
DRAFT DOCUMENT

Last Revised: October 2000



A NEW LOOK AT AGRICULTURE

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

Condensed Version

**A Concept Paper
to Stimulate a Dialog for Change**

**A PROJECT FUNDED BY
U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE;
FLORIDA STEWARDSHIP FOUNDATION; &
SOUTH FLORIDA ECOSYSTEM RESTORATION WORKING GROUP**

prepared by
Craig Evans
President
Florida Stewardship Foundation

**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 is a Condensed Version
of a Concept Paper that 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.

Copies of the Full Document
and Excerpts from the Full Document
are available for download at <http://us-farm.com/download.htm>.

Your comments and suggestions are welcomed.

Please Return Comments to:



Ron Smola

Intergovernmental Liaison
U.S. Department of Agriculture,
Natural Resources Conservation Service
c/o South Florida Water Management District
3100 Gun Club Road
West Palm Beach, FL 33406
Phone: 561-682-2857
FAX: 561-478-4074
Email: rsmola@sfwmd.gov

Or:

John Folks

Environmental Administrator
Florida Department of Agriculture & Consumer Services
3125 Conner Boulevard, MSC-28, Room 171
Tallahassee, FL 32389-1650
Phone: 850-414-9928
FAX: 850-488-0863
Email: folksj@doacs.state.fl.us

Or:

Craig Evans

President
Florida Stewardship Foundation
One Park Place, Suite 240
621 N.W. 53rd Street
Boca Raton, FL 33486
Phone: 561-995-1474
FAX: 561-995-1475
Email: craig@us-farm.com

Contents



Part 1: Overview

Guiding Principles	1
Purpose of this Paper	3
What Does this Mean to Me?	6
The Many Values of Agriculture	8
How Would You Answer This Question?	10
A Call to Action	11

Part 2: Conditions, Actions, Benefits

National Themes	14
Key to Acronyms	20
Proposed Course of Action	22

ECONOMICS

Section 1: 1st Component for Success:

Producer Profitability

Guiding Principle, Point to Keep in Mind, Challenge	23
Current Condition	24
Conclusions	32
Priority Actions	33
Benefits	41

Section 2: 2nd Component for Success:

A Conducive Business Climate

Guiding Principle, Point to Keep in Mind, Challenge	42
Current Condition	43
Conclusions	48
Priority Actions	49
Benefits	55

Section 3: 3rd Component for Success:

Adequate Infrastructure

Guiding Principle, Challenge	56
Current Condition	56
Conclusions	58
Priority Actions	58
Benefits	62



ENVIRONMENT

Section 4: 4th Component for Success:

Enhancing Environmental Compatibility

Guiding Principle, Points to Keep in Mind, Challenge	63
Current Condition	64
Conclusions	66
Priority Actions	66
Benefits	72

Section 5: 5th Component of Success:

Integrating Agriculture into the Landscape

Guiding Principle, Points to Keep in Mind, Challenge	73
Current Condition	74
Conclusions	80
Priority Actions	80
Benefits	84

Part 3: Endnotes

Endnotes	86
----------------	----

*...very thorough ... nothing left unturned ... applicable to
all Florida agriculture.*

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

See other reviewer comments in Excerpt19
(available for download at <http://us-farm.com/download.htm>)

PART 1:

OVERVIEW

Guiding Principles



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.

— Craig Evans
President, Florida Stewardship Foundation

The underlying premise of this paper is:

WITHOUT PROFIT, THERE WILL BE NO AGRICULTURE.

The paper also has three other key premises:

- 1. Agriculture is a vital part of the infrastructure necessary to sustain our society;**
- 2. For this reason, letting go of agriculture, allowing it to become fragmented and disappear, 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.**
- Goal #2** **Create a conducive business climate**
- Goal #3** **Ensure adequate infrastructure.**

ENVIRONMENT

- Goal #4** **Enhance environmental compatibility..**
- Goal #5** **Integrate agriculture into the landscape.**

The full document also contains eight brief articles (Excerpts 5-9 and 16-18) that elaborate on several themes central to the future of agriculture. These articles are available for download at <http://us-farm.com/download.htm>.

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 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.

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 produce the safest, cheapest, most abundant food in the world today. As a result, Americans have more 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 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 security. 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 the 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 agriculture.

