

Irrigation Water Requirements

Crop Data Summary

Job: Aztec	Crop: Alfalfa, hay, northern
Location: Bloomfield	County: San Juan, NM
By: Rhett	Date: 01/31/05
Weather Station: BLOOMFIELD 3 SE	Sta No: NM1063
Latitude: 3640 Longitude: 10758	Elevation: 5800 feet above sea level
Computation Method: Blaney Criddle (TR21)	Net irrigation application: 1 inches
Crop Curve: Blaney Criddle Perennial Crop	Estimated carryover moisture used at season:
Begin Growth: 4/10 End Growth: 9/15	Begin: 0.5 inches End: 0.5 inches

Month	Total Monthly ET (3) inches	Dry Year 80% Chance (1)		Normal Year 50% Chance (1)		Average Daily ETc inches	Peak Daily ETPk inches
		Effective Precipitation inches	Net Irrigation Requirements inches (2)	Effective Precipitation inches	Net Irrigation Requirements inches (2)		
January	0.00	0.00	0.00	0.00	0.00	0.00	
February	0.00	0.00	0.00	0.00	0.00	0.00	
March	0.00	0.00	0.00	0.00	0.00	0.00	
April	1.86	0.14	1.22	0.19	1.16	0.09	
May	5.59	0.23	5.36	0.33	5.26	0.18	0.21
June	8.42	0.13	8.29	0.19	8.23	0.28	0.32
July	9.85	0.50	9.34	0.73	9.12	0.32	0.36
August	8.32	0.59	7.74	0.85	7.48	0.27	0.31
September	2.64	0.18	1.96	0.25	1.89	0.18	
October	0.00	0.00	0.00	0.00	0.00	0.00	
November	0.00	0.00	0.00	0.00	0.00	0.00	
December	0.00	0.00	0.00	0.00	0.00	0.00	
TOTAL	36.68	1.77	33.91	2.54	33.14		

(1) For 80 percent occurrence, growing season effective precipitation will be equaled or exceeded 8 out of 10 years. For 50 percent chance occurrence, effective precipitation will be equaled or exceeded 1 out of 2 years.

(2) Net irrigation requirements is adjusted for carryover moisture used at the beginning of the season and carryover moisture used at the end of the growing season.

(3) ET Evapotranspiration) is adjusted upwards 10% per 1000 meters above sea level.

Date: 7/21/2005

Irrigation Water Requirements

Monthly Crop Water Requirements

Job: **Aztec**

Crop: **Alfalfa, hay, northern**

Location: **Bloomfield**

Date: **01/31/05**

Computation Method: **Blaney Criddle (TR21)**

Crop Curve: **Blaney Criddle Perennial Crop**

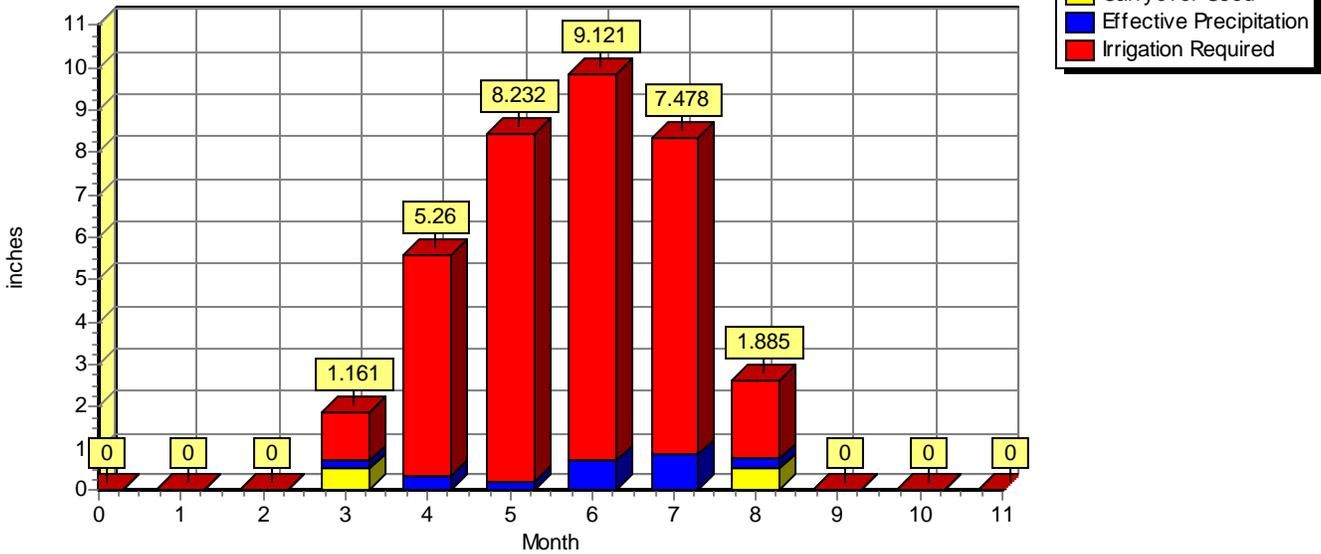
Begin Growth: **4/10** End Growth: **9/15**

Net irrigation application: **1** inches

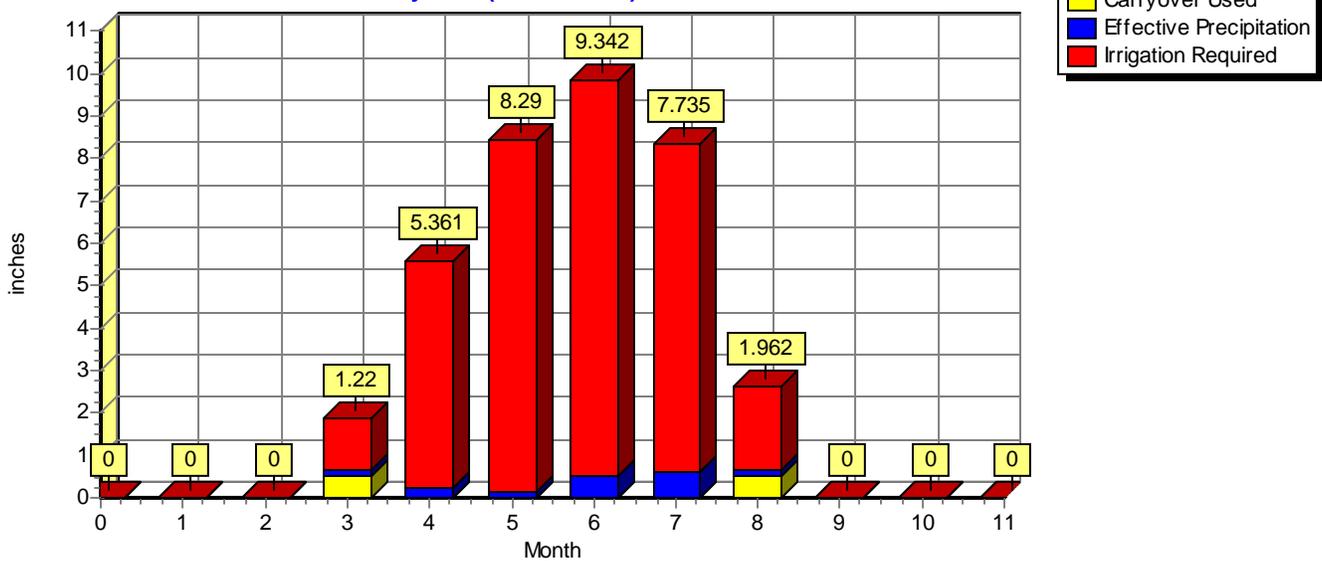
Estimated carryover moisture used at season:

Begin: **0.5** inches End: **0.5** inches

**Irrigation Water Requirements
Normal Year (50% chance)**



**Irrigation Water Requirements
Dry Year (80% chance)**



Irrigation Water Requirements

Crop Data Summary

Job: Aztec	Crop: Beans, dry edible
Location: Bloomfield	County: San Juan, NM
By: Rhett	Date: 01/31/05
Weather Station: BLOOMFIELD 3 SE	Sta No: NM1063
Latitude: 3640 Longitude: 10758	Elevation: 5800 feet above sea level
Computation Method: Blaney Criddle (TR21)	Net irrigation application: 1 inches
Crop Curve: Blaney Criddle Annual Crop	Estimated carryover moisture used at season:
Begin Growth: 5/15 End Growth: 9/5	Begin: 0.5 inches End: 0.5 inches

Month	Total Monthly ET (3) inches	Dry Year 80% Chance (1)		Normal Year 50% Chance (1)		Average Daily ETc inches	Peak Daily ETPk inches
		Effective Precipitation inches	Net Irrigation Requirements inches (2)	Effective Precipitation inches	Net Irrigation Requirements inches (2)		
January	0.00	0.00	0.00	0.00	0.00	0.00	
February	0.00	0.00	0.00	0.00	0.00	0.00	
March	0.00	0.00	0.00	0.00	0.00	0.00	
April	0.00	0.00	0.00	0.00	0.00	0.00	
May	1.41	0.10	0.81	0.14	0.77	0.08	
June	6.17	0.12	6.05	0.17	6.00	0.21	0.23
July	9.60	0.50	9.10	0.72	8.89	0.31	0.35
August	6.45	0.53	5.92	0.76	5.69	0.21	0.24
September	0.71	0.06	0.15	0.08	0.13	0.14	
October	0.00	0.00	0.00	0.00	0.00	0.00	
November	0.00	0.00	0.00	0.00	0.00	0.00	
December	0.00	0.00	0.00	0.00	0.00	0.00	
TOTAL	24.35	1.30	22.05	1.87	21.48		

(1) For 80 percent occurrence, growing season effective precipitation will be equaled or exceeded 8 out of 10 years. For 50 percent chance occurrence, effective precipitation will be equaled or exceeded 1 out of 2 years.

(2) Net irrigation requirements is adjusted for carryover moisture used at the beginning of the season and carryover moisture used at the end of the growing season.

(3) ET Evapotranspiration) is adjusted upwards 10% per 1000 meters above sea level.

Date: 7/21/2005

Irrigation Water Requirements

Monthly Crop Water Requirements

Job: **Aztec**

Crop: **Beans, dry edible**

Location: **Bloomfield**

Date: **01/31/05**

Computation Method: **Blaney Criddle (TR21)**

Crop Curve: **Blaney Criddle Annual Crop**

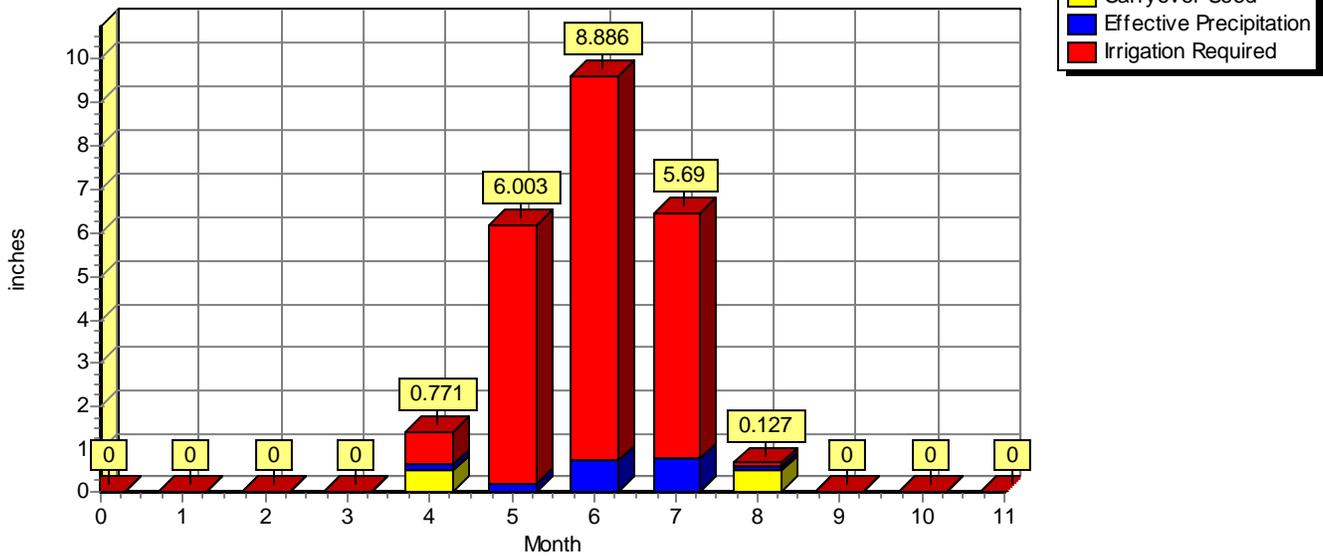
Begin Growth: **5/15** End Growth: **9/5**

