

# STEWARDSHIP INDEX FOR SPECIALTY CROPS

# Performance Metrics for Specialty Crops: A Common Yardstick

Hank Giclas
Western Growers

CDFA Nitrogen Tracking and Reporting System Task Force Meeting
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# Why performance metrics?

### 1. Drive internal business management strategy

- Identify cost reduction opportunities
- Drive best practices innovation (continuous improvement)
- Manage risk

### 2. Respond to marketplace demand for more information

- Reduce duplicative sustainable reporting systems
- Data for backing marketing claims

### 3. Reduce regulatory pressure

- Solve problems proactively



# 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



# 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.

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# **Key Messages**

### Vision:

 A single system for measuring sustainability performance can meet the reporting needs of the entire supply chain and reduce producers' reporting burden

## **Barrier breaker:**

 Creating benchmarks can help more producers achieve their sustainability goals faster.

### Value:

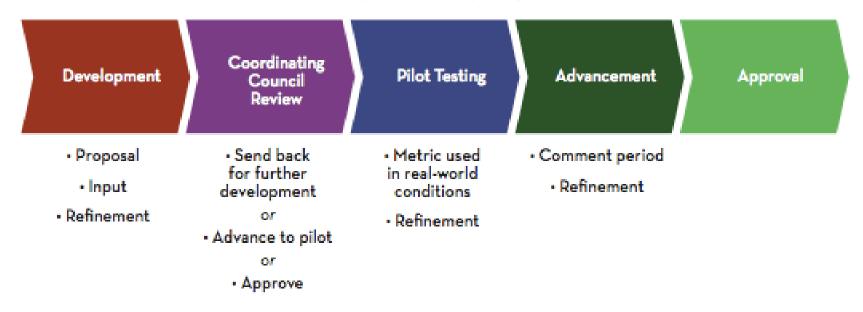
 SISC can be a tool for producers to tell their sustainability story and get recognition for their work



# SISC Overview

#### **PROCESS**

Metrics are developed in an open, five-step process:



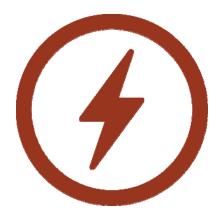
Multi-stakeholder initiative: Growers, Buyers, NGOs



# **Metrics**



Acre inches applied / ton harvested



Total BtU / ton harvested



Pounds of N added to system / ton harvested (Pounds of P used – Pounds P recommended) / ton harvested



Soil organic matter /
Soil organic matter potential

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# Applied Water Use Efficiency Metric

### Acre-inches applied water

### Tons of product harvested

#### Notes:

- Applied water: Total ground and surface water applied.
- The same land area (an acre, a field of known size) should be used to quantify both acre-inches applied and tons of product harvested.
- Includes all irrigation events from the end of the previous harvest to the current harvest.
- For educational purposes, metric can also be presented on a per acre basis as:

Acre-inches applied water/acre planted



# Nitrogen Use Metric

Pounds N added to system

Tons of product harvested

#### Notes:

• N inputs include:

N applied synthetic + N applied organic + N applied irrigation water + N fixed leguminous crops

- Includes all fertilization events from the end of the previous harvest to the current harvest (non-cash cover crops applied to subsequent cash crop).
- For educational purposes, metric can also be presented on a per-acre basis as:

Pounds N added to system /acre planted



# Phosphorus Use Metric

#### Pounds P added – Pounds P recommended

### Tons of product harvested

#### Notes:

- Pounds P added includes total synthetic and organic P applied
- Pounds P recommended is the agronomic recommendation received with results of soil P test (based on P available in soil, cropping history, and production plans)
- Includes all fertilization events from the end of the previous harvest to the current harvest.
- For educational purposes, metric can also be presented on a per acre basis as:

(Pounds P added – Pounds P recommended )/acre planted



# SISC Initiative Current Status

- Primarily a voluntary effort by growers to better understand their farming operations
- Not used currently in any type of mandatory reporting program
- No central reporting or data aggregation point
- Further piloting occurring this season
- Feedback will be collected and metrics will be revised every X years



# **Economic Costs & Impact**

- Costs for metrics should be low. Some lab tests required for soil and P metrics.
- Involves time to track and report. How much depends on grower's system.



## Measures of Success

- The value proposition for measure-to-manage is demonstrated.
- One system is used to evaluate growers performance rather than multiple, duplicative methods – buyers, public programs, trade association evaluations etc..
- Through benchmarking against their peers, growers are able to identify opportunities for improved efficiencies (requires data aggregation)



# Benefits & Challenges

#### **Benefits**

- Avoids duplication of efforts for growers
- Allows growers to benchmark themselves, track performance year over year, and highlight opportunities for improvement
- Allows trade associations or others to evaluate and market collective improvement and identify areas ripe for training

### Challenges

- Participation thus far has been low and required significant hand holding/follow up
- Many growers view it as a buyer-driven program
- Robust data collection on the farm is still not ingrained in the farming community



# Questions?



(Measure To Manage)

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### STEWARDSHIP INDEX FOR SPECIALTY CROPS

### **More Info:**

http://www.stewardshipindex.org

Contact:

Alison Edwards, Program Director alison@stewardshipindex.org