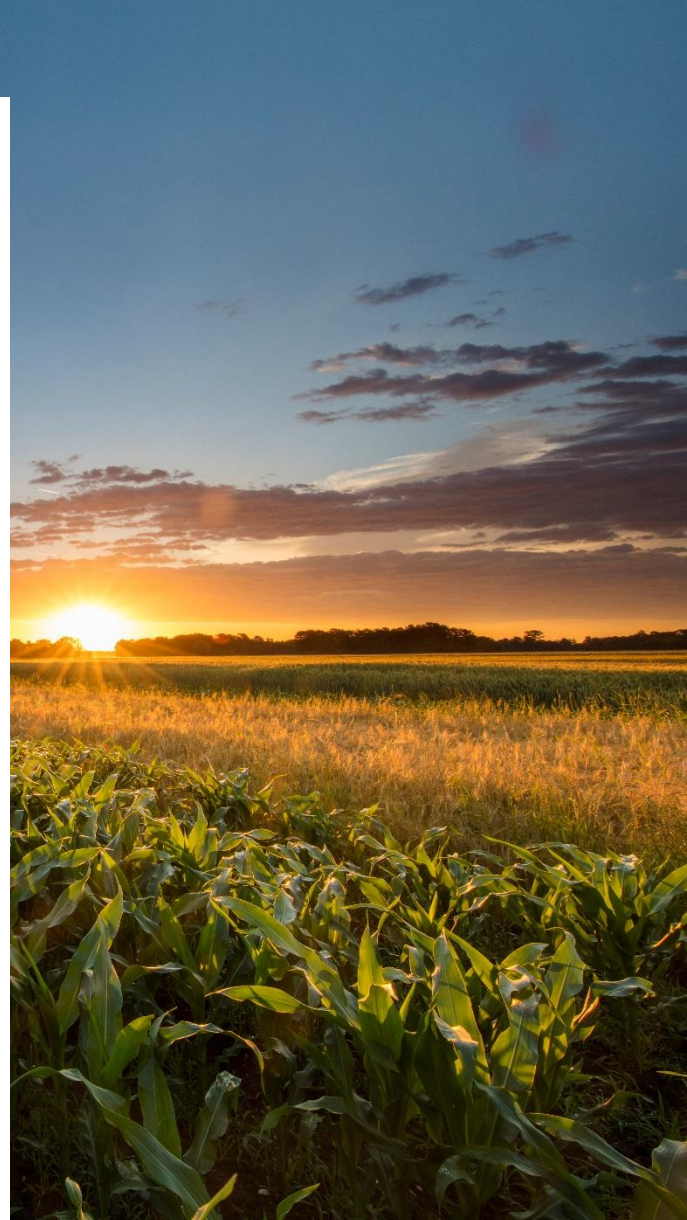


# FARM RECORD ANALYSIS

## CLOSEOUT PROCEDURES

# 2021



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UPDATED: OCT., 2021

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# Introduction

This manual was developed to assist in the standardization of data collection and entry for Farm Business Management Annual Analysis Reporting. Consistency in the data entry is the key to creating a useable set of benchmarks for producers.

Blue text indicates current year additions/revisions.

## Acknowledgements

Farm Business Management Instructors at Northland Community and Technical College developed this manual during the Fall of 1996. Updated annually by the Center for Farm Financial Management, University of Minnesota in consultation with Minnesota Farm Business Management, Minnesota State Colleges and Universities.

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# Section I:

## TIMELINES

### Key Dates

- December 17, 2021 Webinar on New FINPACK Release, Database process, and Closeout Manual Updates
- Jan. - Early March 2022 FINAN Completions
- February 23, 2022 Red River Valley & Northland files need to be completed
- February 24, 2022 Red River Valley & Northland Database Review, Moorhead
- February 28, 2022 All FINAN's for database to be submitted to your database leader for inclusion in state database
- March 2, 2022 Regional Database review meeting, *Virtual*, Southern report groups
- March 3, 2022 Regional Database review meetings, *Virtual*, Northern report groups
- March 7, 2022 Red River Valley Database Report Completion, Fargo
- March 8-9, 2022 State Database Review and Develop Days, St. Paul
- March 10-14, 2022 Annual Report and Special Sort development, database leaders
- March 16, 2022 PDF of 2021 Annual Report made available to instructors
- March 31, 2022 Printed FBM Annual Report available for distribution

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# Section II:

## 2021 OVERVIEW

### What's New?

#### GOVERNMENT PROGRAM PAYMENTS

*\* See screenshots at the end of this section for more detail.*

- **AMERICAN RESCUE PLAN DEBT PAYMENTS**

- Include the funds received for the payoff of FSA related loans for socially disadvantaged producers as **Other Government Payment** income in the whole farm analysis (FINAN) in the year received. This payment will be for 120% of eligible loan balances.
- Use the cash inflow received to **pay off** the **FSA loans** impacted by the payment.
- Include the estimated amount of **Personal Income Taxes Payable** in the Personal Liabilities section of the ending balance sheet. (The extra 20% payment portion is for associated tax liabilities and fees related to debt forgiveness.)
- **Note:** *This program is currently halted because of litigation. Some producers may have received payments already. Handle those payments as stated above.*

- **CFAP (CORONAVIRUS FOOD ASSISTANCE PROGRAM) 1 PROGRAM**

- Include additional funds received for CFAP 1 for beef producers as **Other Government Payment income** in the 2021 whole farm analysis (FINAN).
- \*\*Do not** allocate CFAP1 payments received in 2021 to the beef enterprise analysis. *These payments are not for 2021 production.* **\*\***

- **CFAP (CORONAVIRUS FOOD ASSISTANCE PROGRAM) 2 PROGRAM**

- Include new/additional funds received for CFAP 2 (received in 2021) as **Other Government Payment income** in 2021 whole farm analysis (FINAN).
- \*\*Do not** allocate CFAP2 payments received in 2021 to the crop or livestock enterprise analysis. *These payments are not for 2021 production.* **\*\***

- 
- **ELAP (EMERGENCY ASSISTANCE FOR LIVESTOCK, HONEYBEES & FARM-RAISED FISH PROGRAM)**
    - Include funds livestock producers received from ELAP for losses related to transporting water or feed because of drought conditions, or other eligible program emergencies as **Livestock Government Payment income**.
    - Allocate funds received to the corresponding livestock enterprise analysis as **Government Payment income**.
  
  - **LFP (LIVESTOCK FORAGE DISASTER PROGRAM)**
    - Include funds eligible livestock producers received from LFP as **Livestock Government Payment income**.
    - Allocate funds received to the corresponding livestock enterprise analysis as **Government Payment income**.
  
  - **PCCP (PANDEMIC COVER CROP PROGRAM)**
    - Include funds eligible crop producers received from PCCP as **Conservation Government Payment income**. Include the full **Crop Insurance Expense** as well. Do not net the \$5 premium support payment out of the crop insurance expense paid.
    - Allocate funds received to the corresponding crop enterprises.
      - Cover crops
        - The \$5 premium support should be credited to the cover crop in the enterprise analysis as **Other Income**.
        - The base crop planted reflects the full crop insurance expense.
      - Nurse crops
        - For sugarbeets and other crops planted with a nurse crop protecting the soil in the spring, the \$5 premium support is credited as **Other Income** for receiving crop. The full crop insurance expense is allocated to the crop.
        - In this case, the nurse crop expense (ex: oats) is included with the sugarbeet enterprise. No separate analysis of the nurse crop is completed.
  
  - **PLIP (PANDEMIC LIVESTOCK INDEMNITY PROGRAM)**
    - Include funds for swine, chicken, or turkey producers received from PLIP as **Livestock Government Payment income**.  
**\*\*Do not** allocate PLIP payments received in 2021 to the livestock enterprise analysis. These payments relate back to 2020 depopulation losses and are not for 2021 production.

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- **PMVAP (PANDEMIC MARKET VOLATILITY ASSISTANCE PROGRAM)**

- Include funds dairy producers received from PMVAP as **Livestock Government Payment income**.

**\*\*Do not** allocate PMVAP payments received in 2021 to dairy enterprise analysis. These payments relate back to 2020 losses and are not for 2021 production. **\*\***

- **PPP (PAYCHECK PROTECTION PROGRAM) LOAN**

- This methodology pertains to both the PPP “1<sup>st</sup> Draw” and “2<sup>nd</sup> Draw” farms may have received.
- Treat initially as a **Current Loan**, until forgiven.
- Include **all expenses** paid with loan proceeds as normal farm expenses.
- **If total loan amount is already forgiven:**
  - Enter the amount of forgiveness as **Other Government Payment income** in whole farm analysis.
  - Use this cash inflow to pay down the loan for the amount of forgiveness.
- **If forgiveness is not approved by the end of the year, but is pending:**
  - Show expected forgiveness as **Account Receivable** and leave **Current Loan** on the **Balance Sheet**.
- **For amounts that will not be forgiven:**
  - Show the unforgiven portion of the loan as an **Intermediate Loan** on the **Balance Sheet**. Include amortization information.

**\*\*Do not allocate government payment income to crop or livestock enterprises.\*\***

- **QLA (QUALITY LOSS ADJUSTMENT) PROGRAM**

- Include as **Other Government Payment** income in 2021 whole farm analysis (FINAN).
- \*\* Do not** allocate payments received to the 2021 crop enterprise analysis, these payments relate to losses in **2018 & 2019**.

- **WHIP+ (WILDFIRE AND HURRICANE INDEMNITY PROGRAM-PLUS) PROGRAM**

- Include as **Other Government Payment** income in 2021 whole farm analysis (FINAN).
- \*\*Do not allocate final payments received for '18 & '19 to the crop enterprise analysis.**
- If payments are received for **2021 drought conditions** before year end payments should be allocated to the 2021 crop enterprise analysis for impacted crops as **Crop Government Payments**.

- 
- **MN BUSINESS DEVELOPMENT GRANTS FROM AMERICAN RESCUE PLAN ACT OF 2021**
    - If a farm received any business development grant funds through their local county include as **Other Government Payment income** in 2021 [whole farm analysis](#) (FINAN).
    - \*\* **Do not allocate to crop or livestock enterprise analysis** \*\*
  - **SBA EIDL (ECONOMIC INJURY DISASTER LOANS) LOANS**
    - Treat as any other long-term loan on Balance Sheet and within financial analysis (FINAN).
  - **SBA EIDL EMERGENCY ADVANCES FROM AMERICAN RESCUE PLAN ACT OF 2021**
    - Include any targeted advance and/or supplemental target advance funds as **Other Government Payment income** in the 2021 [whole farm analysis](#) (FINAN).
    - \*\* **Do not allocate to crop or livestock enterprise analysis.** \*\*
  - **ADVANCE CHILD TAX CREDIT PAYMENTS IN 2021**
    - Include the Advance Child Tax Credit Payments received monthly starting in the summer of 2021 for some families as a **Tax Refund** in the Personal Income data entry area in the 2021 [whole farm analysis](#) (FINAN).
    - \*\* **Do not** allocate to crop or livestock enterprise analysis. \*\*
  - **EIP (ECONOMIC IMPACT PAYMENTS – “STIMULUS CHECKS”)**
    - Include the third economic impact payment received (in the spring of 2021) as **Other Personal Income** (non-farm income) in the 2021 whole farm analysis.
    - \*\* **Do not** allocate to crop or livestock enterprise analysis. \*\*
  - **CROP ENTERPRISE ANALYSIS AND GOVERNMENT PAYMENTS**
    - All government payments allocated to the crop enterprise analysis should be included as **Crop Government Payments** going forward. This will move all payments “below the line”.
    - This is a change of historical course, as previously some payments were included as Other Income (in the Gross Revenue calculation) and some as Crop Government Payments (a below the line add back).
    - *Note:* Crop government payments may come from several programs. Be sure to allocate funds received by crop. Do not simply allocate the total against all crop acres.



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## UPDATED ANALYSIS RECOMMENDATIONS

- **HAY, SMALL GRAIN**
  - This crop type should always be entered with the type of **Normal** (*not Established*). The hay and small grain are harvested as one unit in this case.
- **LIVESTOCK RENDERING EXPENSES**
  - Expenses related to livestock rendering services should be included as **Custom Hire Expense** in both the whole farm and livestock enterprise analysis.
- **VALUING HOMEGROWN FEEDS**
  - Consider the impact of drought conditions on feed quality. Value homegrown crops accordingly.
  - A reminder homegrown feed should be valued on the balance sheet and throughout the analysis at its **opportunity cost**. Meaning, value these feed at the appropriate market equivalent, not the crop's cost of production for the farm.
- **CORN SILAGE AND OTHER SILAGE CROPS**
  - Silages should not include **Storage** or **Crop Marketing** expenses in the crop enterprise analysis. Costs of bags, etc. should be included as **Packaging and Supplies**.
- **ORGANIC FARM (TOTAL/PARTIAL) VS ORGANIC TRANSITION FARMS – WHOLE FARM & ENTERPRISE SPECIAL SORTS**
  - A farm is either Organic or Organic Transition. Do not select both whole farm sorts.
  - The **Organic Transition** whole farm special sort is intended for those farms first transitioning from conventional to organic farming.
  - Once a farm is *certified organic* the **Organic Farm** (total or partial) special sort is used.
  - Even if an organic farm is transitioning more acres to organic production, the whole farm special sort remains as **Organic Farm**. Handling **Crop Acres Transitioning to Organic** in the enterprise analysis:
    - Crop Enterprise Analysis data entry – use the conventional crop (not organic).
    - Direct Crop Expense data entry – do not use **Chemical Expense** for organic transition acres. Instead use **Organic Crop Protection**.
    - Other Crop Information data entry – select “Yes” for **Organic Transition**.
  - If a certified organic farm is transitioning a livestock enterprise to organic production, the **Organic transition** special sort is used in Livestock Enterprise Analysis data entry.

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## Analyzing Cover Crops – UPDATED RECOMMENDATIONS!!

- **COVER CROP**

- **Always** analyze the cover crop as its **own crop enterprise**. (The cash crop/base crop and cover crop are to be analyzed separately, in their own enterprises.)
- Cover crops are analyzed in the year when production is complete.
  - Accumulate expenses related to fall seeding as **Growing Crop** or **Prepaid Expense** on the ending balance sheet for that year.
  - Analyze the cover crop in the following year's analysis, when production is complete, whether the cover crop is harvested, grazed, or simply terminated.
- Use the related **Crop** in the enterprise analysis.
  - This will be the individual crop type if a single species is planted.
  - If a mix is planted, utilize the best fit of the following: *cover crop grazing* (unit is AUM), *cover crop mix* (unit is \$), or *cover crop rye mix* (unit is \$).
- Cover crop enterprises may not have any production. This is expected since many are never harvested or grazed and instead are terminated.
- The cover crop enterprise should be identified with the Crop Type of **Double Crop**.
- **Combine** the Cover Crop enterprise with the Base Crop enterprise in Crop Enterprise Analysis data entry.
- **Conservation payments** received related to planting a cover crop should be allocated to the cover crop enterprise. These are included as **Other Income** for the enterprise.
- There is **no longer** a **Cover Crop Expense** in the crop expense chart of accounts. Do not use this expense line.
- Seed, chemical, machinery costs, etc are to be entered as **individual expense items** for the cover crop enterprise being analyzed.
- Change the default allocation factor for single crops used as a cover crop and terminated (for example rye). Reduce the default factor by 50%. Rye becomes 15 vs the default of 30. *If harvested no adjustment is made to the allocation factor.*
- Designate the Cover Crop as **Cover Crop** in **Other Crop Information** data entry.
- Consider other metrics and special sorts as needed for the cover crop enterprise.
- The **acres** and **tenure** type **MUST** match for the cover crop and base crop/cash crop that are being combined and analyzed together.

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- **BASE CROP / CASH CROP**

- Analyze the base crop/cash crop enterprise as normal. The crop to be analyzed with the cover crop is the one that *follows* the cover crop termination or harvest.
- Traditional government program payments (ARC/PLC) should be allocated to the base crop/cash crop. These are included as **Crop Government Payments**.
- Designate the Base Crop / Cash Crop as **Grown After Cover Crop** in **Other Crop Information** data entry.
- The **acres** and **tenure** type *MUST* match for the cover crop and base crop/cash crop that are being combined and analyzed together.
- Consider other metrics and special sorts as needed for the base/cash crop enterprise.

- **HELPFUL CROP DEFINITIONS**

- **Cover Crop** – a crop seeded in the fall to cover the soil over winter and provide agronomic benefits. The purpose of the fall seeded crop drives the definition. *Fall seeded crops planted for production purposes (winter wheat, winter rye) are not considered cover crops.*
- **Base Crop** – the crop planted *following* a cover crop.
- **Nurse Crop** – a crop planted in spring to help protect a more vulnerable crop as it emerges. Nurse crops are often planted with alfalfa hay and sugar beets, for example.

- **SEE THE COVER CROP ANALYSIS SECTION OF THE MANUAL FOR HELPFUL SCREENSHOTS AND MORE DETAILS.**

## FINPACK Summary Information Page

- **REVIEW THIS INFORMATION ANNUALLY. UPDATE FOR THE FARM AS NEEDED.**

- **Total acres owned** – this value drives owned acreage reporting in FINPACK and FINBIN.
- **Number of operators.**
- **Operator information** – **Operator number 1** should always be the ‘primary’ student of the operation. *For example, if a generational transfer occurs and the enrolled student is a MN MDA beginning farmer scholarship recipient, update the information for Operator number 1 to reflect this person’s year born and year started farming.*
- **Special sorts** – review the whole farm special sorts and make adjustments as needed.

- **DO NOT CHANGE THE FARM ID FOR THE FILE.**

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## FINPACK UPDATES

- **FINPACK CHART OF ACCOUNT UPDATES:**

- Removed **Grazing Fees Expense** – utilize land rent as needed for these arrangements. Then include pasture as a crop enterprise to produce the AUM's grazed.
- Removed **Cover Crop Expense** – instead, utilize the specific cover crop related input costs for the cover crop analysis, meaning seed, chemicals, etc. *See updated Cover Crop Analysis recommendations for full information.*

- **FINPACK CROP ADDITIONS:**

- **Cover Crop Mix** Default unit = \$ (like CRP)
- **Cover Crop Rye Mix** Default unit = \$ (like CRP)
- **Triticale Silage** Default unit = tons
- **Triticale Silage, Organic** Default unit = tons

- **CROP ENTERPRISE ANALYSIS – OTHER CROP INFORMATION UPDATES:**

- Combined **Genetic Chemical Resistance & Genetic Insect Control** into **GMO Technology**. Identify GMO enhanced crops with this designation.
- Added the capability to identify crop enterprises as a **Cover Crop** or **Grown After a Cover Crop** at the main Other Crop Information level. See **Cover Crop Analysis** details in this manual for more information. There are no longer any cover crop related Special Sorts.

