CLSA

GJC

THE MORNING STAR PACKING COMPANY

724 Main Street, Woodland CA 95695

GC

Staff: GC

Logged in as received: 10.06.14CC

Date reviewed: _____

Violations?: _____

Logged in as reviewed: _____

CENTRAL VALLEY RWQCB
14 SEP 30 PM 3:58

29 September 2014

Mr. Guy Childs
Central Valley Regional Water Quality Control Board
11020 Sun Center Drive #200
Rancho Cordova, CA 95670-6114

Re: Monthly Report for The Morning Star Packing Company – Williams, according to Waste Discharge Requirements Order No. R5-2013-0144.

Dear Mr. Childs:

Please find herewith the August Report with items requested in the Monthly Monitoring Reports section of the Monitoring and Reporting Program No. R5-2013-0144.

1. Tabulated pond monitoring data.

The tabulated pond monitoring results for August are included as **Attachment A**.

2. Tabulated daily flow measurements from each wastewater source and supplemental irrigation water to each check in each LAA field.

The August flow measurement logsheet is included as **Attachment B**.

3. The cumulative annual wastewater (Station 1 and Station 2) flow discharged to the LAAs to date, the average daily flow for the month, and comparison to the average daily flow limit.

The cumulative annual washwater from Station 1 and Station 2 are provided below and included in **Attachment B**:

Source	Annual Flow	Flow Limit
Station 1: Settling Pond/Gutters	111,168,443	
Station 2: Cooling Pond	0	
Total Washwater Discharge	111,168,443	422,000,000

4. Tabulated wastewater monitoring data and calculation of the running average for each group of three consecutive sample results for BOD and total nitrogen.

The August washwater monitoring data logsheet is included as **Attachment C**.

5. A current site plan depicting the irrigation checks within each LAA field that will be used during the calendar year, including all water conveyance ditches and internal berms that divide each LAA (where applicable).

An updated 2014 site plan for the facility's LAA and individual field maps are provided in **Attachment D**.

6. Tabulated update cropping information for each LAA field that includes at least:

a. *The crop that will be grown in each field;*
b. *Planned and actual planting dates;*
c. *Planned and actual harvest dates;*
d. *Planned and actual cattle grazing schedule, location of cattle grazing, including the number of head on each field;*
e. *Typical maximum expected and actual yield at harvest in applicable crop units per acre;*
f. *Crop total nitrogen demand; and*
g. *Crop average evapotranspiration rate in inches*

The tabulated cropping information for each LAA is included as **Attachment E**.

7. Tabulated land application area monitoring data for each LAA field, including; calculation of the hydraulic loading, irrigation cycle average BOD loading, and total nitrogen loading to date from all sources. The average of the three most recent monitoring results shall be used to determine irrigation cycle average BOD and total nitrogen loading. Loading rates for Settling Pond solids, residual solids, cattle manure and commercial fertilizers shall be calculated separately using actual load analytical results and application areas.

The tabulated land application area monitoring data for each LAA field are also included as **Attachment E.**

8. A summary of the daily pre-application inspection reports for the month.

The pre-application inspection reports for August are included as **Attachment F**.

9. Calculation of the flow-weighted average FDS concentration to date (representative of the Settling Pond and plant sanitation/clean-up water) as monitored at Station 1.

The calculation of the flow-weighted average FDS concentration is presented at the bottom of **Attachment C**.

10. Residual solids monitoring data and monthly mass of residual solids generated and applied to each LAA field and/or disposed of off-site.

The August residual solids monitoring data is included as **Attachment G**.

11. A comparison of monitoring data to the flow limitations, effluent limitations; mass loading limitations (for each LAA field), and discharge specifications, and an explanation of any violation of those requirements.

The Morning Star Packing Company – Williams is in compliance with the flow limitations, effluent limitations, and the discharge specifications. The mass loading specifications were predominately in compliance, however, there were two instances where the cycle average BOD loading exceeded 100 lb/acre-day. A review of the information from July and August was performed to determine the cause of the exceedance. Due to harvesting the baling operations on other fields, the cycle time between irrigations was shortened for MS5 and MS 15. This shortened cycle time caused the high BOD loading. However, it should be noted that the majority of the BOD loadings for the LAA in July/August were substantially less than the 100 lb/ac-day loading limit.

12. If requested by staff, copies of laboratory analytical report(s).

If requested, The Morning Star Packing Company – Williams will mail out the laboratory analytical reports.

13. Copies of current calibration logs for all field test instruments.

The calibration log for August and calibration logs for the flow monitoring devices are included as **Attachment H**.

> *"I certify under penalty of law that this document and all attachments have been prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. The information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."*

Respectfully yours,

Ross Oliveira

Attachment A

MONTHLY MONITORING REPORT

MONTH	August
YEAR	2014

DISCHARGER: Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant
COUNTY: Colusa
WDRs Order: R5-2013-0144

POND MONITORING RESULTS

Monitoring Location	Monitoring Week	Monitoring Date	Monitoring Time	Dissolved Oxygen[1] (mg/L)	pH	Freeboard (0.1 feet)	Odors[3]	Monthly Pond Berm/Leeve Condition[4]	Technican's Initials
Settling Pond	Week 1	8/4/14	8:42 AM	1.05	4.97	44.0	Slight	Good	JY
	Week 2	8/11/14	8:36 AM	4.07	5.47	42.0	Slight	Good	JY
	Week 3	8/18/14	9:53 AM	2.94	6.21	42.0	Slight	Good	JY
	Week 4	8/25/14	8:47 AM	2.91	6.21	42.5	Slight	Good	JY
	Week 5								
Coolng Pond	Week 1	8/4/14	8:59 AM	1.73	7.49	35.5	None	Good	JY
	Week 2	8/11/14	9:07 AM	1.48	7.34	34.0	None	Good	JY
	Week 3	8/18/14	10:13 AM	2.73	8.10	34.0	None	Good	JY
	Week 4	8/25/14	9:40 AM	2.81	7.79	35.0	None	Good	JY
	Week 5								

Sample frequency shall be weekly during the processing season and monthly during the non-processing season.

[1]Samples shall be collected at a depth of one foot from each pond in use, opposite the inlet.

[2]Freeboard shall be measured to the nearest 0.1 foot from staff gauge.

[3]Odors shall be reported as (none, slight, moderate, strong)

[4]If a pond berm/leeve conditon is not reported as good, a description of the condition of the berm/leeve shall be provided, as well as the maintenance that was completed.

MONTHLY MONITORING REPORT

MONTH August
YEAR 2014

DISCHARGER: Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant
COUNTY: Colusa
WDRs Order: R5-2013-0144

POND MONITORING RESULTS

Monitoring Location	Monitoring Week	Monitoring Date	Monitoring Time	Dissolved Oxygen[1] (mg/L)	pH	Freeboard (0.1 feet)	Odors[3]	Monthly Pond Berm/Leeve Condition[4]	Technican's Initials
Settling Pond	Week 1	8/4	8:42	1.05	4.97	44	Slight	good	JY
	Week 2	8/11	8:36	4.07	5.47	42	Slight	good	JY
	Week 3	8/18	9:53	2.94	6.21	42	Slight	good	JY
	Week 4	8/25	8:47	2.91	6.21	42.5	Slight	good	JY
	Week 5								
Coolng Pond	Week 1	8/4	8:59	1.73	7.49	35.5	none	good	JY
	Week 2	8/11	9:07	1.48	7.34	34	None	good	JY
	Week 3	8/18	10:13	2.73	8.10	34	none	good	JY
	Week 4	8/25	9:40	2.81	7.79	35	none	good	JY
	Week 5								

Sample frequency shall be weekly during the processing season and monthly during the non-processing season.

[1]Samples shall be collected at a depth of one foot from each pond in use, opposite the inlet.

[2]Freeboard shall be measured to the nearest 0.1 foot from staff gauge.

[3]Odors shall be reported as (none, slight, moderate, strong)

[4]If a pond berm/leeve conditon is not reported as good, a description of the condition of the berm/leeve shall be provided, as well as the maintenance that was completed.

Attachment B

MONTHLY MONITORING REPORT

DISCHARGER: Morning Star Packing Compa and Fred Gobel
FACILITY: Morning Star Tomato Packing
COUNTY: Colusa
WDRs Order: R5-2013-0144

MONTH	August
YEAR	2014

FLOW MONITORING RESULTS :

Monitoring Date (Day of Month)	Flow Source					
	Supplemental ~~GCID~~ Irrigation Water (gallons; calculated)	Station 1 - Settling Pond Water (gallons; meter)	Station 2 - Cooling Pond Water (gallons; meter)	Station 3 - Total Discharge to LAAs (gallons; meter)	Names of LAAs Irrigated	Station 3 - Total Discharge to LAAs (inches)
1		2,499,321		2,605,523	MS 2 ch 1-11, MS 5 ch 1-6, MS 6 Ch 13-21, MS 21-29-41	
2		2,406,363		2,448,450	MS 2 ch 1-11, MS 5 ch 1-6, MS 6 ch 13-30, MS 11 ch 8-33, MS 15 ch 11-21, MS 16 ch 23-38, MS 21 ch 34-42	
3		2,213,686		2,243,935	MS 2 ch 1-11, MS 2 ch 14-21, MS 3 ch 1-14, MS 5 ch 10-17, MS 6 ch 22-30, MS 11 ch 25-33, MS 15 ch 11-41, MS 16 ch 23-43, MS 21 ch 29-50	
4		2,224,654		2,290,551	MS 2 ch 14-31, MS 3 ch 1-14, MS 5 ch 10-24, MS 14 ch 4-6, MS 15 ch 22-41, MS 16 ch 39-43, MS 21 ch 42-50	
5		2,199,254		2,249,408	MS 2 ch 22-46, MS 3 ch 1-22, MS 5 18-32, MS 14 ch 4-9	
6		2,146,889		2,168,421	MS 2 ch 32-59, MS 3 ch 15-33, MS 5 ch 25-32, MS 11 ch 1-14, MS 14 ch 7-9, MS 14 ch 10-12, MS 21 ch 1-9	
7		2,357,847		2,454,532	MS 2 ch 47-59, MS 3 ch 22-33, MS 6 ch 1-19, MS 11 ch 1-23, MS 14 ch 10-24, MS 21 ch 1-9	
8		2,408,171		2,433,086	MS 2 ch 47-59, MS 3 ch 22-33, MS 6 ch 1-19, MS 11 ch 15-33, MS 14 ch 13-24, MS 15 ch 1-16, MS 16 ch 1-23, MS 21 ch 1-21	
9		2,330,122		2,340,520	MS 2 ch 47-59, MS 3 ch 23-54, MS 6 ch 1-25, MS 11 ch 24-33, MS 15 ch 1-16, MS 16 ch 1-30, MS 21 ch 10-33	
10		2,543,016		2,634,500	MS 3 ch 34-54, MS 6 ch 20-25, MS 11 ch 24-33, MS 14 ch 1-6, MS 15 ch 17-35, MS 16 24-30, MS 21 ch 22-33	
11		2,556,732		2,689,146	MS 6 ch 20-30, MS 11 ch 24-33, MS 14 ch 1-12, MS 1 ch 25-41, MS 16 ch 24-30, MS 21 ch 22-42	
12		2,647,984		2,310,823	MS 14 ch 7-16, MS 15 ch 36-41, MS 16 ch 24-35, MS 21 ch 43-50, MS 24S ch 1-13, MS 24C ch 1-13	
13		2,599,002		657,253	MS 5 ch 1-5, MS 14 ch 13-24, MS 16 ch 31-35, MS 21 ch 43-50, MS 24S ch 1-13, MS 24C ch 1-13	
14		2,486,504		608,910	MS 5 ch 1-24, MS 14 ch 17-24, MS 16 ch 31-43, MS 24S ch 1-42, MS 24C ch 1-42	
15		2,397,514		563,877	MS 5 ch 6-32, MS 14 ch 17-24, MS 16 ch 36-43, MS 20A ch 1-18, MS 24A ch 14-44, MS 24B ch 1-10, MS 24C ch 14-44, MS 24D ch 1-10	
16		2,368,763		416,609	MS 20A ch 1-18, MS 24A ch 43-44, MS 24B ch 1-21, MS 24C ch 43-44, MS 24D ch 1-21	
17		1,886,618		147,312	MS 20A ch 1-18, MS 24B ch 22-28, MS 24D ch 11-28	
18		2,582,858		245,895	MS 20A ch 1-18, MS 24B ch 22-35, MS 24D ch 22-35	
19		2,602,325		695,314	MS 24B ch 29-41, MS 24D ch 29-41	
20		2,620,113		697,607	MS 24B ch 36-41, MS 24D ch 36-41	
21		2,547,465		683,272	MS 24B ch 36-41, MS 24D ch 36-41	
22		2,630,611		1,019,124	MS 24A ch 1-13, MS 24B ch 36-41, MS 24C ch 1-13, MS 24D ch 36-41	
23		2,591,733		2,178,792	MS 14 ch 1-8, MS 20A ch 19-32, MS 24A ch 1-13, MS 24C ch 1-13	
24		2,576,589		2,230,273	MS 14 ch 1-16, MS 20A ch 19-32	
25		2,529,968		2,291,437	MS 2 ch 1-18, MS 3 ch 1-27, MS 14 ch 9-16, MS 20A ch 19-35, MS 20B ch 1-11	
26		2,542,852		2,749,823	MS 2 ch 1-45, MS 3 ch 1-42, MS 14 ch 9-16, MS 20A ch 33-35, MS 20B ch 11-25	
27		2,405,249		2,045,982	MS 2 ch 29-45, MS 3 ch 28-42, MS 14 ch 9-24, MS 20B ch 12-35, MS 24A 1-14, MS 24C ch 1-14	
28		2,192,770		955,085	MS 2 ch 46-59, MS 3 ch 43-54, MS 14 ch 17-24, MS 20B ch 26-35, MS 24A 1-28, MS 24C ch 1-28	
29		2,412,533		1,114,510	MS 2 ch 46-59, MS 3 ch 43-54, MS 20B ch 26-35, MS 24A 15-44, MS 24B ch 1-12, MS 24C ch 15-44, MS 24D ch 1-12	
30		2,467,196		1,259,469	MS 2 ch 46-59, MS 3 ch 43-54, MS 218A ch 1-12, MS 24A 29-44, MS 24B ch 1-19, MS 24C ch 29-44, MS 24D ch 1-19	
31		2,432,238		1,082,368	MS 18A ch 1-12, MS 20A ch 1-18, MS 24B ch 13-26, MS 24D ch 13-26	
Total Monthly Flow (MG)	0	75,406,939	0			0
Average Daily Flow (MGD)	#DIV/0!	2,432,482	#DIV/0!			#DIV/0!
Cumulative Annual Flow to Date (MG)	151,700,652	111,168,443	0			0