The Many Values of Agriculture



Some key attributes of agriculture include:

- ◆ **economics:** Agriculture is important to the economies of many states and the nation. It makes up a major share of our economic exports to other countries and is one of the major reasons the U.S. trade deficit is not higher. Other contributing economic segments — such as food wholesaling and retailing — pump billions of dollars to the U.S. economy and account for several million jobs. For example:

Agriculture is Florida's second most important industry, producing \$18 billion in economic value each year.¹⁵ 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.¹⁶ It also accounts for more than 500,000 jobs and generates a payroll of \$10 billion per year.¹⁷

- ◆ **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 523 million acres of rangeland and pastureland -- 35% of all the non-federal land in the U.S. Second are farmers, who control 375 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 399 million acres -- also 27% of non-federal land. Together, these three groups of private landowners control 1,330 million acres -- 70% of the total U.S. land area.¹⁸

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.¹⁹ 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.²⁰

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 areas²¹, 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 sequestering²²
- ◆ 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 Excerpt 5 (available for download at <http://us-farm.com/download.htm>) 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 the 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 for Florida, and finally, an industry adaptable to the environment — what would you do to ensure its strength and continued presence in Florida?

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



***Y**ou have only to visualize a Florida 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 Florida 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.

This paper is designed to be a blueprint for action. It is still in draft form, 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 South Florida 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 participate in discussion groups and download updated copies at: <http://us-farm.com>.

PART 2:

CONDITIONS, ACTIONS, BENEFITS

National Themes



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, made up of representatives from 28 federal, state and regional agencies, two Indian tribes and 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.

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 ownership .. the future of American conservation is going to be determined 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 overpopulation, 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 and 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 negotiations. 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 also 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. The forum participants were somewhat 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.nrcs.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
FDOT	Florida Department of Transportation
FFBF	Florida Farm Bureau Federation
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
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

Proposed Course of Action



It is recommended that the South Florida Ecosystem Restoration Working Group set up one-day forums to discuss each of the five challenges facing agriculture in South Florida, using the five sections of this report as the basis for these discussions.

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 testimony, insights, comments and suggestions for actions, based on the section of the report under discussion.
2. Hold a facilitated discussion between the presenters, the Working Group and interested members of the public in the audience 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.
3. Make list of supporting documentation that is needed as a supplement to the statements of obstacles and priority actions.
4. Refine action plan – measurable outcomes, who is responsible, what will be done by what date.
5. Direct the Sustainable Agriculture Task Team to oversee progress on implementing actions and make quarterly report back to the Working Group.

1 The First Component for Success: *Producer Profitability*



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.”

– Arthur Kirstein, IV
Agricultural Economic Development Coordinator
Palm Beach County

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: The Task Force needs 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 Task Force to address. To assist in making this determination, obstacles that result from free market forces are indicated by a bracketed notation: [Free market factor].²³ 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.

- ❑ **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]
- ❑ **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.²⁴ [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 - 1 lb	\$ 0.25	\$1.00	25%
Valencia Oranges - 1 lb	\$ 0.23	\$ 1.62	14%
Beef - 1 lb	\$ 0.68 ²⁵	\$ 4.50	15%
TOTAL	\$ 4.66	\$ 21.12	22%

- ❑ **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]

- ❑ **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.²⁶ 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,²⁷ 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 ...

- ❑ **Foreign competition has seriously cut into profits** and, for some sectors of the agricultural industry, eliminated them. [Free market factor]
- ❑ **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.²⁸
- ❑ **Agriculture is not included in any of the mainstream economic development or business development efforts conducted at the state or county level.** Virtually no effective effort is being made by any economic development or business development agency 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.²⁹
- ❑ **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]

- ❑ **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,³⁰ 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*.