- **FINPACK SPECIAL SORT UPDATES:**

- **Crop Specific** – removed the following:
  - **Cover Crop**
  - **Grown with Cover Crop**
- **Livestock Specific** – added the following:
  - **Dairy/beef cross** (to be used with dairy grow/finish enterprises)
  - **Calf auto feeders**

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## OTHER UPDATES AND RECOMMENDATIONS

- Syngenta Corn Seed Settlement Program
  - Many producers received this payment from the lawsuit related to Viptera and Duracade corn seed from Syngenta.
  - Include any payments received in 2021 from this settlement as **Other Income** in 2021 whole farm analysis (FINAN).  
**\*\* Do not allocate to the corn enterprise analysis \*\***
  
- Milk Powder Settlement Program
  - Many producers received this payment relating back to milk sales from 2002 to 2007.
  - Include any payments received in 2021 from this settlement as **Other Income** in 2021 whole farm analysis (FINAN).  
**\*\* Do not allocate to the dairy enterprise analysis \*\***

# Handling Government Payments – Whole Farm

	Amount
<b>Miscellaneous crop income</b>	0
Cull breeding livestock	
Misc. livestock income	
CCC market loan gain	
Crop government payments	
CRP payments	
Livestock govt payments	
Conservation govt payment	
Other government payments	
Custom work income	
Contract livestock income	
Renewable energy income	
Farm rental income	
Patronage dividends, cash	
Crop insurance income	
Livestock insurance inc	
Sale of resale items	
Cash from hedging accts	
Other farm income	
<b>Total</b>	

• CCC Market Gain or LDP Payments

• ARC & PLC Payments

• DMC Payments • **PLIP**  
• **ELAP payments** • **PMVAP**  
• **LFP payments**

• EQIP (for annual production expenses)  
• CSP Payments  
• SHIPP Payments  
• **PCCP Payments**

• **PPP Loan Forgiveness**  
• **WHIP+**  
• **QLA Payments**  
• **CFAP 1 & 2**  
• **MN Business Dev. Grants & SBA EIDL Emergency Advances**  
• **American Rescue Plan Debt Payments**

• Crop insurance, including prevent plant, payments

• Livestock Gross Margin (LGM) payments  
• Livestock Risk Protection (LRP) payments  
• Dairy Revenue Protection (DRP) payments

## Crop Government Payments

<b>Crop</b>
Description
Type
Acres owned
Acres cash rented
Acres share rented
Your Share (%)
Total production (your share)
Value per unit
Total product value
Hedging gain or loss
Crop insurance income
LDP income
Crop government payments
Other income
Combine with ent. number

### **NOT ALLOCATED TO ENTERPRISES:**

- **PPP Loan Forgiveness**
- **EIDL Emergency Advances**
- **CFAP 1 & 2**

- **WHIP+ & QLA for 2018/19**
- **MN Business Dev. Grants**
- **American Rescue Plan Debt Pymts**

• SHIPP, CRP – treat as a crop

• Crop insurance payments  
• Prevent plant payments

• CCC Market Gain  
• LDP Payments

• ARC and PLC payments  
• **WHIP+ for 2021 drought conditions**

• EQIP & CSP for annual expenses  
• **PCCP**

# Livestock Government Payments

Livestock Inventory   Product Sales and Other Income   Other Information

	Milk Quantity		Value
<b>Sales</b>	2,312,050 ...	lb.	<b>409,001 ...</b>
Used in the home		lb.	
Fed		lb.	
Hedging gain or loss			
Livestock insurance income			
Government payments			
Other income			22,682

- LGM payments
- LRP payments
- DRP payments

- **ELAP payments**
- **LFP payments**
- DMC payments
- EQIP & CSP for annual expenses

## **NOT ALLOCATED TO ENTERPRISES:**

- *PPP Loan Forgiveness*
- *EIDL Emergency Advances*
- *CFAP 1 & 2*
- *PLIP payments*
- *PMVAP payments*
- *MN Business Development Grants*

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## Points of Emphasis for 2021

- **Whole Farm Related:**

- **Total acres owned** – this value drives owned acreage reporting in FINPACK and FINBIN.
- **Number of operators.**
  - Include *Year Born* and *Year Started Farming* for **all operators** in the operation.
  - **Operator information** – **Operator number 1** should always be the ‘primary’ student of the operation. For example, if a generational transfer occurs and the enrolled student is a MN MDA beginning farmer scholarship recipient, update the information for **Operator number 1** to reflect this person’s year born and year started farming.
- If major unpaid resources are provided to the operation by a family member, it is recommended that a charge is included for the estimated value of those resources (hired labor, custom hire, or machine lease for example) with an offsetting personal income entry to balance cash.
- Continue to tag **Organic, Organic Transition, Specialty Crop, MDA Beginning Farmer Scholarships, and Veterans** in whole farm special sorts.
- Use the **MN Water Quality Certified** whole farm special sort for those operations that have been certified through Minnesota Department of Agriculture’s Minnesota Agricultural Water Quality Certification Program (MAWQCP).
- Enter detailed family living information for all farms keeping detailed records.
- **Labor Hours** – Make sure all labor hours are included for the farm operation. Place special emphasis on accuracy of unpaid family labor hours. This increases accuracy and consistency for all operations.

- **Crop Enterprise Related:**

- **Custom hired operations** - When a crop enterprise is produced using custom hired operations, for either a portion or all operations, adjust allocation factor accordingly. Use judgment when making this change. *For crop enterprises that are custom harvested, the recommendation is to reduce the default allocation by 50%.* Custom work enterprises (included in Crop Enterprise Analysis) **should not** have real estate taxes or long-term interest expenses allocated to them. Updated recommendation is to enter custom work acres as rented acres in the analysis.
- **Review special sorts, previous crops, and crop production practices and make changes where appropriate.**
- Analyze **Cover Crops** using the new methodology described in this manual.



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- ***Livestock Enterprise Related:***

- Include both quantity and value for all *Feed Fed*.
- Review livestock enterprise reports and correct obvious errors in feed efficiencies and other efficiency factors.
- Dairy Specific
  - Combine Dairy and Dairy Replacements where appropriate. If these are not combined, they will not be included in the Annual Report or FINBIN database.
  - **Dairy Hauling and Trucking** – For dairy operations, Hauling and Trucking expenses should ***only*** include milk hauling. Use the Marketing expense category for milk marketing costs and related cull cow marketing.
  - **SCC** – enter as a whole number, ***not*** in thousands. Ex: Enter 100,000 ***not*** 100.
  - Be sure to enter **Total pounds of protein sold** and **Total pounds of fat sold** on the 'Other Information' tab of the dairy enterprise. This is **not** an optional entry.

- ***General Notes:***

- Review and correct all *Net Worth Discrepancies*. Farms with *Net Worth Discrepancies* greater than 1% of gross revenue will be deleted from the database. Net worth discrepancies are caused by one of the following:
  - Any cash discrepancy leads to a net worth discrepancy in the same amount.
  - Any liability discrepancy leads to a net worth discrepancy in the same amount.
  - Changes to the cost value of land.
- Complete an enterprise analysis for all farms possible. This includes completing livestock enterprises and minor crop enterprises whenever possible.

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## State Database Thresholds

### Whole Farm Analysis

- Cash check discrepancy should be < 1% of gross income and < \$5,000.
- Liabilities check discrepancy should be < \$300.
- Net worth discrepancies should be <1% of gross income and <\$5,000.
- All farms, except pass-through entities, must include deferred liabilities. If a farm has negative deferred liabilities, enter zero and include a Unique Situation report to your database reviewer.
- All farms must include both cost and market balance sheets.
- Total machinery and building depreciation should be <= \$0. See Capital Sales and Purchases for handling gain on the sale of capital assets.
- All farms must include estimated labor hours. Even though FINPACK says this is optional, it is not optional for farm management programs.
- Personal property taxes should not be entered for Minnesota farms.
- Average Hired Labor Rate per Hour should be between \$5 and \$75.

### Crop Enterprises

- Nurse crops for hay establishment (i.e. oats) should not be coded with Double Crop type.
- Irrigation expense should not be allocated to non-irrigated crops.
- For hay crops, seed expense should only be entered on hay establishment enterprises and not on normal production enterprises unless there were re-establishment costs.
- Rent expense should be > \$0 on cash rented crops. If legitimate, enter as share rental with 100% share AND delete the enterprise from the database.
- Real estate taxes should be > \$0 on owned land.
- Seed expense should be > \$0 on corn, soybeans, and other common commodity crops.
- Seed expense can be \$0 for canning crops such as peas and sweet corn.
- Drying should = \$0 on forage crops. Enter preservatives as Misc. Crop Expense.
- All direct and overhead expenses should be >= \$0. Negative overhead expenses are caused by over-allocating direct expenses for labor, leases, utilities, and custom hire.

### Livestock Enterprises

- Beef calves from a cow-calf enterprise should be sold at normal calf selling weight or transferred to a grow/finish enterprise. Enterprises with an average sales weight greater than 800 pounds will be deleted unless the “Cow-calf with backgrounding” special sort is selected.
- Carefully review all items in the Other Information results, such as Calving Percentage, Feed Conversion, etc.
- Enter feed quantities in the proper unit, e.g., do not enter Protein in pounds.

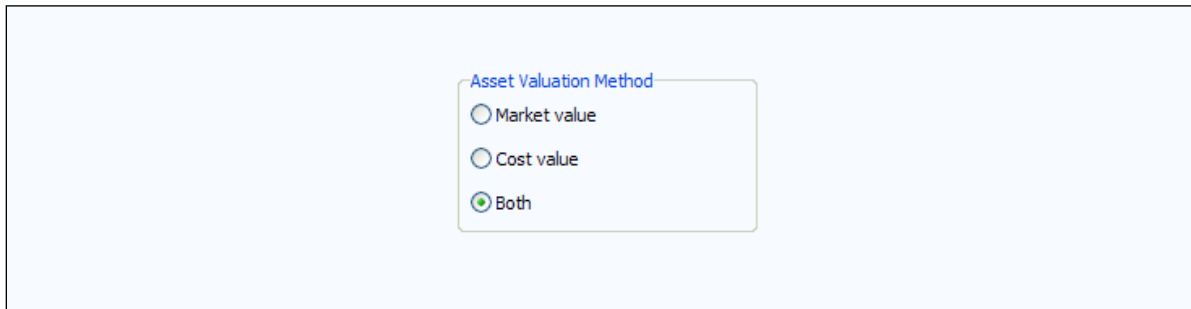
**Note** – many of these items can be reviewed using the RankEm Error Check Report.

# Section III:

## BALANCE SHEET INSTRUCTIONS

### Entering Data in the FINPACK Balance Sheet

**Valuation Method** - Select “Both” during entry; you can still choose to print only the Market Value or Cost Value by selecting these later when you print.



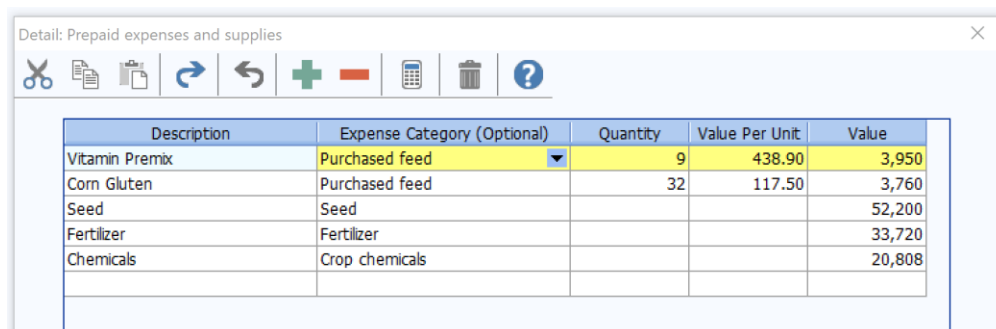
The screenshot shows a dialog box titled "Asset Valuation Method" with three radio button options: "Market value", "Cost value", and "Both". The "Both" option is selected, indicated by a green dot next to it.

## ASSETS

### Current Farm Assets

**Cash and Checking Balance** - Includes all farm accounts, like savings, checking, CD's (Certificates of Deposit), money market accounts, etc. Use **Detail** to make a detailed list.

**Prepaid Expense and Supplies** - Include paid fuel, fertilizer, and chemical in tanks, fall applied fertilizer and/or chemicals, prepaid accounts at elevators, co-ops, companies, etc. Accumulate expenses related to planting cover crops for soil nutrient enhancement using the Cover Crop Expense category. Lime fertilizer expenses should be a prepaid expense. The expense should then be allocated to the respective field/crop for a subsequent number of crop years, per the operator's discretion. Use **Detail** to select the expense category to help identify the total expense incurred in the FINAN enterprise analysis.



The screenshot shows a window titled "Detail: Prepaid expenses and supplies" with a table of expenses. The table has five columns: Description, Expense Category (Optional), Quantity, Value Per Unit, and Value. The data is as follows:

Description	Expense Category (Optional)	Quantity	Value Per Unit	Value
Vitamin Premix	Purchased feed	9	438.90	3,950
Corn Gluten	Purchased feed	32	117.50	3,760
Seed	Seed			52,200
Fertilizer	Fertilizer			33,720
Chemicals	Crop chemicals			20,808

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**Growing Crops** - Example: Winter Wheat (cost of inputs). Also, expenses related to planting cover crops for sale or feed use should be considered a growing crop. Use **Detail** to select the expense category.

**Accounts Receivable** - Examples: Insurance payments, money owed from others, estimated Disaster payments to be received next year, LDP'S where paperwork is done but the check is not received. The beginning balance sheet should include the gross value of the previous December milk which was received in January. The ending balance sheet should include the December check which will be received in the following the January. Deferred crop sales may be included in Accounts Receivable or as crop inventory. Use **Detail** in the entry box to enter a detailed list.

Loan repayment rate locks: If the producer has a marketing loan repayment rate lock in place as of January 1 and the market price is higher than the repayment rate, show the equity gain as an account receivable.

Projected ARC or PLC payments should not be included until the Marketing Year Price has been established.

**Hedging Accounts** - Enter the amount of equity that could be withdrawn if the position were settled on the statement date. Some brokerage statements list this as *"Net Liquidity"*.

**Other Current Assets** - Enter any item not fitting the categories listed in the Current Assets section of the Balance Sheet.

**Crops** - Always enter the Quantity, Value/Unit and Value. Enter crops under CCC loan as normal crop inventory, valued at market value or loan rate, whichever is higher. If the market price is below the loan rate and an LDP has not been claimed, value the crop at local loan rate. If the inventory is "priced" or under contract, use the contract price less estimated expenses for storage and delivery.

For year-end advances on crops sold for the following year, convert the dollars received on the advance to units of crop based on the percentage of the sale received. Reduce the grain inventory by this number of units. Price used in the calculation for determining bushels should be the underlying contract price.

**Market Livestock** - Include feeder animals intended for eventual sale. Youngstock intended to eventually enter the breeding herd should be included in Breeding Livestock.

## Intermediate Farm Assets

**Breeding Livestock** - Include all breeding females and males including youngstock and replacements. To-be-culled breeding animals remain as intermediate livestock until sold. Cost value for raised livestock should be set initially as the estimated cost of production (base value) and should remain the same throughout the animal's life. Purchased animals should be separated from raised if they represent over 10% of the herd with cost value of the purchase cost less depreciation down to the base value.

**Farm Machinery and Equipment** - Enter both Market and Cost Value. For cost valuation, use an economic depreciation method that reflects the estimated actual useful life of the asset or group of assets. An easy calculation is to subtract 10 to 15% of the remaining cost value each year. Start new machinery at full purchase cost for both cost and market value and depreciate depending on use during the year. For new students, establish the cost value by creating a detailed list and estimating the purchase cost less economic depreciation on each item. If this is unworkable, begin at market and apply economic depreciation in future years. See *Entering Capital Leases on the Balance Sheet* for leased assets. Use **Detail** to enter a detailed list. Use the % feature to take a percent depreciation on the detail list (see below).

Depreciation percent...		<input type="checkbox"/> Adjust market values			
10.00		<input checked="" type="checkbox"/> Adjust cost values			
Adjust?	Description	Cost Value	Adjusted Cost Value	Market Value	Adjusted Market Value
<input checked="" type="checkbox"/>	Flatbed trailer	782	704	1,116	1,116
<input checked="" type="checkbox"/>	Grinder	425	382	837	837
<input checked="" type="checkbox"/>	IH 966	4,251	3,826	7,440	7,440
<input checked="" type="checkbox"/>	Feed wagon	612	551	1,023	1,023
<input checked="" type="checkbox"/>	Feeders	147	132	279	279
<input checked="" type="checkbox"/>	Bin sweep	368	331	465	465
<input checked="" type="checkbox"/>	Feed wagon #2	3,883	3,494	4,697	4,697
<input checked="" type="checkbox"/>	Scale	441	397	679	679
<input checked="" type="checkbox"/>	IH 1086	9,311	8,379	11,160	11,160
<input checked="" type="checkbox"/>	Troughs	234	211	419	419
<input checked="" type="checkbox"/>	Feed truck	3,596	3,237	4,441	4,441
<input checked="" type="checkbox"/>	Feed bins	367	330	581	581
<input checked="" type="checkbox"/>	Auger	307	276	465	465
<input checked="" type="checkbox"/>	Combine	23,373	21,036	27,900	27,900
<input checked="" type="checkbox"/>	Weed eater	210	189	335	335
<input checked="" type="checkbox"/>	Livestock trailer	1,148	1,033	1,395	1,395
<input checked="" type="checkbox"/>	Foam marker	401	360	558	558
<input checked="" type="checkbox"/>	Tire chains	204	184	465	465
<b>Total</b>		<b>86,514</b>	<b>77,863</b>	<b>105,109</b>	<b>105,109</b>

### Suggested Depreciation Rates

Livestock equipment	15 - 20 %
Crop machinery	7- 15 %
Buildings and bins	5 %
Augers and movable equipment <sup>21</sup>	10 %
Vehicles	10 – 20 %
Office Equipment	30 %

---

### Suggested Depreciation Percentages Based on Asset Useful Life

Years	Depreciation %	Years	Depreciation %
2	50	9	11
3	33	10	10
4	25	11	9
5	20	12	8
6	17	15	7
7	14	20	5
8	12	25	4

**Titled Vehicles** - If desired, separate titled vehicles from farm machinery.

**Other Intermediate Assets** - Example: Cooperative Stock, (this is not to be confused with co-op patronage equities which are long term assets), Beet Stock, Farm Credit Services Stock, Wheat Growers Stock. Enter the retained value for each cooperative separately. For the market column, value stock at market value with recognition of changes if significant changes in valuation have occurred since the beginning of the year. Also, include the remaining value yet to be expensed on investments in perennial crops. Use **Detail** to enter detailed list.

### **Long Term Farm Assets**

**Farm Land** - Use **Detail** to enter Acres, Value/Acre, Cost Value and Market Value. Do not change Market Value unless a significant change occurs. DO NOT change the cost value of land. This will cause a Net Worth Discrepancy.

**Farm Buildings** - Enter both Cost Value and Market Value. Use a Management Depreciation Method, which depreciates the original cost over the life of the asset for the cost value. An easy calculation is to subtract 5 to 7% of the remaining cost value each year. Enter new buildings at original purchase cost for both cost and market value and depreciate based on use during the year. See Entering Capital Leases on the Balance Sheet for leased assets. Use the **Detail** to enter a detailed list.

*Note:* For the same farm, you can separate land and buildings on the “Cost” Balance Sheet yet lump them together on the “Market” Balance Sheet.

**Other Long Term Farm Assets** - Enter any long term asset not already categorized above. Enter both the Cost and Market Value. Example: Co-op equities.

**Capital Purchases and Capital Sales** - Details regarding the purchase and sales of Breeding Livestock; Machinery and Equipment; Titled Vehicles; Land; Buildings and Improvements; Other Intermediate Assets and Other Long Term Assets can be recorded on the Balance Sheet. Use **Detail** to enter this information. Then, details of these transactions for the year can be selected within Capital Purchase and Sales entry in FINAN. **“Show sold assets”** checkbox is available in all intermediate and long term asset detail. Checkbox needs to be selected to display the “Year Sold” and “Sale Price” columns.

The recommended entry of traded assets can be found on page 34.

Detail: Machinery and equipment

☒ Show sold assets

Description	Model Year	VIN / Serial No.	Year Purchased	Purchase Price	Percent Ownership	Cost Value	Market Value	Year Sold	Sale Price
ROUND BALE RACK	2006		2006		100.00	905	2,932		
WAGON	2006		2006		100.00	1,144	7,331		
10X61 AUGER	2006		2006		100.00	1,499	3,665	2017	2,000
Wagon	2006		2006		100.00	1,200	7,331		
12 Ton Gear	2007		2007		100.00	645	1,466		
Chopper	2007		2007		100.00	5,054	14,661	2017	10,000
Hay Buster (33%)	2007		2007		100.00	2,209	4,398		
Hay Buster	2007		2007		100.00	3,609	14,661		
Silage Bagger	2005		2008		100.00	5,811	10,996	2018	6,000
Used Semi	2004		2008		100.00	4,843	9,530		
Semi Grain Trailer	2004		2008		100.00	3,875	8,797		
Jaylor Mixer	2006		2006		100.00	8,717	10,400	2016	10,385
JD 8110	2004		2009		100.00	47,830	73,306		
Spl. Row Planter-Trd '16	2010		2010		100.00	35,000	41,000	2016	41,039
JD 9670 STS	2010		2011		100.00	111,995	187,336		
JD 612C Corn Head	2009		2011		100.00	22,882	46,264		
Parker Grain Cart	2012		2012		100.00	10,359	14,289		
JD Loader	2012		2012		100.00	5,979	8,247		
JD 726 Mulch Finisher	2008		2012		100.00	20,417	28,162	2018	18,000
Tractor	2008		2012		100.00	107,916	149,129		
JD 332E Skidloader	2013		2013		100.00	35,164	43,653		
Westfield Auger	2013		2013		100.00	15,484	20,234		
Loftness Stalk Chopper	2013		2015		100.00	15,795	17,599		
Meyer 8865 Manure Sprdr	2012		2015		100.00	22,275	24,819		
JD Top Air Sprayer	2013		2016	56,700	100.00	56,700	59,850		
JD Planter	2014		2016	146,000	100.00	131,400	132,979		
Patz TMR Mixer	2016		2016	28,350	100.00	28,350	29,925		

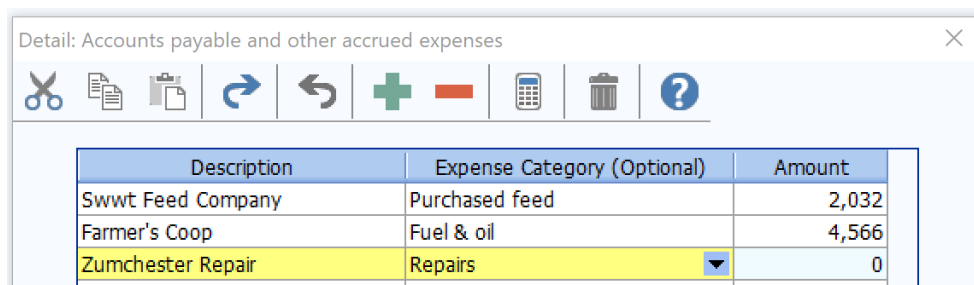
## Personal Assets

**Personal Assets** – these should be detailed as well. Enter the house in this category.

## LIABILITIES

### *Current Farm Liabilities*

**Farm Accounts Payable and Other Accrued Expenses** - Usually includes accounts payable; charge account such as feed, fertilizer owed to local businesses, real estate taxes owed but not paid. Include any government payments received before the beginning balance sheet date but belonging to next year's crop. Do not include credit card or FarmPlan balances if expenses are included in outflows—include in current notes instead. Use detail to list each account and the Expense Category.



