Florida agricultural industry by laws and regulations that cause, or tend to cause, agricultural*

*production to become inefficient or unprofitable.*

## BENEFITS

By taking these actions:

- Producer profitability will be improved;
- American consumers will be assured of having the world's safest food supply;
- American consumers will continue to have the world's cheapest food which, in turn, will allow Americans to spend more money on other pursuits;
- American consumers will be better informed about their food and where it comes from;
- Other countries that export food into the U.S. will be forced by the market place to comply with U.S. laws regarding food safety, child labor, environmental protection and restrictions on chemical use;
- Exotic pests and diseases will be better controlled; and
- The U.S. can continue to be the world's leading agricultural producer. This will allow the U.S. to be completely self-sufficient in providing for its own food needs, and ensure U.S. citizens never will have to compromise on food quality, quantity or safety, or compete with the world's hungry billions for the meals they eat.

# *ECONOMICS*

# SECTION 2

## A CONDUCIVE BUSINESS CLIMATE

## TT2 The Second Component for Success:
## *A Conducive Business Climate*

### GUIDING PRINCIPLE:

*"How law works, not what it aims to do, is what is driving us crazy."*[61]

### POINT TO KEEP IN MIND:

*"Regulations are fully justified for the protection of public values. No one believes that one landowner's use of his land should result in another's loss. Yet it is easy for regulations to cross over the line of reasonableness, taking major values from landowners with only minor gains for the environment or the public."*[62]

### CHALLENGE:

***Create a business and regulatory framework that promotes — and does not discourage — agriculture.***

### SAMPLE OBSTACLE:

*"I don't have any good advice for agriculture. We don't see farmers everyday. And, frankly, the system has not been set up to help agriculture. By the time a farmer learns how to navigate through the system, he'll never do it again.*

*"Let me give you an example. You can get a permit to build a 'shed' with few problems. But if you come in to the Building Department and say you want to build a 'barn,' it's a different matter. You'll have to pay to obtain a certified site plan. The 'code' you'll have to comply with was not designed for barns. It was designed for commercial warehouses. But, never mind, you'll have to comply anyway. And if you don't do something right, you'll have to start all over again.*"

--

Gary D. Pailthorp, P.E., Professional Engineer
Planning & Development Management Department
Hillsborough County, Florida

### CURRENT CONDITION:

**Here are the major obstacles that stand in the way of a conducive business climate for agriculture:**

Note: the previous section, *Producer Profitability*, focused primarily on ways to help individual producers become more profitable and, thus, continue to thrive in agriculture.

This section focuses on the needs of not just individual producers, but the *entire* agribusiness industry — including packers, processors, suppliers, wholesalers and all related businesses and industries that are dependent upon and support agriculture.

Several people in regulatory agencies commented about this section. Their first reaction was to question the problems identified by ag producers with regulations, the impact regulations have on agriculture and the effect they have on profits, and then to request documentation.

Some asked "why is agriculture always complaining about regulations?" That, of course, served to underscore the gap that exists between many regulators and ag producers – and the reason this section is important. Several regulators characterized the following list of obstacles as "one-sided statements of opinion." They're not. They are based on the findings of an extensive study on the impact of regulations on agricultural operations in Hillsborough County, Florida,[63] which is summarized in Appendix C. The study goes a long way toward explaining and documenting this issue. Suggestions on how to overcome each of the problems identified are included in the Priority Actions below.

To make progress in improving the way in which regulations work, regulators must be willing to listen to criticisms from the people who are regulated, to look at problems that have been identified and to consider alternatives that can improve compliance. This section strives to facilitate that process.

Several people in regulatory agencies also pointed out – correctly – that nowhere in the list of obstacles is there any mention or acknowledgment of recent regulatory "success stories." Of course, success stories, by definition, do not qualify as obstacles. Nevertheless, there have been meaningful efforts by regulators in several agencies to work with producers to come up with reforms.

Three examples are noteworthy. First, several water management districts, including South Florida Water Management District and South West Florida Water Management District are now moving toward 20-year permits. Second, the Suwannee River Water Management District has developed the Forestry and Agriculture Resources Management (FARM) Program to eliminate overlapping and sometimes contradictory regulations enforced by federal, state and local agencies. The district arranges for representatives of all authorities which exercise regulatory power over a farm operation to meet together with the owner. The meeting allows the owner to discuss future plans for expansion or changes in the system of production at the site. The various regulatory officials, led by the SRWMD, subsequently provide a single set of management standards for the owner to meet while pursuing changes in the farm operation. All regulatory agencies involved approve a unified plan of compliance that satisfies their respective rules. The farm owner is thus spared from having to contend with compliance standards enforced by multiple levels of government.

Finally, early findings from the Hillsborough County study were so persuasive in alerting county commissioners to existing problems that they immediately began taking steps to make reforms. As a result, the group that funded the study – the Hillsborough County Board of County Commissioners, the Greater Tampa Chamber of Commerce Committee of One Hundred and an Agricultural Task Force representing all major commodity groups in the county – decided that the study had accomplished its purpose, ended the study early and only published a summary of its results (which are incorporated into Appendix C).

It is hoped this section of the concept paper will have the same result: reform and improvement that are generated from an honest appraisal of the problems created by the current regulatory climate (which still exists, as described below, even with recent reforms).

Findings from the Hillsborough County study indicate that:

- **Regulations are exceedingly expensive**. A common complaint by business owners — and farmers are business owners — is that the massive number of rules and regulations, and the costs of hiring attorneys, engineers and consultants needed to understand and comply with the regulations, is robbing their businesses of profitability and, in some cases, is driving them out of business (see Appendix C).[64]

- **Regulations are not doing their job.** Some regulations are necessary for public health and safety and protection of the environment. But some overlap, some conflict with each other, some are arbitrarily enforced, some are targeted to other land uses and should not be — but nevertheless are — applied to agriculture, and some simply make no sense. Many also are not site-specific to the operations affected. Hence, they consume time and money, discourage innovation on the part of agriculturalists to come up with cost-effective solutions, and fuel a needlessly contentious relationship between agricultural operators and regulators, sometimes without delivering any benefit to society (again, see Appendix C).[65]

  "In fact," Pat Cockrell of the Florida Farm Bureau Federation says, "agencies may have different requirements for the same project, i.e.: the water management district may require that a new greenhouse not to have a paved parking area while county building codes require a paved parking area." Also, see Endnote[66]

- **Regulatory agencies rarely provide adequate guidance.** The current regulatory process is so complex, overwhelming and incomprehensible that the regulators who are responsible for it cannot — even with the best intentions:
  - find information quickly;
  - determine which information applies to a specific case prior to initiating a lengthy permitting or review process;
  - provide reliable estimates of the time, costs or outside expertise that an agricultural operator will require to comply with existing rules and requirements; or
  - make distinctions between the rules and regulations that apply to agriculture and those that apply to other types of land use, other industries or other businesses.[67]

- As a result, the agricultural operator must enter the regulatory process:
  - without the benefit of reliable guidance from regulators; and
  - without knowing how long the process will take, how much it will cost or which experts must be consulted for assistance.

  The result is similar to constructing a large municipal building without the benefit of a detailed architectural plan, without a building schedule, without a cost estimate, without a list of the building materials and supplies that will be required and, even worse, without a knowledgeable construction supervisor.[68]

- **Far too many rules are written and too many regulators take action without an adequate understanding of agriculture or the implications that these rules and actions have on agriculture**.[69]

- **Regulations create an enormous burden, but do not always have a clear benefit.**
  *Every* farmer interviewed during a study on the impact of regulations:
  - was frustrated or angry about today's regulatory climate;
  - experienced lengthy (and, they contend, unnecessary) delays in obtaining permits and permit renewals for specific aspects of their operations;
  - lost money as a result of delays; and
  - was required to spend money on procedures that:
    - were not understandable,
    - were unnecessary, or
    - did not apply to their operation

    and for which the farmers could not see *any appreciable benefit* to public health, safety or the environment.[70]

- **Laws that strive for certainty do not always act as a good guide for action.**
  According to Philip Howard:

  > *Once the idea is to cover every situation explicitly, the words of law expand like floodwaters that have broken through a dike. Rules elaborate on prior rules; detail breeds greater detail. There is no logical stopping point in the quest for certainty*.[71]

  And he adds:

  > *The drive for certainty has destroyed, not enhanced, law's ability to act as a guide*.[72]

  As Mike Hennessy, a Hillsborough County nurseryman, says:

  > *It's a never ending process to understand what's going on. Then the*

*agencies change the rules and you have to learn everything all over again.*

Richard Neill and his brother, David, concur, saying: "We would like to add the following:

- "There is a basic attitude problem existing in the agencies with whom we have dealt. Instead of a cooperative 'let us help you do a good job' type of approach, the agencies with which we have dealt seize upon every opportunity to threaten $10,000 per day fines and other retribution if you do not accept their every demand.

- "The agencies seem intent upon causing farmers to expend a lot of funds on engineering that is unnecessary and serves no useful purpose. Even applications prepared by experienced engineers are never approved on the first effort. They are invariably returned with a checklist of 50 or 60 items to be re-done.

- "The agencies have total disrespect for legislative exemptions in favor of agriculture. For instance, the exemption granted to agriculture is generally ignored by the agencies such as South Florida Water Management District. The cost of litigation is such that most owners will not consider that as an alternative."

Finally:

- "**Strict regulation of agriculture may accelerate urbanization."**[73]

In written comments to this paper submitted January 26, 2000, the Florida Department of Community Affairs (DCA) said: "We recommend more specific examples of regulations thought to be excessive or conflicting. Including these examples will improve the clarity of the document and illuminate the nature of the problem."

*Response:* Please see Appendix C (or Excerpt 7 - "The Problems with Regulations" on the project web site, http://us-farm.com) where more specific examples from the Hillsborough County study are cited.

DCA went on to say: "From a lay perspective there are several conflicting positions in the report which should be clarified. For example, the desire for protection (presumably through the enforcement of regulations) from imported diseases, pests and exotic plants is expressed on the one hand, but relief from the regulation, on the other. We suggest the report be extremely clear on these issues in order to avoid criticism."

*Response:* Good point. Perhaps Priority Action 1, below, can provide this clarification. As noted under Priority Action 1, "... the purpose of changes is to *simplify* the current regulatory process, *not* avoid or weaken laws, rules or regulations," or provide *relief* from laws, rules and regulations.

Dick March, an economist with South Florida Water Management District, also said: "the water management districts' permitting activities should be discussed more ... The recent revisions to SFWMD's permit fees made major efforts to accommodate agriculture and were, in fact, endorsed by the District's Agricultural Advisory Committee. The District is moving toward 20 year [permits] in many areas. The report needs more examples of successful co-operation between agriculture and regulatory agencies."

*Response:* Points well taken. These are all moves in the right direction. The suggestion for examples of successful cooperation is important. As noted previously, there are success stories. There are efforts underway to improve the regulatory environment. There are people in government who care. These positive efforts need to be mentioned – and encouraged. Still, as Appendix C points out, there is room for improvement.

Other obstacles include:

- **Agriculture is segregated from all other business activities**.

- **Agriculture is not integrated into mainstream economic development/business development efforts**.

- Agriculturalists maintain a deep skepticism toward most government actions — even those that are intended to "help" agriculture. Past experience has been bitter. People in government change. Programs come and go and are modified with simple majority votes. Also, **far too many programs — including those billed as "good" for agriculture — are designed and carried out without consulting agriculture and without taking the effects on agriculture into consideration**.

- **Farmers are becoming more scarce, and that means that when new conflicts arise, the community is composed more and more of people who do not understand agriculture** and are less likely to be sympathetic to the farmer's point of view.

- **There are no inducements for recruiting suppliers, wholesalers and industries built on local agriculture**, and industries that can process, manufacture and produce ready-for-market products from agricultural commodities produced in the Caribbean Basin and other off-shore locations.

- **Local suppliers, services and consultants are disappearing** as agricultural activities begin to consolidate and diminish in the face of increased urbanization, raising costs of production and operation.

- **Financial markets do not encourage investment and growth in agriculture**. Farming is becoming information and capital intensive. Public policies that discourage investment in farming or increase financial risks cripples necessary investment.

- **Agriculture operates on a different time scale than the rest of society**. Many

capital investments and business decisions require a 10-, 15- or even 20-year period to become fully vested and make a reasonable return on investment. Changes in regulations and policies, increased competition for land and water, rising real estate values, loss of chemicals, increases in operating costs and other changes that occur every year, three years or five years all create a climate of instability that undermines agriculture's ability to remain profitable and operate in a climate conducive to continued investment and planning. See comment from DCA under Endnote[74].

- **The structure of agriculture, the way agriculture operates, the challenges faced by agriculture and the commodities produced by agriculture vary from county to county.** Broad brush, one-size-fits-all approaches that ignore these differences can handicap — or even imperil — the productivity and viability of agricultural businesses.

## CONCLUSIONS

**Need to find ways to:**

- **Improve the regulatory climate** so agricultural operations can comply with laws that are important to public health, safety and protection of the environment, without being placed at an economic disadvantage to foreign producers and other types of land uses that could displace agriculture and result in even greater environmental impacts.

  In order to accomplish this, there is a need to engage farm groups and regulators to work together in constructive efforts to improve the regulatory climate by:
  - developing standards that will *simplify* current rules, regulations and permitting procedures without weakening them;
  - developing more efficient, cost-effective approaches for agricultural enterprises and business operations to comply with all "external" demands and requirements that are placed on these operations by society;
  - using prototype programs to test "whole farm plans," "integrated operating plans" and other approaches to improving the regulatory climate; and
  - providing training to policy makers, regulators and agency staff about the differences between agriculture and other types of land uses and businesses.

  Next to improving profitability, this is the single most important step that needs to be taken to improve the viability of agricultural enterprises in South Florida.

**Also need to find ways to:**

- Reduce unnecessary burdens and costs on agriculture due to **local government regulations** and permits

- Better consider the needs and requirements of agriculture and integrate them into **all policy areas** and all phases of policy development where agriculture has an impact or is impacted.

- **Adapt federal programs to state needs** to avoid the potential for adverse unintended consequences.

## PRIORITY ACTIONS

### 1. IMPROVE REGULATORY CLIMATE:

***Conclusion:*** Need to find ways to improve the regulatory climate so agricultural operations can comply with laws that are important to public health, safety and protection of the environment, without being placed at an economic disadvantage to foreign producers and other types of land uses that could displace agriculture and result in even greater environmental impacts.

***Suggested Actions:*** Here are several ways in which this might be done in South Florida**:**

*A)* ***Industry groups should be encouraged to develop standards that can be <u>easily</u> adopted by producers to meet or exceed current regulations*** (examples: Florida Cattlemen's Association's Best Management Practices manual; U.S. Foundry Association, which defined standards that exceed OSHA's standards for its members to implement.)

- Stress that the purpose of changes is to *simplify* the current regulatory process, *not* avoid or weaken laws, rules or regulations.
- Agencies must ensure they have the authority to waive their rules and regulations if it can be demonstrated that another approach suggested by a farm group, or developed as a result of the steps suggested below, can meet the objectives of their rules and regulations, exceed minimum standards and/or produce a net environmental benefit.
- Use demonstration projects to test different approaches, recruit additional volunteers, demonstrate to other agencies and growers that this alternate approach works so they will support it.
- **Note:** This will work only if it comes *from the bottom up*, and is embraced by industry groups and producers. It has to be something they are sure will work for them, will benefit them, and is designed with their input to meet their specific needs. It will not work if it is imposed from above by government, in which case, it is likely to just be viewed as another layer of bureaucracy. Government has to be the *facilitator*, to allow farm groups and producers to take a lead in suggesting approaches that can simplify the current regulatory climate. One possible approach is described below:

*B)* ***It is recommended that the focus be on <u>integrating</u> all external demands*** — all rules, regulations, monitoring and reporting requirements, recommended practices, licenses and permits, etc. — ***from all sectors of society*** — land use, health, public safety, utilities, road and street, solid waste, occupational safety, environment, water management, unemployment and worker's compensation, farmworker housing, motor carrier safety, etc. — ***into the internal operating plan or plans that are used to guide day-to-day operations***, so that every action that is taken by every employee ensures the smooth operation of an agricultural enterprise *while at the same time ensuring compliance with all rules and regulations that govern the enterprise.* Further, it is recommended that the document that results from this process be called

an *Integrated Operating Plan,* to indicate that all operating requirements — both external and internal — are integrated into a single, site-specific plan that can be easily understood and followed by every employee.

- The duration of the Integrated Operating Plan should be a minimum of 10 years or, preferably, 20 years before it has to be revised.
- All appropriate regulators — including planners, water management districts, environmental regulatory departments, etc. — should be involved in developing the Integrated Operating Plan.
- Once the Plan is in place, all policy makers and regulators should be required to exempt operations with approved Integrated Operating Plans from all new rules, regulations, land use changes, assessments and fees until it is time to revise the Integrated Operating Plan.

***C)*** ***This approach holds the potential to actually <u>exceed</u> current minimum standards and requirements.*** And it could provide a *net environmental benefit* over current regulatory approaches. This is because it would be an incentive-based document that includes incentives for surpassing minimum requirements, plus it would incorporate all permits, regulations and requirements into an easy to read, easy to understand "operating plan" that would act as a day-to-day operational guide for all employees. Consequently, this approach assures that all procedures necessary for meeting the objectives of these permits, regulations and requirements would become a part of the daily operating procedures followed by each employee.

***D)*** ***The Integrated Operating Plan would be a step-by-step "how to" guide to be used by all employees, supervisors and managers***. It would be designed to highlight key actions that must be taken by all employees to properly operate equipment and follow practices to ensure efficient production and compliance with the regulations and permits that would be required in lieu of the Integrated Operating Plan. However, to ensure that it is as easily readable and easily understandable as possible, the Operating Plan also must be succinct. It therefore would act primarily as a detailed outline that would be supplemented with more specific and illustrative descriptions that are incorporated by reference. These other descriptions would include: notebooks containing details on recommended practices; supervisors' manuals that are more detailed and updated as necessary; the manuals provided by equipment manufacturers, chemical companies and other suppliers; and manuals that already in use by the agricultural operation.

E) ***The Integrated Operating Plan would be divided into sections, each covering a single "production location" or "operating unit"*** that plays a role in the integrated agricultural objectives of the company. For the purposes of this document, a "production location" or "operating unit," would be defined as "an agricultural operation with clearly defined boundaries that is not adjacent to another operating unit by the same owner."

Descriptions of the current operations for each unit would be broken down by activity. For example:

Groundwater Management
Surface Water Management
Chemical Applications & Handling Management
Nutrient Management
Waste Management
Equipment Management
Upland Wildlife Habitat Management
Wetland Wildlife Habitat Management
Prescribed Grazing
Prescribed Burning
Brush Management
Pest Management
Noxious and Invasive Plant Control Management

and:

Opportunities for Environmental Enhancement Management (e.g., planting legumes in pastures, use of no-till and multi-crop systems, and non-chemical pest control, etc.) Note: these practices are *optional*, but if pursued, would help to result in "bonus payments."

Also, as appropriate to the type of operation:

Crop Management
Grove Management
Nursery Management
Forage Production Management
Forage Harvest Management
Grazing Management
Livestock Management
Forest Planting Management
Forest Growth Management
Forest Harvesting Management
Mining/Resource Extraction Management
Packing Plant Operations Management
Processing Plant Operations Management
Machine Shop Operations Management
_____ (fill in as appropriate) Operations Management

***F)*** ***It is recommended that a 10-minute video, based on the text of the Integrated Operating Plan, also be developed*** for each operation at each production location, so that employees can be *shown* each operation step. This would be particularly useful in training employees, providing "refresher" courses to ensure consistent practices and in showing outsiders how operations are conducted.

***G)*** ***As part of his or her orientation with the ag operation, each***

***employee would familiarize himself or herself with the contents of the Integrated Operating Plan at the site where he or she is going to work, and would sign an acknowledgment of understanding the contents.*** The Integrated Operating Plan should be easily understood and should answer any questions the employee has regarding the production element of the operation where he or she works. If any questions are unanswered or if the Operating Plan is confusing or poorly understood, the employee would notify his or her supervisor, who would explore improvement or changes needed in the Operating Plan, or help the employee understand.

H) ***The Operating Plan — and any updates made to the Plan, which are made during its 5-year reviews, or at the request of the Landowner or Agricultural Operation Manager — should be developed and approved with the participation of all agencies that would be accepting the plan in lieu of their normal regulatory requirements and/or permits***.

***I)*** ***The intent is to design the Integrated Operating Plan so that it incorporates all external demands and requirements mandated by society into the daily actions and operating procedures followed by each employee.*** By creating an easy to read and easy to understand plan, all parties would benefit, since optimum production can be more easily assured, compliance with all permits and regulations that would have been required in lieu of the Operating Plan can be more easily assured, and optimal environmental sensitivity and compatibility, worker safety and public health requirements can be more easily assured.

***J)*** ***The Integrated Operating Plan should be designed to:***

1) **Simplify permitting:**

- Reduce paperwork to save time and money.
- Reduce cost of compliance.
- Simplify regulations; make them understandable to the average business owner.
- Create permit durations that fit with the realities of farming.
- Eliminate conflicts among agency staff in interpretation of rules.
- Eliminate duplication among agencies.
- Take a team approach to multi-agency issues.
- Improve intergovernmental coordination. "Good example of inter-governmental coordination is Suwannee River Nutrient Management Working Group," according to Pat Cockrell of the Florida Farm Bureau Federation. "Over 20 agencies and groups are signatories working for voluntary compliance"
- Change emphasis from enforcement to compliance monitoring.

C Cultivate a "customer service" attitude among regulators toward agricultural industry.

C Provide the agricultural industry with a central source of reliable information on what rules they must comply with.

Pat Cockrell says: "There is a need for a 'central clearinghouse' on all rules. This was proposed in the agricultural water policy group, but no agencies were willing to take on this project."

Gail C. Stern suggests: "How about an agricultural Internet site for all farming interests? A one stop government address for all concerns, permitting questions, [and] a uniform farming code [that is both] reasonable and understandable." (Note: this idea has been put in practice at http://www.agregs.com)

C Provide information on who to contact for more specific information within each agency.

C Give each person applying for a farming-related permit an Ag advisor (champion/caseworker) — someone to assist them through the entire process

C **Recognize that the costs of compliance cannot be passed on to buyers of farm commodities**.

C **Provide producers with a way to come into compliance at a lower cost**.

C **Consider implementing Integrated Operating Plans at no cost to participating companies or as a cost-share program.** It is in the public's interest to require compliance with all necessary practices and safeguards to ensure environmental compatibility and protection of public health and safety, but not at the expense of forcing producers out of business and making American consumers more reliant on foreign producers who do not have to abide by the same rules and safeguards. Hence, it is not unreasonable to ask the public to share in the cost of regulatory compliance (perhaps through the voluntary, $1, $3 or $5 per shopping trip donation recommended under Priority Action 4-D in Section 1.) In the end, the American consumer will benefit because the U.S. can maintain its food production capability, continue to lead the world in the safety of its food and continue to provide the consumer with the world's lowest cost food.

**2) Ensure that rules pass the test of "common sense."**

< Identified as a possible task for assistance from the Governor's Commission for the Everglades

**3) Tie regulations to good science.**

< Identified as a possible task for assistance from the Governor's Commission for the

< Contributing action recommended by NRCS:

*Action:* Increase NRCS staffing
*Responsible:* NRCS
*Duration:* Short term (1-2 years)

**4) Develop and use Best Management Practices (BMPs) in lieu of permitting.**

< Identified as a possible task for assistance from the Governor's Commission for the Everglades

Pat Cockrell of the Florida Farm Bureau cautions that "as the document is approved and the physical BMPs are put on the ground, their value should not be incorporated into the value of the land under property tax assessment."

**5) Eliminate unfunded mandates.**

**6) Provide alternatives to the current regulatory approach to addressing environmental problems**

< Contributing action recommended by NRCS:

*Action:* Increase NRCS staffing
*Responsible:* NRCS
*Duration:* Short term (1-2 years)

7) **Incorporate incentives for conservation practices to care for and maintain ecological values in natural areas** (see Resource Conservation Agreement under Priority Action 1-B-2 in Section 4).

< Contributing action recommended by NRCS:

*Action:* Increase funding for Farm Bill programs
*Responsible:* USDA
*Duration:* Short term (1-2 years)/Long term (2+ years)

*Action:* Provide incentives for conservation payments
*Responsible:* USDA

*Duration:* Short term (1-2 years)/Long term (2+ years)

*Action:* Provide incentives to agriculture to maintain wildlife habitat
*Responsible:* USDA
*Duration:* Short term (1-2 years)/Long term (2+ years)

*Action:* Seek state funding for conservation programs (Conservation Reserve Enhancement Program - CREP, Mobile Irrigation Labs MILs and Resource Conservation Agreement - RCA)
*Responsible:* Conservation partners
*Duration:* Short term (1-2 years)

**8) Train agency staff so they will be more knowledgeable about agriculture, and about the ways in which the Integrated Operating Plan can work to the benefit of each agency's mission and goals.**

< Identified as a possible task for assistance from the Governor's Commission for the Everglades

Ferdinand F. Wirth, Ph.D., has several suggestions *re: an education program for agency regulatory staff*. "Having spent 4 years as an official advocate for agriculture development at the state and county level [in Delaware], my experience has been that most regulatory problems are created by overzealous regulatory agency personnel who (1) know very little about agriculture, (2) have a tendency to make the most restrictive, technical interpretation of laws, far in excess of the original legislative intent of the law, and (3) apply to agriculture laws that were originally intended to control pollution from municipalities and industrial firms.

"The best solution I found was to slowly educate the regulatory agency staff on the differences between agriculture and other types of resource users. There should also be some form of agriculture ombudsman at the state regulatory agencies, or some other form of oversight committee to prevent regulatory agency staff from going overboard."

**K)** ***Funding should be continued for an extension of studies that are being done in the Kissimmee River Basin. This funding should be provided to USDA, working in concert with DOACS, IFAS and other groups, to:***

**1) Conduct studies to clearly identify and document the environmental benefits of ranching and farming in Florida** and demonstrate how agriculture can improve its benefit to the

environment. These studies should:

- Provide missing data. For example, as Frank Mazzotti, Ph.D. says: "We know very little about wildlife use in ag fields. People see it all the time, but we've never quantified it."[75]
- Emphasize how agriculture is highly adaptable and flexible on environmental issues, when compared with other types of land use (i.e., benefits of "Living Lightly on the Land.")
- Provide data to justify payments of incentives for environmental benefits.
- Conduct a benefit/cost analysis that demonstrates: 1) comparison between maintaining lands in agriculture versus urban development, and 2) the explicit benefits to the environment provided by maintaining land in agriculture

  < Identified as a possible task for assistance from the Governor's Commission for the Everglades

- Demonstrate benefits of Integrated Operating Plan concept.
- Demonstrate benefits of Resource Conservation Agreement concept (see Priority Action 1-B-2, Section 4).
- Demonstrate that BMPs are energy efficient, cost less, help the environment and help the bottom line.
- Provide data to "show that prevention is cheaper than restoration."

- "Questions that need to be addressed include the following: What is the value of agriculture to the local society? How can agricultural practice be modified profitably to enhance wildlife? What changes in laws, rules and regulations are desirable to make more sustainable practices profitable (or affordable)? How would such changes affect the community as a whole? What should be the relative roles of public lands versus private lands?"[76]

< Contributing action recommended by NRCS:

*Action:* Report values of private ownership
*Responsible:* State and federal agencies
*Duration:* Short term (1-2 years)

**2) "Create a scientific framework to ensure the best decisions possible**, build confidence and consensus in decision making process, and reconcile conflicts between protection and use."[77]

***Recommendations:***

*Who:* The Florida Department of Environmental Protection (DEP), working with the U.S. Environmental Protection Agency (EPA), USDA, U.S. Fish & Wildlife Service (USFWS), DOACS, OTTED and water management districts (WMDs). Also, farm groups and individual producers who would like to participate in prototype projects should be recruited.

*What:* **Need major statewide effort. DEP, working with EPA, USDA, USFWS, DOACS, OTTED and WMDs, should invite farm groups to work together in constructive efforts to improve the regulatory climate. This should include steps to:**

- **develop standards that will *simplify* current rules, regulations and permitting procedures without weakening them;**
- **develop more efficient, cost-effective approaches for agricultural enterprises and business operations to comply with *all* "external" demands and requirements that are placed on these operations by society;**
- **use prototype programs to test "whole farm plans," "integrated operating plans" and other approaches to improving the regulatory climate; and**
- **provide training to policy makers, regulators and agency staff about the differences between agriculture and other types of land uses and businesses**

< Identified as a possible task for assistance from the Governor's Commission for the Everglades.

2. **LOCAL GOVERNMENT REGULATIONS:**

***Conclusion:*** Need to find ways to reduce unnecessary burdens and costs on agriculture due to local government regulations and permits

***Suggested Actions:*** Much can be gained by more dialog on this issue at the local government level. Here are several ways in which this might be done in South Florida**:**

***A) Emphasis should be on seeking ways in which local government regulations and permits can be incorporated into the site-specific Integrated Operating Plans described above.***

***B) Another approach was suggested by Bruce Adams of South Florida Water Management District and the Sustainable Agricultural Task Team*:** Set up an approach whereby agricultural operations that meet certain criteria can be exempted from other rules and regulations and get expedited approval for permits.

***C) Still Another approach was recommended by Ferdinand F. Wirth,***

***Ph.D.,*** who says: "One problem with the regulatory climate is that agricultural producers have to deal with federal, state, and local laws which often conflict or overlap. The state of Delaware has found one solution which could work in Florida. That portion of the Delaware Constitution which grants zoning and licensing authority to local governments specifically excludes agricultural activities. Agriculture is a default land use in the state of Delaware. County and municipal governments have no authority over agricultural enterprises. Farmers are exempt from county zoning, building codes, building permits, etc. The counties only have authority when citizen health and safety are involved. The Delaware system has effectively removed one layer of bureaucracy from the backs of the agriculture community."

**DCA Responds:** "As implementation strategies evolve from this document, DCA would consider initiating a forum with local government planners and other key officials to seek ways to promote and sustain agriculture. One example to explore with local governments is the feasibility of creating land use categories that are exclusively for agriculture. The Delaware model that constitutionally exempts agriculture from local zoning, building codes and building permits combined with the principles of an Integrated Operating Plan creates interesting possibilities for changes to current regulations. Regardless, care should be taken to protect the essential state interests, or those affecting the health, safety and welfare of our citizens (water consumption, contamination, habitat impacts, etc.)"

***Recommendations:***

*Who:* The Florida Department of Community Affairs (DCA)**.**

*What:* **Need statewide effort. DCA should initiate a forum with local government planners and other key officials to seek ways to reduce unnecessary burdens and costs on agriculture due to local government regulations and permits.**

< Contributing action recommended by NRCS:

*Action:* Develop local leadership
*Responsible:* NRCS
*Duration:* Short term (1-2 years)

**3. <u>ALL POLICY AREAS</u>:**

***Conclusion:*** Need to find ways to better consider the needs and requirements of agriculture and integrate them into all policy areas and all phases of policy development where agriculture has an impact or is impacted.

***Suggested Actions:*** Here are several ways in which this might be done:

**A)** ***The Integrated Operating Plans, described above, should be a part of this strategy.***

***B)*** ***Policy makers and agency staff should be trained so they will be***

***more knowledgeable about agriculture, and about the ways in which the Integrated Operating Plan can work to the benefit of each agency's mission and goals.***

***C)*** ***Agencies whose actions have an impact on agriculture should be encouraged to adopt the public policy, described under Priority Action 4-A in Section 1, that acknowledges the value of agriculture to the economy, the environment, the appearance of our landscape and our very survival.*** In addition, these agencies should be encouraged to:

- Acknowledge and document the impact that their activities and decisions have on agriculture;
- Devote time at regularly scheduled meetings to discuss these impacts and ways in which the interface between the agency and agriculture can be improved.

D) ***Consider conducting an Ag audit prior to proceeding ahead with any activity undertaken by government or private enterprise that might have an adverse impact on agriculture.*** As former Dade County potato grower Tim Williams says, "Just like economic impact or environmental impact ... require an AGRICULTURAL IMPACT statement before one more dollar is spent or one more acre is removed from the tax rolls."[78] & [79]

***Recommendations:***

*Who:* DOACS, working with DCA, DEP, Florida Department of Transportation (FDOT), Florida Department of Labor (DOL), Florida Department of Health & Rehabilitative Services (HRS) and the Governor's Office.

*What:* **Need statewide effort. DOACS, working with DCA, DEP, FDOT, DOL, HRS and the Governor's Office, should develop strategies to ensure that agriculture is integrated into all phases of policy development where it has an impact or is impacted.** This should include land use planning, environmental planning, transportation, labor, health, business development, community development, economic development, business promotion, tourism, etc.

## 4. ADAPT FEDERAL PROGRAMS TO MEET STATE CONDITIONS:

***Conclusion:*** Federal programs do not always fit the unique conditions in South Florida. Need to find ways to adapt federal programs so they will better meet state needs and avoid the potential for causing adverse unintended consequences.

***Recommendations:***

*Who:* SFERTF, working with USDA-NRCS, DOACS, DEP, DCA, the Governor's Office and other appropriate agencies and farm groups.

*What:* **Need to initiate actions at the federal level. SFERTF, with support from USDA-NRCS, DOACS, DEP, DCA, the Governor's Office and other appropriate agencies and farm groups, should:**

- ***review*** all federal programs to identify areas where they do not fit conditions in Florida,
- make recommendations to ***revise*** these programs so they will work more effectively and efficiently in Florida; and
- encourage all affected federal agencies and the Congressional Delegation to take administrative and legislative steps, as necessary, to ***rectify*** all shortcomings.

## OTHER POSSIBLE ACTIONS

### Regulatory Climate

T Identify land use, regulatory and business policies that will create an accepting, conducive atmosphere for agricultural producers, suppliers, services, wholesalers and industries as a key economic sector.

T Recognize that policy makers, government employees and representatives of environmental and business interests are paid to attend meetings. Agricultural producers are not. They must take time from their work to attend meetings. They also represent a very small segment of the population, so it is difficult for them to cover all the meetings that have a bearing on their businesses. To encourage attendance at meetings where input from agricultural producers is required or highly desirable, keep the meetings short and to the point, hold them at a convenient time (midweek, in the afternoon, after most chores are done) and provide compensation for attendance — a meal or, if more than one meeting is required, offer travel expenses and a stipend for those who must attend a series of regular meetings or serve on a task group.

As Tim W. Williams says: "Imagine angels singing the hallelujah chorus from Handel's Messiah. Just for ... this factual and correct succinct statement of truth. I have sat beside people in the last 5 years who over the course of a 2 day meeting billed their client more money than I took home in a month. O.K. so perhaps I can change professions, but sometimes I wouldn't have had to be there if it weren't for them!!! Conflicts that require our involvement cost us money, no matter how you look at it and what the outcome is. We don't have constituents or members to answer to, but we have wives and children, and living plants and animals, and even a few employees, who depend on our presence each and every day to provide the means by which we survive on this planet."

### Local Government Regulations

T Review all state and local regulations, fire and building codes, assessments and restrictions related to agriculture. Exempt agriculture from: restrictions that are targeted to other land uses or industries, but are not directly applicable to agriculture; special assessments that do not directly benefit agriculture; and restrictions not

necessary for public health or safety or protection of the environment.

- Identify inducements that can be used to attract, strengthen and keep agricultural suppliers, services, wholesalers and add-to-value industries.

- Strengthen Right to Farm Act to provide farmers with better protection from nuisance complaints. Ensure farmers can make operational changes consistent with Best Management Practices without losing protection of this law. Add provisions from California's "Right to Process Act" to cover ag suppliers, services and add-to-value industries.

**All Policy Areas**

- Develop a county-by-county agricultural impact assessment.[80]

- Eliminate "footprints" on land when funding is not identified and allocated.[81]

- Identify steps that can be taken to induce financial markets to encourage investment and growth in agriculture.

- Offer economic incentives to attract, strengthen and keep agricultural suppliers, services, wholesalers and add-to-value industries.

