Sustainability Partnerships: Standards, Metrics & Markets

Stewardship Index for Specialty Crops

Barbara Meister, SureHarvest

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Presentation Overview

1. About the Stewardship Index for Specialty Crops
2. Preliminary Findings from Pilot Testing Metrics
3. The Path Ahead for SISC
4. Why metrics?
5. Building Capacity for
   Data-driven Continuous Improvement

Kroger

Doing Our Part

UNILEVER SUSTAINABLE LIVING PLAN

Small Actions. Big Difference.

OUR TARGETS

By 2020 we will source 100% of our agricultural raw materials sustainably:

- 10% by 2010
- 30% by 2012
- 50% by 2015
- 100% by 2020

2009 Sustainability

heart of SAFEWAY

people · products · community ·

Connecting "C

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Supplier Sustainability Assessment: 15 Questions for Suppliers

ABOUT

Values

Our Road Map for a Sustainable Supply Chain

Are we talking the same language?

We need a common language for measuring sustainability.

That common language is **metrics** – the yardsticks that measure performance –

not *what* you do (practices) but measuring the *impact* (results) of what you do.

>>>Stewardship Index for Specialty Crops

SISC Goals

"The project will offer a suite of outcomes-based metrics to enable operators **at any point along the supply chain** to benchmark, compare, and communicate their own performance. The Stewardship Index will not seek to provide standards, but will instead provide a yardstick for measuring sustainable outcomes." --SISC Introduction and FAQ, approved 12/1/2008

Why performance metrics?

1. **Respond to marketplace demand for more information**
   >>>Reduce duplicative sustainable reporting systems
   >>> Data for backing marketing claims
2. **Drive internal business management strategy**
   >>>Identify cost reduction opportunities
   >>>Drive best practices innovation
   >>>Manage risk
3. **Reduce regulatory pressure**
   >>>Solve problems proactively

Stewardship Index Coordinating Council

Bold = Steering Committee

Growers

Community Alliance with Family Farmers ● DelCabo ● Farm Fresh Direct ● Georgia Fruit and Vegetable Association ● **National Potato Council** ● Torrey Farms ● United Fresh Produce Association ● Washington Horticulture Association ● **Western Growers**

Buyers

California Sustainable Winegrowing Alliance ● California League of Food Processors ● Compass Group ● Del Monte ● Food Marketing Institute ● Heinz ● **Markon Cooperative** ● **Produce Marketing Association** ● Sam's Club ● Sodexo ● SYSCO ● Unilever ● Wal-Mart ● Wegmans ●

NGOs & Experts

American Farmland Trust ● California Rural Legal Assistance Foundation ● Defenders of Wildlife ● Environmental Defense Fund ● **NRDC** ● Organic Center ● SureHarvest ● **Sustainable Food Lab** ● University of Arkansas ● World Wildlife Fund

Metrics

PEOPLE	
	Community
	Human Resources
PLANET	
	Air quality
	GHG emissions
	Biodiversity/Ecosystems
	Packaging
	Energy
	Nutrient management
	Pesticides
	Soils
	Waste
	Water use and quality
PROFIT	
	Green procurement
	Fair price

On-Farm Metrics & Data Elements

Water Use	Soil & Nutrients	Pesticides
Applied water Crop ET	Fertilizer applied Soil organic matter	Application info Product Rate

Air Quality/Energy	Waste	Biodiversity
Equipment usage Pesticide usage Electricity usage	Harvest yields Waste items Waste streams	Vegetation types Weed cover Crop mgmt practices

2010 Pilot Testing

100+ growers in 17 crops in 14 states

Processing Tomatoes	Fresh market Tomatoes	Winegrapes
Citrus	Potatoes	Stone Fruit
Leafy Greens	Onions	Berries
Herbs (fresh)	Carrots	Almonds
Cherries	Pears	Apples
Green Beans	Sweet Corn	

With funding from the USDA-NRCS Conservation Innovation Grant

Pilot Objectives for 2010

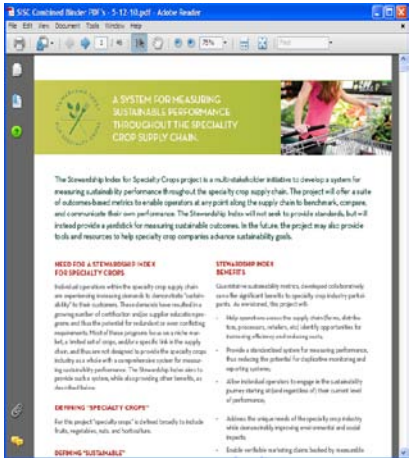
Evaluating:

- Feasibility of data collection
- Data collection costs
- Usefulness and value for participants
- Usefulness and value for buyers/customers

Results will be used to refine the draft metrics.