Description	Expense Category (Optional)	Amount
Swwt Feed Company	Purchased feed	2,032
Farmer's Coop	Fuel & oil	4,566
Zumchester Repair	Repairs	0

**Current Farm Loans** - List loans due in less than 1 year. If expenses financed by credit cards or FarmPlan are included as cash outflows in FINAN, list balance as Current Loan here. If not, include in Accounts Payable.

### *Intermediate Farm Liabilities*

**Intermediate Farm Loans** - List loans owed on equipment and livestock; usually ten years or less. P&I payment is required for calculation of Term Debt Coverage. Principal due is amount due in the next 12-month period. (FSA set-aside payments should be listed as separate loans without accrued interest or payments, 0% interest.)

**Farm Capital Leases** - If this is an *operating lease* (the operator's intent is not to eventually own the asset), do not enter the asset or liability on the Balance Sheet.

If this is a *capital lease*, which includes a "buy-out" provision:

- 1) Report the asset value in the appropriate asset category and depreciate on cost balance sheet as discussed in this section.
- 2) Report the lease as a liability with interest and a payment separated by principal and interest.
- 3) Use the example at the end of this section to help in the calculation of principal and interest.



## Long Term Farm Liabilities

**Long-Term Farm Liabilities** - List loans with original term of longer than ten years ~ usually real estate (land or buildings). P&I payment is required for calculation of Term Debt Coverage. (FSA set-aside payments should be listed as separate loans without accrued interest, or payments, 0% interest.)

## Personal Liabilities

Income and self-employment taxes payable should be estimated and included as personal income taxes payable. Be sure to enter on both beginning and ending Balance Sheets. List credit cards as accounts payable if they are not included as cash outflows in FINAN.

The loan should follow the purpose of the loan not necessarily the collateral. A home improvement would be a personal loan. A loan for farming with the house as collateral would be a farm loan.

**Current Personal Loans** - Short term loans due 12 months or less. Include credit card balances if included in cash outflows in FINAN.

**Intermediate Personal Loans** - Car loans, boats, furniture, and other personal items.

**Long Term Personal Loans** - Real estate, house, cabin, trailer house.

## Deferred Liabilities

Deferred liabilities must be included for all farms except “pass-through entities,” LLCs and S Corporations for which income is passed through to owner for tax purposes. Use the detail feature to calculate deferred liabilities on the Market Balance Sheet.

	Amount
Deferred taxes on current inventories	349705 ...
Deferred liabilities on capital assets	123,748
Total	473,453

### Deferred Liabilities include:

- 1) Taxes due on **current inventories** (grain, market livestock, etc.) include both income and self-employment taxes. Enter the cost basis of purchased feeder as well as the amount of CCC loans treated as income and already taxed.

Detail: Deferred taxes on current inventories

Market value of current inventories		1,436,439
Payables and accrued expenses	(-)	
<b>Purchase cost of feeder livestock</b>	(-)	407,896
Government crop loans already taxed	(-)	
NOL carryovers and other adjustments	(-)	
Taxable current inventory value	(=)	1,028,543
Estimated marginal tax rate (%)	(*)	34.00
Deferred taxes on current inventories	(=)	349,705

Close

- 2) Taxes due on gain from **capital assets** sold (land, stock, machinery, etc.) includes capital gains tax calculated on the difference between market value and tax basis value. In accordance with the Farm Financial Standards, selling costs should have already been subtracted from the market value of assets and therefore should not be included here.
- 3) FINPACK defaults the cost values from the balance sheet into the tax basis column. To be accurate, you should enter the actual tax basis for each asset category. FINPACK will automatically update the tax basis using the cost values until you change them, so they do not match. After you change the tax basis, you must continue to update it from year to year.

Detail: Deferred liabilities on capital assets

	Market Value	Tax Basis	Selling Cost %	Estimated Gains
<b>Breeding livestock</b>		0		
Machinery and equipment	1,099,984	725,975		374,010
Titled vehicles	112,159	81,945		30,214
Other intermediate assets				
Land	1,258,300	1,225,800		32,500
Buildings and improvements	514,278	361,726		152,552
Other long term assets	2,401	2,401		
Stocks and bonds				
Retirement accounts	10,000	10,000		
Personal business investment				
Personal real estate	115,000	115,000		
Other personal long term assets				
<b>Total taxable capital gains</b>				<b>589,277</b>
Estimated marginal tax rate (%)	(*)			21.00
Total deferred taxes on capital assets	(=)			123,748
Total selling costs	(+)			0
Total deferred liabilities on capital assets	(=)			123,748

Close

- 4) The chart on the following pages should be used in determining the appropriate tax rate.

## *Approximate Average Deferred Tax Rates*

### **MINNESOTA**

#### **Average Deferred Tax Rate on**

Total Deferred Income	Current Deferred Income	Non-Current Deferred Income
	Federal <sup>a</sup> and State	Federal <sup>b</sup> and State
15,000	15%	0%
20,000	15%	0%
30,000	15%	0%
40,000	17%	0%
50,000	20%	1%
60,000	21%	2%
70,000	22%	2%
80,000	23%	3%
90,000	24%	6%
100,000	25%	7%
110,000	26%	9%
120,000	26%	10%
140,000	26%	11%
160,000	26%	13%
180,000	26%	14%
200,000	26%	15%
250,000	26%	16%
300,000	26%	17%
350,000	27%	18%
400,000	35%	19%
450,000	35%	20%
500,000	35%	21%
1,000,000	41%	25%
2,000,000 and over	44%	28%

a. Includes Federal Income Tax, Social Security Tax and State Income Tax.

b. Excludes Social Security Tax.

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***Approximate Average Deferred Tax Rates***

**NORTH DAKOTA**

**Average Deferred Tax Rate on**

Total Deferred Income	Current Deferred Income	Non-Current Deferred Income
	Federal <sup>a</sup> and State	Federal <sup>b</sup> and State
15,000	15%	0%
20,000	15%	0%
30,000	15%	0%
40,000	17%	0%
50,000	18%	0%
60,000	20%	0%
70,000	20%	0%
80,000	21%	1%
90,000	22%	2%
100,000	22%	4%
110,000	22%	5%
120,000	22%	6%
140,000	22%	7%
160,000	22%	8%
180,000	22%	9%
200,000	22%	10%
250,000	22%	11%
300,000	22%	12%
350,000	22%	13%
400,000	29%	13%
450,000	29%	13%
500,000	30%	14%
1,000,000	34%	18%
2,000,000 and over	37%	20%

a. Includes Federal Income Tax, Social Security Tax and State Income Tax.

b. Excludes Social Security Tax.

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## Entering Capital Leases on the Balance Sheet

The first step is to determine if the lease is a capital lease or simply a rental arrangement. The Farm Financial Standards Council (FFSC) Guidelines, Appendix G, states,

*According to GAAP, a lessee should show the lease as a capital lease if the lease is non-cancelable and meets any one of the following four interest tests:*

- 1) The terms of the lease transfer ownership of the property to lessee at the end of the lease term.*
- 2) The lease contains a bargain purchase option.*
- 3) The term of the lease is at least 75% of the estimated economic life of the leased property.*
- 4) The present value of the minimum lease payments equals or exceeds 90% of the fair market value of the leased property.*

If the lease is determined to be a capital lease, then, for financial statement purposes, the lease payments must be capitalized and amortized over the term of the lease. It must be remembered that it is the lease investment, which is being put on the balance sheet, not the asset being leased.

Treatment of capital leases is a complicated subject that is often treated incorrectly. Most farmers leasing capital assets under a capital lease probably treat a capital lease like a regular lease by deducting the entire payment as a business expense. Although simple, this is incorrect according to both GAAP and the IRS. Since our purpose is a management application, we will follow the GAAP (and FFSC) format and leave the tax implications to the tax practitioners.

Since a capital lease is actually a type of purchase agreement, many lenders prefer to see the asset, and the accompanying liability, on the balance sheet. This requires the use of a present value chart (or a business calculator) to separate the payments into an interest portion and a principal amount, and an amortization calculation to further separate the principal portion into current and term debt. This is what both GAAP and FFSC recommend.

The asset value (the value of the lease entered on the balance sheet) consists of the current year payment made in advance plus the capitalized value of the outstanding principal portion of future payments based upon the effective interest rate as determined through the use of a present value table or business calculator. This value may be amortized over the estimated life of the asset being leased or may be amortized over the life of the lease.

The liability entered on the balance sheet is the capitalized value of the principal portion of future payments based upon the effective interest rate, as determined using a present value table or a

business calculator. This liability is further divided into current and non-current portions. Accrued interest is also entered as a current liability.

**Example:**

An asset costing \$50,000 is purchased utilizing a five-year capital lease, based on a 10% interest rate.

**Option #1** - There are five equal installments (lease payments) of \$11,990.80 each. The first payment is due upon delivery and is entirely principal. The remaining four payments consist of both principal and interest. Using a present value table, we find that the factor for the four future payments at 10% interest is 3.1699 (*see Present Value Table, page 25*). So, the calculation of the value of the asset the first year (prior to amortization/depreciation) is:

$$\begin{aligned} &\text{Initial payment} + \text{capitalized value of future payments, or} \\ &\$11,990.80 + (\$11,990.80 \times 3.1699 [n=4]) = \$11,990.80 + \$38,009.64 = \$50,000.44 \end{aligned}$$

Other than proving the process, this calculation would not be necessary if you know the actual value being leased. However, the value being leased may differ from the asset cost if there is a buy-out or asset value remaining at the end of the lease term. It is essential the balance sheet reflect only the value being leased (*which is not necessarily the full the value of the item being leased*) and the liability against that value. This asset value would be amortized (depreciated) over the estimated asset life, or over the term of the lease. Using a five-year term, the balance sheet value each year would be:

<u>Year</u>	<u>Amortization</u>	<u>Value</u>	<i>If, as is likely, the lease was initiated during the year (rather than on January 1), a monthly convention would be used in calculating the amortization (depreciation) schedule. For example, if the lease were initiated on April 1, the first-year amortization would be \$7,500 and the sixth year would be the remaining \$2,500.</i>
20x0	0	50,000	
20x1	10,000	40,000	
20x2	10,000	30,000	
20x3	10,000	20,000	
20x4	10,000	10,000	
20x5	10,000	0	

On the liability side, the capitalized value of the lease liability is amortized over the remaining life of the lease. The capitalized value of the future payments, utilizing a present value table or business calculator would be:

$$\$11,990.80 \times 3.1699 [n=4] = \$38,009.64$$

This amount will be amortized over the remaining four annual payments using a standard interest-principal calculation.

<u>Year</u>	<u>Beg Balance</u>	<u>Payment</u>	<u>Interest</u>	<u>Principal</u>	<u>End Balance</u>
20x1	38,010	11,991	3,801	8,190	29,820
20x2	29,820	11,991	2,982	9,009	20,811
20x3	20,811	11,991	2,081	9,910	10,901
20x4	10,901	11,991	1,090	10,901	0

The 20x1 balance sheet would show the total principal liability (\$38,010) divided between a current liability of \$8,190 and a non-current liability of \$29,820. The same procedure would be followed in subsequent years. Accrued interest on the lease is also listed as a current liability. The accrued interest is calculated on the entire principal liability adjusted to reflect the months between the lease payment date and the end of the period represented by the balance sheet.

Since the asset value of the lease is actually the value of the lease, and not the value of the leased asset, any remaining end-of-lease buyout value is *not* reported as an asset on the balance sheet. Similarly, the buy-out price is not reported as a liability. These values, if the buyout is performed, will be entered at the time of that purchase, when the lease is finished.

### ***Other Lease Options (using the same \$50,000 asset and 10% interest rate):***

**Option #2** - There is no initial payment upon delivery. The first payment is not due until the end of the first year, and there is a total of five annual payments of \$13,189.83 each. AN@ on the present value chart, the number of outstanding payments, would be A5@. The interest rate is 10%. Compared to option #1, the higher annual payment of \$13,189.83 reflects inclusion of the first year's interest to the lease. The proof:  $\$13,189.83 \times 3.7908 [n=5] = \$50,000.01$ .

**Option #3** - If an asset is leased/purchased with the purchaser unaware of the purchase price and/or the interest rate; use the annual payment, the number of payments, and an imputed interest rate to determine the capitalized value of the lease and the outstanding liability.

**Option #4** - Suppose there are unequal lease payments. The lessee makes an initial (on-delivery) payment of \$6,000, a low \$7,500 payment at the end of the first year, and three more annual payments of \$16,007.42.

- Add the 4 remaining payments:  $\$7,500 + 16,007.42 + 16,007.42 + 16,007.42 = \$55,522.26$
- $\$55,522.26$  divided by 4 = \$13,880.57 (average payment)
- \$13,880.57 multiplied by 3.1699  $[n=4] = \$44,000$  (outstanding principal)
- $\$44,000 + 6,000 = \$50,000$  (total asset cost)

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**Option #5** - An asset is leased with an initial payment (upon delivery) of \$11,391.16 and four more annual payments of \$11,391.16. At the end of the fifth year the asset can be purchased for a buy-out price of \$2,750.

a) First calculate the remaining value of the asset.

It is actually \$2,500 (\$2,750 - 250 interest = \$2,500 remaining principal)

b)  $\$11,391.16 \text{ (annual payment)} \times 3.1699 [n=4] = 36,108.84 \text{ (remaining liability)}$

c)  $\$36,108.84 + 11,391.16 \text{ (initial principal payment)} = \$47,500$

d)  $\$47,500 \text{ (lease value)} + 2,500 \text{ (remaining asset value)} = \$50,000 \text{ (total asset value)}$

e) In this case, only the \$47,500 (lease value) would be amortized/depreciated as an asset value and only 36,108.84 would be amortized as a liability on the balance sheet. The buy-out value of the asset would not be shown until it was actually purchased.

If you are setting up a new balance sheet during the term of an on-going capital lease, use the annual payment, the (actual or imputed) interest rate and the number of remaining payments to determine the capitalized asset and liability values remaining. In most cases, understanding the rationale is more difficult than actually performing the calculations.

### ***Importance of Procedure:***

The rationale behind standards, such as the FFSC ratios is the ability to compare an individual farm with a database. However, standardized calculations are worthless if the input data does not also conform to a standard reporting procedure. The decision to correctly include the capital lease value and liability on the balance sheet (rather than simply treating the lease payment as an annual operating expense) impacts thirteen of the sixteen FFSC ratios:

Current Ratio, Working Capital, Debt to Asset Ratio, Equity to Asset Ratio, Debt to Equity Ratio, Return on Assets, Return on Equity, Term Debt Coverage Ratio, Asset Turnover Rate and all four Operational Ratios.

Reporting capital lease payments correctly in their component parts of interest and principal, rather than as a single operating expense (lease payment) will impact the remaining financial ratios, Operating Profit Margin, Net Farm Income, and Capital Replacement and Term Debt Repayment Margin.

In management, being able to make consistent and accurate comparisons is important. Admittedly, one can compare with one's own trends over the years using non-standard measures or non-standard data to calculate these measures. However, in these times of narrow margins it is increasingly important that producers be able to compare their performance not only with themselves, but with that of their competition as well. Following standardized procedures is the key to reliability, consistency, and accuracy.



### ***Present Value Table:***

An abbreviated present value table for interest rates between 5% and 15% and lease terms between 2 years and 15 years is provided on the following page. More extensive tables can be found in accounting texts, or other sources.

**Present Value Table**

N	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%
2	1.8594	1.8344	1.8080	1.7833	1.7591	1.7355	1.7125	1.6901	1.6681	1.6467	1.6257
3	2.7232	2.6730	2.6243	2.5771	2.5313	2.4869	2.4437	2.4018	2.3612	2.3216	2.2832
4	3.5460	3.4651	3.3872	3.3121	3.2397	3.1699	3.1024	3.0373	2.9745	2.9137	2.8550
5	4.3295	4.2124	4.1002	3.9927	3.8897	3.7908	3.6959	3.6048	3.5172	3.4331	3.3522
6	5.0757	4.9173	4.7665	4.6229	4.4859	4.3553	4.2305	4.1114	3.9975	3.8889	3.7845
7	5.7864	5.5824	5.3893	5.2064	5.0330	4.8684	4.7122	4.5638	4.4226	4.2883	4.1604
8	6.4632	6.2098	5.9713	5.7466	5.5348	5.3349	5.1461	4.9676	4.7988	4.6389	4.4873
9	7.1078	6.8017	6.5152	6.2469	5.9952	5.7590	5.5370	5.3282	5.1317	4.9464	4.7716
10	7.7217	7.3601	7.0236	6.7101	6.4177	6.1446	5.8892	5.6502	5.4262	5.2161	5.0188
11	8.3064	7.8869	7.4987	7.1390	6.8052	6.4951	6.2065	5.9377	5.6868	5.4527	5.2337
12	8.8633	8.3838	7.9427	7.5361	7.1607	6.8137	6.4924	6.1944	5.9176	5.6603	5.4206
13	9.3936	8.8527	8.3577	7.9038	7.4869	7.1034	6.7499	6.4235	6.1218	5.8424	5.5831
14	9.8986	9.2950	8.7455	8.2442	7.7862	7.3667	6.9819	6.6282	6.3025	6.0021	5.7245
15	10.3797	9.7122	9.1079	8.5595	8.0607	7.6061	7.1909	6.8109	6.4624	6.1422	5.8474

N = number of annual payments

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## Section IV:

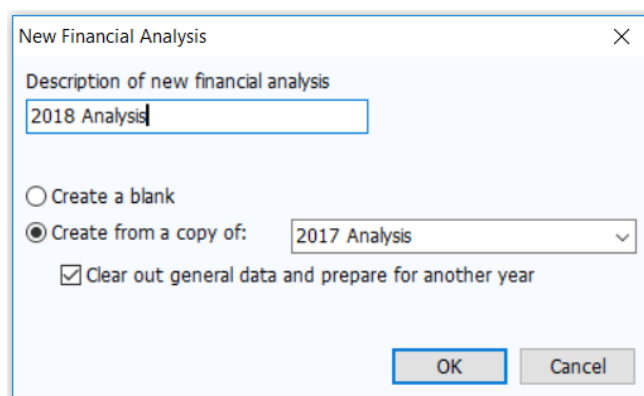
### FINAN (FINANCIAL ANALYSIS) INSTRUCTIONS

#### Input Instructions for FINAN

##### *Creating a New FINAN*

In all areas where you wish to detail, use the Details button, or double click in the entry box to do so. Many times, it is helpful. Black numbers indicate no detail, bolded black numbers indicate detail.

**Data File Name** – Use a unique file name. Remember, when a member of the database review team calls with a data problem you need to be able to identify the farm by this name.



The analysis name must be entered on this screen. It can be changed on the “File Navigator” screen if need be later. Recommendation: 2xxx Analysis

***If possible, copy a previous year’s analysis and check “Clear out general data and prepare for another year.”*** All data will be deleted except:

- General Information and Summary Information pages remain unchanged. The Balance Sheets from last year remain selected; you need to select the appropriate Balance Sheets for this year.
- All detail values are deleted but the descriptions remain.
- Value of Labor and Management remains (Other Information page).
- Labor hours remain.
- Related Operating Expense Allocations to Crops, Livestock, and Other Enterprises remain.
- Crop names, descriptions, and acres stay in the Crop Enterprise Analysis.
- The Default Allocations stay in the Allocated Crop Expenses. Changes for interest allocation for sugar beet stock also remain and need to be changed.

- Livestock names and descriptions remain.
- Individual feed items remain, but quantities and dollars are cleared.
- The Default Allocations stay in the Allocated Livestock Expenses.
- Other Livestock Information such as: average number of head, normal total gain per head, barn capacity, or number of litters remain.

