

# Crop (Biomass, Hay, Nuts, Berries, Corn, Soybean ...) Environmental and Economic Web Application

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David Smith, Josh Gamble, Diomy  
Zamora, Gregg Johnson, Gary Wyatt,  
Dean Current, and William Lazarus



# Partners



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# Biomass Production Database

## Relational Database

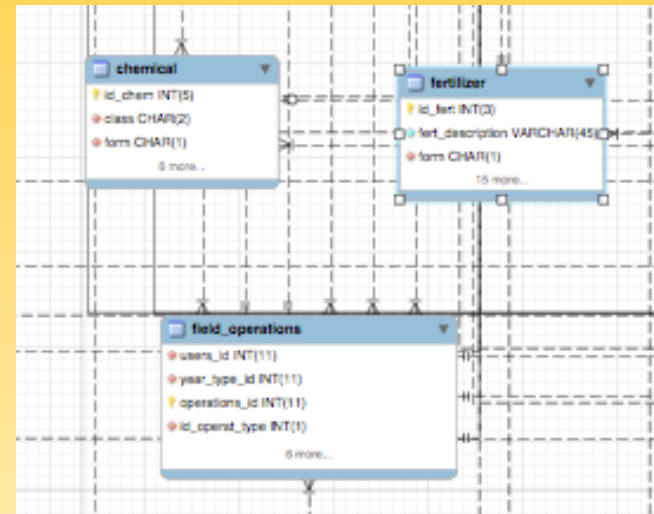
- MySQL

## Data Entry

- Web Application
  - Manual Data Entry
  - CSV Import/Export by data table
  - Bulk Import/Export

## Data Retrieval

- Custom Query



# Biomass Web Application

## Users

- Extension
  - Natural Resource Professional
  - Educators
- Producers
  - Farmers
  - Crop Consultants
- Research
  - Non-economists
  - Economists



# Biomass Web Application

## Decision Support Tool

- Site/Field
- Inputs
- Operations
- Budgets
  - Enterprise
    - AAEA Task Force on Commodity Cost and Returns
  - Environmental
    - CENTURY (biomass, carbon, nitrogen leaching)
    - RUSLE (soil loss, phosphorus)

## Research Specific Data



# User Inputs

Campuses: Twin Cities Crookston Duluth Morris Rochester Other Locations



myU One Stop

Search Websites and People Search

Home **Operations** Budgets Inputs

Register or Login

Site

Field

Input Data Set

Budget Data Set

Budget

Year Type

Stand Life

**Operations**

Labor

Other Costs

Operations  New Copy Delete

Name \*

Date \*

Machinery Type \*  Entered/Custom  Calculated/Owned

Custom Machine

Passes \*

#	Type	Input	Rate/Passes	Unit (Per Acre)	
1.	<input type="text" value="Chemical"/>	<input type="text" value="Extreme, 2.17L (pt)"/>	<input type="text" value="1.0000"/>	<input type="text" value="%v"/>	<input type="text" value="-"/>
2.	<input type="text" value="Planting"/>	<input type="text" value="Switchgrass"/>	<input type="text" value="3.0000"/>	<input type="text" value="cutting"/>	<input type="text" value="-"/>
3.	<input type="text" value="Planting"/>	<input type="text" value="11 species 4G-4F-"/>	<input type="text" value="4.0000"/>	<input type="text" value="lb"/>	<input type="text" value="-"/>

Add Input
Remove ALL Inputs

\* - Required field

Save

Field Operations List

**Additional Information**

Here we need to put information and calculation.