Participant Materials

Pilot Binder



Pilot PDF

Data Entry Spreadsheet

A	B	C	D	E	F	G	H
	Data Item	**Guidance**	**Unit**	**2009 Amount**	**2010 Amount**	**Data Source**	**Data Availability (0-4 scale)**
	Total Farm Area	*Enter total land parcel of this site.*	*Acres*				
	Farm area with vegetative cover	*Enter total area currently vegetated, including cropped and non-cropped lands*	*Acres*				
	Farm area with perennial vegetative cover	*Area with perennial vegetation*	*Acres*				
	Area with Predominantly Native Vegetation	*Area where >50% of vegetation is native (visual estimate)*	*Acres*				
	Area free of noxious weeds	*Area free of listed noxious weeds (visual estimate)*	*Acres*				
	Cropped Area Management Score	*See below to calculate*	*Score*				
	Non-Cropped Area Management Score	*See below to calculate*	*Score*				

	Management Practices -- Cropped Areas	**Yes**	**No**
1	Cover crop		
2	Improved cover crop		
3	Residue and tillage management		
4	Integrated Pest Management		
5	Seasonal shallow water		
6	Reduce impact of farm practices on wildlife		
7	Intercropping or multistory cropping		
8	Use of multiple crop species or varieties		
9	Crop rotation		
10	Minimize pesticide drift		
11	Other (please specify): _____		
12	Other (please specify): _____		

Feedback Word Doc

PILOT FEEDBACK

Metric: Soil, Nutrient & Water Quality

Feedback

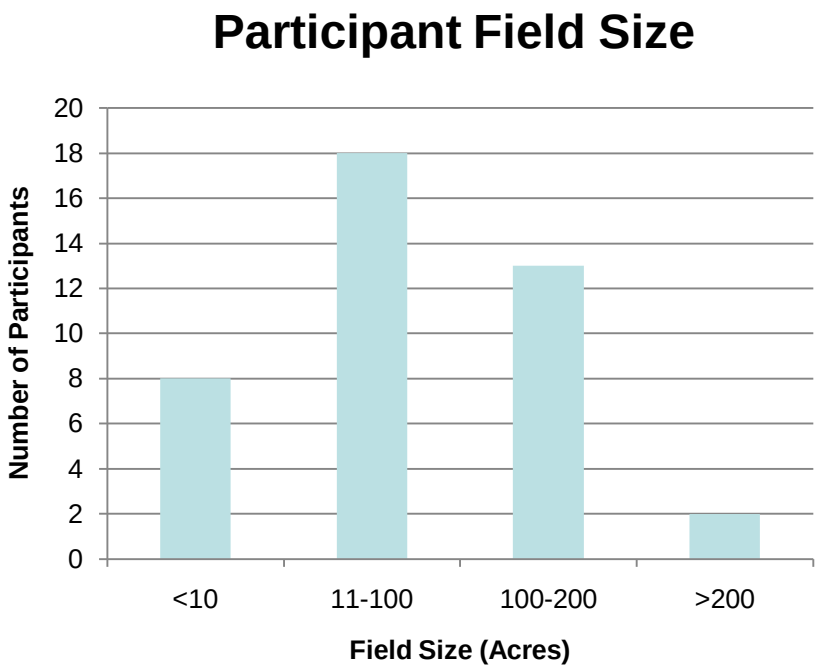
An important element of the pilot is to get your feedback on the process you went through to collect data for the metric and to get your overall impression of the metric itself.

1. How many hours would you estimate you spent gathering the data for this metric?
2. Did you incur any expenses in gathering data other than man hours? If so, how much and what for?
3. Which data was the most difficult to gather and why? Besides the feedback given in the **Data Availability** column, do you have additional feedback about gathering the data?
4. What is your overall impression of the metric and how it can benefit your operations?
5. What suggestions do you have for improving this metric?