Net irrigation application: **1** inches

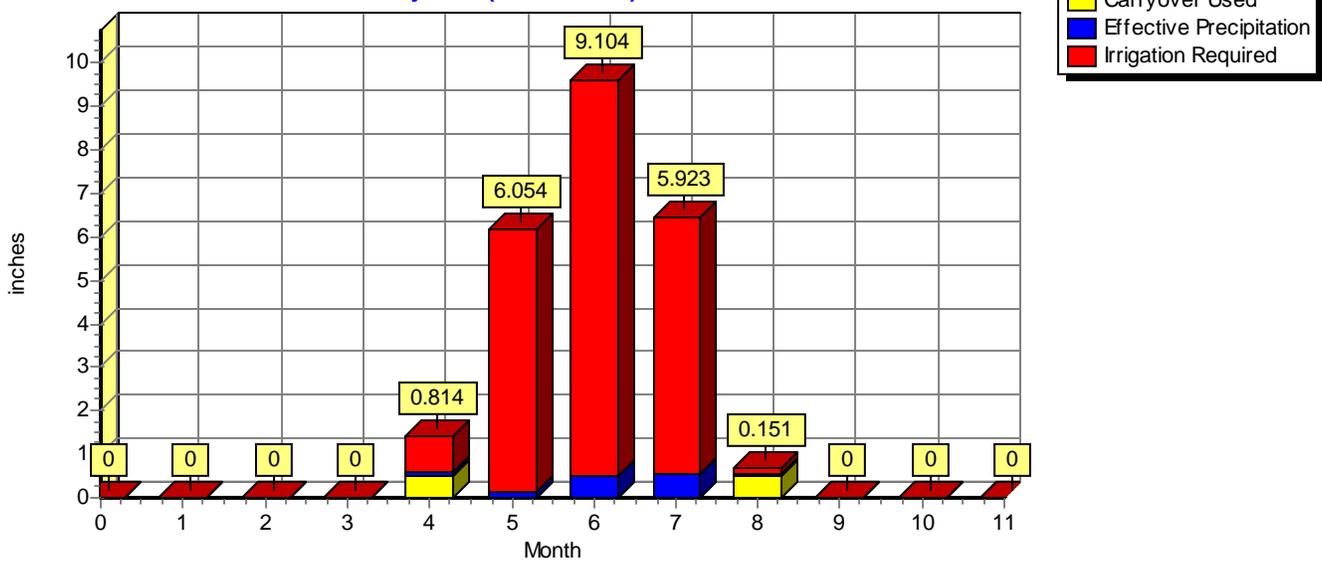
Estimated carryover moisture used at season:

Begin: **0.5** inches End: **0.5** inches

**Irrigation Water Requirements
Normal Year (50% chance)**



**Irrigation Water Requirements
Dry Year (80% chance)**



Irrigation Water Requirements

Crop Data Summary

Job: Aztec	Crop: Corn, grain
Location: Bloomfield	County: San Juan, NM
By: Rhett	Date: 01/31/05
Weather Station: BLOOMFIELD 3 SE	Sta No: NM1063
Latitude: 3640 Longitude: 10758	Elevation: 5800 feet above sea level
Computation Method: Blaney Criddle (TR21)	Net irrigation application: 1 inches
Crop Curve: Blaney Criddle Annual Crop	Estimated carryover moisture used at season:
Begin Growth: 4/25 End Growth: 11/10	Begin: 0.5 inches End: 0.5 inches

Month	Total Monthly ET (3) inches	Dry Year 80% Chance (1)		Normal Year 50% Chance (1)		Average Daily ETc inches	Peak Daily ETPk inches
		Effective Precipitation inches	Net Irrigation Requirements inches (2)	Effective Precipitation inches	Net Irrigation Requirements inches (2)		
January	0.00	0.00	0.00	0.00	0.00	0.00	
February	0.00	0.00	0.00	0.00	0.00	0.00	
March	0.00	0.00	0.00	0.00	0.00	0.00	
April	0.35	0.03	0.00	0.05	0.00	0.06	
May	2.59	0.19	2.21	0.28	2.12	0.08	0.10
June	4.97	0.11	4.86	0.16	4.81	0.17	0.19
July	8.32	0.46	7.86	0.67	7.65	0.27	0.31
August	8.40	0.59	7.81	0.85	7.55	0.27	0.31
September	5.60	0.37	5.23	0.53	5.07	0.18	0.21
October	2.94	0.37	2.56	0.54	2.35	0.09	0.11
November	0.58	0.09	0.00	0.13	0.00	0.06	
December	0.00	0.00	0.00	0.00	0.00	0.00	
TOTAL	33.76	2.22	30.54	3.20	29.56		

(1) For 80 percent occurrence, growing season effective precipitation will be equaled or exceeded 8 out of 10 years. For 50 percent chance occurrence, effective precipitation will be equaled or exceeded 1 out of 2 years.

(2) Net irrigation requirements is adjusted for carryover moisture used at the beginning of the season and carryover moisture used at the end of the growing season.

(3) ET (Evapotranspiration) is adjusted upwards 10% per 1000 meters above sea level.

Date: 7/21/2005

Irrigation Water Requirements

Monthly Crop Water Requirements

Job: **Aztec**

Crop: **Corn, grain**

Location: **Bloomfield**

Date: **01/31/05**

Computation Method: **Blaney Criddle (TR21)**

Crop Curve: **Blaney Criddle Annual Crop**

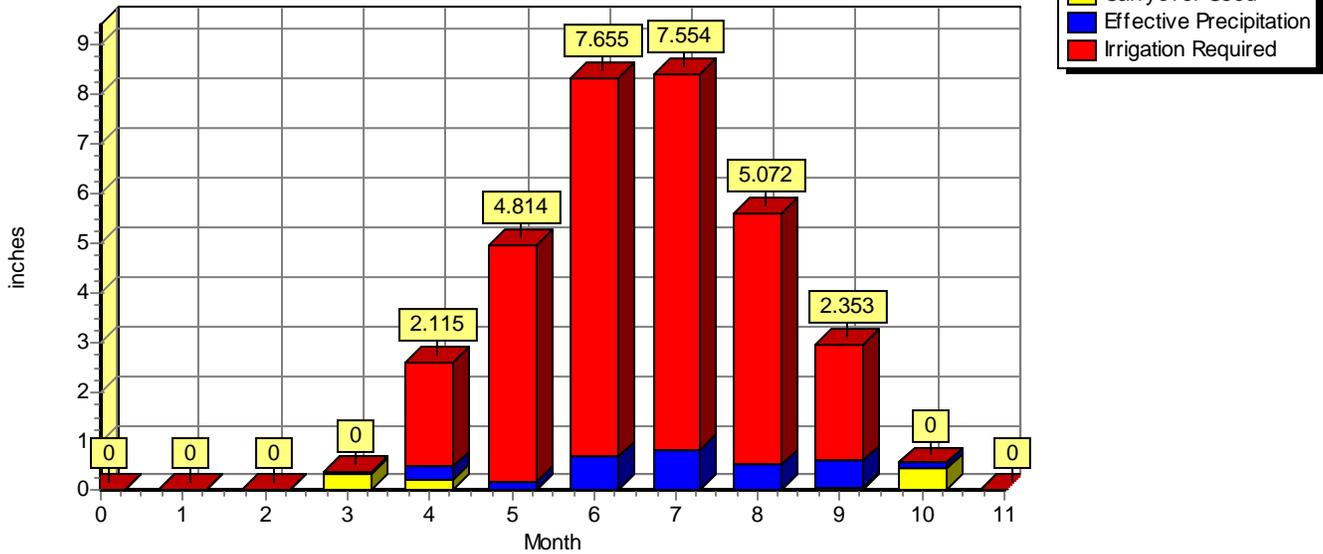
Begin Growth: **4/25** End Growth: **11/10**

