



III. Guidance for Pilot Participants

Information on Pilot Testing

Goals

The Stewardship Index is committed to developing sustainability metrics that are scientifically valid and practical for use by individual operators. In this context, we are asking growers of all types and sizes to test the metrics. Through this effort we hope to assess the following:

- ✓ Viability and time requirements of collecting data
- ✓ Usefulness of the metrics to the grower for improving business operations and efficiency
- ✓ Usefulness and integrity of the metrics for evaluating sustainable performance
- ✓ Potential for growers to meaningfully compare to others within specific regions and operation types (requires enough participants in peer group so that data can be sufficiently anonymized)
- ✓ Usability of calculator tool
- ✓ Usefulness of the data to buyers

Scope of 2011 Pilot Testing

The Stewardship Index will seek to pilot the metrics for diverse crops, operations and regions around the country. We will target six crops in our pilot testing in an effort to obtain enough pilot results in each crop to assess the utility of comparing data and the extent of variation. These are: tomatoes, potatoes, leafy greens, strawberries, citrus, and winegrapes. Growers of other crops are welcome to participate as well, and this list may grow as others express interest in participating.

The Stewardship Index requests pilot participants to test the full set of metrics to the extent feasible. However, we welcome participation even if all metrics cannot be completed.

Data Confidentiality

The Stewardship Index has developed a policy to preserve the confidentiality of the data that is contributed by volunteer pilot participants while enabling the sharing of anonymized data and lessons learned with the SISC community.

The balance between confidentiality and data sharing is as follows: First and foremost, SISC is fully committed to preserving the confidentiality of individual data contributed by pilot participants and will not disclose data that can be attributed to an individual person, company, farm or facility to any party, including other Stewardship Index partners. However, under certain circumstances, SISC may share data, feedback, and other pilot results that are anonymized and cannot directly or indirectly be attributed to a particular pilot participant. Pilot feedback about the experience of piloting, such as the difficulty, usefulness, availability of data, etc, is generally not considered confidential but will likewise be anonymized. Quantitative performance data collected from pilot participants, e.g. pounds of nitrogen applied per acre, may be shared by the Coordinating Council that governs SISC if a majority of each of the three stakeholder groups (growers, buyers, NGOs) agree to do so, and, again, only if the data are fully anonymized.

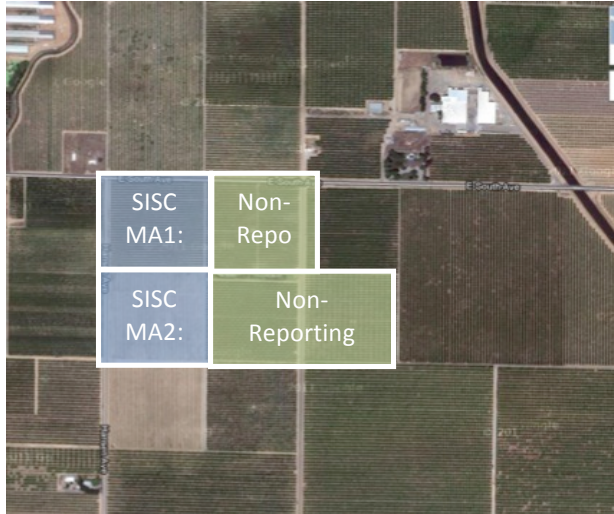
Pilot participants are required to sign a statement acknowledging they understand and accept the terms of this policy. The policy in full can be found in Appendix A.

Definitions of Total Farmed Area and SISC Management Area

Total Farmed Area

SISC defines the Total Farmed Area as an area owned or rented by the farming business that shares resources such as machinery, water, or staff. The Total Farmed Area can be comprised of one or more Management Areas, but does not include things like roads, creeks, and houses. Operations in different states or regions should be reported as separate farms. In Figure 1 below, the Total Farmed Area includes two SISC Management Areas and two “non-reporting” areas that are not part of the SISC pilot.