Attachment C

MONTHLY MONITORING REPORT

MONTH	Agusut
YEAR	2014

DISCHARGER: Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant
COUNTY: Colusa
WDRs Order: R5-2013-0144

WASTEWATER MONITORING RESULTS : Washwater Discharge began on July 16th

Samples Collected from Station 1

Monitoring Week	Monitoring Date	BOD (mg/L)	3-Sample Average BOD (mg/L)[1]	Total Nitrogen (mg/L)	3-Sample Average Total Nitrogen (mg/L)[1]	FDS (mg/L)
Second to Last Week of Previous Month	7/21/14	418.5		62.89		570
Last Week of Previous Month	7/28/14	952.73	686	87.24	75	882
Week 1 of Current Month	8/4/14	868.52	747	72.94	74	868
Week 2 of Current Month	8/11/14					686
Week 3 of Current Month	8/14/14	470	764	34	65	400
Week 4 of Current Month	8/18/14	672	670	28	45	360
Week 5 of Current Month	8/25/14	625	589	25	29	410

Sampling is not required during periods when no wastewater is discharged to the LAAs.

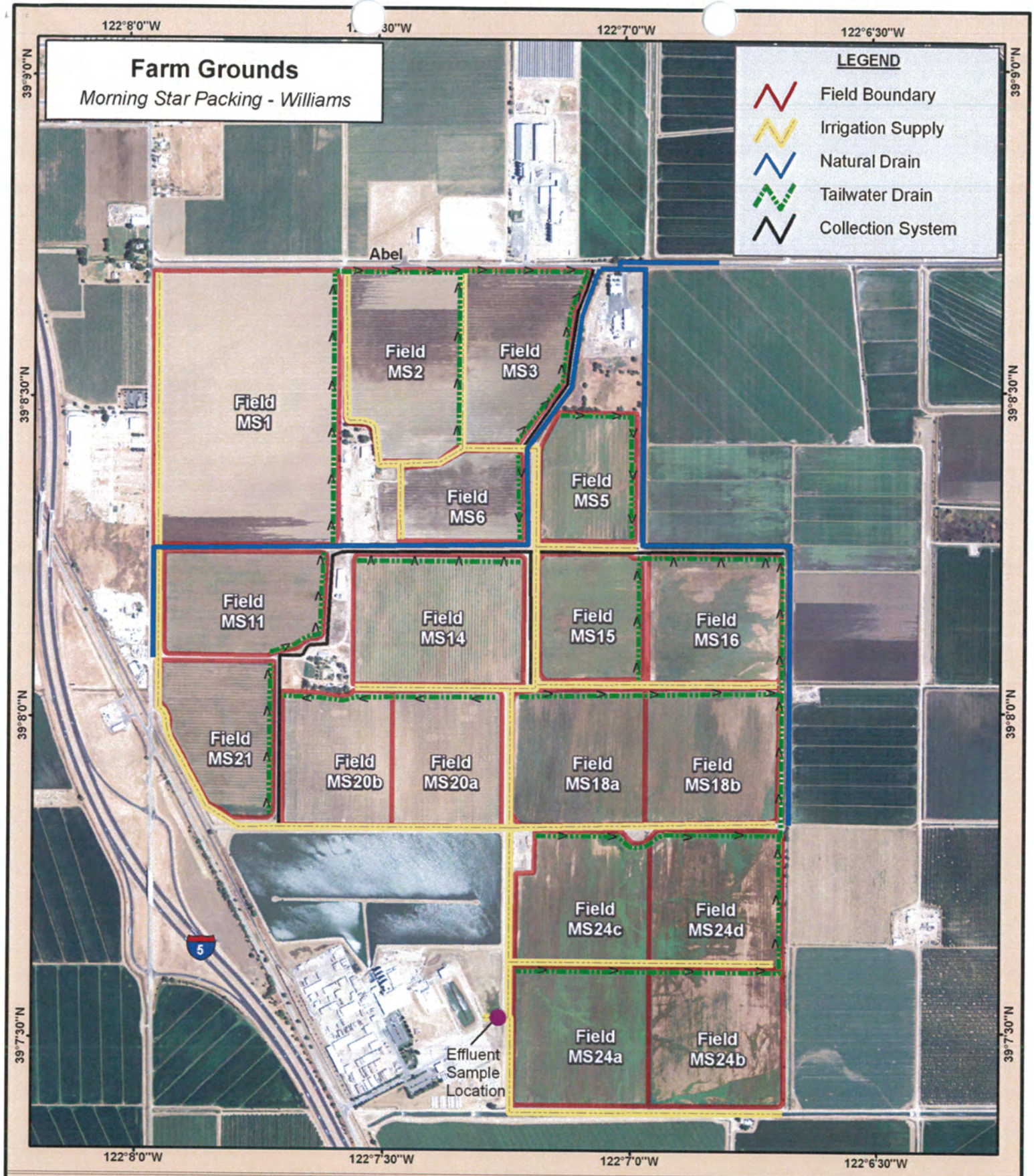
Average BOD Concentration (mg/L)[1]	**659**
Average Monthly Total Nitrogen Concentration (mg/L)[2]	**40**
Monthly Average FDS Concentration (mg/L)	**544.8**
Flow Weighted Average FDS Concentration to Date (mg/L)[3]	**603**

[1]See MRP Reporting Section A.4.

[2]Value to be used in annual loading calculation (WDR Section C.2.a).

[3]Calculated per WDR Section C.1.a (Show Calculations).

Attachment D



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Map Scale 1:14,400 1 Inch = 1,200 Feet

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Data Source:
Aerial Photography: Summer 2012
Projection: UTM Zone 10N, NAD 83
State of California: Colusa County

Map Source:
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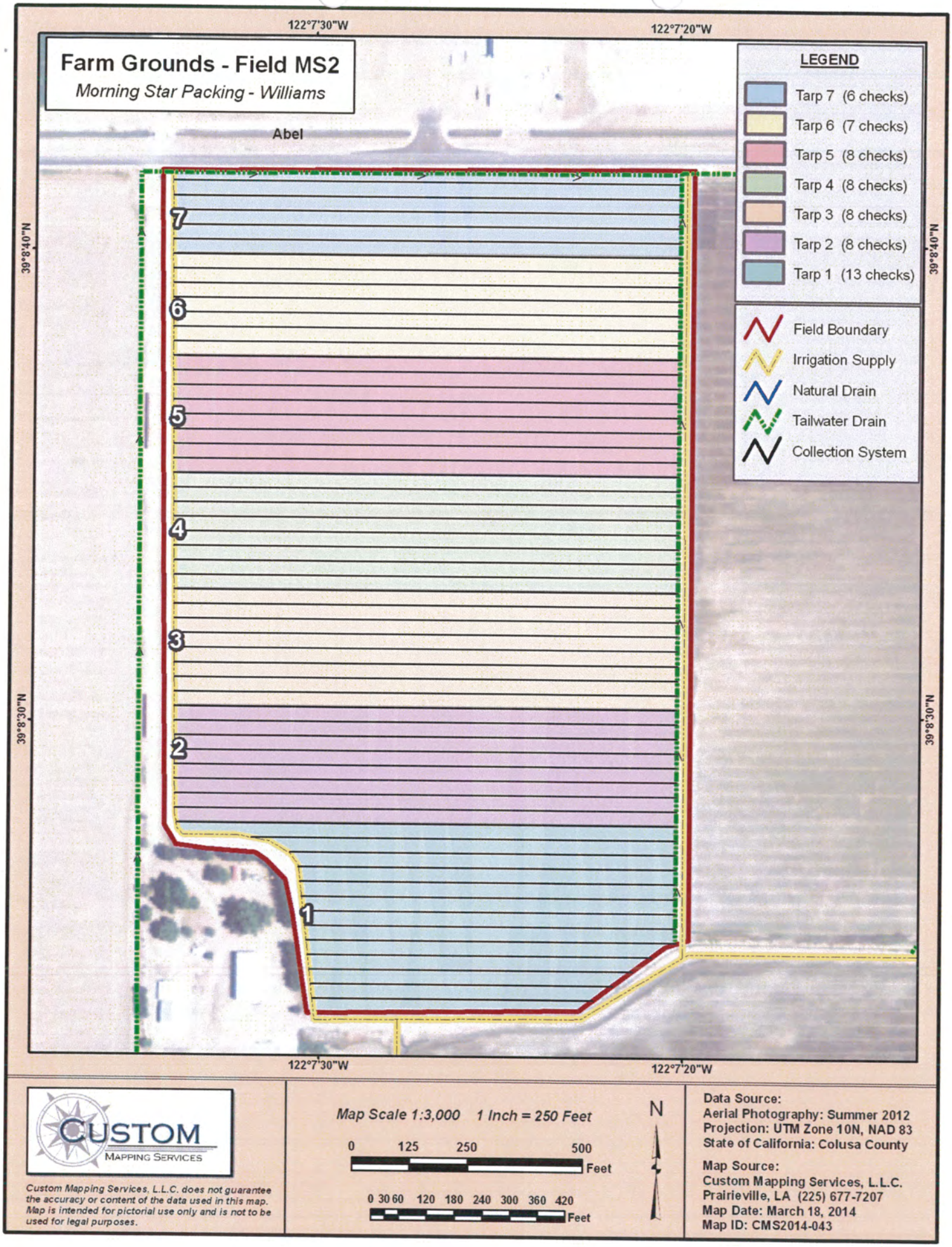
Prairieville, LA (225) 677-7207
Map Date: February 27, 2014
Map ID: CMS2014-038



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Map Scale 1:3,000 1 Inch = 250 Feet

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Data Source:
Aerial Photography: Summer 2012
Projection: UTM Zone 10N, NAD 83
State of California: Colusa County

