

Animal Inventory

Barn # 6 Barn 6

Animal Type **Dairy - 1400#**
Animal Capacity **60**
Average Size **1400**
IDOA Animal Units **84**
NRCS Animal Units **84**

Barn # 7 Barn 7

Animal Type **Dairy - 1400#**
Animal Capacity **30**
Average Size **1400**
IDOA Animal Units **42**
NRCS Animal Units **42**

Barn # 8 Barn 8

Animal Type **Dairy - 1400#**
Animal Capacity **100**
Average Size **1400**
IDOA Animal Units **140**
NRCS Animal Units **140**

Barn # 9 Barn 9

Animal Type **Dairy - 1400#**
Animal Capacity **50**
Average Size **1400**
IDOA Animal Units **70**
NRCS Animal Units **70**

Barn # 10 Barn 10

Animal Type **Dairy - 150#**
Animal Capacity **75**
Average Size **150**
IDOA Animal Units **45**
NRCS Animal Units **11**

Animal Inventory

Barn # 11 Barn 11

<i>Animal Type</i>	Dairy - 150#
<i>Animal Capacity</i>	75
<i>Average Size</i>	150
<i>IDOA Animal Units</i>	45
<i>NRCS Animal Units</i>	11

Barn # 12 Barn 12

<i>Animal Type</i>	Dairy - 1400#
<i>Animal Capacity</i>	40
<i>Average Size</i>	1400
<i>IDOA Animal Units</i>	56
<i>NRCS Animal Units</i>	56

Barn # 13 Barn 13

<i>Animal Type</i>	Dairy - 250#
<i>Animal Capacity</i>	100
<i>Average Size</i>	250
<i>IDOA Animal Units</i>	60
<i>NRCS Animal Units</i>	25

Total IDOA Animal Units	1,354
--------------------------------	--------------

Total NRCS Animal Units	1,252
--------------------------------	--------------

Annual Waste Volume and Nutrient Content - Total Operation

Westridge Dairy

Animal Type	Inventory	Daily Volume day/space	Total Daily Volume	Total Annual Volume	Nutrient Content lbs/day/space			Annual Nutrients Produced		
					N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O
Dairy - 150#	150	13	1,950	711,750	0.0640	0.030	0.050	3,504	1,643	2,738
Dairy - 250#	100	22	2,200	803,000	0.1060	0.040	0.090	3,869	1,460	3,285
Dairy - 1400#	860	120	103,200	37,668,000	0.5950	0.240	0.480	186,771	75,336	150,672
Total Inventory	1110	Source: MWPS 18 Table 2-1		107,350	39,182,750	Source: MWPS 18 Table 2-1		194,144	78,439	156,695

Annual Waste Volume and Nutrient Content - Operation Responsibility

Westridge Dairy

Animal Type	Inventory	Daily Volume day/space	Total Daily Volume	Total Annual Volume	Nutrient Content lbs/day/space			Annual Nutrients Produced		
					N	P ₂ O ₅	K ₂ O	N	P ₂ O ₅	K ₂ O
Dairy - 150#	150	13	1,950	711,750	0.0640	0.030	0.050	3,504	1,643	2,738
Dairy - 250#	100	22	2,200	803,000	0.1060	0.040	0.090	3,869	1,460	3,285
Dairy - 1400#	860	120	103,200	37,668,000	0.5950	0.240	0.480	186,771	75,336	150,672
Total Inventory	1110	Source: MWPS 18 Table 2-1		39,182,750	Source: MWPS 18 Table 2-1			194,144	78,439	156,695