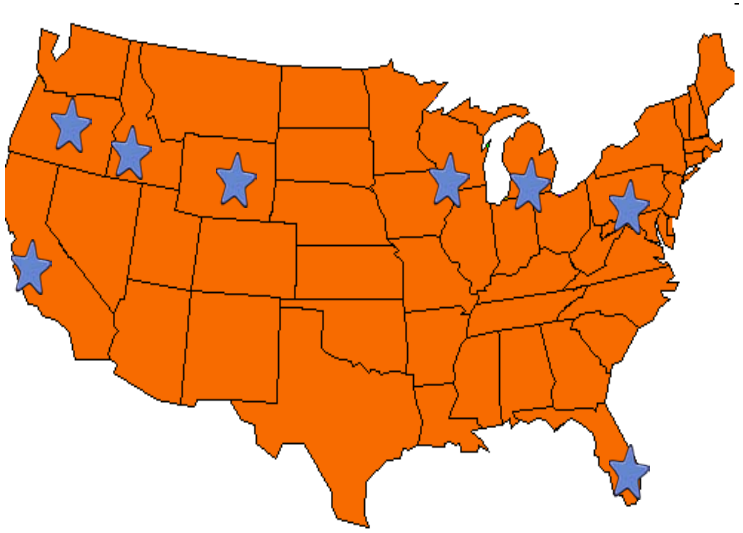
Pilot Participation

- 35* growers in 18 crops in 8 states
- 58* data sets (multiple fields, crops & years)
- 15 grower interviews with non-participants

** = data still trickling in… more growers, crops, states*



Pilot Participation – Geography and Crops



California: berry-nursery, carrots, herbs, lettuce, onions, oranges, peaches, raspberry, strawberry, processing tomatoes, walnuts, winegrapes,	**Oregon**: Onions	**Idaho**: Potatoes
Colorado: Potatoes	**Wisconsin**: Potatoes, green beans, sweet corn	**Michigan**: Potatoes, lettuce
Florida: Peppers	**Pennsylvania**: Potatoes	