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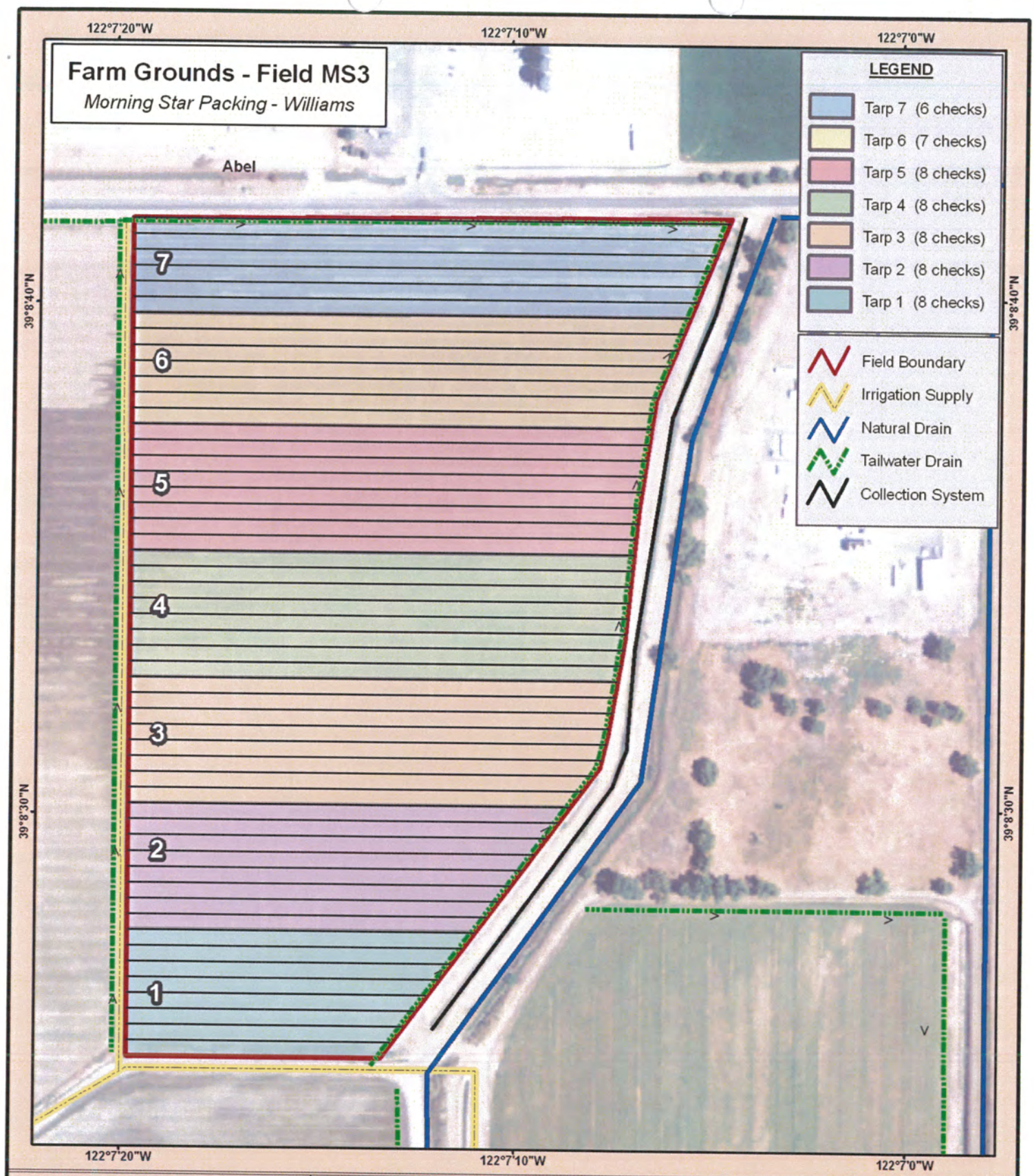

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Data Source:
Aerial Photography: Summer 2012
Projection: UTM Zone 10N, NAD 83
State of California: Colusa County

Map Source:
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Data Source:
Aerial Photography: Summer 2012
Projection: UTM Zone 10N, NAD 83
State of California: Colusa County

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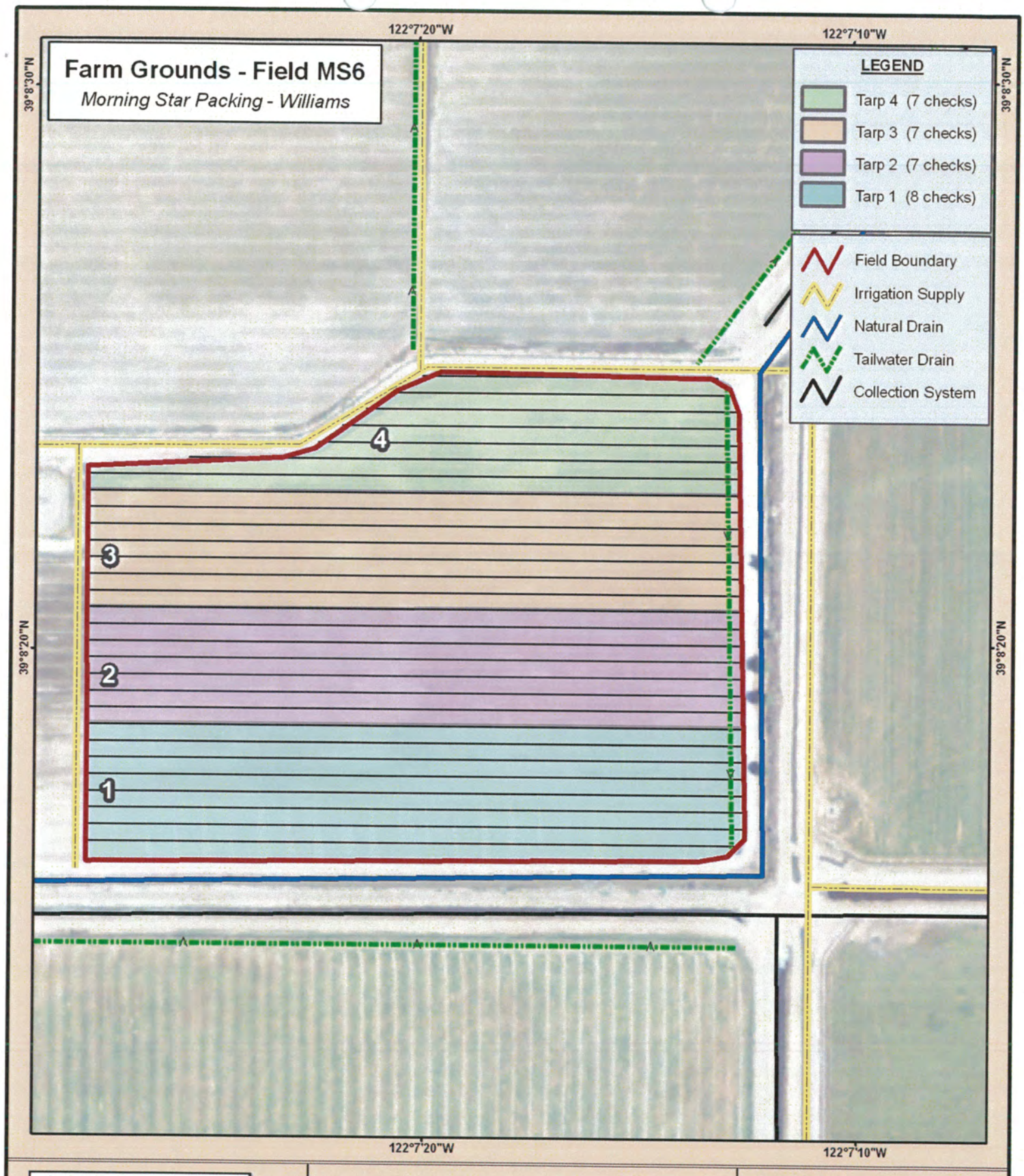
Map Date: March 24, 2014
Map ID: CMS2014-049



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Data Source:
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State of California: Colusa County

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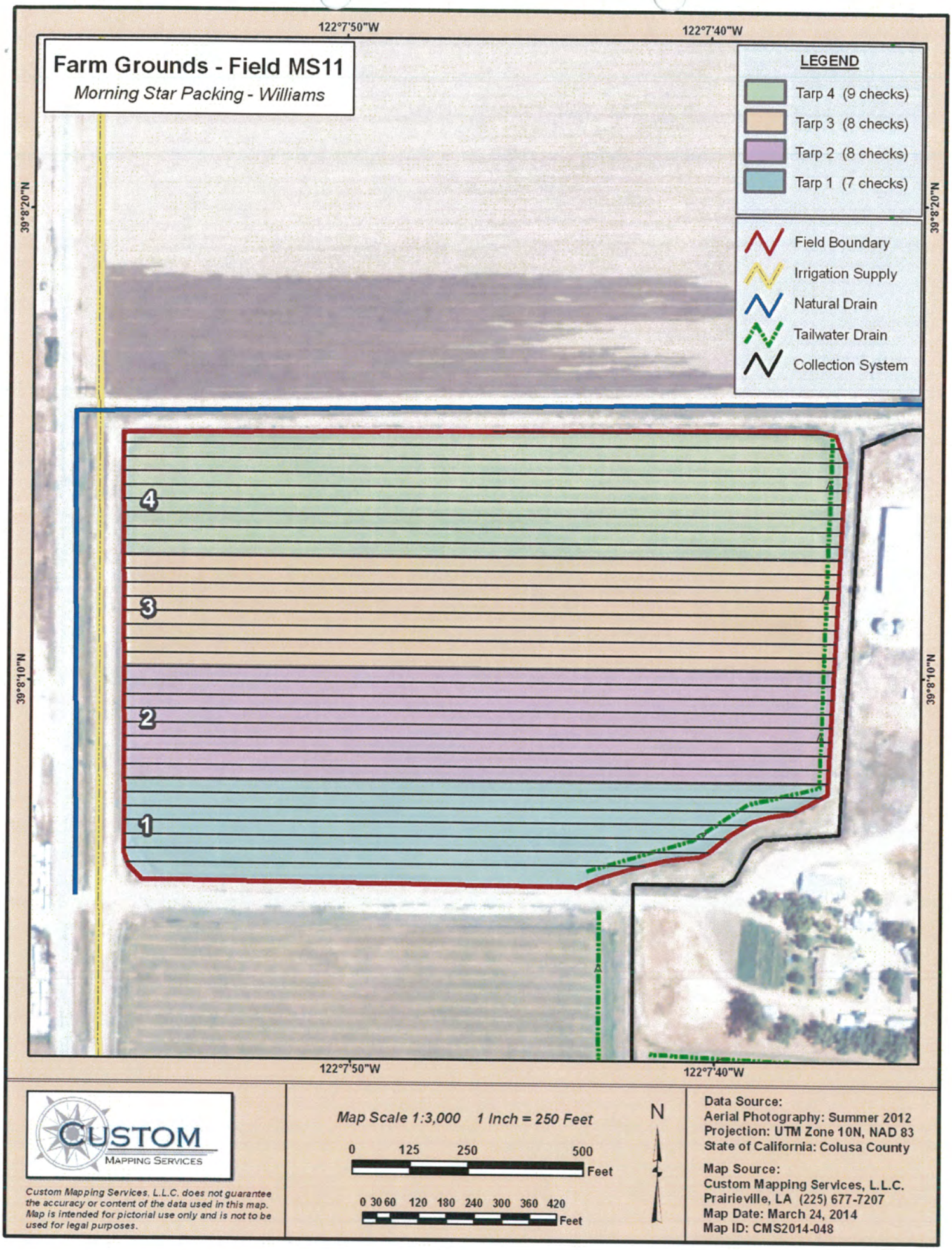

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Projection: UTM Zone 10N, NAD 83
State of California: Colusa County