Total Facility Nitrogen - Operation Responsibility

Westridge Dairy

Barn # 1	Barn 1	Barn # 2	Barn 2
Waste Source	Dairy - 1400#	Waste Source	Dairy - 1400#
Animal Spaces	120.00	Animal Spaces	120.00
Annual Manure Volume Gallons or Lbs	5,256,000	Annual Manure Volume Gallons or Lbs	5,256,000
Total N per Animal Space	0.5950	Total N per Animal Space	0.5950
Total N Annually from Source - Pounds	26,061	Total N Annually from Source - Pounds	26,061
Ammonium % of Total N	44.44	Ammonium % of Total N	44.44
	Source: MWPS - 18 Table 2-1		Source: MWPS - 18 Table 2-1
	Source: MWPS - 18 Table 10-6 and 7		Source: MWPS - 18 Table 10-6 and 7
		Organic	Inorganic
N Pounds Annually	14,479	N Pounds Annually	14,479
N loss during Storage and Handling	11,582 Pounds	N loss during Storage and Handling	11,582 Pounds
N loss pounds annually (storage)	30 %	N loss pounds annually (storage)	30 %
N loss during Land Application	-3,474 Pounds	N loss during Land Application	-3,474 Pounds
N loss pounds annually (application)	3 %	N loss pounds annually (application)	3 %
	Source: MWPS - 18 Table 10-1		Source: MWPS - 18 Table 10-1
	Source: MWPS - 18 Table 10-2		Source: MWPS - 18 Table 10-2
	Source: MWPS - 18 Table 10-5		Source: MWPS - 18 Table 10-5
Organic N mineralization factor Year 1	25%	Organic N mineralization factor Year 1	25%
Organic N Mineralized Year 1	3,620	Organic N Mineralized Year 1	3,620
Plant Available N Year 1	3,620	Plant Available N Year 1	3,620
Total Plant available N Year 1	11,484	Total Plant available N Year 1	11,484
Organic N Mineralized Year 2	1,810	Organic N Mineralized Year 2	1,810
Organic N Mineralized Year 3	905	Organic N Mineralized Year 3	905
Organic N Mineralized Year 4	452	Organic N Mineralized Year 4	452

Total Facility Nitrogen - Operation Responsibility

Westridge Dairy

Barn # 3	Barn 3	Barn # 4	Barn 4
Waste Source	Dairy - 1400#	Waste Source	Dairy - 1400#
Animal Spaces	120.00	Animal Spaces	120.00
Annual Manure Volume Gallons or Lbs	5,256,000	Annual Manure Volume Gallons or Lbs	5,256,000
Total N per Animal Space	0.5950	Total N per Animal Space	0.5950
Total N Annually from Source - Pounds	26,061	Total N Annually from Source - Pounds	26,061
Ammonium % of Total N	44.44	Ammonium % of Total N	44.44
	Source: MWPS - 18 Table 2-1		Source: MWPS - 18 Table 2-1
	Source: MWPS - 18 Table 10-6 and 7		Source: MWPS - 18 Table 10-6 and 7
Organic	Inorganic	Organic	Inorganic
N Pounds Annually	14,479	N Pounds Annually	14,479
N loss during Storage and Handling	11,582 Pounds	N loss during Storage and Handling	11,582 Pounds
N loss pounds annually (storage)	30 %	N loss pounds annually (storage)	30 %
N loss during Land Application	-3,474 Pounds	N loss during Land Application	-3,474 Pounds
N loss pounds annually (application)	3 %	N loss pounds annually (application)	3 %
	Source: MWPS - 18 Table 10-1		Source: MWPS - 18 Table 10-1
	Source: MWPS - 18 Table 10-2		Source: MWPS - 18 Table 10-2
	Source: MWPS - 18 Table 10-5		Source: MWPS - 18 Table 10-5
Organic N mineralization factor Year 1	25%	Organic N mineralization factor Year 1	25%
Organic N Mineralized Year 1	3,620	Organic N Mineralized Year 1	3,620
Plant Available N Year 1	3,620	Plant Available N Year 1	3,620
Total Plant available N Year 1	11,484	Total Plant available N Year 1	11,484
Organic N Mineralized Year 2	1,810	Organic N Mineralized Year 2	1,810
Organic N Mineralized Year 3	905	Organic N Mineralized Year 3	905
Organic N Mineralized Year 4	452	Organic N Mineralized Year 4	452

Westridge Dairy

LMFA 900.803 m) (1),(2),(3),(4),(5),(9)

Total Facility Nitrogen - Operation Responsibility

Westridge Dairy

Barn # 7	Barn 7	Barn # 8	Barn 8
Waste Source	Dairy - 1400#	Waste Source	Dairy - 1400#
Animal Spaces	30.00	Animal Spaces	100.00
Annual Manure Volume Gallons or Lbs	1,314,000	Annual Manure Volume Gallons or Lbs	4,380,000
Total N per Animal Space	0.5950	Total N per Animal Space	0.5950
Total N Annually from Source - Pounds	6,515	Total N Annually from Source - Pounds	21,718
Ammonium % of Total N	44.44	Ammonium % of Total N	44.44
		Organic	Inorganic
N Pounds Annually	3,620	N Pounds Annually	12,066
N loss during Storage and Handling		N loss during Storage and Handling	
N loss pounds annually (storage)		N loss pounds annually (storage)	
N loss during Land Application		N loss during Land Application	
N loss pounds annually (application)		N loss pounds annually (application)	
Organic N mineralization factor Year 1	25%	Organic N mineralization factor Year 1	25%
Organic N Mineralized Year 1	905	Organic N Mineralized Year 1	3,017
Plant Available N Year 1	905	Plant Available N Year 1	3,017
Total Plant available N Year 1	2,871	Total Plant available N Year 1	9,570
Organic N Mineralized Year 2	452	Organic N Mineralized Year 2	1,508
Organic N Mineralized Year 3	226	Organic N Mineralized Year 3	754
Organic N Mineralized Year 4	113	Organic N Mineralized Year 4	377