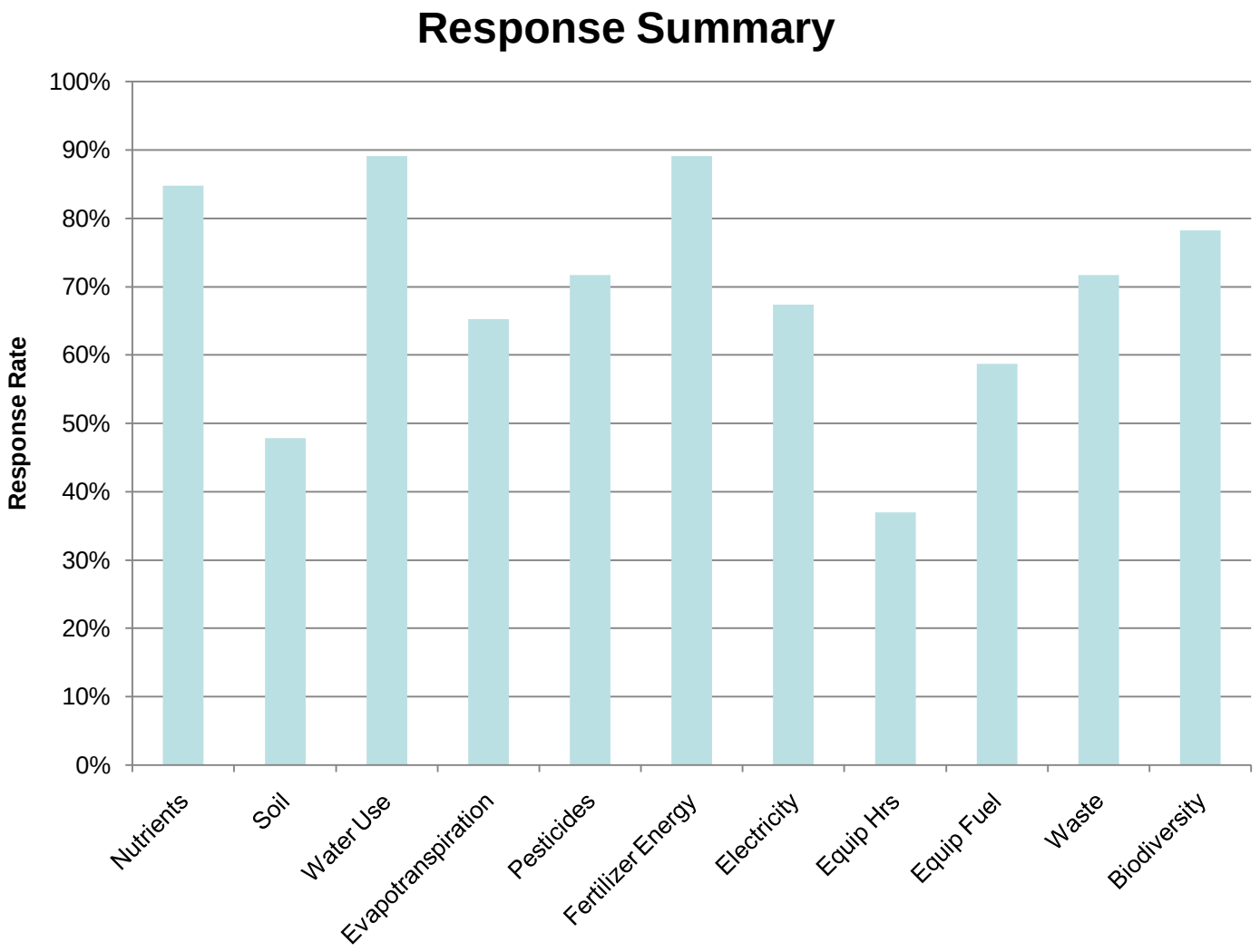
Pilot Participation – Challenges

- **Voluntary initiative** - pilot testing SISC metrics was not top of the to-do list, even when buyer called repeatedly for the data submission.
- Even for growers committed to sustainability programs, was **difficult to engage their time** commitment.
- For many, there was **not a clear perceived benefit** to the grower and concern that metrics would only advantage buyers.
- Concerns over **data confidentiality** overwhelmed perceived benefits of participation.

Pilot Quotes

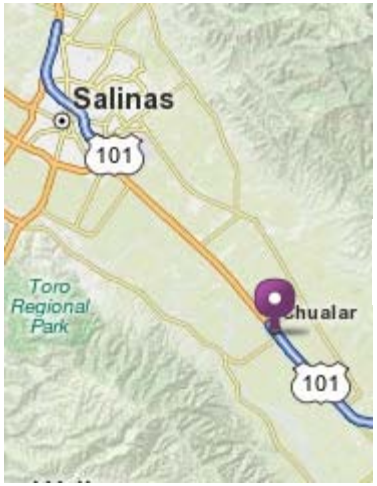
- "Establishing **baseline** is helpful."
- **"**If you can demonstrate that we will **benefit from being able to track this information**, then I am all for it. We aren't equipped to take it on right now."
- "I found out **how many kw** it takes to irrigate crop and **accurate $$ figure** in field."
- "Very difficult to define these things. The **value is in awareness of the various factors and a consciousness of them when making decisions**."
- "Crop production **data** is spread across different parts of business & **hard to find**…"
- "Overall impression is good, benefit by possibly **using less** water which will **save on energy costs** and fertilizer/chemigation applications."