Net irrigation application: **1** inches

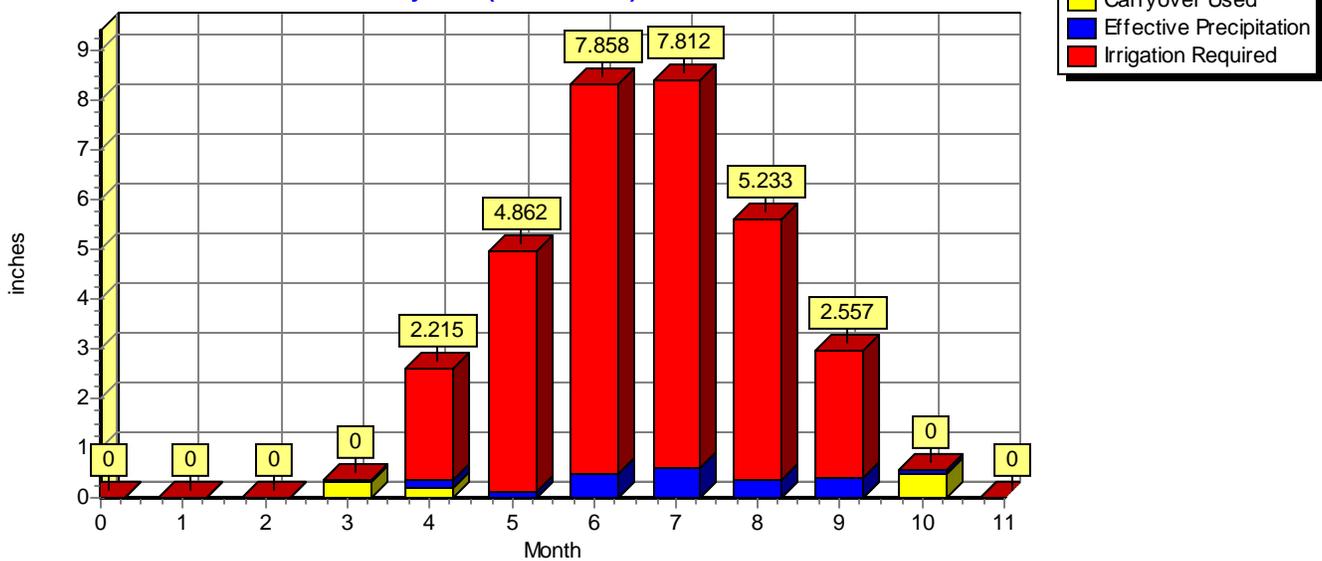
Estimated carryover moisture used at season:

Begin: **0.5** inches End: **0.5** inches

**Irrigation Water Requirements
Normal Year (50% chance)**



**Irrigation Water Requirements
Dry Year (80% chance)**



Irrigation Water Requirements

Crop Data Summary

Job: Aztec	Crop: Grain, spring
Location: Bloomfield	County: San Juan, NM
By: Rhett	Date: 01/31/05
Weather Station: BLOOMFIELD 3 SE	Sta No: NM1063
Latitude: 3640 Longitude: 10758	Elevation: 5800 feet above sea level
Computation Method: Blaney Criddle (TR21)	Net irrigation application: 1 inches
Crop Curve: Blaney Criddle Annual Crop	Estimated carryover moisture used at season:
Begin Growth: 4/10 End Growth: 6/30	Begin: 0.5 inches End: 0.5 inches

Month	Total Monthly ET (3) inches	Dry Year 80% Chance (1)		Normal Year 50% Chance (1)		Average Daily ETc inches	Peak Daily ETPk inches
		Effective Precipitation inches	Net Irrigation Requirements inches (2)	Effective Precipitation inches	Net Irrigation Requirements inches (2)		
January	0.00	0.00	0.00	0.00	0.00	0.00	
February	0.00	0.00	0.00	0.00	0.00	0.00	
March	0.00	0.00	0.00	0.00	0.00	0.00	
April	1.03	0.13	0.41	0.18	0.35	0.05	
May	6.09	0.24	5.85	0.34	5.75	0.20	0.22
June	4.40	0.11	3.79	0.15	3.74	0.15	
July	0.00	0.00	0.00	0.00	0.00	0.00	
August	0.00	0.00	0.00	0.00	0.00	0.00	
September	0.00	0.00	0.00	0.00	0.00	0.00	
October	0.00	0.00	0.00	0.00	0.00	0.00	
November	0.00	0.00	0.00	0.00	0.00	0.00	
December	0.00	0.00	0.00	0.00	0.00	0.00	
TOTAL	11.52	0.47	10.05	0.67	9.85		

(1) For 80 percent occurrence, growing season effective precipitation will be equaled or exceeded 8 out of 10 years. For 50 percent chance occurrence, effective precipitation will be equaled or exceeded 1 out of 2 years.

(2) Net irrigation requirements is adjusted for carryover moisture used at the beginning of the season and carryover moisture used at the end of the growing season.

(3) ET Evapotranspiration) is adjusted upwards 10% per 1000 meters above sea level.

Date: 7/21/2005

Irrigation Water Requirements

Monthly Crop Water Requirements

Job: **Aztec**

Crop: **Grain, spring**

Location: **Bloomfield**

Date: **01/31/05**

Computation Method: **Blaney Criddle (TR21)**

Crop Curve: **Blaney Criddle Annual Crop**

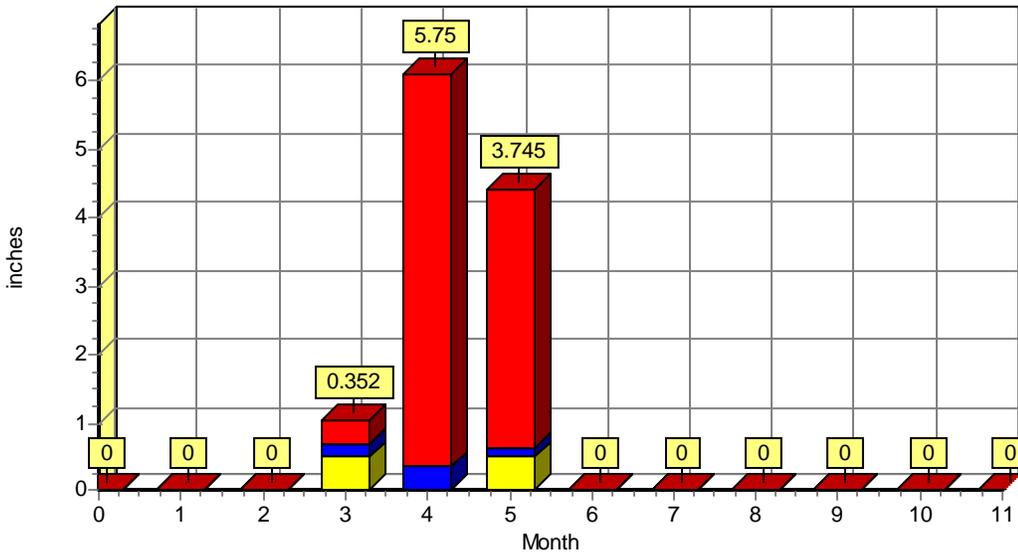
Begin Growth: **4/10** End Growth: **6/30**

Net irrigation application: **1** inches

Estimated carryover moisture used at season:

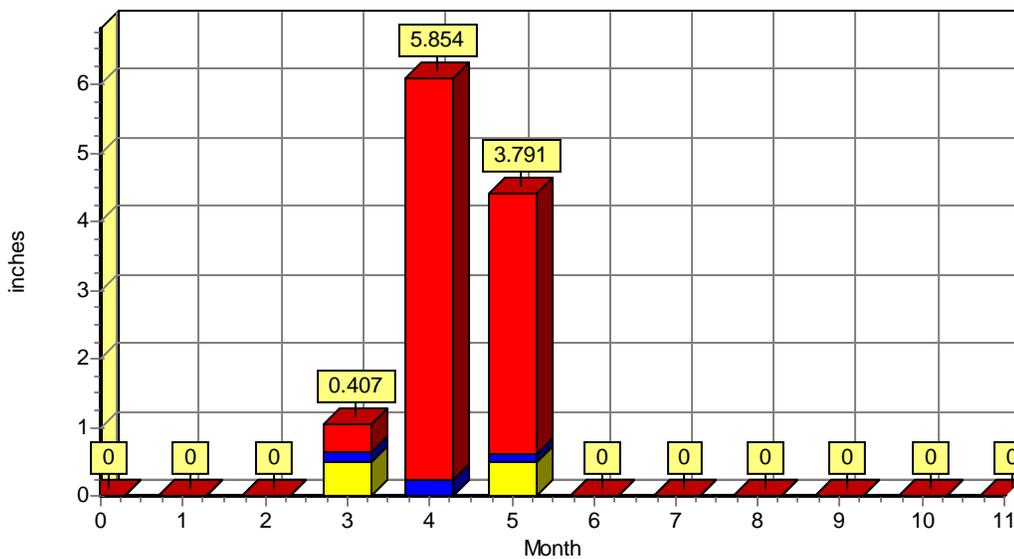
Begin: **0.5** inches End: **0.5** inches

**Irrigation Water Requirements
Normal Year (50% chance)**



■ Carryover Used
■ Effective Precipitation
■ Irrigation Required

**Irrigation Water Requirements
Dry Year (80% chance)**



■ Carryover Used
■ Effective Precipitation
■ Irrigation Required

Irrigation Water Requirements

Crop Data Summary

Job: Aztec	Crop: Pasture, cool season grass
Location: Bloomfield	County: San Juan, NM
By: Rhett	Date: 01/31/05
Weather Station: BLOOMFIELD 3 SE	Sta No: NM1063
Latitude: 3640 Longitude: 10758	Elevation: 5800 feet above sea level
Computation Method: Blaney Criddle (TR21)	Net irrigation application: 2 inches
Crop Curve: Blaney Criddle Perennial Crop	Estimated carryover moisture used at season:
Begin Growth: 3/15 End Growth: 10/30	Begin: 0.5 inches End: 0.5 inches

Month	Total Monthly ET (3) inches	Dry Year 80% Chance (1)		Normal Year 50% Chance (1)		Average Daily ETc inches	Peak Daily ETPk inches
		Effective Precipitation inches	Net Irrigation Requirements inches (2)	Effective Precipitation inches	Net Irrigation Requirements inches (2)		
January	0.00	0.00	0.00	0.00	0.00	0.00	
February	0.00	0.00	0.00	0.00	0.00	0.00	
March	0.82	0.16	0.16	0.23	0.09	0.05	
April	2.61	0.24	2.37	0.35	2.26	0.09	0.10
May	4.64	0.26	4.38	0.37	4.27	0.15	0.16
June	6.89	0.15	6.74	0.21	6.68	0.23	0.25
July	8.18	0.55	7.63	0.79	7.39	0.26	0.29
August	7.11	0.66	6.45	0.94	6.17	0.23	0.25
September	4.68	0.42	4.27	0.60	4.08	0.15	0.17
October	2.39	0.42	1.47	0.60	1.28	0.08	
November	0.00	0.00	0.00	0.00	0.00	0.00	
December	0.00	0.00	0.00	0.00	0.00	0.00	
TOTAL	37.32	2.84	33.47	4.09	32.23		

(1) For 80 percent occurrence, growing season effective precipitation will be equaled or exceeded 8 out of 10 years. For 50 percent chance occurrence, effective precipitation will be equaled or exceeded 1 out of 2 years.

(2) Net irrigation requirements is adjusted for carryover moisture used at the beginning of the season and carryover moisture used at the end of the growing season.

(3) ET Evapotranspiration) is adjusted upwards 10% per 1000 meters above sea level.

Date: 7/21/2005

Irrigation Water Requirements

Monthly Crop Water Requirements

Job: **Aztec**

Crop: **Pasture, cool season grass**

Location: **Bloomfield**

Date: **01/31/05**

Computation Method: **Blaney Criddle (TR21)**

Crop Curve: **Blaney Criddle Perennial Crop**

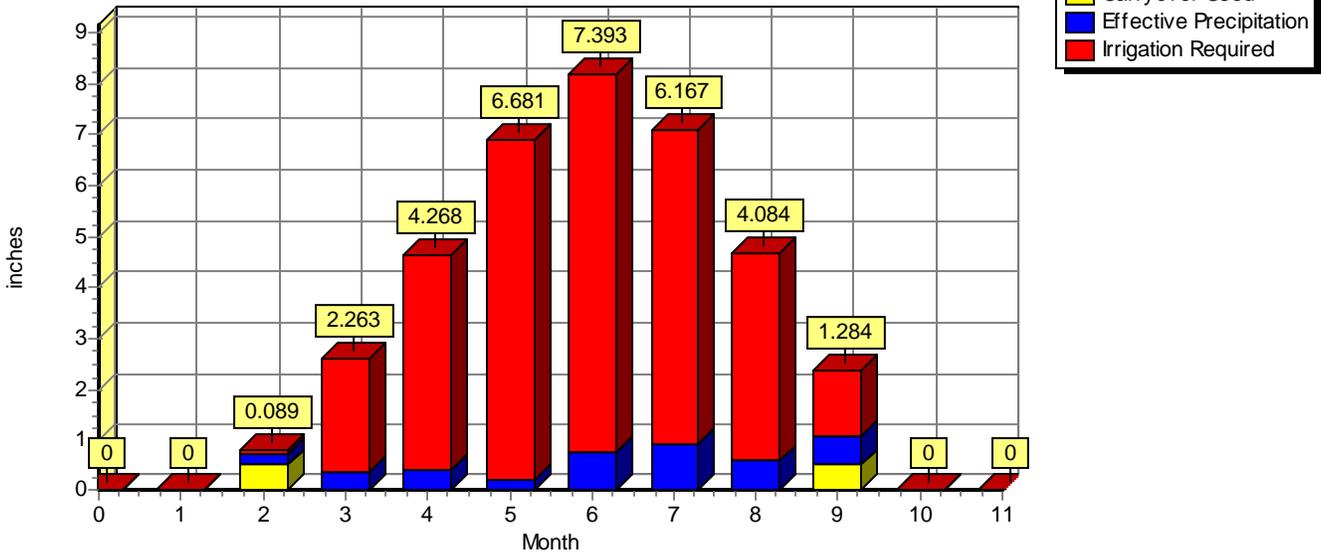
Begin Growth: **3/15** End Growth: **10/30**