- Provide loan programs and economic development incentives: Farmers need access to capital to purchase land and equipment and to invest in the development of new products, services, production technologies and marketing strategies. Yet commercial banks often are reluctant to lend money to farmers for agricultural enterprises. Public economic development programs are generally targeted to the industrial and service sectors and do not consider loans to agricultural businesses. State and local governments can facilitate agricultural economic development by treating farms as other businesses, making loan funds, tax incentives and technical assistance available to producers. Twenty-four states offer public agricultural financing programs. Many of these programs are targeted to beginning farmers. Few, if any, have the capital to meet the demand for credit among farmers. One promising approach is a private initiative in Maryland that is experimenting with getting commercial banks to participate in an agricultural loan program through the commitment of Community Reinvestment Act funds. An organization in Virginia is developing a brand of local farm and seafood products, and an organization in Maine is experimenting with selling farm products on the Internet.

Pat Cockrell of the Florida Farm Bureau Federation says: “Currently low interest loans are [available] through FHA for those farmers who have no other credit source. Shouldn’t we put the incentive on the financially successful farmers and give low interest loans, possibly for export? Israel has a similar program. We often put our incentives on the wrong behavior. The problem is not borrowing money - it is paying it back!”

**Other Suggestions**

- Promote agri-tourism.

  Pat Cockrell of the Florida Farm Bureau Federation suggests: “possibly a waiver of liability if farms are used for tours. Currently it is very costly for insurance for commercial tours.”

- Launch educational campaign to improve awareness of agriculture and how it can be positively affected — to the benefit of all consumers and the economy — by changes in the current business climate.

- Form groups to foster exchange of ideas between urban and agricultural people.

## BENEFITS

By taking these actions:

- Agricultural operations can save enormous sums of money in applying for permits; ensuring compliance with all laws, regulations, ordinances and requirements imposed by all levels of government; fulfilling monitoring and reporting requirements; re-applying for permits as they expire over different time intervals; and keeping up to date (and in compliance) with all laws, regulations, ordinances and requirements as they change from month to month and year to year.
- The American public will be assured of better compliance with all laws, regulations, ordinances and requirements affecting public health, safety and welfare and the environment.
- Agricultural operations will have more opportunities (and greater incentives) to exceed minimum standards and requirements, and thus can do a better job of protecting public health, safety and the environment.
- Governmental policies that act as disincentives to agriculture will be identified and rectified and positive incentives, that accommodate agriculture and promote its long-term viability, can be put in their place.
- Policies with “unintended consequences” can be identified and corrected.

# *ECONOMICS*

# SECTION 3

## ADEQUATE INFRASTRUCTURE

# TT3 The Third Component for Success: *Adequate Infrastructure*

## GUIDING PRINCIPLE:

*Agriculture is an essential part of our society's infrastructure. Without it, we will not survive. It is in our interest to give attention to all the infrastructure that agriculture needs to thrive.*

## CHALLENGE:

***Immediate priority should be given to the infrastructure needed to support and sustain agriculture.***

## CURRENT CONDITION:

Here are the major obstacles that stand in the way of ensuring adequate infrastructure for agriculture:

- **All of the infrastructure necessary for agriculture needs to be improved**, including:
  - research
  - water management
  - roads
  - airports
  - rail lines
  - ports
  - security
  - quarantines on imported food and plant material to prevent spread of diseases and pests

- **Labor issues need attention**, including supply, housing, transportation, schooling, immigration and social services.

- **Worker rights need more attention.** Some agricultural operations receive high marks in this area from labor groups; others receive low marks. Labor groups complain that some operations see workers as expendable, hire illegal immigrants because they will work for less and won't complain about hazardous conditions or a lack of benefits, and will not cooperate with labor groups to improve worker conditions, benefits or provide for housing and schooling. Other operations are

commended for paying minimum wage (or more), offering modest health insurance benefits, ensuring safe working conditions and striving to keep people from year to year so they don't have to retrain new people each year.

- **Adequate farm worker housing is a growing need.** Some agricultural operations provide worker housing, or pool resources with other operations to provide housing, but it is becoming less and less common for owners and operators to do so. Instead, farm workers often are forced to seek housing on their own, staying in inexpensive apartments and houses with five or six – or more – people crowded into a room. Part of the issue is money. In today's global economy, agricultural producers must find ways of reducing their labor costs. They cannot afford to construct and maintain housing if this cost cannot be passed on to consumers. They also are at a competitive disadvantage with foreign growers in the wages that are paid to workers, so are reluctant to increase these wages to help workers afford better housing in local real estate markets. Local zoning laws and construction codes also provide obstacles, and have made it prohibitively expensive for producers to expand the stock of worker housing or construct new housing. Economical housing solutions – such as manufactured and prefabricated housing – often are not allowed, and the densities required to provide worker housing on an economical and practical basis – 30 or 40 units per acre – often are prohibited by local zoning laws and land use regulations.

- **Too much of the research being conducted at the university level is driven by grant opportunities, rather than producer needs.** Frank Williamson, Jr. says: "Development of non-chemical pest control, bio-engineering for production and drought resistance, better no-till and multi-crop systems, and environmental interfaces all are crying for research and development."[82] & [83] (Note: this obstacle is addressed under Priority Actions 1-B, 3-B and 3-C in Section 1 and under Priority Action 1-J in Section 2.)

- **Roads are designed and built without adequate consideration for the needs of agricultural operations**, such as tractor lanes, safe ingress and egress from fields, wide turning radius of trucks, secure overnight parking areas where truck refrigeration units can be allowed to run, and constant heavy load traffic on rural roads.

- **Rural road maintenance receives a low priority**; rural counties do not always have the funds to adequately maintain rural roads and bridges. Poor rural road maintenance results in more wear and tear on trucks, which increases maintenance costs and can increase the costs of transportation for growers.

- **Road planning sometimes does not look at rural areas as rural**. Road planners figure that, someday, they'll develop. And they plan accordingly.

- "**One of the concerns about infrastructure is that as Florida agriculture goes through transitions its infrastructure also transitions**. Several examples:
  - "Cattlemen have lost cull cow slaughter facilities in Florida. This loss was due to a lack of profitability for those slaughter facilities. This could have

been because of regulatory costs, low plant efficiency, like quality imported meat or any number of other issues.

- "State Farmers Markets were developed 50 years ago and became an infrastructure center. In fact, the basic infrastructure developed and grew outside of the state facility as the industry grew. As that industry transitions because of trade markets or weather the infrastructure transitions also. As a farming industry is reduced, there is a critical mass needed to maintain that infrastructure. Our role is to maintain the critical mass because once we lose an industry and its infrastructure, it will not come back.
- "A basic rule of thumb is that as technology migrates, the local infrastructure deteriorates."[84]

- **Agriculture faces heavy competition for land and water with urban and environmental land uses.**

- **Water management policies will play a key role in survival of the agricultural industry**. Current problems include short permit durations that do not fit well with the needs of agriculture and flood control policies during large storm events that sometimes prevent water from being pumped from fields and groves quickly enough to prevent crop damage and loss.

## CONCLUSIONS

**Need to find ways to:**

- Improve the state's **transportation systems** to:
  - coordinate state and county planning of road, rail, air and waterborne transportation facilities;
  - take the needs of agriculture into consideration;
  - provide for the transportation of agricultural products and supplies.

- Ensure an ongoing, stable supply of trained and trainable **labor** for the agricultural industry. Also need practical, workable programs to ensure the health, safety and welfare of all workers in the agriculture industry.

- Address agriculture's concerns with the Comprehensive Everglades Restoration Plan (CERP) to achieve **environmental restoration** and meet the water-related needs of the region.

## PRIORITY ACTIONS

### 1. <u>TRANSPORTATION SYSTEMS</u>:

***Conclusion:*** Need to find ways to improve the state's transportation systems to:

- coordinate state and county planning of road, rail, air and waterborne transportation facilities;
- take the needs of agriculture into consideration;
- provide for the transportation of agricultural products and supplies.

***Suggested Actions:*** Input should be obtained from local agricultural interests to:

A) ***Identify areas where road, rail, air and waterborne transportation infrastructure can be improved to better serve agriculture.***

***B)*** ***Ensure that food distribution requirements are a key consideration in planning road construction and maintenance,*** and in planning and upgrading air, rail and port facilities.

***C)*** ***Ensure that links in transportation needs between different types of agricultural uses are acknowledged, understood and taken into consideration.*** For example, the Florida horse industry depends upon "dead-heading" — truckers haul straw, hay and grain to Florida to avoid driving empty trucks on their way to pick up produce for distribution to U.S. and Canadian markets. Policies that impact the transportation of produce out of Florida also affect the flow of feed into Florida for the horse industry.

***D)*** ***Ensure that food safety — with a special emphasis on avoiding diseases and pests that can be spread throughout Florida from imported food and plant material — is a key consideration*** in planning and upgrading air, rail and port facilities. [See comments from Mike Stuart on this subject in Section 1, at the end of the discussion of "Current Condition" and in Priority Action 3-A.]

***E) Review, revise and implement road construction and safety criteria to accommodate large, slow moving farm vehicles.***

***F) Consider requiring Ag impact statements prior to implementing any public policy or project.***

Dick Marsh, an economist with South Florida Water Management District, states: "The recommendation for Ag impact statements seems to be a move toward increased bureaucracy. I believe this issue could and should be addressed through the requirements in Section 120.541, F.S., regarding statements of estimated regulatory costs. Agricultural interests could also take advantage of the procedural requirements in Section 120.54(1)(d), F.S., 'In adopting rules, all agencies must, among the alternative approaches to any regulatory objective and to the extent allowed by law, choose the alternative that does not impose regulatory costs on the regulated person, county, or city which could be reduced by the adoption of less costly alternatives that substantially accomplish the statutory objectives.'"

Allyn L. Childress, South Florida Ecosystem Working Group staff, says: "The paper recommends that a revised transportation plan be generated that takes the needs of agriculture into consideration. How does this tie into concerns that road improvements in agricultural/rural areas lead to urban development? A further discussion on this topic would be helpful, particularly one that would address alternative methods of product distribution."

***Recommendations:***

*Who:* FDOT, working with DOACS, DCA and others

*What:* **Need regional and statewide action. FDOT, working with DOACS, DCA and others, should generate a revised transportation plan that:**

- **coordinates state and county planning of road, rail, air and waterborne transportation facilities;**[85]
- **takes the needs of agriculture into consideration;**
- **provides for the transportation of agricultural products and supplies; and**
- **addresses the comments from Dick Marsh and Allyn Childress**.

**2. <u>LABOR</u>:**

***Conclusion:*** Need to find ways to ensure an ongoing, stable supply of trained and trainable labor for the agricultural industry. Also need practical, workable programs to ensure the health, safety and welfare of all workers in the agriculture industry.

***Suggested Actions:*** There are several key labor issues, each of which need to be addressed. These include:

*A)* ***Supply*:** Producers have competing needs – the need for a reliable supply of trained or trainable labor on one hand, and a need to keep labor costs low, since producers are price takers, not price makers, and cannot pass on to consumers any of their costs of doing business, such as labor costs.

Labor costs, in fact, are the key obstacle to American producers in staying competitive with foreign growers, who often have a much cheaper labor supply. By U.S. standards, farm work is hazardous, requires long hours, is seasonal and often offers low pay with few or no benefits (even though many farm workers may make more than the minimum wage, missed days of work due to bad weather and the seasonal nature of farm work results in a low annual income, often at or below the poverty line). For this reason, farm work does not appeal to most domestic workers, but instead, attracts foreign workers (both documented and undocumented) who may only work in this country for a few months a year; may live an itinerant lifestyle, moving from farm to farm, following the cycle of plantings and harvests; or may settle in an area, with some members of the family working in service jobs (as maids, dishwashers, janitors, or fast-food vendors) while other members of the family work on ranches and farms, or in processing and packing plants.

This situation is not likely to change, given the current economics of agriculture and the competitive nature of the global economy. In fact, it may get worse. Simply because of labor costs, it is no longer economical for some major crops to be grown in Florida or any other part of the U.S. There are only four ways in which this situation can be addressed:

1) **Increase the use of mechanization and technology to reduce labor costs;**

2) **Increase the amount of the retail food dollar that is received by producers** (see Priority Action 1 under Section 1, Producer Profitability);

3) **Create a labor pool where worker training, housing, schooling and benefits (health, disability and pensions) are subsidized through Farm Bill programs or voluntary donations at supermarket checkout counters** (see Priority Action 4-D in Section 1) and can be handled on behalf of farm owners and operators by private labor contractors and farm worker organizations; and

4) **Develop a list of actions that can be implemented, within the context of current laws and consistent with international trade agreements, to ensure that American producers can operate on a "level playing field"** (see Priority Action 2 in Section 1). Possible actions include:

a) Ensure the American public receives products that meet all U.S. labor laws,
b) Require that all produce brought into U.S. meet the same requirements as those imposed on American growers,
c) Ban products that do not meet these requirements,
d) Develop a stamp, certificate or 'green label' for products that meet all U.S. laws, and
e) Ensure that future trade agreements include provisions to standardize labor laws and worker rights.

All four approaches should be explored and a strategic labor plan should be developed to ensure both that U.S producers can remain economically competitive with foreign growers and worker needs are met.

***B)*** ***Worker health, safety and welfare:*** Labor forums should be held to bring together owners and operators and labor interests to discuss labor issues, and encourage owners and operators to make labor and labor interests a partner. Labor has a vested interest in the economical viability of U.S. farms and ranches and its food and fiber processing industries. Without profitable enterprises, there will be no jobs. Labor, however, must recognize that many jobs may be lost through increased use of mechanization and technology. The remaining jobs, however, are likely to require more technical skills and, thus,

will be higher paying and provide better benefits.

Emphasis in these discussions should focus first on what can be done to improve worker conditions that does not cost any money. Worker health, safety and welfare must be a priority. But again, economics will be a key issue. Action plans must recommend ways to provide for worker health and safety, while keeping U.S. producers competitive and working to raise standards in other countries (see A-4 above).

***C)*** ***Worker rights*****:** Again, labor forums between owners and operators and labor interests can be used as a basis for developing action plans to recommend ways of ensuring worker rights while keeping U.S. producers competitive and working to raise standards in other countries (again, see A-4 above).

***D)*** ***Housing:*** Local zoning laws, land use regulations and construction codes must be modified to allow for economical, practical solutions to provide farm worker housing.

Labor forums also can be used to discuss issues and develop action plans to address housing, as well as --

***E)*** ***Transportation***
***F)*** ***Schooling*** and
***G)*** ***Immigration***.

***Recommendations:***

*Who:* South Florida Ecosystem Restoration Task Force (SFERTF), Florida Department of Labor (DOL), Florida Department of Health & Rehabilitative Services (HRS), Florida Department of Education (DOE), DOACS, USDA, the U.S. Immigration and Naturalization Service (INS), and other appropriate agencies.

*What:* **Need regional, statewide and federal actions. SFERTF should encourage DOL to work together with HRS, DOE, DOACS, USDA, the INS and other appropriate agencies to take aggressive action to ensure:**

- **an ongoing, stable supply of trained and trainable labor for the agricultural industry, and**
- **practical, workable programs to ensure the health, safety and welfare of all workers in the agricultural industry.**

**3. <u>ENVIRONMENTAL RESTORATION/ REGIONAL WATER MANAGEMENT</u>:**

***Conclusion:*** Need to find ways to address agriculture's concerns with the Comprehensive Everglades Restoration Plan (CERP) to achieve environmental restoration and meet the water-related needs of the region.

***Suggested Actions:*** The U.S. Army Corps of Engineers should work with ag interests to explore the benefits to CERP of developing conservation strategies that:

**A)** ***Link land use to water use.***

***B)*** ***Look at topography as well as hydrology.***

***C)*** ***Utilize the abilities of agricultural land uses to:***

- recharge ground water supplies,
- retain water in periods of drought;
- detain water in periods of flood;
- support wastewater reuse (where feasible);
- provide vegetative covers, settling ponds and evaporation ponds that can remove particulates and pollutants from water flowing into environmentally sensitive areas;
- support wetland systems;
- provide vegetative covers for carbon sequestering[86];
- provide wildlife habitat;
- provide buffers between natural areas and urban areas;
- generate oxygen; and
- contribute to soil creation, conservation and health.

D) ***Identify impacts to rural and farming communities from Comprehensive Everglades Restoration Plan implementation and other restoration projects*** (work closely with Implementation Issue Team)

- Identified as a possible task for assistance from the Governor's Commission for the Everglades

***E)*** ***Address agriculture's concerns with the Comprehensive Everglades Restoration Plan (CERP)***. These include assurances that:

- the current water supply to existing users will be maintained, and plans will be made to meet future needs;
- needs for flood protection, not only for agricultural areas but urban areas, will be addressed;
- current CERP plans that call for the conversion of 200,000 to 300,000 acres of prime agricultural land to CERP storage and other purposes not be acquired or taken from unwilling sellers until it has been be demonstrated on a smaller scale that these project components are feasible, workable and scientifically valid;
- the Conceptual Plan will be accepted as a guide and framework for identifying and evaluating C&SF Project modifications while recognizing that periodic revisions will be necessary to reflect improved scientific understanding; and
- significant uncertainty remains regarding the technical feasibility and cost effectiveness of many components in the

conceptual plan.

Phil Parsons commented on this section on January 3, 2000. Changes made to reflect his comments were made March 7, 2000. Parsons said:

"I understand that this is a report to the Federal Working Group. You may not want to include my comments that I think reflect the positions of agriculture generally as to the Restudy [now known as the Comprehensive Everglades Restoration Plan] because the Federal Team has a completely different view of what the Restudy should accomplish. If you can't reflect agriculture's views on the Restudy you ought to consider deleting this part of the Report entirely so that it doesn't detract from the rest that I believe has widespread agricultural support.

"Your statement of the 'who' only mentions the Corps of Engineers. The Restudy and any project components that area actually implemented will be an undertaking not just of the Corps but theoretically an undertaking of the Corps and the local sponsor of the State of Florida, the South Florida Water Management District, as equal partners with equal funding responsibility.

"Your statement of the 'what' accepts the federal view generally of the Restudy as an 'environmental restoration project.' This is not the view of agriculture. We worked hard in 1996 and earlier to ensure that the purposes of the Restudy were not just to achieve environmental restoration but to also 'provide such features as are necessary to meet the other water-related needs of the region, *including* flood control, the enhancement of water supplies and other objective served dy the C&SF Project.' (From WRDA 1996)

"We have always recognized the need to modify the C&SF project to better meet all needs, both economic and environmental. We have never rejected the purpose of meeting environmental needs but have had no success in persuading the Federal team of the need to provide a balanced approach to meeting all needs.

"Your statement of the 'how' is that agencies should explore the benefits of restoration and develop conservation strategies with the list of features you provide. These features stress the environmental benefits that can be expected from agriculture.

"The problem with this is not that these expectations are misplaced but that they do not address agriculture's concerns at all with the Restudy. The concerns are that the Restudy does not provide assurances that the current water supply to existing users will be maintained, much less meet future needs. In addition, the Restudy almost totally fails to address wide spread needs for flood protection, not only for agricultural areas but urban areas as well. The Restudy plan calls for the conversion of 200,000 to 300,000 acres of prime agricultural land to Restudy storage and other purposes. Finally, the implementation plan calls for initial authorization of project components that have not been determined to be feasible yet based on the authorization additional agricultural land will be acquired or taken from unwilling

sellers before we know whether the project component makes sense."

Susan Brown of U.S. Sugar emphasized these points in a position paper presented for approval to the Agricultural Advisory Committee of South Florida Water Management District on December 14, 1999. The position paper, that was unanimously approved, reads:

***AGRICULTURE'S POSITION ON***
***COMPREHENSIVE EVERGLADES RESTORATION PLAN (CERP)***

- *Florida agriculture affirms the multi-purpose commitment of the Comprehensive Plan as contained in the WRDA 1996 authorization. "The Comprehensive Plan shall provide for the protection of water quality in and the reduction of the loss of freshwater from the Everglades. The plan shall include such features as are necessary to provide for the water-related needs of the region, including flood control and the enhancement of water supplies and other objectives served by the C&SF Project." Congress should affirm this statement of purposes and priorities in authorizing the plan.*

- *Congress should accept the Conceptual Plan as a guide and framework for identifying and evaluating C&SF Project modifications while recognizing that periodic revisions will be necessary to reflect improved scientific understanding.*

- *Congress should recognize that significant uncertainty remains regarding the technical feasibility and cost effectiveness of many components in the conceptual plan.*

- *The pilot projects recommended in the Final Report should be authorized and implemented, including ASR, Lake Belt reservoir technology, L-31 seepage management and wastewater reuse.*

- *The analysis and justification of recommended project components should be based on the existing Principles and Guidelines for Water Resources Implementation Studies and completed in sufficient time to allow the local sponsor to obtain approval under state law.*

- *Other project components that were authorized prior to July 1, 1999 should be fully funded and implemented including the Kissimmee River Restoration, Modified Water Deliveries to ENP, the C-111 Project and STA 1 E.*

Allyn L. Childress also commented: "The paper asks that the needs of agriculture be 'fully integrated' in the implementation plan for the Conservation Everglades Restoration Plan. Who determines the priorities in cases of conflict between what is best for agriculture and what is best for the environment and urban areas? Perhaps

alternative language could be utilized to clarify that the strategy is to ensure that agriculture has an equitable role in the process. (The final bullet under Benefits [below] states it well.)"

Discussion on this issue is needed so these concerns and suggestions can be incorporated into this action step.

***Recommendations:***

*Who:* The U.S. Army Corps of Engineers (USACOE) and SFWMD, working with NRCS and DOACS

*What:* **Need to address agriculture's concerns with the Comprehensive Everglades Restoration Plan (CERP).** USACOE and SFWMD, working with NRCS and DOACS, should ensure that agriculture has an equitable role in the Comprehensive Everglades Restoration Plan (CERP) process to achieve environmental restoration and provide such features as are necessary to meet the other water-related needs of the region, *including* flood control, the enhancement of water supplies and other objectives served dy the C&SF Project (from WRDA 1996)

## OTHER POSSIBLE ACTIONS

### Transportation Systems

T DOT forms should have check off boxes for key items that need to be considered in both urban and rural areas to ensure road systems accommodate the needs of agricultural producers, suppliers, services, wholesalers, add-to-value industries and transporters.[87]

T Need to ensure that roads constructed in agricultural areas have provisions for tractor lanes — and, if necessary, underpasses or overpasses — so farm equipment can be easily and safely transported to and from fields, groves and pastures.

T Need provisions to promptly repair or replace fences damaged in traffic accidents before farm animals escape, or before wild animals enter fields and groves and damage crops.

### Labor

T Assist in labor procurement.

**Environmental Restoration/Regional Water Management**

T Agriculture needs a high priority for access to water and flood control.

T Need better coordination of water permitting, water availability between local government and water management districts

**Research**

T Research should focus on needs of ag producers, suppliers, services and industries.

As Jim Strickland of Cattlemen Manatee says: "A Dead Horse: Incredible amounts are funded for seemingly old hat ag issues which are duplicated in the private sector. We need to change the mindset of research staff ... But first, we need to address new priorities to keep us profitable. We all know when, how, and what to worm cattle with, rotation grazing and standard practices.

"Send Fresh Horses: What we need to address now is new research through agencies such as Soil Conservation Service, I.F.A.S., and universities to arrive at methodology and financial statistics to justify paying ranchers for environmental practices maintained or implemented on their land to the benefit of all."

T Rick Roth says: "Land grant colleges need to:
A) Do more ag research with dollars tied to specific demands of society,
B) Change focus from production to marketing,
C) Educate ag students why public relations is critical to industry survival."

T Need research on crops that can grow in high water table conditions on marginal lands.

T Identify and fund other key research needs to create a thriving agricultural industry.

**Other Suggestions**

T Need to provide security patrols to prevent pilfering, poaching and vandalism, which increase dramatically when residential subdivisions locate near agricultural operations.

## BENEFITS

By taking these actions:

- Government can ensure that agriculture is not needlessly and inadvertently displaced or harmed as a result of public policies and projects;
- All future planning for transportation systems can be improved to better serve agriculture and facilitate food safety;
- Labor issues can be adequately addressed; and
- Environmental restoration activities will incorporate agriculture as an integral part of the landscape and as a major “partner” to help in carrying out environmental restoration objectives and water-related needs of the region.

# SECTION 4

## ENHANCING ENVIRONMENTAL COMPATIBILITY

## ••4 The Fourth Component for Success: *Enhancing Environmental Compatibility*

**GUIDING PRINCIPLE:**

*Agriculture can be one of the best friends the environment has.*

**POINTS TO KEEP IN MIND:**

*"There sometimes has been confusion about the concerns that agriculture has raised. It is important to recognize that the concerns raised by agriculture do not mean that ag does not want to be part of the solution ... Agriculture is ready and willing to participate and be supportive, but wants science to drive decisions ... On the other hand, agriculture rightfully expresses concern anytime it appears that management decisions may be made while we are missing a lot of good science."*

— Glenda L. Humiston, Deputy Under Secretary
Natural Resources & Environment
U.S. Department of Agriculture
Washington, D.C.[88]

**CHALLENGE:**

***Enhance compatibility between agriculture and the environment.***

## CURRENT CONDITION:

Here are the major obstacles that stand in the way of ensuring better compatibility between agriculture and the environment.

Paul Warner, Lead Ecosystem Restoration Representative for the South Florida Water Management District said, in reading the following list, "These are one-sided complaints that lack documentation." As a matter of fact, they're not. They are based on the findings of an extensive study on the impact of regulations on agricultural operations in Hillsborough County, Florida,[89] which is summarized in Appendix C. Suggestions on how to overcome each of the problems identified are included in the Priority Actions below.

To make progress in improving the way in which environmental regulations work, environmental interests must be willing to listen to criticisms from the people who are regulated, to look at problems that have been identified and to consider alternatives that can improve compliance. This section strives to facilitate that process.

Findings from the Hillsborough County study indicate that:

- **Strict, across-the-board, one-size-fits-all regulations often do not allow adequate flexibility for solutions to be developed that fit site-specific situations**.

- **Environmental groups have too often seen agriculture — and characterized it — as part of the problem rather than part of the solution**. This mindset (which, itself, has been one-sided) has been translated into legislation and been picked up by the media, which in turn has colored the perceptions of policy makers, regulators and much of the public.

- **There is a complex array of conservation programs for agriculture, yet there is a lack of consistency between programs.** It often is difficult to "dovetail" several programs together. There also is no central source of information on what conservation programs are available, from whom, and how to apply.

- **Many conservation programs for ag were created for Midwest situations and cannot be applied to Florida without major changes.**

- **One of the most serious environmental challenges facing Florida is the spread of exotics**. The costs of controlling exotics can add greatly to the operating costs of an ag operation. (Note: this obstacle is addressed under Priority Action 3 in Section 1.)

- **Habitats can be destabilized when exotics are removed.** Public land managers currently do not prepare for native succession. As a result, exotics just grow back. (Also addressed under Priority Action 3 in Section 1.)

- **The market currently pays Florida farmers to produce vegetables, citrus, timber and homesites. But it does not pay for the other "products" of their land for**

**which they are the custodians -- open space, wildlife habitat, water resources, wetlands and more.** And therein lies the dilemma: As much as agricultural landowners may want to protect environmental values on their lands, they have a powerful inducement not to do so. The market economy offers landowners a strong incentive to manage their holdings for the highest and best ***economic*** return. And that can translate into intensive development that may be at odds with environmental protection. Of course, landowners are not *forced* to seek the highest profit obtainable. That is their choice. But if one can profit by converting land from native habitat to agriculture and from agriculture to condominiums, chances are land will be converted.[90]

Richard Neill says: "There seems to be some real confusion on the part of many members of the public as to the ownership of trees, wetlands, and other assets located on farm land. As you point out, the farmers are expected to maintain these assets for the benefit of society as a whole at their own expense.

"[A] case that I am deeply involved in at the present time involves a 4,700 acre ranch located within the municipal limits of the City of North Palm Beach. The City has taken the position that the owner of the ranch (for 25 years) cannot cut a tree, plow a field, dig a ditch, or really do anything else without first preparing a site plan, applying for a permit, and entering into an agreement to mitigate the damage he is presumed to be doing to the property.

"In fact, this property was overgrown with exotics when purchased by our client 25 years ago. The farming and ranching operations conducted on the property since then have greatly improved the looks, productivity, and habitat. The regulators don't seem to appreciate that."

Stephen W. Forsythe, State Supervisor of the U.S. Fish and Wildlife Service and the USFWS representative to the South Florida Ecosystem Restoration Working Group, says: "The issue of economic return from the land for development versus environmental protection is an important concept to discuss. Clearly development can be at odds with environmental protection, as can some practices usually considered normal agriculture, such as land clearing, wetland drainage, or timber harvest. The challenge before all of us, then, is to find that balanced approach."

Forsythe goes on to say: "We have to focus on incentives to protect habitat that are compatible with ongoing or planned agricultural operations."

## CONCLUSIONS

**Need to find ways to:**

- Celebrate, acknowledge and reward agricultural landowners and operators for their **private stewardship** efforts. One of the best ways to enhance the environmental value in the region is to take advantage of the strong stewardship ethic of many of the

region's farmers and ranchers, and adjust programs to improve the ability of these owners and operators to nurture the ecological values associated with the lands under their care.

T Determine what agricultural activity, if any, can take place on public lands and what public lands, if any, can be leased or sold back to ag producers. This **new thinking for the millennium** should be considered as a possible land management strategy and should be discussed by the Working Group as part of its land acquisition strategy.

## PRIORITY ACTIONS

### 1. PRIVATE STEWARDSHIP:

***Conclusion:*** Need to find ways to celebrate, acknowledge and reward landowners and operators for their private stewardship efforts. Also need to find ways to adjust programs to improve the ability of these owners and operators to nurture the ecological values associated with the lands under their care.

***Suggested Actions:*** Here are several ways in which this might be done:

A) ***Develop a landowner assistance program to install BMPs to reduce or eliminate on-farm and off-farm impacts of agricultural operations and improve the compatibility of agricultural operations with ecological resources.***

< Identified as a possible task for assistance from the Governor's Commission for the Everglades

< Contributing action recommended by NRCS:
*Action:* Increase NRCS staffing
*Responsible:* NRCS
*Duration:* Short term (1-2 years)

**Emphasize:**

***5)*** **Steps to reduce nutrient runoff and impacts of pesticides and herbicides on ground water and surface water supplies*;***

**6) Steps to establish research and monitoring programs that can be carried out by private landowners or in cooperation with private landowners to determine effectiveness of BMPs and ways to improve upon them ;**

***7)*** **Steps to coordinate BMPs and "Recommend Practices" among**

**different agencies:**

- Use the USDA, Natural Resource Conservation Service's "Field Office Technical Guide," Section 4, (Conservation Practices) as the baseline for all BMPs:
  - Combine these together with modifications made by Florida Cattlemen's Association specifically for the beef cattle industry, "Water Quality Best Management Practices for Cow/Calf Operations in Florida," March 5, 1999;
  - Combine these together with modifications made by other ag organizations for specific types of ag operations;
  - Combine these together with the Best Management Practices developed by South Florida Water Management District for Everglades Agricultural Area;
  - Combine these together with BMPs developed by the University of Florida, Institute of Food and Agricultural Sciences.

***B)*** ***Convene a "stewardship forum" to engage groups to assess options and determine next steps***. Options to consider and expand upon include:

**1) The concept expressed by Frank Mazzotti, Ph.D.: "If you want private landowners to conserve wildlife, make it worth their while and teach them how to do it."**[91]

**2) Complete implementation of the "Resource Conservation Agreement" program developed by Stewardship America, Inc..** Resource Conservation Agreements provide annual payments and tax incentives to private landowners to provide management services on their properties such as prescribed burning, controlling (or eliminating) exotics, brush management, and maintaining natural hydrololgic patterns to care for and maintain wetlands, wildlife habitats, water detention areas, water recharge areas, and other environmental values. (Note: Resource Conservation Agreements are built upon an Integrated Operating Plan that incorporates all recommended conservation practices and management services into the day-to-day

operating plans of the participating agricultural enterprises. For more detail on the Integrated Operating Plan, see Priority Action 1 under Section 2. For more detail on the Resource Conservation Agreement, visit the project website at http://privatelands.org, which provides links to documents describing the Resource Conservation Agreement with examples of how it works.)

< Contributing actions recommended by NRCS:

*Action:* Maintain land in private ownership
*Responsible:* State and federal agencies
*Duration:* Short term (1-2 years)

*Action:* Increase funding of Farm Bill programs
*Responsible:* USDA
*Duration:* Short term (1-2 years)/Long term (2+ years)

*Action:* Provide incentives for conservation payments
*Responsible:* USDA
*Duration:* Short term (1-2 years)/Long term (2+ years)

*Action:* Provide incentives to agriculture to maintain wildlife habitat
*Responsible:* USDA
*Duration:* Short term (1-2 years)/Long term (2+ years)

*Action:* Seek state funding for conservation programs (Conservation Reserve Enhancement Program - CREP, Mobile Irrigation Labs MILs and Resource Conservation Agreement - RCA)
*Responsible:* Conservation partners
*Duration:* Short term (1-2

years)

Allyn L. Childress of the South Florida Ecosystem Working Group staff said: "The paper recommends that farmers be given financial incentives to protect environmentally sensitive lands. How would this be linked with other programs that would ensure agriculture is not just a 'transitional' land use?"

*Response*: The Resource Conservation Agreement is designed to help address this issue. For more information, visit the project web site at: http://privatelands.org

3) **Implement the Integrated Operating Plan concept** (Priority Action 1, Section 2).

4) **Establish tax incentives for environmental benefits.**

5) **Give marketable credits to landowners practicing sound land management of natural resources.**

< Contributing action recommended by NRCS:

*Action:* Report values of private ownership
*Responsible:* State and federal agencies
*Duration:* Short term (1-2 years)

6) **"The Legislature should explore incentives to allow landowners to preserve and manage environmentally sensitive lands** or lands that are identified for protection by the local comprehensive plan. Tax incentives would be the most important, but management assistance and similar incentives should be available."[92] (Note: Sections 10 and 13 of the Florida Forever Act, passed by the Legislature in 1999, provide several opportunities for private landowner incentives by adding subsection (11) to section 253.034, Florida Statutes, and amending subsection (7) of section 259.032, Florida Statues.)

7) **USDA, working in concert with DOACS, IFAS and other groups, should:**

C Conduct studies to clearly identify and document the environmental benefits of ranching and farming in Florida and demonstrate how agriculture can improve its benefit to the environment; and

C Create a scientific framework to ensure the best decisions possible, build confidence and consensus in

decision making.

- (For more detail on these two recommendations, see Priority Action 1 K) under Section 2 "A Conducive Business Climate.")

**8)** **As Tim W. Williams says: "Any value, tax credit, cash payment, aquifer recharge credit, or other real benefit that can be willingly attributed to privately owned agricultural land for environmental benefits that exist, or that are added or enhanced by the owner or tenant, would be a godsend**. How often have we as producers reached into our own pockets to do the right thing only to have that work against our lending value or increase our regulatory burdens? It's high time we move from discussion to action, before more production ag and natural areas are compromised."

< Contributing action recommended by NRCS:
*Action:* Use Florida Forever funds to purchase or lease back agricultural land
*Responsible:* State agencies
*Duration:* Short term (1-2 years)/Long term (2+ years)

**9)** **DOACS, working with other groups, should initiate a major program to encourage better partnerships between agricultural and environmental groups** to:

- Promote development and use of Best Management Practices (BMPs);
- Develop "Integrated Operating Plans" that incorporate BMPs, are site-specific and can be adopted to satisfy all regulatory requirements (see Priority Action 1 under Section 2);
- Establish/maintain long_term planning to promote agricultural land use over urban development;
- Restrict production/sale of chemicals not legal in the U.S.