## General Information

Year of analysis	2018
Beginning balance sheet	January 1, 2018
Ending balance sheet	January 1, 2019
Cash flow plan for comparison (optional)	

Type Of Analysis

☐ Whole Farm

☒ Whole Farm with Enterprise Analysis

☒ Show group summary information

☐ Analysis complete, include in Portfolio Risk Analyst

- 1) Enter analysis year.
- 2) Select "Whole Farm with Enterprise Analysis"
- 3) Check "Show group summary information"
- 4) When you have completed the analysis, check "Analysis complete, include in RankEm."

## Summary Information

- 1) Select proper type of business organization
- 2) Enter the producer's unique Farm ID. Once established, the ID for a specific farm should never be changed. When a son or daughter takes over an existing farm and the parents exit or mostly exit management of the farm, a new farm ID should be assigned. If you do not know the correct ID, contact your regional or Center administration. This is necessary to keep unique ID#'s for the State Data Base.
- 3) State and County - Enter State and County name from pick lists
- 4) An operator is generally defined as one family that relies on the farm for family income and receives that income in the form of farm earnings (or owner wages in the case of a corporation). A husband and wife unit are generally considered one operator. Additional family members or partners are operators if they are not paid labor. It is possible to enter decimals for part-time

*operators* but unless the producer spends less than 50 percent of his/her time on the farm, the farm should have at least one operator.

- 5) All data is required by RankEm. Be sure to enter Acres Owned, Number of Operators to the tenth, All Operators' Year of Birth and Years Farming.

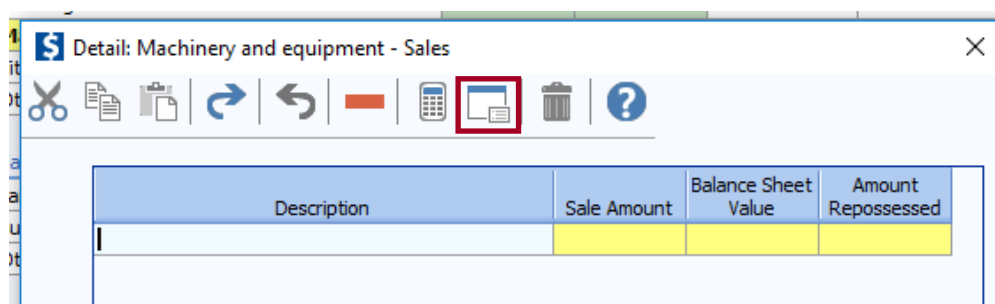
Type of business	Sole proprietor	▼
Farm ID	12345678	
State	Minnesota	▼
County	Goodhue	▼
Total acres owned	98	
Number of operators	1	
Operator number 1		
Year born	1962	
Year started farming	1983	
Operator number 2		
Year born	0	
Year started farming	0	
Operator number 3		
Year born	0	
Year started farming	0	
Operator number 4		
Year born	0	
Year started farming	0	
Operator number 5		
Year born	0	
Year started farming	0	
Special sorts	None	...
Analyst Name	I. M. Analyst	
Summary Group	MN State College & University Red River Valley ▼	

- 6) Special Sorts: Identify organic farms, farms in organic transition, and specialty crop farms as well as farms that expanded or contracted during the year. A general guideline for use of the expansion or contraction is when there has been a 25% change in physical units of production or investment. Identify farms as MN Water Quality Certified if appropriate.
- 7) Analyst Name: Enter your name as the FINPACK user who prepared this analysis. Analyst Name will be displayed in RankEm to identify the analyst if there are questions or outliers which need correction. Analyst name will be deleted before data is uploaded to FINBIN.
- 8) Summary Group: Select the regional report group for this farm, MN State College & University North, South, Red River Valley or Southwest Minnesota Farm Business Management Association. All others choose "MN Other."

## WHOLE FARM DATA ENTRY

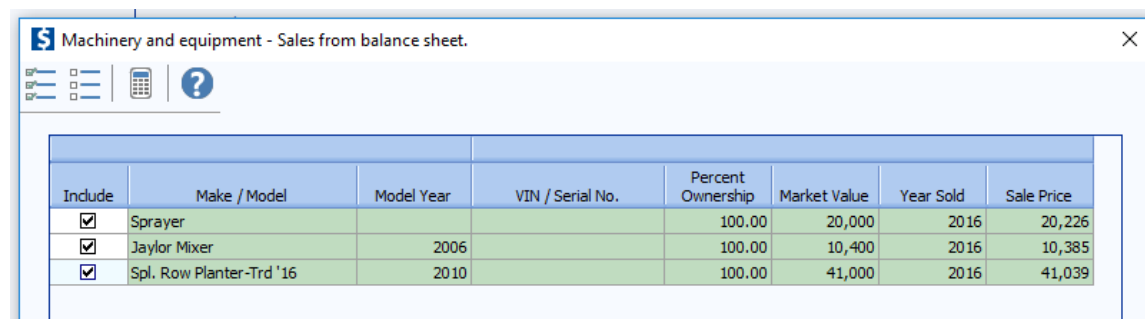
### CAPITAL PURCHASES AND SALES:

- 1) **Beginning Values and Ending Values** are displayed from the Balance Sheets. Enter capital purchase and sales.
- 2) **Enter Capital Purchases and Capital Sales.** For capital sales, always use Detail to enter the Balance Sheet Value of the asset sold. With this, FINAN will calculate the gain or loss on the sale. Selecting the “Select from Balance Sheet Items” icon from the toolbar in Sales and Purchase detail will allow you to bring purchases and sales entered on the Balance Sheet into the FINAN. (This applies to all farm intermediate and long-term capital asset categories.)



Description	Sale Amount	Balance Sheet Value	Amount Repossessed
-------------	-------------	---------------------	--------------------

To select items from the Balance Sheet to include in the FINAN, the user must be in the correct capital asset cell in the table to bring in purchases or sales of that asset type. By checking the “Include” box, the assets will automatically be brought into detailed entry.



Include	Make / Model	Model Year	VIN / Serial No.	Percent Ownership	Market Value	Year Sold	Sale Price
<input checked="" type="checkbox"/>	Sprayer			100.00	20,000	2016	20,226
<input checked="" type="checkbox"/>	Jaylor Mixer	2006		100.00	10,400	2016	10,385
<input checked="" type="checkbox"/>	Spl. Row Planter-Trd '16	2010		100.00	41,000	2016	41,039

By checking “Include” and pressing the “Close” button, the assets are brought into detailed entry.

- 3) Enter any assets repossessed under Capital Sales detail.
- 4) **Breeding Livestock** – Be careful that you do not double count capital sales. Enter sales here or in Cull Breeding under “Other Income.” Recommendation: Enter whole herd liquidations and major herd reductions here and enter normal cull sales under “Other Income”.

- 
- 5) **Other Intermediate Assets** – Include sugar beet and corn processing stock purchases and sales. Be sure to include changes in PCA or FCS Stock as a purchase or sale as appropriate. Include sugarbeet unit retains (both sold and purchased). Enter any change in positive livestock ledger accounts from beginning to the end of the year as a purchase or sale. Ledger “purchases” should also be added to livestock sales. Ledger “sales” should also be subtracted from livestock sales.
- 6) **Other Long-Term Assets** – Include Patronage, stock redemption or retirement as a sale.
- 7) **Personal Capital Purchases and Sales** – All purchases and sales of nonfarm capital assets should be listed in the proper category. Premiums on whole life insurance policies should be included in nonfarm capital purchases.
- 8) **Recommended procedure for trade-ins**
- a) The capital purchase will equal cash (boot) paid plus the sale value received for the traded asset. This value will also be entered as the cost value of the newly acquired asset on the Balance Sheet.
  - b) The sale amount entered on the Balance Sheet and in FINAN will equal the value received for the traded asset from the dealership or other purchaser.
  - c) In FINAN, the amount entered as the “balance sheet value” is the cost value of the traded asset. If using “Select from Balance Sheet items” feature, FINPACK will automatically enter the cost value coming from the balance sheet for the traded asset.
  - d) Market value of the newly acquired asset equals the estimated current market value.
  - e) If sales details are entered on the Balance Sheet for the traded asset, the item can remain on the balance sheet. Entering sales this way removes traded/sold item from the printed asset list and the value of the traded/sold asset is removed from the total cost and market value of the asset group.
- 9) **Recommended procedure for property insurance indemnity claims – total loss situations:**
- On the Balance Sheet
    - The “totaled” asset is marked as sold on balance sheet, thus removing the value. Enter Year Sold/Traded and Sale Price in detailed entry for the capital asset lost. The Sale Price entered equals the insurance indemnity amount received.
  - In the Financial Analysis (FINAN)
    - The insurance indemnity payment received is entered as a capital sale for the appropriate asset category in FINAN. Insurance funds received are entered as the Sale Amount. The cost value of the asset is entered as the Balance Sheet Value in capital sale detailed entry. (Use ‘Select from Balance Sheet’ wizard in FINAN to bring these details entered on the balance sheet into capital sales data entry.)

- If a replacement asset is purchased, this new asset is entered on the balance sheet and in FINAN like any other asset purchase.
- If a “totaled out” asset is repurchased enter as explained above. The repurchased asset is entered on the balance sheet as a newly purchased asset.

10) **Recommended procedure for property insurance indemnity claims – partial loss situations:**

- On the Balance Sheet
  - The damaged property’s cost value should be reduced by the amount of the insurance indemnity received. Presumably, the market valuation will be reduced similarly. *(Note – using the “sales” feature on the balance sheet will not work in this case, as including a year sold/traded and a sales value will remove the entire asset value from the balance sheet.)*
  - If improvements were made to fix the damaged asset, include these as a capital purchase on the balance sheet. Enter the improvement amount on its own line, with purchase price and cost valuation being equal (before annual depreciation). The improvement’s market value will presumably be valued similarly.
- In the Financial Analysis (FINAN)
  - The property insurance indemnity received for the partial loss is to be entered as a building and improvement (or appropriate asset category) capital sale.
  - A capital purchase is entered for the dollar value of improvements made.

## **LIABILITIES:**

- 1) **Beginning and Ending Principal Balances** are displayed from Balance sheets.
- 2) Enter **Money Borrowed and Principal Paid** for each loan.
- 3) Enter **Principal Forgiven** under Principal Paid Detail.
- 4) Enter **Accounts Payable Forgiven** under Accounts Payable Principal Paid Detail. This is the only entry allowed for Accounts Payable.
- 5) **Ledger Contracts.** Beginning and ending balances should be listed from the balance sheet if the balance is negative. Enter increases as money borrowed and decrease livestock income by the same amount. Enter decreases as principal paid and increase livestock income by the same amount.
- 6) **New Loans.** Enter loans taken this year as money borrowed.
- 7) Under each loan type or by individual loan, check liability balances as follows:

$$\text{Beginning Balance} + \text{Amount Borrowed} - \text{Principal Paid} = \text{Ending Balance}$$

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### ***CROP SALES:***

Enter per crop; gross quantity of crop sold, and gross income received. Enter gross proceeds here and enter expenses deducted from the sale as farm expenses. *Exception: Sugar beets – do not enter a quantity sold for sugar beets.*

Include gross sales of crops that were under CCC loan. Do not include money borrowed on CCC loans and treated as income for tax purposes. Include the funds received for yearend grain advances as a grain sale in the year received. Sale quantities equate to the number of units the balance sheet inventory was reduced by. All year-end grain advances should be treated as a crop sale and not as other income. Price used in the calculation for determining bushels should be the underlying contract price.

### ***LIVESTOCK SALES:***

**Animal Sales** – Enter number sold, total live weight pounds sold, and gross income received of market livestock. Enter gross proceeds here and enter expenses deducted from the sale as farm expenses. Record Cull Livestock in Cull Livestock section, not here. (Weights should be entered on a live weight basis. If sold on carcass weight and the yield is unknown, convert live weight based on a 75% yield for pigs and 63% yield for cattle.)

For livestock sold on ledger contracts, increase, or decrease cash sales by the change in ledger balance. Show offsetting capital purchases, capital sales, borrowings or principal paid to balance cash flow.

**Livestock Products** – Enter gross quantity and gross income received.

### ***OTHER FARM INCOME:***

**Cull Breeding Stock** – Enter income received from Cull Breeding Stock sales. Breeding stock sales should be entered as capital sales only when liquidating a herd or doing a major downsizing. Use Detail to allow Selecting the data into the Enterprise Analysis.

**Miscellaneous Livestock Income** – Enter any miscellaneous livestock income.

**CCC Market Loan Gain** – Include all LDP payments and CCC loan market gains received during Analysis Year. (LDP & Market Loan Gain income accounts have now been combined.)

**Crop Government Payments** – ARC and PLC payments present a special problem because the amount of the payment is not known until the end of the marketing year. This uncertainty makes it difficult or sometimes impossible to accurately match income to the production year. Therefore, it is recommended



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that ARC/PLC payments be recognized as income in the year received rather than trying to estimate the amount that should accrue to each production year.

**CRP Payments** – Enter all cash CRP Payments received in the analysis period.

**Livestock Govt Payments** – Include dairy DMC payments as well as other livestock related payments.

**Other Government Payments** – Enter any other government payments, such as disaster payments, etc. WHIP+ (Wildfire, Hurricane Indemnity Program Plus), PPP (Paycheck Protection Program) loan forgiveness, CFAP (Coronavirus Food Assistance Program) 1 & 2, SBA EIDL (Economic Injury Disaster Loans) Emergency Grant, and MN Small Business Relief Grants payments received are entered as “Other Government Payment”.

**Conservation Government Payment** – Enter government payments related to conservation efforts. SHIPP, EQIP, CSP, and other cost share program payments entered here are for annual payments related to conservation production practices. Also enter PCCP payments received in 2021 here. See below for more details on EQIP payments.

**Livestock Insurance Income** – Enter LGM, LRP, and DRP payments here. Also enter any business interruption insurance proceeds received as Livestock Insurance Income.

**Renewable Energy Income** – Enter all renewable energy related income for the farm like solar and wind.

**Custom Work** – Enter all cash farm related custom work income.

**Farm Rental Income** – Enter all rental income received by the farm.

**Patronage Dividends** – Enter all cash patronage dividends and cash unit retains received. Additional stock accumulation should be recorded on the Balance Sheet.

**Insurance Income** – Enter the gross cash for all insurance income payments.

**Cash Withdrawn from Hedging Accounts** – Enter all cash withdrawn from hedging accounts. See the special note on hedging transactions below.

**Other Farm Income** – Enter all cash farm income not previously entered.

- Syngenta Corn Seed Settlement Program – funds received from this lawsuit should be included as Other Income in the 2021 whole farm analysis. This payment should not be allocated to the corn enterprise analysis.
- Milk Powder Settlement Program – funds received from this lawsuit should be included as Other Income in the 2021 whole farm analysis. This payment should not be allocated to the dairy enterprise analysis.
- Property Insurance income has been removed. Enter small insurance indemnity payments received (\$20,000 or less) as Other Farm Income. Proper handling of Property Insurance claims involving capital assets is detailed on pages 38 and 39.

***Special Note for EQIP & Other Cost-Share Payments:*** Proper methodology depends on use of funds.

- If funds are used for capital investments (i.e. depreciable, multi-year assets) – Treat the cost-share income as a capital sale and use the funds to purchase the capital asset. This is the preferred approach to handling cost-share for feedlots and other large capital purchases as it minimizes the distortion of net farm income and enterprise profitability. On the ending balance sheet, the cost value of the asset should reflect the total purchase amount less the government cost-share payment, less the appropriate amount of depreciation for the year. The market value should reflect the full asset value. This will balance the cash flow but will exclude the cost share payment from net farm income without distorting depreciation.

Example: If the total cost of a feedlot is \$100,000 and government cost-share is \$48,000, then \$100,000 should be entered as capital purchase (buildings and improvements) and \$48,000 as capital sale. The ending cost value of the feedlot on the balance sheet is \$49,400 (\$100,000 minus \$48,000 = \$52,000 \*95% to depreciate over 20 years). The market value should be the estimated amount by which the addition of the feedlot increased the market value of the property on which it was built.

- If funds are received as an annual payment for conservation related production practices – Treat the cost-share funds received income in the whole farm analysis. The funds received offset operating expenses for particular enterprises. Specifically, these payments should be entered as Conservation government payments in the Other Farm Income area of the whole farm analysis. Allocate the payment to the appropriate enterprise(s), including the payments as Other Income for crop enterprises and Government Payment Income for livestock enterprises.

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## ***FARM EXPENSES:***

**Crop Expenses/Livestock Expenses/Related Operating Expenses** – Enter all actual cash farm expenses paid during the calendar year.

- If an expense item is negative due to refunds, etc., submit a Unique Situation report to your database review with justification. Farms with unexplained negative whole farm expenses will be deleted from the database.
- If major unpaid resources are provided to the operation by a family member, it is recommended to include a charge for the estimated value of those resources (hired labor, custom hire, machine lease for ex.) with an offsetting personal income entry to balance cash.
- If expenses were deducted from sales of grain, livestock, or livestock products, include the gross sales as income and include all expenses for trucking, commission association dues, and marketing fees here.

### **Specific expense categories:**

- Seed treatments: include in Seed expense
- Free seed, chemicals, etc.: enter as Other Farm Income and Seed/Chemical/etc. expense
- Fertilizer and chemical application: Custom Hire
- Organic Crop Protection: replaces Non-chemical crop protection
- Employee benefits: Hired Labor
- Worker's Compensation Insurance: Hired Labor
- Silage bags: Packaging and Supplies
- Precision farming expenses: if they do not fit elsewhere, include in Misc. Crop Expense
- Cover crop expenses for agronomic and soil enhancement purposes: Cover Crop Expense
- CSP related expenses: enter in the appropriate expense category. Soil testing and grid sampling should be included in fertilizer. Cover crops are analyzed as their own enterprise, included all related expenses for the cover crop.
- DHIA: Listed if you have installed FINPACK setup files with the software installation
- Cash salaries, wages, and benefits to operators: Enter in Owner Wages and Benefits and reduce Value of Operator Labor and Management
- Feed additives and supplements: Purchased Feed
- Livestock implants: Veterinary

- Livestock rendering: Custom Hire
- Manure handling: Custom Hire if hired
- Hoof trimming – Custom Hire
- Milk hauling – Trucking and Hauling. For the *dairy enterprise analysis*, milk hauling expenses should be the only trucking and hauling expenses entered in this expense category.
- Milk marketing, cull cow hauling, cull cow marketing – Marketing expense
- Truck Expenses –
  - *Farm trucks* – split out expenses related to *repairs, fuel, and vehicle tabs* (included as a misc. expense) accordingly, if possible. If this is not possible, use judgement and include the farm truck expenses as repair or miscellaneous expenses.
  - *Semi/Grain trucks* – fuel, repairs, etc. considered *Hauling & Trucking* expenses.
  - *Non-farm/over the road trucking* – income and expenses related to non-farm trucking operations should not be included in the farm analysis. These are personal business income and expenses. (Include the net income as *Personal Business income*. Use detailed entry to list gross income and individual expenses as deductions to arrive at net income if preferred.) If desired, include a *Value-Added* enterprise to analyze.

**Purchased Feed** – Use Detail for Purchased Feed to specify the feed commodities purchased which will then contribute to the Amount Available for feed in the Livestock Enterprise Analysis.

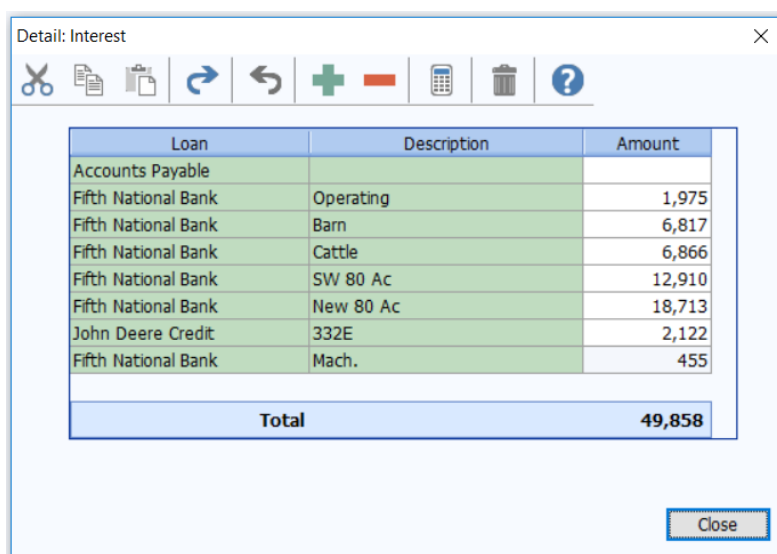
Detail: Purchased feed

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Description	Type of Feed (Optional)	Quantity	Value
Corn - Dairy	Corn	5,343 bu.	17,365
PVM - Dairy	Protein Vit Minerals	204 ton	32,256
<b>Total</b>			<b>49,621</b>

Close

**Interest** – Use Detail to list interest paid on individual loans. This will automatically transfer to the interest breakdown on the enterprise analysis.