# Inputs | List

Seed   Plant list								
ID#	Name	Price	Unit	Vender	Category	Crop	Cultivar	
1	1 Willow	0.10	cuttings	Double A Willow	Woody	Willow clone	Fish Creek	
2	2 Poplar	0.10	cuttings	Lodhoz North Star Acres, Inc	Woody	Poplar or cottonwood clone	NM6	
3	3 Willow	0.10	cuttings	Double A Willow	Woody	Willow clone	Fish Creek	
4	4 Switchgrass	15.00	lb	Feder's Prairie Seed Compan	Perennial herbaceou:	Switchgrass	Other local ecotype	
5	5 Martin county ecotype prairie cordgra	80.00	lb	wild collected	Perennial herbaceou:	Prairie cordgrass	Other local ecotype	
6	6 Red river from UMN plots Was / StP	80.00	lb	from UMN research plots	Perennial herbaceou:	Prairie cordgrass	Red River	
7	7 'Rush' intermediate wheatgrass	7.00	lb	Albert Lea Seed House	Perennial herbaceou:	Intermediate wheat grass	'Rush' intermediate v	
8	8 11 species 4G-4F-3L native ecotype m	33.00	lb	Feder's Prairie Seed Compan	Perennial herbaceou:	Native grass-forb-legume mixtu	Generic cultivar	
9	9 Pioneer alfalfa	4.00	lb	Albert Lea Seed House	Perennial herbaceou:	Hay, Alfalfa	Generic cultivar	
10	10 Corn Generic	3.50	lb	Misc.	Annual	Corn	Generic cultivar	
11	11 Soybeans Generic	50.00	lb	Misc.	Annual	Soybeans	Generic cultivar	
12	12 Wheat, Spring Generic	14.00	lb	Misc.	Annual	Wheat, Spring (excl durum)	Generic cultivar	
13	13 Alfalfa	4.25	lb	Misc.	Perennial herbaceou:	Hay, Alfalfa	Generic cultivar	

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# Reports | Enterprise Budgets | Detail

Budgetset

Budget Detail

Budget Summary

Cash Flow

Budget Compare

Budget

Year

1 - 1 Warning: mysql\_fetch\_array() expects parameter 1 to be resource, boolean given in /swadm/www/cropbudget.apec.umn.edu/hcode/reports/reportDetailResult.php on line 297

	Quantity	Unit	Price	Per Acre
<b>REVENUE</b>				
<i>Product</i>				
Government payments				
Miscellaneous income				
<b>Total Revenue</b>	-	-	-	-
<b>COSTS</b>				
<b>Seed or Plants Materials</b>				
'Rush' intermediate wheatgrass	8.00	lb	\$ 7.00	\$ 56.00
<b>Total</b>				\$ 56.00
<b>Fertilizer &amp; Lime</b>				
<b>Crop chemicals</b>				
<b>Crop insurance</b>				
<b>Miscellaneous</b>				
<b>Machinery with Labor</b>				
Chisel Plow 37 Ft	1.00	per acre	\$ 10.07	\$ 10.07
Field Cultivator 47 Ft	1.00	per acre	\$ 6.35	\$ 6.35
Prairie Grass Drill (Twinned) , 21 Ft	1.00	per acre	\$ 19.10	\$ 19.10
<b>Total</b>				\$ 35.51





