



IV. Step by Step Calculator Instructions

This section provides step-by-step instructions for completing the SISC Calculator. Data item numbers correspond with those in the calculator.

Overview and Tips for Use

Data for the Calculator is collected using a Microsoft Excel spreadsheet. If you prefer, you may provide data via paper by printing the spreadsheet and filling each field in. If you are not able to print, you may obtain a paper copy by contacting info@stewardshipindex.org.

Tips

- **Navigating the Tool:** The calculator is divided into several tabs. You can switch among tabs by clicking on navigation (“Go to...”) buttons, clicking on the sections at the top of the page, or clicking on tabs at the bottom of the page.
- **Required Fields:** An asterisk (*) denotes boxes that are required for the calculator to work appropriately.
- **Color Coded Boxes:**
 - **Blue Boxes:** Indicate data entry fields.
 - **Gray Boxes:** Indicate calculated or default fields that are used to calculate the final metric. In some cases, if you have better data, the calculator allows you to overwrite these fields. Otherwise, you may use the defaults provided.
 - **Yellow Boxes:** Indicate help boxes or additional instructions. These yellow help boxes are included next to certain sections and will pop up when you select data entry cells.
- **Results:** Go to the final page - “Metric Dashboard”- to see your results. For multiple crops, results from the energy allocation worksheet can be seen on the “Energy Results” page.
- **Feedback:** Feedback can be given at any time by clicking on the "Feedback" buttons or the "Feedback" tab.
- **Assistance:** If you have any questions while using the calculator, you can always contact us at info@stewardshipindex.org or (707) 331-1810.

Calculator Layout

The calculator has the following tabs:

About the Index – This page has general information on the calculator. No data input is required on this page.

General Information – Complete this page with data that applies to the reporting farm enterprise. See “Definition of Total Farmed Area and SISC Management Area” above for more information on what to include for your farm.

Management Areas – Complete this page with data that applies to one or more specific SISC Management Areas within your farm operation. The calculator allows for reporting on up to 3 different SISC Management Areas, each on a separate tab.



Energy Use – Complete this page with data on your farm’s energy use.

Energy Allocation Worksheet – Use this worksheet to develop estimates of energy use unless you already know the specific fuel and electricity data for the reported crops. That is, use this worksheet if:

- You are reporting on more than one crop per SISC Management Area.
- You are not currently collecting electricity or fuel data at the resolution of your Management Area(s). (E.g., you know your whole farm’s electricity use, but not for the specific SISC Management Area).

Energy Results – The estimates of how much direct energy (fuel and electricity) should be allocated to each field, as well as total indirect energy, are displayed on this page. No data input is required.

Metrics Dashboard – Your metric results are displayed on this page using the data you have provided. No data input is required on this page.

Feedback – This page collects your feedback on each metric section. Please share; your feedback will help us improve the tool and understand how well it works for your situation.

Compost and Fertilizer Reference Sheets – These sheets are for reference to help you estimate if you do not know the N-P-K value of your compost or fertilizer.

Section 1 – General Information

1.1: Company Name

Provide information for the reporting business.

1.2-1.9: Contact Information

Provide contact information for the individual overseeing involvement in the SISC pilot.

1.10: Reporting Year*

Enter the calendar year for which you are reporting. This designates your reporting year. Only crops harvested during the reporting year will be analyzed in the calculator. For reporting on crops harvested in a different year, create a new calculator file or save an existing calculator file as a different file using Excel’s ‘Save As’ function. See [“Reporting Timeframe”](#) above for more detail.

1.11: Date of Last Harvest in Reporting Year*

Enter the date when the last harvest was completed for this reporting year. If reporting on multiple SISC Management Areas, enter the date of whichever harvest was latest.

1.12-1.19: Farm Information

Provide the name and location for the farm addressed in this report. Please see the section [“Definition of Total Farmed Area and SISC Management Area”](#) above for more information about what to include in your farm and SISC Management Areas. In this section, provide the total cropped area of the farm,

* Required field



including cropped areas for which you are not reporting. If you are not reporting on some cropped areas, we hope you will share your reasons for excluding them.

Section 2 – Management Area Information

2.1: SISC Management Area Name

Enter a name for this Management Area.

2.2: Total Acres in SISC Management Area

Enter total acreage of cropped land in this Management Area. See the section above entitled “Definition of Total Farmed Area and SISC Management Area” for clarity on how to define your Management Area.