The screenshot shows a software window titled "Detail: Interest" with a close button (X) in the top right corner. Below the title bar is a toolbar with icons for cut, copy, paste, undo, redo, add (+), subtract (-), calculator, delete (trash), and help (?). The main area contains a table with three columns: "Loan", "Description", and "Amount". The table lists several entries, including "Accounts Payable" and multiple entries from "Fifth National Bank" for different purposes like "Operating", "Barn", "Cattle", "SW 80 Ac", "New 80 Ac", and "Mach.". A "Total" row at the bottom shows a value of 49,858. A "Close" button is located at the bottom right of the window.

Loan	Description	Amount
Accounts Payable		
Fifth National Bank	Operating	1,975
Fifth National Bank	Barn	6,817
Fifth National Bank	Cattle	6,866
Fifth National Bank	SW 80 Ac	12,910
Fifth National Bank	New 80 Ac	18,713
John Deere Credit	332E	2,122
Fifth National Bank	Mach.	455
Total		49,858

***Special Note for ethanol plant and other entity investments:*** Income from and/or expenses related to ethanol plants and other entity investments may have a significant impact in certain years. It is left to the producer/student and instructor to decide whether these transactions result in farm (or non-farm) income. Treatment should be consistent from year to year and consistent with treatment of the business investment on the balance sheet. Payments received that are related to pledged bushels will usually be entered as farm income. If entered as farm income, include income tied to pledged bushels as Other Income on the Crop Enterprise Analysis. Exclude payments that reflect dividends on investment unrelated to specific bushels from the Crop Enterprise Analysis. These payments may be included in a Value Added/Non-Farm Enterprise Analysis to evaluate the investment profitability.

***Special note on hedging transactions:*** If you do not have accurate record of cash deposits and withdrawals, the net cash transactions for the year can be calculated from Forms 1099: The net deposits/withdrawals = Form1099, enter Box 12 + beginning balance sheet value (Box 10) – ending balance sheet value (Box 11). If the result is positive, enter as cash withdrawn from hedging accounts and if negative, enter as hedging account deposits.

***Special note on Ditch/Tile Assessments:*** Landowners may receive a ditch assessment on as part of their real estate taxes. These costs are the result of county or judicial ditch project costs completed. These assessments should be removed from the Real Estate Tax expense annually and entered as a Building and Improvement purchase. The Building and Improvement capital purchase would be entered on both the Balance Sheet and financial analysis (FINAN).

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### **PERSONAL INCOME:**

Enter all cash **non-farm** income received during the analysis period. If personal business income, enter the net value. If desired used detailed entry to list gross business revenues and the appropriate expenses to arrive at the net value. Enter EIP (Economic Impact Payments – i.e. the ‘Stimulus Checks’) as Other Personal Income.

**Warning:** Do not double count dividends, tax refunds that may have been **farm** income such as gas tax refunds, property tax refunds, etc.

### **OTHER INFORMATION:**

**Gifts and Inheritances** – Enter cash gifts and cash inheritances received. For non-cash items, enter the value as a capital purchase and offset the purchase by also entering the value here.

**Family Living Expense** – Enter cash family living expenses including personal share of utilities, insurance, property taxes, and any other such expense. The total expenditure should be tracked for each operation, whether or not detailed family living expenditures are recorded. If Detailed family living expenses are entered, be sure to enter the number of family members. Enter owner wages as farm expenses, not owner withdrawals. ***For partnerships, use detailed family expenses or enter total under partnership withdrawals detail item, not both.***

**Income and Social Security Tax Paid** – Enter all cash income and personal self-employment taxes paid during the calendar year.

**Cash Gifts Given** – Enter all cash gifts given.

**Estimated Value of Labor and Management** – This is the opportunity cost charged for unpaid operator labor and management when calculating the Rate of Return on Assets and Rate of Return on Equity. It is also combined with any Owner Wages and Benefits expense and deducted from the enterprise analysis reports. In the RankEm Summary reports it is always combined with Owner Wages and Benefits to make farms of different ownership structure comparable. For sole proprietors and partnerships, the recommended rate is: \$25,000/full time operator plus 5% of value of farm production. This is a guideline only; adjust for very small or very large farms.

***Formula: \$25,000 + 5% (Value of Farm Production).***

### **Other adjustments:**

- For entities, if owner compensation is included in Owner Wages and Benefits expense, enter zero OR, if the amount included is abnormally low or high, make an adjusting entry here to bring the total value of Owner Labor and Management in line with other farms.
- For sole proprietors and partnerships, if any compensation is included in Owner Wages and Benefits, reduce Value of Labor and Management by the same amount.
- Wages paid to children and other family members (other than operators and their spouses) who have no at risk capital investment and do not share in profits should be included as hired labor expense and have no effect on this entry.

### ***CASH FLOW CHECK:***

At any time, click the check-mark icon  on the toolbar to view the cash flow check.

	Amount		Amount
<b>Beginning cash balance</b>	1,254	<b>Ending cash balance</b>	3,624
Gross cash farm income	272,271	Total cash farm expenses	202,056
Personal income	17,158	Owner withdrawals for family living	47,787
Capital sales		Capital purchases	12,500
Money borrowed	85,888	Principal payments	104,437
Gifts and inheritances		Gifts given	
Beginning personal savings	1,634	Ending personal savings	1,634
		Income taxes	8,557
Total inflows	378,205	Total outflows	380,594
		Discrepancy	-2,389

### ***LABOR HOURS:***

Use labor records or estimate the total hours of labor employed by the farm for the year. Hours of labor guideline for unpaid operator and family labor:

#### **Operator:**

Crop Farm Only	=	2,000 Hours
Diversified Crop/Livestock	=	2,500 Hours
Intensive Livestock	=	3,000 Hours

\* These are guidelines, adjust to fit the operation. These suggestions assume only on-farm work. Adjust if operators are employed off the farm as well.

\* *Note – this section is noted as Optional. Labor hours are **NOT** optional in an FBM FINAN.*

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Make adjustments for part time situations and as needed. Remember to include the spouse and other family members' labor hours. Also, consider the allocation between crop and livestock enterprises when reviewing labor hours for accuracy. For entities, if *Owner Wages and Benefits* expense is included, include owner/operator hours in *Full Time Hired Labor*. (This input is critical to the hours of work listed on the analysis in each individual enterprise.) For dairy operations – 1 FTE is typically about 2400 hours. A guide to reviewing accuracy is 1.2 million pounds of milk are typically produced per FTE or there are typically about 50 cows per FTE.

### **ACCRUAL ADJUSTMENTS TO RELATED OPERATING EXPENSES:**

This section makes adjustments to the cash expenses to arrive at the amount actually incurred for the analysis year. Recommendation: Enter detailed expense categories for prepaid expenses, growing crops, accounts payable and accrued interest on balance sheets to automatically complete this page.


### **FARM INTEREST BREAKDOWN:**

Enter interest accrued during the calendar year. When detail is used for farm interest expense input, the amounts automatically move to this location, therefore, you do not have to input them here. For sugar beet stock loans, see sugar beet section.

*Cash Interest Paid + Ending Accrued Interest - Beginning Accrued Interest = Interest on Debt.*

*Interest on Debt needs to be allocated to operating, intermediate and long term.*

### **RELATED OPERATING EXPENSE ALLOCATIONS:**

Enter the proportion of the total for each allocated expense to crop, livestock, and other (value added/non-farm) enterprises. Toggle  to enter dollars instead of percentages.

*Note:* To maintain meaningful trends, attempt to be consistent from year to year unless there are major changes to the farming operation. The average for power and machinery is 75% - 80% to crops, for building and fences is 30% - 35% crops.

### **CROP SHARE RENTAL ARRANGEMENTS**

Select whether the operation being analyzed is the Renter or Landlord. Then enter their share of the production and expenses.

**Note for Zero Cash Rental Arrangements:** If a producer rents land for zero cash rent, enter as 100% share arrangement with the renter paying 100% of expenses. *Delete this enterprise before submitting.*



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## CROP ENTERPRISE ANALYSIS

### ***Helpful Crop Definitions for Crop Enterprise Analysis:***

**Cover Crop** – a crop seeded in the fall to cover the soil over winter and provide agronomic benefits. The purpose of the fall seeded crop drives the definition. *Fall seeded crops planted for production purposes (winter wheat, winter rye) are not considered cover crops.*

**Base Crop** – the crop planted *following* a cover crop.

**Nurse Crop** – a crop planted in spring to help protect a more vulnerable crop as it emerges. Nurse crops are often planted with alfalfa hay and sugar beets, for example.

### ***Crop Returns Data Entry:***

**Crop Name** – Use the crop list (“Down arrow” Pick List). If you want to use a crop that is not listed, contact a member of the database review team from your area. User added crops, those that are not in the FINPACK master list, will not be included in summary reports.

- Hay enterprises - Use one of the recommended hay crop types (found below) in the crop enterprise analysis. “Hay” should not be the crop type used in the enterprise analysis. It is acceptable to use “Hay” as the crop type on the balance sheet and cash flow projection. Within FINAN Crop and Feed Check, all hays are combined together. Exception is Hay, Small Grain. This crop enterprise type analyzes the small grain and hay crop as one. The Crop Type here should be also be Normal.
- For hay crops, recommended enterprises are:
  - Alfalfa hay
  - Mixed hay
  - Clover hay
  - Grass hay
- For haylage and other wet forages other than corn silage, it is recommended but not required that the dry hay crop name be used, and the forage production be converted using the formula under Total Production. Like other hays, it is recommended to convert baleage to dry equivalents.
- Organic transition crops should be listed using the conventional crop name until they reach organic certification.
- **Cover Crop Analysis**
  - Always analyze the cover crop as its own crop enterprise. (The cash crop/base crop and cover crop are to be analyzed separately, in their own enterprises. The base crop is the crop planted following the cover crop termination/harvest.) The Cover Crop is the Double Crop type. Acres and tenure type must match for the cover crop and base crop/cash crop that are being combined and analyzed together.

- Cover crops are analyzed in the year when production is complete.
  - Accumulate expenses related to fall seeding as Growing Crop or Prepaid Expense on the ending balance sheet for that year.
  - Analyze the cover crop in the following year's analysis, when production is complete, whether the cover crop is harvested, grazed, or simply terminated.
  - Use the related Crop in the enterprise analysis. For cover crops this will be the individual crop type if a single species is planted. If a cover crop mix is planted, utilize the best fit of the following: *cover crop grazing* (unit is AUM), *cover crop mix* (unit is \$), or *cover crop rye mix* (unit is \$).
- Cover crop enterprises may not have any production. This is expected since many are never harvested or grazed and instead are terminated.
- Seed, chemical, machinery costs, etc are to be entered as individual expense items for the cover crop and base crop enterprise being analyzed.
- Combine the Cover Crop enterprise with the Base Crop enterprise in Crop Enterprise Analysis data entry.
- Conservation payments received related to planting a cover crop should be allocated to the cover crop enterprise. These are included as Other Income for the enterprise. This would include CSP and EQIP payments. PCCP (\$5 crop insurance subsidy per acre for planting cover crops) is allocated to the cover crop enterprise.
- Traditional government program payments (ARC/PLC) should be allocated to the base crop/cash crop. These are included as Crop Government Payments.
- Designate the Cover Crop as Cover Crop and the Base Crop / Cash Crop as Grown After Cover Crop in Other Crop Information data entry.
- Consider other metrics and special sorts as needed for both the cover crop and base crop enterprises.

**Description** – You may use this to further describe the crop or field. Be consistent. This description can be used to select specific fields in historical database reports. For “small grain hay” use the description to identify barley, oats, and mixed.

**Crop Type** – Use only if applicable. The default is normal crop.

- Hay establishment should be entered separately from full production hay and coded establishment. If seeded with a nurse crop, such as oats, enter alfalfa in a separate column from the nurse crop and code as establishment/double crop. (The nurse crop should be left as Normal). Use your judgment in allocating seed, fertilizer, and other direct expenses between enterprises. Overhead allocations should reflect the effort or use of equipment for the two enterprises. A

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suggested approach is to enter a minimum of 2/3 of the normal allocation to the nurse crop and ½ the normal allocation for the hay crop. For example, if the normal allocation factors are 30 for oats and 60 for alfalfa, enter 20 for the oat enterprise and 30 for alfalfa establishment. Fixed per acre allocation items, like real estate taxes, should be reduced to total .5 across the impacted enterprises (the hay crop and nurse crop).

- Be sure to code irrigated crops – they should not be summarized with dryland acres.

**Acres Owned** – Either total crop or each field owned.

**Acres Cash Rented** – Either total crop or each field cash rented. Custom hire enterprise acres should be entered as Rented Acres in the crop enterprise analysis. These acres should not have real estate taxes or long-term interest expenses allocated to them. Custom hire enterprise acres are excluded from Total Crop Acres.

**Acres Share Rented** – Either total crop or each field share rented.

**Your Share** – Must choose a % production from the above crop share rental arrangements. (100% if owned or cash rent.)

**Total Production** – Bu, Cwt, Tons, and total volume produced for this field or crop. Use the FINPACK unit.

- Convert haylage to dry hay equivalents using the following formula
  - $(\% \text{ dry matter of wet crop} \div \% \text{ dry matter of hay equivalent}) * \text{wet production}$
  - Example for converting 100 tons of haylage:

$$(.35 \text{ dry matter haylage} \div .85 \text{ dry matter hay}) * 100 = 41.2 \text{ tons}$$

- Convert high moisture corn to dry corn equivalent.
- Peas, Field have a production unit of bushels. Convert lbs./cwts. to bushels if needed.
- Edible bean crops have a production unit of hundredweights (cwt.).
- For SHIPP, CRP, Custom Work, Prevented Planting, and Rented Out, enter the dollars received as crop insurance income or as the production and \$1.00 for the Value Per Unit. (Going forward, only gross revenue will be displayed in Summary and FINBIN reports).
- Specific notes related to Prevented Plant:
  - Use the Prevented Planting crop type for prevent plan acres in crop enterprise analysis.
  - If forage or another cover crop is harvested off prevented plant acres, the production can be included as a second harvested product on these acres (use detailed entry). Production should be converted to dry equivalents if applicable. An alternative approach is to enter

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this production as a separate double crop. Alternatively, enter the value as “Other income” in the Prevented Planting enterprise.

- For pasture, estimate production in AUMs based on these animal units:

<i>1000 lb. Cow/calf</i>	<i>1.00</i>
<i>1100 lb. Cow/calf</i>	<i>1.07</i>
<i>1200 lb. Cow/calf</i>	<i>1.13</i>
<i>Mature bull</i>	<i>1.30</i>
<i>Calves by themselves</i>	<i>0.30</i>
<i>Weaned calves to yearling</i>	<i>0.60</i>
<i>Yearling cattle (600-800 lbs.)</i>	<i>0.75</i>
<i>2-year old cattle</i>	<i>0.85</i>
<i>Dairy cow</i>	<i>1.30</i>
<i>Ewe/lamb pair</i>	<i>0.20</i>
<i>Mature horse</i>	<i>1.50</i>

For example, if a pasture enterprise fed one hundred 1100-pound beef cows for six months, enter 642 aums (100 cows x 1.07 animal units x six months). This same amount should be entered as a feed expense to the beef enterprise analysis.

**Value Per Unit** – For crops already sold or contracted for sale, enter the actual sale/contract price. For crops in inventory, use the ending inventory value with a minimum of the loan rate for program crops. For crops already fed, use a conservative sales value, and use this same value for valuing the feed in the Livestock Enterprise Analysis. For 2021, consider the impact drought conditions have had on feed quality and value crops accordingly.

- Forage values should reflect relative feed value (RFV) and be based on estimated sales value, not purchase prices. Stearns DHIA Laboratories provides actual auction prices based on RFV at: <http://www.stearnsdhialab.com/Auct-Hay.htm>.
- Corn snaplage / earlage value = estimated bushels per ton x corn price. A guideline is 36.6 bu./ton.

**Other Income** – Allocate hedging gains or losses, crop insurance income, LDP payments for this year’s production, crop government payments (ARC and PLC), and any other crop related income. Examples are straw sales, crop specific disaster payments, and hauling allowance. Enter Detail to document what was included. Use the –X method to allocate across like enterprises (see Direct Expenses below). Cash patronage dividends received in a year should be allocated to the appropriate enterprise. (Any equity redemption received in a year is a capital sale and would not be treated as income in the whole farm or any applicable enterprise.)

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### Special notes:

- Because of the uncertainty of ARC and PLC payments, Crop Government Payments should be allocated to the year received rather than the production year.
- *Allocation of Government Payments:*
  - ARC and PLC payments are entered here but are included in the output report as a “below the line” adjustment, meaning they are added to the net return at the bottom of the output report. It is recommended that payments be allocated over all tillable acres, except crops that did not contribute to base such as edible beans, carrots, potatoes, or other vegetable crops. Allocate by farm unit if possible.
  - WHIP+ (Wildfire & Hurricane Indemnity Program Plus) payments received or anticipated for 2021 drought impacted acres are entered as Crop Government Payments for impacted crops. (Include the estimated 2021 WHIP+ payment as an Account Receivable on the ending balance sheet if not received by year end.) *Note: The final WHIP+ payments related to 2018 & 2019 disasters that were received in 2021 **should not** be allocated to the 2021 crop enterprise analysis.* These payments should be allocated like ARC and PLC.
  - *Note: PPP, EIDL Emergency Advances, CFAP 1 & 2, WHIP+ & QLA for 2018/19, MN Business Development Grants, and American Rescue Plan Debt payments are **not** to be allocated to the crop enterprise analysis.*
- CSP payments and related expenses: Income and expenses related to the CSP government program are allowed to be included in the enterprise analysis for crop acres and applicable livestock operations. Income received related to crop enterprises should be included as “Other Income” in the crop enterprise analysis. This will then be allocated to the applicable crop acres. Expenses related to the CSP program (typically soil testing, grid sampling, or cover crop related expenses) should be included as fertilizer, seed, or other appropriate expense. These costs should be allocated to applicable acres. If CSP government program funds are received for practices related to pasture management of the specific livestock enterprises, the funds should be included as “Government Payment” income for the applicable livestock enterprise. CSP related expenses should be included as Government program expense under Direct Livestock Expenses.

### ***Direct Crop Expenses:***

Enter the amount for each crop in dollars. For like enterprises, enter the total cost in one column. You can then assign it equally to the other fields using a “-X” in the other enterprise(s), where X refers to the column in which the total was entered. For example, enter the first corn enterprise in column number 2. Enter the total seed cost for all corn in this column. For each succeeding corn enterprise, enter -2 for

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the seed expenses to distribute the total equally (per acre) to all corn enterprises. (Crops do not have to be listed side-by-side for this to function properly.)

**Seed** – Seed expense (include seed treatment expenses). Assign a realistic expense for home-grown seed used. (Usually market price, plus cleaning treating and hauling).

- For canning crop enterprises, include the actual seed cost paid by the farmer. If there is no seed cost (as the seed is provided by the canning company), enter a zero seed cost. If the farmer had to pay for seed, include the expense paid.
- For hays, seed expenses should appear only on establishment enterprises and not on the full production enterprises unless there were re-establishment costs. If re-establishment occurred, make a note in the FINAN for reviewers.

**Fertilizer** – Fertilizer or purchased manure. If custom applied, include product cost only and include application expense in custom hire.

- Custom manure application costs should be split equally (50/50) between the livestock and cropping enterprises. For cropping enterprises, this expense should be allocated as fertilizer expense. (Livestock enterprises should allocate this cost as custom hire.)
- Lime fertilizer expenses should be accumulated on the balance sheet as a prepaid expense. The expense should then be allocated to the respective field/crop for a subsequent number of crop years, per the operator's discretion. If lime is spread in the spring, for the current crop, then a portion of the initial cost would be treated as a prepaid expense on the next Jan. 1 balance sheet (again, per the operator's recommendation). If lime is prepaid in the fall, the entire cost is treated as a prepaid expense and allocation begins the following crop year.
- Corn fertilizer allocation to soybeans: If no fertilizer was applied to soybeans, but fertilizer was applied to corn to supply nutrients for next year's soybean, a portion of the corn fertilizer should be allocated to soybeans. The recommended allocation is 50% of the corn P & K expense OR 25% of total corn fertilizer expense if P&K cannot be broken out.
- Prevented planting: Acceptable approaches for fertilizer applied to Prevent Plant acres:
  1. If the producer plans to reduce phosphorus and potash applications in the following year to use up these nutrients, accumulate these amounts in prepaid expense on the ending balance sheet to be allocated in the following year's analysis.
  2. If not, charge all fertilizer applied to prevent plant acres to the Prevented Planting crop.

**Crop Chemicals** – Chemical expenses. If custom applied, include product cost only and include application expense in custom hire.