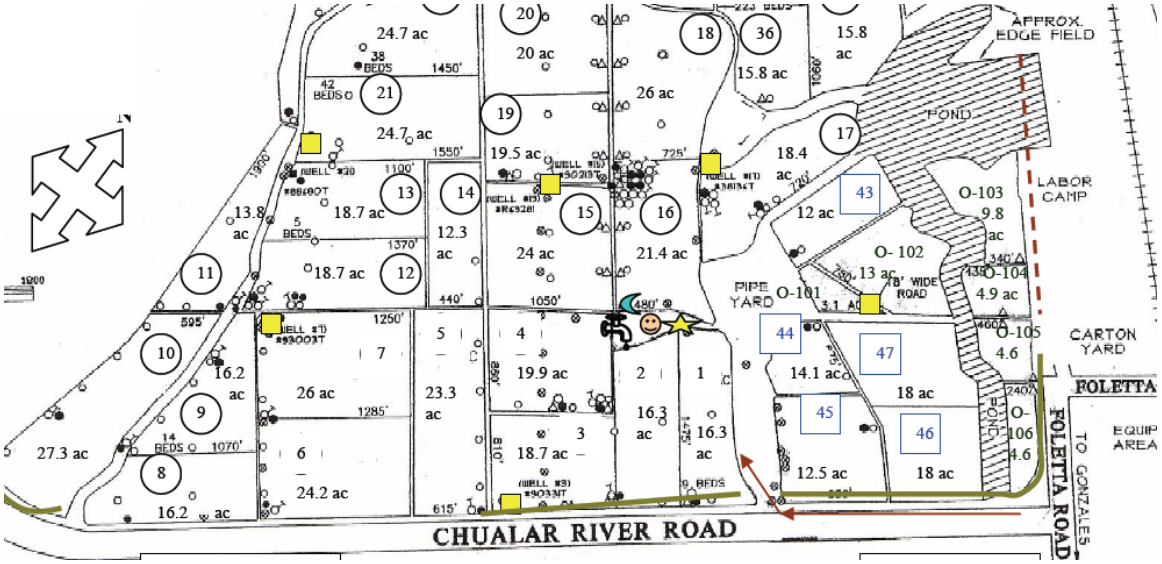
Pilot Participation – Data Areas



Response rate = those data sets that provided data for the metric areas listed

Findings –data collection complexity





Fast-paced veg production:

Lots of variables in each field = **Complexity**!

Key Findings – Data collection readiness

- Some pioneering growers collecting most of the data as requested, but the **majority of growers are not**.
- Data is **generally available, but not accessible** in the requested format.
- Some data not collected in ways that allow for **allocation** to individual fields.
- Some data incomplete; **differences in data collection** methods affected data quality.
- Data collection methods, costs, and time requirements varied.

Key Findings – Feedback on draft metrics

- The metrics are generally acceptable.
- Simplify where possible.
- Guidance on data inputs needs further revision.
- Several cross-cutting issues need to be addressed.
- The value proposition was unclear to some participants.

The Path Ahead

1. Release Beta version of 3-4 metrics by May 1.
    - Involve pilot growers in refining metrics.
    - Which metrics? Most useful to growers, most important to consumers and where growers have data.

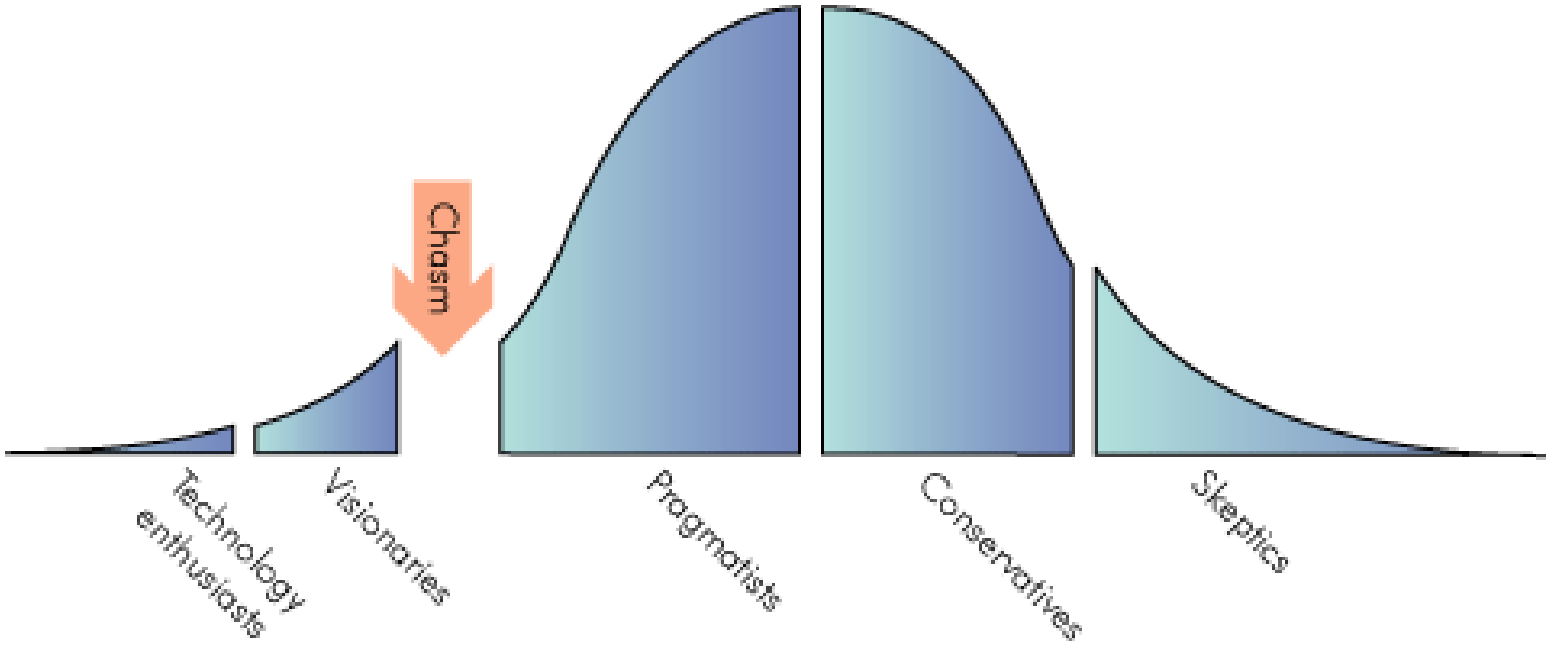
2. Continue to develop and pilot test the remaining metrics.

