

**SUSTAINABLE  
PRODUCTION OF  
PROCESS VEGETABLES  
IN THE US:  
INTRODUCING THE SCRI  
GRANT**

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## What is Sustainability?



- Sustainability is a balanced approach to incorporating environmental, social and economic components into food production systems

## Why should we document?

- Value chain and consumers demand it
- Gain and keep market share
- Domestic and international

## How can we document sustainability?

Multiple programs are available:

- Keystone, Field to market
  - Performance metrics, corn, soy, wheat, etc.
  - Outcomes: air/water quality, energy, GHG, etc.
  - Industry – driven
- Various Value Chain Initiatives
  - Walmart, McDonalds, Sysco, NPC, etc.
  - Regional, national, global
  - Increasing range of products
  - Industry - driven

## Currently Involved with Processing Industry?

- Stewardship Index for Specialty Crops (SISC)
  - Performance metrics: fruits, vegetables, nuts
  - Outcomes: air/water quality, biodiversity, GHG, etc.
  - Industry-driven
- National Initiative for Sustainable Agriculture (NISA)
  - Originated in Wisconsin
  - Practice-based
  - Crop and animal systems
    - Soy, rice, vegetables, cranberry, etc.
    - Dairy, pork
  - Producer-driven

### Where does the processed vegetable industry fit?

- Competitive industry – processed vs. fresh
- Competing individual companies
- Multiple assessments
- Global demands: Europe, Pacific Rim
- No economic return

#### Meeting the Challenge?

- Industry active with
  - Stewardship Index for Specialty Crops – Industry based
  - Private initiatives – value chain based
  - NISA – through USDA:SCRI – Producer driven

### USDA SCRI Grant

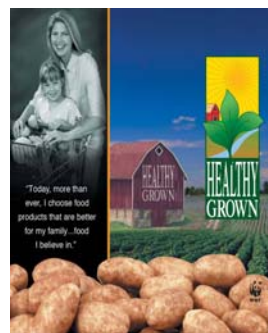
Building Market Foundations for Sustainable Vegetable Production and Processing

- Kickoff 3-5 pm today, 9-noon Wednesday
- USDA, Specialty Crops Research Initiative – Paul Mitchell
- Patterned after Healthy Grown
- Sweet Corn and Green Beans
- Midwest (WI, MN, IL), Pacific NW (WA, OR), East (NY)
- Partnership of processors, growers, research, scientist
- National processor/grower advisory board

### USDA SCRI Grant- Expected Outcomes

- Baseline of current sustainability status and past achievements documented
- Whole farm and crop assessment will meet all assessment needs
- Key practice drivers identified
- Key practices tested and outcomes measured in targeted, on-farm research
- Strengthen linkages between grower practices (NISA) and measureable outcomes (SISC)
- Identify traits valued by consumers and value chain and determine economic cost

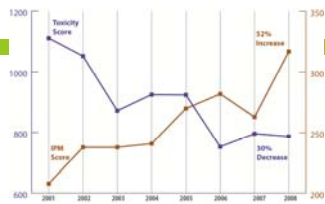
### Origins of Processed Vegetable Sustainability in Midwest



#### Guiding Principals

- Grower driven
- Research-based
- Ecosystem friendly practices
- Cap on pesticide toxicity
- Independent certification
- Return to growers
- Market Launch 2001

## Achievements



- Successful implementation on 10% of fresh potato production
- 52% increase in ecosystem friendly practices
- 30% reduction in pesticide toxicity
- National recognition (USDA)
- “Green” perception

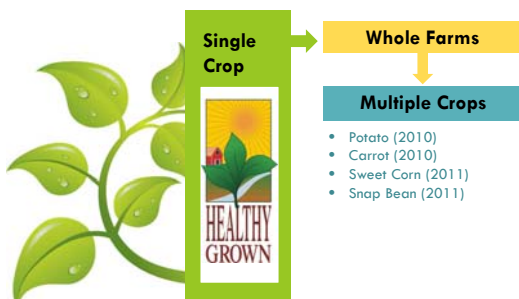
## Drawbacks

- Certification expensive
- Failed to generate expected grower payback
- Ahead of its time in 2001-2005?



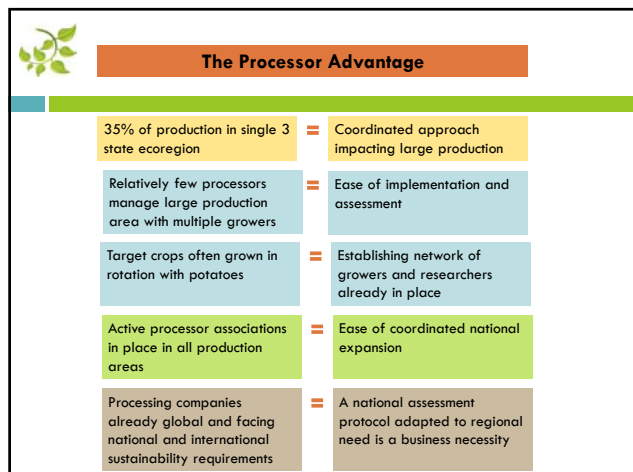
BUT – 10 years later,  
Wisconsin potatoes gaining  
market access and price  
premium based on  
sustainability