- ❑ 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.³¹
- ❑ **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:

- ❑ **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/pdf/files/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 1989.³² 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 policies 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 policies*
- *“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

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

- *“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].”*
- *“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.*
- *“Recall that 930 million acres of agricultural land are at stake.*
- *“Widely dispersed farm ownership still existed in the 1970s ...*
- *“‘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.*
- *“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.³³ **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 Excerpt 9 - “An American Tragedy,” available for download at <http://us-farm.com/download.htm>)*
- *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.”*

- 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)*
- *“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.”*
- *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:

- ❑ **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.
- ❑ **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.”³⁴ 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:

- ❑ **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.³⁵

- **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.³⁶ 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.³⁷

- ❑ **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.”³⁸

- ❑ **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:

- ✓ Improve opportunities for **profitability**, especially for small- and medium-size producers
- ✓ Initiate **economic development** efforts to retain and capitalize on existing agricultural activities
- ✓ Expand **marketing** to increase sales of agricultural products from South Florida
- ✓ 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"
- ✓ Reduce the impact on profitability caused by 1) **exotic and invasive plants, pests and diseases** that often accompany shipments and passengers coming into the state and 2) the loss of "**minor crop**" tools
- ✓ 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
- ✓ 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*

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.
- 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.
- e) **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.

Art Kirstein 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.”³⁹

2) **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.

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.**
- ▶ Identified as a possible task for assistance from the Governor’s Commission for the Everglades

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) 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 ;**
- 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; processing Caribbean and off-shore produce; establishing new markets and crops; and expanding the 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.
- B) 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.

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. **MARKETING:**

Conclusion: Need to find ways to expand marketing to increase sales of agricultural products from South Florida.

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

- A) 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.⁴⁰

- B) *A strategy to provide improved information to producers on market needs and demands.*** This should include:
- 1) Identifying marketing opportunities**
 - 2) Providing research on commodity marketing strategies:**
 - 3) Conducting research on market development.**
 - 4) Encouraging more grower input into research agenda.**
- C) *These strategies should:***
- 1) Explore** new ways to sell existing crops and products
 - 2) Emphasize** opportunities for diversification
 - 3) Expand** visibility of South Florida produce at trade shows;
 - 4) Improve** technical assistance, communications, information delivery, media relations, resource coordination.
 - 5) Benefit** all types and sizes of agricultural operations.
- D) *Funding strategies also should be developed to pursue these ideas.***

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. TRADE:

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:

- A) *Ensure the American public receives products that meet all U.S. food safety requirements, labor laws, environmental regulations and restrictions on chemical use.***
- B) *Require that all produce brought into U.S. meet the same requirements as those imposed on American growers — or relax restrictions on American growers.***
- C) *Ban products that do not meet these requirements.***
- D) *As a first step, develop a stamp, certificate or ‘green label’ for products***

that meet all U.S. laws. Also, develop a second stamp, certificate or label for products produced using best management practices or grown with some environmental benefit.

- E) *“Ensure that future trade agreements include provisions to standardize key agricultural inputs*
- F) *Give consumers clear choices between local, domestic and foreign grown products.*

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.”**⁴¹

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

4. EXOTIC 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.”*⁴² Establish 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)**⁴³:
 - 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) Working 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.**⁴⁴

Two contributing actions recommended by NRCS are:

- **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)
- **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.**

- **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.
- **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.***
- B) ***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;***
- C) ***An interagency memorandum of understanding should be established setting forth a coordinated vision and plan of action to address consolidation;***
- D) ***A strategy should be created for implementing changes in the policies that contribute to consolidation; and***
- E) ***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. EDUCATION:

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) ***Work to establish a public policy that acknowledges the value of agriculture to the economy, the environment, the appearance of our landscape and our very survival.***
- B) ***Encourage all 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.
- C) ***Provide support and information for all campaigns***, including displays, posters, videos, bookings for personal appearances, information for an ongoing story of our food: how it's grown, who grows it, how it gets to our tables.
- D) ***Give consumers an option to donate \$1, \$3 or \$5 at the checkout counter to support American 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. 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. law.***
- E) ***As Gail C. Stern says: "EDUCATE, EDUCATE, EDUCATE ... our future depends on a truly informed public.***

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.

BENEFITS

By taking these actions:

- Producer profitability will be improved;

- South Florida consumers will be assured of having the world's safest food supply;
- South Florida consumers will continue to have the world's cheapest food which, in turn, will allow Floridians to spend more money on other pursuits;
- South Florida 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 food needs, and ensure South Florida 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.

2 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.”⁴⁵

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.”⁴⁶

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, be able 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,⁴⁷ which is summarized in Excerpt 7 - “The Problems with Regulations” (available for download at <http://us-farm.com/download.htm>). 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 Excerpt 7).