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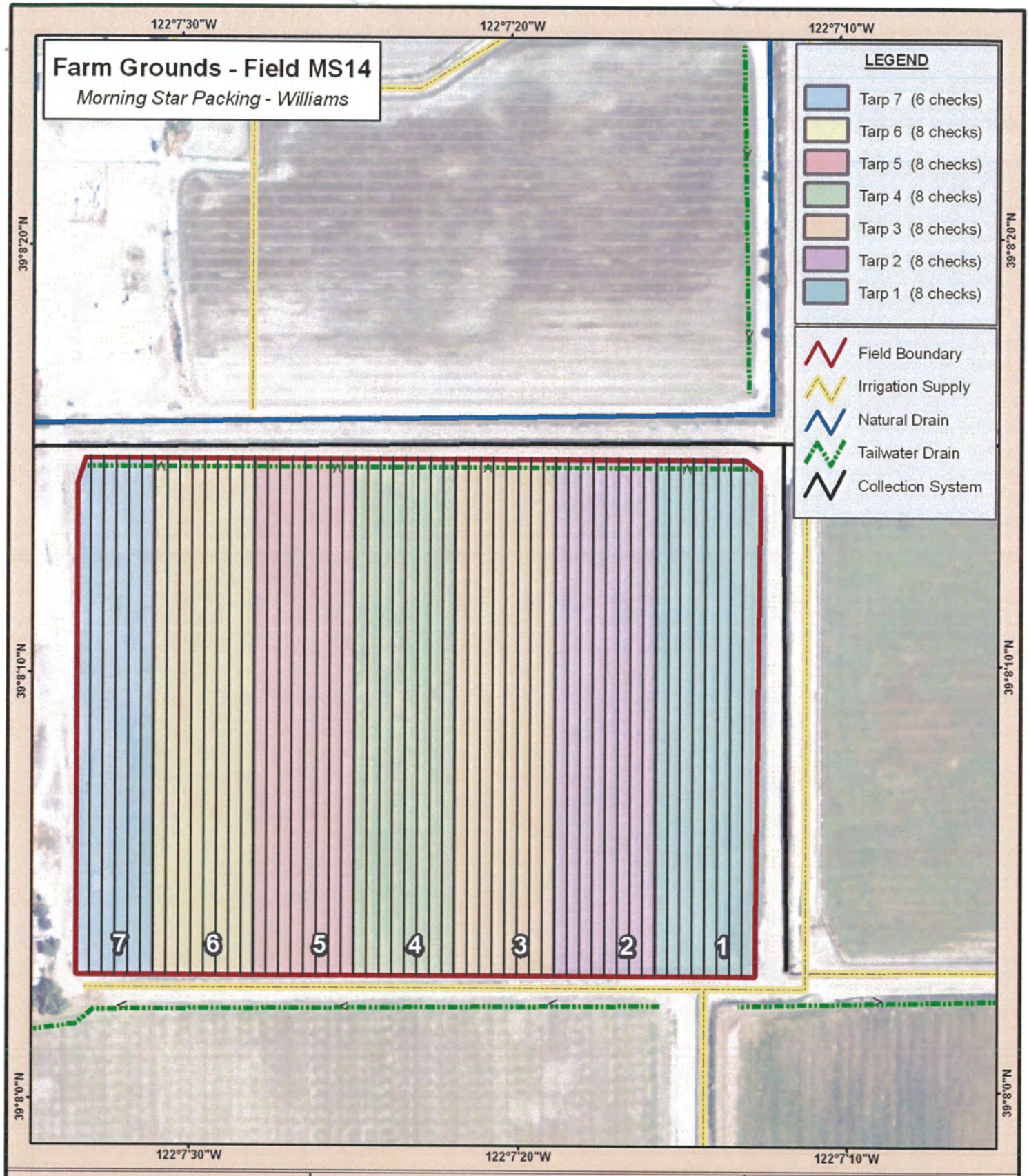
Prairieville, LA (225) 677-7207
Map Date: March 24, 2014
Map ID: CMS2014-048



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Data Source:
Aerial Photography: Summer 2012
Projection: UTM Zone 10N, NAD 83
State of California: Colusa County

Map Source:
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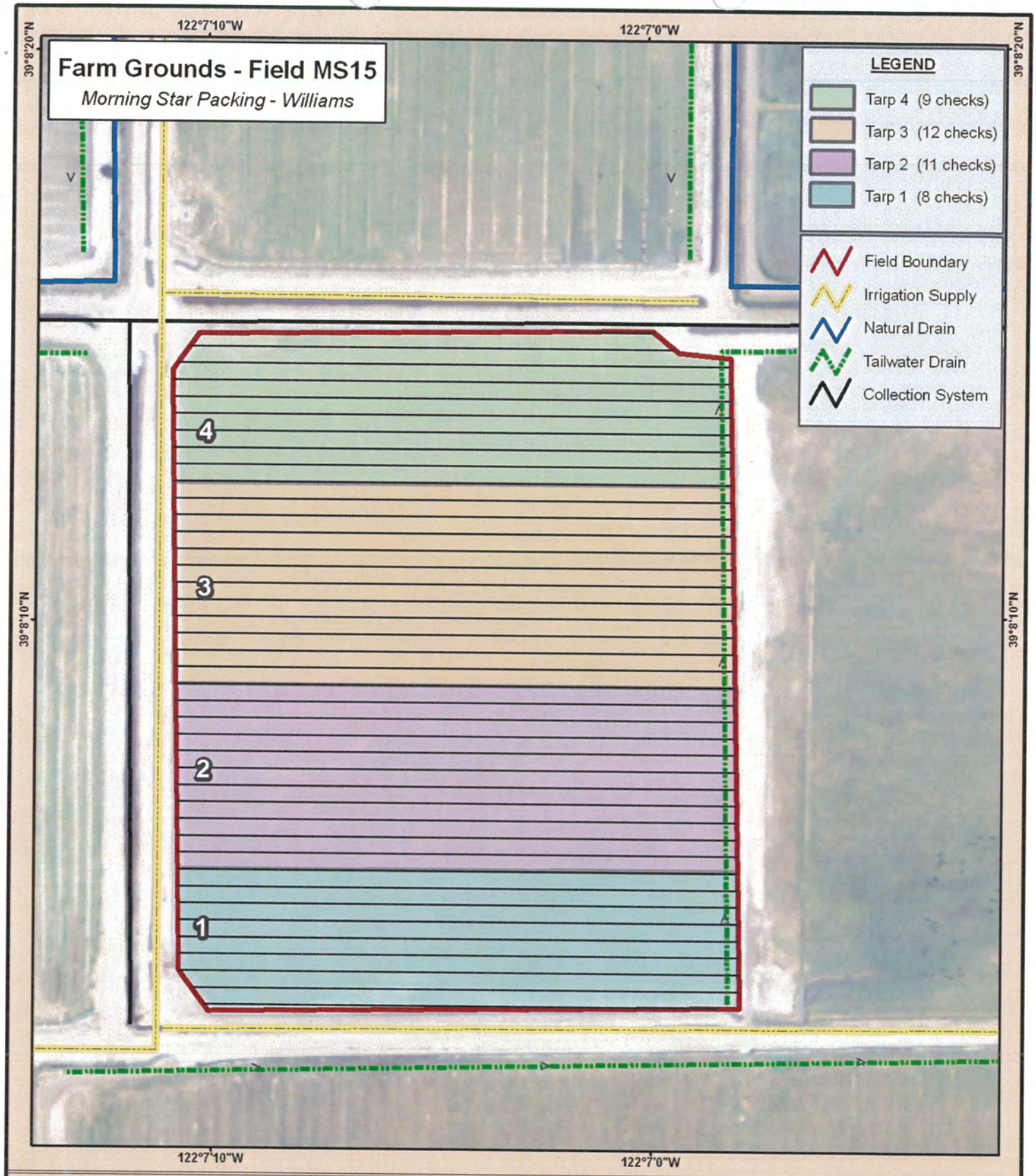
Prairieville, LA (225) 677-7207
Map Date: March 24, 2014
Map ID: CMS2014-050



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Map Scale 1:2,700 1 Inch = 225 Feet

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N

Data Source:
Aerial Photography: Summer 2012
Projection: UTM Zone 10N, NAD 83
State of California: Colusa County

Map Source:
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Map Date: March 24, 2014
Map ID: CMS2014-045

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Data Source:
Aerial Photography: Summer 2012
Projection: UTM Zone 10N, NAD 83
State of California: Colusa County

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Prairieville, LA (225) 677-7207
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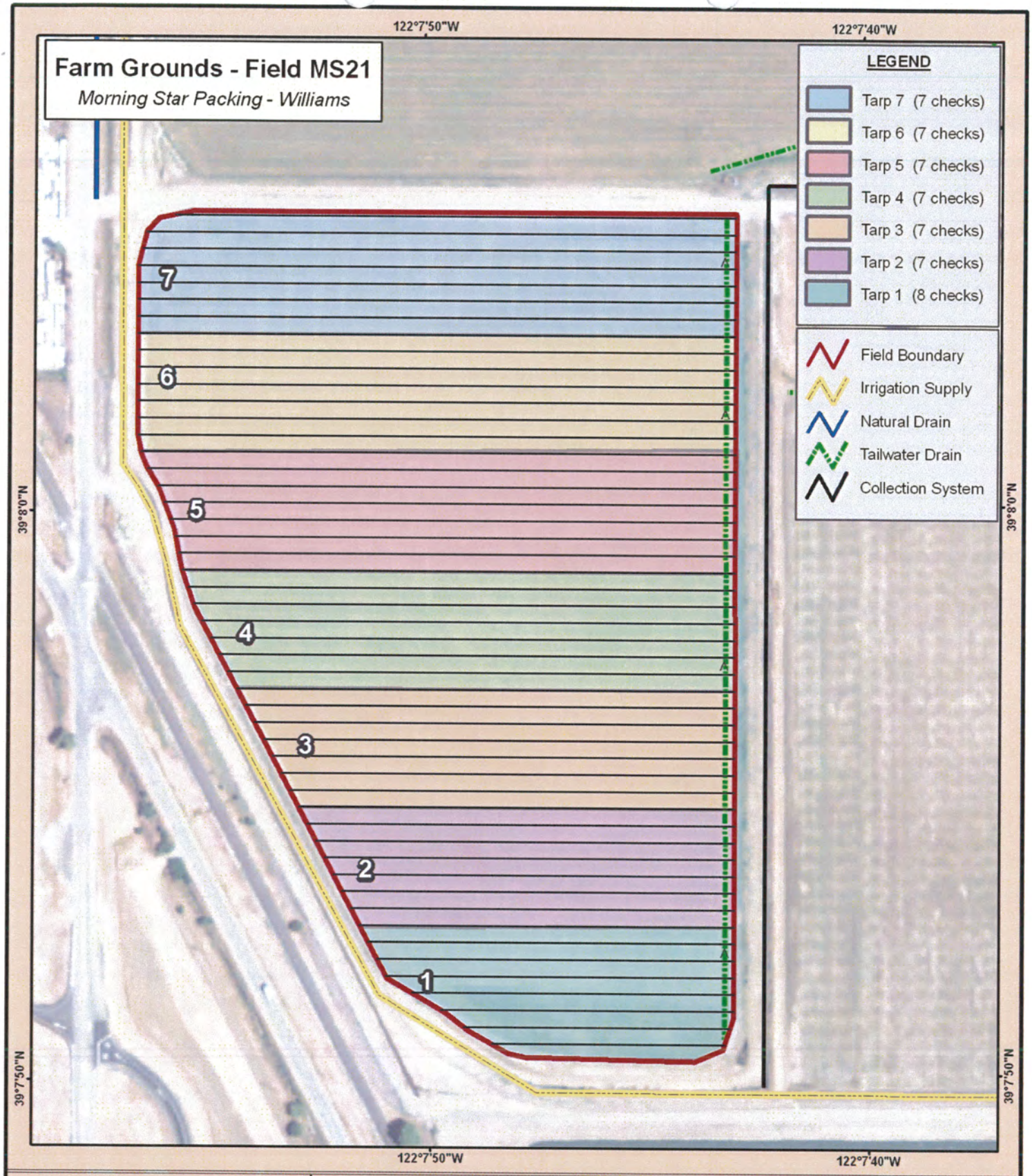
Map ID: CMS2014-051



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Map Scale 1:2,700 1 Inch = 225 Feet

0 112.5 225 450 Feet

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N

Data Source:
Aerial Photography: Summer 2012
Projection: UTM Zone 10N, NAD 83
State of California: Colusa County

Map Source:
Custom Mapping Services, L.L.C.
Prairieville, LA (225) 677-7207
Map Date: March 24, 2014
Map ID: CMS2014-046

Attachment E

MONTHLY MONITORING REPORT

DISCHARGER: Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant
COUNTY: Colusa
WDRs Order: R5-2013-0144

MONTH	August
YEAR	2014

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME MS2

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	41.05
Number of Checks	58
Check Width (feet)	30
Check Length (feet)**	1,100
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	6/4/14
Actual Planting Date	6/4/14
Anticipated Harvest Date	August 13, October 17
Actual Harvest Date	7/24/14
Expected Harvest Yield	3 tons/acre
Actual Harvest Yield	N/A