Westridge Dairy

LMFA 900.803 m) (1),(2),(3),(4),(5),(9)

Total Facility Nitrogen - Operation Responsibility

Westridge Dairy

Barn # 11	Barn 11	Barn # 12	Barn 12
Waste Source	Dairy - 150#	Waste Source	Dairy - 1400#
Animal Spaces	75.00	Animal Spaces	40.00
Annual Manure Volume Gallons or Lbs	355,875	Annual Manure Volume Gallons or Lbs	1,752,000
Total N per Animal Space	0.0640	Total N per Animal Space	0.5950
Total N Annually from Source - Pounds	1,752	Total N Annually from Source - Pounds	8,687
Ammonium % of Total N	44.44	Ammonium % of Total N	44.44
	Source: MWPS - 18 Table 2-1		Source: MWPS - 18 Table 2-1
	Source: MWPS - 18 Table 10-6 and 7		Source: MWPS - 18 Table 10-6 and 7
Organic	Inorganic	Organic	Inorganic
N Pounds Annually	973	N Pounds Annually	4,826
N loss during Storage and Handling	30 %	N loss during Storage and Handling	27.5 %
N loss pounds annually (storage)	-234 Pounds	N loss pounds annually (storage)	-1,062 Pounds
N loss during Land Application	3 %	N loss during Land Application	3 %
N loss pounds annually (application)	-16 Pounds	N loss pounds annually (application)	-84 Pounds
	Source: MWPS - 18 Table 10-1		Source: MWPS - 18 Table 10-1
	Source: MWPS - 18 Table 10-2		Source: MWPS - 18 Table 10-2
	Source: MWPS - 18 Table 10-5		Source: MWPS - 18 Table 10-5
Organic N mineralization factor Year 1	25%	Organic N mineralization factor Year 1	25%
Organic N Mineralized Year 1	243	Organic N Mineralized Year 1	1,207
Plant Available N Year 1	243	Plant Available N Year 1	1,207
Total Plant available N Year 1	772	Total Plant available N Year 1	3,922
Organic N Mineralized Year 2	122	Organic N Mineralized Year 2	603
Organic N Mineralized Year 3	61	Organic N Mineralized Year 3	302
Organic N Mineralized Year 4	30	Organic N Mineralized Year 4	151

Total Facility Nitrogen - Operation Responsibility

Westridge Dairy

Barn # 13	Barn 13	
Waste Source	Dairy - 250#	
Animal Spaces	100.00	
Annual Manure Volume Gallons or Lbs	803,000	
Total N per Animal Space	0.1060	Source: MWPS - 18 Table 2-1
Total N Annually from Source - Pounds	3,869	
Ammonium % of Total N	44.44	Source: MWPS - 18 Table 10-6 and 7
	Organic	Inorganic
N Pounds Annually	2,150	1,719 Pounds
N loss during Storage and Handling		27.5 % Source: MWPS - 18 Table 10-1
N loss pounds annually (storage)		-473 Pounds
N loss during Land Application		3% Source: MWPS - 18 Table 10-2
N loss pounds annually (application)		-37 Pounds
Organic N mineralization factor Year 1	25%	Source: MWPS - 18 Table 10-5
Organic N Mineralized Year 1	537	Pounds
Plant Available N Year 1	537	1,209 Pounds
Total Plant available N Year 1		1,747 Pounds
Organic N Mineralized Year 2	269	Pounds
Organic N Mineralized Year 3	134	Pounds
Organic N Mineralized Year 4	67	Pounds

Total Facility Nitrogen - Operation Responsibility

Westridge Dairy

Land Required to Dispose of Waste for Corn Grain Yield AVG

Avg Corn Grain Yield	132
Acres required for Application	543.00