2.3: Number of Crop Rotations in SISC Management Area*

Enter the number of crops which were harvested during the reporting year on this Management Area. Do not include crops planted during the reporting year but harvested in a subsequent year. Non-commercial cover crops grown in between cash crops are attributed to the subsequent cash crop and should not be included here as a separate crop. If the cover crop itself is sold, it should be reported as a separate crop.

2.4: Date of last harvest in previous reporting year*

Enter the date harvest ended during the previous reporting year (e.g., last harvest in 2010 if the reporting year is 2011). All inputs applied after this date count towards this reporting year and should be included in data entered in the calculator.

If no crop was harvested in the prior year then enter the date that corresponds to one year before the current year harvest.

2.5: Cropping Information *

Provide area planted, date of completion, and tons harvested for the crop grown on this Management Area. If more than one crop was planted during the year, you must enter the crops in chronological order with the earliest crop being “Crop 1.”

Crops: Select your crop from the drop-down menu. If your crop is not on the list, select “other” and enter your crop on the feedback page.

Acres planted: Enter the acres planted in this SISC Management Area for each crop.

Date harvest completed: Enter the last date of harvest for each crop in mm/dd/yy format. These should all be in the reporting year.

Tons harvested: Enter the number of tons harvested and sold from this SISC Management Area for each crop (U.S. short tons).

* Required field



Section 3 – Nutrients

3.1: Total amounts or per acre rate *

Choose whether you'd like to enter nutrient product data as a total quantity applied to entire SISC Management Area or as a rate per acre.

3.2: Nutrient Product Information

Enter information for each nutrient product applied during the reporting timeframe for the crop(s) harvested in this SISC Management Area, as indicated by the calculator. The calculator will specify the correct reporting interval for the crop(s) based on the current and previous harvest dates (or will start 12 months prior to the current harvest if no crop was harvested in the previous year).

Complete each row with the information below, entering data for each product in a separate row. Multiple applications of the same product in the same reporting interval can be combined to reduce data entry. However, applications of the same product in different reporting intervals must be entered on separate rows.

Date Range

Select the date range during which the product was applied. If applied during multiple date ranges, enter the product on a separate row for each period.

Product

Select the fertilizer product applied for each application. Enter blends and composts or manures as described here. If you are unable to find your product, please help us to improve this tool by listing that product in the Nutrient Feedback section.

Synthetic Blends - If the product is a blend, choose "Synthetic Blend" from the drop-down list and enter the N-P-K values in the section below. A list of N-P-K values for most commercial fertilizer products is provided in Appendix D. If the product is in the drop-down list, simply select the product and enter the units and amount applied.

Compost and Manure - For compost and manure, select the appropriate material and enter N-P-K below if known. If N-P-K is not known, select values according to the appropriate feedstock from the table in Appendix C.

Amount Applied*

Enter the amount of product applied to this SISC Management Area, either as total or rate per acre, according to what you selected in 3.1 above. You may enter the amount in any of the units provided in the list in the next column.

IMPORTANT: Be sure to enter information that is consistent with your selection above at 3.1.

Unit of Amount Applied*

Select the units used to express the amount of fertilizer applied. Units are provided for both liquid and dry applications.

* Required field



N, P₂O₅, and K₂O*

Enter the % N, % P₂O₅, and % K₂O for blended fertilizer products. This is commonly known as the “N-P-K ratio” and can be found on the fertilizer label expressed as “XX-XX-XX.” It is not necessary to enter an N-P-K value if you select the product from the product drop down list. For your reference a table of many commercial fertilizers is found in Appendix D, organized by company name. (Note: the “P” and “K” in the N-P-K ratio on the label in fact represent P₂O₅ and K₂O.)

For compost, list N-P-K from a compost analysis, if known. If not known, refer to the table in Appendix C for estimated N-P-K values for your feedstock.

Crop

The crop “receiving” this application will be identified by the calculator and shown here.

Embedded Energy

An estimate of the energy required to produce the total amount of fertilizer used (for all acres) is calculated and shown here in millions of BtUs.

Section 4 – Soil Organic Matter

The soil metric requires that a soil sample be sent to a lab in order to evaluate Total Organic Carbon (TOC). Follow your lab’s instructions for collecting a soil sample. Lab results for TOC should be obtained at least every 5 years. USDA has a helpful factsheet about Total Organic Carbon and its importance as an indicator at http://soils.usda.gov/sqi/assessment/files/toc_sq_biological_indicator_sheet.pdf.

4.1: Soil Test Date

Enter the date of the most recent soil test conducted, as well as the previous one.