Net irrigation application: **2** inches

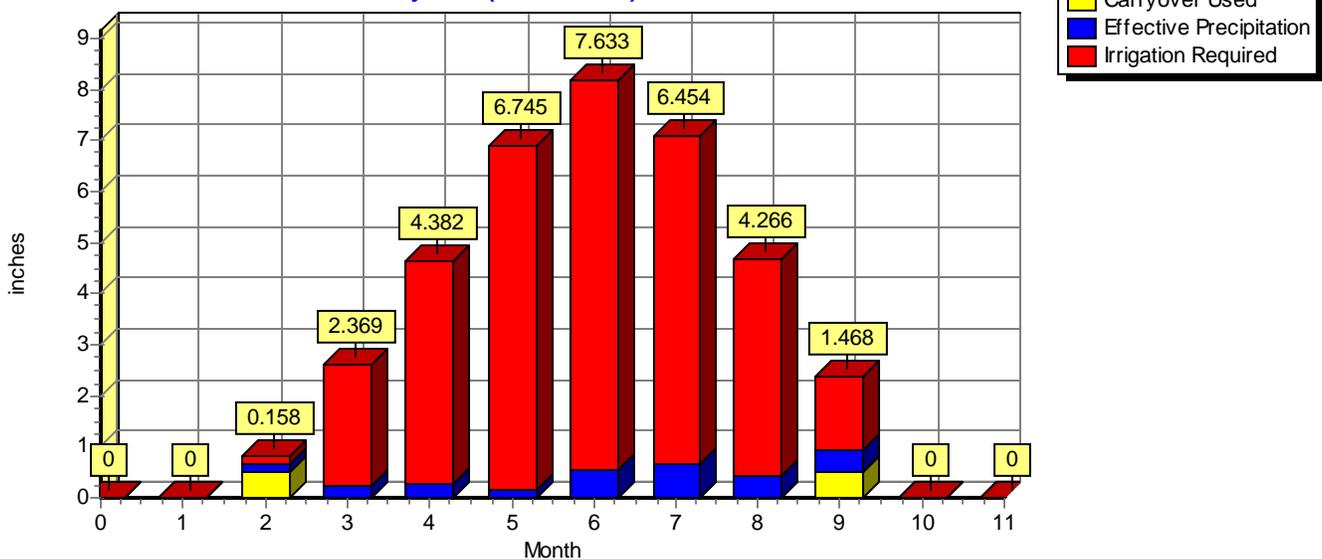
Estimated carryover moisture used at season:

Begin: **0.5** inches End: **0.5** inches

Irrigation Water Requirements
Normal Year (50% chance)



Irrigation Water Requirements
Dry Year (80% chance)



Irrigation Water Requirements

Crop Data Summary

Job: Aztec	Crop: Potato, late, storage
Location: Bloomfield	County: San Juan, NM
By: Rhett	Date: 01/31/05
Weather Station: BLOOMFIELD 3 SE	Sta No: NM1063
Latitude: 3640 Longitude: 10758	Elevation: 5800 feet above sea level
Computation Method: Blaney Criddle (TR21)	Net irrigation application: 1 inches
Crop Curve: Blaney Criddle Annual Crop	Estimated carryover moisture used at season:
Begin Growth: 4/1 End Growth: 10/15	Begin: 0.5 inches End: 0.5 inches

Month	Total Monthly ET (3) inches	Dry Year 80% Chance (1)		Normal Year 50% Chance (1)		Average Daily ETc inches	Peak Daily ETPk inches
		Effective Precipitation inches	Net Irrigation Requirements inches (2)	Effective Precipitation inches	Net Irrigation Requirements inches (2)		
January	0.00	0.00	0.00	0.00	0.00	0.00	
February	0.00	0.00	0.00	0.00	0.00	0.00	
March	0.00	0.00	0.00	0.00	0.00	0.00	
April	0.95	0.18	0.27	0.26	0.20	0.03	
May	2.99	0.20	2.79	0.29	2.70	0.10	0.11
June	7.00	0.12	6.88	0.18	6.83	0.23	0.27
July	10.95	0.54	10.41	0.77	10.18	0.35	0.40
August	10.70	0.67	10.02	0.97	9.73	0.35	0.39
September	7.17	0.40	6.77	0.58	6.60	0.23	0.26
October	1.89	0.19	1.20	0.27	1.11	0.13	
November	0.00	0.00	0.00	0.00	0.00	0.00	
December	0.00	0.00	0.00	0.00	0.00	0.00	
TOTAL	41.65	2.30	38.35	3.31	37.34		

(1) For 80 percent occurrence, growing season effective precipitation will be equaled or exceeded 8 out of 10 years. For 50 percent chance occurrence, effective precipitation will be equaled or exceeded 1 out of 2 years.

(2) Net irrigation requirements is adjusted for carryover moisture used at the beginning of the season and carryover moisture used at the end of the growing season.

(3) ET Evapotranspiration) is adjusted upwards 10% per 1000 meters above sea level.

Date: 7/21/2005

Irrigation Water Requirements

Monthly Crop Water Requirements

Job: **Aztec**

Crop: **Potato, late, storage**

Location: **Bloomfield**

Date: **01/31/05**

Computation Method: **Blaney Criddle (TR21)**

Crop Curve: **Blaney Criddle Annual Crop**

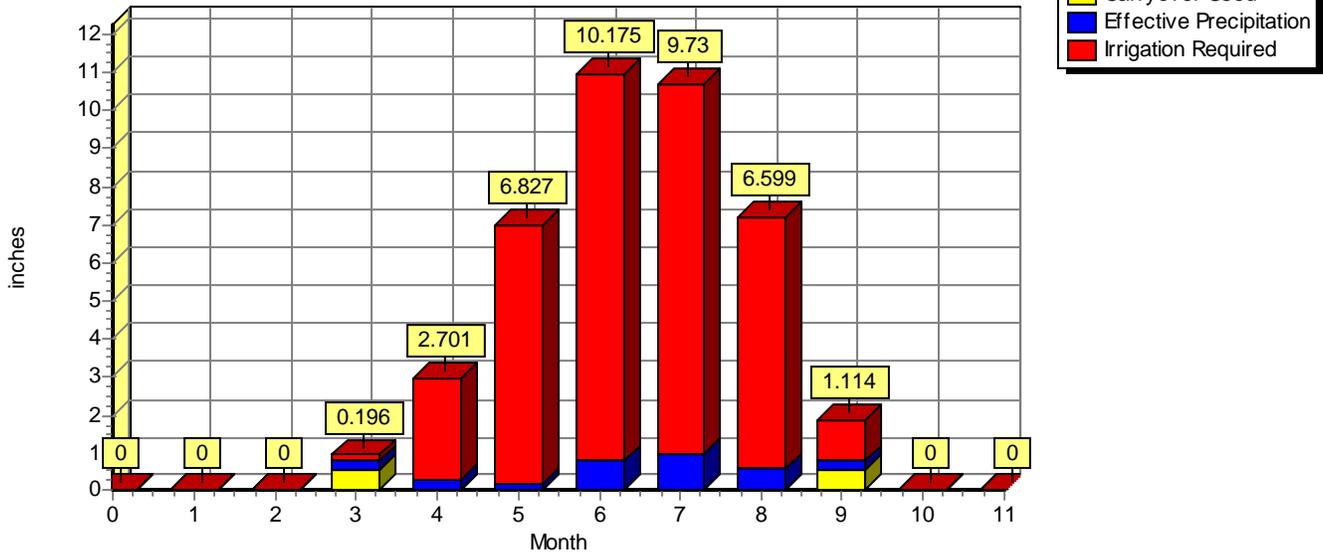
Begin Growth: **4/1** End Growth: **10/15**