Frank Williamson Jr. says: "Solutions must respect both environmental and farming values. Resolving these sometimes contrasting interests has been difficult. On the one hand farmers have been defensive, slow to understand or accept the 'externality' problems of their business, those unseen and uncounted costs that can arise out of the normal practice of farming. On the other hand

> environmentalists ... have often been uncompromising and impatient. These mindsets create distrust and polarization. More progress in these matters will be made when all interests come to the table early, and with the best science available seek to define problems and lay out solutions. The complexity of these issues will often dictate multi-phase projects, and this requires patience and trust, ingredients that have been lacking up to now."[93]

Phyllis Mofson, from the Legislative Committee on Intergovernmental Relations of the Florida Legislature, says: "You make the point that relatively high land prices in this country put our farmers at a disadvantage vis-a-vis foreign farmers in terms of their operational costs. To relieve some of the pressure to sell off agricultural lands for development, you propose compensating farmers for the other valuable social functions they provide (habitat preservation, water recharge, etc.) but this does not address the issue of uncompetitively high land prices, which owners of Florida's agricultural lands generally don't want to give up. You point out the difficulties of buying development rights or conservation easements. [in Appendix B - "How Much are Natural Resource Values Worth?"http://us-farm.com/download.htm] Farmers in Florida generally do not want to let go of the speculative value of the development potential of their land, which in many cases is the factor that allows them to stay in business in the short term. You discuss the difference between the commodity value and the resource value of agricultural land [in Appendix A - "Agricultural Land Values"], and suggest appropriately that farmers should benefit from the resource value while the land is used for agricultural production. But how?

"Your very strong Appendix B ["How Much are Natural Resource Values Worth?"] begins to explore this question and develop policy actions – perhaps these could be moved to the body of the paper and developed further? I'm afraid they may get lost in the Appendix section. And even if implemented, how would this relieve the pressure of the commodity value of future use, absent some sort of relinquishment of development rights?"

*Response:* See description of Resource Conservation Agreement under paragraph 2), above (and at http://privatelands.org). By establishing payment rates for specific natural and ecological amenities and specific services tied to maintaining these amenities, the Resource Conservation Agreement can, over time, create a market price for these amenities and services. Because these payment rates will provide a steady stream of revenue, land with Resource Conservation Agreements will sell for more than land without, and land with amenities which can receive payments through Resource Conservation Agreements will begin to be valued higher in the market place than land without these amenities.

Stephen W. Forsythe adds: "As I continued to study the paper's possible approaches ... to achieving the goal of enhancing environmental compatibility, I was struck by a strong sense of how much we do not know, or what we need to know, or what is not communicated between environmental and agricultural groups. I must say I was genuinely impressed by the accuracy of Frank Williamson Jr.'s quote [under

paragraph 9), above]... he certainly offers the challenge for us!"

***Recommendations:***

*Who:* DOACS, working with NRCS, USFWS, IFAS, Florida Center for Environmental Studies (CES) and FFBF.

*What:* **Need statewide effort, starting with prototype programs in South Florida region. DOACS, working with NRCS, USFWS, IFAS, CES and FFBF, should explore each of the suggested actions listed above, as well as other ways to reward, recognize and encourage private stewardship efforts and remove disincentives to private stewardship efforts.**

< Identified as a possible task for assistance from the Governor's Commission for the Everglades

**2. <u>NEW THINKING FOR THE MILLENNIUM</u>:**

***Conclusion:*** Need to find ways to determine what agricultural activity, if any, can take place on public lands and what public lands, if any, can be leased or sold back to ag producers. This issue should be considered as a possible land management strategy and should be discussed by the Working Group as part of its land acquisition strategy**.**

***Suggested Actions:*** Here are several ways in which these strategies might be carried out:

***A) "Determine what if any Ag activity can take place on all public lands within the state, and ask for bids and management plans on same."***[94]

B) ***Strive to make public land management strategies as efficient and cost-effective as possible by allowing ag producers "to lease back or buy back existing public lands that are not critical to environmental protection."***[95]

< Identified as a possible task for assistance from the Governor's Commission for the Everglades

*Here's how:*

***C) Use the Florida Center for Environmental Studies' (CES) Grazing Lands Working Group as a model for recruiting and utilizing the skills and knowledge of ag producers and ranchers to assist in the management of state lands*** to allow for compatible management strategies that will accommodate environmental, recreation, timber harvesting and agricultural production objectives, where appropriate and without detracting from the ecological functions of the state's public lands.

***D) Establish lease program through which government agencies***

***"lease" land from private landowners to pay costs of establishing specific practices or paying for management services*** (21st Century sharecropping). Landowner continues to own and use land; government pays costs of specific actions that are implemented over duration of lease. (Also, see "Resource Conservation Agreement" concept under Priority Action 1, above.)

***Recommendations:***

*Who:* DEP, in cooperation with water management districts (WMDs) and DOACS.

*What:* **Need prototype programs, developed by DEP in cooperation with WMDs and DOACS.**

## OTHER POSSIBLE ACTIONS

**Private Stewardship**

T Urge the state legislature to enact legislation similar to Florida's Blue Belt Law, which allows for a preferential tax assessment (similar to the agricultural assessment) for land left undeveloped if the land can be utilized as a water recharge area. To date, this program has been implemented on a trial basis in only a few counties. But it has the potential to keep land that presently is not used for agricultural purposes undeveloped until it can be brought into production, thereby keeping more land available for farming and avoiding the premature conversion of land to non-agricultural uses.

Jim Strickland, a Manatee County appraiser and cattleman, points out: "Under current statute, many counties do not qualify under the criteria set forth in [the Blue Belt] amendment to Florida statute 193.461. To be eligible for preferential property assessment, counties must have designated high water recharge areas determined by local water management boards. Many counties, such as Manatee and Sarasota, have no high water recharge areas, and are as such not eligible for Blue Belt." Perhaps a change is needed.

T Andy LaVigne, Executive Director of Citrus Mutual says: "We need to put together some legislation or a proposal to the Governor that is environmentally sensitive but protects the viability of agriculture so that both environment and agriculture can work hand in hand."

T Conduct survey to identify problems that landowners have encountered in trying to apply for and participate in conservation programs and problems agencies have encountered in recruiting landowners to participate in and in implementing conservation programs on private lands.

C Locate gaps

- C Decide what incentives are needed by agencies to recruit landowner participation
- C Insist on evaluation of process to cut paperwork and improve success rate for applicants.

T Create a central source with information on all conservation programs available through federal, state, regional and local agencies and private organizations

T Develop an outreach program and one-stop service to inform landowners of opportunities and help landowners get through process. Resolve the following problems identified by landowners:

- C Too hard to deal with paperwork for uncertain benefit. Need to go out and recruit landowners to participate, then support applicants through the process. Need:
  - , shorter forms
  - , less paperwork
  - , real people to assist in filing papers
- C Line item in each agency budget to implement and support one-stop shopping.

T Need to educate landowners about how conservation can benefit their bottom line, including tax incentives that can be derived from conservation easements and "bargain sale" arrangements (compared, for example, to proceeds that owner would net after capital gains taxes from an outright sale).

T Need government assistance in development and release of natural pest controls.

**Research**

T Need renewed agricultural research and extension — we must strengthen these programs which have made our farmers the best in the world

T Where's the analysis that helps farmers think through the issues — what BMPs will work, what benefits they provide to environment, what benefits they provide to bottom line?

T "More emphasis needs to be placed on making these practices environmentally correct. Once this is achieved through education and good statistics, local planners and zoning staff will recognize agriculture as the important facet of our communities."[96]

- "Need research to arrive at methodology and financial statistics to justify paying ranchers for environmental practices maintained or implemented on their land to the benefit of all."[97]

- Need research on innovative practices, cooperative production practices.

- "The legislature has seen fit to fund less than fee acquisition. Now funds need to follow for research geared specifically toward less than fee. This (to me) is only fair as we are spending tax dollars from all sides of issues. So, logically, we need research to substantiate the faith that taxpayers had in funding new ideas such as conservation easements."[98]

**Other Suggestions**

Six recommendations are contained in a report, prepared by a Technical Review Committee made up of Jan van Schilfgaarde, Michael Duever, E.T. York and Divaid Zilberman, on a two-day workshop, held April 28-29, 1999 in West Palm Beach, Florida, entitled "Integrating Agricultural and Ecological Solutions in South Florida." The workshop was sponsored by the South Florida Ecosystem Restoration Task Force, Science Coordinating Team. The recommendations are:

1. *"Social science* ... We need to understand not only the physical/biological /hydrologic interactions as impacted by changes in management and use; we also need to evaluate the economic (profitability?), social (equity?), and political (incentives, regulations?) implications and options. Social science research should be done at various levels. First, we need to better understand the microeconomics of alternative forms of agriculture, that is, the economic considerations facing individual firms when they make use of resources in Florida and how their decisions are affected by various policies. Such microeconomic analysis requires interdisciplinary cooperation among economists, agronomists and resource managers. Once the micro foundation is established, one needs to establish some aggregate relationships (understand how various policies affect the overall economic and environmental perspective of the region) and use these to assess the impact of various policy proposals — the impact on equity, profitability, environmental conditions and natural resources. What is needed is research aimed at the development of policies that are efficient economically, sound environmentally and politically acceptable.

2. "*Soil management*. It has been proposed that organic soils can be preserved by maintaining high water tables for much of the year, and that some crops (specifically sugar cane) can be grown profitably when water tables are maintained at or near the surface for some nine months out of the year. Drainage must be provided for harvest and replanting. The long wet period should reduce the microbial population to the point that subsidence is minimized. In the coarse soils of Dade County, water management is crucial for profitable production, as are nutrient and pest management. To protect both the quantity and the quality of the water supply, soil management

must be adapted to the emerging conditions, often influenced by market conditions that will lead to changes in cropping.

3. "*Hydrology*. The impact of possible changes in water delivery and removal practices on agriculture is, to a large extent, unknown but of great importance. Equally important is the effect of agricultural practices on the hydrologic response in the region. Besides water quantity, there is concern for water quality. Whereas principles are reasonably well established, detailed information for South Florida is sorely lacking.

4. "*Enhancing wildlife in agricultural settings*. One of the prime driving forces behind the 'Everglades Restoration' effort was the loss of habitat for a number of species. Besides changing water quantity and quality delivered to the Everglades, there also is substantial opportunity to enhance the habitat for a number of species in agricultural settings. Wildlife management research is the proverbial stepchild in agricultural research planning, and especially in South Florida, it must be given its due.

5. *"Plant nutrition and nutrient loading*. There is overlap and duplication among soil management, hydrology and nutrient management research. However, a major part of the perceived South Florida problem is associated with nutrient loading -- in Lake Okeechobee and south. Past emphasis has been primarily on P, and it is anticipated that regulatory standards will be changed from the current 50 ppb to 5 or 10 ppb. This may be justified, but such drastic action must be based on detailed evaluation, both of its ecological need and of its economic impact. It also should not be overlooked that, as P problems are brought under control, other contaminants -- sulfur, copper and pesticides among them -- may become relatively more important.

6. *"Pest management*. Most groups concluded that reducing pesticide use and thus losses was not a high research priority, in part because it was felt that industry would take the lead in this area. That assumption is open to question. In any case, biocontrol of invasive weeds and insects has never been an area for industrial investment and must be supported with public funds. A clear example is control of melaleuca in the Everglades.

"A great deal more could be written in support of an expanded research program for agriculture. We believe, however, that not much would be gained by adding further detail. The purpose of the conference, as we understand it, was to highlight the need for more research in agriculture, to stress the importance of maintaining a viable agriculture in South Florida and to demonstrate that disparate groups of diverse interests can work together. We believe the conference was successful on all three counts."[99]

## BENEFITS

By taking these actions:

C Private lands can be more effectively managed for conservation and ecological

values.

- The benefits of private stewardship efforts will be emphasized, which can result in the realization that:
  - All land does not have to be purchased with public money or tied down with permanent restrictions to protect its environmental resources;
  - Many environmental objectives can be met through cooperative, incentive-based partnerships with private landowners that capitalize on these owners' deep love and knowledge of their land;
  - There is not enough money to buy or manage all the land that contributes to the nation's environmental welfare;
  - Government cannot outlaw all destructive uses of lands in private ownership through regulatory approaches;
  - It is much less expensive — and sometimes much more effective — to hire private landowners to care for and maintain important ecological values, since this approach gives landowners an economic incentive for carrying out these activities and costs *less than 1% of public land acquisition,*[100] because there is no cost for land acquisition, no loss of local property tax revenues, no loss of economic production, no loss of jobs, and payments only for management services, that would be paid anyway if the land was to be adequately managed by a public agency. (See comment from DCA under Endnote[101].)
  - Loss of funds to properly manage public lands — which can lead to the degradation and destruction of these lands and their ecological values — is not a concern, since the *only cost* of the landowner incentive programs is for the management services rendered, and these funds do not rely on annual appropriations, but would be paid into a dedicated fund managed by an independent third party at the onset of each agreement.
  - Land acquisition programs do not appeal to most farmers, ranchers, small woodland owners and timber companies (who own *70 percent of the total U.S. land area*) because they do not want to sell their land. The majority of these landowners also are wary about permanent conservation easements because of deep uncertainty about the future viability of the nation's agricultural industry. Many landowners are simply unwilling make permanent commitments for themselves (or the next generation), when they are not sure how long they can continue the land uses — such as farming, ranching and timber production — that generate the operating capital that is necessary to sustain these agreements.
  - Private stewardship initiatives will build on, support and encourage the use of every other type of existing conservation tool, while filling in gaps that current tools do not address.
- The amount of land managed for conservation purposes can be greatly expanded through private stewardship incentives.
- These actions also ensure economic uses of the land can continue, compatible with its environmental values.
- In addition, they offer a way to generate revenues from publicly-owned lands, and to use the knowledge and skills of ranchers and farmers to manage environmental

resources, provide recreation opportunities and pursue agricultural activities, where appropriate, thus providing an opportunity to provide better management and more intelligent use of public lands.

*ENVIRONMENT*

# SECTION 5

## INTEGRATING AGRICULTURE IN THE LANDSCAPE

## TT5 The Fifth Component for Success:
## *Integrating Agriculture into the Landscape*

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**GUIDING PRINCIPLE:**

*Preserving land alone is not enough. Local and state governments also must preserve the conditions that allow the land to be used profitably for agriculture.*

**POINTS TO KEEP IN MIND:**

*The conversion of agricultural land is a complex process. It involves such factors as farm profitability, urban growth pressures, land values, personal decisions about work and retirement, community expectations, taxes and government programs, incentives and regulations. When investing in urban growth investors begin buying land for its development potential. New farmers soon cannot afford farms and fewer farmers are ... able to increase their holdings. At some point the process becomes irreversible and farm after farm is subdivided and developed. Communities that wish to* [retain] *their agricultural lands must start early in the process to change the expectations of farmers, investors and developers. Although some conversion is essential for economic progress, too often it is the best land which is pushed out of production, with little thought to the consequent environmental, economic, and social impacts ...*[102]

Also:

*It may help to clarify what needs to be done if the focus was shifted from preserving land, to preserving* ***farmers***.[103]

**CHALLENGE:**

***Integrate agriculture into the landscape as a vital part of society's infrastructure and quality of life.***

## CURRENT CONDITION:

Here are the major obstacles that stand in the way of integrating agriculture in the landscape:

- **Virtually all land use planning in Florida is geared toward the urbanization of open land**. There is no effective rural planning. One of the major problems is the terminology and tools in current use were developed to describe urban areas. They have little meaning or application in rural areas. In fact, their application in rural areas tends to urbanize these areas, and remove the rural character that makes them unique.

  A background paper prepared in February 1990 by Robert Lincoln, Joint Select Committee on Growth Management Implementation, entitled "Planning Needs in Rural Areas: an Evaluation of State Policy," underscores some of the drawbacks to the way in which the Growth Management Act has been applied to rural areas:

  *How do we recognize rural areas? One concept which may serve to illustrate rural areas is working landscapes ... A working landscape is one upon which the hand of man has acted, guiding and shaping the land and the vegetation which it supports without dominating it with structures. Pastures, fields, and orchards -- lands managed by man, but not overtaken by him -- are the working landscapes of rural areas.*

  *Wilderness areas can be distinguished from rural areas by the dominance of natural landscapes over working landscapes. Urban areas can be distinguished from rural areas by the dominance of manmade artifacts: buildings hiding the underlying land. Rural areas are recognizable by the partnership of nature and mankind ...*

  *Describing rural residential patterns in terms of "units per acre," or acres per unit, ignores the pattern of varied parcel sizes which occurred over time as land was divided according to need and opportunity. It also ignores the need for larger parcels if large scale agricultural activities are to remain viable.*

  *Rural residential patterns are based on parcels, not lots: the purposes of a traditional subdivision — achieving a regular pattern of land use and providing land for infrastructure and access — have little meaning in a rural setting. Rural residential patterns are based on parcels of varying sizes, sold over time in response to the housing and agricultural needs of various purchasers. Density, lot size and housing type — fundamental aspects of the tools used to describe urban lands — have little meaning ... in rural areas ...*

  *Whether the lot size is one, five, ten or forty acres, if working and natural landscapes are divided "cookie-cutter" fashion to provide residential use of the land, the rural character of the land will be destroyed ...*

  *The threat to rural lands which are either adjacent to or in close proximity to*

*rapidly developing areas comes largely from the imposition of suburban patterns of development on agricultural lands. Suburbanization effects rural areas in several ways. The establishment of residential subdivisions ... destroys the pattern of varied parcels sizes designed to accommodate agriculture, displaces agricultural uses, and often requires the extension of services to areas which are the least equipped to support them. In addition, suburban residents are desirous of the protection afforded by urban land use regulations, particularly restrictions on "incompatible" adjacent uses. These restrictions limit the means by which rural residents ... can make a livelihood.*
Also, see Endnotes[104]&[105]

- ❑ **Many south Florida growers farm the weather, not the land.** Some of the products they produce can be grown no where else in the continental United States — including tropical plants, carambolas, leechees, mangoes and papayas, to name a few. Yet development patterns are squeezing them out of business — and making us reliant on foreign producers for the products they grew.

- ❑ **Urban development patterns pose many impediments to the continuation of agriculture**. These include:
  - C rising real estate values
  - C loss of land available for — and appropriate to — agriculture production, services and processing.
  - C urban encroachment
  - C parcelization
  - C lack of adequate buffering between agricultural operations and homes, which results in conflicts with urban neighbors and complaints about noise, smells, dust, etc.

- ❑ **Neighborhood opposition poses a major problem.** "Look at the problems the Florida Department of Agriculture and Consumer Services is having in Broward and Dade counties in their efforts to eliminate canker," Nat Roberts says. "We get threatened often by neighbors that do not like our use of pesticides or herbicides. One lady consumed at least a week of our production manager's time in trying to address her complaints. The state investigators said she was crazy. But we still had to deal with her and we have a bunch of neighbors. Same issues apply to migrant labor and transport equipment in a suburban area."

- ❑ **Zoning has failed as a tool to retain and manage agricultural land, open space and conservation.**

- ❑ **Many available "land conservation tools" sustain open space but do not necessarily sustain agriculture.**

- ❑ **Growth management = growth accommodation. No consideration has been given at all of how to integrate agriculture into the landscape.**
- ❑ **Very few planners have the personal background or training to understand agriculture**. As a result, agriculture — and its needs and impacts — are often

misunderstood. Some planners see agriculture as a temporary use, that can be replaced once land can be developed to its "highest and best use" — residential subdivisions. Some see it as a place where the troublesome, "Not in My Back Yard" uses — such as asphalt plants, land excavations and landfills — can be located. And some believe that agriculture can always relocate, if not in their area, then in some other county, state or country.

Very few planners recognize that agriculture is a large outdoor industry that is distinct from — but sensitive to — other land uses. Very few planners appreciate the economic importance of agriculture; understand what is necessary to maintain (or improve) its economic viability; recognize its needs for support services and industries, farm worker housing, tractor lanes along highways and local distribution networks; or realize how the failure to plan for agriculture — with considerably more depth than simply marking an "A" on a land-use map — and to prevent conflicting uses from locating where they will interfere with agricultural operations, is leading to the demise of agriculture in many of the state's fast-growth counties.

- **Too often, the first response by concerned policy makers, planners, environmentalists and members of the public is to blanket agricultural areas under a cover of "no development" in a misdirected effort to "protect" agriculture.**

Pat Cockrell of the Florida Farm Bureau Federation says: "The issue of rural density does not allow the value to stay with rural lands. [Land value] is what many farmers borrow against (collateral) to put a crop in the ground. Farmers are not guaranteed a profit each year. I had a south Florida vegetable farmer tell me that if he could make a profit one out of three years that he would stay in business. That's because of the nature of the markets can make one year highly profitable. His problem was he couldn't forecast which year would be profitable so he had to plant each year. He had to borrow against land value in the bad years so he could have a 'good' year.'"

- **Public land acquisition policies often have the effect of reducing or depressing land values** without compensating landowners. Attempts to prevent development in agricultural areas — such as by "downzoning," or decreasing the number of units that can be built on an acre — also result in decreased land values. This, in turn, interferes with a producer's ability to obtain production loans and can reduce a grower's ability to remain in business, thus forcing the producer to intensify his or her land uses or sell out to the highest bidder for the property.[106] (For more detail on this issue, see Appendix B.)[107] & [108]

- Large parcels of land are needed for ecological integrity. **The largest culprit in breaking up large, privately owned parcels is federal estate taxes.** (See Appendix G - "The Case for Eliminating Estate Taxes.")

- **The consolidation of ag land ownership into the hands of nonfarmers and the "industrialization" of agriculture have major implications for the future uses of rural lands.** Charles C. Geisler, a

professor in the Department of Rural Sociology at Cornell University, examines the massive trend toward industrialization and the consolidation of ownership in a paper entitled, "Working Lands and Working People: Coupling Smart Growth with Smart Ownership." The paper, presented in the opening plenary session of the Keep America Growing Conference in Philadelphia on June 7, 1999, is available for download at http://www.farmland.org/kag/pdffiles/papers/002.pdf Geisler states:

- *"The 1997 Census of Agriculture tells a [revealing] story about the separation of ownership and control. Today, half our agricultural land is owned by persons not farming it ... In their hands, the prospects of land conversion is more of a business calculation and estate planning endgame than an occupational decision."*
- Moreover, *"By 1991 USDA researchers were reporting that the largest 4 percent (124,000 owners) held 47 percent of all farmland and 25 percent of all value in farms.*[109] ***We have, then, a situation in which a population roughly the size of Boise, Idaho, owns nearly half the agricultural land in the United States and controls its fate. "*** [Emphasis added.]
- The situation has not improved. A July 17, 1998 article in *The New York Times* reported that farm debt in 1998 reached $172 billion, the highest since the height of the farm crisis in 1985. Since then, articles in the *New York Times* and other papers have continued to chronicle the economic struggles and losses of land that are devastating farmers across the nation (see Appendix F - "An American Tragedy.")
- Federal estate tax laws also exacerbate this problem, since they remove land from individuals and families and abet consolidation by corporate and nonfarm entities. (See Appendix G - "The Case for Eliminating Estate Taxes.")
- As a result: *"Ownership units have grown in acres, assets, and market share at the expense of their neighbors. A starkly bimodal ownership structure is the result. The newly consolidated unit ... typical in many parts of the U.S. today, may rest legally in the hands of an individual, a family corporation, or an institutional owner (insurance company, bank, corporation, religious order, university, or estate).*
- Consequently: *"... many million farmers been evacuated from their lands, and ... American agriculture has been diluted almost beyond recognition by depressed ratios of people-to-land and by changing ownership realities for those who remain on the land.*
- ***"Such a structure,"* Geisler says: *"is a poor shield against farmland conversion and eventual sprawl."*** [Emphasis added.]

Against the backdrop of these statistics, Geisler asks: *"How is it that our remedies for sprawl are almost entirely about land use controls rather than land ownership?*"

(For a more complete discussion about consolidation, see Section 1, *Improving Producer Profitability*, Current Conditions and Priority Action 1.)

As Stephen W. Forsythe of the U.S. Fish and Wildlife Service says, "I can say without any doubt that this section makes a compelling case for agriculture and environmental planners (if such groups exist) to work together. I fear that both groups will continue to lose productive agriculture and environmental land if the current land-use planning approaches in Florida continue."

Steven M. Seibert, Secretary, Department of Community Affairs wrote on January 26, 2000:

> *Thank you for the opportunity to review and comment on A NEW LOOK AT AGRICULTURE ... I applaud the efforts of the Sustainable Agriculture Task Team and commend the insightfulness of this report.*
>
> *Last year when I began my tenure with the State's land planning agency I was struck by the number of land use implications associated with agriculture practices in Florida, yet the lack of engagement by the Department. I have since appointed Mr. Tom Beck as the Department's liaison with the Department of Agriculture and Consumer Services. As a result, I look forward to a stronger partnership with Florida's agricultural stakeholders.*
>
> *According to the University of Florida's Institute of Food and Agricultural Sciences, Florida will convert another 2.6 million acres from rural to urban use by 2020. We currently hold the fourth place position in the nation for such conversion. As the fourth fastest growing state in the nation, we must consider agricultural needs as an integral part of the landscape of Florida. As you point out in this report, "Land resources support growth of population in the state. Land for agriculture is as necessary as the raw ground to support that growth."*
>
> > *The Department of Community Affairs has recently conducted a growth management survey of more than 3,500 citizens in Florida. We are also hosting "town hall" meetings in 13 locations around the state in an effort to gain additional input on growth management in Florida. This information will be used to reassess and perhaps revise Florida's policies on many things, including agriculture. Your challenge to integrate agriculture into the landscape as a vital part of society's infrastructure and quality of life is one in which the Department would like to participate. We look forward to working with you on this matter of essential state interest.*

## CONCLUSIONS

**Need to find better ways to:**

T Provide **landowner equity**, so landowners can realize full value of their land without converting it out of agriculture. Retaining agriculture as a part of the landscape is essential to a sustainable ecosystem. However, land is currently undervalued in agriculture and overvalued in development; therefore, today's market tends to favor development.

T Review **tax issues.** Consider creating more enlightened tax structures, that reward responsible stewardship and use of land for food production. The current taxing system – federal, state, local – impacts the decisions of landowners and discourages the protection of natural resources and continuation of agriculture.

T Reconcile urban development needs with their impact on agriculture and accommodate **new development** without displacing agriculture.

T Address the problems and needs of **rural communities**. Rural communities are often built around nodes of agriculture production and services. These communities provide important economic contributions to the state; have a unique character and valued quality of life; and contain many important natural values, including open space, wildlife habitats, wetlands, and water recharge areas. However, state and federal policies currently are not sensitive enough to the problems and challenges faced by rural areas.

## PRIORITY ACTIONS

1. **LANDOWNER EQUITY:**

***Conclusion:*** Need to find better ways to provide landowner equity, so landowners can realize the full value of their land without converting it out of agriculture. Retaining agriculture as a part of the landscape is essential to a sustainable ecosystem. However, land is currently undervalued in agriculture and overvalued in development; therefore, today's market tends to favor development.

***Suggested Actions:*** Here are several ways in which this might be addressed:

***A) Need to ensure ag owners can maintain equity in their land.***

**1) One approach is to devise local taxing mechanisms that enable agricultural land values to remain competitive for purposes of borrowing.[110]**

< Identified as a possible task for

assistance from the Governor's Commission for the Everglades

**2) Another approach, suggested by Dick Marsh, an economist with South Florida Water Management District, is to "focus on the separate reasons for which agricultural land is valued** (both in the market and in public decision-making) and indicate whether, how and in what direction markets, resource management agency decision-making processes, and taxation practices tend to influence the use of land and the retention and/or expansion of 'desirable' agricultural land values" – **and, then, determine whether, how and to what degree these policies should be modified**.

**3) A third approach is to implement programs such as the Resource Conservation Agreement** (discussed in Section 4, Priority Action 1B2) that provide payments to landowners for actions taken to care for natural values on their land. This, in turn, would create a saleable market value for these resources.

***Recommendations:***

*Who:* South Florida Ecosystem Restoration Task Force (SFERTF)

*What:* **Need state action. Also may need federal action. SFERTF should consider designating agencies that can take the lead in devising prototype programs that will provide collateral value and/or market value for the features land that go beyond its value for development and resource extraction, including its ecological, environmental and food production values.**

## 1. TAX ISSUES:

***Conclusion:*** Need to consider creating more enlightened tax structures, that reward responsible stewardship and use of land for food production. The current taxing system – federal, state, local – impacts the decisions of landowners and discourages the protection of natural resources and continuation of agriculture.

***Suggested Actions:*** Here are several ways in which this might be done:

*A)* ***Develop a demonstration proposal to test a more enlightened tax structure to support agriculture as an essential piece of the restored Everglades landscape.*** This demonstration proposal should take steps to:

.

1) **Eliminate or greatly reduce federal estate taxes so they do not break up agricultural properties and force the sales of land and intensification of land uses to satisfy the taxes.** Priority should given for eliminating federal estate taxes for heirs of lands that have been in ag for at least 5 out of the last 10 years and that remain in agriculture

and/or provide environmental benefits. See additional discussion about "The Case for Eliminating Estate Taxes" in Appendix G (also available for download as Excerpt 17 at http://us-farm.com/download.htm).

2) **Reduce the sales tax on all Ag equipment.**

3) **Reduce or eliminate the intangible tax on Ag property.**

4) **Devise local taxing mechanisms that enable agricultural land values to remain competitive for purposes of borrowing.**

< Identified as a possible task for assistance from the Governor's Commission for the Everglades

5) **Emphasize the link between tax relief and keeping agriculture profitable and viable.** The purpose of tax relief is to prevent "unintended consequences" — such as forcing large tracts of land with native habitats from being converted into more intensive uses or carved into homesites, as a direct result of an estate tax liability; or increasing operating costs to the point that an agricultural operator decides to stop farming and convert his or her land to another more profitable use; or making it impossible for a landowner/operator to borrow sufficient capital to maintain an ongoing, viable farm operation and, thus, forcing that landowner/operator to stop farming.

***Recommendations:***

*Who:* Southwest Florida Regional Planning Council (SWFRPC) in cooperation with USDA, DOACS and farm groups**.**

*What:* **Need federal, state and local action. SWFRPC in cooperation with USDA, DOACS and farm groups, should develop approaches to reduce the impact that the current tax structure has on the decisions that landowners make about land use, with an emphasis on changing tax policies that discourage the continuation of agriculture and encourage the conversion of agricultural lands to other uses.**

## 3. NEW DEVELOPMENT:

***Conclusion:*** Need to find better ways to reconcile urban development needs with their impact on agriculture and accommodate new development without displacing agriculture.

***Suggested Actions:*** Here are several ways in which this might be addressed in South

Florida**:**

***A) "Need to promote urban development infill, Sustainable Communities and the 'Eastward Ho' strategies"***[111]

< Contributing actions recommended by NRCS:

*Action:* Enforce Brownfield development
*Responsible:* Local zoning
*Duration:* Short term (1-2 years)

*Action:* Lessen impact of urban growth on agriculture
*Responsible:* Local and state agencies
*Duration:* Long term (2+ years)

B) ***Need to ensure agriculture-friendly zoning***:

- C Allow for the construction of farm-related buildings, farm worker housing and support industries in agricultural areas;
- C Limit condemnation of agricultural lands by public bodies;
- C Require agricultural buffer zones as part of any non-agricultural development that is located in an agricultural area or near an existing agriculturally-related operations;
- C "Bear in mind that farmers will resist any plan that locks them into farming. It is not that farmers are speculators at heart, but rather they see powerful reasons why farming's future in Florida is threatened. Increasing competition for water and land and the rising costs of regulatory compliance together with international market uncertainties all make them skeptical. Farmers [also] are dismayed at Florida politics which seem so unfriendly to them ... It strengthens their belief that they are expendable, perhaps unwanted, and that their future in Florida is tenuous indeed. With these uncertainties we cannot expect Florida farmers to give up any land use rights easily."[112]

C) ***Need to train planners about the unique needs of agriculture and the tools that can be used to integrate development into the landscape without displacing agriculture or negatively impacting agricultural operations***.

1) **"Agriculture needs to be considered in the equation as an integral part of settlement of land in Florida**. Land resources support growth of population in the State. Land for agriculture is as necessary as the raw ground to support that growth."[113]

***D) Need an integrated approach:*** "Land use; uniform, sensible regulations; better tax incentives; recognizing property values so that reasonable loans can be obtained at low cost to farmers; recognizing farmers'

increasing roles in land stewardship, recharge, wetlands. You are right in asking that farmers be compensated/recognized for that," Gail C. Stern says. "I see these things on a daily basis because [the horse] industry is not situated on remote parcels of land. Municipal/residential/commercial growth have come to us. We are now competing for land against large tract home builders, their residents and conflicting infrastructure.[114]

< Contributing action recommended by NRCS:

*Action:* Use Farmland Protection Act to take create and integrated approach; fund as fully as possible to maximize benefits to agriculture in Florida
*Responsible:* USDA
*Duration:* Short term (1-2 years)/Long term (2+ years)

***Recommendations:***

*Who:* DCA working with DOACS.

*What:* **Need statewide effort. South Florida could be used to test prototype programs. DCA, working with DOACS, needs to create improved policies so that development can be integrated into the landscape without displacing agriculture.**

**4. <u>RURAL COMMUNITIES</u>:**

***Conclusion:*** Need to find better ways to address the problems and needs of rural communities. Rural communities are often built around nodes of agriculture production and services. These communities provide important economic contributions to the state; have a unique character and valued quality of life; and contain many important natural values, including open space, wildlife habitats, wetlands, and water recharge areas. However, state and federal policies currently are not sensitive enough to the problems and challenges faced by rural areas..

***Suggested Actions:*** Here are several ways in which these issues might be addressed:

***A) Need rural development policies that reflect the needs and unique characteristics of rural communities, and avoid forcing urban development patterns on rural areas***.

***B) Need to "consider the needs of rural and low income communities as Everglades restoration progresses."***[115] This should include:

**2) "a review of farm worker housing needs and recommendations for alleviating farm worker housing shortages.**[116]

3) **"Guiding the appropriate use of land impacting the Everglades ecosystem.**[117]

4) **"Enhancing sustainable and environmentally compatible development that sustains the regional economy and supports and healthy Everglades ecosystem.**[118]

5) **"Creating sustainable agricultural programs compatible with Everglades ecosystem restoration and protection.**[119]

6) **"Allocating natural resources to support natural and human systems."**[120]

***Recommendations:***

*Who:* The Governor's Office, working through the Governor's Commission for the Everglades.

*What:* **Need statewide effort. The Governor's Office, working through the Governor's Commission for the Everglades, should develop recommendations for federal, state and local officials to enhance the quality of rural communities and better address the problems and challenges of rural communities.**

## OTHER POSSIBLE ACTIONS

**Landowner Equity**

T Need to revise appraisal process to provide better means of valuing development rights.

T Need to separate purchases of development rights from the services that are performed to manage or maintain a property. The two transactions should be completely distinct and separate from each other. One deals with an interest in real property; the other deals with professional services. A landowner should not be obligated by the sale of development rights to perform any services beyond his or her agreement to relinquish those rights in return for fair and equitable compensation. Any agreement to also provide management services should also provide fair and equitable compensation to the landowner, unless the landowner voluntarily agrees to provide these services at no additional cost.

T Consider using the "Property Analysis Record," maintain by the Center for Natural Lands Management in Fallbrook, CA to measure the value of services to care for and maintain different types of habitats.

- Look at ways in which landowners can be compensated for the values their lands provide for food production and for environmental services to offset the current trend in the marketplace to only value (and, therefore, encourage) intensification of land use. See Appendix B.

- Provide avenues to support total resource management practices.

- Need to prevent local governments from downzoning Ag land "to protect Ag." Also need to prevent federal, state and local governments from consuming Ag land at discounted values. As Tim W. Williams states: "Public policy that reduces land value without compensation is [unfair], and yet it happens in FL everyday. Development is not hurting farmers in Miami Dade County but Government is."

- Williams goes on to say: "Please focus on farmers, not acreage. I got the feeling my land value would be in peril as those concerned might blanket Ag areas under a cover of 'no development'. Without any other remedies in place to mitigate the possible effect my land worth [of] as much as 20+ K per acre falls overnight to 5000.00 Where does the million dollar production loan come from if I only own 150 acres ? 150 x 5000 = 750,000 while 150 x 20,000 =3,000,000 ltv.@ 33%. **DO YOU UNDERSTAND THIS?**" For further discussion about this point, see Appendix A.

