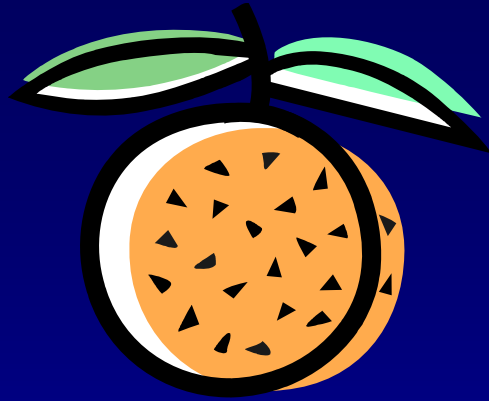


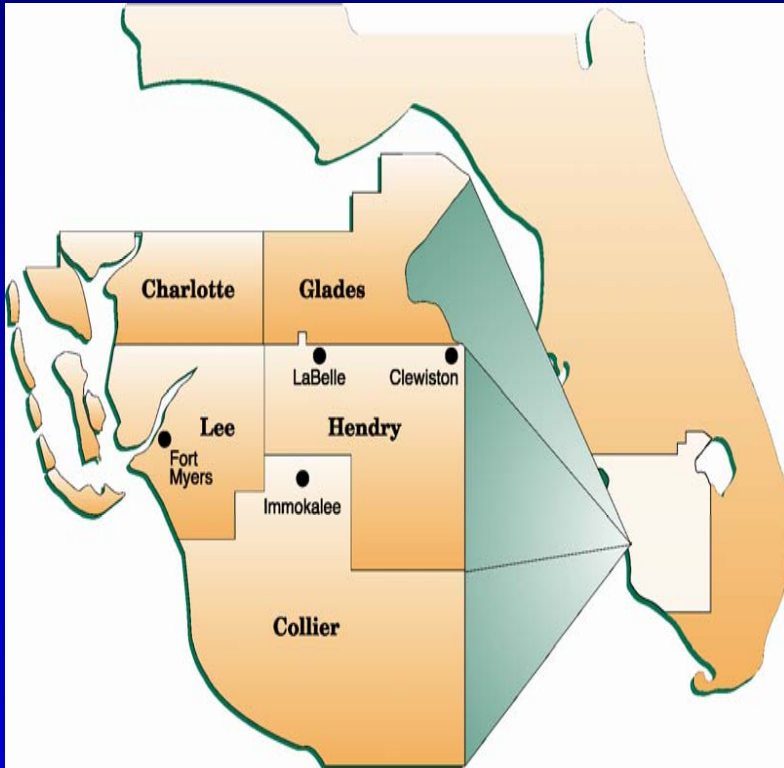
# Agriculture's Role in the Lee County DR/GR

Presentation to the  
Southeast Lee County DR/GR Committee  
Ft. Myers, Florida  
April 9, 2008

Fritz Roka  
University of Florida – IFAS  
Southwest REC



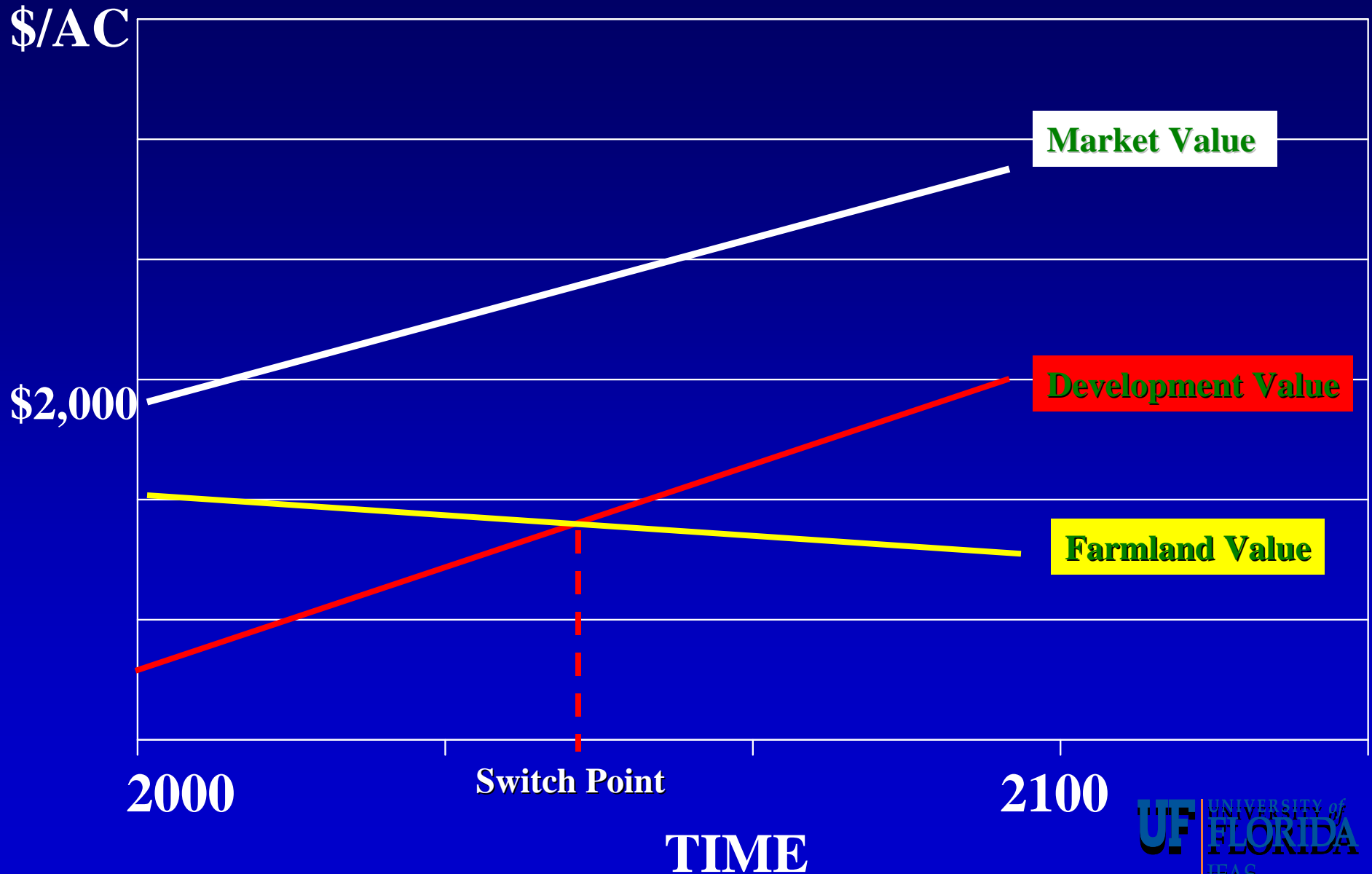
**UF** UNIVERSITY of  
**FLORIDA**  
IFAS