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**Crop Insurance** – Hail and other crop insurance. Include gross premium, with any income listed as “Crop insurance income.”

**Drying Fuel** – Amount of drying fuel for the crop. Edible beans and other specialty crops may have *small* amounts of drying expense. Silages should not include drying expenses.

**Custom Hire** – Fertilizer and chemical applications, aerial application, and freight charges for sugar beets. Cost of product applied (fertilizer, chemical, seed) should be separated from the custom hire application expense.

**Hired Labor** – All hired labor expense for non-salaried workers who do not have management responsibility should be allocated as a direct expense between the applicable enterprises.

**Land Rent** – Cash rent amount total for this crop or field.

**Machinery Leases** – True leases specific to this crop or field.

**Marketing** – Commodity marketing consultants, hedge, or option expense. Silages should not include any marketing expenses.


**Storage** – Cost of storage for cash crops. Silages should not include a storage expense. The cost of bags, etc. is considered Packaging and Supplies for silage crops.

**Truck Expenses** – the type of truck expense dictates how the expense is handled in the analysis.

- Farm Trucks – split out expenses related to repairs, fuel, and tabs (included as a miscellaneous expense) accordingly, if possible. If this is not possible, use judgment and include the farm truck expenses as repair or miscellaneous expenses.
- Semi/Grain Trucks – fuel, repairs, etc. are considered Hauling and Trucking expenses.
- Non-Farm/Over the Road Trucking – income and expenses related to non-farm trucking operations should not be included in the farm analysis. These are considered personal business income and expenses. If desired, include a Value-Added enterprise to analyze such enterprises.

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### **Allocated Crop Expenses:**

Enter allocation factors that weight the expense portion allocated to each crop on a per acre basis. Toggle  to view in Dollars (\$). Entries must be made as allocation factors.

**Default Allocation** – This allocation will be used for any expense that has no entry below. The Standard Allocations will automatically appear when the crop is selected. Adjustments can be made to any individual line, however.

#### **Hay Enterprise Default Allocations**

- Hay, Alfalfa; Haylage, Alfalfa; Hay, Mixed; Haylage, Mixed; and Hay crops assume 3 cuttings for the year. Adjust allocation factor if needed, based on actual number of cuttings for the production year.
- Hay, Grass and Haylage, Grass assume 2 cuttings for the year. Adjust allocation factor if needed, based on actual number of cuttings for the production year.

#### **Cover Crop Enterprises Default Allocations**

- Change the default allocation factor for single crops used as a cover crop and terminated (for example rye). Reduce the default factor by 50%. Ex: Rye becomes 15 vs the default of 30.
- If the cover crop is harvested or grazed there is no adjustment made to the allocation factor.

#### **Impact of Custom Hire Operations on Allocation Factors**

- When a crop enterprise is produced using custom hired operations, either a portion or total, adjust the allocation factor accordingly. Use judgment when making this change. Consider how specific expenses are handled, if needed. For example, is the farm providing fuel or is that included with the custom hire operations? *For crop enterprises that are custom harvested, the recommendation is to reduce the default allocation by 50%.*
- **Custom work enterprises** *should not* have real estate taxes or long-term interest expenses allocated to them. Custom work enterprises included in the crop enterprise analysis should be entered as *rented acres*.



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### **Other Crop Information:**

This information will be used to provide additional detail in the state database.

**Previous Crop** – If the entire field was planted to the same crop in the previous year, enter the crop from the drop-down list.

**Field County** – The county will default to the county entered on the Summary Information page. Change if this field is in a different county.

**Production Practices** – Tillage method, row spacing, other production practices if consistent practices were employed across the entire field. If inconsistent practices were used, leave that practice blank. Note: It is just as important to specify that a specific practice was not used. For example, if no GMO seed was used, be sure to select No.

**Tillage System Options** – Select tillage type employed across the field. Choose from the following:

- Moldboard – flip 8-10 inches of soil
- Chisel/Deep Till – stir 8-10 inches of soil
- Minimum Till – chop and fluff 2-3 inches of soil; method doesn't turn over soil, leaves residue
- No Till – no disturbance to soil bed
- Ridge Till – planting in ridges built during cultivation of previous year's crop
- Strip Till – disturbing on the portion of the soil that is to contain the seed row
- <No Answer> - use this when multiple tillage systems are used or no one system can be designated for all acres included in the particular analysis.

**Cover Crop related** – identify both the cover crop enterprise and benefitting base/cash crop here.

- Cover Crop – identify any cover crop acres as Yes.
- Grown After a Cover Crop – identify the base/cash crop planted after the cover crop with a Yes designation.

**Special Sorts** – Use special sorts where appropriate. *Joint venture is a must for rented Beet Stock acres.*

- Special sorts removed include: Cover crop, grown with cover crop

**Delete from Summary** – Use to delete an individual enterprise only. The rest of the “Whole Farm” and Enterprise Information will be included in the summary. Do not delete because of a disaster or loss. If you have any concern about the accuracy of the data, delete it from the averages. If the whole field or a major portion was replanted, delete from the averages.

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## LIVESTOCK ENTERPRISE ANALYSIS

### *Livestock Enterprise:*

Use the “drop-down” livestock list. The livestock list to use is also listed at the end of this section. If you want to use a livestock enterprise that is not listed, please call a member of the database review team for your area. Be sure to use the proper enterprise.

- If beef calves are carried beyond weaning, they should be transferred to a backgrounding enterprise to keep the state data accurate. If backgrounders are included in the cow-calf enterprise, use the “Cow-calf with backgrounding” special sort.
- The dairy enterprise must be split between dairy and dairy replacements. The table below displays how dairy replacements should be included depending on whether the farm being analyzed is the dairy producer or the heifer raiser. Calves should be born in the dairy enterprise and transferred out to the dairy replacement and/or dairy steer enterprises.

Activity	Dairy Producer	Heifer Raiser
Raised replacements	Dairy replacements With raised repl special sort	
Buy / sell	Dairy replacements With buy/sell special sort Avg head includes farmed out	Dairy repl for sale With buy sell special sort
Per head per day	Dairy replacement With per head/per day sort Contract raising cost goes here	Dairy repl for sale With special sort

**Description** – Be consistent with input in this cell. This description can be used in the Historic Database to generate trend reports for specific herds or lots of animals.

**Gender** – This is only active for grow/finish enterprises. Use to specify male or female only enterprises. Leave this entry blank for mixed gender enterprises.

**Contract** – Use to specify that this enterprise is produced under a production contract. Contractor is the owner of the livestock. Contract Grower is the producer who is housing livestock for the owner. Leave this entry blank for enterprises that are not produced under a production contract. Enter contract grower income as Transferred Out livestock value (and not Other Income). This will avoid the income from being treated as a Revenue Adjustment in calculating the cost of production.


**Shared** – Select Yes if this enterprise is produced on a share rental basis.

**Combine with Enterprise Number** – Use to combine the lesser enterprise with the primary enterprise. (Ex: If the Dairy Cow Enterprise is in Column 1 and the Dairy Replacements are in Column 2, enter the number “1” in this cell in the Dairy Replacement Enterprise Column.)


**Special Sorts** – Use appropriate Sorts as identified in Section V. of this Closeout Manual. Be sure to use for Organic enterprises and Dairy Initiatives farms.

**Delete from Summary** – Use to delete an individual enterprise only. The rest of the “Whole Farm” & Enterprise Information will be included in the summary. Do not delete simply because of a disaster, disease, etc.

### ***Livestock Inventory tab:***

If detail is listed on the Balance Sheet, you can bring the information into the Livestock Inventory Section. To do so, first click the Detail button. Then click the ‘Select from Sales’ icon from the detailed entry toolbar  and check the animals that belong to this enterprise (see below).

Include	Description	Number	Total Weight	Total Value
<input checked="" type="checkbox"/>	Dairy cows	55		44,000
<input type="checkbox"/>	Bred heifers	11		6,600
<input type="checkbox"/>	Yearling heifers	15		6,000
<input type="checkbox"/>	Heifer calves	14		2,800
<input type="checkbox"/>	Sows	32		3,200
<input type="checkbox"/>	Gilts	9		900
<input type="checkbox"/>	Boars	2		684

**Note:** You can also use the ‘Select from Sales’ icon  to select from previous entries for feeder livestock purchases (from whole farm Direct Livestock Expense detail), sales (from whole farm Livestock Sales detail), and cull sales (from whole farm detail on the Other Farm Income page).

**Born** – For pig production enterprises, enter the number born alive. All dairy calves are born into the dairy enterprise. Those sold as calves should be sold from the dairy enterprise. All others are transferred out and into the Dairy Replacement or Dairy Steer enterprise at market value (suggested price \$100.00/head).

**Sold** – Enter number sold, total live weight pounds sold, and gross income received of market livestock. Weights should be entered on a live weight basis. If sold on carcass weight and the yield is unknown, convert live weight based on a 75% yield for pigs and 63% yield for cattle.

**Cull Sales** – Downers should be included with culls, not died.

**Transferred Out** – Beef; Calves to Feeders; Dairy heifer calves from Cows to Dairy Replacements; Dairy bull calves to Dairy Steers if not sold directly from dairy enterprise; Hogs - transferred to Breeding when farrowed - transferred out at weaning from Farrowing to Finishing, if Finishing separate.


- Note: When transferring calves from a Cow-Calf Enterprise to a Beef Background or Beef Feeder Enterprise, charge 3% shrink value to the Cow-Calf Enterprise. This is done by reducing the transfer out value by 3%. This shrink cost will help the retained ownership enterprises reflect a more current analysis.
- Dairy Beef enterprise definitions:
  - *Feeders*: animals sold or to be sold at less than 500 lbs.
  - *Backgrounding*: animals sold or to be sold between 500 and 1,000 lbs.
  - *Finishing*: animals sold or to be sold at greater than 1,000 lbs.

#### TRANSFER TABLE

Enterprise Description	Number	Pounds	Value
Beginning and Ending Inventory - Breeding Livestock	Cows on hand Bulls Bred Heifers Open Heifers kept to breed	Exclude for Dairy, Beef, and Sheep breeding stock.	Cost value for breeding; Market Value on market livestock
Beginning and Ending Inventory - Held for Sale	All except breeding stock	Total weight (exclude for dairy)	Market Value
Born	Born to dairy Transferred out to Replacement Dairy		
Purchased	Number of Head	Exclude for Dairy, Beef, and Sheep breeding stock.	What you paid
Transferred in (Once a cow, always a cow; Calves get born into dairy cow & transferred out)	Head Amount	Exclude for Dairy, Beef, and Sheep breeding stock.	Breeding stock at cost; otherwise Market Value
Sales (except Culls)	Number of Head including sales for breeding stock	Weight (except dairy)	Cash Receipts
Culls	Cull cows, dairy, beef, hogs, etc.	Exclude for Dairy, Beef, and Sheep breeding stock.	Cash Receipts
Butchered	X	X	X
Died – Breeding Stock	(Same as Beginning Inventory – Breeding Livestock)		
Died – Held for Sale	(Same as Beginning Inventory - Held for Sale)		

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### ***Product Sales and Other Income tab:***

**Milk** – The quantity and value should be the milk produced during the analysis year. Use Detail and then the Select icon  to select from whole farm entries.

**Fed** – Milk fed to calves.

**Government Payments** – Include government payments like DMC, ELAP, LFP, EQIP, and CSP here. (See previous CSP/EQIP recommendations if needed).

**Hedging Gain or Loss** – enter any livestock specific hedging gains or losses here. (For losses, enter a negative value).

**Other Income** – Cash patronage dividends received in a year should be allocated to the appropriate enterprise. (Any equity redemption received in a year is a capital sale and should not be treated as income in the whole farm or to any applicable enterprise.) For Breeding Bulls (leased out) - split out as a separate enterprise and show lease income. Use Detail to document entries.

<b>Livestock Product Sales</b>	<b>Quantity</b>	<b>Value</b>
Milk	Pounds	\$
Wool	Pounds	\$
Honey	Pounds	\$
Eggs	Dozen	\$

### ***Other Information tab:***

Data entered on this tab is specific to the enterprise being evaluated.

#### **Dairy**

- **Required fields:** Average Number of Cows, **Total pounds of protein sold, Total pounds of fat sold**, Number of milking units.
- Barn Capacity will only be included in the Historical Database for the farm.
- All other entries (average SCC, Average DIM, etc.) are to be entered if known.
  - All of these “Other Information” entries will be included in the farm’s Historical Database, RankEm Summary, and FINBIN output, if a value is included.
  - SCC (somatic cell count) should be entered as a whole number, **do not** enter in thousands. Example: Enter 100,000 **not** 100.

- Cows per milking unit - A milking unit is one milking machine or one robotic milker. Output displays “Cows per milking unit”. This will replace barn capacity metric in FINBIN summary and benchmark reports.

## Hogs

- Live to carcass weight conversion factor will default to 75% if left blank.

## Grow/Finish Enterprises

- Average “daily” Number of Head and Normal Gain per Head are required if listed.
- Other information should be taken from livestock inventory matrix.
- Normal Gain per Head is divided into the total enterprise gain to arrive at the number of head “equivalents” produced for the year. This becomes the divisor for the Per Head output column.

## FEED FED:

Enter the quantity and value of each feed fed. Toggle  to enter price per unit instead of total value.

- Enter haylage and other wet forages in “as fed” form or enter the dry forage name and convert to dry equivalent at your discretion. Like other hays, it is recommended to convert baleage to dry equivalents. If haylage is converted to dry hay, use the following formula:
  - $(\% \text{ dry matter of wet crop} \div \% \text{ dry matter of hay equivalent}) * \text{wet production}$
  - Example for converting 100 tons of haylage:
 
$$(.35 \text{ dry matter haylage} \div .85 \text{ dry matter hay}) * 100 = 41.2 \text{ tons}$$
- Convert high moisture corn to dry corn equivalent.
- See the discussion of AUMs under Crop Enterprise Analysis for pasture. Use the same value per unit for production of AUMs and feeding of AUMs.
- Milk replacer should be included in the Dairy Replacement enterprise and not in Dairy.

Feed	Unit
Beet pulp	Ton
Complete ration	Ton
Corn gluten	Ton
Cottonseed	Ton
Creep/starter	Ton
DDGS, dry	Ton
DDGS, wet	Ton
Midds	Ton

Milk	Lbs.
Milk replacer	Lbs.
Pasture	AUMs
Protein, vitamins, and minerals	Ton
Stover	Ton
Straw	Ton
Whey	Ton

### ***DIRECT LIVESTOCK EXPENSES:***

Enter total dollar amount of each expense listed.

**DHIA** – DHIA costs of a Dairy Cow enterprise should be entered separately.

**Silage Bags** – should be considered a Direct Crop Expense & included as Packaging & Supplies.

**Marketing Expenses** – include only costs incurred in marketing and marketing decisions like brokerage fees; advertising; state & national deductions; and other marketing tool fees. Do not include milk hauling expense. (The exception is cull cow hauling, include that here.) Do not include gains or losses from hedging/options; these are added to or subtracted from “Other Income”, enter negative value if needed.

**Hauling and Trucking** – charges related to hauling and pickup of livestock and livestock products. For dairy enterprises, this category should be used exclusively for milk hauling.

**Manure Application** – Custom application costs should be split equally (50/50) between the livestock and cropping enterprises. The livestock portion of these expenses should be allocated as a custom hire expense. (The cropping portion of the expense is fertilizer.)

**Dairy Genomics** – expenses associated with dairy genomics should be accumulated under Vet Expenses and then allocated to the enterprise being tested (example Dairy Cows versus Dairy Heifers). The exception is embryo transfer related expenses these are Breeding Expenses.

**Hired Labor** – All non-salaried labor should be allocated as a direct expense. Salaried workers, especially those with management responsibility, should be entered as overhead expense and allocated between crops and livestock.

**Livestock Rendering** – include all expenses related to livestock render as Custom Hire.

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### ***ALLOCATED LIVESTOCK EXPENSES:***

The top of the page will indicate whether you are entering Percentages or per head Allocation Factors. Allocation factors can be turned on and off under Tools. For Percentages, enter the % of the total of each expense listed. For Allocation Factors, the entries will be weighted by the number of head in the enterprise.

**Default Allocations** – This allocation will be used for any expense that has no entry below. They will appear automatically when the Standard Allocations are used.

### ***SPECIAL NOTES FOR DAIRY***

- Be sure to combine the Dairy and Dairy Replacement Heifer enterprises.
- List all heifers as breeding stock.
- Cull cows will remain in the breeding herd category.
- Calves are born in the primary dairy enterprise. Those sold are sold directly from the dairy herd. All others are transferred, females to dairy replacements, males to dairy steers at market value (suggested value \$100.00/head).
- If the amount spent to breed replacements is known, allocate the specific dollar amount of breeding expense to the replacement enterprise. Otherwise, use a split of 2/3 breeding expense to dairy (or main livestock enterprise) and 1/3 to replacements.
- Milk price used in the analysis should be gross dollars. The milk check deductions should be entered in the appropriate expense category, namely marketing. The net milk check should not be entered as the milk revenue.
- Unique situations within the dairy enterprise (like embryo sales, bull royalties, milk bottling) should be separated from the “normal” dairy enterprise. For these situations, include a Value-Added enterprise to analyze that piece of the operation. Income from unique situations like these can be included in the whole farm analysis, but segregate from the dairy enterprise analysis.
- Special sorts related to the Dairy Margin Coverage Program for dairy. These include:
  - DMC – 1 year sign up
  - DMC – 5-year sign-up



## *Calculations of Livestock Cost of Production with Revenue Adjustments*

### Livestock Cost of Production Revenue Adjustments

	Breeding Lvst Product Sale (Dairy)  Cost of Prod Per Cwt. of Milk Prod	Breeding Lvst Sale by Wgt (Beef Cow-Calf)  Cost of Prod Per Cwt. Produced	Breeding Lvst Sale by Carcass (Farrow to Finish)  Cost of Prod Per Cwt Carc Sold
Total cost			
Beg inv br lvstk	Plus	Plus	Plus
Beg inv lvst hld sale	Plus		
Purchases	Plus	Plus	Plus
Trans in	Plus	Plus	Plus
Sales	Minus		
Cull sales	Minus	Minus	Minus
Butchered	Minus		
Trans out	Minus		
End inv br lvstk	Minus	Minus	Minus
End inv hld sale	Minus		
Divide by	Prod + Used + Fed	Cwt Produced	Cwt Carcass Sold

---

	Breeding Lvst Sale per Head (Farrow to Wean)  Cost of Prod Per Hd Sold/Trans	Finishing Lvst Sale by Wgt (Beef Finishing)  Cost of Prod Per Cwt. Produced	Finishing Lvst Sale Per Head (Dairy Replace.)  Cost of Prod Per Hd Sold/Trans
Total cost			
Beg inv br lvstk	Plus	Plus	Plus
Beg inv lvst hld sale		Plus	Plus
Purchases	Plus	Plus	Plus
Trans in	Plus	Plus	Plus
Sales			
Cull sales	Minus	Minus	Minus
Butchered		Minus	Minus
Trans out			
End inv br lvstk	Minus	Minus	Minus
End inv hld sale		Minus	Minus
Divide by	Head Sold/Trans	Cwt Sold/Trans	Head Sold/Trans

## VALUE ADDED/NON-FARM ENTERPRISES

Use the Value Added/Nonfarm Enterprise Analysis to analyze value added co-op investments, custom work, and nonfarm enterprises such as trucking and seed sales.

**Value Added/Nonfarm Analysis**

<b>Enterprise</b>	1
Description	Crop custom work
Divisor quantity	Sugar production
Divisor description	Agritourism
Crop name	Ethanol production
Crop quantity	Bioenergy production
Total premium	Other food crop products
	Other nonfood crop prod.
	Other food products
Livestock name	<input checked="" type="checkbox"/>
Livestock quantity	
Total premium	...
Dividends	...
Direct income	...
Cost of goods sold	...
Total investment	...
Delete from summary	No

**Enterprise** – Select the enterprise type from the drop-down list. This will only be used to sort enterprises for group summaries.

**Divisor quantity and description** – If it is useful, use this as a custom divisor for the output report. Do not use for crop or livestock units used in the enterprise – this will be included under the crop and livestock entries. The divisor description will be used in the column heading. Examples, miles for trucking, shares for co-op investments.

**Crop Related Enterprises** – If you want to analyze this enterprise based on the number of units of a crop used, enter the crop name and the number of units used/marketed. Also, if the easiest way to measure the income from this enterprise is to calculate the premium price received for the crop, enter the Total Premium income received over the price used to value the crop in the crop enterprise analysis.

**Livestock Related Enterprises** – If you want to analyze this enterprise based on the number of units of a livestock enterprise used, enter the enterprise name and the number of units used/marketed. Also, if the easiest way to measure the income from this enterprise is to calculate the premium price received for the livestock, enter the Total Premium income received over the price entered for sales of from this enterprise in the livestock enterprise analysis.