- Williams also drives home his point by saying: "Keep well meaning government agencies and the Federal Government out of the land value reduction business. Over 5000 acres has been confiscated from bonafide Ag producers [in south Dade County] over the last 10 years! First it was flooded, then put on acquisition and environmentally sensitive maps, then after half or more of the value was eroded 'purchased' by the government. This must stop!"

**Tax Issues**

- Need to provide information to landowners on farm transfer and estate planning.

**New Development**

- "Create an 'exchange program' for environmentally sensitive lands and/or lands in the path of high density development that have good Ag value; 'trade' them for land with good Ag value in another part of the state that could support Ag activity over a longer period of time."[121]

- Investigate changes in development patterns as recommended by the Treasure Coast Regional Planning Council in its publications *Patterns of Sustainable Development: Towns, Cities, Villages and The Countryside* and *Suggested Strategy for the*

*Sustainable Settlement of Florida.* These development patterns would restore agriculture as an integral part of the landscape. A brief description of this approach is described below:

***Suggested Strategy for the Sustainable Settlement of Florida***

*Under current land development regulations, nearly everything is allowed if you manage to meet or circumvent the regulations, yet little attention is paid in the regulations to how well development fits together or what the life of residents or employees will be like once the development becomes occupied.*

*Local zoning codes, local land use designations and Florida's own Land Development Regulation Act (Chapter 163 F.S.) contain disincentives to well-planned, high quality, sustainable development and in many cases make such development illegal. What is encouraged by current regulations is an unsustainable form or pattern of development known as "sprawl." This pattern is repeated over and over again across Florida as a result of investors and developers simply following the existing rules.*

*The rules governing the growth and settlement of Florida need to change. Remember, Florida does not have a growth management act or plan for settlement per se. It only has a land development regulation act which has nothing to do with regional planning or good planning in general. It is simply a series of regulations describing what we do not want in the state (i.e., planning by regulation). It does not provide an overall "game plan" for Florida describing the settlement or development patterns we are in favor of.*

*Consider the following:*

*If:* *1) sustainable areas of the "countryside" were recognized and identified by Florida to remain free of urbanization and connected by natural or authentic rural corridors.*

*If:* *2) the vast majority of people live within appropriately located villages, towns, or cities made up of clearly defined neighborhoods and special districts;*

*If:* *3) the neighborhood is viewed as the basis and most important unit of planning and community organization (i.e., the standard incremental unit of growth);*

*If:* *4) neighborhoods are viewed and designed (and where necessary retrofitted) as compact, largely self-contained, pedestrian pockets, and generally include the following characteristics:*

*a)* *recognizable centers and edges,*

*b) a size of between 40 and 160 acres,*

*c) a finely woven network of interconnected streets, detailed for pedestrian use as well as automobiles,*

*d) a sufficiently diverse mixture of housing types and affordabilities to accommodate the full range of people needed to build and maintain a complete and real community,*

*e) a balance of employment and housing opportunities, and*

*f) adequate provision of public and civic uses (e.g., greens, squares, houses of worship, town buildings, etc.).*

*If: 5) neighborhood schools were the rule for children under age 14 and were viewed as an essential and central organizing feature of communities;*

*If: 6) sufficient attention were paid to beauty, architecture, and urban design to allow for compact, self-contained, mixed-use neighborhoods, and to assure that people might come to love their neighborhood, and grow roots; and*

*If: 7) one could live a reasonably good life without the absolute necessity and burden of automobile use and ownership, (which would help to make housing more affordable);*

***Then: by default most, if not all, of Florida's growth management objectives could be achieved.***

*To realize this goal the Legislature needs to take the lead and issue a clear directive that a comprehensive growth plan be done to address the State's future settlement patterns and redevelopment of its existing towns, cities and villages. A bold directive is needed to provide support for the State planning and transportation agencies, regional planning councils, water management districts, MPO's and local governments to take aggressive and continuous action in their plans to facilitate redevelopment, development, and infill that is consistent with the vision described above. At the same time, it is critical that less ideal forms of growth be discouraged by a more complete and comprehensive evaluation of true costs.*

*It is critical that the State Plan make it clear what form and type of development it supports, and provide inducements that will result in action. To date, we have all made it clear what we do not like, but the time has come to deal with the harder job of saying with great clarity what we support.*

[There is not complete agreement on this approach. As Tim W. Williams says: "Was this idea taken from a speech by Michael Eisner to Disney board members about 'Celebration?' Not that the idea is bad, but have you ever seen a farm win in any other system but a free market one (as it relates to land use and value)?"]

**Other Suggestions**

- Need viable, well-funded programs for:
  - Purchasing development rights
  - Leasing development rights
  - Tax deferred land exchanges (in exchange for development rights)
  - Encouraging mitigation banking on agricultural properties
  - Entering into long-term (10- or 20-year) contracts for environmental services
  - Making payments for public benefits produced on private lands

- Louis Hunter, of Ranch One Cooperative in Immokalee, and Dennis Carlton, a Riverview, Florida rancher, both voiced a comment heard from many producers. "Too much land has been taken over by government. We can manage it better than they can."

## BENEFITS

By taking these actions:

- Conflicts between agriculture and urban land uses can be reduced;
- Development can be integrated into the landscape without displacing agriculture;
- Rural areas can develop according to their unique "sense of place" and history, without having urban development patterns imposed that can eliminate a community's rural character.
- Impediments imposed on the continuation of agriculture by urban development patterns can be alleviated or removed.
- An owner's equity in his or her land can be maintained.
- Planners will be able to better understand agriculture, its place in the landscape, its contribution to the environment, its economic importance and its role in our very survival; and will be able to create and implement policies designed to facilitate the continuation of agricultural enterprises.
- Land use planning in Florida will have a better potential to be broadened to encourage a better mix of land uses — made up of a mosaic of natural landscapes, working landscapes, rural landscapes, suburban landscapes and urban landscapes, without having one type of land use overwhelm or displace another.
- Regressive tax policies that force landowners to intensify uses on their properties, convert agricultural operations to urban and suburban developments, and carve up wildlife habitats, just to satisfy tax requirements, will be eliminated.
- Tax policies that act as disincentives to agriculture and, thus, speed the conversion of these lands to asphalt, will be turned into incentives for maintaining and improving agricultural activities on the landscape.

# PART 3:

## APPENDICES & ENDNOTES

# Appendix A:
## *Agricultural Land Values*

At times, it seems everything conspires against the farmer — the weather, pests, vandals from nearby subdivisions, government regulations, urban planners, and people from the state capital — or worse, Washington, DC — who swear "I'm here to help you" and then do just the opposite. Even if everything else is going right (and that is rare), there's the market, which can make or break a year ... or a family.

> *One story making the rounds tells about a farmer who won the Florida Lottery. When asked by a reporter what he would do with his new fortune, the farmer said: "Well, I figure I'll keep on farming ... until it is all gone."*

Make no mistake: some farmers do very well. In fact, one good year can often make up for a string of three or four bad years. It's those good years — and the land, and the life — that keep people in farming.

Most farmers will say: "I'll keep on farming ... so long as it is profitable." In fact, they might even farm a little bit longer, hoping for one of those good years, hoping their kids might take over the farm, hoping ...

But once regulations become too strict, profit margins become too thin, complaints and nuisance suits from new suburban neighbors become too frequent, and competition from foreign producers threatens to undermine the market for their produce, many farmers begin to wonder ... Is it worth it? Should I sell?

If there is a willing buyer — a developer — who offers to pay $20,000, $30,000 or $50,000 an acre, the thought is tempting. Maybe not today. But someday ...

That's why land value is important. It provides collateral for the bank loans needed to plant each year's crop. It provides a nestegg in case something goes wrong. And it provides security for the future.

There is even a presumption — which is prevalent among farmers, bankers, developers, homeowners and many planners — that land only has one type of value: a commodity value, based on the dollar value of the crops it can produce, on the price per acre it will bring for development, and on its resale value once improvements are made. "Highest and best use" is often translated into "highest and best price."

After all, if one decides to sell, there is no sense in selling to anyone except the highest bidder.

As a result, farmland preservation may sound nice in theory, but in the real world of dollars and cents, and uncertain weather, uncertain zoning, uncertain markets and uncertain futures, a farmer needs as many options as possible. Land values provide a hedge against those uncertainties.

Farmland, however, is unique in that it has both a commodity value and a resource value.

Like coal for a steel mill, land is an industrial input. In fact, land is the largest input in the agricultural industry, the input that makes production possible.

Unlike coal or, for that matter, steel mills, land that is properly used does not become depleted or depreciate; it actually can get better over time.

As a result, it can provide for long-term food production — sometimes for centuries. That's why it is a resource. But food production is only one of its resource values. Farmland also assists in the retention and detention of floodwaters, recharges groundwater supplies, provides habitat for wildlife and retains open space.

This is in contrast to urban land which, outside of parklands, only has a commodity value; and natural land which, outside of income from recreation, only has a resource value.

Resource values provide for steady, long-term returns. Commodity values fluctuate with the market, sometimes appreciating or depreciating rapidly; hence, they can provide for large, short-term returns.

Unfortunately, the State of Florida does not recognize the resource value of farmland. The state has set the tone for economic growth. And short-term returns — from the development of land, from impact fees for new construction, from an expanding property tax base, and from additional job markets — are fueling its growth.

Many future decisions about land use will be based on economics. If it is profitable to keep land in agriculture, the agricultural industry will survive. But if it is more profitable to sell land for development — and there are no other alternatives for landowners to "cash in" on the commodity value of their land — agriculture will be diminished ... and may eventually disappear.

Once land is converted to an urban use, it loses its resource value. The structures that are built usually determine its future use. However, all built structures — such as factories, business establishments, commercial developments and homes — have a limited economic life. Many will be obsolete in 20 or 30 years. Some may fall into disrepair. Some may be torn down. And weeds may grow up in vacant lots. But farmland that is displaced won't come back.

# Appendix B:
## *How Much are Resource Values Worth?*

There is great irony in the way we view Florida's land and its value for different uses.

FOR EXAMPLE: *If you have a wetland on your property, you might be lucky to get it appraised at $250 an acre. Start to fill it in, however, and you're likely to find yourself paying a $10,000 a day fine to the U.S. Environmental Protection agency*.

While natural habitats that are rare and fragile are considered priceless by society, our market economy gives them a low value.

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**HERE ARE SOME PRICELESS NATURAL RESOURCES THAT WILL NOT INCREASE YOUR PROPERTY VALUE**

**, WETLANDS**
**, WILDLIFE HABITAT**
**, PRESENCE OF THREATENED & ENDANGERED SPECIES**
**, HIGH FOOD PRODUCTION CAPABILITY**
**, CLEAN DRINKING WATER**
**, CLEAN AIR**
**, PRODUCTIVE FISHERIES**
**, BIOLOGICAL DIVERSITY**
**, SCENIC VIEWS**
**, BIOLOGICAL, BOTANICAL AND SCIENTIFIC OPPORTUNITY**
**, SOIL CONSERVATION**
**, SOIL CREATION**
**, CARBON SEQUESTERING[122]**
**, FLOOD CONTROL**
**, TRADITIONAL RURAL CHARACTER**

**In fact, they may *reduce* your property value**.

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Much of the fault for this lies with our land appraisal process ... which, in Florida, is highly development-oriented. State and county policies literally spawn development, often at the expense of other land uses and environmental considerations.

*Land is valued on the basis of how many housing units or condos it will accommodate[123] ... not on how effectively it will grow our food ... or how important it is for aquifer recharge ... or as wildlife habitat.*

In fact, there presently is no way within the market economy to assign a dollar value to the land's ability to grow food, or to the natural resources and wildlife it harbors.[124]

Agricultural landowners can apply for and receive an "exemption," and pay property taxes based on the current agricultural uses on their property.

But the land still retains its underlying housing density, as provided under state law and shown on each county's future land use map. This housing density, which may range from 1 unit per 20 acres to 1 unit per 5 acres for most agricultural land, is used as a yardstick for measuring the land's value for use as collateral for agricultural production loans, and for future development options.[125]

There is no property tax structure — or credit — for environmental uses of land, such as aquifer recharge, or for areas that are left in a natural or undisturbed state, such as habitats that harbor threatened or endangered species.[126]

Consequently, the current property appraisal system actually works against less-than-fee, transfer of development right and conservation easement concepts that offer landowners compensation in return for their willingness to limit (or give up) residential use on their land so its food-growing and natural resources values can be retained or enhanced.

Many landowners do not want any limit placed on their options as a property owner. However, the current appraisal system requires that they "give up" a potentially lucrative use of their property, if they choose to act as custodians of the natural resources on their property.

Moreover, many land managing agencies and nonprofit organizations that operate less-than-fee and conservation easement programs, often are required by statute ... or insist ... that they pay no more than the current appraised value for the development rights that they purchase. Some groups even try to reduce this price to 85% of appraisal.

**Hence, the landowner is given the impression that he or she is losing out on a valuable future use ... and being paid less than today's market value for that use ... and, therefore, is being penalized, not rewarded or provided a with a benefit ... for acting as a responsible steward of his or her property.**

A better approach would be to create an incentive program for private landowners who provide beneficial uses on their land for environmental restoration or enhancement ... for areas that are left in a natural or undisturbed state... and/or for aquifer recharge ... with some form of *direct* or *indirect* compensation, such as:

- a cash payment on an annual basis,
- an inheritance or property tax credit,
- guaranteed loans to lower interest rates and/or expand an operation's borrowing power with commercial lenders,
- funds for capital improvements and installation of Best Management Practices (BMPs),
- or regulatory relief.[127]

Grazing lands, for example, may produce a low return on a dollar per acre basis, but for decades they have provided an economically viable use which has allowed private landowners to maintain open space, critical wildlife habitats and water resources for the

benefit of all state residents ... at no cost to the public.

Low-intensity agricultural uses can utilize soils that are not desirable for crop production, and can easily incorporate wetlands, hammocks, pine uplands and greenway corridors into their operations.

Converting these lands to urban uses will mean the loss of their natural resources and wildlife values. Purchasing them with public monies may be prohibitively costly. The results of a study conducted by Farming for the Future, Inc. in Hillsborough County shows that open spaces purchased with public monies cost the county $1.15 for every $1.00 generated in revenues, creating a $0.15 deficit, while agricultural uses only cost $0.16 for every $1.00 of revenue, producing an $0.84 surplus.[128]

Although the tax revenues and economic contributions produced by low intensity agricultural uses are small when compared with other land uses, the costs for the services they require are even smaller.[129]

When these lands are purchased with public monies, their tax revenues and economic contributions are lost. The public also must pay for purchasing these lands, for making capital improvements and for providing ongoing annual maintenance and management.

When public budgets are cut, maintenance and management of public lands often is one of the first categories to suffer, which in turn, allows these lands to degrade, become invaded with exotic species and, with the build up of undergrowth, be at greater risk of severe damage or habitat destruction as the result of intense fires.

One dramatic example of this is the 60,000 acres of scrub jay habitat that has been purchased by the state with public monies. Scrub jay populations have declined as a direct result of the change in management practices (or worse, the lack of management) that has occurred from the time these lands were in private ownership.[130] Much of the blame for this lies with a "buy now, manage later" philosophy that has permeated the state's land acquisition program until just recently.[131] Two other contributing factors have been an across-the-board policy to immediately remove the private landowner from the property, which results in a cessation of the activities the landowner may have been pursuing for generations to manage the land, and the years-long delays that have occurred in developing public management plans for publicly-owned properties.[132]

If you go out to any parcel of state or water management district owned land, then go out on private ranchland you'll quickly see which lands have more wildlife and who are the better land managers.

Usually, it's the private landowner. *We have to pay anyway. So why not pay private landowners to keep and care for the wildlife habitats and other natural resources that they now have on their properties?*

Several of these concepts are particularly well stated by Lovett E. Williams, Jr., who spent 24 years with the Florida Game and Fresh Water Fish Commission:

> *"One factor contributing to the loss of good wildlife habitat is the policy of low land appraisals for 'unimproved' land. When offered for sale, land that conservationists would consider the very best for wildlife is appraised with no consideration for its conservation features. To the contrary, a slash pine*

*plantation is appraised higher than a natural hammock and an improved cattle pasture is appraised higher than a scrub full of scrub jays and Florida mice. And that is the case even when the State of Florida is having land appraised for purchase of a 'conservation easement.'*

*"I learned that when a consulting client of mine sold a conservation easement to the State. In the appraisal process, only conventional agricultural and developmental land features were valued. Timber and wildlife were not. The place had many endangered and endemic species but would have been valued just as high, or higher, without them.*

*"The present system of [giving a] low rating [to the value of] natural lands is not objected to by the government and private entities in Florida that are presently purchasing conservation lands because it keeps the price down. But that is a short term view. The present appraisal practices encourage landowners to intensify their land uses. And why not? [What do they have to lose?]*

As Tim W. Williams, a Dade County potato grower who recently stopped farming because of the issues discussed in this paper, says: "Any value, tax credit, cash payment, aquifer recharge credit, or other real benefit that can be willingly attributed to privately owned agricultural land for environmental benefits that exist, or that are added or enhanced by the owner or tenant, would be a godsend. How often have we as producers reached into our own pockets to do the right thing only to have that work against our lending value or increase our regulatory burdens? It's high time we move from discussion to action, before more production ag and natural areas are compromised."

# Appendix C:
# *The Problems with Regulations*

*The survival of agriculture will be influenced substantially — perhaps decisively — by the cumulative effects of government regulations and attitudes.*[133]

That was one of the principal conclusions of an extensive survey on the future of agriculture in the county that has done more than any other place in the U.S. to "preserve agriculture" through all available farmland protection measures. The other conclusion:

> *Without profitable agriculture, there will be no agriculture.*[134]

The two concepts are closely tied, since government regulations and attitudes have a major impact on profits. Here's why:

## *Would You Answer This Ad?*

Imagine, for a moment, that you are job hunting. Think about your skills ... and your salary requirements. Now imagine how you would react if you came across this ad in the classifieds:

> **WANTED:** Experienced Farm Owner. Self-starting, hard worker, willing to put in long hours. Physical outdoor labor required. Should have good grasp of business administration, labor relations, chemistry, biology, hydrology, animal science, welding and mechanics. Ability to understand wide variety of government regulations and deal with governmental agents a must. Law degree and sense of humor a plus. Annual income up to $18,000, payable in years when company makes sufficient profit. Must be willing to donate salary to cover costs of additional employees that must be hired while you attend mandatory meetings. Must also meet all applicable government regulations and have all paperwork in order to start. (Note: advance preparation is useful. Paperwork to comply with applicable regulations may require 1-2 years to process, and can cost up to $95,000[135]). Serious applicants only.

Far fetched? Hardly. Consider the following statistics from a study conducted by Farming for the Future, Inc. in Hillsborough County, Florida:

## *Farm Averages*

The following information was drawn from the most recent *Census of Agriculture* report for Florida, compiled by the U.S. Department of Commerce, Bureau of Census:

- Hillsborough County has 2,760 farms
- The average farm size is 96 acres
- 67% of Hillsborough County's farmers live on their farms
- However, ***54% must take jobs off the farm at least part time to support themselves***

***and their families***

- The market value of agricultural products sold each year averages $93,921 per farm
- The expenses for farm production average $75,290 per farm per year
- That means the ***average net cash return*** from agricultural sales on a per farm basis in Hillsborough County ***is only $17,983 per year***.

For full time farmers, the net return is higher. As Tim W. Williams notes: “I unwittingly took the predecessor to this position about 14 years ago; the job has evolved, however, into your job description.” Williams suggested adding the law degree and the necessity to donate one’s salary to employees that must be hired so it is possible to attend mandatory meetings. “But, seriously,” he noted, “most farmers around here do pay themselves more than $18,000 per year, and are ‘full time’ farmers.”

## *Number of Rules and Regulations*

Hillsborough County farmers must deal at one time or another with 46 different governmental agencies and departments ...

- 13 on the local level;
- 1 on the regional level;
- 20 on the state level; and
- 12 on the federal level.

**That works out to one per week ... with just six weeks left over to farm in a year.**

Roger Newton, Environmental Horticulture Extension Agent for the Hillsborough County Extension Service, undertook a project in 1993 to compile a "Regulatory Agency Guide."

Newton began the project because he realized virtually every nursery grower he worked with was running afoul of one or more rules or regulations; not on purpose, but because the growers were unaware of many recent laws and regulatory changes and how these laws and changes applied to their operations.

Newton decided he would compile a **pamphlet** briefly describing each of the laws, regulations, ordinances and requirements that affect the ornamental plant production industry. He located 117 known county, state and federal laws, regulations, ordinances and requirements and began writing brief descriptions of each.

When completed in 1994, the pamphlet had grown into a thick loose-leaf binder more than 4 inches thick, weighing over 10 pounds, and requiring four high-density 1.44 MB computer diskettes to store the data. The loose-leaf binder contains *1,080 pages of small, 10 point type.* **Even so, the guide is only a *summary*.**

## *Responses to Requests for Information*

Of the 46 agencies and departments contacted for the Hillsborough County study, only two cooperated fully. The regulatory costs for these two agencies ranged from a low of $4,843 to

establish a tropical fish operation on a 15-acre parcel up to $95,324 to establish a vegetable operation with a packing house on a 955-acre parcel.

One third of the agencies contacted — 15 — did not respond to repeated requests for information. Of the 31 agencies responding:

- 11 sent copies of their regulations without any explanations or references to assist in locating the regulations that applied to the properties — or the proposed uses — in the study's request;
- 10 replied saying they do not regulate agriculture — even though some, like the Environmental Protection Commission (EPC), have rules and regulations governing impacts on wetlands, water quality, air quality and waste disposal, all of which greatly effect *every* agricultural operation in the county (It should be noted that, after some initial reluctance, EPC did provide a detailed response);
- 2 agencies required the purchase of their regulations
- 1 said "the information you requested is beyond the scope of services normally provided by [our agency] ... you may, instead, wish to consult the law library ...";
- 5 agencies provided a partial response to the researchers' questions; but
- ***Only 2 agencies*** provided the information requested and addressed the conditions that related to the specific parcels of property on which the request was based.

From these responses, the researchers received:

- 5,082 pages of data, including cover letters and copies of regulations
- This accounted for 27 pounds of paper
- And included *90 multi-page forms that had to be completed by an agricultural operator*.

That's with one-third of the agencies and departments not responding!

As Philip K. Howard says in his best-selling book, *The Death of Common Sense: How Law is Suffocating America* (New York: Random House, 1994):

> *How can law function as a guide to action if almost no one knows it? Bob Hrasok believes that nobody, including the OSHA inspectors, knows all the OSHA regulations: "How can anybody know the fine print in four thousand rules?"* (p. 30)

As a result, Howard says:

> *Several million small employers operate pursuant to their own moral code, comfortable only in the assurance that they could never figure out the letter of the law if they tried. This is a predicament one witness before Congress termed the syndrome of "involuntary noncompliance."* (p. 31)

## *Possible Solutions*

Gene Boules, Director, Hillsborough County Planning and Development Management Department does a lot of thinking about regulatory streamlining. "To streamline regulations," he says, "will require a fundamental shift in how we view permitting. We need to rethink what our purpose is, what we are trying to accomplish." Several promising developments are on the horizon, "where the emphasis is on results, instead of pieces," Boules said.

> *In my experience, the major problem is that the bulk of rules are not understandable. Ninety-five percent of people will comply with rules if they understand them. Unfortunately, most regulatory agencies start off by telling people what they can't do, instead of what they can do. We also tend to get locked up in process. That creates a negative mindset and makes unnecessary adversaries of folks.*

There are other problems as well:

> *Most development agencies never looked at rural areas as rural. We figure that, someday, they'll develop. And we plan accordingly.* [For example, see comment from Gail C. Stern under Endnote [82]].

> *Zoning was not meant for agriculture. We need a better clarity in our plans, a way to recognize the unique features of rural areas and farming as permanent parts of the plan.*

Performance standards create another set of problems. "They operate strictly on a permit process that's very specific and highly technical," Boules said. Problem is, no matter how tightly environmental issues are defined, something is always left out or overlooked. Because of this, many agencies want to reserve judgments until all the data is in, and that can take forever. For this reason, Boules said:

> *I believe the answer for ag lies in BMPs [Best Management Practices] and incentives to help farmers do a better job.*

Richard Neill, a Fort Pierce attorney and farmer with his brother, David, agrees. "Gene Boules ... puts his finger on one major problem when he says, 'Zoning was not meant for agriculture.' His idea of BMPs makes a lot of sense to us."

**In the meantime, agriculture is paying for other people's ignorance of its industry.**

TONY LE YUNG CULTIVATES 30 DIFFERENT VARIETIES OF ORIENTAL VEGETABLES ON 1,000 ACRES. He says he has "no problems" with regulations "just a lot of extra work."

> He has "extra personnel to deal with extra paperwork on labor, water and chemical issues."
>
> > He conducts "extra training to comply with new chemical labeling and worker safety rules."
> >
> > He owns and maintains "extra equipment to take water samples — not once or twice a year, but every month."

TONY LE YUNG used to cultivate 2,500 acres of Oriental vegetables.

> In 1994, he reduced the acreage to 1,500 acres.
> In 1996, his production acreage dropped to 1,000 acres.
> Now he's cutting back to 400 acres.

"We're making money," Le Yung says. "Usually when you do well, you expand. But we're going in the opposite direction. We're downsizing the farm so we can manage its business side.

"A grower prefers to stick to marketing and producing. Rules and regulations are not our priority. They take up too much time. But we don't have a choice. We're made to feel like the bad guy. It's impossible to comply with the book on some regulatory issues. Whoever wrote the rules did not understand farmers. In a factory, you can define things much better than you can in a farm. But most inspectors we see don't understand that.

"Having to comply to code is not cost-effective. Many times it's impractical to comply to code.

"Environment is a major issue for us. So is workman's comp. We see that there's a lot of liability for a business. But the definitions are not very clear. The law is not well defined. And there is no information to guide us on what to do.

"The best way to deal with uncertain laws is to avoid them. We are spending too many resources that are going into nonproductive activities. And we have far too many liabilities. The only way we can protect ourselves is to become smaller."

**Hence, a profitable, 2,500 farm was turned into a 400 acre farm *as a direct result* of regulations written by people who do not understand farming or the impact of their regulations on farming.**

CARL GROOMES OF FANCEE FARMS, A PLANT CITY STRAWBERRY GROWER, says:

***A rule is written and the interpretation is in the eye of the beholder ... and every beholders' eye is different.***

*I'm out here trying to abide by the law and I don't know who to believe. Federal and state are not on the same playing field. When they disagree, it always takes up time, and I must take the harshest of their two rules.*

*Migrant housing laws have been changed every year for the past 15 to 16 years. You have to meet the criteria of first the county, then the state. Then OSHA comes in with a different set of criteria. Of course, you don't know a little new law that's key.*

*We cannot abide by all the rules all the time, so we do the best we can. We overlook some small detail, like a toilet pipe that is not the right height, and they come cruising in and give us a $500 or $600 fine.*

> ***Most people in ag were raised to be honest. It's a shame to know we're breaking laws everyday because we have no idea what they are. It's a modern-day pit and pendulum. You know the knives are up there whizzing above your head. You just don't know when one of them is going to slide down and slice you. It doesn't give you a good feeling. Yet I do the best I can.***
>
> *The paperwork is just overwhelming. Right now, I'm upgrading my water system. I'm supposed to have meters attached to four wells. They're 20 years old. None met current thresholds for the meters, so I had to spend $50,000 adapting the piping. I also had to change the nozzle sizes. Now I can run water only during certain times of day and have to send in a report on what I use every month.*

***The person who knows the water system best is me. I live here. Yet someone comes here, reads something out of a book and tells me what to do. And he treats me just like a filling station jockey.***

*Now my banker has an excuse to treat me the same way. If regulators come out and find problems, my banker can use that as an excuse to rate me as "substandard." Normally, you'd get a substandard loan classification only if you had two or three bad crop years. Now a couple of fines or letters is all that's needed to give a banker an opportunity to renege. And you ask him, and he says "the regulator won't let me do it."*

***The thing is, every regulation costs money. There's no means in agriculture to pass on any cost in the product. That's what kills us.***

*We're not making the kind of money society thinks we are to be able to abide by all the regulations that have piled up over the past 20 years.*

*Why have we been singled out? After 20 years of checking and not finding anything wrong, you'd think they'd leave me alone. But no, I'm scrutinized every which way. Document this. Document that. Put this pipe in over here. Put that one over there. And, oh yes, don't make it too short, because it will cost you extra.*

***American farm families built the U.S. But most people have forgotten that. We've given people the cheapest, most abundant food supply in the world. And the safest. Cheap food has given everybody more money to spend, so they can go buy $100,000 homes, two cars and put their kids in college.***

*Society always thinks food is on the supermarket shelf. If not fresh, then it's either canned or frozen. Every bit of it comes from a seed that was poked in the ground.*

*Environmentalists have made people think we poison the land and all kinds of other critters.*

***All this kills the desire of my 15 year old son to want to be a fourth generation farmer. He hears about all these problems, and he thinks, as much as he likes the farm, he'd better do something else when he grows up.***

*Society in general does not give ag the respect its should. Lawyers, doctors and sports figures all are respected. But without us, a lot of people would be living their lives a lot different ... and you sure wouldn't need as many lawyers.*

*People think we get subsidies. Those programs don't apply to a lot of crops, especially not fruit and vegetables. I've never gotten a subsidy. Zero.*

***It used to be a real pleasure to get up on a tractor all day. Smell the soil. Wind in your hair. Work your parcel. But I can't do that anymore. There's too much business to take care of. Regulations are two-thirds of it. I have a secretary who does nothing but fill out forms and reports. It's just amazing what she has to do. Quarterly reports. Forms. Stamps. Three copies of this. It's no wonder government is the biggest employer there is.***

These examples could go on and on. As one talks to farmers, one hears the same points, time and time again. All 15 growers, ranchers and producers interviewed for this paper relayed similar experiences ... and exhibited similar attitudes. This is much more than simple grousing. The problems described are universal among ag producers.

## FARMERS' COMMENTS ABOUT REGULATIONS

Based on discussions conducted by
Dr. Roy R. Carriker
Food & Resource Economic Department
Institute of Food and Agricultural Sciences
University of Florida
with five panels of growers in five counties

**Major Problems:**

1. Regulatory compliance = paperwork (time and money)
2. Conflicting interpretation of rules (agency staff sometimes make their own rule interpretation and application)
3. Agencies exceed authority
4. Agency staff sometimes shows a bad attitude toward farmers
5. There seems to be duplication between agencies
6. Farmers have no reliable source of information on what rules they must comply with
7. Farmers often do not know who to contact (within an agency)
8. Costs of compliance cannot be passed on to buyers of farm commodities
9. Agency staff often know little about agriculture
10. Rules often lack common sense.

# Appendix D:
## *Common Perceptions About Agriculture*

Here are some common perceptions about agriculture that are prevalent among many policy makers and members of the public. These perceptions drive many public policies that impact agriculture.

Many ag owners and operators, however, question these perceptions. Are the perceptions accurate? Could they benefit from closer scrutiny? Should the following points be taken into consideration in rethinking these perceptions? You be the judge.[136]

### **PERCEPTION:** *Agriculture is a only a temporary land use awaiting conversion to a higher and better use.*

Many people assume that subdivisions and shopping centers are the best economic uses of land. While it is true that some people may purchase farmlands in the hopes that the lands may eventually be developed, it does not have to be that way:

IN FACT: Economic studies conducted in several Florida counties by Stewardship America, Inc. indicate that some forms of agriculture -- such as production of tropical fruits and vegetables, some winter vegetables, strawberries, nursery products and aquaculture -- represent some of the highest economic uses that can be made of land on a per acre basis, particularly since these activities can generate revenues year after year, and decade after decade. Strawberries, for example, can generate up to FIVE TIMES as much revenue for the local economy on a per acre basis over a 50-year period than the construction and resale of an acre of median priced homes. (See Endnotes[137] & [138] and Appendix E - "The Economics of Land Use" for more information about these studies.)

**PERCEPTION:** *Agriculture does not pay its own way as a land use. Because of the "Greenbelt" tax rate, agriculture receives a much lower, preferential tax treatment, at the expense of urban residents.*

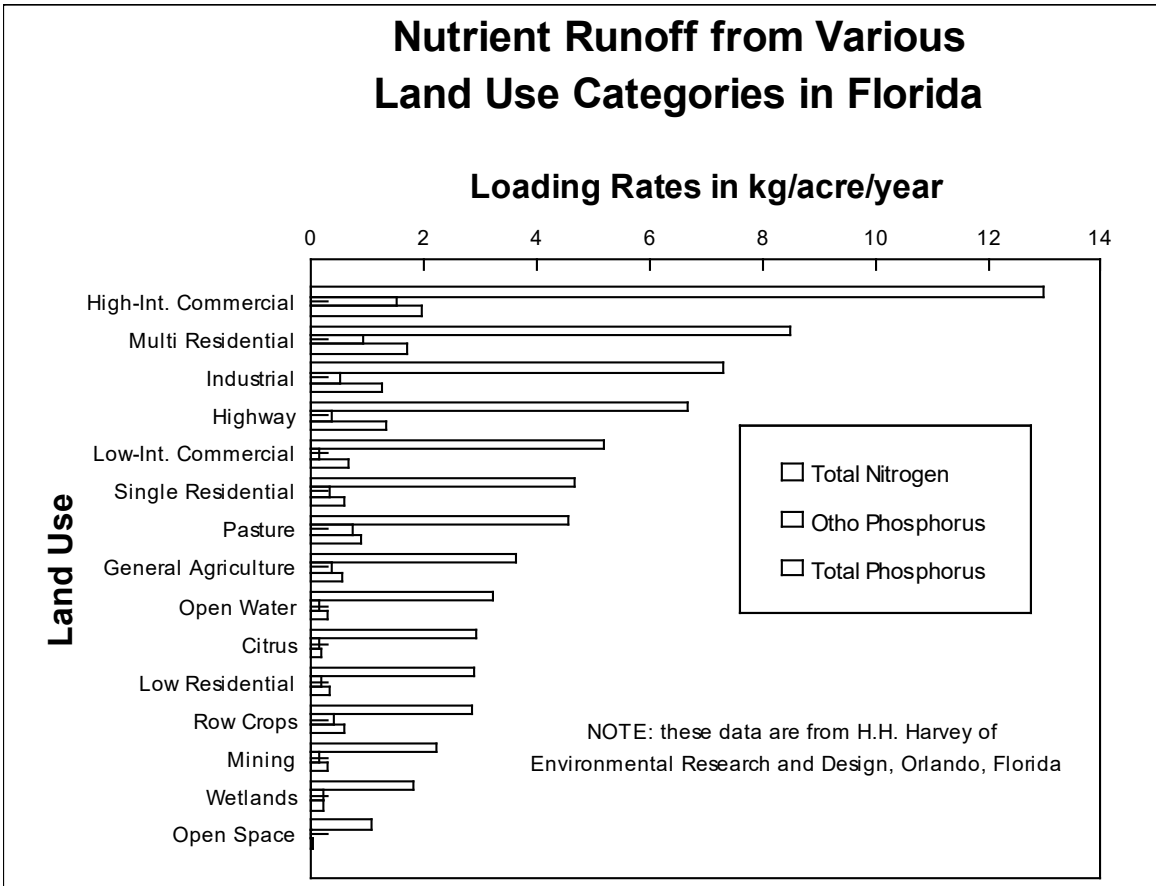
FACT: Economic studies conducted in several Florida counties indicate that agriculture more than pays its own way as a land use. For every $1.00 generated in revenues by agriculture, county governments and schools spend an average of only $0.17 in services. In contrast, residential dwellings cost counties and schools an average of $1.55 for every $1.00 generated in taxes and other fees. Stated another way, the farmer has to pay almost $6 to get $1 in services, while the urban resident receives over $9 in services when $6 is paid in taxes. (See Endnotes [139] & [140] and Appendix E - "The Economics of Land Use" for more information about these studies.)