Net irrigation application: **1** inches

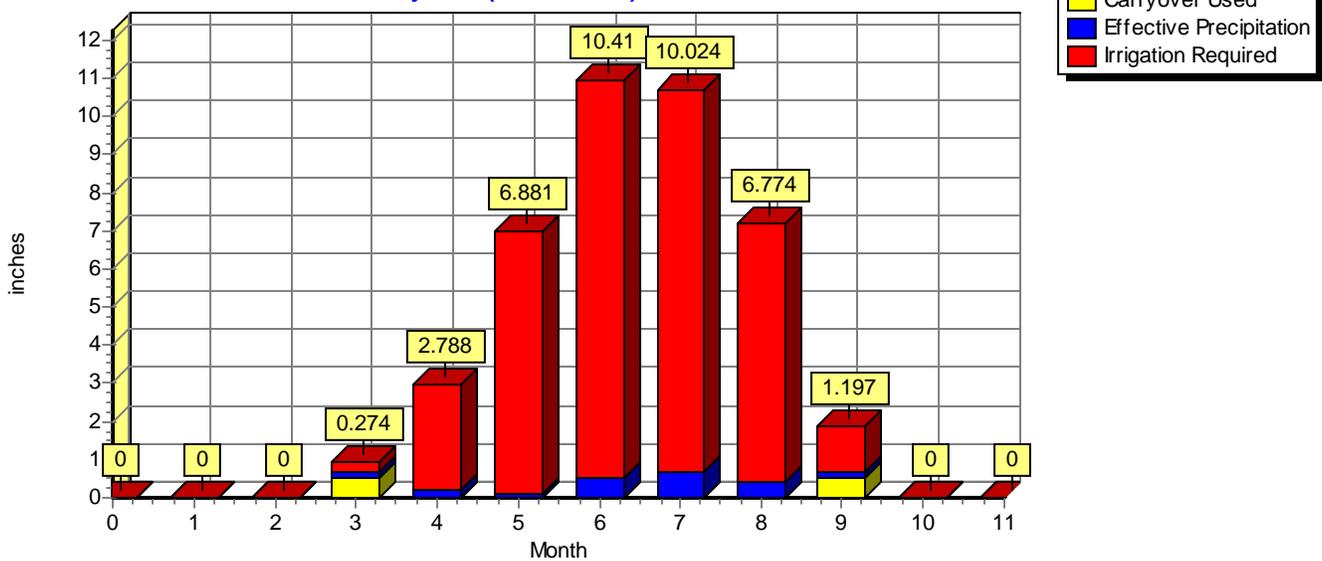
Estimated carryover moisture used at season:

Begin: **0.5** inches End: **0.5** inches

**Irrigation Water Requirements
Normal Year (50% chance)**



**Irrigation Water Requirements
Dry Year (80% chance)**



Irrigation Water Requirements

Crop Data Summary

Job: Aztec	Crop: Tree Farm
Location: Bloomfield	County: San Juan, NM
By: Rhett	Date: 01/31/05
Weather Station: BLOOMFIELD 3 SE	Sta No: NM1063
Latitude: 3640 Longitude: 10758	Elevation: 5800 feet above sea level
Computation Method: Blaney Criddle (TR21)	Net irrigation application: 1 inches
Crop Curve: Blaney Criddle Perennial Crop	Estimated carryover moisture used at season:
Begin Growth: 4/1 End Growth: 10/30	Begin: 0.5 inches End: 0.5 inches

Month	Total Monthly ET (3) inches	Dry Year 80% Chance (1)		Normal Year 50% Chance (1)		Average Daily ETc inches	Peak Daily ETPk inches
		Effective Precipitation inches	Net Irrigation Requirements inches (2)	Effective Precipitation inches	Net Irrigation Requirements inches (2)		
January	0.00	0.00	0.00	0.00	0.00	0.00	
February	0.00	0.00	0.00	0.00	0.00	0.00	
March	0.00	0.00	0.00	0.00	0.00	0.00	
April	1.55	0.18	0.86	0.26	0.78	0.05	
May	4.46	0.22	4.24	0.31	4.15	0.14	0.16
June	7.15	0.12	7.03	0.18	6.97	0.24	0.27
July	8.40	0.47	7.93	0.67	7.73	0.27	0.31
August	6.36	0.53	5.83	0.76	5.60	0.21	0.23
September	2.93	0.32	2.61	0.45	2.41	0.09	0.11
October	0.89	0.32	0.07	0.46	0.00	0.03	
November	0.00	0.00	0.00	0.00	0.00	0.00	
December	0.00	0.00	0.00	0.00	0.00	0.00	
TOTAL	31.73	2.15	28.58	3.10	27.64		

(1) For 80 percent occurrence, growing season effective precipitation will be equaled or exceeded 8 out of 10 years. For 50 percent chance occurrence, effective precipitation will be equaled or exceeded 1 out of 2 years.

(2) Net irrigation requirements is adjusted for carryover moisture used at the beginning of the season and carryover moisture used at the end of the growing season.

(3) ET Evapotranspiration) is adjusted upwards 10% per 1000 meters above sea level.