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.**
- ❑ **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 Excerpt 7).⁴⁸
- ❑ **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.⁴⁹

- ❑ 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.⁵⁰

- ❑ **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.**⁵¹

- ❑ **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 operationand for which the farmers could not see *any appreciable benefit* to public health, safety or the environment.⁵²

- ❑ **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.*⁵³

And he adds:

*The drive for certainty has destroyed, not enhanced, law's ability to act as a guide.*⁵⁴

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.

Finally:

❑ **“Strict regulation of agriculture may accelerate urbanization.”⁵⁵**

In written comments to this report 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 Excerpt 7 - “The Problems with Regulations” (available for download at <http://us-farm.com/download.htm>) 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 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 Excerpt 7 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.**
- 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.**
- 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 Endnote⁵⁶.

- ❑ **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 easily 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 integrating 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.

- C) ***This approach holds the potential to actually exceed current minimum standards and requirements.*** And it could provide a *net environmental benefit* over current regulatory approaches.
- D) ***The Integrated Operating Plan would be a step-by-step “how to” guide to be used by all employees, supervisors and managers.***
- E) ***The intent here 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 will 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.
- F) ***The Integrated Operating Plan would be designed to:***
- 1) **Streamline 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.
 - Cultivate a “customer service” attitude among regulators toward agricultural industry.
 - 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>)

- Provide information on who to contact for more specific information within each agency.
 - Give each person applying for a farming-related permit an Ag advisor (champion/caseworker) — someone to assist them through the entire process
 - **Recognize that the costs of compliance cannot be passed on to buyers of farm commodities.**
 - **Provide producers with a way to come into compliance at a lower cost.**
 - **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.”**
 - 3) **Tie regulations to good science.**
 - 4) **Develop and use Best Management Practices (BMPs) in lieu of permitting.**
 - 5) **Eliminate unfunded mandates.**
 - 6) **Provide alternatives to the current regulatory approach to addressing environmental problems**
 - 7) **Incorporate incentives for conservation practices to care for and maintain ecological values in natural areas**
 - 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.**

- G) ***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.
 - 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.”⁵⁷**

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.**

3. ALL POLICY AREAS:

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.*

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.

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 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.

3 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.”⁵⁸ & ⁵⁹ (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.**
- ❑ **Rural road maintenance receives a low priority** which results in more wear and tear on trucks, 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.**
 - “A basic rule of thumb is that as technology migrates, the local infrastructure deteriorates.
 - “Our role is to maintain the critical mass because once we lose an industry and its infrastructure, it will not come back.”⁶⁰

- ❑ **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. TRANSPORTATION SYSTEMS:

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.

- 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.*
- 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.*

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;⁶¹**
- **takes the needs of agriculture into consideration; and**
- **provides for the transportation of agricultural products and supplies.**

2. LABOR:

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. 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).
- 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. 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. **ENVIRONMENTAL RESTORATION/
REGIONAL WATER MANAGEMENT:**

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 sequestering⁶²;
 - 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 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.

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 by the C&SF Project (from WRDA 1996)

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.

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 ...

“We also need to consider the unique productivity of south Florida's farmland. The Everglades Agriculture Area is a prime example. If we take an additional 10,000 acres of the Everglades Agricultural Area out of production, how much more land would have to come into production to replace this? It could be as high as 20,000 to 30,000 acres.”

— Glenda L. Humiston, Deputy Under Secretary
Natural Resources & Environment
U.S. Department of Agriculture
Washington, D.C.⁶³

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,⁶⁴ which is summarized in Excerpt 7 - “The Problems with Regulations,” and is available for download at <http://us-farm.com/download.htm>. 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 often 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.⁶⁵

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.
- ✓ 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 millenium** 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.* Emphasize:
 - 1) **Steps to reduce nutrient runoff and impacts of pesticides and herbicides on ground water and surface water supplies;**
 - 2) **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;**
 - 3) **Steps to coordinate BMPs and “Recommend Practices” among different agencies.**
- 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.”⁶⁶**
 - 2) **Complete implementation of the “Resource Conservation Agreement” program developed by Florida Stewardship Foundation.** 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 hydrologic patterns to care for and maintain wetlands, wildlife habitats, water detention areas, water recharge areas, and other environmental values. (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 and how it works.)