4.2: Lab Test Method

Select the method used by the laboratory to determine the results. The lab should use the dry combustion method to determine TOC. In Western states, this may include a testing method that accounts for soil carbonates.

If you already have a lab test for Soil Organic Matter (SOM) using a Weight Loss on Ignition lab method, your lab may be able to convert this to TOC if it has a correction curve for your soil type. If this is the case, you should ask your lab to calculate this conversion.

Several new soil carbon tests enable growers to measure change in soil organic carbon over a shorter time span, making this measurement more useful for gauging the benefit of land management practices. One is microbial biomass carbon, measured with a fumigation-extraction technique. Another method estimates carbon by measuring beta-glycosidase. While these methods are typically not available in commercial labs, they are often used by researchers and will also work for the soil metric.

* Required field



4.3 TOC Reported by Lab*

TOC should be reported as a percent of carbon and entered in the calculator as a number between 0 and 100.

4.4: Soil Series Name*

Soil series can be determined by locating your farm soil maps via the USDA's Web Soil Survey. Follow these steps to determine the dominant soil series for your site. If tests are conducted in different locations, different soil series names may apply.

1. Visit NRCS's Web Soil Survey at: <http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm> .
2. Click on the green button that says "Start WSS".
3. Click on the map near your farm. Keep clicking until you have zoomed into the particular field where you took your soil sample. The map may load slowly.
4. Once the map is at the scale where you can select your field, click on the "AOI" (Area of Interest) button and draw a rectangle or other shape around your field. (The rectangle button requires your field to be horizontal on the map. If this is not the case, choose the AOI button with a polygon shape, which will allow you to draw your own shape. Double click on the last corner of the shape to tell the program you are done drawing.)
5. Once your field is outlined, click on the "Soil Map" tab almost at the top of the screen, next to the "Area of Interest" tab.
6. Your soil series name can be found in the "Map Unit Legend" section on the left side of the screen, under "Map Unit Name." Click on the name to see more information on this specific field.
7. Select the soil series name in the appropriate place in the Stewardship Index calculator. If a field contains multiple series, choose a dominant series to use.

4.5 Soil Texture*

Enter your soil texture type. If not known, you may refer to information from the Web Soil Survey map above or see the USDA NRCS guide to soil texture in Appendix B.

Section 5 – Water Use

5.1: Method for measuring applied water

Select the method used to measure applied water. Include all irrigation events from the end of the previous harvest to the current harvest (i.e., harvest-to-harvest timeframe specified above). In order to maintain sufficient accuracy and precision, growers may select from one of the following water conveyance methods, based on irrigation conveyance type, that have been pre-approved for calculating applied water. Determination of "applied water" must be measured at the field (SISC Management Area) level. Method 4 provides a way to estimate field-level usage if actual measurement has not been performed.

Approved methods for measuring applied water are listed here, with more detail on each provided below.

1. Irrigation District Reporting (with approved measurement devices)



2. Closed Conduit Measuring Devices (aka pressurized pipe)
3. Standard Open Channel Measuring Devices for Surface Irrigation
4. Alternative to Direct Measurement: Using Power Records

Note: The standard for precision is +/- 6% (Based on California Department of Water Resources standards).

1. Irrigation District Reporting

If water is delivered by an irrigation district, district measurements may be used if each of the following conditions apply:

- Water is measured directly by an approved measurement device (see below).
- Water is measured at the field/block level.
- The field being measured is the same as where the crop is grown.

2. Closed Conduit Measuring Devices (aka Pressurized Pipe)

If water is delivered through pressurized pipe, whether groundwater or surface water, to irrigation devices such as drip or center-pivot irrigation, then the following technologies are acceptable. Note that the pipeline must be flowing full to work properly and the water user must demonstrate a reliable method of recording total flows with a display unit.

- Mechanical in-line propeller meter
- Insertion type electromagnetic meter
- Full profile magnetic type flow meters, such as acoustic transit-time or Doppler flow meter.

3. Standard Open Channel Measuring Devices for Surface Irrigation

If water is delivered via gravity-fed surface irrigation, such as flood or furrow irrigation, then the following methods are acceptable:

- Flow gates or control structures with an accurate rating curve and level sensors in an adjacent stilling well. Approved devices include:
 - Sharp-crested weir
 - Undershot or Waterman gate (with up- and downstream water levels)
 - Parshall flume
 - Trapezoidal flume
 - Ramped broad-crested weir (or ramped flume)
- Acoustic Doppler Flow Meter (ADFM)
- A propeller meter for systems using gated pipe. An acoustic sensor or a pressure transducer can be used for measuring the head on the meter.