---

**Dividends and Direct Income** – Enter any other income for the enterprise. All income for the enterprise must be entered in Crop Premium, Livestock Premium, Dividends, and Direct Income.

**Cost of Goods Sold** – Optional, use this only if the enterprise has an identifiable cost of goods sold as would be entered on Schedule C for this enterprise.

**Total Investment** – This will be used to calculate the Rate of Return on Assets for this enterprise.

**Direct Expense** – This is the IRS Schedule C expense list. Enter all expenses except the cost of goods sold and those allocated from the farm expenses.

**Allocated Expenses** – Enter the percentage of the Value Added/Nonfarm allocated expenses to each enterprise.

# Section V:

## ORGANIC & SPECIALTY CROP FARM ANALYSIS

### Balance Sheet Considerations

For producers who are establishing new orchards or perennial crops, accumulate the establishment costs in Other Intermediate Assets and depreciate over a conservative economic life of the plants.

### Whole Farm Special Sorts in the Analysis

If all enterprises produced on the farm are certified organic, identify the producer as **Organic Farm (total)**. If some but not all enterprises are certified organic, identify the farm as **Organic Farm (partial)**. **Organic Transition** is intended for farms first transitioning from conventional to organic farming. A farm is either Organic or in Organic Transition. *Do not select both whole farm sorts.* Even if an organic farm is transitioning more acres to organic production, the whole farm special sort remains **Organic Farm**. If the farm produces fruits or vegetables for fresh markets, identify the producer as a **Specialty Crop Farm**.

#### Summary Information

Type of business	Sole proprietor
Farm ID	9876543
State	Minnesota
County	Redwood
Total acres owned	74.5
Number of operators	1
Operator number 1	
Year born	1962
Year started farming	1982
Operator number 2	
Year born	0
Year started farming	0
Operator number 3	
Year born	0
Year started farming	0
Operator number 4	
Year born	0
Year started farming	0
Operator number 5	
Year born	0
Year started farming	0
<b>Special sorts</b>	Total organic
Analyst Name	Pauline Van Nurden
Summary Group	MN State College & University North

Detail: Whole Farm Special Sorts

Include	Description
<input checked="" type="checkbox"/>	Organic farm (total)
<input type="checkbox"/>	Organic farm (partial)
<input type="checkbox"/>	Organic transition
<input type="checkbox"/>	Specialty crop farm
<input type="checkbox"/>	Custom operator
<input type="checkbox"/>	Plain sect farm (PA)

Crop	Description	Quantity Sold	Income Received	Price Per Unit
Corn, Organic		5,000 bu.	40,000	8 bu.
Soybeans, Organic		5,000 bu.	92,500	18.5 bu.

- **Organic Crop Protection** is used for all expenses related to crop protection products used for organic weed, insect, or other pest control. There should be **no** Crop Chemical expense used for organic crops.
- **Cover Crop Expense.** Use as needed for cover crop related expenses on organic acres.
- **Fallow.** Direct expenses incurred on fallow land should be included in whole farm expenses but should be captured and included as Growing Crop expenses on the ending balance sheet. These Growing Crop expenses should then be assigned to the production crops in the following year. Fallow enterprises should be entered to account for the acres, but direct expenses should be handled as stated and overhead expenses should be allocated to production crops.

- Purchased Feed.** Use the organic commodity type option if the operation purchases commodity feedstuffs for livestock. Ex: Hay, alfalfa organic; corn, organic; etc.

	Amount
Feeder livestock purchase	
<b>Purchased feed</b>	142345 ...

Detail: Purchased feed

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Description	Type of Feed (Optional)	Quantity	Value
	Hay, Alfalfa, Organic ▼	335 ton	92,125
	Protein Vit Minerals	93 ton	50,220
<b>Total</b>			<b>142,345</b>

Close

---

## Related Operating Expense

- **Organic Certification.** Organic enterprises *must* include this expense.

## Crop Enterprise Analysis

### Organic Enterprise Identification – Specific organic identifiers exist for the following crops:

Barley	Hay, baleage	Peas
Buckwheat	Hay, grass	Rye
Corn	Hay, mixed	Rye silage
Corn, blue	Haylage, alfalfa	Sorghum silage
Corn, ear	Haylage, small grain	Soybeans
Corn, high moisture	Haylage, sudangrass	Sunflowers
Corn silage	Oats	Sweetcorn
Edible Beans (all types)	Oatlage	Triticale silage
Flax	Pasture	Wheat, spring
Hay, alfalfa	Pasture, intensive	Wheat, winter

- If available, select the organic crop option for the farm's organic crop production. Major organic crop types are available in the drop down list. These are listed as, '**Crop, Organic**'. Ex: Corn, Organic.
- For edible bean varieties, select 'Beans, Edible Organic'.
- If no organic crop option is available for the specific crop produced, use the convention crop option. Ex: There is not 'Sorghum, Grain Organic' available as a crop. Select 'Sorghum, Grain' for a farm with organic sorghum grain production.

**Crop Value** – Value per unit used should follow the same guidelines as suggested for conventional crops in the Closeout Manual; the sale value for products already sold and the ending inventory value for products held in ending inventory.

### Production – If multiple products are produced from the same acreage, follow these guidelines:

- If the multiple products result from harvesting the same product in different forms, use detail for Total Production to identify the production of each product. This would be common for taking hay and pasture from the same acreage.
- If different products are produced under two separate production activities, enter the activities as separate enterprises, and identify the second, third enterprises as double crops.
- If some crop was left in the field because of lack of markets, report the quantity sold.

---

### Specialty Crop Enterprise Identification –

- Vegetables (assorted): Use this crop for multiple products produced on a small acreage, making it impractical to analyze each enterprise individually. Enter the value of the total production of these crops as the Production.
- Vegetables (high tunnel): Use this crop for vegetables produced in high tunnel facilities, again entering the total value of production as the Production.

**Direct Crop Expenses** – Organic crop production should use the following expense in the organic enterprise analysis:

- **Seed and Plants.** If the farm is using home grown seed, a realistic price should be included as a seed expense. This includes market price plus cleaning, hauling, etc. Seed expense should not be \$0 for organic acres.
- **Organic Crop Protection.** Organic acres should have this expense if crop protection products were used. *Acres with Crop Chemical expense will be deleted!*
- **Organic Certification.** Organic crops should have a portion of this annual fee allocated to them.

**Overhead Expense Allocations** – If organic and conventional production occurred on the same farm, use your and your student’s knowledge of the production system to allocate overhead expenses to the various enterprises.

### Other Crop Information

- **GMO Technology** should have the ‘No’ radio button selected.
- **Organic Transition.** Certified organic acres should list “No”, like convention acres. See below for instruction on acres in organic transition.
- **Manure.** Select the proper manure use for the acres.
- **Special Sorts.** Remember to review the other available special sorts. Pay particular attention to the following: Cover crop; Grown with cover crop; CSP/EQIP/Conservation; Type of fertilizer used (if commercial used); Amount of fertilizer used.
- **Delete from summary.** Refrain from using this option on organic acres. The goal is to have as many organic acres in the database as possible.

### Special Note for Crop Acres Transitioning to Organic

- If crop acres are in the process of transitioning to organic use the conventional crop type, not the organic option. For example, use “corn” not “corn, organic” until acres are certified organic.
- Acres in organic transition should utilize **Organic Crop Protection** not Crop Chemical expense.
- In Other Crop Information data entry, select “Yes” for acres in Organic Transition.

## Livestock Enterprise Analysis

**Enterprise Identification** – Identify certified organic enterprises as **Organic** using the **Special Sorts**. If transitioning to certified organic production, select the **Organic Transition** special sort. This is the only way organic & organic transition livestock enterprises are identified.

**1 - Dairy**

Enterprise name	Dairy
Description	
Gender	
Contract	
Shared	No
Combine with ent. number	
<b>Special sorts</b>	Organic
Delete from summary	No

Detail: Livestock Special Sorts

Include	Description
<input checked="" type="checkbox"/>	Organic
<input type="checkbox"/>	Organic transition
<input type="checkbox"/>	Dairy initiatives
<input type="checkbox"/>	DMC - 1 yr sign-up

**Delete from summary.** Refrain from using this option on organic livestock enterprises. The goal is to have as many organic enterprises in the database as possible.

**Livestock and Product Sales.** Income received should reflect the actual income received for organic livestock sales.

### Feed Fed

- Home produced organic feed should be valued at estimated market value for organic feed of the same quality.
- All organic livestock enterprises should have '**Pasture, Organic**' or '**Pasture, Intensive Organic**' as a Feed Fed. Pasture aum's for feed are produced in the Crop Enterprise Analysis.

**Feed Fed**

Feed	Unit	Description	Amount Remaining	1-Dairy	
				Quantity	Total Value
Pasture, Organic	aum		475		

### Direct Livestock Expenses

- **Organic Certification.** Organic enterprises must include a portion of this annual fee allocated to them.



# Section VI:

## COVER CROP ANALYSIS

In this section you will find information specific to entering cover crop information in the crop enterprise analysis. In general, follow the same guidelines as suggested throughout the Closeout Manual. Items in this section are **updated for 2021** and are additional items of note, specific to analyzing cover crops.

**Note:** The cover crop is ALWAYS analyzed as its own crop enterprise. The cash crop/base crop and cover crop are to be analyzed separately, as their own individual crop enterprises. They are then 'combined' to display the 'base crop with cover crop' report in FINAN.

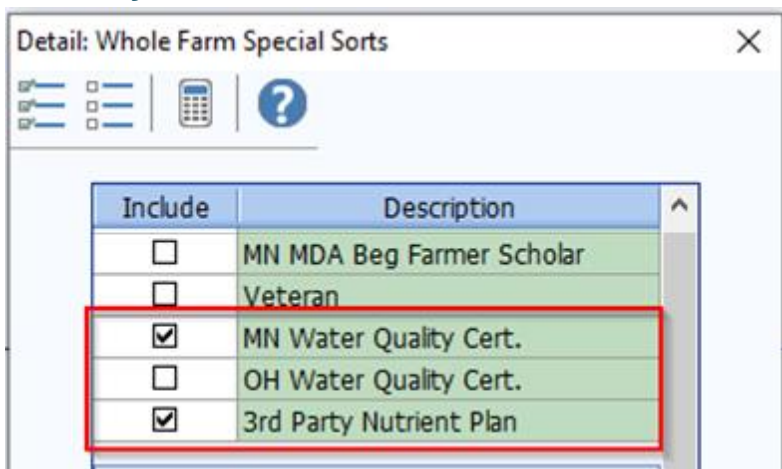
### Balance Sheet Considerations

Accumulate expenses related to fall seeding of cover crops on the ending balance sheet in one of two ways – either as a **Prepaid Expense** or as a **Growing Crop**.

- **Prepaid Expense and Supplies** - Accumulate all expenses related to planting cover crops using the individual expense categories needed (for example seed). The expense should then be allocated to the respective field/crop the following year. Use **Detail** to select the expense category to help identify the total expense incurred in the FINAN enterprise analysis.
- **Growing Crops** – Another option is to include expenses related to planting cover crops as a growing crop. In data entry, **Quantity** equals the number of acres and **Value per Unit** is the cost of inputs. Use **Detail** to select the expense category.

### Whole Farm Special Sorts in the Analysis

Consider if the the following special sorts apply to the farming operation: **MN Water Quality Certified** and **3rd Party Nutrient Management Plan**.



The screenshot shows a window titled "Detail: Whole Farm Special Sorts". It contains a table with two columns: "Include" and "Description". The table lists several special sorts, with checkboxes in the "Include" column. A red rectangle highlights the rows for "MN Water Quality Cert." and "3rd Party Nutrient Management Plan", both of which have their checkboxes checked.

Include	Description
<input type="checkbox"/>	MN MDA Beg Farmer Scholar
<input type="checkbox"/>	Veteran
<input checked="" type="checkbox"/>	MN Water Quality Cert.
<input type="checkbox"/>	OH Water Quality Cert.
<input checked="" type="checkbox"/>	3rd Party Nutrient Plan

---

## Whole Farm Analysis

### **CROP SALES:**

If a cover crop is produced and sold, enter the commodity sold like any other commodity. This includes entering gross quantity of crop sold and gross income received. Enter gross proceeds here and enter expenses deducted from the sale as farm expenses.

### **OTHER FARM INCOME:**

**Conservation Government Payment** – Many cover crop acres qualify for additional funds. Remember to enter government payments related to conservation efforts in the whole farm analysis.

- SHIPP, EQIP, CSP, PCCP and other cost share program payments are entered here for conservation production practices.
- If funds are received as an annual payment for conservation related production practices –
  - Treat the cost-share funds received as income in the whole farm analysis. The funds received offset operating expenses for particular enterprises.
  - These payments should be entered as **Conservation government payments** in the Other Farm Income area of the whole farm analysis.
  - Allocate the payment received to the appropriate **Cover Crop** enterprise(s). These payments are included as **Other Income** in the crop enterprise analysis in the year the cover crop is analyzed.
  - **Note:** these payments may be received in the fall, when seeding occurs. Include as income when received in the whole farm analysis. Funds are allocated to the cover crop enterprise when analyzed the following year. (Use FINPACK Notes as an optional tracking method.)

### **FARM EXPENSES:**

**Direct Crop Expenses** – Enter all actual cash farm expenses paid during the calendar year. **DO NOT** use Cover Crop Expense. This expense chart of account has been removed and should not be utilized!

## Cover Crop - Crop Enterprise Analysis

All cover crops are analyzed as their own crop enterprise, no matter if used for feed, sale, grazing, or soil enhancement/agronomic purposes. **Cover crops are analyzed in the year production is complete.** Expenses for fall seeded cover crops are accumulated on the balance sheet as Growing Crop or Prepaid Expense. Then, analysis of the cover crop enterprise happens in the following year's analysis.

## CROP DATA ENTRY:

- **Crop** – Use the crop type from the pick list that best matches the cover crop in the enterprise analysis. Select the individual crop if a single species is planted. If a mix is planted, utilize the best fit of the following: *cover crop grazing* (unit is AUM), *cover crop mix* (unit is \$), or *cover crop rye mix* (unit is \$).
- **Type** – the cover crop enterprise should be identified as Double Crop.
- **Acres and Tenure** – both acres and tenure type (rented, owned, share rented) must match for the cover crop and base crop/cash crop that are being combined and analyzed together.
- **Production** – if a cover crop is harvested or grazed, indicate the production received from the acres. If the cover crop is solely for agronomic and soil enhancement purposes and terminated in the spring, there will be no production. This is expected and acceptable.
- **Other Income** – allocate any conservation payments received related to planting a cover crop as O. These may have been received in the prior year, when the cover crop was planted.
- **Combine with enterprise number** – combine the cover crop with the base crop/cash crop planted after. The base crop/cash crop is analyzed separately, as its own enterprise.

### Crop Enterprise Analysis

	1	2
<b>Crop</b>	Rye Silage	Corn
Description	cover crop	Acres w/ cover crop
Type	Double Crop	Normal
Acres owned	25	25
Acres cash rented		
Acres share rented		
Your Share (%)	100	
Total production (your share)	50 ton	5,000 bu.
Value per unit	50.00 ton	4.55 bu.
Total product value	2,500	22,750
Hedging gain or loss		
Crop insurance income		364
LDP income		
Crop government payments		1,007
Other income	566	
Combine with ent. number	2	

### ***DIRECT CROP EXPENSES:***

- There is no longer a Cover Crop expense in the direct crop expense chart of accounts. *Do not use this expense in the cover crop analysis!*
- Seed, chemical, machinery costs, etc. are to be entered as individual expense items for the cover crop being analyzed.

Direct Crop Expenses			
	Amount Remaining	1 Rye Silage cover crop Double Crop 25 Acres	
Seed		125	...
Fertilizer			250
Crop chemicals			250
Crop insurance			
Drying expense			
Storage			
Custom hire			400
Hired labor	11,675		
Land rent			
Machinery leases			
Utilities	8,086		
Consultants			
Marketing			
Miscellaneous			

### ***ALLOCATED CROP EXPENSES:***

- Review the allocation factor used and adjust if needed.
- Consider whether real estate taxes and long term interest should be included on owned acres for the cover crop enterprise. If yes, split between the cover crop and base crop enterprises.

### ***OTHER CROP INFORMATION:***

- **Cover Crop** – select ‘Yes’ for the cover crop enterprise
- **Other Crop Information** – review the other crop information being collected and enter the appropriate data for the enterprise.
- **Special Sorts** – consider any special sorts needed for the enterprise.

---

## Base Crop (Cash Crop) - Crop Enterprise Analysis

Analyze the base crop/cash crop enterprise as normal. The crop to be analyzed with the cover crop is the one that **follows** the cover crop termination.

### **CROP DATA ENTRY:**

- **Crop** – Use the base crop/cash crop from the pick list.
- **Type** – the base crop/cash crop enterprise should be identified as Normal.
- **Acres and Tenure** – both acres and tenure type (rented, owned, share rented) must match for the cover crop and base crop/cash crop that are being combined and analyzed together.
- **Crop Government Payments** – allocate any traditional government program payments (like ARC/PLC) to the base crop/cash crop.
- **Combine with enterprise number** – the cover crop is combined with the base crop/cash crop. No data entry is needed for the base crop/cash crop.

### **ALLOCATED CROP EXPENSES:**

- Review the allocation factor used and adjust if needed. *If using a single crop as a cover crop, change the default allocation by 50%.* For example, rye as a cover crop would be 15 (vs 30 by default). If using a cover crop mix as the crop type there is no need to change allocation factors.
- Consider whether real estate taxes and long term interest should be included on owned acres for both the cover crop and base crop enterprises. If yes, split between the cover crop and base crop enterprises.

### **OTHER CROP INFORMATION:**

- **Grown After a Cover Crop** – select 'Yes' for the base crop enterprise
- **Other Crop Information** – review the other crop information being collected and enter the appropriate data for the enterprise.
- **Special Sorts** – consider any special sorts needed for the enterprise.

### Other Crop Information

Crop	Rye Silage	Corn
Description	cover crop	Acres w/ cover crop
Type	Double Crop	Normal
Total acres	25	25

<b>Previous Crop</b>	Soybeans	Rye Silage
Field County	MN_Redwood	MN_Redwood
Tillage system	<input type="radio"/> Moldboard <input type="radio"/> Chisel/deep till <input checked="" type="radio"/> Minimum till <input type="radio"/> No till <input type="radio"/> Ridge till <input type="radio"/> Strip till <input type="radio"/> <No Answer>	<input type="radio"/> Moldboard <input type="radio"/> Chisel/deep till <input checked="" type="radio"/> Minimum till <input type="radio"/> No till <input type="radio"/> Ridge till <input type="radio"/> Strip till <input type="radio"/> <No Answer>
Row width	<input checked="" type="radio"/> < 10 <input type="radio"/> 10 - 18 <input type="radio"/> 19 - 25 <input type="radio"/> 26 - 32 <input type="radio"/> > 32 <input type="radio"/> <No Answer>	<input type="radio"/> < 10 <input type="radio"/> 10 - 18 <input type="radio"/> 19 - 25 <input checked="" type="radio"/> 26 - 32 <input type="radio"/> > 32 <input type="radio"/> <No Answer>
GMO Technology	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> <No Answer>	<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> <No Answer>
Organic transition	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> <No Answer>	<input type="radio"/> Yes <input checked="" type="radio"/> No <input type="radio"/> <No Answer>
Manure	<input type="radio"/> Manure only <input checked="" type="radio"/> Manure and commercial <input type="radio"/> No manure <input type="radio"/> <No Answer>	<input type="radio"/> Manure only <input checked="" type="radio"/> Manure and commercial <input type="radio"/> No manure <input type="radio"/> <No Answer>
Cover crop	<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> <No Answer>	<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> <No Answer>
Grown after a cover crop	<input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> <No Answer>	<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> <No Answer>
Special sorts	CSP/EQIP/Con	CSP/EQIP/Con
Delete from summary	No	No
	1	2

Crop	Rye Silage	Corn
Description	cover crop	Acres w/ cover crop
Type	Double Crop	Normal
Total acres	25	25

## SAMPLE COVER CROP ANALYSIS OUTPUT

### Crop Enterprise Analysis

	<b>Corn Acres w/ cov Owned</b>	<b>Rye Silage Double Crop cover crop Owned</b>	<b>Corn After CovCp Owned</b>
<b>Returns</b>			
Acres	25.00	25.00	25.00
Unit	bu.	ton	bu.
Yield per acre	200.00	2.00	202.00
Share of production (%)	100.00	100.00	100.00
Value per unit	4.55	50.00	5.00
Total product value	910.00	100.00	1010.00
Crop insurance	14.54	-	14.54
Other crop income	-	-	-
Gross return per acre	924.54	100.00	1024.54
<b>Direct Expenses</b>			
Seed	113.56	5.00	118.56
Fertilizer	121.00	10.00	131.00
Crop chemicals	38.66	10.00	48.66
Crop insurance	18.00	-	18.00
Drying expense	11.11	-	11.11
Custom hire	38.00	16.00	54.00
Machinery leases	7.50	-	7.50
Consultants	20.00	-	20.00
Marketing	2.25	-	2.25
Miscellaneous	9.75	-	9.75
Fuel & oil	30.47	5.54	36.01
Repairs	66.84	12.15	78.99
Operating interest	37.19	6.76	43.95
Total direct expenses	514.33	65.45	579.78
Return over direct expenses	410.21	34.55	444.76

- When entered correctly, there will be 3 columns of output for the cover crop analysis: base crop, cover crop, base crop combined with cover crop.
- Keys include combining both enterprises, having like tenure and acres, and designating the cover crop and crop grown after cover crop in other crop information.
- The combined column provides total gross return per acre with all production and total expenses per acre with both the cover crop and base crop direct and allocated expenses.