3. **Build the capacity for growers** – through their **trade associations** - to
    - collect data for monitoring sustainability performance
    - adopt continuous improvement "measure to manage" business strategies.

4. Begin work on data aggregation software platform with needs assessment, but as a secondary priority until more farm-level data collection capacity is built.

Performance Metrics & Early Adopters

Correlation to technology/change adoption phenomenon?



Why metrics? What's in it for me?

Another buyer mandate!@#!…*or something more?*

Sustainability as a business management strategy:

>>> Do more with less.

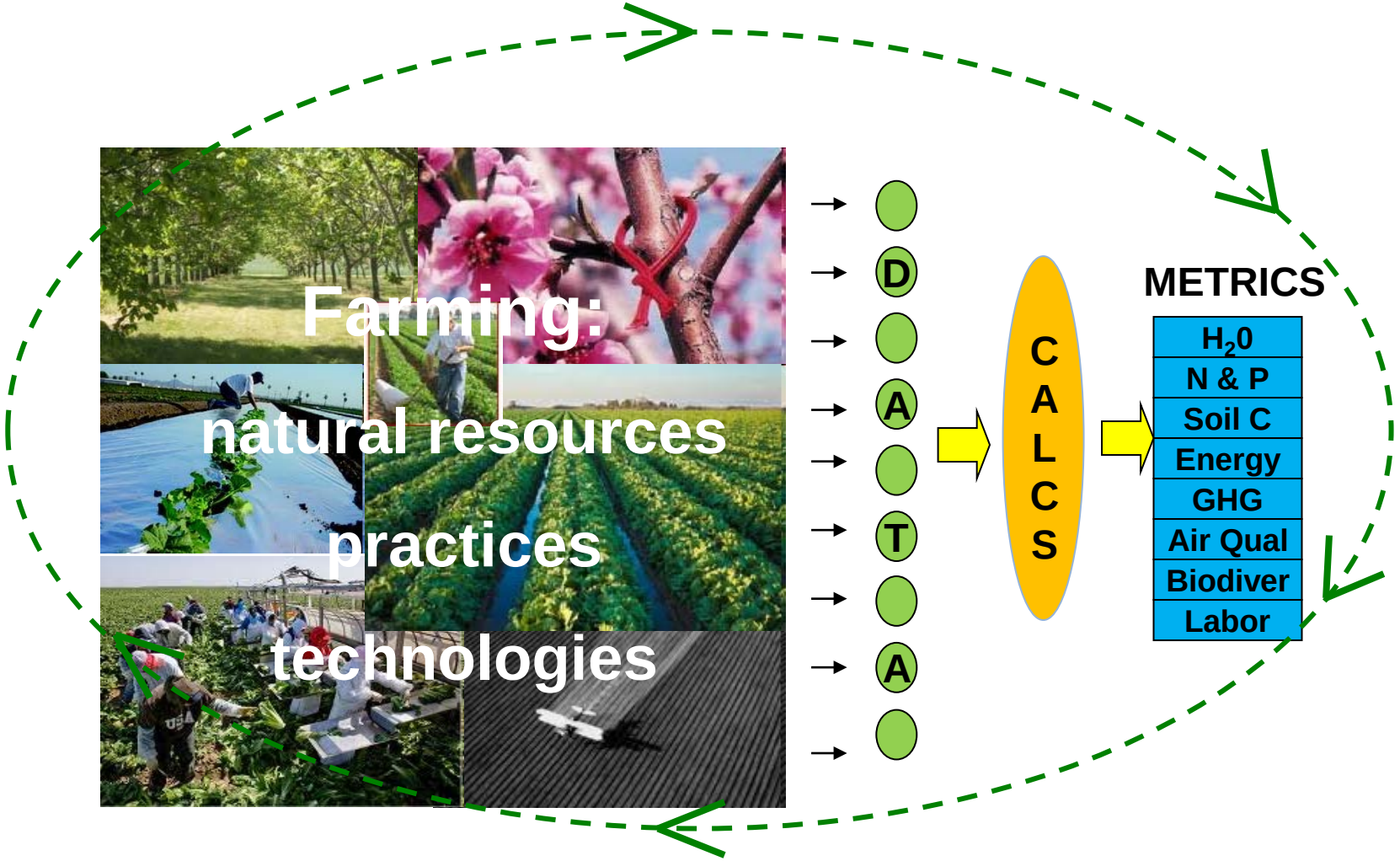
>>> Cost savings.