**PERCEPTION:** *Agriculture is the major polluter of the state's waterways and environment. Strict controls are needed to make agriculture clean up and pay for the environmental damaged caused by its pollution.*

FACT: More can be done to reduce agriculture's impact on the environment. The same, however, can be said for every other type of land use as well.[141] An extensive review of more than 200 water quality tests throughout the state of Florida indicates that, on a per acre basis, urban land uses contribute more pollution to the environment than most agricultural uses.[142] Careless disposal of household chemicals, overzealous fertilizing of home lawns and gardens, gas and oil spills from cars and trucks, and heavy metal deposits from the wear on engines and brakes all take their toll.[143] The chart on the next page shows the cumulative results of these water quality tests.

Much of agriculture's current impact on the environment results from farming techniques that have been adopted to boost food production and bring marginal lands into production as more productive farmlands have been displaced and paved over due to the outward expansion of cities and towns.[144]

While this has caused some environmental impacts, it also has resulted in two major benefits to society: First, a few farmers can now feed hundreds of people who, in turn, can pursue other careers and interests to contribute to our society's diversity and advancement. Second, had U.S. farm productivity been frozen at, say, the 1910 level, it is estimated that U.S. farmers would have to cultivate 1.222 billion acres to equal what they now produce on 382 million acres. *This means that 840 million acres that are now NOT in cultivation would have to be put under the plow.* This last point is critically important in understanding how much progress modern agriculture has made in REDUCING its impacts on the environment for each pound of food that is produced. See Endnotes [145], [146] & [147].




Source: *Stormwater Loading Rate Parameters for Central & South Florida*,
Environmental Research & Design, Orlando, Florida, October 1994

## **PERCEPTION:** *Agriculture uses far too much water.*

FACT: Agricultural operations consume large amounts of water, but large amounts of that water are returned to the environment. Also, much of the water used by agriculture provides each of us with a benefit.

Agriculture is a *direct* user of water. But each one of us are *indirect* users. With every bowl of cereal we eat, every glass of orange juice and milk we drink, every morsel of food we consume, every piece of cotton or wool fabric we wear, we use the water that nourishes agriculture.

Agriculture operations currently use more water than developed areas. But agriculture covers much more of South Florida's land area. Also, unlike other sectors of society, the agricultural industry's annual demand for water has been increasing only minimally because of widespread use of water conservation measures. In fact, as the Collier County Extension Service points out:

> *"Assuming current average water consumption and county dwelling unit densities, an acre of new citrus trees uses roughly half as much water as an acre of new houses."*[148]

Of the water used by agriculture, some is lost to evapo-transpiration (which eventually returns to earth as rain), some is taken up by the plants and animals being raised, some flows away in runoff, but a large amount also seeps into the soil to replenish ground water supplies. When it rains, croplands and pastures capture vast amounts of water, much of which percolates into the ground. In large storm events, water is pumped into canals and ditches to prevent crops from being drowned out, but large amounts of water also are held in detention ponds, where it will percolate into the ground. Recharge in developed areas is much more difficult because paved areas prevent rainwater from percolating into the ground.

Water needs — and water problems — are different in every county, and every state. (See Endnotes[149], **[150]** & [151])

*More can be done to conserve water, and provide water to natural systems*. However, in the end, water consumption comes back to an inescapable fact: whether growing food, raising animals, watering lawns, cooking dinner, washing cars or bathing, ***it is people who use water.*** And that is the central factor we must keep in mind in deciding how precious water resources should be distributed.

# Appendix E:
# *The Economics of Land Use*

*The decisions made today will shape the appearance, environmental quality and economy of our communities tomorrow. Once these decisions are made, their consequences cannot be undone.*

That is one of the conclusions drawn by Stewardship America, Inc. from the economic impact studies it conducted in five Florida counties – Collier, Hillsborough, Lake, Palm Beach and Polk. Another conclusion is that we, as a society, currently hold many common assumptions about land use. These assumptions often guide our decisions. For example …

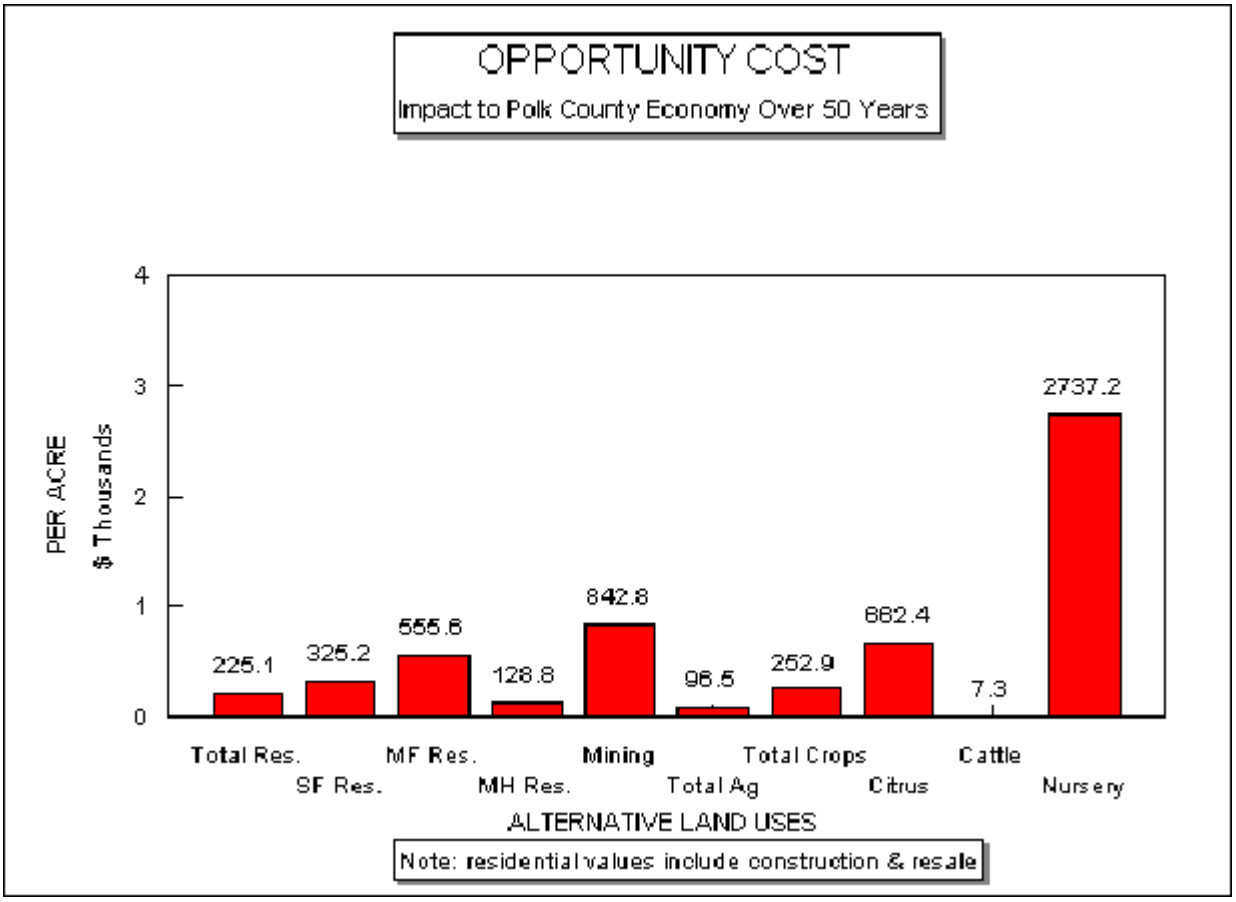
**ASSUMPTION #1:**

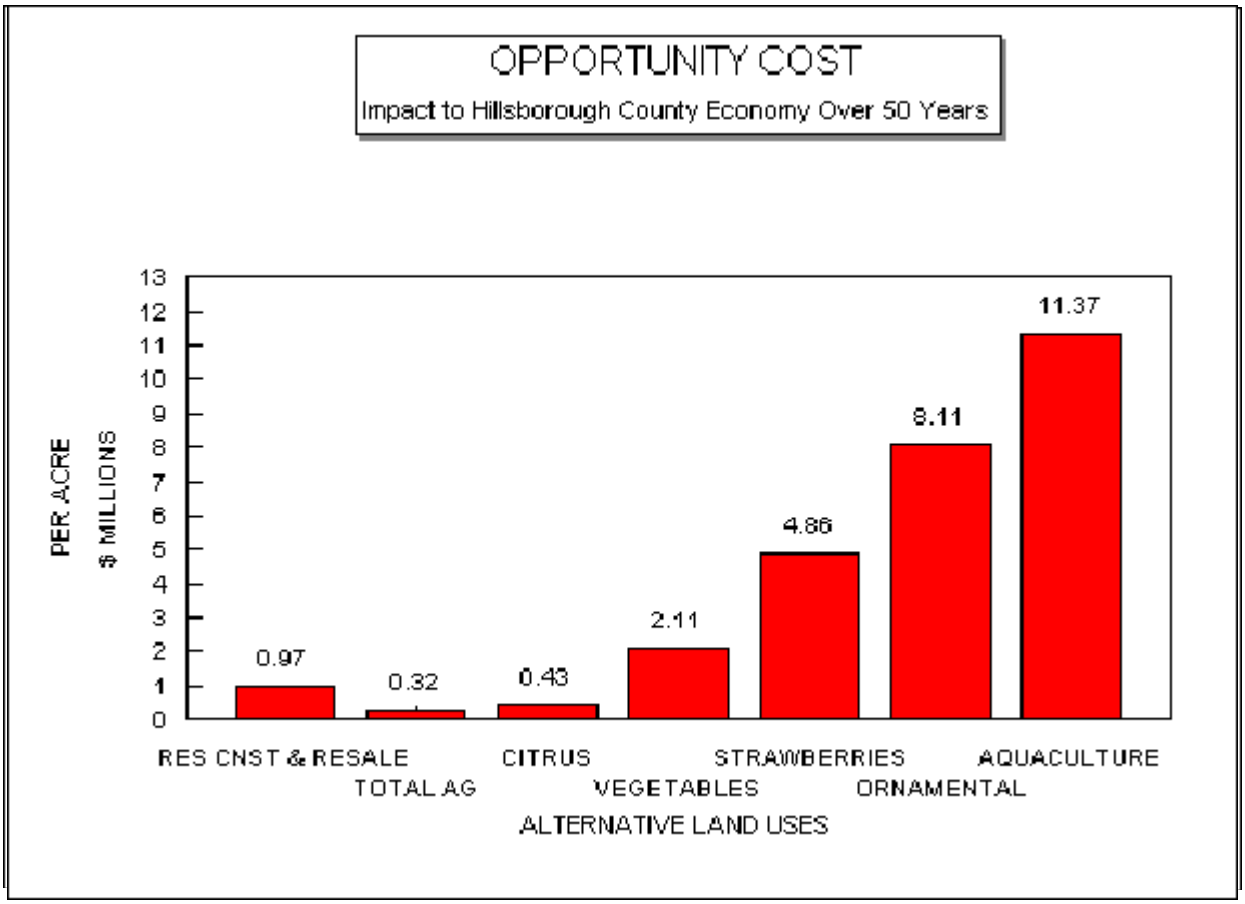
*Agriculture is only a temporary land use awaiting conversion to a higher and better use*

**ASSUMPTION #2:**

*Residential development = economic development*

Many people assume that subdivisions and shopping centers are the best economic uses of land. **IN FACT:** The economic studies conducted by Stewardship America, Inc. indicate that some forms of agriculture -- such as production of tropical fruits and vegetables, some winter vegetables, strawberries, nursery products and aquaculture -- represent some of the highest economic uses that can be made of land on a per acre basis, particularly since these activities can generate revenues year after year, and decade after decade.
Strawberries, for example, can generate FIVE TIMES as much revenue for the local economy on a per acre basis over a 50-year period than the construction and resale of an acre of median priced homes. The charts on the next three pages provide a comparison, over time, of the contributions made to county economies by different land uses on a per acre basis.
These charts show the results of an *Opportunity Cost Analysis*, that calculates the value gained or foregone when an acre of land is converted to another use.


OPPORTUNITY COST
Impact to Polk County Economy Over 50 Years
PER ACRE
$ Thousands
4
3
2
1
0
225.1
325.2
555.6
128.8
842.8
96.5
252.9
662.4
7.3
2737.2
Total Res.
SF Res.
MF Res.
MH Res.
Mining
Total Ag
Total Crops
Citrus
Cattle
Nursery
ALTERNATIVE LAND USES
Note: residential values include construction & resale


OPPORTUNITY COST
Impact to Hillsborough County Economy Over 50 Years
$ MILLIONS PER ACRE
13
12
11
10
9
8
7
6
5
4
3
2
1
0
0.97
0.32
0.43
2.11
4.86
8.11
11.37
RES CNST & RESALE
TOTAL AG
CITRUS
VEGETABLES
STRAWBERRIES
ORNAMENTAL
AQUACULTURE
ALTERNATIVE LAND USES

**ASSUMPTION #3:**

*Residential development expands the tax base.*

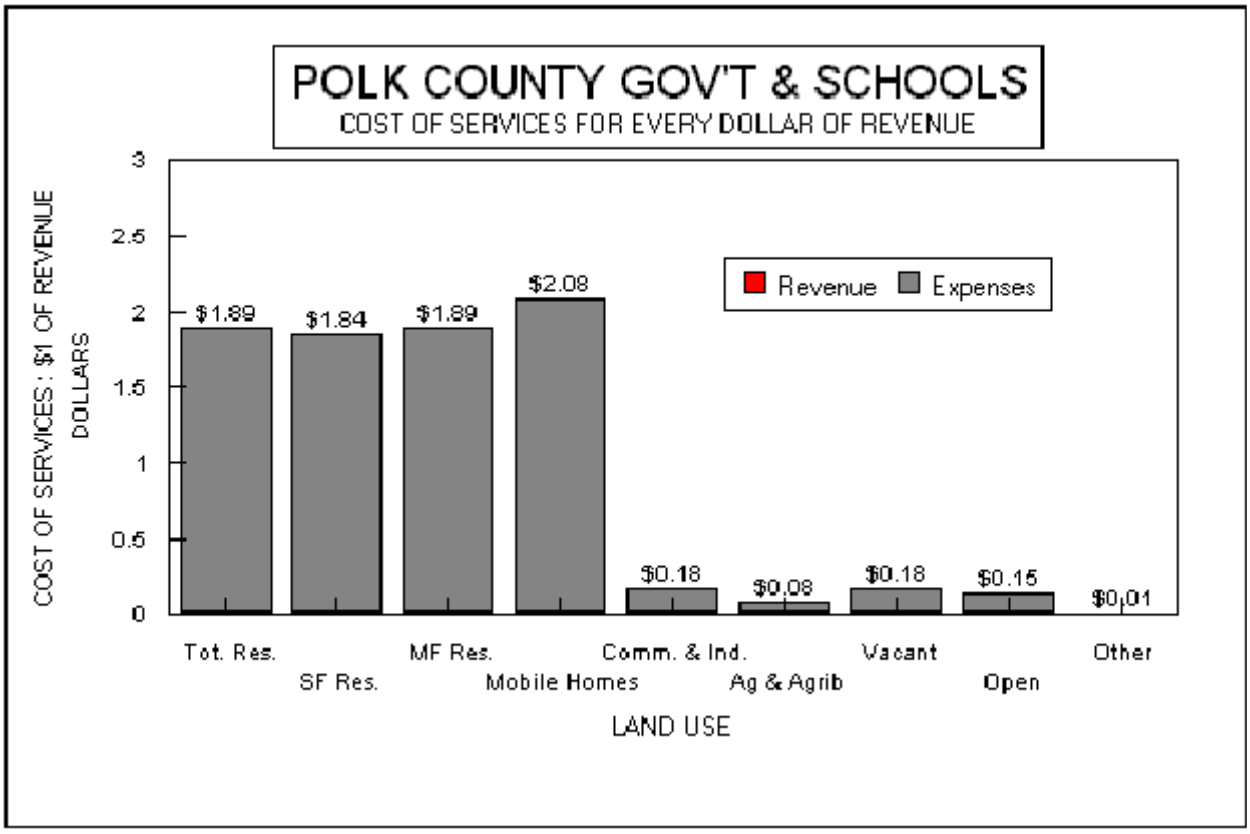
**ASSUMPTION #4:**

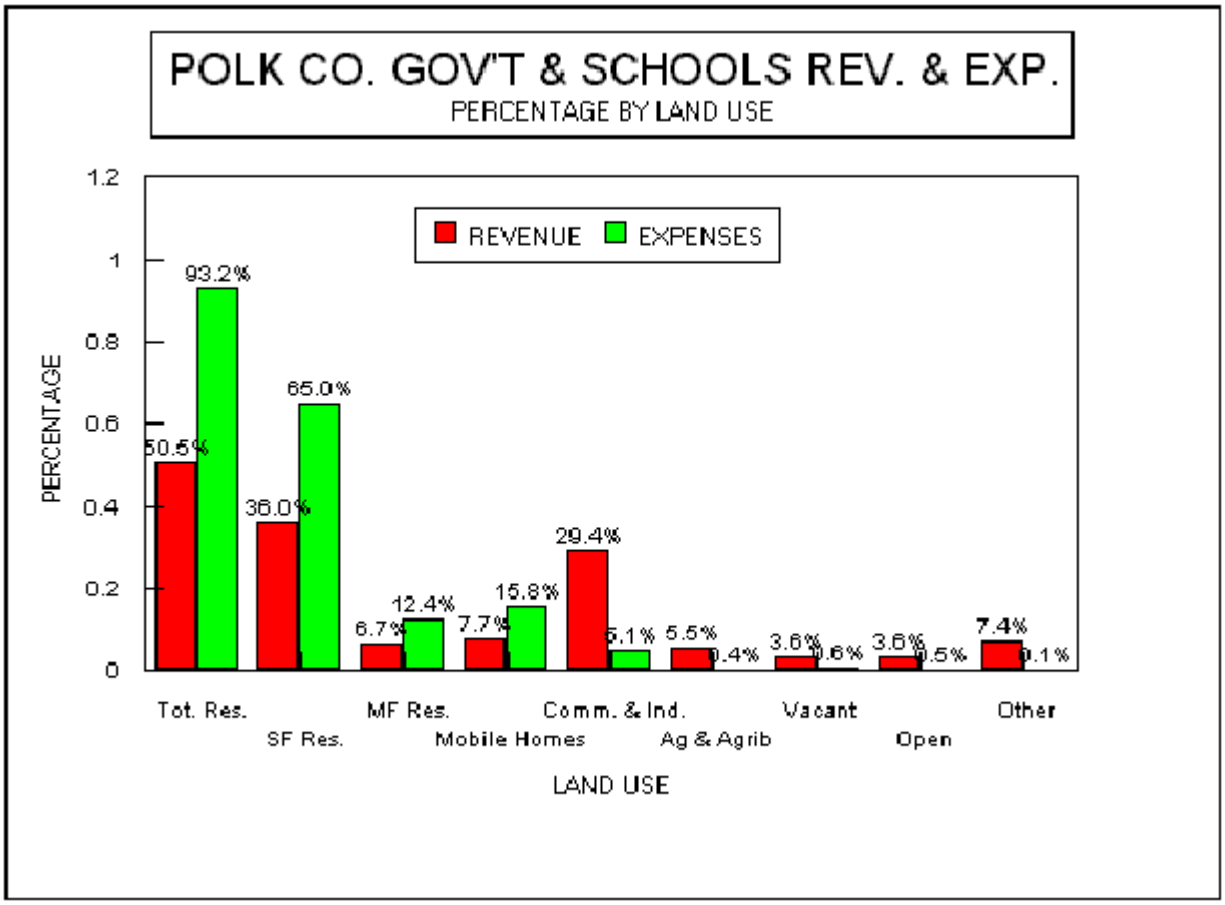
*Agriculture does not pay its way as a land use. Because of the "Greenbelt" tax rate, agriculture receives a lower, preferential tax treatment at the expense of urban residents.*

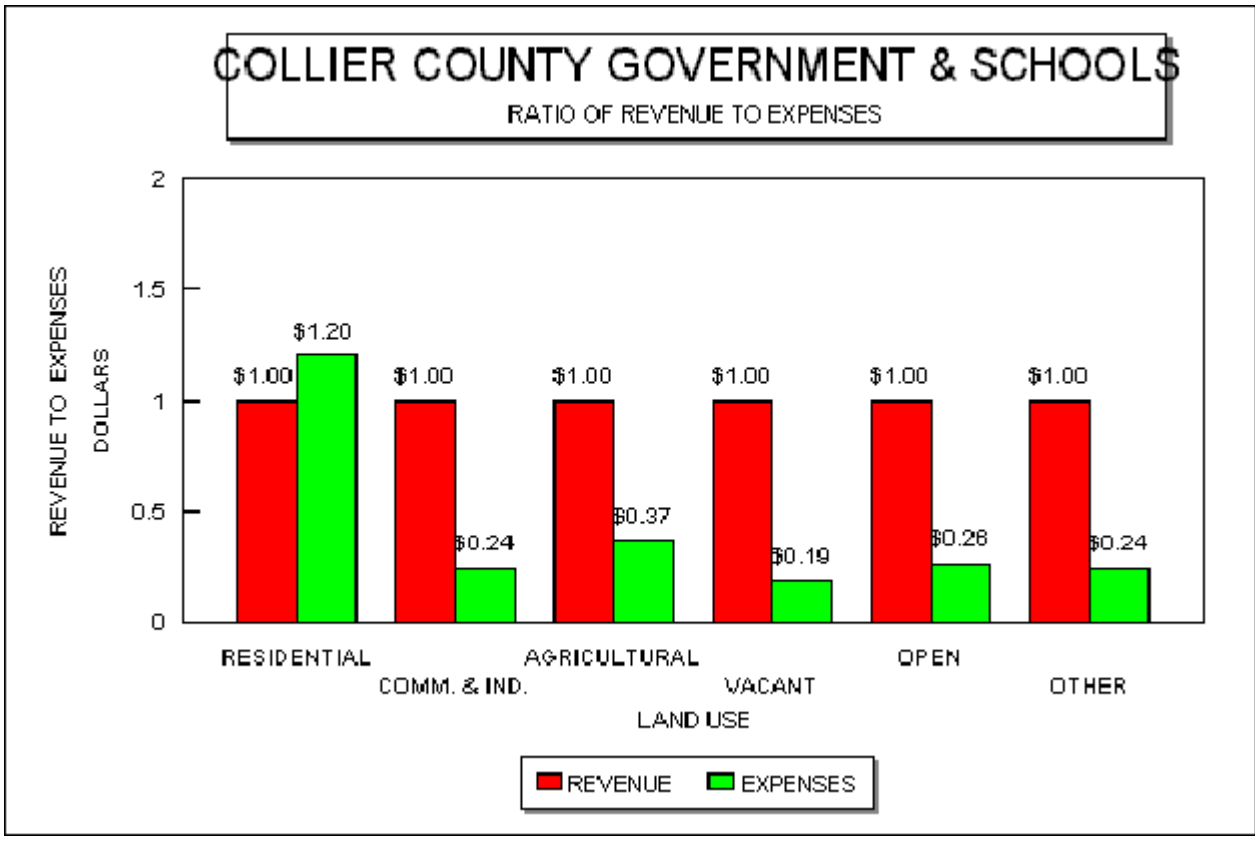
**FACT:** Again, the economic studies conducted by Stewardship America, Inc. indicate that residential developments create an ongoing deficit while agriculture more than pays its own way as a land use.

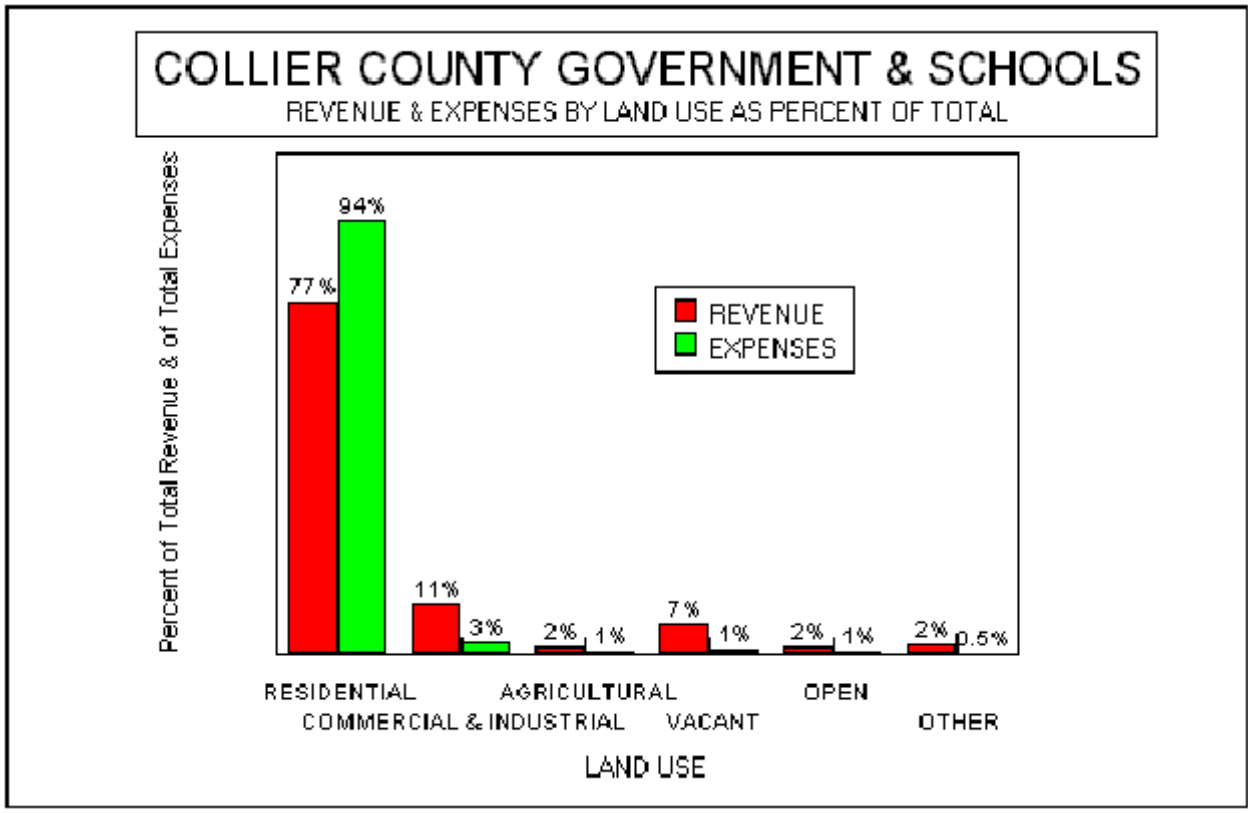
For every $1.00 generated in revenues by agriculture, county governments and schools spend an average of only $0.17 in services. In contrast, residential dwellings cost counties and schools an average of $1.55 for every $1.00 generated in taxes and other fees. Stated another way, the farmer has to pay almost $6 to get $1 in services, while the urban resident receives over $9 in services when $6 is paid in taxes.

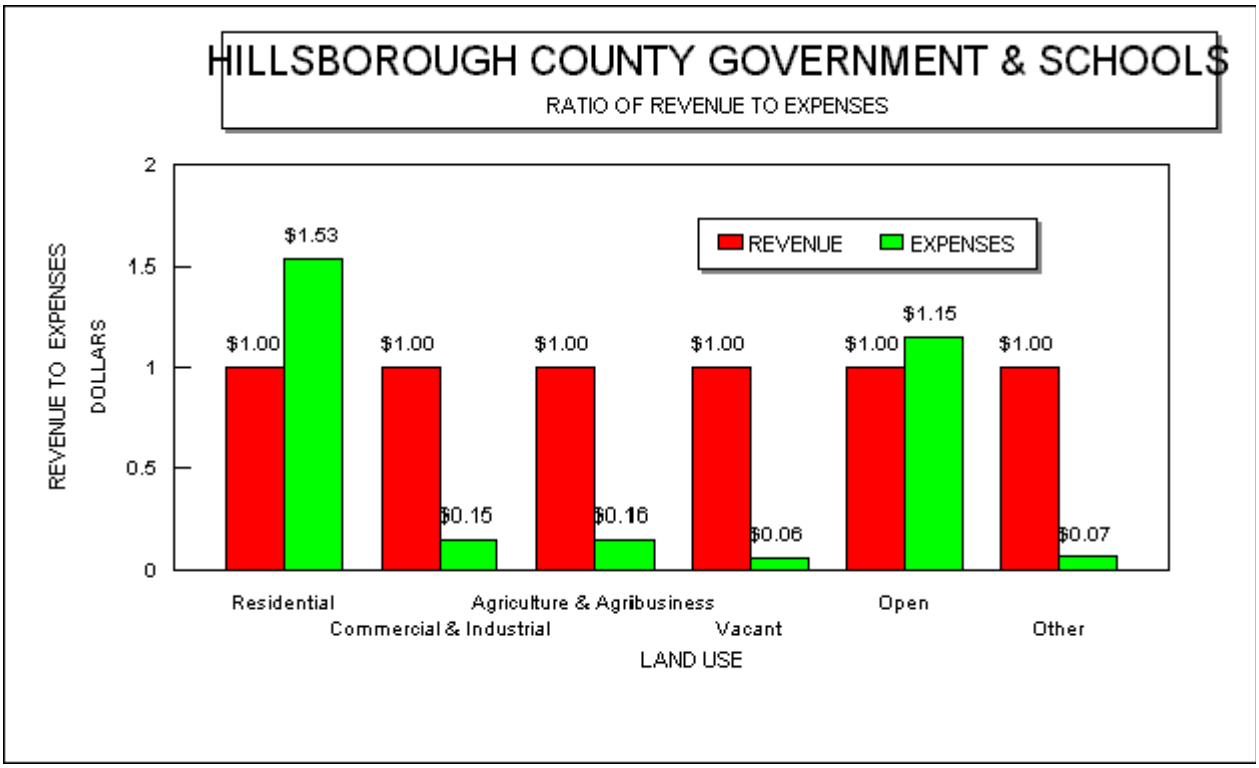
The charts on the pages that follow show the relationships between revenues and expenses for different land uses in Polk, Collier and Hillsborough counties. These numbers are based on county financial reports. They account for all revenues and expenses by land use.

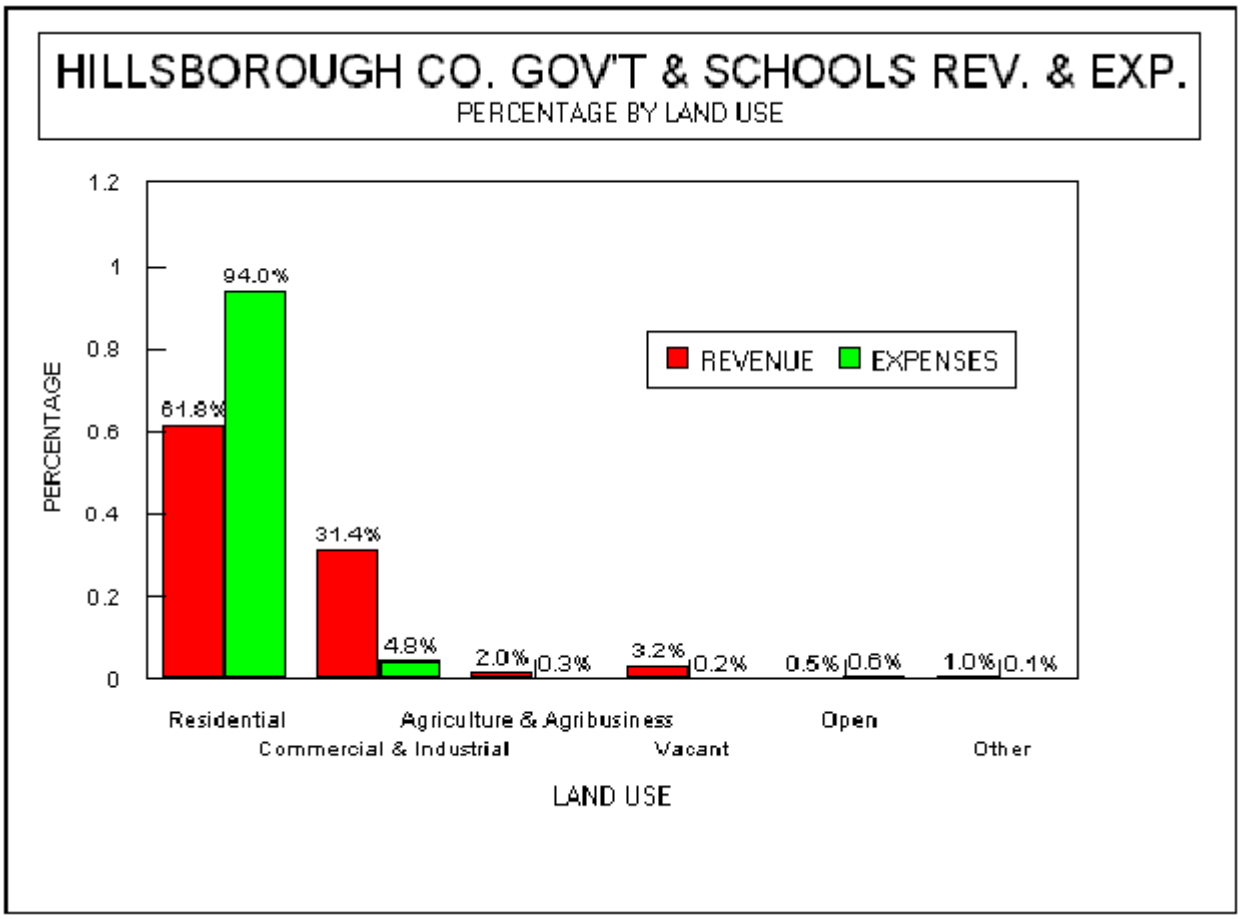

POLK COUNTY GOV'T & SCHOOLS
COST OF SERVICES FOR EVERY DOLLAR OF REVENUE
COST OF SERVICES : $1 OF REVENUE
DOLLARS
3
2.5
2
1.5
1
0.5
0
Revenue
Expenses
$1.89
$1.84
$1.89
$2.08
$0.18
$0.08
$0.18
$0.15
$0.01
Tot. Res.
SF Res.
MF Res.
Mobile Homes
Comm. & Ind.
Ag & Agrib
Vacant
Open
Other
LAND USE


POLK CO. GOV'T & SCHOOLS REV. & EXP.
PERCENTAGE BY LAND USE
REVENUE
EXPENSES
PERCENTAGE
1.2
1
0.8
0.6
0.4
0.2
0
50.5%
93.2%
36.0%
65.0%
6.7%
12.4%
7.7%
15.8%
29.4%
5.1%
5.5%
0.4%
3.6%
0.6%
3.6%
0.5%
7.4%
0.1%
Tot. Res.
SF Res.
MF Res.
Mobile Homes
Comm. & Ind.
Ag & Agrib
Vacant
Open
Other
LAND USE


COLLIER COUNTY GOVERNMENT & SCHOOL$
RATIO OF REVENUE TO EXPENSES
REVENUE TO EXPENSES
DOLLARS
2
1.5
1
0.5
0
$1.00
$1.20
$1.00
$0.24
$1.00
$0.37
$1.00
$0.19
$1.00
$0.26
$1.00
$0.24
RESIDENTIAL
COMM. & IND.
AGRICULTURAL
VACANT
OPEN
OTHER
LAND USE
REVENUE
EXPENSES


COLLIER COUNTY GOVERNMENT & SCHOOLS
REVENUE & EXPENSES BY LAND USE AS PERCENT OF TOTAL
Percent of Total Revenue & of Total Expenses
94%
77%
11%
3%
2%
1%
7%
1%
2%
1%
2%
0.5%
REVENUE
EXPENSES
RESIDENTIAL
COMMERCIAL & INDUSTRIAL
AGRICULTURAL
VACANT
OPEN
OTHER
LAND USE


HILLSBOROUGH COUNTY GOVERNMENT & SCHOOLS
RATIO OF REVENUE TO EXPENSES
REVENUE TO EXPENSES
DOLLARS
2
1.5
1
0.5
0
REVENUE
EXPENSES
$1.00
$1.53
$1.00
$0.15
$1.00
$0.16
$1.00
$0.06
$1.00
$1.15
$1.00
$0.07
Residential
Commercial & Industrial
Agriculture & Agribusiness
Vacant
Open
Other
LAND USE


HILLSBOROUGH CO. GOV'T & SCHOOLS REV. & EXP.
PERCENTAGE BY LAND USE
PERCENTAGE
1.2
1
0.8
0.6
0.4
0.2
0
REVENUE
EXPENSES
61.8%
94.0%
31.4%
4.8%
2.0%
0.3%
3.2%
0.2%
0.5%
0.6%
1.0%
0.1%
Residential
Commercial & Industrial
Agriculture & Agribusiness
Vacant
Open
Other
LAND USE

## *Conclusions*

Although residential land uses as a whole create a deficit for county government and schools, certain segments can potentially create a surplus. Demographics, for example, plays an important role in the economics of land use. Several studies (David Fishkind and others) suggest that senior residences, when analyzed separately, can create a surplus. This is because senior residences require different services than other types of residences, particularly those with school-aged children. Residences with school-aged children often create deficits because schools are expensive to build and operate.