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

**Est based on Google Earth

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Flow Rate to Each Check (gpm)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1	1500		0.00	1-11	WW	588,171	9	8	2.6	NA
2			0.00	1-11	WW	409,315	24	8	1.8	NA
3		1100	0.00	1-11	WW	200,652	11	8	0.9	NA
	1100			14-21	WW	172,461	13	6	1.0	NA
4		1500	0.00	14-21	WW	277,058	15	6	1.7	NA
	1500			22-31	WW	207,794	9	8	1.0	NA
5		1200	0.09	22-31	WW	339,296	12	8	1.6	NA
	1200			32-46	WW	475,014	12	11	1.6	NA
6		1500	0.00	32-46	WW	543,695	15	11	1.9	NA
	1500			47-59	WW	302,916	9	10	1.1	NA
7			0.00	47-59	WW	502,056	24	10	1.9	NA
8			0.00	47-59	WW	319,391	24	10	1.2	NA
9		0800	0.00	47-59	WW	128,301	8	10	0.5	NA
10			0.00							
11			0.00							
12			0.00							
13			0.00							
14			0.00							
15			0.00							
16			0.00							
17			0.00							
18			0.00							
19			0.00							
20			0.00							
21			0.00							
22			0.00							
23			0.00							
24			0.00							
25	0800		0.00	1-28	WW	800,339	16	21	1.4	34
26		1200	0.00	1-28	WW	530,982	12	21	0.9	34
	1200			29-45	WW	322,382	12	13	0.9	19
27		0600	0.00	29-45	WW	277,514	6	13	0.8	19
28	0800		0.00	46-59	WW	291,831	16	11	1.0	33
29			0.00	46-59	WW	466,715	24	11	1.6	33
30		0200	0.00	46-59	WW	187,218	2	11	0.7	33
31			0.00							
Total			0.09							

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	55

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

DISCHARGER: Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant
COUNTY: Colusa
WDRs Order: R5-2013-0144

MONTH	August
YEAR	2014

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME

MS3

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	41.05
Number of Checks	53
Check Width (feet)	30
Check Length (feet)**	1,000
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

**Est based on Google Earth

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	6/5/14
Actual Planting Date	6/5/14
Anticipated Harvest Date	August 14, October 18
Actual Harvest Date	7/24/14
Expected Harvest Yield	3 tons/acre
Actual Harvest Yield	N/A

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Flow Rate to Each Check (gpm)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1			0.00							
2			0.00							
3	1500		0.00	1-14	WW	189,949	9	9.6	0.7	NA
4			0.00	1-14	WW	705,240	24	9.6	2.7	NA
5		0700	0.09	1-14	WW	251,902	7	9.6	1.0	NA
	0700			15-22	WW	349,578	17	5.5	2.3	NA
6		0900	0.00	15-22	WW	169,463	9	5.5	1.1	NA
	0900			23-33	WW	388,354	15	7.6	1.9	NA
7			0.00	23-33	WW	386,197	24	7.6	1.9	NA
8			0.00	23-33	WW	245,685	24	7.6	1.2	NA
9		0700	0.00	23-33	WW	86,356	7	7.6	0.4	NA
	0700			34-54	WW	400,380	17	14.5	1.0	NA
10		1800	0.00	34-54	WW	578,021	18	14.5	1.5	NA
11			0.00							
12			0.00							
13			0.00							
14			0.00							
15			0.00							
16			0.00							
17			0.00							
18			0.00							
19			0.00							
20			0.00							
21			0.00							
22			0.00							
23			0.00							
24			0.00							
25	0900		0.00	1-27	WW	657,746	15	18.6	1.3	31
26		1300	0.00	1-27	WW	504,261	13	18.6	1.0	35
	1300			28-42	WW	237,046	11	10.3	0.8	42
27		0600	0.00	28-42	WW	222,604	6	10.3	0.8	42
28	0900		0.00	43-54	WW	213,189	15	8.3	0.9	19
29			0.00	43-54	WW	363,674	24	8.3	1.6	19
30		0300	0.00	43-54	WW	218,827	3	8.3	1.0	19
31			0.00							
Total			0.09							

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	50

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

MONTH	August
YEAR	2014

DISCHARGER: Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant
COUNTY: Colusa
WDRs Order: R5-2013-0144

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME: MS5

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	24.6
Number of Checks	34
Check Width (feet)	30
Check Length (feet)**	1,200
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

**Est based on Google Earth

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	7/3/14
Actual Planting Date	7/7/14
Anticipated Harvest Date	Sept 11, November 15
Actual Harvest Date	N/A
Expected Harvest Yield	N/A
Actual Harvest Yield	N/A

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Total Volume to Each Check (gal)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1	1900		0.00	1-6	WW	194,437	5	5.0	1.4	35
2		1900	0.00	1-6	WW	192,818	19	5.0	1.4	35
3	1800		0.00	10-17	WW	86,834	6	6.6	0.5	280
4		2000	0.00	10-17	WW	402,994	20	6.6	2.2	280
	2000			18-24	WW	70,524	4	5.8	0.4	35
5		1300	0.09	18-24	WW	280,690	13	5.8	1.8	35
	1300			25-32	WW	271,437	11	6.6	1.5	50
6		1700	0.00	25-32	WW	384,117	17	6.6	2.1	50
7			0.00							
8			0.00							
9			0.00							
10			0.00							
11			0.00							
12			0.00							
13	0900		0.00	1-5	WW	131,802	15	4.1	1.2	34
14		1800	0.00	1-5	WW	95,391	18	4.1	0.9	34
	1800			6-24	WW	120,828	6	15.7	0.3	38
15		1500	0.00	6-24	WW	217,541	15	15.7	0.5	38
	1500			25-32	WW	54,958	9	6.6	0.3	62
16		1400	0.00	25-32	WW	146,892	14	6.6	0.8	62
17			0.00							
18			0.00							
19			0.00							
20			0.00							
21			0.00							
22			0.00							
23			0.00							
24			0.00							
25			0.00							
26			0.00							
27			0.00							
28			0.00							
29			0.00							
30			0.00							
31			0.00							
Total			0.09							

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	36

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

DISCHARGER: Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant
COUNTY: Colusa
WDRs Order: R5-2013-0144

MONTH	August
YEAR	2014

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME: MS6

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	21.4
Number of Checks	29
Check Width (feet)	30
Check Length (feet)**	1,300
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

**Est based on Google Earth

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	7/3/14
Actual Planting Date	6/24/14
Anticipated Harvest Date	Sept 11, November 15
Actual Harvest Date	8/23/14
Expected Harvest Yield	3 tons/acre
Actual Harvest Yield	2.9 tons/acre

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Total Volume to Each Check (gal)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1	1100		0.00	13-21	WW	821,495	13	8.1	3.8	NA
2		1800	0.00	13-21	WW	296,838	18	8.1	1.4	NA
	1800			22-30	WW	98,946	6	8.1	0.5	NA
3		1200	0.00	22-30	WW	211,657	12	8.1	1.0	NA
4			0.00							
5			0.09							
6			0.00							
7	1600		0.00	1-19	WW	289,062	8	17.0	0.6	30
8			0.00	1-19	WW	551,675	24	17.0	1.2	30
9		1100	0.00	1-19	WW	304,715	11	17.0	0.7	30
	1100			20-25	WW	113,721	13	5.4	0.8	99
10			0.00	20-25	WW	286,258	24	5.4	2.0	99
11		0600	0.00	20-25	WW	107,713	6	5.4	0.7	99
	1100			26-30	WW	194,482	13	4.5	1.6	30
12		1300	0.00	26-30	WW	392,807	13	4.5	3.2	30
13			0.00							
14			0.00							
15			0.00							
16			0.00							
17			0.00							
18			0.00							
19			0.00							
20			0.00							
21			0.00							
22			0.00							
23			0.00							
24			0.00							
25			0.00							
26			0.00							
27			0.00							
28			0.00							
29			0.00							
30			0.00							
31			0.00							
Total			0.09							

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	57

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

DISCHARGER: Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant
COUNTY: Colusa
WDRs Order: R5-2013-0144

MONTH	August
YEAR	2014

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME: MS11

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	35.6
Number of Checks	32
Check Width (feet)	30
Check Length (feet)**	1,500
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	6/24/14
Actual Planting Date	6/24/14
Anticipated Harvest Date	Sept 2, Nov 6
Actual Harvest Date	8/25/14
Expected Harvest Yield	2 tons/acre
Actual Harvest Yield	4.3 tons/acre

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

**Estbased on Google Earth

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Total Volume to Each Check (gal)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1			0.00							
2	0800	1500	0.00	8-24	WW	251,594	7	17.6	0.5	58
	1500			25-33	WW	171,253	9	9.3	0.7	43
3		0200	0.00	25-33	WW	40,703	2	9.3	0.2	43
4			0.00							
5			0.09							
6	2200		0.00	1-14	WW	98,854	2	14.5	0.3	58
7		1800	0.00	1-14	WW	552,963	18	14.5	1.4	58
	1800			15-23	WW	105,326	6	8.3	0.5	14
8		1000	0.00	15-23	WW	111,675	10	8.3	0.5	14
	1000			24-33	WW	195,431	14	10.3	0.7	19
9			0.00	24-33	WW	403,745	24	10.3	1.4	19
10			0.00	24-33	WW	550,496	24	10.3	2.0	19
11		1100	0.00	24-33	WW	379,757	11	10.3	1.4	19
12			0.00							
13			0.00							
14			0.00							
15			0.00							
16			0.00							
17			0.00							
18			0.00							
19			0.00							
20			0.00							
21			0.00							
22			0.00							
23			0.00							
24			0.00							
25			0.00							
26			0.00							
27			0.00							
28			0.00							
29			0.00							
30			0.00							
31			0.00							
Total			0.09							

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	27

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

MONTH	August
YEAR	2014

DISCHARGER: Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant
COUNTY: Colusa
WDRs Order: R5-2013-0144

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME: MS14

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	44.5
Number of Checks	54
Check Width (feet)	30
Check Length (feet)**	1,250
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

**Est based on Google Earth

Crop Information

Crop Name	Grass Hay
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	N/A
Actual Planting Date	2008
Anticipated Harvest Date	August 28, Nov 1
Actual Harvest Date	7/10/14
Expected Harvest Yield	2 tons/acre
Actual Harvest Yield	N/A

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Total Volume to Each Check (gal)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1			0.00							
2			0.00							
3			0.00							
4	1900		0.00	4-6	WW	39,355	5	2.6	0.6	36
5		1100	0.09	4-6	WW	106,030	11	2.6	1.5	36
	1100			7-9	WW	125,308	13	2.6	1.8	28
6		1300	0.00	7-9	WW	114,741	13	2.6	1.6	28
	1300			10-12	WW	97,088	11	2.6	1.4	21
7		1200	0.00	10-12	WW	65,829	12	2.6	0.9	21
	1200			13-24	WW	219,430	12	8.6	0.9	33
8		1400	0.00	13-24	WW	162,860	14	8.6	0.7	33
9			0.00							
10	1100		0.00	1-6	WW	149,093	13	5.17	1.1	66
11		1100	0.00	1-6	WW	189,879	11	5.17	1.4	66
	1100			7-12	WW	224,402	13	5.17	1.6	81
12		1400	0.00	7-12	WW	488,104	14	5.17	3.5	81
	1400			13-16	WW	232,430	10	3.44	2.5	55
13		1800	0.00	13-16	WW	131,802	18	3.44	1.4	55
	1800			17-24	WW	87,868	6	6.89	0.5	55
14			0.00	17-24	WW	211,979	24	6.89	1.1	55
15		2200	0.00	17-24	WW	139,939	22	6.89	0.7	55
16			0.00							
17			0.00							
18			0.00							
19			0.00							
20			0.00							
21			0.00							
22			0.00							
23			0.00							
23	1000		0.00	1-8	WW	683,542	14	6.9	3.7	31
24		2200	0.00	1-8	WW	858,863	22	6.9	4.6	31
	2200			9-16	WW	78,078	2	6.9	0.4	61
25			0.00	9-16	WW	389,775	24	6.9	2.1	61
26			0.00	9-16	WW	344,794	24	6.9	1.8	61
27		0700	0.00	9-16	WW	173,137	7	6.9	0.9	61
	0700			17-24	WW	420,475	17	6.9	2.2	29
28		0800	0.00	17-24	WW	94,750	8	6.9	0.5	29
29			0.00							
30			0.00							
31			0.00							
Total			0.09							