>>> Process of continuous improvement.

"Save money and farm better."

Metrics >> data-driven, on farm continuous improvement.

OUTCOMES???
What are the results on People, Planet, Profitability???



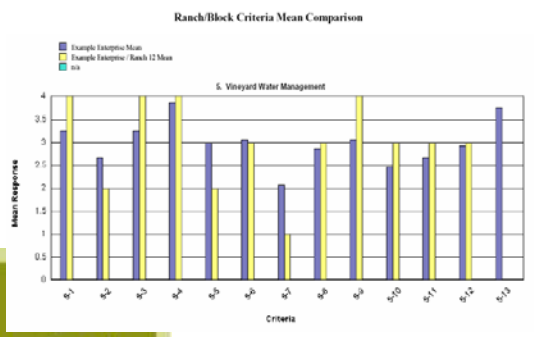
Data Collection & Mgmt Platform

Sustainable Winegrowing Program

2001 - present

Growing and winemaking practices that are sensitive to the **E**nvironment, responsive to the needs and interests of society-at-large (social **E**quity), and **E**conomically feasible to implement and maintain.

With funding from USDA-NRCS Conservation Innovation Grants and USDA Specialty Crop Block Grants.



Self Assessment Workshops

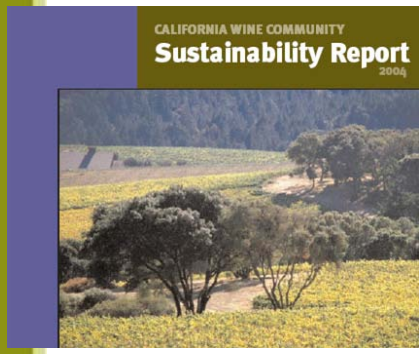
Customized Reports

Self Assess

Implement Change

SWP CYCLE OF CONTINUOUS IMPROVEMENT

Interpret Performance



Action Plan

Develop Action Plan to Improve

Targeted Education Workshops

ACTION PLAN

Workbook Chapter	Criteria Number	Criteria and Area of Concern	Plan of Action	Timetable for Action
Pest Management	Criteria 6-1 Page	Vineyard Monitoring for Insect and Mite Pests Category 1: My vineyard is rarely if ever monitored.	Monitor every two weeks.	Next growing season
Pest Management	Criteria 6-37 Page 6-68	Pesticide Emergency Response Plan Category 1: I maintain minimum legal requirements or less for a pesticide emergency response plan.	Contact Ag Commissioner's office; a typical emergency response plan looks [illegible] how to make it work on my ranch; train both tractor drivers; post plan by the sprayer fill-up.	Immediately