Other studies (Madison, Wisconsin, for example) show that higher value homes and higher value multi-family residences, even those with school-aged children, can sometimes create a surplus. Defining what comprises a "higher value" home depends upon several variables: property valuation method and tax rate, percentage of the homes occupied by adults without school age children, impact fees and number of higher value homes.

High value residences and senior residential growth, however, increase the demand for service and retail workers, who generally receive low wages. This in turn increases the demand for affordable housing, which most studies of this type have found to create a deficit.

This underscores why it takes careful planning to account for all factors contributing to the economics of a specific land use and to offset the deficits caused by one or more aspects of one land use with surpluses generated by another use.

Although homes in higher price brackets, senior housing, and seasonal housing may create a surplus, *a variety of housing types*, *offered at a variety of prices*, are necessary to meet the needs of each county's residents.

**However, there currently is no mechanism in any Florida community for determining the fiscal impact of each housing type, nor for adjusting the mix as developments are approved so there is a better fiscal balance between all housing types and all types of land use in each community.**

Many county records are not kept in a manner that delineate revenues and expenses by land use.

For this reason, it is not readily apparent that residential uses (or which type of residential units) create a deficit; or that agricultural, commercial/industrial, and open land uses create a

surplus. Consequently, county decision makers only see one side of the coin: the extra revenue brought in -- in the short term -- by residential development. The other side of the coin, the costs of services required by residential development -- and its ongoing deficits -- are not easily visible.

- There are several reasons for this: Residential land uses appear to be fiscally attractive because they provide short term stimulus to the economy during construction and contribute a significant amount of revenue to the tax base.

- The full impact of costs associated with the services needed by a residential development, such as fire and police protection, schools and roads, may not become apparent for several years ... after the impact fees paid for specific housing units have been exhausted ... and after all the housing units are occupied and their residents begin using their full share of public services and infrastructure.

- Because of the continuing nature of growth, the addition of new taxables, the expansion of the tax base and collection of impact fees help obscure the deficits that are incurred as yesterday's developments begin demanding their full share of public services.

- Finally, infrastructure improvements are made in stages: a sewage treatment plant or incinerator, for example, is built with excess capacity to allow for future growth. Shortfalls in capacity or miscalculations in the actual costs of providing service to a resident do not become apparent until the excess capacity is used up and a new plant or expansion becomes necessary ... at a cost of several hundred million dollars.

In addition, there are costs related to commercial and industrial development, mining and agriculture that go beyond initial community expenditures. These include water availability and environmental impacts.
These costs also need to be considered when planning decisions are made.

Much of the liability generated by our current mix of land uses is in the form of "unfunded mandates" since many costs – such as adequate classroom capacity in public schools – are being deferred.

These "unfunded mandates" were not captured in the numbers reported in Stewardship America, Inc.'s studies, since the studies used *actual* expense and revenue numbers from county and school budgets.
It is obvious, however, that some areas of the state -- and some service sectors, such as schools -- are receiving less than the optimal amount of funds needed to provide adequate levels of service for current residents. Hence, the state is already facing the need to "catch up," even before new residents are added.
When service levels are increased to meet public demand, and the bill comes due for increasing service levels up to the capacities required, many counties may face the uncomfortable necessity of raising taxes or compromising or cutting services -- or, worse, having to do all three (leaving residents with congested roads, crowded schools and poorly maintained public facilities ... and even higher taxes).

These choices -- and dilemmas -- already are becoming apparent in many fast-growth communities in the state.

However, these communities still have the opportunity to overcome these pitfalls.

## *Recommendations*

The data gathered from the studies conducted by Stewardship America, Inc. indicate that land use planning in Florida *lacks an effective cost-accounting component*. These studies also suggest that, with a few minor policy changes -- such as the way in which information is gathered and reported -- it may be possible to *better understand the impacts and consequences* of all future land use options: so deficits created by a change in one land use can be identified and balanced by surpluses generated through an accompanying adjustment in another land use.

For example, if a community decides to build 100 affordable housing units, it is possible to calculate fairly accurately how much of a deficit would be created by this land use for county and school budgets over time. It also would be possible to calculate which other land uses can be encouraged at the same time to completely offset this deficit. This would make it much easier to obtain a fiscally balanced mix of land uses -- a mix that would be economically sustainable for the long term.

As a result, decisions would be less likely to be driven primarily by revenue issues, such as increasing the tax base, without a corresponding look at the cost of services involved, or by market pressures to convert lands that presently create a surplus into developments that may appear attractive in the short term, but which can create large deficits over the long term.

The way in which this can be done is to develop and implement a *full cost-accounting* system to inform and guide decisions. This involves calculating the economic impacts of programs and facilities, not simply in terms of immediate outlays, but in terms of TOTAL costs and benefits. These calculations would show the costs and benefits that are generated over time as a result of each public action, including the additional costs of public obligations that are created by the initial expenditure. Rather, a continuing fiscal balance could be achieved through a sound understanding of the economic ramifications of different land use options.

A “full cost accounting” system would give planners and policy makers a means of taking all costs and benefits into consideration. Such a system also could be designed to account for costs and benefits of specific social and environmental issues.

Then we would be able to have holistic planning ... and a reliable guide for creating communities that are truly sustainable ... economically ... socially … and environmentally.

# Appendix F:
# *An American Tragedy*

From *The New York Times*, May 30, 1999, page A12:

*Mark Drabenstott, a vice president of the Federal Reserve Bank of Kansas City, said ... the American farm economy is now "clearly in the throes of a serious downturn."*

*The root of the suffering is a market that has sent the prices of crops ... to 12-year lows. Livestock, too, has been hit hard ... The United States Department of Agriculture reports that average farm income dropped 33 percent from 1996 to 1998 and that an additional dip of 10 percent is expected for this year.*

*[This] steep drop in income has ... meant disaster to farmers already working on slim margins.*

*[One example is] Larry Barber, a rawboned 57-year-old ... who recently lost a farm that had been in the family for more than a century ...*

*A week before Mr. Barber was forced to sell his cattle, he sat and cried, tears streaming down his face, making no sound, his body shuddering.*

*"I lost all desire to do anything," Mr. Barber said, tears now again in his eyes as he drew hard on a cigarette. "This is like a death, you know."*

*Riding the agricultural economy's roller coaster, farmers like Mr. Barber saw record prices for their crops just three years ago, before the Asian economic crisis stifled demand for American agricultural products.*

*"People tell me, 'It's not your fault'," Mr. Barber said, "but it is a little like driving a car, then skidding on a bad patch of ice and hitting a child. It wouldn't be your fault, but you'd live every day with the doubts and thoughts of how could I have avoided this terrible thing."*

From the front page of *The Baltimore Sun*, November 8, 1998:
Captions from an article entitled
"The Last Harvest: 'I'm done fighting'"

*Farming: Bad weather, crop disease, plunging prices. A North Dakota grain raiser surrenders to the pressures that are driving the U.S. family farm to extinction.*

*Last harvest, then auction.*

*"My boy is 20. I asked him if he wanted to farm. And he said, 'Dad, are you crazy?'"*

*"As things are right now, you could have a bumper crop and still go broke."*

*Calling it quits: Allen Kunze operates the combine harvesting his soybeans while brother Tom Kunze watches from the field. All the equipment was auctioned when the crop was in. The family has farmed this land for five generations.*

*Low-tech: Allen Kunze's son Kory, 20, pulls an old buggy across the road to be auctioned. It once belonged to his great-uncle. Pushing is farm hand Jerry Burns, 68, who lost his farm in Minnesota in 1983 after six years of ruinous rains.*

This is a tragedy for both these families and the nation. Texas cattle ranchers, Montana wheat farmers, Washington apple producers, Georgia peach growers, Florida tomato farmers, the story is the same everywhere you look.

In the two and a half year period from January 1998 to August 2000, *The New York Times* alone ran 80 articles on the loss of farms, farms going out of business, and farm debt. That's an average of almost one article every two weeks!

As the prices paid to producers plunge and more farmers and ranchers go out of business, do not expect to see any change in the price *you* pay for food. In fact, there is likely to be little change in prices in supermarkets or restaurants. Every one else in the food chain — processors, shippers, wholesalers and retail outlets still will be taking their profits. The farmer is generally the loser in this scenario.

# Appendix G:
## *The Case for Eliminating Estate Taxes*

> "*I worked with private forest landowners. We've put together just wonderful forest stewardship plans and they've done a wonderful job of implementing those plans and then because they did not do sufficient estate planing the whole thing went to pieces as soon as they died.*"
>
> **-- Al Sample, Pinchot Institute for Conservation, Ames, Iowa, December 7, 1999**

An executive summary of five Private Land Conservation Forums held around the country in 1999 by the U.S. Department of Agriculture, in which more than 1000 people participated and submitted written comments, observed:

> "There is consensus that estate taxes are a significant threat to the family farm and small private forests. Speakers state that estate taxes can force clear cutting, other costly means, or land sales that break larger parcels into smaller ones in order to pay the tax. These money raising methods often are done at the expense of good land management." ("Financial and Tax Relief," http://www.nhq.nrcs.usda.gov/CCS/Forum_al.htm)
>
> This last point is underscored by the latest Natural Resources Inventory (http://www.nhq.nrcs.usda.gov/NRI/1997/), which indicates that soil erosion is once again increasing in the U.S. The Inventory states that on-farm improvements in this area have continued, but the amount of land that is now being converted from agriculture to urban and other uses has dramatically increased (up from 1.4 million acres per year between 1982 and 1992 to 3.2 million acres per year during the 1992-1997 period) and the very act of this conversion has led to greater soil erosion.

Every session of Congress for the past decade has had scores of bills introduced to eliminate or reduce estate taxes. Some of these bills have been designed to provide relief solely to family farms and small businesses; others have proposed a wholesale elimination of estate taxes.

In the summer of 2000, a bill to completely phase out estate taxes over a 10-year period finally passed both houses of Congress by large majorities. President Clinton vetoed the bill, which was sustained after the U.S. House of Representatives failed to muster the two-thirds majority necessary to override the veto in September 2000.

But one thing is sure: other bills to eliminate estate taxes will follow and, eventually, one will prevail.

While public support for the elimination of estate taxes is strong and continues to grow in some segments of society, the concept still sparks controversy.

For example, Wayne Daltry, Executive Director of the Southwest Florida Regional Planning Council, and a member of the South Florida Ecosystem Restoration Working Group, is opposed to the wholesale elimination of estate taxes. He says:

> *"There are three issues:*
>
> *"1. The proposal will not protect farm land. Eliminating the inheritance tax for farmers/farmland only increases what the heirs will receive. From that point on, they determine the property disposition. In other words, if the kids don't want to stay on the farm, they won't. Eliminating the tax just gives them more inheritance.*
>
> *"2. The proposal will have unintended tax consequences. Many family farms are now 'corporate' farms, with the family being the Board of Directors and stockholders. Public tax responsibilities are met through corporate taxation. As in all corporations, a death of a stockholder will have tax responsibilities* [that affect the stockholder's heirs within the immediate family]*, but the success of the corporation usually isn't imperiled. Given the boon of an inheritance tax elimination, there will be a lot of corporate dissolutions, with impact upon the existing tax structure beyond that already in place*
>
> *"3. The proposal is bad social policy. All taxation forms have social policy aspects. This proposal, to eliminate inheritance tax on landed millionaires (after all, the tax doesn't apply to estate recipients of less than $600,000) eliminates a major component of the National commitment to upward mobility. Keeping holdings intact through generational change will mean that more and more land will accrue to fewer and fewer segments of the population. (After all, all other inheritances will be taxed, so put the money in land!) There has been no society in history that allowed AND GUARANTEED such behavior that did not eventually have violent social unrest.*
>
> *"A Counter Proposal:*
>
> *"Of course there are the mid sized farmers to whom the inheritance tax is the burden that breaks the family farm's back. An appropriate response is found in other tax code experiences. For federal inheritance tax purposes, farmland could be reassessed with low or no value at time of transfer, but the tax itself kept as a lien in case the property is sold - or the owner goes into the 'house is a crop' business. Through time, the tax lien could dissolve so that the next generation isn't double burdened at the next mortal turnover."*

Wayne's views stimulated a spirited discussion about the merits – and social impacts – of

eliminating estate taxes. In the end, consensus was reached on a compromise proposal. Here's the compromise:

> There is a compelling social purpose to maintain small family farms, to maintain land in agricultural uses where agriculture is combined with and maintained in concert with natural and environmental values, and to discourage the conversion of productive agricultural land into non-farm uses. In other words, this is a "special interest group" that needs special attention – not just for their sake, but for the sake of our environment and our food supply.
>
> So, if a family farm is to receive special treatment (from that of, say, a family owned hardware store), it is because the social purpose is there – which is a point Wayne does not contend.
>
> "How do we get the heirs to commit to the same vision [of responsible land management] if there is no estate tax or no estate tax adjustments for social purposes?" Wayne asks.
>
> The answer, of course, is a "tax adjustment tied to social purposes." An heir may keep the additional "windfall" that is received through an estate tax abatement but, in return, must make a social commitment to carry out certain actions. If no social commitment is made, then the full amount of the estate tax becomes due.

The Concept Paper accommodates this viewpoint under Section 5, Priority Action 3, TAX ISSUES, paragraph A-5. It states: "**Emphasize the link between tax relief and keeping agriculture profitable and viable.** The purpose of tax relief is to prevent 'unintended consequences' such as forcing large tracts of land with native habitats from being converted into more intensive uses or carved into home sites, as a direct result of an estate tax liability; or increasing operating costs to the point that an agricultural operator decides to stop farming and convert his or her land to another more profitable use; or making it impossible for a landowner/operator to borrow sufficient capital to maintain an ongoing, viable farm operation and, thus forcing that owner/operator to stop farming."

This doesn't advocate for total elimination of estate taxes. It advocates for recognizing the link and the social repercussions caused by a tax policy that doesn't acknowledge – and often works against – the need for a viable agricultural industry. Landowners will respond to economics. If there is an economic INCENTIVE to do one thing, chances are the landowner WILL DO IT. If there is an economic DISINCENTIVE to do another, chances are the landowner WON'T DO IT. Total elimination of estate taxes offers no incentives. Estate tax relief tied to keeping land in farms, with additional estate tax relief tied to carrying out stewardship activities on the land, provide incentives to accomplish positive social goals.

One of the programs described in the Concept Paper is a "Resource Conservation Agreement." This program has been developed with input by private landowners, environmental interests and government agency representatives to provide both financial

incentives and federal tax incentives (including reductions in income, capital gains and estate taxes and a credit for local property taxes) in return for specific social "services" that can be rendered by landowners and operators. These tax incentives are tied – and, as Wayne says, "this is the tie which I want to nail down and have monitored" – to land management practices designed to ensure the maintenance of natural areas and ecological values and compatibility between agricultural operations and the environment..

The Resource Conservation Agreement offers Congress – and other politicians – an opportunity to provide tax reform to certain key groups, where each reduction can be demonstrated to be "in the national interest," without undermining the inheritance tax laws on large, non-farm holdings.

For example, tax abatements that are being proposed under the Resource Conservation Agreement include: ESTATE TAX REDUCTIONS of 25% if land remains in agriculture, 50% if the land has a Resource Conservation Agreement in place (plus an additional 1% per year for each year the agreement remains in place); and 100% if the land is subject to a permanent conservation agreement; and CAPITAL GAINS REDUCTIONS of 25% if the land remains in agriculture, 50% with a resource conservation agreement, 75% with a permanent conservation agreement and 100% if the land is sold to a government agency. Further details on these incentives can be viewed at http://privatelands.org/RCA_outline_rev.htmm#Tax Incentives.

Wayne concurs with this approach:

"The family farm is the competition to the corporate farm," he says, "and needs to be kept. On paper, speculative value of land for non-farm purposes is the unique factor facing farmers, and 'tinkering with the assessment measure' is appropriate." Wayne even goes further to say: "Reactive tax policy is also appropriate when the land is taken by the owner from farming purposes."

Not all landowners would agree with Wayne's last point. And some would like to see estate taxes eliminated, with no strings attached. That may happen. The bill that passed both houses of Congress in the summer of 2000 would do this. It embodies a political reality. That's one reason the Concept Paper and the Resource Conservation Agreement do not rely entirely on the elimination of estate taxes as an incentive for encouraging better stewardship, but combine together several incentives, of which the elimination or abatement of estate taxes is only one possible approach.

Other people remain opposed to any change in the estate tax. As Wayne points out, "Regretfully, it is the estate tax that provides for some of this country's upward mobility. It breaks up land holdings and businesses into smaller chunks so people of lesser means can get a piece of the action

"Sure, farms are being broken up and turned into subdivisions, but it is those subdivisions that are restoring the sense of 'yeomanry,' a sense of owning a piece of America, participation in its civic decisions, etc. that was being lost when all the family farms began

going bust post-Civil War in the cycle of booms and busts that culminated in the Great Depression and contributed to the great urban migration from the latter part of the 19th Century through World War II. The post WWII housing support acts had a strong foundation of recognition that a 'renter' class had a different outlook than an 'ownership class.'"

Wayne continues: "I agree that large ownerships can allow habitat protection, etc. This is true, if the owner wants habitat. If the owner doesn't, it is gone. At estate transfer time, what is the current incentive to keep the land in preserve, with or without estate taxes? Well, with estate taxes, the tax code can be tinkered with to reward lands left in preserve – again remove the speculative value and replace with the current use value (or boon). Without such a system, it is the romanticist view of the owner (or undercapitalization) that keeps the habitat. Experience with greenbelt tax laws demonstrates the ephemeral nature of some habitat when there is a competing market price AND no incentive."

As Wayne notes there are "compelling social reasons to maintain land in agriculture."

For example, consider the following data.

Duke Hammond, a biological scientist with the Florida Fish and Wildlife Conservation Commission, undertook a research project in 1997 to document the impacts of federal estate taxes on the habitat of the endangered Florida panther.

The research resulted in two papers: "The Connection Between Federal Estate Tax Law and Panther Habitat Loss in South Florida" was completed in July 1998. This paper was the subject of the "Editor's Page" in the September 1998 issue of *Florida Trend* Magazine, the full text of which appears below. In addition, Hammond prepared a second paper, "Protecting Panther Habitat on Private Lands in Southern Florida – A Current Assessment," which was presented at the 63rd annual North American Wildlife and Natural Resources Conference in 1998.

Hammond said in a July 21, 1998 letter, "My hope is to use these papers to stimulate interest in 'fixing' federal estate tax law in a way that will forestall development on natural and low intensity agricultural areas on private lands. That is an odd task for a biological scientist working for a state game and fish agency. But, I have been directed to improve our relationship with private landowners and protect wildlife habitat on private lands. Reforming estate tax law has the potential of accomplishing both."

Key points made in Hammond's papers include:

- "Fifty percent of the habitat occupied by panthers in south Florida is privately owned. These lands are vulnerable to development, often as a direct result of the federal estate tax."

C "The federal estate tax is linked to wildlife habitat in a predictable manner. Nine months after an owner's death, the estate tax is payable in full at the time of filing by the heir. Often, a valuable piece of land in an estate precipitates a tax so large that the land must be sold just to pay the levy."

Example: The original Bright Hour Ranch in central Florida, which stretched for 90,000 acres to the north and south of S.R. 70, was reduced to half its size by federal estate taxes. Another example: Dixie Hollins of Crystal River, Florida, was forced to sell all but 1,600 acres of a 4,800-acre property after his father's death in 1992. The estate taxes also forced him to change his profession – from independent farmer to employee – since the parcel he retained was no longer of sufficient size for him to make his entire living from the land, without eliminating most of its native habitat, which he was unwilling to do.

C Hammond continues: "Large inherited properties almost always experience escalating land uses subsequent to being passed from one generation to the next in order to generate income to offset losses resulting from payment of the tax. And those who purchase the property usually intensify land uses or develop the property as real estate in order to derive a profit from land which was purchased at near market value. The predictable outcome is that wildlife habitat on the property deteriorates after the levying of the tax."

C "The Golden Gate Estates calamity [in Collier County] is one example of the potential aftermath that can result from private lands being sold to pay federal estate taxes. While we lack the certainty to determine what might have occurred had the Golden Gate Estates land had been retained by the Collier family ... the fact remains that in the case of Golden Gate Estates, land was sold by the family to pay an outstanding federal estate tax, and environmental havoc ensued."

C "When agricultural land passes from one generation to the next at the owner's death, an estate tax representing a substantial percentage (as much as 55%) of the estate's value becomes due. Often, agricultural landowners are 'land-rich and cash-poor.' Assessment of federal estate taxes against these landowners frequently results in land use escalation, regardless of whether the land is retained or sold. This causal relationship ultimately engenders habitat loss, an avoidable injury that would not have occurred at that time had federal estate taxes not been assessed." The tax also is a major factor in the loss of small, family farms and their consolidation into large, corporate agribusinesses.

C "Many private landowners treasure natural areas on their property as highly as many in what has come to be known as the environmental community, preferring to keep their current land uses in place in deference to those resources. It is often economic hardship that results in more intense land uses being considered by landowners. The situation is a bit ironic. Government desires to protect natural areas on private lands, lands that owners have little desire to develop, and levies a tax against the landowner that results in development of habitat both government and the landowner desire to

protect. A simple way to protect natural values on private lands would be for government to allow deferment of payment of estate taxes on those private holdings where landowners agree not to escalate land uses in ways that would destroy valuable habitat. Another solution might be to repeal federal estate taxes altogether. If estate taxes were not assessed by the government, thousands of acres of privately owned land would be protected from development. Some of that acreage would most certainly be developed for other reasons, but the threat of development arising from the levying of estate taxes would be removed from all privately owned natural areas."

- "Reform of the federal estate tax law carries with it a relatively low cost to society and government. The estate tax currently accounts for approximately 1% of federal tax revenues, with 21% of this amount derived from real estate. Some lesser portion (less that 2/10 of 1% of total tax revenues) relates to lands with wildlife habitats (Guest and Associates, L.L.C., Estate Tax Factbook, Price Waterhouse, Washington, D.C., 1996, 31 pp.). The loss of tax revenue that would result from estate tax reform would be negligible, yet the benefits to society in the form of habitat preservation would be significant."

Hammond concludes one of the papers by saying:

- **"Many decisions which determine the survival of endangered species are made by those who have no interest in or understanding of population dynamics. It will be critical in the future that such decision makers become aware of the consequences of their actions. It is a certainty that senators and representatives in Congress who passed the current federal estate tax law in 1916 had no concept of its future adverse impacts on privately owned wildlife habitat. The future of the Florida panther may well depend on how quickly this concept can be grasped by lawmakers today."**

One of Hammond's papers generated the following editorial by Mark R. Howard in *Florida Trend* Magazine, entitled "The Price of Panthers." The editorial raises some excellent questions that are pertinent to the discussion of this issue:

> *"How do you put a price tag on a Florida panther? Ask most Floridians, or for that matter most U.S. citizens, if there's some inherent value in having the big cats roaming around south Florida, and we're inclined to say we like the idea. There's a little bit of the naturalist in all of us. In economic parlance, it's called 'existence value' – we don't want to buy a panther, may never even see one in the wild, but we attach some worth to knowing that they're out there.*
>
> *"The follow-up question – 'How much is it worth to you?' – isn't so easy to answer. But we have to ask both questions because there are links between panthers and seemingly unrelated issues like taxes. And because the endangered panthers are symbols for a whole raft full of other 'desirable' things about Florida that we will be forced to put a price tag on over the course of the next 40 years – wetlands, other wildlife, agricultural land, clean*

*water in our springs, even 'my unspoiled view' today vs. 'your high-rise condo' tomorrow.*

*"Consider the panther. It takes a lot of land to grow them – one cat can range over about 450 square miles. There are only about 40 or 50 left in the state, and 50% of their habitat in south Florida is privately owned farmland or rangeland mixed in with wilderness, according to Duke Hammond, a biological scientist with the Florida Game and Fresh Water Fish Commission.*

*"A number of big landowners haven't been in a hurry to develop their property, content to use a few acres to make a living and to let the panthers and other wildlife roam on the rest. But when the owners die, Hammond says, federal estate taxes frequently force their heirs to sell at least a piece of their inheritance. And the new owners usually are more interested in turning a buck than growing panthers.*

*"Hammond and an intern at his department, Selene Jacobs, collected case histories of how panther habitat has eroded in this fashion, and have written an interesting research paper on the relationship between wildlife habitat and estate taxes. One example from their research involves the Hilliard family, which once owned 60,000 acres of mostly wild country in Hendry County. When Marlin Hilliard died in 1981, the government gave his heirs nine months to pay $17.5 million in estate taxes. Ultimately they had to sell 17,000 acres to pay that tab. And since then, some 12,000 of those acres have been converted to citrus groves and sugar cane fields. Joe Marlin Hilliard, Marlin's nephew, told Hammond his family would have preferred to keep it undeveloped. And even after some hugely complicated estate planning, the next generation of Hilliards likely will have to sell more land. The panthers' habitat will erode farther.*

*"So how much is it worth to help the Hilliards keep panthers as part of Florida's landscape? Should we, for example, tinker with federal estate taxes to slow the loss of habitat? The landowners would like it. And no less a conservationist than Bernard Yokel, president emeritus of the Florida Audubon Society, thinks it's fair to compensate landowners who protect wildlife. Yokel told Hammond, 'Wildlife is clearly an asset. But the farmer, and businessman, will not put himself out of business to protect that. It's a luxury, and good environment is expensive. There is planning and money involved if you want an environmental future.'*

*"But estate tax reform is problematic: Even conservationists, who tend to favor ways of saving habitat, might not support it. As Hammond points out, landowners often dodge part of their estate taxes by donating the development rights to their property to conservation organizations. Provide a tax break to the landowners, you may end up goring the conservationists' ox because landowners would probably stop giving.*

*"And what about you and me? If my taxes go up to pay for that landowner's tax break, my estimation of the 'existence value' of those panthers could change in a hurry. Panthers, in fact, may have already become too expensive to maintain as part of the natural landscape.*

*"But forget the panthers for a moment. Consider a hypothetical Florida a few decades from now in which competition from foreign growers and development pressures from population growth have substantially reduced the amount of agricultural land. How much will the existence value of the remaining farmland and groves be worth to us? Will a movement emerge to preserve some of Florida's 'traditional agricultural character' by subsidizing the remaining farmers? Will we want the state to buy development rights to their property, or to reform estate tax law so their heirs can continue to grow fruit and vegetables?*

*"Pick your issue. Some of the state's purest springs now show signs of contamination, probably from agricultural chemicals and runoff. How much are we willing to pay – in regulation, bureaucracy, research, purchases of easements, etc. – to keep them pure? And do we want them 99% pure, as they were, or can we live with 90% pure, or maybe 80%, to balance all the interests involved?*

*"Whether it's panthers or springs or zoning densities, the issue is always messy and we usually avoid meaningful discussion until a lot of our choices have been made for us. Hammond says that he wrote the paper in the first place because the panthers' fate happened 'not because of a conscious choice, but because we haven't been talking about what we want to do.' He wants us to be thinking about these issues all the time, and he's right. In talking about how many panthers to have or whether to have them at all, we're answering the question of who we are and what we see as fundamental to Florida's identity. We can't stand back and pretend the things we love about the state will endure because they're 'priceless.' Over time, the market has a way of putting a precise value on them, and at that point the price is often very high."*

# Appendix H:
## *Selected Comments from Reviewers*

*Your paper,* **A New Look at Agriculture in South Florida** *... is very thorough. I can think of nothing left unturned. Your observations and facts can, in most part, be applicable to <u>all</u> Florida agriculture.*

*The mission, as you suggested, has to be in getting more of the populace to understand the plight of the agriculturalist and appreciate their value. That is, and will continue to be, a mammoth undertaking, but one which we all must commit to if we ever expect change. I congratulate you on a great "starting place" document, and appreciate the hard work placed into it. You certainly have raised some key issues, concerns and meaningful corrective actions.*

**— Carl B. Loop, Jr.**
**President**
**Florida Farm Bureau Federation**

*This is an outstanding document. Please use it to effect immediate, substantive change.*

*I support this effort wholeheartedly. So often good intentions have led us down the road to ruin. In order for Agriculture to survive as it exists today ... action must be taken immediately. Agriculturalists in these areas know exactly what we need and exactly what we don't want. Thank you for taking on this important task.*

**— Tim W. Williams, Owner/Operator**
**Webster Williams & Son, Inc.**
**Homestead, Florida**

*This should be required reading for every policy maker in the state — county commissioners, governing boards of the water management districts, heads of state agencies, legislators and the governor. They, in turn, should be sure every economic development council, every planner and the staff members of every agency read this, too.*

**— Richard Machek**
**Immediate past member, Governing Board**
**South Florida Water Management District**

*I would like to congratulate you on* **"A New Look at Agriculture in South Florida."** *It is not only brilliantly written but it addresses most of the difficult issues that we, as members of the agricultural community, must resolve and resolve quickly.*

**— Arthur Kirstein, IV**
**Agricultural Economic Development Coordinator**
**Palm Beach County, Florida**

***If Florida agriculture is to survive the 21st century, citizens must recognize that their greenbelts, their tax base, their water sheds, and much of their food supply is dependant on a healthy agriculture.***

***The soviet experiment in government ownership, central planning, and best management practices is ample proof that central control leads to pollution, land degradation, and food shortages.***

***No one will care for a cow like the owner. And no one is as interested in the well being of the land as the owner.***

**— Alto Adams, Jr.**
**Adams Ranch, Inc.**
**Fort Pierce, Florida**

***Overall ... you did a good job of identifying problems and issues that agriculture is faced with today. However, the [Possible Approaches] section lacks the details, strategies [and] budgets of how to implement these actions. Education is great but it would be a better document if we could define who, how, when and what resources it will take to get the job done.***

**— Barbara Miedema**
**Sugar Cane Growers Cooperative**
**Belle Glade, Florida**

**[Note: Barbara is correct. The current document has taken several steps toward defining who, how, when and what resources are necessary. The next step is to add more refinement and detail to the "Priority Actions" than have been proposed.]**

***Your comments about government regulations are right on the money. You have an intriguing idea about payments for resource protection. Your comments about the lowest cost food are correct. The recognition of asset values for loan collateral is realistic. The idea of consumer education is good but really difficult to implement. Overall, I think the ideas are good but they fail to recognize the really macro economic issues of free markets. And as an economics professor taught me years ago, there is no more pure free market than agricultural markets. Maybe next year we will find the grapefruit with which we can make some money and I will be a believer again.***

**— Nat Roberts**

**Callery-Judge Groves**
**Loxahatchee, Florida**

***Your paper is sorely needed and should be in all classrooms. Terrific! Very well organized. Very factual and informative. I do hope every legislator and leader will receive a copy and will take time to read and realize it's importance.***

***I wish I could offer suggestions: the paper is so well thought out and outlined, how could I dare make a change? The important part is getting this information in the hands of People, all people who love this great nation and like to eat.***

***After the final draft, I would like copies to distribute to my contacts. Thanks for the good work, and God bless you.***

**— Rudy Garber**
**Rancher**
**Sarasota, Florida**

***Many of your comments are right on target. But some of your suggestions are aimed at doing what has already been done, [which] in some cases just need a re-focus ... There needs to be a prioritzation of the actions needed.***

**— Rick Roth**
**Roth Farms**
**Belle Glade, Florida**

***The paper you are constructing covers "all the bases" ... agriculture can and must survive. Our ability to feed ourselves must remain paramount. However, current trends and viewpoints must be changed. Agriculture must be provided for, future agriculture must be provided for in all facets.***

***Your document is a solid one, the key will be finding policy makers, those in charge to have the courage to recognize and implement change. These changes, on a totally collective basis will be indicative to how well we survive. Florida's economy to a great degree is based on growth, its largest employer: the government. In the long run this is a formula for disaster because growth in itself, with no strong foundation, collapses upon itself. Agriculture is a strong foundation, sustainable industries within ag strong pillars. We must treat it with respect and the determination that it has to not only survive but flourish. This goes for the technical industries. So goes the State, so goes the nation. "For the want of a nail, the shoe is lost ..."***

***Keep up the wonderful work.***

**— Gail C. Stern**
**Palm Beach County Horse Industry Council**

***I like the paper. There is little I could add to the concepts you present ... as I would make notes in the margins on the way through I would subsequently find that you would deal with that issue in more detail later.***

***From an eco (nomic and logic) point giving land a real $ value for its environmental values, benefits, functions, whatever is a central theme. [That would] make it easy for families to keep large farms. We also need to stop regulations from driving land owners to more intensive land use. People don't realize that in Glades and Hendry Counties range is driven into cane because of the cost of regulation, not the desire to make more money.***

***I can plan an eco (nomic and logic) sustainable landscape. To me the missing piece has been how to make it happen. You deal with those critical issues here in a way that gives me hope that it could be achieved. Bravo.***

**— Frank Mazzotti, Ph.D.**
**Institute of Food and Agricultural Sciences**
**University of Florida**
**Belle Glade, Florida**

***Overall, your draft is very comprehensive and thorough. I don't have any specific additions or deletions to suggest. Since the end user group will be agency_types and bureaucrats I am glad you included — several times — examples of agency rules and regulations that create a hindrance. While you are in the facilitation process with this group, it would be interesting if they could identify rules or policies within their own agencies that they can identify as a hindrance to agribusiness. It might be an insightful experience. If they don't have any ideas, perhaps you could have some specific examples that you can get from some farmers.***

***Making a living off the land is difficult in the best of times. What I would hope from the agencies — federal and state — is that if they can't come up with any ideas of how to help farmers, at least don't hinder us. We're all in this together.***

**— Mary E. Giddens**
**Diamond G Ranch**
**LaBelle, Florida**

***I really think this paper can be a great educational tool. There is information in here that really brings home how critical our situation has become. As business owners, it's serious, but in order to get the general public interested in our plight, they have to understand how it affects them. This document shows that our source of food is actually threatened. If the public is made to realize and understand this, their concern will cause the "policy makers and therefore the regulators" to be concerned and eventually take action.***

*"A New Look at Agriculture" also provides ideas from leaders in the industry on what can be done to solve many of our problems... When listing our many concerns all together, it is overwhelming to say the least. Perhaps at some point, we need to consider selecting a short list of solutions and focus on them. In other words, prioritize our issues by which ones would provide "the most bang for our buck" and make a concerted effort to tackle them. For instance, should we focus on:*

- *Streamlining regulation - highlight the ridiculous number of agencies and regulations we deal with and instigate a real streamlining process*
- *Trade issues - from exotic pests to pursuit of a level playing field*
- *Marketing research - to meet new consumer needs and wants*
- *Labor issues - from availability of workforce to adequate housing w/ reasonable requirements*
- *Educate the public - as well as policy makers and regulators as to the actual benefits that we provide for the environment*

**— Mary Ann Gosa**
**Regional Field Representative, South Florida**
**Florida Farm Bureau Federation**

*I spent the first third of my life (so far) on a Midwestern farm where my family and I expended plenty of sweat and time making a living off the land. I look back on it with mixed memories now that there are no longer any farms or farmers in my family (after several generations). I realize that farming now is not like the farming I knew, but some basics will never change, such as the risk due to uncontrollable factors like weather and market prices. No doubt there are more regulations than ever. Also, it seems true that the intricacies of farming are not well understood by the public at large. However, lack of understanding also applies to other subjects that I know more about these days than farming, for example, protection of endangered species ... We have to focus on incentives to protect habitat that are compatible with ongoing or planned agricultural operations ... I hope to work with you on this issue, with the goal of getting my agency better aligned with agriculture, and vice versa, in South Florida."*

**— Stephen W. Forsythe**
**State Supervisor, U.S. Fish & Wildlife Service and**
**USFWS representative to the South Florida**
**Ecosystem Restoration Working Group**

*I very much appreciated and liked the format of the concept paper. The introductory section on "What you should know about Agriculture" was especially informative and an excellent way to frame the discussions to follow. Also, the format of identifying each component, its obstacles, and potential solutions, was refreshing. Too often, point papers do not broach possible solutions, and I believe this is necessary if the goal of the document is truly to stimulate dialog (and change). The level of writing and technical*

*information [also] was appropriate for me as a non-agriculturalist."*

**— Joanne M. Delaney**
**Research Interpreter**
**Florida Keys National Marine Sanctuary**

*This paper provides a valuable contribution to the discussions of economic development, environmental protection, land use and development currently underway in Florida. There seems to be a curious disconnect, as you observe, between agriculture and almost every other policy area in our state ... You are moving us in the direction of full or true cost accounting, and in this you provide a great service."*

**— Phyllis Mofson**
**Florida Legislature**
**Legislative Committee on Intergovernmental Relations**

*As you point out in this report, "Land resources support growth of population in the state. Land for agriculture is as necessary as the raw ground to support that growth."*

*The Department of Community Affairs has recently conducted a growth management survey of more than 3,500 citizens in Florida. We are also hosting "town hall" meetings in 13 locations around the state in an effort to gain additional input on growth management in Florida. This information will be used to reassess and perhaps revise Florida's policies on many things, including agriculture. Your challenge to integrate agriculture into the landscape as a vital part of society's infrastructure and quality of life is one in which the Department would like to participate. We look forward to working with you on this matter of essential state interest.*

**— Stephen M. Seibert**
**Secretary**
**Florida Department of Community Affairs**

# Endnotes

[1] Dick Marsh, an economist with the South Florida Water Management District, West Palm Beach, Florida, states: "There needs to be a differentiation between large 'corporate' agriculture and the 'family farm.' What precisely are we trying to sustain when we sustain 'agriculture'?"