## The Next Step: Expansion into Processing Vegetables



## Advantages of documenting sustainability of processing industry

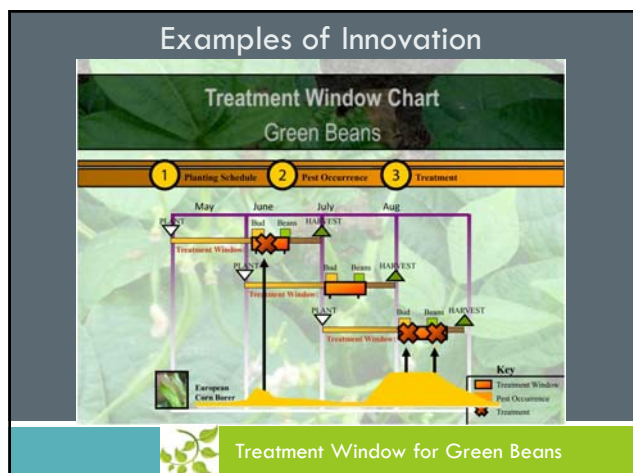
- Ideally positioned to serve as a national model
- Industry has pioneered sustainability
- Unique food system from both processor and research perspectives



## Advantages of Processing Vegetables for Expansion to Regional Level

### The Research Advantage

Extensive research already in place	= Faster implementation
Production manuals for growers already developed	= Faster adaptation
Processing companies proactive in developing sustainable practices	= Needed to remain competitive economically



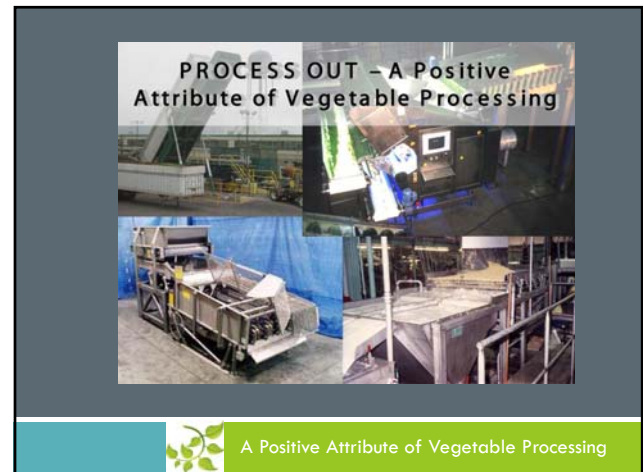
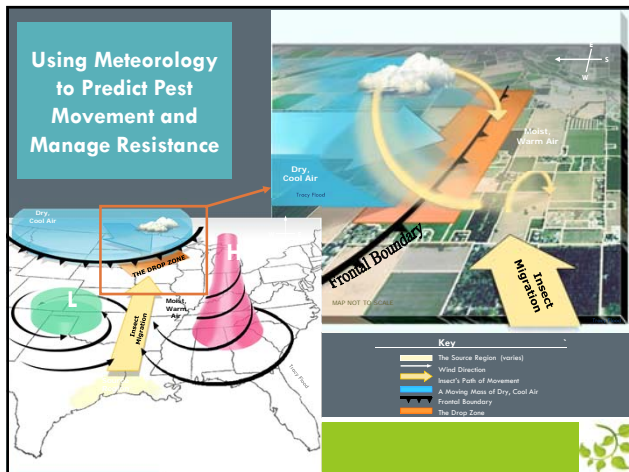
## Reducing the ecosystem impact of insecticidal application on green beans

Target: *Ostrinia nubilalis/helicoverpa zea*

Time	Insecticide	Number of Apps	average \$/acre (season)
1980-1990	parathion+carbaryl	4-8	\$24.00
1990-1998	acephate, methyl parathion	2-4	\$28.50
1999-present	bifenthrin	1-2	\$6.00

Target: *Delia platura, empoeae fabae*

Time	Insecticide	Number of Apps	average \$/acre (season)
1980-2005	chlorpyrifos+dimethoate	1-2	\$16.00
2005-present	thiamethoxam	1	\$8.00



### The Future: National Initiative for Sustainable Agriculture (NISA)

- Federation of producer-driven sustainability initiatives
- Implementing sustainable farm and crop management systems that are regionally appropriate and can effect change at the farm level
- Harmonized to create a national standard
- Satisfy the performance expectations of all segments of the value chain
- Partnerships and synergy with other sustainability programs ( eg SISC, FTM)

### Conclusions

- Yes! Sustainable processed vegetable production in the US is an achievable goal!
- The USDA: SCRI Grant provides a vehicle to achieve the goal.