Figure 1. Total Farmed Area example



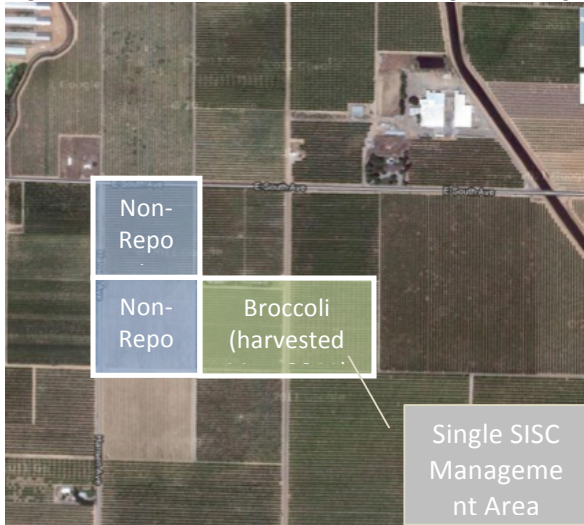
SISC Management Area

A SISC Management Area can be a collection of fields, a field, or a block within a field. The size and number of SISC Management Areas is determined by the grower based on his or her needs and in consideration of the guidelines below:

- A field is considered a single SISC Management Area when multiple crops are rotated in succession on the same ground and harvested in the reporting year.

Example: Broccoli and lettuce are harvested in the same field in 2011. This field should be considered a single SISC Management Area because both crops are grown on the same ground in the same reporting year. See Figure 2.

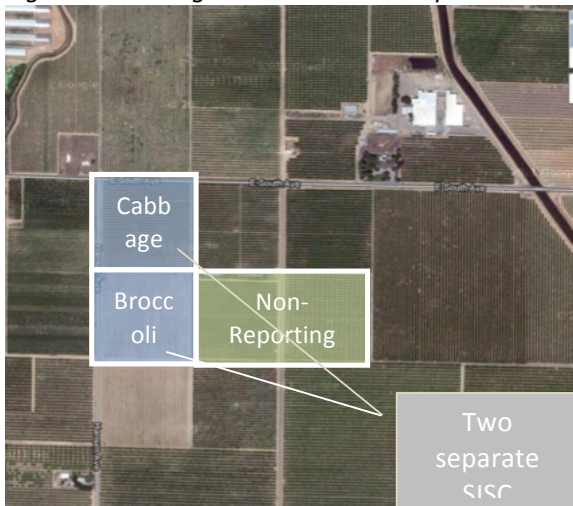
Figure 2: Broccoli and Lettuce in a Single Management Area



- Different crops grown concurrently on different ground are considered different SISC Management Areas.

Example: Cabbage is grown on one field and broccoli is grown on an adjacent field during the same season. Both crops are harvested in 2011. As indicated in Figure 3 below, each field is considered a separate SISC Management Area.

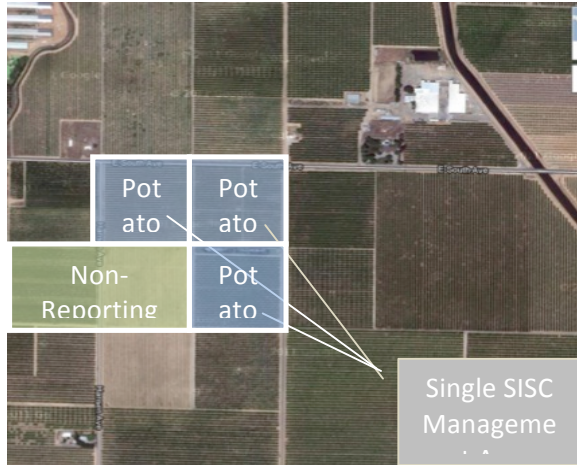
Figure 3: Cabbage and Broccoli in Separate Management Areas



- Several blocks or fields may be considered a single SISC Management Area when the same crops are grown, managed together, and harvested in the same reporting year. If a grower chooses to aggregate multiple fields growing the same crop into a single SISC Management Area, the SISC metrics will provide data about those fields in aggregate.

Example: A grower has three separate fields where potatoes were harvested in 2010. The fields were under the same general management routine and the grower doesn't need field-specific metric results. As shown in Figure 4 below, all three fields may be aggregated and considered as one SISC Management Area.

Figure 4: Three Fields Defined as a Single Management Area



- Growers producing multiple crops may choose to pilot SISC metrics on one or more of those crops.