**Response:** All agriculture. See "What Does this Mean to Me?" starting on page 7, especially the paragraph that states: "Agriculture is more than just another business venture — it is our food supply. It is more than just a value that enhances our quality of life — it is our life support system. *Agriculture is the cornerstone of our civilization and society*."

[2] Judith Jones Putnam and Jane E. Allshouse, "Food Consumption, Prices and Expenditures, 1970-97," Food and Rural Economics Division, Economic Research Service, U.S. Department of Agriculture, Washington, D.C., Statistical Bulletin No. 965.

This is the average price spent by all consumers on all food, both inside and outside the home, including snacks. The average expenditure by Americans for food to be eaten at home is only 7.4 percent of every dollar earned. The report goes on to note, however, that "The proportion of income spent for food varies widely among households of different sizes and incomes. Data from the 1996 Consumer Expenditure Survey conducted by the U.S. Department of Labor showed that the percentage of aftertax income spent for food [both inside and outside the home] varied from 8.7 percent for households with incomes of $70,000 ... to 34.2 percent for households with incomes of $5,000-$9,9999."

[3] "Farm Facts - Food is Most Affordable in the United States," a comparison of percent of income spent on food in 14 countries, from the American Farm Bureau web site, *http://www.fb.com/today/farmfacts/ffacts2.html*. Data from USDA and United Nations System of National Accounts.

[4] U.S. Department of Agriculture, Washington, D.C., 1997.

[5] *Mapping & Monitoring of Agricultural Lands Project*,: Department of Community Affairs, Tallahassee, Florida, 1984; and *Major Land Uses*, U.S. Department of Agriculture, Economic Research Service, Washington, D.C.,1992.

Over a 20-year period, the average loss is a little bit less -- but still significant. According to Florida Department of Agriculture and Consumer Services, *Agricultural Facts*, 1996, farmland losses averaged over 139,000 acres per year from 1974 through 1995, a 28% loss during that time.

A high rate of loss also is projected to continue. According to an April 1999 estimate by Dr. John Reynolds, University of Florida, Department of Resource Economics, Institute of Food and Agricultural Science, we can expect an average of 130,000 acres

per year to be converted to residential or other urban uses from 2000 through 2020. See following press release:

*News release form UF/IFAS Educational Media & Services*
*"newsifas@gnv.ifas.ufl.edu"*

*UF researcher estimates rate of rural_to_urban land conversion*

*By Cindy Spence*

*Source: John Reynolds*
*April 26, 1999/photo available* *(352) 392_1845, ext. 412*

*GAINESVILLE___Natives grumble about it all the time __ the rate at which Florida land, seemingly overnight, is transformed from pasture to pavement, hammock to highway, scrubland to skyscraper.*

*But how fast is it really happening? And what does the future hold?*

*University of Florida economist John Reynolds can hazard some pretty good guesses. The food and resource economics researcher specializes in models that provide estimates of the rate of land conversion from rural to urban.*

*Using population projections and data from aerial photography and satellite imagery, Reynolds estimates that 130,000 acres per year will be converted from rural to urban uses in Florida from 2000 to 2020. For Florida, the issue is critical.*

*"The conversion of rural land to urban uses is considerably more important to Florida than to most of the rest of the nation," said Reynolds, a professor in UF's Institute of Food and Agricultural Sciences. "Only about 2 to 3 percent of the total land area of the United States is accounted for by urban development, and only small fractions of percentages are being converted to urban uses each year.*

*"By contrast, Florida's urban land uses account for 10 to 11 percent of land area and that is expanding more rapidly."*

*Reynolds has determined that for each additional person who moves to Florida, a half_acre of land is converted to urban uses. Florida's population broke the 15 million mark in 1998, and roughly 673 people move to Florida every day. The U.S. Census Bureau projects that Florida will pass New York as the third largest state by 2025, with 20.7 million residents.*

*"We will continue to see the conversion of rural land to urban uses because we will continue to see people move to Florida," Reynolds said. "There will be a need for places for those people to live, work, play and go to school."*

*In Florida, many of the urban counties are still important agriculturally, too.*

*Eight of the top nine counties in agricultural sales are metropolitan statistical areas or urbanizing areas. These counties __ Palm Beach, Dade, Collier, Hillsborough, Manatee, Orange, St. Lucie, Polk __ sell more than [$3.3 billion] in agricultural products annually [based on their direct "farm-gate" value] and, according to [1993] figures [from Florida Department of Agriculture and Consumer Services], account for [58] percent of all agricultural products sold in Florida.*

*Today, urban and agricultural uses in these areas co_exist quietly, but Reynolds see the potential for conflict in the future. Between 2000 and 2010, population growth in those eight counties will result in the conversion of 340,291 acres, or 531.7 square miles, to urban uses, he said. While all the new urban land would not come out of farmland, the conversion will affect agriculture.*

*In Dade County, farmers have stayed in business by virtue of their ability to grow winter vegetables during a window when they cannot be grown elsewhere. Tapping into that niche market has kept their farms viable. But as the value of their land creeps up, more farmers will feel the pressure to sell out, especially considering that land within 5 miles of urban areas in Dade County already carries a $28,000_per_acre price tag.*

*"In Dade, agriculture is really threatened, and it could disappear," Reynolds said. "The farmable areas are being squeezed between preservation and urbanization. If the Dade population continues to grow as much, there will be severe pressure."*

*Numbers tell the story of Florida's transformation from rural to urban use particularly well. For example, in 1954, the census of agriculture showed 192,517 acres in Dade and 129,872 acres in Broward being used for agricultural production. By 1992, that figure had dropped to 83,681 acres in Dade and to 23,735 acres in Broward. In Pinellas County, the 1954 census showed 56,955 acres in agricultural production and that number had dropped to 4,123 by 1992.*

*"Most of the coming growth will be concentrated around the current major population areas. In some of these areas there will be competition for water and concern about a number of environmental land issues, along with conflict between urban interests and agricultural interests," Reynolds said. "There's going to be fairly intense competition for the rural land.*

*"In some cases, agricultural production can move to other rural areas," Reynolds said. "But that's not always the case, as with Dade County's vegetable_growing region."*

*Florida's comprehensive planning process has resulted in enough land being designated in all the counties to accommodate population growth in the next 50*

*years, Reynolds said. But, the designated land is not always where people want to develop.*

*"We will continue to see intensification of land use planning efforts and restrictions on land use changes in the next 20 years," Reynolds said.*

*Traditionally sleepy North Florida counties also are feeling urban pressures. Walton, Wakulla and Gilchrist counties saw 30 percent growth from 1991 to 1997. Gulf County grew 20 to 30 percent.*

*"These counties won't be anything like Miami," Reynolds said. "But they're not going to be Old Florida, either."*

*Reynolds said other trends also will affect which counties grow.*

*"How much will computers allow us to work and get an education at places that are nontraditional now?" Reynolds asks. "Computers may allow people to live in North Florida more than they have in the past even if their place of work is somewhere else.*

*"It's always hard to judge the next century's change," Reynolds said. "People now expect more change than they did 50 years ago. But we always adapt to change, and we'll continue to adapt to change."*

[6] As Tim W. Williams says: "Please focus on farmers, not acreage. I got the feeling my land value would be in peril as those concerned might blanket Ag areas under a cover of 'no development'. Without any other remedies in place to mitigate the possible effect my land worth as much as 20+ K per acre falls overnight to 5000.00 Where does the million dollar production loan come from if I only own 150 acres ? 150 x 5000 = 750,000 while 150 x 20,000 =3,000,000 ltv.@ 33%. **DO YOU UNDERSTAND THIS?**"

[7] Foreign travel advisories, U.S. Department of State, Washington, D.C.

Also: Center of Disease Control Travel Information: "Food and Water Precautions and Travelers' Diahhrea," Division of Quarantine, National Center for Infectious Diseases, Centers for Disease Control and Prevention, Atlanta, GA, July 12, 1996.

[8] U.S. Census Bureau projection as reported by Jack Z. Smith, columnist and editorial writer for the Fort-Worth-Star-Telegram, in an article entitled "At nearly 6 billion, we can't afford to forget Earth's growing problem," Sun-Sentinel, Fort Lauderdale, Florida, June 9, 1999, p 27A..

[9] The World Bank, *Food Security for the World*, Statement Prepared for the World Food Summit, Rome, Italy, November 12, 1996.

[10] Food and Agricultural Organization of the United Nations, Soil Resources Management and Conservation Service, *World Reference Base for Soil Resources*, 1998.

[11] Ferdinand F. Wirth, Ph.D., Assistant Professor of Food and Resource Economics, University of Florida, Indian River Research and Education Center offered a dissenting comment to this and the following paragraph:

"... the gist of this paragraph is that there is not enough food for the current world population, and that increasing population will just exacerbate the situation. This is not true, for two reasons!! First, there is currently plenty of food produced to feed the world's population. Look at the huge U.S. grain surpluses every year. The U.S. is having problems finding storage for all the grain. The real problem is food distribution - actually getting the food to the people. Many third world countries lack an adequate food transportation and distribution infrastructure. This is evident every time there is a major African drought; people in the countryside starve while emergency food shipments end up rotting in central warehouses in major cities, with no way to get the food to the countryside.

"The second flaw in the reasoning is the failure to remember the tremendous improvements (past and ongoing) in the technological efficiency of agriculture (that's why one farmer can now feed 130 people). Just prior to World War II, one farm worker supplied food and fiber for only 11 people. Malthus was guilty of the same error (ignoring technological improvement) in 'Population' when he suggested that human population growth is limited by the food supply. The rate of technological improvement has also been accelerating with biotechnology, and it is very possible that within one generation an American farmer will be able to feed 250 people. If we export our technology to developing nations, there is every reason to be optimistic that we can feed the world's population for the foreseeable future if the distribution problems are solved."

**Response:** According to the United Nations Food and Agriculture Organization (FAO), Dr. Wirth is correct is stating that sufficient food is currently produced to feed *most* of today's people. FAO also notes that poor distribution, rather than lack of production, is the major cause for the world's current food deficiencies. Nevertheless, that does not change the FAO statistics cited in these two paragraphs. FAO has taken distribution problems into account in its projections. Hence, even though world population is going to increase 50%, FAO projects that current food production will have to double to keep pace with that increase, since much of the population increase will come in areas that also have poor distribution.

It's hard to comment on Dr. Wirth's second point. It is clear that there has been a dramatic increase in the amount of food produced per acre over the last 50 years. According to USDA and FAO, however, production increases have leveled off in the last 10 years. There is a lot of *hope* that technology (and biotechnology) will, once again, provide the key to continuing increases in production. But there is no solid

evidence to show this is happening at the present time. If Dr. Wirth's projection is correct, and the average farmer can feed 250 people, then that will result in a doubling of food production — exactly what the FAO says is needed, at a minimum. If food distribution problems can be addressed, so much the better. Still, even if Dr. Wirth is completely correct, that does not change any of the points raised in this essay: world population and food demand are increasing at a time when we are losing our farms and farmers. While we might be able to stay exactly where we are *if* each farmer doubles his or her current production, or *if* we *completely solve* all the world's food distribution problems, the fact remains that we are losing our farms and farmers at an alarming rate. And that is going to impact the safety, abundance, variety and cost of our food in the years to come. Moreover, each of us is going to feel that impact *personally.*

12 Food and Agricultural Organization of the United Nations, *Food Requirements and Population Growth*, A Technical Document Prepared for the World Food Summit, November 11-13, 1996.

13 Kevin Burger, comment at Sustainable Agriculture Task Force Meeting, South Florida Water Management District, West Palm Beach, Florida, May 11, 1999.

14 From a presentation by Frank Williamson, Jr., "Agriculture in Florida," at the Third Annual Public Interest Environmental Conference, Florida 2020: Visions of our Future, Reitz Center, University of Florida, Gainesville, spring 1997.

15 The Commission on 21st Century Production Agriculture, "Directions for Future Farm Policy: The Role of Government in Support of Production Agriculture," Report to the President and Congress, January 2001.

16 Florida Department of Agriculture and Consumer Services, "Florida Agriculture Overview," Ag Facts, p. 1, 1998.

17 Ibid.

18 Florida Department of Labor, ES-202 reports, 1996, the most recent data available, accessed via Internet at: http://lmi.floridajobs.org/LMI_LIB.htm and ftp://207.156.40.162/ES202/AN96F01.TXT. Direct employment in 1996 resulting from agricultural production, services and processing was 288,286 jobs. This generated $5.1 billion in payroll earnings.

However, that is only part of the picture.

[The following information is excerpted from a study on *The Economics of Land Uses in Polk County, Florida*, conducted by Stewardship America, Inc., Boca Raton, Florida, January 1999.]

Because agricultural production and other agribusinesses produce products or

services for sale outside Florida, which serve to channel outside dollars into the state, they are known as "export" or "basic" industries.

The vast majority of Florida's agricultural products are exported to end-users outside the state, either directly or after packing and/or processing. All of these sales import dollars into the state. The agricultural industries, in turn, use these dollars to pay their employees, pay property taxes and purchase supplies and services. These dollars are then re-spent by each employee, by local governments and by the businesses providing sales and services to agricultural industries. Thus, the dollars generated from the sale of Florida agricultural products are circulated and re-circulated throughout the state economy.

This spending translates into local retail sales; local bank accounts; purchases of consumer products, automobiles and homes; entertainment purchases through local restaurants, theaters and sporting facilities; and purchases of legal, accounting, medical, beauty, cleaning, repair and other personal services.

This process of expanding the economic employment and income base of the state through economic interactions of the agricultural industry and other economic sectors is known as the "multiplier effect."

Economic impact, which is the combination of direct cash sales outside the state plus the "multiplier effect" that these sales have on the state's job market and economy, is calculated by using a *Regional Economic Multiplier* computed by the U.S. Department of Commerce. This multiplier is applied only to the income that results from sales outside the state, not to local sales that are generated within Florida. This multiplier accounts for the *indirect* and *induced* impacts that result when money brought in from outside the state is spent locally.

When this multiplier is applied to jobs and earnings to determine the economic impact generated by agriculture, it shows that **more than 500,000 jobs — which account for than $10 billion in payroll earnings — owe their existence to agriculture**.

**In addition, the ES-202 report for 1996 shows that other contributing industries, such as food stores and eating establishments, employed another 674,567 people who had payroll earnings of $8.1 billion**.

A reviewer from South Florida Water Management District noted that the jobs and earnings cited above “are not heavily dependent on Florida agriculture.” This is true. But it is worth remembering that they *are* dependent upon agriculture, as emphasized in the chapter in Part I entitled “What Does this Mean to Me?”

***An issue often raised about agricultural jobs is*:** Doesn’t the large number of migrant workers, who are paid low wages, put a large demand on social services, which must

be paid for by all taxpayers? This concern can be answered by understanding that it is low income jobs, regardless of the type of industry, that creates the need for social services.

Many families that have a member doing agricultural work may also have family members who have low-paying jobs in other industries, so although the family is regarded as a "farm worker household," any social services received also are provided to the members who are in other industries. Thus, it is often assumed that it is farm workers who need social services, whereas it could be any low income person or family member. Agricultural jobs represent only a small portion of the industries which provide jobs to unskilled and often non-English speaking workers. For example, according to the *1997 Florida Statistical Abstract*, in 1996 there were over 40,000 people employed in Polk County in service jobs, almost 38,000 in retail jobs, over 8,000 in construction, and about 10,000 in agriculture (p 212). All of these industries include low paying jobs and employ workers who may use social services. [Studies conducted by Stewardship America, Inc. in other counties, such as Collier and Hillsborough, show similar breakdowns in the distribution of workers among low-wage jobs.]

The common belief is that migrant workers often earn *hourly* wages that are significantly lower than *hourly* wages paid in other unskilled positions. However, a worker's total income is perhaps more impacted by the fact that farm work is seasonal and variable even during the season. The earnings of farm workers are not simple to calculate since they often earn an hourly rate and/or a piece rate per box. Wages for Florida citrus workers, for example, are most often paid on a piece rate per box. The Florida Agricultural Statistical Service showed an average pay of $6.19 per hour for field workers in October, 1995. A study done in 1994 by the University of Florida's Institute of Food and Agricultural Sciences shows that although the piece rates for citrus workers can vary, the resulting hourly wage remains fairly level. The piece rate varies due to such factors as height of trees and amount of fruit per tree, and thus reflects how long it would take to fill a box. Additionally, the study found that the mean hourly wage for citrus workers was $7.08, with a standard deviation of $1.64. [Data from: Robert Emerson, Rebecca Chung, Leo Polopolus, *Harvest Labor Market Efficiency* ,University of Florida Institute of Food and Agricultural Sciences, Gainesville, Florida, 1994, p. 11.]

Another study by Ed Kissam and David Griffith states that "Farmwork pays higher wage rates — about 20% over the minimum wage — more than most of the jobs available to domestic and immigrant workers with few marketable vocational skills or with other serious barriers to employment." [Data from: Ed Kissam and David Griffith, *Final Report: The Farm Labor Supply Study: 1989-1990*, Micro Methods, Berkeley, California: prepared under Grant #3-9-M-9-0044 from the Office of the Assistant Secretary for Policy, U.S. Department of Labor, 1991, p. 94.]

Then why do so many migrant workers live in poverty? The main reasons are unemployment and underemployment. The work is highly seasonal and not steady.

Workers may not find work every day of the week and on the days they do work, they may work long days or only partial days. This is caused not only by such factors as timing of harvests and weather fluctuations, but also by the casual structure of the labor market.

Seasonal under-employment and off-season unemployment cause farm workers to seek jobs outside of agriculture. Due to employment barriers such as inability to speak English, lack of skills and little formal education, the only other employment generally available is entry level jobs in retail, service and construction with hourly wages comparable to agricultural work. These jobs, however, are attractive since they frequently offer steadier work and may provide some benefits.

Thus, migrant farm workers tend to leave farm work for steadier employment in low paying non-agricultural fields such as service, retail and construction. The attraction of other more stable and permanent jobs causes high turnover and exits from agricultural work. According to Kissam and Griffith, "Stability of employment, turnover and exits are closely linked." [Ibid., p. 87]

As residential growth occurs, there is a correlating growth in the demand for people to enter these fields. For example, Polk County has an average of 19 workers in these fields for every 100 residents. [Derived from the *1997 Florida Statistical Abstracts*, pp. 11 and 212.] Therefore, if agriculture is replaced by residential growth, there would be a corresponding increase in the demand for service, retail and construction jobs and migrant workers would be likely to continue moving into these unskilled and low paying positions.

[19] U.S. Department of Agriculture, Natural Resources Conservation Service, National Resources Inventory, 1997.

[20] Sources: *Florida Agriculture*, Florida Department of Agriculture and Consumer Services; *1995 Florida Statistical Abstract*; *1992 Census of Agriculture*; and U.S. Forest Service. According to these sources, agriculture utilizes 10.8 million acres and commercial forestry utilizes 13 million acres of the state's total land area of 34.5 million acres. Eight million acres of state land is in public ownership, leaving 26.5 in private ownership. Forestry utilizes 6.3 million acres of public lands and 6.7 million acres of private lands. Of the private lands, 10.8 million are in agriculture and 6.7 million are in forestry.

[21] From Mike Jennings, U.S. Fish and Wildlife Service, Vero Beach, FL, via email June 25, 1999:

*The Road Back: Endangered Species Recovery Success*, U.S. Fish and Wildlife Service, Washington, D.C., no date. Reports that a 1993 study by two project partners, the Association for Biodiversity Information and The Nature Conservancy found:
"Only 25 percent of all listed species occur primarily on federal lands. In addition,

more than half of the federally listed species have at least 80 percent of their habitat on private lands."

As Mike Jennings note: "Extrapolating, one could conclude that about 75 percent [of listed species] occur primarily on non_Federal lands."

According to the *South Florida Multi-Species Recovery Plan*, USFWS, 1999, three listed species are found almost exclusively on private lands: The *scrub blue pine* only has a 2 hectare site (about 5 acres) on public lands; the balance of all other sites are on private lands. The *Florida zizphus* has five sites, only one on public lands; the other four, the largest sites, are on private lands. For *Lakla's mint*, all known populations within its historic range are on private lands; one translocated population occurs on federal land.

22 Suggestion from Pat and Brady Pfeil, Carlton Bar A Ranches and Groves, Arcadia, Florida. Response to first draft, June 10, 1999.

23 Carbon sequestering is the process of providing plant cover to take $CO_2$ from the air and create a "carbon sink." Plants convert $CO_2$ to carbon, some of which ends up as roots, stems, leaves, and some of which is returned to the soil via plant residues. The objective is to sequester as much as possible to keep it out of the air and thus avoid contributing to the "greenhouse effect." Information from Bart Lawrence, Soil Conservationist-Plant Materials,. Guam, Micronesia, USA.

24 Suggested by Paul Warner, Lead Ecosystem Restoration Representative, South Florida Water Management District, West Palm Beach, Florida, who was the District's representative to the South Florida Ecosystem Restoration Working Group at the time the first two drafts of this document were prepared.

25 Information compiled through the cooperative efforts of the Florida Farm Bureau Federation, Florida Nurserymen & Growers Association, Sugar Cane Growers Co-op, North Florida Growers Exchange and Wetherington Farms. Published by Florida Farm Bureau Federation, 1995. Information on new red potatoes and crook neck yellow squash added by Tim W. Williams, Webster Williams & Son, Inc., Homestead, on May 30, 1999.

26 Information on beef provided by Thomas E. Rew, General Manager, Hayman's 711 Ranch, Kenansville, Florida. As he notes: "Assuming the retailer receives $4.50 for a pound of beef, I receive about 15% of that or $.68 per pound. (Bear in mind that when I sell my calves, they are not ready for slaughter. Because we are a segmented industry, the feed lot and packing house must 'add value' to my calf before the consumer buys it.)"

27 According to statistics compiled by the Florida Department of Agriculture and Consumer Services, Bureau of Information Services, and the Florida Farm Bureau Federation.

28 Comment from Thomas E. Rew, General Manager, Hayman's 711 Ranch, Kenansville, Florida, in response to first draft of document, June 1, 1999:

"I don't believe producers need a government 'safety net.' Why are only 5 of 253 commodities entitled to receive price supports? Why don't we all face the same scope of economic pressures? Perhaps at one time these supports were necessary.

However, are they still relevant today ...? Bottom line — don't advocate more price supports. Argue for their elimination."

[29] Note from Paul Warner: "Need to point out what standards are used re: quality of imports."

[30] Note from Paul Warner: "Role of Department of Agriculture and Consumer Services and IFAS [University of Florida, Institute for Food and Agricultural Sciences] need to be recognized."

[31] Craig Evans and Jean McGuire, *An Analysis of the Costs & Effects of Regulations on Hillsborough County Agricultural Operations,* Farming for the Future, Inc., Boca Raton, Florida, January 1997.

[32] Dick March, an economist with South Florida Water Management District, states: "The discussion of agricultural land values ... seems to mix the issues of valuation of non-market values for use in benefit-cost analyses and other public decision making processes with the issue of property assessment for taxation and with the issue of land prices. Consequently, at different points ... it appears [the report] is saying agricultural land is overvalued and at other points that agricultural land is undervalued. One approach is to focus on the separate reasons for which agricultural land is valued (both in the market and in public decision-making) and indicate whether, how and in what direction markets, resource management agency decision-making processes, and taxation practices tend to influence the use of land and the retention and/or expansion of 'desirable' agricultural land values."

**Response:** Dick makes a valid point. And he suggests a very good approach for examining this issue, which has been incorporated into the priority actions listed in Section 5, *Integrating Agriculture into the Landscape.* The discussions about land value in various parts of the report are intended to make four points: 1) land use tends to follow economics, 2) the market provides very little value for the natural and ecological amenities found on ag lands, 3) lacking any market value for these amenities, these lands tend to be valued solely by a units-per-acre yardstick, and 4) this greatly affects the decisions a landowner makes on how land is used, especially when agriculture starts to become unprofitable.

The result is a tendency to eliminate the features from the land for which the lowest value is assigned — wetlands, wildlife habitat and open pastures — and to convert land to the economic activities for which the highest value is assigned — shopping centers, commercial centers and houses. The rising cost of land, which is skewed away from agriculture and toward development, prices many farming activities out of existence whenever development draws near. Hence, as a direct result of the way in which land is appraised and valued, we almost predetermine that the last crop will be asphalt.

[33] C.L. Beale, "Salient Features of the Demography of American Agriculture," pp 108-27 in D.L. Brown, D. Field and J.J. Zuiches (eds.), *The Demography of Rural Life*, NERCRD 64, 1993.

[34] G. Wunderlich, "Owning Farmland in the United States" (Washington, DC: USDA, ERS Ag. Info. Bulletin 637), December 1991.

[35] Ibid.

[36] Note from Paul Warner: "need more documentation here."

[37] "Florida Agriculture Facts," Florida Department of Agriculture and Consumer Services, Tallahassee, Florida, 1996.

[38] Note from Paul Warner: "Plausible explanation. Needs more documentation."

[39] Note from Paul Warner: "Lacks discussion of present efforts to control impacts."

**Response:** See Priority Actions, "Exotic Control," under Section 1, *Improving Producer Profitability.*

[40] Paul Warner says: "These activities already are being implemented to some extent. What would be useful is a thoughtful evaluation of present programs and additional opportunities."

[41] Suggestion from Arthur Kirstein, IV, Agricultural Economic Development Coordinator, Palm Beach County, Florida. His comments contain only his personal opinions; they do not reflect any position taken by Palm Beach County or any organization. Response to second draft of this document, July 15, 1999.

[42] Note from Paul Warner: "These activities already are being implemented to some extent ... by private industry and by DOACS and IFAS ... what would be useful is a thoughtful evaluation of present programs and additional opportunities."

[43] Ferdinand F. Wirth, Ph.D., says "I disagree that too much university research 'is driven by grant opportunities, rather than producer needs.' Until the state is willing to fund 100% of university costs, researchers have no choice but to pursue grant funds. Most grant opportunities should accurately reflect producer wants and needs. Unfortunately, producer groups often perceive their needs (and finance research) based upon faulty information or situations which no longer exist in the marketplace. For example, the Florida grapefruit industry has been suffering from low prices for several years because the supply of fruit far exceeds the current demand. The best way to solve that problem is through market research and development to increase demand. However, the citrus box tax assessment, a primary source for citrus research funds, specifies that the monies can only be used for production research. Increased production will only worsen the existing problem, but no box tax money is available for the necessary market research and development."

[44] Suggestion from Tim W. Williams of Webster Williams & Son, Inc., of Homestead, South Dade potato growers. Idea added in response to first draft of this document, May 30, 1999.

[45] Suggestion from Rick Roth, Roth Farms, Belle Glade, Florida. Idea added in response to first draft of this document, June 13, 1999.

[46] Dr. Wirth offered a dissenting comment to this suggestion by saying: "I personally object to any recommendation that restaurants and supermarkets be forced to disclose when products are not American-grown. We live in a global economy, and this recommendation screams of trade barriers and protectionism. In some ways it reminds me of the 'America - Love It or Leave It' bumper stickers that were prevalent during the Vietnam War protest years in the late 1960s and early 1970s.

"... If the U.S. requires country-of-origin labels, other countries will also follow suit. Essentially, the labels will become a trade barrier ...

"We have to recognize that some countries can produce certain food products more cheaply, and of higher quality, than U.S. producers. Country-of-origin label regulations have been used by U.S. growers to protect themselves when they have been unable (or unwilling) to compete with foreign growers. For example, the Louisiana crawfish producers lost 70% of the market for crawfish tail meat to Chinese imports because the higher quality Chinese product was selling for $3.99/pound and the Louisiana producers wanted to maintain their $6.99/pound price. They had state laws changed to require country-of-origin labeling, but it did not help. The crawfish producers then convinced President Clinton to impose, after the 1996 elections, what have been described by some analysts as unwarranted 50 percent price tariffs. Louisiana consumers were the ultimate losers, since the price for crawfish increased from $3.99 per pound back to $6.99 per pound. Many consumers who had been purchasing crawfish tails, but were unwilling or unable to pay the high price, stopped purchasing crawfish tails or substituted shrimp in recipes calling fro crawfish tails.

"A better recommendation would be for all citizens to insist that the U.S. government hold foreign producers to the high U.S. food safety standards and allocate sufficient resources to assure the quality of foreign food products imported into the United States."

**Response:** Yes, we do live in a global economy. And virtually every product we buy — whether it is an article of clothing or electronics — includes a label or sticker telling us where it comes from. Why can't we also ask where our food comes from?

Dr. Wirth is correct in suggesting that foreign producers be required to meet the high U.S. food safety standards. But that is not likely to occur easily ... or quickly. Much easier to affix a label so the consumer can make an informed decision.

Pat Cockrell of the Florida Farm Bureau Federation adds: "Other countries do require country of origin, and in fact, only fresh agricultural products in the U.S. don't have country of origin statements. I do not disagree with [Dr. Wirth's] statement that other countries may be able to produce at a higher quality or a cheaper cost of production. I think Florida producers are saying that they will compete if they can use the same artificially created production advantages. These artificially produced advantages are generally a result of governmental actions on health, welfare, currency policy, environment or address other social problems. When Adam Smith was developing concepts of comparative advantages, government did not restrict trading advantage, but rather promoted efforts to give a comparative advantage. The European community still indulges in this with their export policy and other agricultural policies. One of the reasons Florida's fruit and vegetable industry has been traded away in trade negotiations is because of the narrow view of comparative advantage and a lack of understanding of government's role in establishing that comparative advantage."

47 Paul Warner says: "Documentation of how present trade agreements to not do this is

needed."

48 Suggestion from Rick Roth.

49 Robert F. Doren, "Strategies for Success," (Miami, Florida: South Florida Ecosystem Restoration Working Group, December 1999), draft document, pp. 4-5 and 19-26.

50 Paul Warner says: "Evaluation of present efforts and additional opportunities needed."

51 Suggestion from Rick Roth, Roth Farms, Belle Glade, Florida, in response to first draft of this document.

52 Dick Marsh, an economist with the South Florida Water Management District, states: "The discussion of agricultural land values ... seems to mix the issues of valuation of non-market values for use in benefit-cost analyses and other public decision making processes with the issue of property assessment for taxation and with the issue of land prices. Consequently, at different points ... it appears [the report] is saying agricultural land is overvalued and at other points that agricultural land is undervalued. One approach is to focus on the separate reasons for which agricultural land is valued (both in the market and in public decision-making) and indicate whether, how and in what direction markets, resource management agency decision-making processes, and taxation practices tend to influence the use of land and the retention and/or expansion of 'desirable' agricultural land values."

**Response:** Dick makes a valid point. And he suggests a very good approach for examining this issue, which has been incorporated into the priority actions listed in Section 5, *Integrating Agriculture into the Landscape.* The discussions about land value in various parts of the report are intended to make four points: 1) land use tends to follow economics, 2) the market provides very little value for the natural and ecological amenities found on ag lands, 3) lacking any market value for these amenities, these lands tend to be valued solely by a units-per-acre yardstick, and 4) this greatly affects the decisions a landowner makes on how land is used, especially when agriculture starts to become unprofitable.

The result is a tendency to eliminate the features from the land for which the lowest value is assigned — wetlands, wildlife habitat and open pastures — and to convert land to the economic activities for which the highest value is assigned — shopping centers, commercial centers and houses. The rising cost of land, which is skewed away from agriculture and toward development, prices many farming activities out of existence whenever development draws near. Hence, as a direct result of the way in which land is appraised and valued, we almost predetermine that the last crop will be asphalt.

53 Paul Warner says: "Evaluation of current programs and opportunities needed."

54 Comment from Tim W. Williams.

55 Ibid.

56 Again, Paul Warner says: "These activities already are being implemented to some extent. What would be useful is a thoughtful evaluation of present programs and additional opportunities."

57 Suggestion from Ron Smola, Intergovernmental Liaison, USDA, Natural Resources

Conservation Service. Idea added in response to first draft of this document, May 30, 1999.

58 Carbon sequestering is the process of providing plant cover to take $CO_2$ from the air and create a "carbon sink." Plants convert $CO_2$ to carbon, some of which ends up as roots, stems, leaves, and some of which is returned to the soil via plant residues. The objective is to sequester as much as possible to keep it out of the air and thus avoid contributing to the "greenhouse effect." Information from Bart Lawrence, Soil Conservationist-Plant Materials,. Guam, Micronesia, USA.

59 Suggestion from Tim W. Williams.

60 Ibid.

61. Philip K. Howard, *The Death of Common Sense: How Law Is Suffocating America,* (Random House, New York, New York, 1994), p. 173.

62 Frank Williamson, Jr., "Agriculture in Florida."

63 Craig Evans and Jean McGuire, *An Analysis of the Costs & Effects of Regulations on Hillsborough County Agricultural Operations,* Farming for the Future, Inc., Boca Raton, Florida, January 1997.

64 Craig Evans and Jean McGuire, *An Analysis of the Costs & Effects of Regulations on Hillsborough County Agricultural Operations,* Farming for the Future, Inc., Boca Raton, Florida, January 1997, "Conclusions," p 49.

65 Ibid.

66 Comment from Gail C. Stern: "Don' t forget Army Corps of Engineers involvement, EPA involvement. These well meaning entities may push land costs (but not necessarily land values) up so high we won't be able to continue with ag. In Wellington, our Basin B issue is looming. The area (our preserve area) is the cradle of Palm Beach County's Horse industry but these agencies have come in and declared this longstanding farm land as wetlands. Various mitigation fees have been thrown around but not set. Permits given by the Village and SFWMD [South Florida Water Management District] now have been stopped by EPA and the Corps in saying they now need a say. Landowners previously cleared to build horse farms have been stopped by mitigation discrepancies.

"Yet, large residential, commercial projects are proceeding. Piecemeal permitting is prevalent. Certain realtors have 'assessed' their own mitigation fees in negotiating real estate prices with sellers resulting in a seller's loss of money to buyers. I know you don't have time to absorb this, but ... this will 'travel' to any area where the Corps and EPA assert jurisdiction."