- 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.**
- 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.”⁶⁷
- 7) **USDA, working in concert with DOACS, IFAS and other groups, should:**
 - 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
 - Create a scientific framework to ensure the best decisions possible, build confidence and consensus in decision making.
- 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.”
- 9) **Develop ways 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.”⁶⁸

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 Excerpt 6 - “How Much are Natural Resource Values Worth?” available for download at <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 Excerpt 5 - “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 [Excerpt 6 - “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. NEW THINKING FOR THE MILLENNIUM:

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.”***⁶⁹
- C) ***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.”***⁷⁰

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

Here’s how:

D) 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.

E) Establish lease program through which government agencies “lease”

land from private landowners to pay costs of establishing specific practices or paying for management services. 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

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. The report summarizes 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 [phosphorus], and it is anticipated that regulatory standards will be changed from the current 50 ppb to [parts per billion] 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.”⁷¹

BENEFITS

By taking these actions:

- 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*,⁷² 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 Endnote⁷³.)
 - ◆ 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.

5 The Fifth Component for Success: Integrating Agriculture into the Landscape



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 ...”⁷⁴

Also:

*“It may help to clarify what needs to be done if the focus was shifted from preserving land, to preserving **farmers**.”⁷⁵*

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 Endnotes⁷⁶&⁷⁷

- ❑ **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, leeches, 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:
 - rising real estate values
 - loss of land available for — and appropriate to — agriculture production, services and processing.
 - urban encroachment
 - parcelization
 - 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.** 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.⁷⁸ (For more detail on this issue, see Excerpt 6 - “How Much are Natural Resource Values Worth?” available for download at <http://us-farm.com/download.htm>)⁷⁹
- ❑ Large parcels of land are needed for ecological integrity. **The largest culprit in breaking up large, privately owned parcels is federal estate taxes.** (See Excerpt

- ❑ **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.⁸⁰ 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 Excerpt 9 - “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 Excerpt 17 - “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 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.*
 - **“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 IN SOUTH FLORIDA. 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:

- ✓ 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.
- ✓ 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.
- ✓ Reconcile urban development needs with their impact on agriculture and accommodate **new development** without displacing agriculture.
- ✓ 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.⁸¹**
 - ▶ 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.**

2. 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 be 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 Excerpt 17 (available for download 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”***
- B) ***Need to ensure agriculture-friendly zoning:***
- Allow for the construction of farm-related buildings, migrant worker housing and support industries in agricultural areas;
 - Limit condemnation of agricultural lands by public bodies;
 - 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;
 - “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.”⁸²

- 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.”⁸³
- 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.

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. RURAL COMMUNITIES:

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.”*⁸⁴ This should include:
- 2) **“a review of farm worker housing needs and recommendations for alleviating farm worker housing shortages.”**⁸⁵
 - 3) **“Guiding the appropriate use of land impacting the Everglades ecosystem.”**⁸⁶
 - 4) **“Enhancing sustainable and environmentally compatible development that sustains the regional economy and supports and healthy Everglades ecosystem.”**⁸⁷
 - 5) **“Creating sustainable agricultural programs compatible with Everglades ecosystem restoration and protection.”**⁸⁸
 - 6) **“Allocating natural resources to support natural and human systems.”**⁸⁹

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.**

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:

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.

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 ? $150 \times 5000 = 750,000$ while $150 \times 20,000 = 3,000,000$ 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' Diarrhea," 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 in 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. Florida Department of Agriculture and Consumer Services, “Florida Agriculture Overview,” Ag Facts, p. 1, 1998.
16. Ibid.

17. 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 Florida Stewardship Foundation, 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 Florida Stewardship Foundation 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.

18. U.S. Department of Agriculture, Natural Resources Conservation Service, National Resources Inventory, 1997.
19. 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.
20. 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.

21. Suggestion from Pat and Brady Pfeil, Carlton Bar A Ranches and Groves, Arcadia, Florida. Response to first draft, June 10, 1999.
22. Carbon sequestering is the process of providing plant cover to take CO₂ from the air and create a “carbon sink.” Plants convert CO₂ 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.
23. 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.
24. 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.
25. 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.)”
26. According to statistics compiled by the Florida Department of Agriculture and Consumer Services, Bureau of Information Services, and the Florida Farm Bureau Federation.