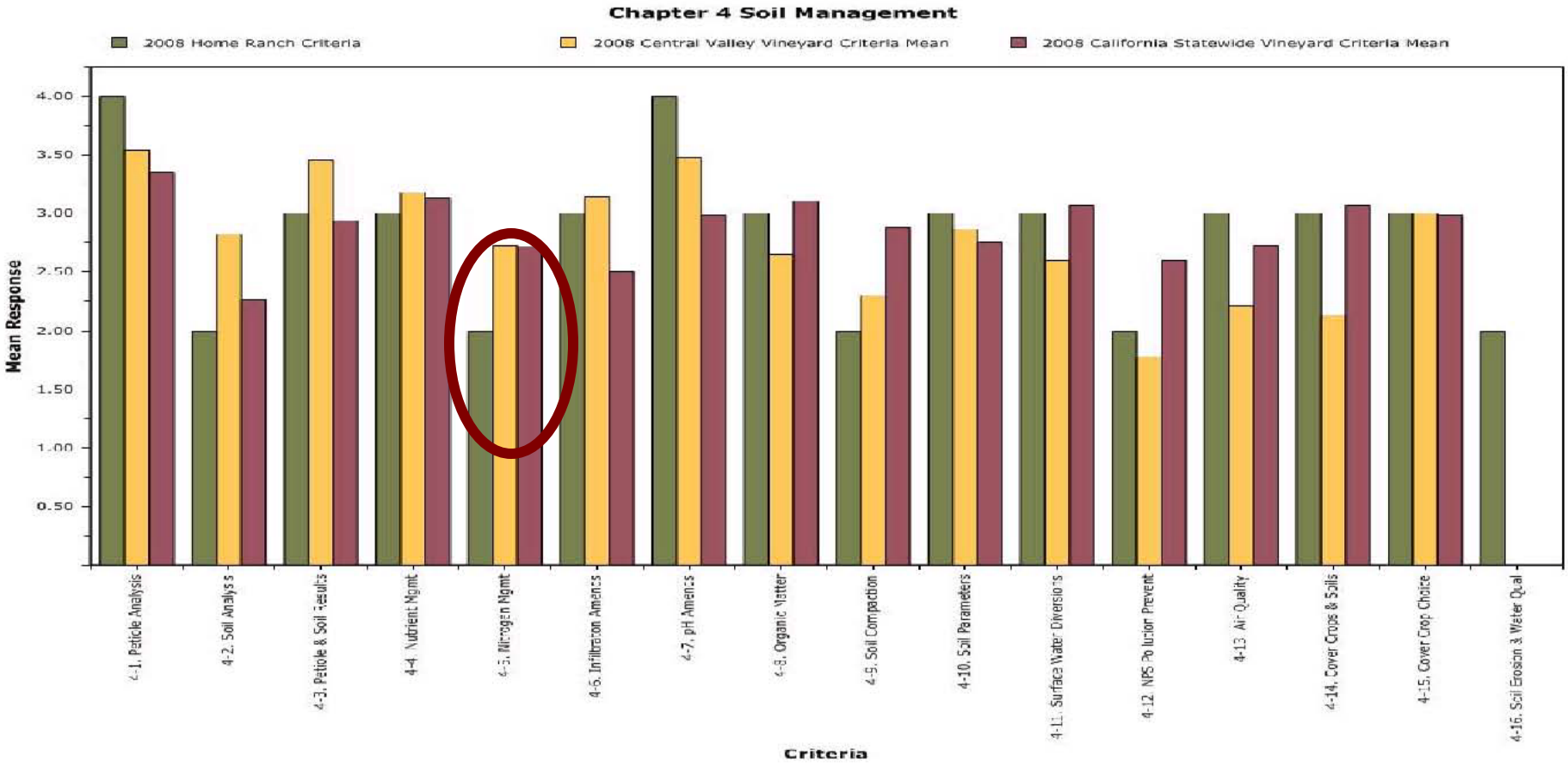
1. Decide what issues you can address.

2. Specify the issue and your area of concern

3. Determine an appropriate plan of action.

4. Create a realistic timetable for carrying out the action.

Farm-level benchmark reports help growers and their associations assess performance and identify targets for improvements.



10 years of data demonstrating continuous improvement

Participating Vineyard Organizations	1,320 organizations	
Acres Farmed by the 1,320 Organizations	366,386 acres	69.6% of 526,000 statewide acres
Acres Assessed by the 1,320 Organizations	252,297 acres	48.0% of 526,000 statewide acres
Organizations Submitting Results	906 organizations	**68.6%** of 1,320 organizations
Assessed Acres in Database	224,927 acres	**42.8%** of 526,000 statewide acres

Why metrics matter for growers –

For data-driven continuous improvement >>> Save money and Farm Better

The 5Ps of Sustainability:

Principles: Strategy drives company direction.

Processes: Management areas (farming, packing, cooling, HR, etc.)

Practices: What gets done and how. (drip irrigation, scouting, employee benefits, etc.)

Performance: Using metrics to assess impact on 3Es.

Progress: Making change and evaluating improvements over time.

What's next for SISC?

1. Release Beta version of 3-4 metrics by May 1.
2. Continue to develop and pilot test the remaining metrics.

3. **Build the capacity for growers – through trade associations - to**
   - **collect data for monitoring sustainability performance**
   - **adopt continuous improvement "measure to manage" business strategies.**

   >>> organize peer groups of growers to implement Beta version of metrics and continue pilot testing.

   >>> build programs for self-assessment, benchmarking, targeted education, peer-learning.

4. Begin work on data aggregation software platform with needs assessment, but as a secondary priority until more farm-level data collection capacity is built.

You're invited to join us on this journey.

www.stewardshipindex.org

www.sureharvest.com