# Reports | Enterprise Budgets | Cash Flow

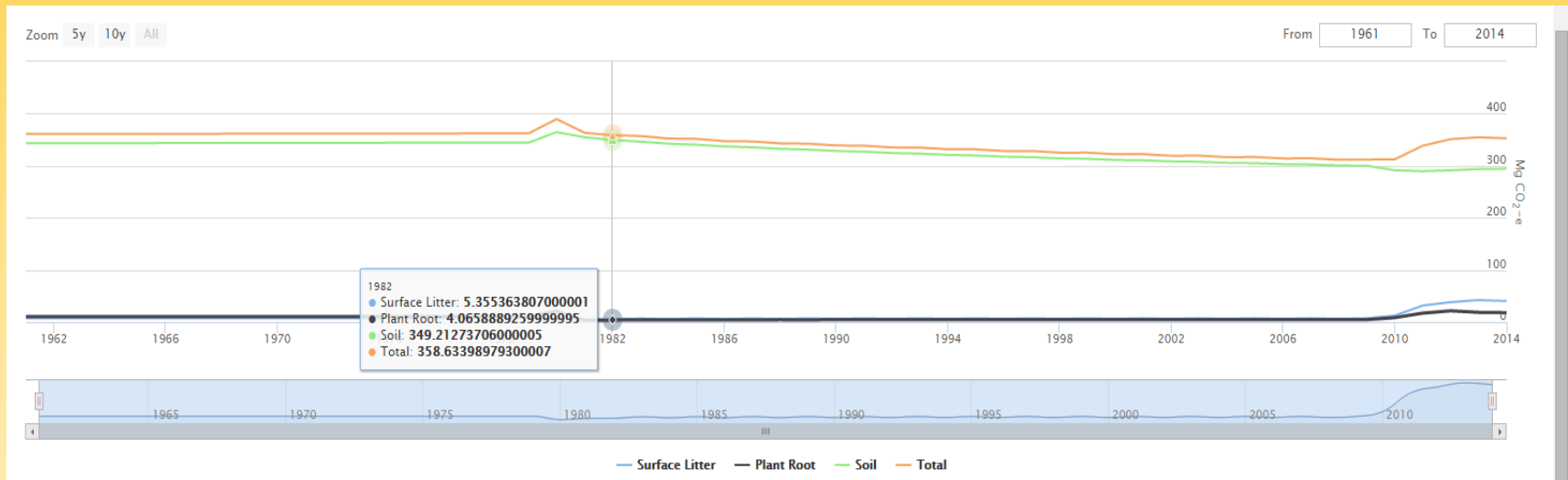
Budgetset: Alley Cropping

Budget: Intermediate Wheatgrass (10 yrs)

BUDGET	1. Stand	3. Mature stand	4. Mature stand	5. Mature stand	6. Mature stand	Average	NPV	Annualized NPV
<b>REVENUE</b>								
Primary product	-	-	-	-	-	-	-	-
Secondary product	-	-	-	-	-	-	-	-
Government payments	-	-	-	-	-	-	-	-
Miscellaneous income	-	-	-	-	-	-	-	-
<b>Total Revenue</b>	-	-	-	-	-	-	-	-
<b>COSTS</b>								
Seed or Plants Materials	-	-	-	-	-	\$ 6	\$ 54	\$ 7
Fertilizer & Lime	-	-	-	-	-	-	-	-
Crop chemicals	-	-	-	-	-	-	-	-
Crop insurance	-	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-
Machinery with Labor	\$ 29	\$ 29	\$ 29	\$ 29	\$ 29	\$ 30	\$ 241	\$ 30
Crop drying	-	-	-	-	-	-	-	-
Transport	-	-	-	-	-	-	-	-
Labor & Mgmt (non-mach.)	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 162	\$ 20
Rent	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 1,622	\$ 200
Int on pre-harvest var exp	\$ 4	\$ 4	\$ 4	\$ 4	\$ 4	\$ 4	\$ 37	\$ 5
<b>Total Listed Costs</b>	<b>\$ 253</b>	<b>\$ 253</b>	<b>\$ 253</b>	<b>\$ 253</b>	<b>\$ 253</b>	<b>\$ 260</b>	<b>\$ 2,116</b>	<b>\$ 261</b>
<b>NET RETURN</b>	<b>-\$ 253</b>	<b>-\$ 253</b>	<b>-\$ 253</b>	<b>-\$ 253</b>	<b>-\$ 253</b>	<b>-\$ 260</b>	<b>-\$ 2,116</b>	<b>-\$ 261</b>
<b>CUMULATIVE, COMPOUNDED</b>	<b>-\$ 584</b>	<b>-\$ 860</b>	<b>-\$ 1,148</b>	<b>-\$ 1,447</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>



# Reports | Environmental Budgets | Carbon Flow



# Next Steps

- Beta Testing
  - Extension
  - Producers
  - Researchers
- Century Integration



# Sponsors



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Interested in being a web tool  
beta tester?

Diomy Zamora  
zamor015@umn.edu