4. Alternative to Direct Measurement: Using Power Records³

If none of the direct measurement methods is appropriate, then a grower may use extrapolation from power records to estimate the annual diversion from a pump as an alternative measurement method. The following conditions apply in order to qualify to use this method.

Derivation of the Power Consumption Coefficient (PCC) is required, which is the ratio of the number of kilowatt-hours needed to pump an acre-foot of water. This number is unique to each

³ Excerpted from Idaho Department of Water Resources, "Minimum Acceptable Standards for Open Channel and Closed Conduit Measuring Devices." October 2009



well or pumping plant due to physical aspects of the system and can be applied to the year-end power records to determine the total acre-feet pumped.

To determine the rate of flow, a portable measuring device, such as a non-invasive ultrasonic flow meter can be used. Simultaneous with the flow measurement, power is measured using the utility's kilowatt-hour meter. A qualified individual with the necessary equipment will be required to perform these measurements. Because systems wear and water levels change, the flow-to-power ratio may change over time. Therefore, the power consumption coefficient must be re-calibrated at least once every three years.

Pumps must be single speed, not variable rate or variable frequency.

CONSTRAINTS: If any of the following are true, a different method must be utilized as then power records are unlikely to yield acceptable results:

- If the well flows (artesian) so that water can be diverted when the pump is off.
- The electrical meter also records power used by other devices not integral to the irrigation system.
- The electrical meter records power used by more than one pump.
- Variable frequency drives operate the pump, resulting in variable flow rates.
- The energy supplied to the pump cannot be accurately and reliably measured. For example, most diesel and propane driven pumps do not have provisions to measure the fuel used by the engine.
- The flow rate from the pump varies significantly due to changes in demand or operation. For example, pumps that discharge into a pressurized system sometimes and then open discharge at other times, or pumps that supply multiple pivots and/or other discharge points, would likely have flow rates that change considerably. These changes generally alter the flow to power ratio, causing inaccurate estimates of diversions.

5.2-5.3: Applied water quantity

For each crop grown on this SISC Management Area, enter the per-acre volume of applied water for all irrigation events that occurred during the reporting interval specified by the Calculator. Be sure to indicate both the units used and the amount of water applied.

Note: Crop Evapotranspiration

A separate worksheet will be provided to calculate SISC's Simple Irrigation Efficiency Metric, which requires a calculation of crop evapotranspiration .

Section 6 – Pesticide Embedded Energy

Although SISC does not currently have a pest management metric, data on pesticide use is required to calculate the energy embedded in applied pesticides. The calculator provides an approximate estimate of energy embedded in the application based on the type and amount of the product applied (see Technical Notes in Appendix B). Note that because actual values for pesticide embedded energy are not publically available, SISC is piloting a method to approximate embedded energy in pesticide products as described in Appendix B.



6.1: Total amounts or per acre rate*

Choose whether you'd like to enter pesticide product data as a total quantity applied to the entire SISC Management Area or as a rate per acre.

6.2: Pesticide Product Information

Enter information for each pesticide product applied during the reporting time frame for the crop(s) harvested in this SISC Management Area, as indicated by the calculator. The calculator will specify the correct reporting interval for the crop(s) based on the current and previous harvest dates (or will start 12 months prior to the current harvest if no crop was harvested in the previous year). Multiple applications of the same product in the same reporting interval can be combined to reduce data entry. However, applications of the same product in different reporting intervals must be entered on separate rows.

Date Range *

Select the date range during which the product was applied. If applied during multiple date ranges, enter the product on a separate row for each period.

Search by name or EPA registration number?*

The calculator includes a database of pesticide products registered by U.S. EPA. You may search this database by product name or by EPA registration number using a drop-down menu. If you choose "by name", the calculator will select the product based on the name you provide; if you choose "by EPA reg" the calculator will select the product based on the EPA registration number you provide.

Product Name

Select the product name from the list if you have chosen to search by product name. If your product is found, the name and EPA registration number will appear in the gray boxes below your entry. Be sure to check that the EPA registration number looks right.

If you have selected to search by EPA registration number you can ignore this field.

EPA Registration Number

Enter the EPA registration number for your product if you have chosen this search method. If your product is found, the name and EPA registration number will appear in the gray boxes below your entry. Be sure to check that the product name looks right.

If you have selected to search by product name you can ignore this field.