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	43

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

MONTH	August
YEAR	2014

DISCHARGER: Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant
COUNTY: Colusa
WDRs Order: R5-2013-0144

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME: MS15

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	26.7
Number of Checks	40
Check Width (feet)	30
Check Length (feet)**	1,000
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	6/30/14
Actual Planting Date	6/30/14
Anticipated Harvest Date	Sept 8, Nov 12
Actual Harvest Date	8/26/14
Expected Harvest Yield	3 tons/acre
Actual Harvest Yield	3.4 tons/acre

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

**Est based on Google Earth

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Total Volume to Each Check (gal)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1			0.00	11-21	WW	169,139	12	6.9	0.9	29
2	1200		0.00	11-21	WW	135,678	9	6.9	0.7	29
3		0900	0.00	22-41	WW	452,259	15	13.8	1.2	147
	0900			22-41	WW	41,979	1	13.8	0.1	147
4		0100	0.00							
5			0.09							
6			0.00							
7			0.00							
8	2000		0.00	1-16	WW	59,560	4	11.0	0.2	7
9		2000	0.00	1-16	WW	358,884	20	11.0	1.2	7
	2000			17-24	WW	35,888	4	5.5	0.2	32
10		1600	0.00	17-24	WW	195,732	16	5.5	1.3	32
	1600			25-35	WW	134,566	8	7.6	0.7	29
11		2000	0.00	25-35	WW	506,343	20	7.6	2.5	29
	2000			36-41	WW	55,237	4	4.1	0.5	29
12		1000	0.00	36-41	WW	278,916	10	4.1	2.5	29
13			0.00							
14			0.00							
15			0.00							
16			0.00							
17			0.00							
18			0.00							
19			0.00							
20			0.00							
21			0.00							
22			0.00							
23			0.00							
24			0.00							
25			0.00							
26			0.00							
27			0.00							
28			0.00							
29			0.00							
30			0.00							
31			0.00							
Total			0.09							

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	30

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

MONTH	August
YEAR	2014

DISCHARGER: Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant
COUNTY: Colusa
WDRs Order: R5-2013-0144

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME: MS16

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	36.7
Number of Checks	*42
Check Width (feet)	30
Check Length (feet)**	1,240
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

*Estimated & Calculated based on Google Earth with 30' checks
**Est based on Google Earth

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	7/1/14
Actual Planting Date	6/24/14
Anticipated Harvest Date	Sept 9, Nov 13
Actual Harvest Date	N/A
Expected Harvest Yield	3 tons/acre
Actual Harvest Yield	N/A

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Total Volume to Each Check (gal)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1			0.00							
2	1000		0.00	23-38	WW	391,500	14	13.7	1.1	NA
3		0800	0.00	23-38	WW	239,275	8	13.7	0.6	NA
	0800			39-43	WW	149,547	16	4.3	1.3	NA
4		1400	0.00	39-43	WW	182,187	14	4.3	1.6	NA
5			0.09							
6			0.00							
7			0.00							
8	0200		0.00	1-23	WW	583,912	22	19.6	1.1	32
9		0100	0.00	1-23	WW	31,986	1	19.6	0.1	32
	0100			24-30	WW	223,899	23	6.0	1.4	15
10			0.00	24-30	WW	318,554	24	6.0	2.0	15
11			0.00	24-30	WW	479,461	24	6.0	3.0	15
12		1000	0.00	24-30	WW	403,499	10	6.0	2.5	15
	1000			31-35	WW	403,499	14	4.3	3.5	15
13			0.00	31-35	WW	217,913	24	4.3	1.9	15
14		0900	0.00	31-35	WW	49,285	9	4.3	0.4	15
	0900			36-43	WW	131,427	15	6.8	0.7	27
15			0.00	36-43	WW	151,439	24	6.8	0.8	27
16		0900	0.00	36-43	WW	97,578	9	6.8	0.5	27
17			0.00							
18			0.00							
19			0.00							
20			0.00							
21			0.00							
22			0.00							
23			0.00							
24			0.00							
25			0.00							
26			0.00							
27			0.00							
28			0.00							
29			0.00							
30			0.00							
31			0.00							
Total			0.09							

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	37

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

MONTH	August
YEAR	2014

DISCHARGER: Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant
COUNTY: Colusa
WDRs Order: R5-2013-0144

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME MS18a

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	39.1
Number of Checks*	42
Check Width (feet)	30
Check Length (feet)**	1,300
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

*Estimated & Calculated based on Google Earth with 30' checks
**Est based on Google Earth

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	6/23/14
Actual Planting Date	6/23/14
Anticipated Harvest Date	Sept 1, Nov 5
Actual Harvest Date	8/13/14
Expected Harvest Yield	3 tons/acre
Actual Harvest Yield	2.8 tons / acre

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Total Volume to Each Check (gal)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1			0.00							
2			0.00							
3			0.00							
4			0.00							
5			0.09							
6			0.00							
7			0.00							
8			0.00							
9			0.00							
10			0.00							
11			0.00							
12			0.00							
13			0.00							
14			0.00							
15			0.00							
16			0.00							
17			0.00							
18			0.00							
19			0.00							
20			0.00							
21			0.00							
22			0.00							
23			0.00							
24			0.00							
25			0.00							
26			0.00							
27			0.00							
28			0.00							
29			0.00							
30	1500		0.00	1-12	WW	853,424	9	10.7	2.9	4
31		1100	0.00	1-12	WW	409,829	11	10.7	1.4	4
	1100	2400		13-26	WW	565,067	13	12.5	1.7	4
Total			0.09							

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	16

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

MONTH	August
YEAR	2014

DISCHARGER: Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant
COUNTY: Colusa
WDRs Order: R5-2013-0144

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME MS18b

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	39.1
Number of Checks*	43
Check Width (feet)	30
Check Length (feet)**	1,300
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

*Estimated & Calculated based on Google Earth with 30' checks
**Est based on Google Earth

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	6/23/14
Actual Planting Date	6/23/14
Anticipated Harvest Date	Sept 1, Nov 5
Actual Harvest Date	8/18/14
Expected Harvest Yield	3 tons/acre
Actual Harvest Yield	2.7 tons/acre

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Total Volume to Each Check (gal)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1			0.00							
2			0.00							
3			0.00							
4			0.00							
5			0.09							
6			0.00							
7			0.00							
8			0.00							
9			0.00							
10			0.00							
11			0.00							
12			0.00							
13			0.00							
14			0.00							
15			0.00							
16			0.00							
17			0.00							
18			0.00							
19			0.00							
20			0.00							
21			0.00							
22			0.00							
23			0.00							
24			0.00							
25			0.00							
26			0.00							
27			0.00							
28			0.00							
29			0.00							
30			0.00							
31			0.00							
Total			0.09							

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	0

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

MONTH	August
YEAR	2014

DISCHARGER: Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant
COUNTY: Colusa
WDRs Order: R5-2013-0144

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME: MS20a

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	32.3
Number of Checks	34
Check Width (feet)	30
Check Length (feet)**	1,250
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

**Est based on Google Earth

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	6/10/14
Actual Planting Date	6/10/14
Anticipated Harvest Date	Aug 19, Oct 23
Actual Harvest Date	8/5/14
Expected Harvest Yield	3 tons/acre
Actual Harvest Yield	3 tons/acre

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Total Volume to Each Check (gal)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1			0.00							
2			0.00							
3			0.00							
4			0.00							
5			0.09							
6			0.00							
7			0.00							
8			0.00							
9			0.00							
10			0.00							
11			0.00							
12			0.00							
13			0.00							
14			0.00							
15			0.00							
16	1700		0.00	1-18	WW	172,139	7	15.5	0.4	NA
17			0.00	1-18	WW	147,312	24	15.5	0.4	NA
18		0700	0.00	1-18	WW	245,895	7	15.5	0.6	NA
19			0.00							
20			0.00							
21			0.00							
22			0.00							
23	0630		0.00	19-32	WW	1,495,249	17.5	12.1	4.6	NA
24			0.00	19-32	WW	1,639,647	24	12.1	5.0	NA
25		0700	0.00	19-32	WW	198,948	7	12.1	0.6	NA
	0700									
26		1100	0.00							
27			0.00							
28			0.00							
29			0.00							
30			0.00							
31	2200	2400	0.00	1-18	WW	107,473	2	15.5	0.3	15
Total			0.09							

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	41

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

DISCHARGER: Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant
COUNTY: Colusa
WDRs Order: R5-2013-0144

MONTH	August
YEAR	2014

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME: MS20b

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	32.3
Number of Checks	35
Check Width (feet)	30
Check Length (feet)**	1,250
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	6/10/14
Actual Planting Date	6/10/14
Anticipated Harvest Date	Aug 19, Oct 23
Actual Harvest Date	8/5/14
Expected Harvest Yield	3 tons/acre
Actual Harvest Yield	3 tons/acre

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

**Est based on Google Earth

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Total Volume to Each Check (gal)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1			0.00							
2			0.00							
3			0.00							
4			0.00							
5			0.09							
6			0.00							
7			0.00							
8			0.00							
9			0.00							
10			0.00							
11			0.00							
12			0.00							
13			0.00							
14			0.00							
15			0.00							
16			0.00							
17			0.00							
18			0.00							
19			0.00							
20			0.00							
21			0.00							
22			0.00							
23			0.00							
24			0.00							
25	0700		0.00	1-11	WW	379,625	17	9.5	1.5	NA
26		1100	0.00	1-11	WW	217,292	11	9.5	0.8	NA
	1100			12-25	WW	326,836	13	12.1	1.0	NA
27		1700	0.00	12-25	WW	735,831	17	12.1	2.2	NA
	1700			26-35	WW	216,421	7	8.6	0.9	NA
28			0.00	26-35	WW	355,314	24	8.6	1.5	NA
29		1800	0.00	26-35	WW	284,120	18	8.6	1.2	NA
30			0.00							
31			0.00							
Total			0.09							

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	26

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

DISCHARGER: Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant

MONTH	August
YEAR	2014

COUNTY: Colusa
WDRs Order: R5-2013-0144

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME: MS21

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	25.9
Number of Checks	50
Check Width (feet)	30
Check Length (feet)**	750
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

**Est based on Google Earth

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	6/28/14
Actual Planting Date	6/28/14
Anticipated Harvest Date	Sept 6, Nov 10
Actual Harvest Date	8/21/14
Expected Harvest Yield	2 tons/acre
Actual Harvest Yield	3.4 tons/acre

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Total Volume to Each Check (gal)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1	0700		0.00	29-41	WW	895,219	17	6.7	4.9	47
2			0.00	29-41	WW	329,820	24	6.7	1.8	47
		1000		34-42	WW	95,140	10	4.6	0.8	47
3		2000	0.00	29-41	WW	293,968	20	6.7	1.6	47
	2000			42-50	WW	40,703	4	4.6	0.3	30
4		2100	0.00	42-50	WW	297,523	21	4.6	2.4	30
5			0.09							
6	2100		0.00	1-9	WW	47,662	3	4.6	0.4	24
7			0.00	1-9	WW	236,984	24	4.6	1.9	24
8		1100	0.00	1-9	WW	69,099	11	4.6	0.5	24
	1100			10-21	WW	108,883	13	6.2	0.6	23
9		2100	0.00	10-21	WW	211,966	21	6.2	1.3	23
	2100			22-33	WW	30,281	3	6.2	0.2	49
10			0.00	22-33	WW	330,298	24	6.2	2.0	49
11		0900	0.00	22-33	WW	186,426	9	6.2	1.1	49
	0900			34-42	WW	233,033	15	4.6	1.8	37
12	2000		0.00	43-50	WW	111,567	4	4.1	1.0	50
13		1000	0.00	43-50	WW	87,868	10	4.1	0.8	50
14			0.00							
15			0.00							
16			0.00							
17			0.00							
18			0.00							
19			0.00							
20			0.00							
21			0.00							
22			0.00							
23			0.00							
24			0.00							
25			0.00							
26			0.00							
27			0.00							
28			0.00							
29			0.00							
30			0.00							
31			0.00							
Total			0.09							