27. 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.”
28. Note from Paul Warner: “Need to point out what standards are used re: quality of imports.”
29. 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.”
30. 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.
31. 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.

32. 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.
 33. G. Wunderlich, "Owning Farmland in the United States" (Washington, DC: USDA, ERS Ag. Info. Bulletin 637), December 1991.
 34. Ibid.
 35. Note from Paul Warner: "need more documentation here."
 36. "Florida Agriculture Facts," Florida Department of Agriculture and Consumer Services, Tallahassee, Florida, 1996.
 37. Note from Paul Warner: "Plausible explanation. Needs more documentation."
 38. Note from Paul Warner: "Lacks discussion of present efforts to control impacts."
- Response:** See Priority Actions, "Exotic Control," under Section 1, *Improving Producer Profitability*.
39. 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.
 40. 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."
 41. Paul Warner says: "Documentation of how present trade agreements to not do this is needed."
 42. Suggestion from Rick Roth.
 43. Robert F. Doren, "Strategies for Success," (Miami, Florida: South Florida Ecosystem Restoration Working Group, December 1999), draft document, pp. 4-5 and 19-26.
 44. Paul Warner says: "Evaluation of present efforts and additional opportunities needed."
 45. Philip K. Howard, *The Death of Common Sense: How Law Is Suffocating America*, (Random House, New York, New York, 1994), p. 173.
 46. Frank Williamson, Jr., "Agriculture in Florida."

47. 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.
 48. Ibid.
 49. Craig Evans and Jean McGuire, *An Analysis of the Costs & Effects of Regulations on Hillsborough County Agricultural Operations*, p 49.
 50. Ibid.
 51. Ibid.
 52. Ibid.
 53. Ibid., p. 27.
 54. Ibid., p. 30.
 55. 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
 56. 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.
57. Frank Mazzotti, Ph.D., “Environmental Research in the Agricultural Landscape.”
 58. 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.”

59. 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.”
60. Comment from W.P. Pat Cockrell, Director of Ag Policy, Florida Farm Bureau Federation, in response to 2nd draft of paper.
61. ELMS II Final Report, Agricultural Lands Recommendation 166, pp. 106-7.
62. Carbon sequestering is the process of providing plant cover to take CO₂ from the air and create a “carbon sink.” Plants convert CO₂ 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.
63. Glenda L. Humiston, remarks during the South Florida Science Forum, Boca Raton, Florida, May 17-19, 1999.
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.
65. 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.

66. 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.
67. *Final Report of the Environmental Land Management Study Committee*, (ELMS II), Tallahassee, Florida, February 1993, Resource Lands Recommendation 171, p. 109.
68. Frank Williamson, Jr., “Agriculture in Florida.”
69. Suggestion from Tim W. Williams.
70. Suggested by Tom Dyer, a former ranch manager and consultant for Holland & Knight in Tampa, after reading the first draft of this paper.
71. Report of the Technical Review Committee on “Integrating Agricultural and Ecological Solutions in South Florida,” pp. 4-5.
72. Evans and McGuire, “The Florida Panther & Private Lands, An Economic Analysis: The Landowners' ‘Conceptual Plan’ Compared With Other Conservation Alternatives” (Boca Raton, Florida: Florida Stewardship Foundation, 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.
73. 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.”
74. Report of the Volusia County Agriculture Protection Task Force, Volusia County, Florida, February 1992.
75. Suggestion from Tim W. Williams.
76. 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.”

77. 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.”
78. Comment from Tim W. Williams.
79. 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.

80. G. Wunderlich, "Owning Farmland in the United States" (Washington, DC: USDA, ERS Ag. Info. Bulletin 637), December 1991.
81. Suggestion from Tom Dyer, former ranch manager and consultant for Holland & Knight, Tampa, Florida.
82. Frank Williamson, Jr., "Agriculture in Florida."
83. Suggestion from discussion of Concept Paper during June 30, 1999 presentation to the South Florida Ecosystem Restoration Working Group, Hutchison Island, Florida.
84. 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.
85. Ibid, Section 3- IV-A.
86. Ibid, Section 3-IV-E.
87. Ibid, Section 3-IV-F.
88. Ibid, Section 3-IV-G.
89. Ibid, Section 3-IV-H.