Unit of Amount Applied*

Select the units used to express the amount of pesticide applied. Units are provided for both liquid and dry applications. The calculator expects a weight-based unit for dry products. If you try to enter a volume-based unit for a dry product, the calculator will show "NA" under the Btu field and an error message on the right will request that you use a weight-based unit.

Amount Applied*

Enter the amount of product applied in this SISC Management Area, either as total or rate, depending on what you selected in 6.1 above and using the unit you specified.



IMPORTANT: Be sure to enter information that is consistent with your selection above at 6.1.

Crop

The crop “receiving” this application will be identified by the calculator and shown here. No entry is required.

Embedded Energy

An estimate of the energy required to produce the total amount of fertilizer used (for all acres) is calculated and shown here in millions of BtUs. No entry is required.

Section 7 – Farm Energy Use

Note: Data may be entered at the level of the Total Farmed Area or individual SISC Management Areas. Data should be reported for the 12-month period which ends with the date the last harvest was completed. *The appropriate date range is specified by the calculator above the data entry table (i.e., above the entry fields for items 7.1 through 7.5).*

7.1: Total Annual Electricity Use

Select whether you would like to enter data for the Total Farmed Area or for the individual SISC Management Area(s). Enter total annual electricity use for the dates specified above the data entry table (the field where this data should go will turn blue once you make your selection). If your electricity bills do not coincide with these dates, prorate the electricity for the period of time included in the reporting year.

Example: Your electric bill covers the period from October 15 through November 15, 2011 but your last date of harvest that year is October 25, 2011.

The electricity should be prorated to include 10 of the 30 days in the billing period, which is 30% of the bill. If the bill is for 1000 kWh, 300 should be included in reporting year 2011 and the rest would be included in electricity for the 2012 reporting year.

7.2-7.5: Total Fuel Use

For each fuel, select whether you would like to enter data for the Total Farmed Area or for the individual SISC Management Area(s). Enter total annual fuel use for the dates specified above the data entry table for diesel and gasoline fuels. Include both stationary sources (e.g. irrigation pumps) and mobile sources (e.g. farm equipment). On-road vehicles should not be included.

If you use other fuels on your farm for either stationary or mobile equipment, please select the fuel type and enter the total annual usage. If you are unable to find the fuel on the drop down list, please indicate this in the feedback section.

Contracted Services

Fuel from contracted services is included in the total fuel for the energy use metric. If you are completing the calculator for only one crop on one SISC Management Area AND know your data at the level of that Management Area, a section will appear on this worksheet asking you for data on contracted services. Otherwise, you will be asked to complete this information as part of the Energy Allocation Worksheet and Sections 7.6 and 7.7 will not appear.



7.6: Aerial Applications

Enter the total number of aerial applications conducted during the reporting year.

7.7: Other Contracted Activities

Complete a row for each activity contracted to a third party. If you have requested fuel data from the contractor, you may enter that directly into the gray box in the “Estimated Diesel Use” column. Otherwise, enter your best guess as to the number of operations and machinery horsepower used each activity.

Activity:

Select the activity category that best describes the contracted service. If not found, select “other” and enter in the box to the right.

Number of operations:

Enter the number of operations of this activity conducted in the SISC Management Area. If you have requested fuel data from the contractor, you may skip this box.

Horsepower:

Enter your best estimate of the horsepower for the machinery used to conduct this operation. If you have requested fuel data from the contractor, you may skip this box.

Estimated Diesel Use:

This box will be calculated using the information entered in the previous two columns. If you’ve requested data from your contractor, you may override the calculation and enter that data here.

Activity Description

If “other” was selected for the activity, please enter a short activity description here.

Section 8 – Energy Allocation Worksheet

This worksheet is designed to help you estimate how much fuel and electricity went to each crop if data is only known at the level of the Total Farmed Area (or SISC Management Area for multiple crop rotations). *NOTE: You are only required to complete this section if your total fuel and electricity use was used to grow multiple crops.*

The worksheet asks for data on your farm machinery and how much it was used for each general farm management activity. This information is used to estimate diesel use for each crop. Similarly, the worksheet also asks for information on your main irrigation pumps in order to estimate electricity and/or fuel use from those sources. This information is used to estimate how much of your total energy use (fuel and electricity) should be attributed to a particular crop. If your fuel and electricity use is also used for non-reported crops, i.e., crops that are not part of the SISC pilot, you will be asked to describe some activities on the non-reported crops as well so that total energy use can be allocated to the SISC piloted crops.