---

### **COVER CROPS SEEDED AND GRAZED IN THE FALL**

- If a cover crop is seeded and grazed in the fall when planted the production will be included the next year's analysis. In this case, the production may include grazing from the fall and spring, prior to termination. These AUM's produced should be totaled and included as described above.
- AUM's from fall cover crop grazing should still be fed to the livestock enterprise(s) in the correct year grazing occurred.
- *Note – AUM's produced and fed may be off in a given year with this methodology. This will cause discrepancies in the Crop and Feed Check. In this case, accept these discrepancies. The goal is to properly analyze the total value of the cover crop enterprise.*
- Handle the expenses and other cover crop logistics as described above.



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## Section VII:

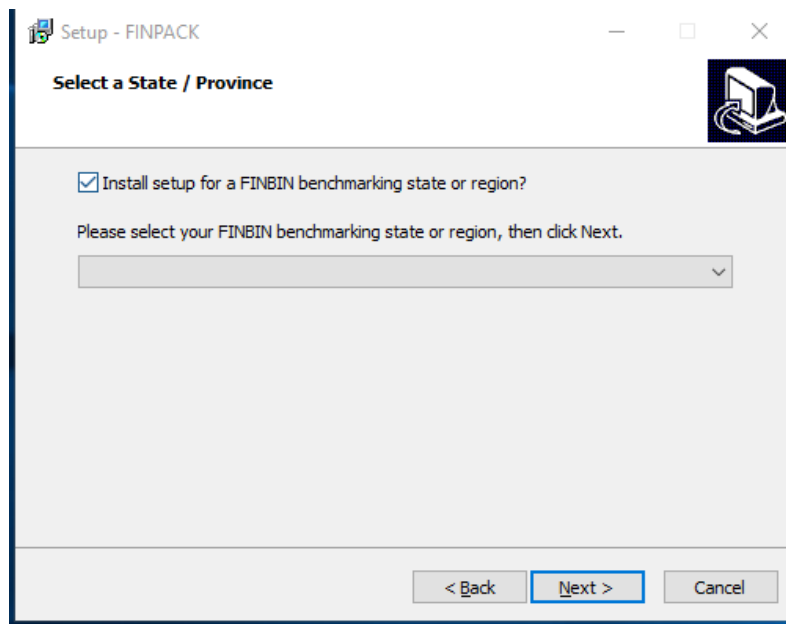
# DOWNLOADING FINPACK SETUP FILES

### Downloading the Uniform Setup Files for FINPACK

There is not a separate installation step to download the Uniform Setup files for FINPACK.

As a part of the FINPACK Installation, you will be asked if you want to **“Install setup for FINBIN benchmarking state or region?”**.

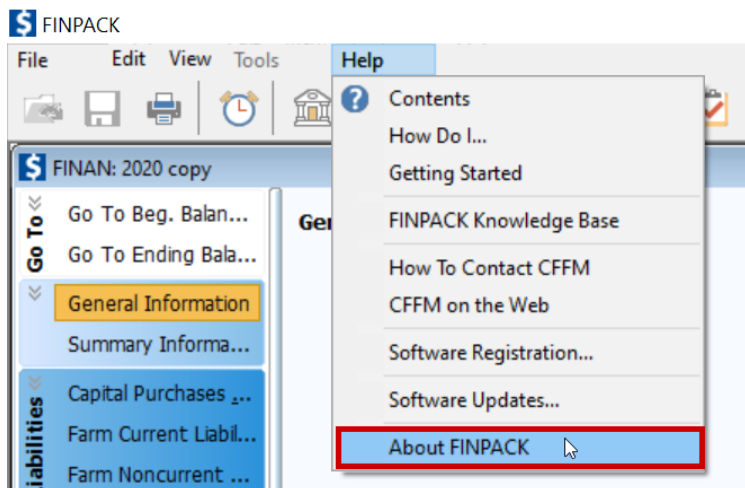
After selecting the checkbox, you will also have to use the dropdown to select the benchmarking state or region you are affiliated with.



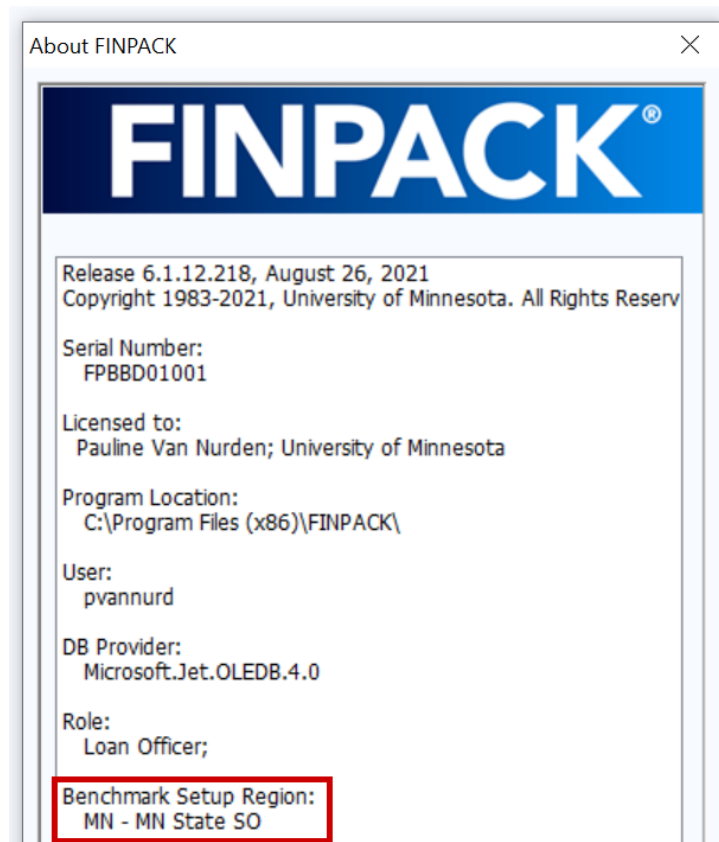
**NOTE:** This process replaces the need to download set files from the CFFM website. Furthermore, when you download an update during the year your setup file configuration will remain.

## Verifying Uniform Setup Files are downloaded for FINPACK

In FINPACK, go to **Help > About FINPACK** to verify uniform setup files for your FINPACK installation.



In the About FINPACK dialog box, look for “**Benchmark Setup Region**”. If this does not appear in the dialog box information you do not have uniform benchmarking set up files downloaded. *If this is the case, you will need to **re-install FINPACK** and follow the steps above.*



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## Section VIII:

# IMPORTING FINAN DATA

### Exporting from Accounting Software

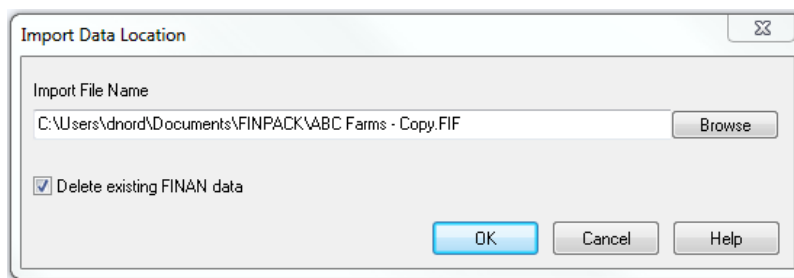
FINPACK interfaces exist for several accounting software packages including QuickBooks, Quicken, EasyFarm, PCMars, UltraFarm, and MicroTel. Each system will export the cash transactions for the period in a file format that can be imported into FINAN. At this time, only cash transactions are included. Most systems export totals for each chart of accounts category.

The exported file will have a file extension of '.fif' (FINPACK Interface File). If the export file does not include this extension, rename the file to add the .fif extension. Refer to the individual accounting system documentation for instructions on exporting data for FINPACK.

### Selecting the FINPACK Interface File

Begin by creating your FINAN for the accounting period, either by creating a blank FINAN or copying last year's analysis. On the FINAN General Information page, select the beginning and ending balance sheets (balance sheet data is not imported). Then select Edit + Import Data from the main menu.

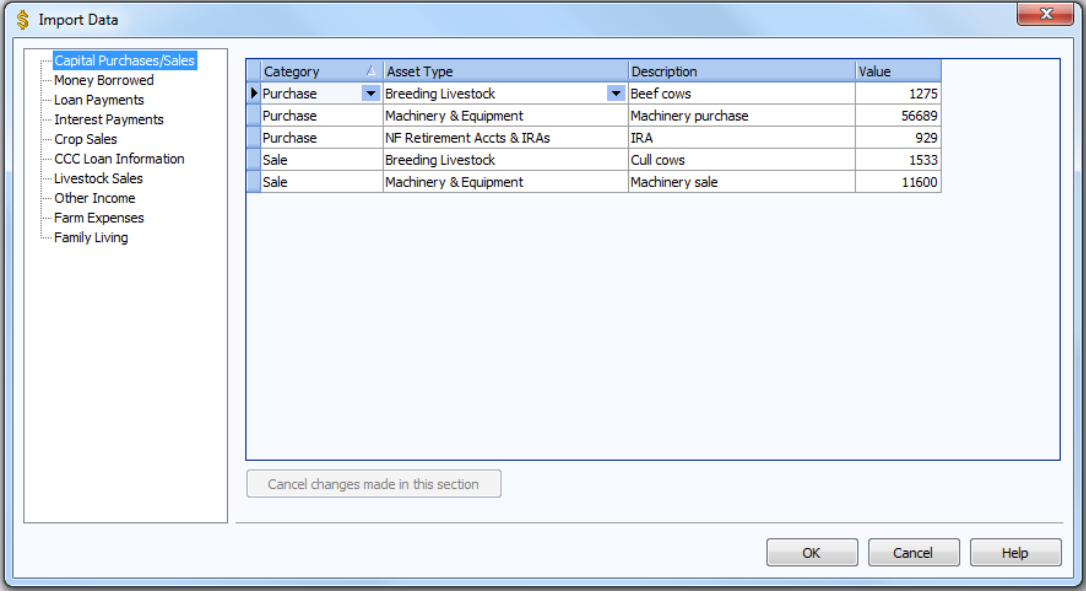
You will be prompted for the file location. If the correct file name for this farm is not displayed, click Browse to find the correct file.



The default setting is to delete all existing cash transaction data from the FINAN input. If you uncheck this option, imported transactions will be added to existing transactions. This may be useful for farms that keep more than one set of accounts.

## Checking and Correcting Chart of Accounts Mapping

When the FINPACK Interface File is selected, the data will be displayed by category and chart of accounts location as shown below. At this point you have the ability to check and edit the destination of the imported data in FINAN. Scroll through the FINAN data entry page titles on the left to review and edit the data mapping.



The screenshot shows the 'Import Data' window. On the left is a tree view of categories, with 'Capital Purchases/Sales' selected. On the right is a table with four columns: Category, Asset Type, Description, and Value. The table contains five rows of data. Below the table is a button labeled 'Cancel changes made in this section'. At the bottom right are buttons for 'OK', 'Cancel', and 'Help'.

Category	Asset Type	Description	Value
Purchase	Breeding Livestock	Beef cows	1275
Purchase	Machinery & Equipment	Machinery purchase	56689
Purchase	NF Retirement Accts & IRAs	IRA	929
Sale	Breeding Livestock	Cull cows	1533
Sale	Machinery & Equipment	Machinery sale	11600

**Column 1:** Category – This is the FINAN Whole Farm data entry category destination for the transaction data. The category can be changed to move data to a different location in FINAN. If the new category moves the data to a different page, the record will disappear from the current category listing once you move to a different record (as it is moved to the new page).

**Column 2:** This is the chart of accounts destination for each transaction. The major purpose of this page is to allow you to change the destination to accurately import the transaction data into FINAN.

**Column 3:** Description – This is the description of the account from the accounting software.

**Column 4:** Value – This is the dollar amount that will be imported. Values can be changed here in the unusual situation that a correction is needed. Value changes are temporary until the data is imported or the import is Cancelled; changes are not saved in the '.fif' file.

When you have verified the data mapping for each page of FINAN data entry, click OK. When the data has been successfully imported, the FINAN will close and you will need to re-open it to view and edit the FINAN data.

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## Importing Errors

If errors are found in the import file, an error message will be displayed, and specific amounts will not be imported. Errors usually indicate that the chart of account being mapped to in FINAN is not active in your copy of FINPACK. You will have to manually enter these amounts in FINAN to correct the problem.

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## Section IX:

### ALLOCATION FACTORS

#### Crop Allocation Factors

Crop	Default Allocation
Alfalfa Seed	60
Barley	30
Barley, Malting	30
Beans, Black Turtle	50
Beans, Dark Red Kidney	50
Beans, Great Northern	50
Beans, Light Red Kidney	50
Beans, Lupin	50
Beans, Navy	50
Beans, Pink	50
Beans, Pinto	50
Beans, Small Red	50
Buckwheat	30
Canola	30
Cordwood	60
Corn Silage	70
Corn	55
Corn, Ear	55
Corn, Seed	55
Corn, White	55
<b>Cover Crop Grazing</b>	<b>15</b>
<b>Cover Crop Mix</b>	<b>15</b>
<b>Cover Crop Cereal Rye Mix</b>	<b>15</b>
CRP (Establish 20)	5
Custom Work	30
<b>Fallow</b>	<b>15</b>
Flax	30
Grass seed	40

Hay	60
Hay, Alfalfa *	60
Hay, Grass **	40
Hay, Mixed *	60
Hay, Small Grain	40
Haylage, Alfalfa *	60
Haylage, Grass **	40
Haylage, Mixed *	60
Haylage, Small Grain w/ Peas	40
Hulless Oats	30
<b>Oatlage</b>	<b>35</b>
Oats	30
Pasture	5
Pasture, Intensive	20
Peas Field	30
Peas, Processing	30
Potatoes	300
Potatoes, Seed	300
Prevented Planting	20
Pulpwood	30
Rented Out	5
Rice, Wild	30
Rye	30
SHIPP (Establish 20)	5
<b>Sorghum Silage</b>	<b>55</b>
Sorghum, Grain	50
Soybeans	30
Stover	30
Straw	10
Sugar Beets	120
Sunflowers	40
Sunflowers, Confectionary	40
Sweet Corn	35
Timber	7
Triticale	30
<b>Triticale Silage</b>	<b>35</b>

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Wheat	30
Wheat, Spring	30
Wheat, Winter	30
Wheat, Kernza	30

Crops **bolded** above indicates an updated allocation factor this year.

**Special Notes Regarding Crop Allocation Factors:**

- \* Hay, Alfalfa; Haylage, Alfalfa; Hay, Mixed; Haylage, Mixed; and Hay crops ***assume 3 cuttings*** for the year. Adjust allocation factor if needed, based on actual number of cuttings for the production year.
- \*\* Hay, Grass and Haylage, Grass ***assume 2 cuttings*** for the year. Adjust allocation factor if needed, based on actual number of cuttings for the production year.

When a crop enterprise is produced using **custom hired operations**, either a portion or total, adjust the allocation factor accordingly. For crops custom harvested, recommendation is to reduce the default allocation by 50%.

Consider changes to the Standard Allocation Factors on **double crop, cover crop and related situations**.

For example, if a crop is used as a cover crop and terminated reduce the allocation factor by 50%. For example, rye used as a cover crop and terminated, change the allocation factor to 15 (from 30).

If the cover crop is harvested or grazed do not change the default allocation factor.



## Livestock Allocation Factors

LIVESTOCK ENTERPRISE	DEFAULT ALLOCATION
Beef, Cow-Calf	18
Beef, Replacement Heifers	7
Beef, Background Beef	4.5
Beef, Custom fed	3
Beef, Finish Calves	9
Broilers, Contract	8
Chickens, Egg Production	.43
Dairy	85
Dairy Heifers (for sale)	15
Dairy Replacement Heifers	15
Dairy Steers	9
Hogs, Contractor	85
Hogs, Farrow to Finish	27
Hogs, Farrow to Weaning	13
Hogs, Feeder Pig Production	17
Hogs, Finish Feeder Pigs	3
Hogs, Weaning to Feeder	1
Hogs, Weaning to Finish	4
Honey Production	4
Horses, Breeding Mares	4
Sheep, Feeder Lamb Production	4.5
Sheep, Lamb Finishing	1.5
Sheep, Market Lamb Production	7

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# Section X:

## SPECIAL SORTS

Special sorts are important for the separation of various data and comparing like types of operations with specific various activities. Use all special sorts that apply.

**Please place special emphasis on Bold items.**

### Whole Farm Sorts

**Organic Farm (total)**

**Organic Farm (partial)**

**Organic Transition**

**Specialty Crop**

**Custom Operator**

**Expansion Crops**

**Expansion Beef**

**Expansion Dairy**

**Expansion Hogs**

**Contraction Crops**

**Contraction Beef**

**Contraction Dairy**

**Contraction Hogs**

**MN MDA Beg Farmer Scholarship**

**Veteran**

**MN Water Quality Certified Farm**

Environmental & Structural Water Quality Controls

3<sup>rd</sup> Party Nutrient Management Plan

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## Crop Enterprise Sorts

Most of the crop sorts have been moved to the Production Practices on the first screen of the Crop Enterprise Analysis. For sugar beets, be sure to use the Joint Venture sort for rented beet base. Use other special sorts as appropriate.

- Drainage, pattern tile
- Drainage, spot tile
- Drainage, no tile
- Following fallow
- Joint venture
- Nitrogen, 28% UAN
- Nitrogen, urea
- Nitrogen, anhydrous
- 0 - 60 lb. Nitrogen
- 61 - 100 lb. Nitrogen
- 101 - 140 lb. Nitrogen
- 141 - 180 lb. Nitrogen
- > 180 lb. Nitrogen
- Side dressed fertilizer
- Auto-steer/Swath control
- Variable rate seed
- Variable rate fertilizer
- Variable rate chemicals
- 2<sup>nd</sup> yr. continuous crop
- 3+ years continuous crop
- CSP/EQIP/Conservation Practices
- Ethanol corn variety (Ex. Enogen brand)
- Subsurface Nutrient Placement

## Livestock Enterprise Sorts

Use only the marked sorts each type of enterprise.

	Dairy	Beef Cow-Calf	Beef Finishing	Hogs	Dairy Replace	Dairy Finishing
Organic	X	X	X	X	X	X
Organic transition	X	X	X	X	X	X
Dairy initiatives	X					
3x milking	X					
<b>Tie stall Barn</b>	<b>X</b>					
<b>Free Stall Barn</b>	<b>X</b>					
Sand bedding	X					
Compost bedding	X					
Rotational Grazing	X	X			X	
<b>Robotic milking</b>	<b>X</b>					
DMC – 1-year sign-up	X					
DMC – 5-year sign-up	X					
Dairy/beef Cross						X
Raise replacements	X				X	
Per-Head-Per-Day Contract	X				X	
Buy/Sell Replacements	X				X	
Calf auto feeders	X				X	
<b>Dry lot</b>		X				
<b>Share lease</b>		X				
<b>Finish, Females Only</b>			X			
<b>Finish, Males Only</b>			X			
<b>Finish, Split Sex</b>			X	X		X
<b>Location, Single Site</b>				X		
<b>Location, Multiple Sites</b>				X		
All-In-All-Out Site				X		
<b>Weaning, 21 Days or Less</b>				X		

<b>Weaning, Over 21 Days</b>				<b>X</b>		
<b>Segregated Early Weaning</b>				<b>X</b>		
Wean to Finish Barn				X		
Auto-Sort Barn				X		
Ventilation, natural				X		
Ventilation, total power				X		
Ventilation, tunnel				X		
Ventilation, curtains/minimum power				X		
Hoop barn				X		
Large Pens > 80 head				X		
Small Pens < 30 head				X		
Feeding DDGs	X	X	X	X	X	X
Spring calving		X				
Summer calving		X				
Fall calving		X				
Winter calving		X				
Cow-calf with backgrounding		X				
Seedstock production		X				