67 Craig Evans and Jean McGuire, *An Analysis of the Costs & Effects of Regulations on Hillsborough County Agricultural Operations,* p 49.

68 Ibid.

69 Ibid.

70 Ibid.

71. Ibid., p. 27.

72. Ibid., p. 30.

73 Report of the Technical Review Committee — Jan van Schilfgaarde, chair; Michael Duever, E.T. York and David Zilberman — on "Integrating Agricultural and Ecological Solutions in South Florida," a two-day workshop held April 28 and 29,

1999 in West Palm Beach, Florida, sponsored by South Florida Ecosystem Restoration Task Force, Science Coordinating Team, pg. 3

74 The Florida Department of Community Affairs notes that "Many businesses and industries would claim they are vulnerable to changes in regulations and policies, increased competition for land and water, rising real estate values, increases in operating costs and other change occurring every one to five years. We recommend eliminating this from the list of obstacles peculiar to agriculture.

**Response:** Valid point, except for one major difference. Virtually every other business and industry in Florida can pass on the costs that are created by these changes in the prices that are charged for their products and services; agriculture cannot.

75 Ibid.

76 Report of the Technical Review Committee on "Integrating Agricultural and Ecological Solutions in South Florida," pg. 3

77 Frank Mazzotti, Ph.D., "Environmental Research in the Agricultural Landscape."

78 Suggestion from Tim W. Williams.

79 Dick Marsh, an economist with South Florida Water Management District, states: "The recommendation for Ag impact statements seems to be a move toward increased bureaucracy. I believe this issue could and should be addressed through the requirements in Section 120.541, F.S., regarding statements of estimated regulatory costs. Agricultural interests could also take advantage of the procedural requirements in Section 120.54(1)(d), F.S., 'In adopting rules, all agencies must, among the alternative approaches to any regulatory objective and to the extent allowed by law, choose the alternative that does not impose regulatory costs on the regulated person, county, or city which could be reduced by the adoption of less costly alternatives that substantially accomplish the statutory objectives.'"

80 Suggestion from Rick Roth.

81 Suggestion from Tim W. Williams.

82 Ferdinand F. Wirth, Ph.D. says: "I disagree that too much university research 'is driven by grant opportunities, rather than producer needs.' Until the state is willing to fund 100% of university costs, researchers have no choice but to pursue grant funds. Most grant opportunities should accurately reflect producer wants and needs. Unfortunately, producer groups often perceive their needs (and finance research) based upon faulty information or situations which no longer exist in the marketplace. For example, the Florida grapefruit industry has been suffering from low prices for several years because the supply of fruit far exceeds the current demand. The best way to solve that problem is through market research and development to increase demand. However, the citrus box tax assessment, a primary source for citrus research funds, specifies that the monies can only be used for production research. Increased production will only worsen the existing problem, but no box tax money is available for the necessary market research and development."

83 W.P. Pat Cockrell, Director of Ag Policy, Florida Farm Bureau Federation, points out that "market research and development for citrus is conducted through the grower funded Florida Department of Citrus."

84 Comment from W.P. Pat Cockrell, Director of Ag Policy, Florida Farm Bureau

Federation, in response to 2nd draft of paper.

85 ELMS II Final Report, Agricultural Lands Recommendation 166, pp. 106-7.

86 Carbon sequestering is the process of providing plant cover to take $CO_2$ from the air and create a "carbon sink." Plants convert $CO_2$ to carbon, some of which ends up as roots, stems, leaves, and some of which is returned to the soil via plant residues. The objective is to sequester as much as possible to keep it out of the air and thus avoid contributing to the "greenhouse effect." Information from Bart Lawrence, Soil Conservationist-Plant Materials,. Guam, Micronesia, USA.

87 Suggestion from Linda Friar, Florida Coordinator, South Florida Ecosystem Restoration Task Force, Miami, Florida.

88 Glenda L. Humiston, remarks during the South Florida Science Forum, Boca Raton, Florida, May 17-19, 1999.

89 Craig Evans and Jean McGuire, *An Analysis of the Costs & Effects of Regulations on Hillsborough County Agricultural Operations,* Farming for the Future, Inc., Boca Raton, Florida, January 1997.

90 Dick Marsh, an economist with South Florida Water Management District, states: "The discussion of agricultural land values ... seems to mix the issues of valuation of non-market values for use in benefit-cost analyses and other public decision making processes with the issue of property assessment for taxation and with the issue of land prices. Consequently, at different points ... it appears [the report] is saying agricultural land is overvalued and at other points that agricultural land is undervalued. One approach is to focus on the separate reasons for which agricultural land is valued (both in the market and in public decision-making) and indicate whether, how and in what direction markets, resource management agency decision-making processes, and taxation practices tend to influence the use of land and the retention and/or expansion of 'desirable' agricultural land values."

**Response:** Dick makes a valid point. And he suggests a very good approach for examining this issue, which has been incorporated into the priority actions listed in Section 5, *Integrating Agriculture into the Landscape.* The discussions about land value in various parts of the report are intended to make four points: 1) land use tends to follow economics, 2) the market provides very little value for the natural and ecological amenities found on ag lands, 3) lacking any market value for these amenities, these lands tend to be valued solely by a units-per-acre yardstick, and 4) this greatly affects the decisions a landowner makes on how land is used, especially when agriculture starts to become unprofitable.

The result is a tendency to eliminate the features from the land for which the lowest value is assigned — wetlands, wildlife habitat and open pastures — and to convert land to the economic activities for which the highest value is assigned — shopping centers, commercial centers and houses. The rising cost of land, which is skewed away from agriculture and toward development, prices many farming activities out of existence whenever development draws near. Hence, as a direct result of the way in which land is appraised and valued, we almost predetermine that the last crop will be asphalt.

91 Frank Mazzotti, Ph.D., Associate Professor of Wildlife Ecology, Everglades Research

and Education Center, University of Florida, "Environmental Research in the Agricultural Landscape," presentation at a workshop on "Integrating Agricultural and Ecological Solutions in South Florida," West Palm Beach, Florida, April 28, 1999.

92 *Final Report of the Environmental Land Management Study Committee*, (ELMS II), Tallahassee, Florida, February 1993, Resource Lands Recommendation 171, p. 109.

93 Frank Williamson, Jr., "Agriculture in Florida."

94 Suggestion from Tim W. Williams.

95 Suggested by Tom Dyer, a former ranch manager and consultant for Holland & Knight in Tampa, after reading the first draft of this paper.

96 Suggestion from Jim Strickland, Cattlemen Manatee (and a Manatee County appraiser), Myakka, Florida, in response to first draft of this report, June 10, 1999.

97 Suggestion from Frank Mazzotti.

98 Suggestion from Jim Strickland.

99 Report of the Technical Review Committee on "Integrating Agricultural and Ecological Solutions in South Florida," pp. 4-5.

100 Evans and McGuire, "The Florida Panther & Private Lands, An Economic Analysis: The Landowners' 'Conceptual Plan' Compared With Other Conservation Alternatives" (Boca Raton, Florida: Stewardship America, Inc., December 1997). A comprehensive economic analysis comparing the costs of the landowners' "conceptual plan" with conservation easements and public land purchases. Results show the "conceptual plan" is a very cost-effective alternative to other conservation approaches. All methodologies and calculations are fully explained and shown in detailed spreadsheets.

101 In written comments submitted January 26, 2000, the Florida Department of Community Affairs said: "The issue of public land acquisition and its impact on tax roles may need further discussion. One suggestion for making public land acquisition less of an issue is for taxes to be assessed according to the costs of providing new infrastructure necessary to support the intended use. The cost of providing rural infrastructure should be less than the cost for suburban infrastructure."

102 Report of the Volusia County Agriculture Protection Task Force, Volusia County, Florida, February 1992.

103 Suggestion from Tim W. Williams.

104 Comment from Gail C. Stern, Palm Beach County Horse Industry Council, Wellington, Florida, in response to first draft, June 7, 1999:

"Living in and having a large portion of our industry based in a newly formed municipality called Wellington, I have made some chilling observations regarding local government' s view on existing agriculture. On one hand we worked diligently to include an equestrian element into the 9J5 comprehension requirements by the DCA. It includes approximately 4,400 acres dedicated to the equine industry and other agricultural uses. On the other hand, that being said, it also portrays some of our village 'fathers' desiring to take all ag designations off of the 441 corridor and assigning industrial and commercial designations in ag's place. *The assumption is: that will be the future anyway.* [Emphasis added.] The new mall planned for the 441 corridor states in its DRI that the future of Wellington and the surrounding area will be much like that of Western Boca. . . To anyone who moved up here to escape the

onset of development of Western Boca it does not bode well for the once rural atmosphere.

"Sadly, it is not simply the views of certain local governments. In many meetings I have attended it seems to be a general observation that Agriculture cannot sustain itself. More and more reliance will fall to third world countries to feed us. Those of us who remember the gas shortages of the 1970' s would certainly not like to be placed in the potential position of being held hostage for our food in the future. It is totally incomprehensible, yet it could happen."

105 Dick March, an economist with South Florida Water Management District, says: "The comment on ... land use planning in Florida is on-target. The distinction between wilderness areas and rural areas is an important one that could be applied elsewhere in the document."

106 Comment from Tim W. Williams.

107 Dick Marsh states: "The discussion of agricultural land values ... seems to mix the issues of valuation of non-market values for use in benefit-cost analyses and other public decision making processes with the issue of property assessment for taxation and with the issue of land prices. Consequently, at different points ... it appears [the report] is saying agricultural land is overvalued and at other points that agricultural land is undervalued."

**Response:** The discussions about land value in various parts of the report are intended to make four points: 1) land use tends to follow economics, 2) the market provides very little value for the natural and ecological amenities found on ag lands, 3) lacking any market value for these amenities, these lands tend to be valued solely by a units-per-acre yardstick, and 4) this greatly affects the decisions a landowner makes on how land is used, especially when agriculture starts to become unprofitable.

**Downzoning** takes away the units-per-acre value of a property, but does not give back any value for natural or ecological values; hence, the effective value of the land is reduced and the farmer's ability to use it for collateral for loans is reduced.

Downzoning can even exacerbate the tendency of many owners to want to eliminate the features from the land for which the lowest value is assigned — wetlands, wildlife habitat and open pastures — and to convert land to the economic activities for which the highest value is assigned — if not shopping centers, commercial centers and houses, then other more intense types of land use, such as citrus groves, mines and hunting camps.

108 Phyllis Mofson, from the Legislative Committee on Intergovernmental Relations of the Florida Legislature, says: "You make the point that relatively high land prices in this country put our farmers at a disadvantage vis-a-vis foreign farmers in terms of their operational costs. To relieve some of the pressure to sell off agricultural lands for development, you propose compensating farmers for the other valuable social functions they provide (habitat preservation, water recharge, etc.) but this does not address the issue of uncompetitively high land prices, which owners of Florida's

agricultural lands generally don't want to give up. You point out the difficulties of buying development rights or conservation easements. Farmers in Florida generally do not want to let go of the speculative value of the development potential of their land, which in many cases is the factor that allows them to stay in business in the short term. You discuss the difference between the commodity value and the resource value of agricultural land [in Appendix A], and suggest appropriately that farmers should benefit from the resource value while the land is used for agricultural production. But how?

"Your very strong Appendix B begins to explore this question and develop policy actions – perhaps these could be moved to the body of the paper and developed further? I'm afraid they may get lost in the Appendix section. And even if implemented, how would this relieve the pressure of the commodity value of future use, absent some sort of relinquishment of development rights?"

*Response:* See description of Resource Conservation Agreement under paragraph 2), above (and at http://privatelands.org). By establishing payment rates for specific natural and ecological amenities and specific services tied to maintaining these amenities, the Resource Conservation Agreement can, over time, create a market price for these amenities and services. Because these payment rates will provide a steady stream of revenue, land with Resource Conservation Agreements will sell for more than land without, and land with amenities which can receive payments through Resource Conservation Agreements will begin to be valued higher in the market place than land without these amenities.

109 G. Wunderlich, "Owning Farmland in the United States" (Washington, DC: USDA, ERS Ag. Info. Bulletin 637), December 1991.

110 Suggestion from Tom Dyer, former ranch manager and consultant for Holland & Knight, Tampa, Florida.

111 Suggestion from Tom Dyer, former ranch manager and consultant for Holland & Knight, Tampa, Florida.

112 Frank Williamson, Jr., "Agriculture in Florida."

113 Suggestion from discussion of Concept Paper during June 30, 1999 presentation to the South Florida Ecosystem Restoration Working Group, Hutchison Island, Florida.

114 Suggestion from Tom Dyer, former ranch manager and consultant for Holland & Knight, Tampa, Florida.

115 State of Florida, Office of the Governor, Executive Order Number 99-144, creating "The Governor's Commission for the Everglades," June 24, 1999, Section 2.

116 Ibid, Section 3- IV-A.

117 Ibid, Section 3-IV-E.

118 Ibid, Section 3-IV-F.

119 Ibid, Section 3-IV-G.

120 Ibid, Section 3-IV-H.

121 Ibid.

122 Carbon sequestering is the process of providing plant cover to take $CO_2$ from the air and create a "carbon sink." Plants convert $CO_2$ to carbon, some of which ends up as roots, stems, leaves, and some of which is returned to the soil via plant residues.

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123 Assessments, Florida Statutes, Chapter 193, sec. 001.

124 F.S. 193.

125 Dick Marsh, an economist with South Florida Water Management District, states: "The discussion of agricultural land values ... seems to mix the issues of valuation of non-market values for use in benefit-cost analyses and other public decision making processes with the issue of property assessment for taxation and with the issue of land prices. Consequently, at different points ... it appears [the report] is saying agricultural land is overvalued and at other points that agricultural land is undervalued. One approach is to focus on the separate reasons for which agricultural land is valued (both in the market and in public decision-making) and indicate whether, how and in what direction markets, resource management agency decision-making processes, and taxation practices tend to influence the use of land and the retention and/or expansion of 'desirable' agricultural land values."

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126 Ibid.

127 Comment from Tim W. Williams: "True, all true, but there is almost never an excuse for not doing the right thing. Most farmers I know including myself justify continuing or improving the resource value of our property not just of benefit to our community, or the environment, but our duty as farmers, symbiants with the land, to God. Yes, I believe there could be a dollar value placed on certain cultural or conservation practices but that doesn't mean that until I get paid to continue them I will stop, or that I won't do things in a more environmentally beneficial way if I can identify one.

"We are continually striving to reduce inputs and lower costs while at the same time

helping the environment. Sometimes that means using a more expensive pesticide with little or no affect on the surrounding beneficial insect population, or doing more intensive scouting to prevent a spray or two. We have lengthened our season by 60 days to avoid using an insecticide for wireworms completely! There are much higher costs associated with this activity, but considerable monetary gains as well. I have found that when I factor in any potential positive affect on the environment we almost always win."

128 Evans and McGuire, *The Economic Contributions of Agribusiness to Hillsborough County, Florida*, 1996.

129 Ibid.

130 Kirby Green, Deputy Secretary, Florida Department of Environmental Protection, Keynote Address: "A Brief History of Public Land Acquisition and Management in Florida," Second Annual Agro-Ecology Conference: Issues Concerning Timber Management On Public Lands in Florida, organized by the University of Florida and Florida Center for Environment Studies, Jacksonville, Florida, February 25, 1999.

131 Ibid.

132 Ibid.

133 Agricultural Advisory Committee and Robert Scarfo, *Future of Agriculture Study for Montgomery County, MD* ,Montgomery County Office of Economic Development, Rockville, MD, February 1995, "Part I Table of Contents," p. v. Findings of an extensive study assessing a two-decade long experiment with purchasing development rights, transferring development rights and implementing strict agriculture land use planning and zoning.

134 Ibid, p. 5.

135 Evans and McGuire, *An Analysis of the Costs & Effects of Regulations on Hillsborough County Agricultural Operations,* p 3.

136 This section of the document attracted more spirited debate than any other. It was written to express the view that agriculture's positive contributions and efforts are often overlooked or not well understood by the general public, while its problem areas seem to attract excessive criticism and regulation. At the same time, there is less media coverage and public awareness of the contributions that are made to the some of the same problems by other sectors of society.

This view is widely held by those who are intimately familiar with agriculture. Consequently, most people in agriculture lauded the statements in this section. Environmental interests had mixed reactions. Some felt more "balance" was needed, more acknowledgment of the problems posed by agriculture. Others felt the "different perspective" offered in this section was important to consider. Representatives of government agencies — particularly regulatory agencies — were generally critical in their comments.

Stephen W. Forsythe, State Supervisor of the U.S. Fish and Wildlife Service and the USFWS representative to the South Florida Ecosystem Restoration Working Group, says: "I think ... Part I dealing with myths is unnecessarily defensive, to the extent that the stated purpose of the document is obfuscated. Maybe I am being too blunt, but the apparent attempt to change agriculture's image by pointing a finger at other

areas, like urban residents, detracts from the document ... In fact, some agricultural practices, many supported by taxpayers, have had serious negative effects on the environment. Some of these practices are still in place in South Florida, such as flood control or water use at the expense of the natural system. I think agriculture probably needs better public support and the way to get started is to develop a document that admits to the facts and lays out a course to move on from there. I absolutely agree that agriculture can and should have a positive role in protecting the remaining elements of the various ecosystems in our nation. However, I cannot overstate the necessity for this role to be one of equity. In other words, any approach developed must be balanced, which means that all parties may have to give up something."

137 Craig Evans and Jean McGuire, *The Contribution of Agribusiness to Hillsborough County, Florida,* Farming for the Future, Inc., Boca Raton, Florida, September 1996, pp 51-56.

138 This document was reviewed by several professional staff members at South Florida Water Management District. The comments were combined and submitted by Paul Warner, Lead Ecosystem Restoration Representative, who was the District's representative to the South Florida Ecosystem Restoration Working Group at the time the first two drafts of this document were prepared. The comments submitted on this paragraph read as follows:

"Specious comparison, since economic activity associated with people in the homes generating incomes and bringing in transfer payments is not counted." Also, the reviewer noted that strawberries is "one of highest value crops" and that 50 years is a "very long period." He also asked: "is the value discounted?"

**Response:** All of these factors were carefully considered in the calculations, in counting the economic activity associated with people in homes, in choosing the time period for comparison, and in ensuring valid comparisons.

The *Opportunity Cost* analyses, referred to in this paragraph, calculate the long-term value of a land use to the economy -- not just over 5 or 10 years, when large cash influxes from a change in use can cause a one-time spike in value, which can obscure the importance of one land use relative to another as a revenue generator over time.

Instead, the opportunity cost analyses calculate the revenues generated by different land uses -- including residential development, commercial activities, mining and the production of various agricultural commodities -- on an annual basis and per acre basis by using *Regional Economic Multipliers*, and then compares these revenues over a 50-year period (a period chosen to span at least one generational transfer and cover the effective economic life of most buildings and businesses, when major renovations or rebuilding would, in all likelihood, be needed).

Opportunity cost is the value over time to a county's economy that is gained or foregone when an acre of land is converted from one use to another. The opportunity cost relationships between different land uses were determined, first, by identifying which activities could take place (i.e. what products or services could be produced or

sold) on one acre of land that would generate cash revenues and, second, by identifying what portion of these cash revenues come from *imported* income. For example, the sale of a house to a person moving into a county will generate cash revenues and *import* wealth to the county. But the house will not import any additional wealth (except for home improvements and property taxes), even if the person living in the house earns money from sources outside the county.

> To understand this, it may help to consider a comparison between a farmer and an accountant:
>
> The farmer grows corn which is sold outside the county. Hence, each acre on which the corn is grown captures imported wealth for the county.
>
> It does not matter where the farmer lives, since the house is not responsible for importing wealth to the county. It is the activity of growing corn on a specific acre of land that imports wealth.
>
> The accountant, by comparison, works in an office in a downtown area. In addition to his salary, he earns dividends from bonds invested outside the county. The accountant's salary only imports wealth to the county if he is hired by someone from outside the county, who pays him with money earned outside the county. The income earned through dividends, however, does imports wealth. The wealth imported through the accountant's salary is earned through the activities conducted at the accountant's office. The accountant also spends some of his imported wealth shopping at stores in the county. It is this activity -- shopping -- that transfers this imported wealth into the county economy. And each store at which the accountant shops captures a portion of this imported wealth for the county.
>
> Again, it does not matter where the accountant lives. What is important is the activity that captures the imported wealth and where this activity takes place.

**METHODOLOGY:** The opportunity costs were determined by calculating the *economic impact* of each of the alternative uses, then comparing these impacts.

*Economic impact* is the amount of money flowing into the economy as a result of a particular industry's sales, plus related sales of supporting industries, and the resulting "ripple effects" caused by these sales through spending by employees to buy consumer goods and services.

When a business produces a product or service for sale outside a county, which channels outside dollars into the county, it is known as an "export" or "basic" industry.

In order for an economy to grow and avoid stagnation, it must import income. It is this ability to import income that determines the economic base of an area. The economic base of a community is defined as: "The economic activity of a community which enables it to attract income from outside its borders. Those activities that are net exporters of goods and services are thus basic industries; that is, they produce and sell more of a good or service than is consumed or purchased locally."

Sales of products or services for export can be generated by an acre of land in several ways, including agriculture, construction and commerce. These uses export different proportions of their products outside the county, thereby bringing dollars into the county's economy.

1. **The first step in this analysis was to determine the *direct* cash value of sales made outside the county by the businesses and industries being studied.**

   The value of agricultural sales was calculated based on data from the County Cooperative Extension Service. The value of sales for the other base industries was taken from various data from the U.S. Census Bureau.

   The sales of new construction and resales were derived from county building permit data on the construction value per unit of single family homes and condominiums, and from county planning data on average units per acre. According to the sources of *Regional Economic Multiplier* information, the export factor for new construction is always considered to be 100 percent.

2. **The next step was to calculate the sales on a per acre basis.**

   This calculation determined the exported sales per acre of each base industry's sales.

3. **The next step in the analysis was to determine the *indirect* and *induced* impacts of these product and service sales.** *Indirect* impacts include such items as:

   - Sales of key inputs – raw materials to a factory; wholesale merchandise to a store; fertilizers, chemicals and seeds to a grower, for example;
   - Sales of parts and repair services;
   - Sales of office supplies, packing materials and business supplies; and
   - Sales of legal, accounting and consulting services.

   Each sale by a local business to a base industry represents additional

economic activity for the county that, in turn, generates additional jobs and income for county residents as a result of the sales of products and services outside the county.

*Induced* impacts include:

- Spending by employees who earn their income directly from a base industry; and
- Spending by employees who earn their income from businesses that sell products and services to a base industry.

This spending translates into local retail sales; local bank accounts; purchases of consumer products, automobiles and homes; entertainment purchases through local restaurants, theaters and sporting facilities; and purchases of legal, accounting, medical, beauty, cleaning, repair and other personal services.

When sales of products and services outside the county increase, a chain reaction of increased local spending is triggered. Businesses that provide services and supplies to the base industry hire new employees and increase their local purchases to meet the increased demands of the base industry. This expansion, in turn, leads to increased hiring, output and local purchases by the firms that supply products and services to these businesses. At the same time, the additional dollars earned by employees trigger additional spending activity in the county's retail, banking, consumer product, entertainment and personal service industries.

Conversely, when sales of products and services outside the county *decrease*, a chain reaction of *decreased local spending* is triggered.

Without products and services to export to generate sales, an economy will stagnate, and eventually shrink, since money is being constantly exported out of the county through the purchase of products and services offered by companies in other states and countries, payments to state and federal agencies, travel and payments on loans (and mortgages) held by investors outside the county.

The *direct* plus *indirect* and *induced* impacts that result from base industry sales were calculated by multiplying the numbers for the *direct* cash sales of agricultural products by the *Regional Economic Multiplier* computed by the U.S. Department of Commerce, Bureau of Economic Analysis, using their Regional Input-Output Modeling System (RIMS II).

The basis of the RIMS model is a transactions table showing the

distribution of sales and the pattern of purchases for each sector of the economy. As Dr. David Mulkey and Dr. Rodney Clouser of the Food and Resource Economics Department at the University of Florida explain (Mulkey et al., 1988):

> "A sector consists of a group of firms producing similar types of products ... Households (consumers) are treated as a separate sector which produces goods and services and sells labor.
>
> "For each sector, the transactions table reflects the dollar value of sales to every other sector and the dollar value of purchases from every other sector. In effect, the table provides a picture of interactions between sectors in a regional economy and allows the flow of dollars to be traced through the economy. This information allows the calculation of multipliers which can be used to assess the total contribution of a particular sector to the economy of a region or state ...
>
> "Multipliers are measured in terms of output, employment, and earnings and were estimated for 531 sectors ... Thus, resulting multipliers capture direct, indirect and induced impacts of each sector on the state and regional economy."

The *indirect* and *induced* impacts were calculated by multiplying the numbers derived in step 1 for the *direct* cash sales made outside the county for each product and service by the *Regional Economic Multipliers* computed for Florida by the U.S. Department of Commerce, Bureau of Economic Analysis, using their Regional Input-Output Modeling System to determine the total economic impact that these sales have on the county's economy. In order to be of use, this Opportunity Cost analysis has to be calculated on a long-term basis. However, the relationships between industries as reflected in the multipliers do change, and new multipliers are calculated and put out by the Bureau of Economic Analysis of the U. S. Department of Commerce on a periodic basis. Therefore, it is important for the reader to understand that the Opportunity Cost analysis is only an estimate.

4. **Next, this number was projected over the time period for which the business or industry will continue to contribute to the economy from the acre of land it uses for its business activity.**

It was assumed that the foreseeable economic planning time frame is 50 years. Most agricultural land, if well cared for, can produce income almost indefinitely. Most buildings, if well cared for and renovated as

necessary, also can have a useful economic life of 50 years, or more.

Construction to develop an acre of land was assumed to have a cash flow of six years (with the first year being taken up by permitting) and no income thereafter, since once an acre is built on it no longer produces construction income.

Fifty periods (years) was the time frame used for real estate resales since these sales can continue to produce income almost indefinitely.

It was assumed the cash flows would increase with the rate of inflation. The average rate of inflation for the last 5 years of 2.73 percent was used.

By projecting this number over the time period in which each industry will continue to contribute to the economy from the acre of land it uses -- and applying the average rate of inflation -- comparisons can be made of the value to the economy for each use of an acre of land.

5. **Finally, present values of the cash flows were computed using a discount rate based on the 30 year Treasury Bond.**

   *Present value* represents the present worth of a flow of money over a period of time. The formula for present value is simply the sum of the annual cash flows which are each divided by one plus the discount rate.

   This is the amount of money that would have to be invested today in another business, economic activity or security ... with a rate of return at least equal to the rate of inflation ... to replace the revenue the current land use contributes to the economy.

This analysis found that residential uses contribute a great deal to the economy when a development is being constructed ... but over time it contributes very little. Agricultural land uses, on the other hand, contribute on a steady, long-term basis, and several major agricultural land uses contribute much more to the economy than residential development.

For example, over 50 years, the contribution of *residential* development on one acre of land, plus the resale of those homes, contributes $972,738 to the Hillsborough County economy ... with a present value of $547,835.

*Present value* and *net present value* are frequently used interchangeably. *Present value* represents the present worth of an even flow of money over a period of time. *Net present value* represents the present worth of a variable flow of money over time. Although for simplicity sake the term *present value* is used in this study, the *net*

*present value* formula was used since the cash flows are variable from year to year.

Strawberries, as the reviewer from South Florida Water Management District noted, is a high value crop. In fact, according to the Hillsborough County opportunity cost analysis:

> One acre of *strawberries* contributes almost $5 million ... for a present value of $982,869.

But strawberries certainly are not the highest producing form of agriculture in the county.

> An acre of *ornamental plants* contributes over $8 million ... for a present value of $1.6 million.
>
> *Aquaculture* contributes even more ... $11 million per acre ... for a present value of $2.3 million.

The point here is that agriculture, which is often thought of as a temporary land use awaiting conversion to a "higher and better use," does include some commodities that can generate more revenue for a county economy over time than most housing developments and, in some cases, can imported more revenue than some commercial developments.

It is worth noting that activities, such as residential development, that produce the majority of their revenues in the first few years of the 50-year time period will have a higher present value than activities that produce annual revenues over the entire 50-year period. This is because the revenues from development are received much closer to the present time.

Nevertheless, the opportunity cost analyses provide only one piece of the economic picture. They focus solely on comparing revenues from alternative land uses. Expenses are not considered.

The expenses incurred by local governments and schools for these land uses are examined in the *Community Revenues & Expense* analyses.

139 Based on data from four economic studies conducted by Farming for the Future, Inc. and Stewardship America, Inc. of Boca Raton, Florida:

Craig Evans and Jean McGuire, *The Contribution of Agriculture to Lake County, Florida* August 1996, 70 pgs.; *The Contribution of Agribusiness to Hillsborough County, Florida,* September 1996, 126 pgs.; *The Contribution of Agriculture to Collier County, Florida*, November 1996, 154 pgs.; and *The Economics of Land Use in Polk County, Florida*, January 1999, 112 pgs. Residential land use ratios in the four studies were: 1.00:153 in Lake County; 1.00:1.56 in Hillsborough County; 1.00:1.20 in Collier County and 1.00:1.89 in Lake County. Agricultural ratios were,

respectively, 1.00:0.07; 1.00:0.16; 1.00:0.37; and 1.00:0.08. Collier County's ratio of 1.00:0.37 reflects the services required for the large number of migrant workers employed in the county.

140 One South Florida Water Management District reviewer commented as follows:

"Questionable comparison. Property tax is not set up to match taxes and services. Clearly it is people who receive services for the most part, especially education. Also not clear what taxes were included, state contributions, etc."

**Response:** This study did not focus solely on property taxes. It looked at all revenues and expenses, including state contributions. The study clearly recognized that it is people who demand and receive services. But the emphasis of the study was on: 1) what types of land uses help to pay for these services, 2) how different types of land uses can be mixed and matched to ensure all needs within a community are met – jobs, affordable housing, social services, schools, a viable economy, etc. – and 3) how this data can be used to promote better understanding of the *impacts and consequences* of different land use options so deficits created by a change in one land use can be identified and balanced by surpluses generated through an accompanying adjustment in another land use.

For example, if a community decides to build 100 affordable housing units, it is possible to calculate fairly accurately how much of a deficit would be created by this land use for county and school budgets over time. It also is possible to calculate which other land uses can be encouraged at the same time to completely offset this deficit.

The objective here is more holistic land use planning that balances different uses, revenues and expenses, and social and environmental considerations. With the type of data that is generated by these studies, decisions are be less likely to be driven primarily by revenue issues, such as increasing the tax base, without a corresponding look at the cost of services involved, or by market pressures to convert lands that presently create a surplus into developments that may appear attractive in the short term, but which can create large deficits over the long term. Rather, a continuing balance between social, economic and environmental needs can be more easily achieved.

**METHODOLOGY:** The *Analysis of Community Revenues & Expenses* was done by reviewing county government and school financial records, as well as data published by the state and federal governments to identify revenues and expenditures generated by specific land uses.

"Revenue" represents all funds for county government and schools and includes property taxes, fees, state and federal aid and other taxes. These revenue and expense items were then allocated to land use categories using the allocation method most appropriate for that land use. The decision as to which allocation method was "appropriate" was made by examining the mission statements in the county budget

book to identify the sources of revenues and the recipients of each function's services, again by major item. School revenue was broken down by taxable values and expenses were attributed to residential uses except for adult education expenses related to Commercial/Industrial or Agricultural, and were taken from the "Report on Audit of the County District School Board, Fiscal Year Ended June 30, 1996" Table 1. The major allocation methods include taxable value, percent of building permits issued, population and land parcels. (Details on these allocation methods can be found in the Appendices of the four studies cited above).

The figures used in these analyses are **actual** revenues and expenses. They therefore include not only expenditures for actual services rendered, but also any expenses for minimum levels of service that are required but not necessarily used, such as stand-by pay for emergency personnel and rural roads that have excess capacity compared to urban streets.

141 Comment from a reviewer at South Florida Water Management District: "True!"

142 Comment from a reviewer at South Florida Water Management District: "Per acre statistics seem to have been selected to make overall impact of ag appear less significant."

**Response:** This sentence only reports on data compiled by others which, in this case, was the South Florida Water Management District (see next footnote). A massive study of stormwater runoff by the U.S. Environmental Protection Agency in the early 1980s was one of the first to show that runoff from developed areas – including homes on quarter-acre lots and parking lots and streets – can be even more toxic than runoff from farm operations. This study, which was known as the Nationwide Urban Runoff Program (NURP), showed that pollutants from developed areas contain significant concentrations of nutrients, oxygen-demanding materials, toxins and carcinogens. As you can see below, the findings were "expressed in pounds per acre per year." The same is true of the studies cited in the next footnote.

*Results of the Nationwide Urban Runoff Program*, Vol. I & Appendices (Washington, D.C.: U.S. Environmental Protection Agency, Water Planning Division, 1982), Table 2, p. G7-19.

143 Harvey H. Harper, Ph.D., P.E., *Stormwater Loading Rate Parameters for Central and South Florida*, Environmental Research & Design, Inc., 3419 Trentwood Boulevard, Suite 102, Orlando, Florida 32812, Revised October 1994, 59 pgs. Presents the results of an extensive literature search and analysis of pollutant concentrations and loading rates for selected land use types within Central and South Florida.

Similar information is included in:

Paul J. Whalen and Michael G. Cullum, *Technical Publication 88-9: An Assessment of Urban Land Use/Storm Water Runoff Quality Relationships and Treatment*

*Efficience of Selected Stormwater Management Systems* (West Palm Beach, Florida: South Florida Water Management District, July 1988), 56 pgs.

144 Comment from a reviewer at South Florida Water Management District: "These are not primary considerations in determining pollution reduction goals."

**Response:** Thanks. That's the point! Maybe some of this information should be taken into consideration. It always helps to understand the factors that lead up to a problem, since they may provide a clue in how to solve it.

145 Example provided by Frank Williamson, Jr., former chair, Governing Board, South Florida Water Management District.

146 See comment from a reviewer at South Florida Water Management District, above. He makes the same observation following this paragraph.

147 Tim W. Williams, a south Dade County potato grower says: "It should be pointed out that Agriculture is already subject to strict environmental rules and regulations, and that we must comply with the same rules and reg's. as many other industries as well as some additional ones specific to Ag. 'Our' part of the Biscayne Bay and other adjacent 'natural areas' are said to be 'Pristine' and 'outstanding'. This is not by accident. This land has been farmed for about 100 years."

148 "Water Observations," Collier County Extension Service, Naples, Florida, 1993, informational one-page handout.

149 Frank Williamson, Jr., points out: "One of the largest users of water in South Florida is not agriculture, or even the environment or urban dwellers. Canals now discharge millions of acre feet of water every year into the oceans, wasting precious water. As a result, we are water wasters, not water poor**.** It is estimated that in three counties alone — Palm Beach, Broward and Dade — about 3.3 million acre feet of runoff flow to tide each year."

Data based on memorandum from Carl Neidrauer, P.E., Senior supervising Engineer, Planning Department, South Florida Water Management District, Dec. 13, 1996.

150 Williamson continues by saying: "Capturing half of this water, which is considered possible, could supply the needs of about five million people, double the current population of those counties."

151 In a counterpoint, however, Tim W. Williams says: No! "South Florida has too much water!!! I'm afraid that the current conveyance system will be stopped up. In attempting to stop the current loss to tide in several of the canals near Everglades National Park and divert that discharge to 'the environment' farmland has been flooded as a result. Because of 'Environmental outcry' after statements about 3 million acre feet of 'vital' fresh water lost to tide, 'vital' levees and flood control canals have been degraded and filled in. Of course all the while a finding of 'no significant impact' has been attached to funding measures. Millions of dollars of produce and tree crops have been lost due to this process. Alternatives have been suggested and the Secretary of the Interior finally found out by accident about a year ago that plans supported and put in place by E.N.P. had actually had a flooding affect on South Dade Agriculture. The situation is solvable: Ag can have flood protection and the environment can have it's water... but nothing done yet will work. There must be adequate planning and funding for land acquisition and system management

after construction, and there must be Ag input, we know what will work for us."