# 3 Challenges

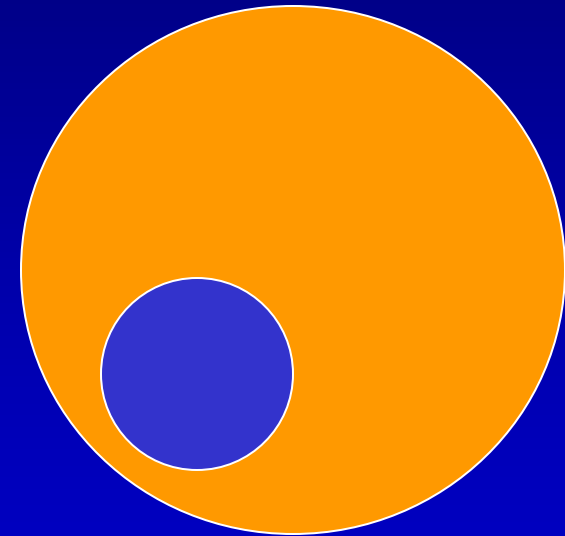
- Economics of commodity markets
- Development pressure on land prices
- Regulations

# General Time Trend of Land Values



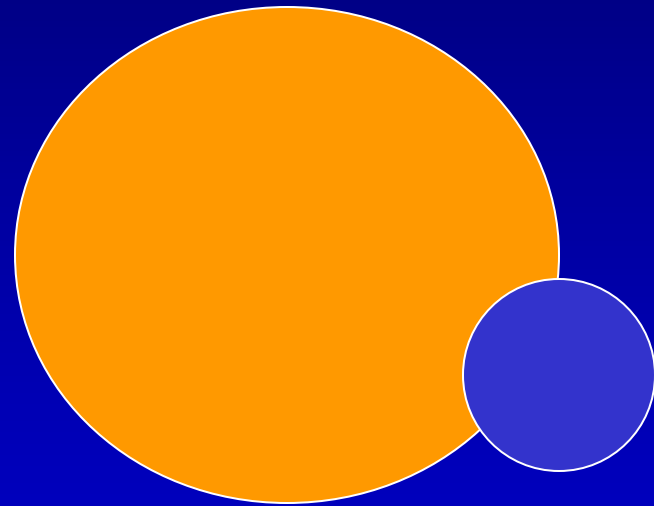
# Regulations: Facilitating Commerce

- **Trade & Commerce**
  - Legal contracts
  - Grades & standards



# Regulations: Protecting the Public Interests

- **Min Wage**
- **Environment**
  - Water use permits
  - ESA



Lemonade from Lemons

# "Farming" Environmental Services

- Wildlife habitat / Open Space
- Urban waste recycling
- Water quality
- Water storage
- Carbon sequestration

# Question?

How do we measure values for  
“non-market” goods?