Reporting Timeframe

To facilitate consistent and comparable use of the SISC metrics, specific periods are prescribed for collecting the data needed for each metric. The section below describes the reporting intervals for each metric, explains terms used in the SISC Calculator and provides examples for reporting intervals in different scenarios. Note that the reporting intervals are automatically provided by the SISC Calculator so it is not essential for the user to learn all the details described below.

Reporting Year. The reporting year for a SISC-measured crop is the calendar year in which a crop is harvested, regardless of when the data are calculated or shared.

Example: Crop A is harvested in October 2011 but the grower reports it to SISC or another party in 2012. The reporting year for this crop is 2011 because that is when it was harvested.

Example: Crop B is planted in November 2010 and harvested in April 2011. The reporting year for this crop is 2011 because that is when it was harvested.

Start and end dates for data collection. The data collection interval is different for different metrics, as described in Table 2 below. The SISC calculator automatically calculates the correct reporting intervals based on the harvest dates provided by the user.



Table 2. When to collect data for SISC Metrics

Metric	When the data are collected
Energy use	12 month period preceding the last harvest in the reporting year
Nutrients	Harvest-to-harvest
Soil	Soil test every 3 to 5 years
Water use	Harvest-to-harvest for Water Use Efficiency metric Simple Irrigation Efficiency metric reporting interval depends on crop type

Harvest-to-harvest timeframe. SISC uses a harvest-to-harvest timeframe for collecting water use and nutrient application data. While the realities of farming often include post-harvest activities and applications, we have selected a harvest-to-harvest timeframe with the aim of capturing all relevant cropping activities and following the growing cycle while still providing clear timeframes for consistent data collection.

When using a harvest-to-harvest timeframe, data collection for a given crop begins directly after the previous crop *in that location* (i.e., on the same ground) was last harvested. It ends on the last date that the crop is harvested. This means that all inputs of water and nutrients applied after a previous crop was harvested are included in evaluating the crop in the current reporting year, even if those applications were made in a prior calendar year. Where multiple crops are grown in one year, there may be more than one harvest-to-harvest interval. The last harvest date in the reporting year marks the end of data collection for that year. Inputs applied after that date should be reported in the following reporting year.

Inputs applied to a non-commercial cover crop are included as part of the cash crop that follows. If the cover crop is harvested for sale it should be treated as a separate cash crop. If no crop was harvested in the prior reporting year, then the harvest-to-harvest timeframe is considered to be the 12 months prior to the last harvest date.

Example 1: Crop A is harvested in September and October, with the last date of harvest on October 31, 2011. No other crops are grown on this ground in 2011.

- Water and nutrient data: All applications beginning after the last date the same ground was harvested in 2010 should be included. If no crop was harvested in 2010, inputs applied from October 31, 2010 through October 31, 2011 should be included.
- Energy use data from October 31, 2010 through October 31, 2011 should be included.
- Soil data: The most recent soil test should be used to calculate the soil metric.

Example 2: Crop A was planted in November 2010 and last harvested on April 20, 2011. Crop B is planted on the same ground in June 2011 and harvested over several weeks from August through October 31, 2011. This ground was last harvested in September 2010.

- The reporting year for both Crops A and B is 2011.



- Water and nutrient data: All inputs applied from September 2010 through April 2011 should be attributed to Crop A. All inputs applied from the time after Crop A's harvest in April until Crop B's harvest is finished in October should be attributed to Crop B. (Anything applied after harvesting Crop B should be reported with the first crop harvested in 2012).
- Energy use data: The energy metric for both crops should be calculated based on energy use between October 2010 and October 2011.
- Soil data: The most recent soil test should be used to calculate the soil metric.

Three-year rolling average. SISC recognizes that fluctuations in weather, pest pressure, climate, markets, and other variables will change metric results from year to year. In the future, to better reflect the on-going sustainability performance of an operation, SISC metrics will be presented both for the reporting year and as a three-year rolling average for each metric. For perennials, this will be the last three reporting years. For crops which are rotated, the last three harvests of the same crop are used for this average (regardless of when they were harvested). It may take more or less than three years to collect three data points for specific crops, depending on how often they are rotated. SISC users may report metric results with less than three years of data points until three years or more have been collected. SISC may revisit whether three years is the appropriate timeframe to capture natural variations.