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	35

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

MONTH	August
YEAR	2014

DISCHARGER: Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant
COUNTY: Colusa
WDRs Order: R5-2013-0144

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME MS24a

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	39.95
Number of Checks*	44
Check Width (feet)	30
Check Length (feet)**	1,300
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

*Estimated & Calculated based on Google Earth with 30' checks
**Est based on Google Earth

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	6/15/14
Actual Planting Date	6/15/14
Anticipated Harvest Date	Aug 24, Oct 28
Actual Harvest Date	7/28/14
Expected Harvest Yield	3 tons/acre
Actual Harvest Yield	N/A

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Total Volume to Each Check (gal)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1			0.00							
2			0.00							
3			0.00							
4			0.00							
5			0.09							
6			0.00							
7			0.00							
8			0.00							
9			0.00							
10			0.00							
11			0.00							
12	1500		0.00	1-13	WW	168,580	9	11.6	0.5	NA
13			0.00	1-13	WW	970,875	24	11.6	3.1	NA
14		0200	0.00	1-13	WW	36,760	2	11.6	0.1	NA
	0200			14-42	WW	902,036	22	26.0	1.3	NA
15		1800	0.00	14-42	WW	805,689	18	26.0	1.1	NA
	1800			43-44	WW	18,522	6	1.8	0.4	NA
16		1800	0.00	43-44	WW	102,595	18	1.8	2.1	NA
17			0.00							
18			0.00							
19			0.00							
20			0.00							
21			0.00							
22	0600		0.00	1-13	WW	698,311	18.0	11.6	2.2	63
23		0930	0.00	1-13	WW	206,470	9.5	11.6	0.7	63
24			0.00							
25			0.00							
26			0.00							
27	1800		0.00	1-14	WW	195,964	6.0	12.5	0.6	87
28		1800	0.00	1-14	WW	464,132	18.0	12.5	1.4	87
	1800			15-28	WW	154,711	6.0	12.5	0.5	82
29		1700	0.00	15-28	WW	361,744	17.0	12.5	1.1	82
	1700			29-44	WW	170,233	7.0	14.3	0.4	82
30		1700	0.00	29-44	WW	306,724	17.0	14.3	0.8	82
31			0.00							
Total			0.09							

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	46

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

MONTH	August
YEAR	2014

DISCHARGER: Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant
COUNTY: Colusa
WDRs Order: R5-2013-0144

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME MS24b

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	39.95
Number of Checks*	44
Check Width (feet)	30
Check Length (feet)**	1,300
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

*Estimated & Calculated based on Google Earth with 30' checks
**Est based on Google Earth

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	6/15/14
Actual Planting Date	6/15/14
Anticipated Harvest Date	Aug 24, Oct 28
Actual Harvest Date	7/28/14
Expected Harvest Yield	3 tons/acre
Actual Harvest Yield	N/A

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Total Volume to Each Check (gal)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1			0.00							
2			0.00							
3			0.00							
4			0.00							
5			0.09							
6			0.00							
7			0.00							
8			0.00							
9			0.00							
10			0.00							
11			0.00							
12			0.00							
13			0.00							
14			0.00							
15	1800		0.00	1-10	WW	92,608	6	9.0	0.4	NA
16		1800	0.00	1-10	WW	512,975	18	9.0	2.1	NA
	1800			11-21	WW	188,091	6	9.8	0.7	NA
		1100		11-21	WW	344,833	11	9.8	1.3	NA
17	1100		0.00	22-28	WW	522,366	13	6.3	3.1	NA
18		1630	0.00	22-28	WW	838,258	16.5	6.3	4.9	NA
	1630			29-35	WW	381,027	7.5	6.3	2.2	NA
19		1830	0.00	29-35	WW	759,870	18.5	6.3	4.5	NA
	1830			36-41	WW	193,635	5.5	5.4	1.3	NA
20			0.00	36-41	WW	961,253	24	5.4	6.6	NA
21			0.00	36-41	WW	932,097	24	5.4	6.4	NA
22		0600	0.00	36-41	WW	107,432	6	5.4	0.7	NA
23			0.00							
24			0.00							
25			0.00							
26			0.00							
27			0.00							
28			0.00							
29	1700		0.00	1-12	WW	127,674	7	10.7	0.4	42
30		1700	0.00	1-12	WW	230,043	17	10.7	0.8	42
	1700			13-19	WW	55,255	7	6.3	0.3	34
31		1800	0.00	13-19	WW	506,201	18	6.3	3.0	34
	1800	2400		20-26	WW	168,734	6	6.3	1.0	99
Total			0.09							

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	58

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

MONTH	August
YEAR	2014

DISCHARGER: Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant
COUNTY: Colusa
WDRs Order: R5-2013-0144

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME MS24c

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	39.95
Number of Checks*	44
Check Width (feet)	30
Check Length (feet)**	1,300
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

*Estimated & Calculated based on Google Earth with 30' checks
**Est based on Google Earth

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	6/15/14
Actual Planting Date	6/15/14
Anticipated Harvest Date	Aug 24, Oct 28
Actual Harvest Date	7/28/14
Expected Harvest Yield	3 tons/acre
Actual Harvest Yield	N/A

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Total Volume to Each Check (gal)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1			0.00							
2			0.00							
3			0.00							
4			0.00							
5			0.09							
6			0.00							
7			0.00							
8			0.00							
9			0.00							
10			0.00							
11			0.00							
12	1500		0.00	1-13	WW	168,580	9	11.6	0.5	NA
13			0.00	1-13	WW	970,875	24	11.6	3.1	NA
14		0200	0.00	1-13	WW	36,760	2	11.6	0.1	NA
	0200			14-42	WW	902,036	22	26.0	1.3	NA
15		1800	0.00	14-42	WW	805,689	18	26.0	1.1	NA
	1800			43-44	WW	18,522	6	1.8	0.4	NA
16		1800	0.00	43-44	WW	102,595	18	1.8	2.1	NA
17			0.00							
18			0.00							
19			0.00							
20			0.00							
21			0.00							
22	0600		0.00	1-13	WW	698,311	18	11.6	2.2	63
23		0930	0.00	1-13	WW	206,470	9.5	11.6	0.7	63
24			0.00							
25			0.00							
26			0.00							
27	1900		0.00	1-14	WW	163,303	5	12.5	0.5	87
28		1900	0.00	1-14	WW	489,917	19	12.5	1.4	87
	1900			15-28	WW	128,926	5	12.5	0.4	29
29		1800	0.00	15-28	WW	383,023	18	12.5	1.1	29
	1800			29-44	WW	145,914	6	14.3	0.4	30
30		1800	0.00	29-44	WW	324,767	18	14.3	0.8	30
31			0.00							
Total			0.09							

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	46

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

MONTH	August
YEAR	2014

DISCHARGER: Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant
COUNTY: Colusa
WDRs Order: R5-2013-0144

LAND APPLICATION AREA MONITORING RESULTS FOR FIELD NAME MS24d

(Submit one sheet for each field irrigated during the month)

Field Irrigation Information

Area (acres)	39.95
Number of Checks*	44
Check Width (feet)	30
Check Length (feet)**	1,300
Irrigation Application Days	N/A
Irrigation Resting Days	N/A
Irrigation Cycle Days	N/A

*Estimated & Calculated based on Google Earth with 30' checks
**Est based on Google Earth

Crop Information

Crop Name	Sudan Grass
Crop ET (Inches)	
Total Nitrogen Demand (lb/ac)	
Anticipated Planting Date	6/15/14
Actual Planting Date	6/15/14
Anticipated Harvest Date	Aug 24, Oct 28
Actual Harvest Date	7/28/14
Expected Harvest Yield	3 tons/acre
Actual Harvest Yield	N/A

Cattle Grazing Schedule

Number of Cattle on Field	0
Cattle Grazing Start Date	N/A
Cattle Grazing End Date	N/A
BOD Mass/Head (lb/day/head)	N/A
Nitrogen Mass/Head (lb/day/head)	N/A

Day of Month	Start Time	End Time	Precipitation (Inches)	Names of Checks Irrigated Each Day	Types of Water Applied (wastewater, cooling water, supplemental irrigation)	Estimated Total Volume to Each Check (gal)	Total Irrigation Hours for Each Check	Area (acres)	Total Volume of Water Applied to Each Check (inches)[1]	BOD Loading Rate as an Irrigation Cycle Average (lb/ac/day)[2]
1			0.00							
2			0.00							
3			0.00							
4			0.00							
5			0.09							
6			0.00							
7			0.00							
8			0.00							
9			0.00							
10			0.00							
11			0.00							
12			0.00							
13			0.00							
14			0.00							
15	1800		0.00	1-10	WW	92,608	6	9.0	0.4	NA
16		1800	0.00	1-10	WW	512,975	18	9.0	2.1	NA
	1800			11-21	WW	188,091	6	9.8	0.7	NA
17		1100	0.00	11-21	WW	694,574	11	9.8	2.6	NA
	1100			22-28	WW	522,366	13	6.3	3.1	NA
18		1630	0.00	22-28	WW	838,258	16.5	6.3	4.9	NA
	1630			29-35	WW	279,419	5.5	6.3	1.6	NA
19		1830	0.00	29-35	WW	759,870	18.5	6.3	4.5	NA
	1830			36-41	WW	193,635	5.5	5.4	1.3	NA
20			0.00	36-41	WW	961,253	24	5.4	6.6	NA
21			0.00	36-41	WW	932,097	24	5.4	6.4	NA
22		0600	0.00	36-41	WW	107,432	6	5.4	0.7	NA
23			0.00							
24			0.00							
25			0.00							
26			0.00							
27			0.00							
28			0.00							
29	1800		0.00	1-12	WW	109,435	6	10.7	0.4	30
30		1800	0.00	1-12	WW	243,575	18	10.7	0.8	30
	1800			13-19	WW	47,362	6	6.3	0.3	40
31		1900	0.00	13-19	WW	534,323	19	6.3	3.1	40
	1900	2400		20-26	WW	140,611	5	6.3	0.8	99
Total			0.09							

[1]Calculations and assumptions shall be documented on a separate piece of paper

[2]See MRP page 3, "Land Application Area" footnote 4 for calculation instructions. Calculations and assumptions shall be documented on a separate piece of paper.

Total Nitrogen Loading Rate for Month (lb/ac)[3]	60

[3]See MRP footnote 5

MONTHLY MONITORING REPORT

DISCHARGER: Morming Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant
COUNTY: Colusa
WDRs Order R5-2013-0144

MONTH	August
YEAR	2014

LAND APPLICATION AREA MONITORING TOTAL NITROGEN LOADING RESULTS

LAA Field	Gobel	MS 1	MS 2	MS 3	MS 5	MS 6	MS 11	MS 14	MS 15	MS 16	MS 18a	MS 18b	MS 20a	MS 20b	MS 21	MS 24a	MS 24b	MS 24c	MS 24d
Acres of LAA Irrigated																			
Total Nitrogen Loading from Wastewater (lbs/ac)			55	50	156	80	168	82	112	93	124	40	41	26	133	46	58	46	60
Total Nitrogen Loading Rate from Settling Pond Solids (lbs/ac/month)					123	123			123	123					123				
Total Nitrogen Loading Rate from Cooling Pond Solids (lbs/ac/month)																			
Total Nitrogen Loading Rate from Residual Solids (lbs/ac/month)																			
Total Nitrogen Loading Rate from Cattle/ Manure (lbs/ac/month)																			
Total Nitrogen Loading Rate from Commercial Fertilizers (lbs/ac/month)			56	14		63	14	63	0	0	82	82	119	119	0	82	82	82	82
Cumulative Annual Total Nitrogen Value (lbs/ac/year)			111	64	279	266	182	145	235	216	206	122	160	145	256	128	140	128	142
Annual Crop Demand (lbs/ac/year)																			

Attachment F

MORNING STAR

"Excellence Through Commitment"

LAND APPLICATION AREA MONITORING

Weekly-Inspection Observations:

Technician: Justin Young

Date: 8/4/14 Weather: Partly Cloudy

1. Any evidence of erosion: yes / (no)
2. Berm Condition good
3. Standpipe and flow control valve condition N/A
4. Are the valves being used properly: (yes) / no
5. Is there any soil saturation: yes / (no)
6. Is there any ponding: yes / (no)
7. Is there any potential runoff to off-site areas: yes / (no)
8. Is there any potential and actual discharge to surface water: yes / (no)
9. Are there any accumulation of organic solids at soil surface: yes / (no)
10. Is there any soil clogging: yes / (no)
11. Are there any odors that have the potential to be objectionable at or beyond the property boundary: yes / (no)
12. Are there any insects: yes / (no)
13. Temperature and wind direction/strength: 91° / ESE 2 MPH
14. Other observations: Crops are growing good.