# Measures of Economic Gain

## Northeast Florida Study

- Kiker and Hodges (2004)
- 4 county area (3,115 sq.mi)
- Ag & Forestry: \$400 million
- Recreation: \$530 million
- Value of natural ecosystems:

\$1.5 Billion

# Willingness-to-Pay Silvopasture Study

- Shrestha & Alavalapati (2004).
- Case study in the Lake Okeechobee region
- Silvopasture – WQ, carb seq, habitat
- Household survey (152) south-central FL
- Results: Avg household WTP

\$30 – 70/year for 5 years

# Actual Public Expenditure Panther Habitat Study

- Main & Roka (1998)
- 4 public tracts in SWFla
- Land acquisition and annual maintenance

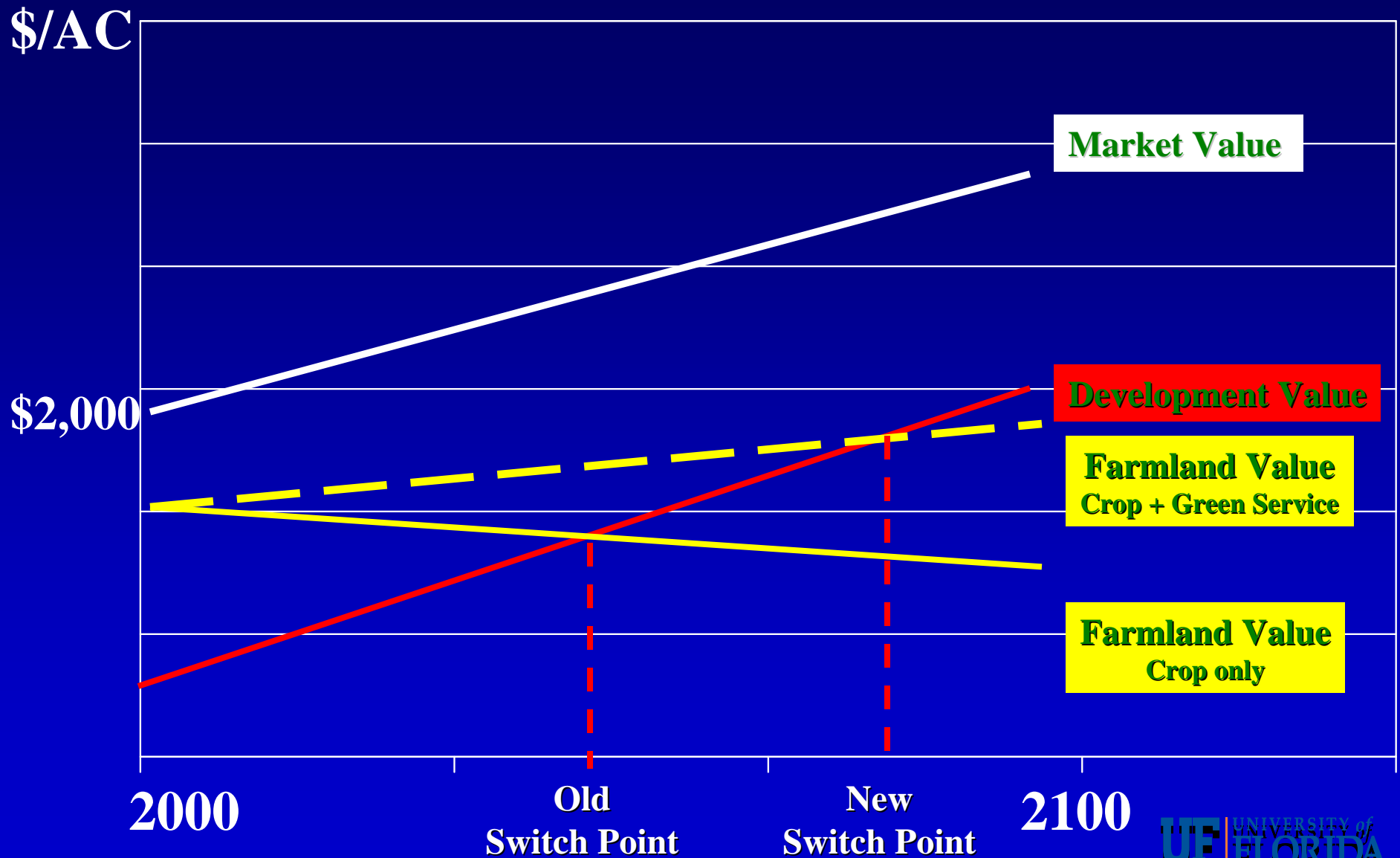
- Results:

\$30/acre-year

# Creating New Revenue Streams, NOT Subsidies

- Public – Private partnerships
- Conservation easements / TDRs
  - Buying the house
- Eco-service payments
  - Annual maintenance of the house

# Revised Time Trend of Land Values



# Outline for further work

- Economic valuation studies
- Quantifying ecological benefits
- Political consensus
  - Aligning Environmental with Agricultural interests
  - Creating viable revenue streams