8.1: Non-Reported Crop Area

If your Total Farmed Area fuel or energy data includes crops that are not part of the SISC pilot (i.e., not reported on in the calculator), please enter the planted acreage and water applied for each non-reported area that shared in your total fuel and electricity use. This information can be estimated,



rather than measured. If two or more non-reporting fields are managed similarly, they can be entered as a single field (i.e. one column) with the acreage of both fields added together. If space provided is inadequate, please note this in the feedback section.

8.2: Farm Machinery

Complete a row for each tractor or other farm machinery that is a major component of your fuel use. Though the lines say “Tractor”, you may enter other farm machinery in those rows—just select “Other machinery” from the list. If you operate more machinery than can be entered in the space provided, enter the largest and/or most frequently used. Default values are provided for horsepower, efficiency, and specific fuel consumption, but they may be overridden by entering data manually.

Tractor

Select the type of tractor that most closely describes yours. If the horsepower is not exactly right, it can be adjusted in the next column. For machinery other than tractors, select “Other machinery”.

Horsepower

Default values are provided for horsepower, but may be overridden by entering data manually. Therefore, if you have a 140HP 2WD tractor, select the 130 HP 2WD tractor from the list in the tractor column, and then enter 140 in the horsepower column.

Fuel Consumption

Default values are provided for fuel efficiency in gallons per hour, but may be overridden by entering data manually if you know your fuel efficiency more specifically.

Fuel Type

Diesel is the default fuel type, but other fuel types may be selected from the drop down list.

Specific Fuel Consumption

Default values are provided for specific fuel consumption in gallons per horsepower-hour, but may be overridden by entering data manually if you know your data more specifically.

8.3 Farm Irrigation Equipment

Complete a row for each irrigation pump or booster used within the area for which you reported fuel and electricity (e.g. if you reported electricity at the Total Farmed Area level, include this information for all pumps on the farm). Though the rows say “Pump”, you may enter boosters here as well. Later, you will select the pump and booster used on each SISC Management Area.

Power Source

Select the power source used by the pump.

Well Lift

Enter the depth, or total vertical distance that the pump moves water to the surface, in feet.

Pressure

Enter the pressure at the well head in PSI (pounds per square inch).

Total Dynamic Head



This field is calculated using the well lift and pressure information provided to estimate the “total dynamic head” of the pump. You may override this and enter data manually if you know this information.

8.4: Other Electrical Equipment

The SISC on-farm metrics are not meant to include packing, shipping, or processing activities in the metric results. However, you may only receive one electrical bill with total electricity usage for your whole facility. In this section, please enter any major electricity users that are not directly associated with your farming operation. This includes cold storage and refrigeration, sorting and packing facilities, drying facilities, etc. Please describe the facility and estimate its electricity use. This will be subtracted from the total electricity you entered on the Energy Use page if you listed that energy use as “Total Farmed Area.”

In the future, we hope to provide a more accurate way to estimate electricity use for these types of facilities as well. Your description of the facility will help us to improve this tool.

8.5: Estimated Use of Machinery, Irrigation and Contracted Services

Information about machinery use and water applications is needed for both SISC-reported crops and fields where energy was used to produce crops that are not part of the SISC pilot. This information can be estimated, rather than measured. Information about contracted services for non-reporting fields is not required.

If two or more non-reporting fields are managed similarly, they can be entered as a single field (i.e. one column) with the acreage of both fields added together.

Irrigation

For each SISC Management Area, select the pump and booster used on that area that corresponds to the information you entered in the previous “Farm Irrigation Equipment” section above. You may select up to two pieces of equipment.

Tractor Passes

In each category of farm management activities, select the main tractors and machinery used from the list of machinery that you entered in the previous section. Then enter the approximate number of passes conducted by each tractor type used. Repeat for each SISC Management Area.

Enter approximate passes for contracted services separately and estimate tractor type used.

Aerial Application

Enter the total number of aerial applications for each crop.

When finished, go to the “Energy Results” page to see the breakdown of your fuel and electricity.

Section 9 – Energy Results

This page provides the results from the Energy Allocation Worksheet. You will find total energy use by crop and how that energy is broken down by source. The weighting factors created from the



information you provided are included here. For fuels, weighting factors for diesel are assumed for all other fuel types. If you feel these weighting factors are inaccurate for the other fuels, you may change the numbers on this sheet, and the factors you enter will be used in the final results.

Section 10 – Metric Dashboard

After all that hard work, click on the Metric Dashboard to see your results! You may select to see results by acre or by yield in the blue box at the top.