MORNING STAR

"Excellence Through Commitment"

LAND APPLICATION AREA MONITORING

Weekly-Inspection Observations:

Technician: Justin Young

Date: 8/11/14 Weather: Sunny

1. Any evidence of erosion: yes / (no)
2. Berm Condition good
3. Standpipe and flow control valve condition N/A
4. Are the valves being used properly: (yes) / no
5. Is there any soil saturation: yes / (no)
6. Is there any ponding: yes / (no)
7. Is there any potential runoff to off-site areas: yes / (no)
8. Is there any potential and actual discharge to surface water: yes / (no)
9. Are there any accumulation of organic solids at soil surface: yes / (no)
10. Is there any soil clogging: yes / (no)
11. Are there any odors that have the potential to be objectionable at or beyond the property boundary: yes / (no)
12. Are there any insects: yes / (no)
13. Temperature and wind direction/strength: 78° East @ 1MPH
14. Other observations: Crops are growing good.

MORNING STAR

"Excellence Through Commitment"

LAND APPLICATION AREA MONITORING

Weekly-Inspection Observations:

Technician: Justin Young

Date: 8/18/14 Weather: Sunny

1. Any evidence of erosion: yes / (no)
2. Berm Condition good
3. Standpipe and flow control valve condition N/A
4. Are the valves being used properly: (yes) / no
5. Is there any soil saturation: yes / (no)
6. Is there any ponding: yes / (no)
7. Is there any potential runoff to off-site areas: yes / (no)
8. Is there any potential and actual discharge to surface water: yes / (no)
9. Are there any accumulation of organic solids at soil surface: yes / (no)
10. Is there any soil clogging: yes / (no)
11. Are there any odors that have the potential to be objectionable at or beyond the property boundary: yes / (no)
12. Are there any insects: yes / (no)
13. Temperature and wind direction/strength: 96° Wind Calm
14. Other observations: Crops are growing good

MORNING STAR

"Excellence Through Commitment"

LAND APPLICATION AREA MONITORING

Weekly-Inspection Observations:

Technician: Justin Young

Date: 8/25/14 Weather: Partly Cloudy

1. Any evidence of erosion: yes / (no)
2. Berm Condition Good
3. Standpipe and flow control valve condition N/A
4. Are the valves being used properly: (yes) / no
5. Is there any soil saturation: yes / (no)
6. Is there any ponding: yes / (no)
7. Is there any potential runoff to off-site areas: yes / (no)
8. Is there any potential and actual discharge to surface water: yes / (no)
9. Are there any accumulation of organic solids at soil surface: yes / (no)
10. Is there any soil clogging: yes / (no)
11. Are there any odors that have the potential to be objectionable at or beyond the property boundary: yes / (no)
12. Are there any insects: yes / (no)
13. Temperature and wind direction/strength: 88° wind @ 7mph SE
14. Other observations: Crops are growing good

Attachment G

DISCHARGER: Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant
COUNTY: Colusa
WDRs Order R5-2013-0144

MONTHLY MONITORING REPORT

MONTH	August
YEAR	2014

RESIDUAL SOLIDS MONITORING : Facility Not Processing, Solids Monitoring N/A

Date	Type of Solids Generated	Volume of Solids Generated (tons)[1]	Volume of Solids Disposed of Offsite (tons)	Offsite Solids Disposal Location[2]	Volume of Solids Disposed of Onsite (tons)	Onsite Solids Disposal Location[3]
August	Pomace, Wet Waste	10,017	10,017	Animal Feed, Gilton Resource Recover/Transfer Station	0	

[1]Volume of Solids Generated. Solids may include pomace, seeds, stems, diatomaceous earth, screenings, pond solids, and sump solids, or other material.

[2]Volume Disposed of Off-site. Describe the disposal method (e.g. animal feed, land application, off-site composting, landfill, etc.) and the name of the hauling company.

[3]Volume Disposed of On-site; location of on-site disposal (e.g. land application area field); method of application, spreading, and incorporation; application rate (tons/acre), and results from weekly grab sample analysis for total nitrogen.

Attachment H

DISCHARGE Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant
COUNTY: Colusa
WDRs Order R5-2013-0144

MONTHLY MONITORING REPORT

MONTH	August
YEAR	2014

FIELD INSTRUMENT CALIBRATION LOG

Monitoring Week	Date	Time	Lower Standard pH Buffer	Lower Standard Stabilized pH	Lower pH Standard Calibrated pH	Upper Standard pH Buffer	Upper Standard Stabilized pH	Upper Standard Calibrated pH	DO Initial Reading	Electrolyte Solution Added	DO Reading after Calibration	Technican's Initials
Week 1	8/4/14	8:35	4.0	3.8		10.0	9.8	9.9	1.05	N/A	N/A	JI
Week 2	8/11/14	8:30	4.0	3.75	3.9	10.0	9.8		4.07	N/A	N/A	JI
Week 3	8/18/14	9:50	4.0	3.9		10.0	9.8		2.94	N/A	N/A	JI
Week 4	8/25/14	8:30	4.0	3.9		10.0	9.9		2.91	N/A	N/A	JI
Week 5												

If either calibrated pH value is more than 0.2 higher or lower than its corresponding pH buffer value, recalibrate the meter before using it in the field.

DISCHARG Morning Star Packing Company, LP and Fred Gobel
FACILITY: Morning Star Tomato Packing Plant
COUNTY: Colusa
WDRs Orde R5-2013-0144

MONTHLY MONITORING REPORT

MONTH August
YEAR 2014

FIELD INSTRUMENT CALIBRATION LOG

Monitoring Week	Date	Time	Lower Standard pH Buffer	Lower Standard Stabilized pH	Lower pH Standard Calibrated pH	Upper Standard pH Buffer	Upper Standard Stabilized pH	Upper Standard Calibrated pH	DO Initial Reading	Electrolyte Solution Added	DO Reading after Calibration	Technican's Initials
Week 1	8/4	8:35	4.0	3.8		10	9.75	9.9	1.05	N/A	N/A	JP
Week 2	8/11	8:30	4.0	3.75	3.9	10	9.8		4.07	N/A	N/A	JP
Week 3	8/18	9:50	4.0	3.9		10	9.8		2.94	N/A	N/A	JP
Week 4	8/25	8:30	4.0	3.9		10	9.9		2.91	N/A	N/A	JP
Week 5												

If either calibrated pH value is more than 0.2 higher or lower than its corresponding pH buffer value, recalibrate the meter before using it in the field.

Aqua Sierra Controls, Inc.

INSTRUMENT CALIBRATION REPORT

Aqua Sierra Controls, Inc.
1650 Industrial Drive
Auburn, CA 95603
Phone (800) 649-4287
Fax (530) 823-3475
service@aquasierra.com
www.aquasierra.com

Attn: JAMES BRISCO
MORNING STAR PACKING COMPANY
2211 OLD HIGHWAY 99
WILLIAMS, CA 95987

Instrument ID 01
Description FLOW METER
Serial Number A1J001295
Model Number U SONIC R

Calibrated 5/30/2014
Scheduled 5/30/2015
Calibration ID 21526
Certificate # 01
Equipment ID
Department
Manufacturer DREXEL BROOK
Calibration Type INITIAL
Location SETTLING POND
Building OUTSIDE

Calibration Specifications

Stated Accy Pct of Reading

In Val	In Type	Out Val	Out Type	Fnd As	Error %	Lft As	Error %
0.00	FEET H2O	0.00	GPM	0.00	0.00%	0.00	0.00%
0.20	FEET H2O	334.20	GPM	330.00	-1.26%	330.00	-1.26%
0.54	FEET H2O	1483.00	GPM	1,483.00	0.00%	1,483.00	0.00%
0.71	FEET H2O	2235.00	GPM	2,275.00	1.79%	2,275.00	1.79%
0.87	FEET H2O	3032.00	GPM	3,068.00	1.19%	3,068.00	1.19%

Test Instruments Used During the Calibration

Test Instrument ID	Description	Manufacturer	Model Number	Serial Number
101	ULTRASONIC TEST STAND	ASC	1076-10	ASC-04-KEN

Notes about this calibration
2.5' RECTANGULAR WEIR
ZERO DISTANCE = 2.74'
VERIFIED LEVEL READING AT WEIR

Calibration Result Calibration Successful
Who Calibrated KEN LANE

Aqua Sierra Controls, Inc.

INSTRUMENT CALIBRATION REPORT

Aqua Sierra Controls, Inc.
1650 Industrial Drive
Auburn, CA 95603
Phone (800) 649-4287
Fax (530) 823-3475
service@aquasierra.com
www.aquasierra.com

Attn: JAMES BRISCO
MORNING STAR PACKING COMPANY
2211 OLD HIGHWAY 99
WILLIAMS, CA 95987

Instrument ID 02
Description FLOW METER
Serial Number A1J000210
Model Number U SONIC R

Calibrated 5/30/2014
Scheduled 5/30/2015
Calibration ID 21527
Certificate # 02
Equipment ID
Department
Manufacturer DREXEL BROOK
Calibration Type INITIAL
Location COOLING POND
Building OUTSIDE

Calibration Specifications

Stated Accy Pct of Reading

In Val	In Type	Out Val	Out Type	Fnd As	Error %	Lft As	Error %
0.00	FEET H2O	0.00	GPM	0.00	0.00%	0.00	0.00%
0.22	FEET H2O	301.70	GPM	299.00	-0.89%	299.00	-0.89%
0.41	FEET H2O	752.80	GPM	749.00	-0.50%	749.00	-0.50%
0.55	FEET H2O	1153.00	GPM	1,174.00	1.82%	1,174.00	1.82%
0.67	FEET H2O	1530.00	GPM	1,542.00	0.78%	1,542.00	0.78%

Test Instruments Used During the Calibration

Test Instrument ID	Description	Manufacturer	Model Number	Serial Number
101	ULTRASONIC TEST STAND	ASC	1076-10	ASC-04-KEN

Notes about this calibration

2' RECTANGULAR WEIR WITH END CONTRACTIONS
ZERO DISTANCE = 32.6" OR 2.72'
CHANNEL #2

Calibration Result Calibration Successful
Who Calibrated KEN LANE

Aqua Sierra Controls, Inc.

INSTRUMENT CALIBRATION REPORT

Aqua Sierra Controls, Inc.
1650 Industrial Drive
Auburn, CA 95603
Phone (800) 649-4287
Fax (530) 823-3475
service@aquasierra.com
www.aquasierra.com

Attn: JAMES BRISCO
MORNING STAR PACKING COMPANY
2211 OLD HIGHWAY 99
WILLIAMS, CA 95987

Instrument ID 03
Description FLOW METER
Serial Number A1J000210
Model Number U SONIC R

Calibrated 5/30/2014
Scheduled 5/30/2015
Calibration ID 21524
Certificate # 03
Equipment ID
Department
Manufacturer DREXEL BROOK
Calibration Type INITIAL
Location MAIN DITCH
Building OUTSIDE

Calibration Specifications

Stated Accy Pct of Reading

In Val	In Type	Out Val	Out Type	Fnd As	Error %	Lft As	Error %
0.00	FEET H2O	0.00	GPM	0.00	0.00%	0.00	0.00%
0.20	FEET H2O	334.20	GPM	340.00	1.74%	340.00	1.74%
0.54	FEET H2O	1483.00	GPM	1,476.00	-0.47%	1,476.00	-0.47%
0.71	FEET H2O	2235.00	GPM	2,228.00	-0.31%	2,228.00	-0.31%
0.87	FEET H2O	3032.00	GPM	3,048.00	0.53%	3,048.00	0.53%

Test Instruments Used During the Calibration

Test Instrument ID	Description	Manufacturer	Model Number	Serial Number
101	ULTRASONIC TEST STAND	ASC	1076-10	ASC-04-KEN

Notes about this calibration
2.5' RECTANGULAR WEIR
CHANNEL #1
ZERO DISTANCE MEASURED AT 3.13'
VERIFIED LEVEL READING AT WEIR

Calibration Result Calibration Successful
Who Calibrated KEN LANE