Date: 7/21/2005

Irrigation Water Requirements

Monthly Crop Water Requirements

Job: **Aztec**

Crop: **Tree Farm**

Location: **Bloomfield**

Date: **01/31/05**

Computation Method: **Blaney Criddle (TR21)**

Crop Curve: **Blaney Criddle Perennial Crop**

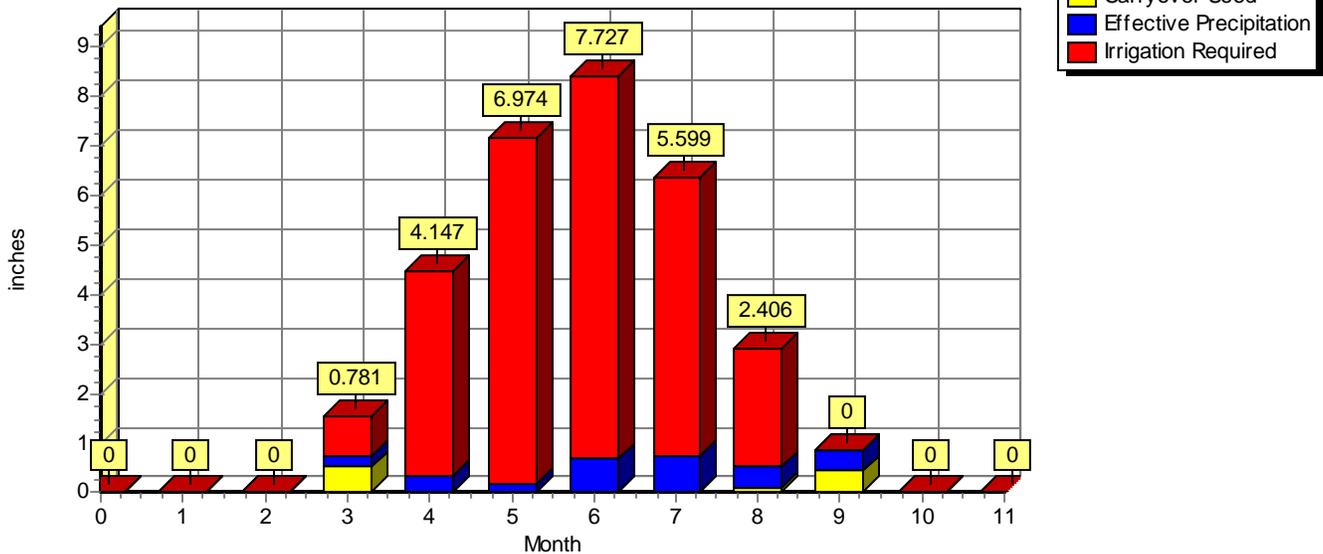
Begin Growth: **4/1** End Growth: **10/30**

Net irrigation application: **1** inches

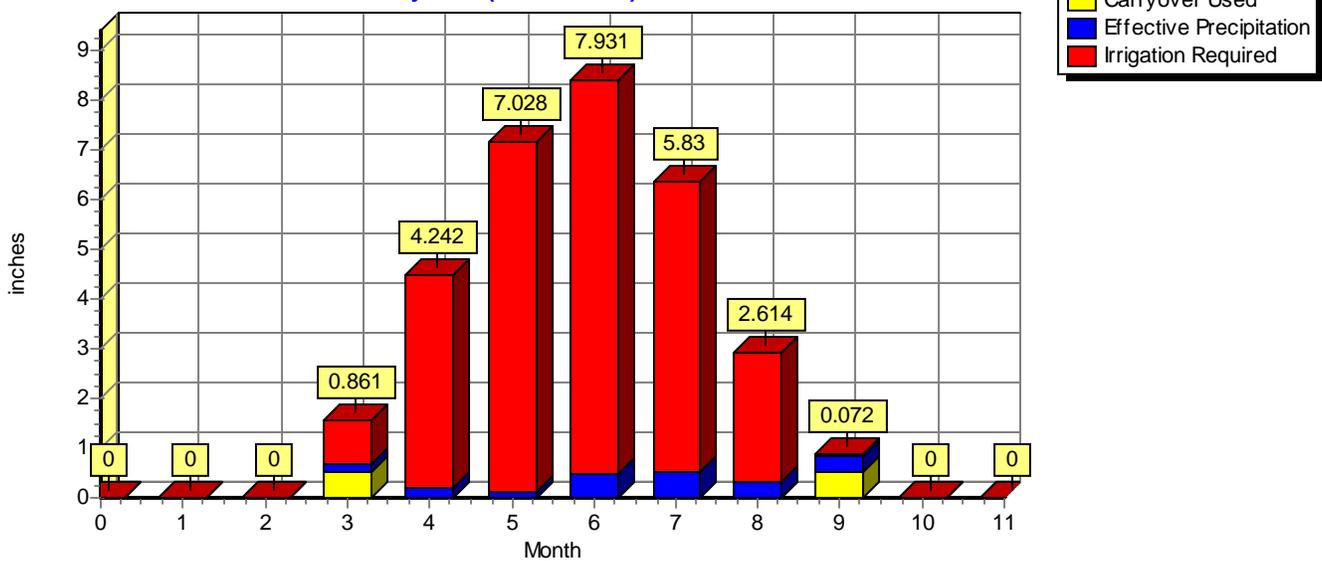
Estimated carryover moisture used at season:

Begin: **0.5** inches End **0.5** inches

Irrigation Water Requirements
Normal Year (50% chance)



Irrigation Water Requirements
Dry Year (80% chance)



Irrigation Water Requirements

Crop Data Summary

Job: Aztec	Crop: Wheat, winter, grain
Location: Bloomfield	County: San Juan, NM
By: Rhett	Date: 01/31/05
Weather Station: BLOOMFIELD 3 SE	Sta No: NM1063
Latitude: 3640 Longitude: 10758	Elevation: 5800 feet above sea level
Computation Method: Blaney Criddle (TR21)	Net irrigation application: 1 inches
Crop Curve: Blaney Criddle Annual Crop	Estimated carryover moisture used at season:
Begin Growth: 9/1 End Growth: 7/15	Begin: 0.5 inches End: 0.5 inches

Month	Total Monthly ET (3) inches	Dry Year 80% Chance (1)		Normal Year 50% Chance (1)		Average Daily ETc inches	Peak Daily ETPk inches
		Effective Precipitation inches	Net Irrigation Requirements inches (2)	Effective Precipitation inches	Net Irrigation Requirements inches (2)		
January	0.51	0.18	0.33	0.26	0.25	0.02	0.02
February	0.83	0.18	0.65	0.26	0.57	0.03	0.03
March	1.90	0.26	1.64	0.38	1.52	0.06	0.07
April	3.35	0.21	3.14	0.30	3.05	0.11	0.13
May	6.16	0.24	5.93	0.34	5.82	0.20	0.23
June	9.58	0.14	9.44	0.20	9.38	0.32	0.36
July	5.78	0.27	5.00	0.39	4.88	0.39	
August	0.00	0.00	0.00	0.00	0.00	0.00	
September	1.97	0.29	1.18	0.42	1.06	0.06	
October	1.20	0.34	0.86	0.49	0.71	0.04	0.04
November	0.63	0.26	0.37	0.37	0.26	0.02	0.02
December	0.48	0.14	0.33	0.21	0.27	0.02	0.02
TOTAL	32.40	2.52	28.87	3.63	27.77		

(1) For 80 percent occurrence, growing season effective precipitation will be equaled or exceeded 8 out of 10 years. For 50 percent chance occurrence, effective precipitation will be equaled or exceeded 1 out of 2 years.

(2) Net irrigation requirements is adjusted for carryover moisture used at the beginning of the season and carryover moisture used at the end of the growing season.

(3) ET Evapotranspiration) is adjusted upwards 10% per 1000 meters above sea level.

Date: 7/21/2005

Irrigation Water Requirements

Monthly Crop Water Requirements

Job: **Aztec**

Crop: **Wheat, winter, grain**

Location: **Bloomfield**

Date: **01/31/05**

Computation Method: **Blaney Criddle (TR21)**

Crop Curve: **Blaney Criddle Annual Crop**

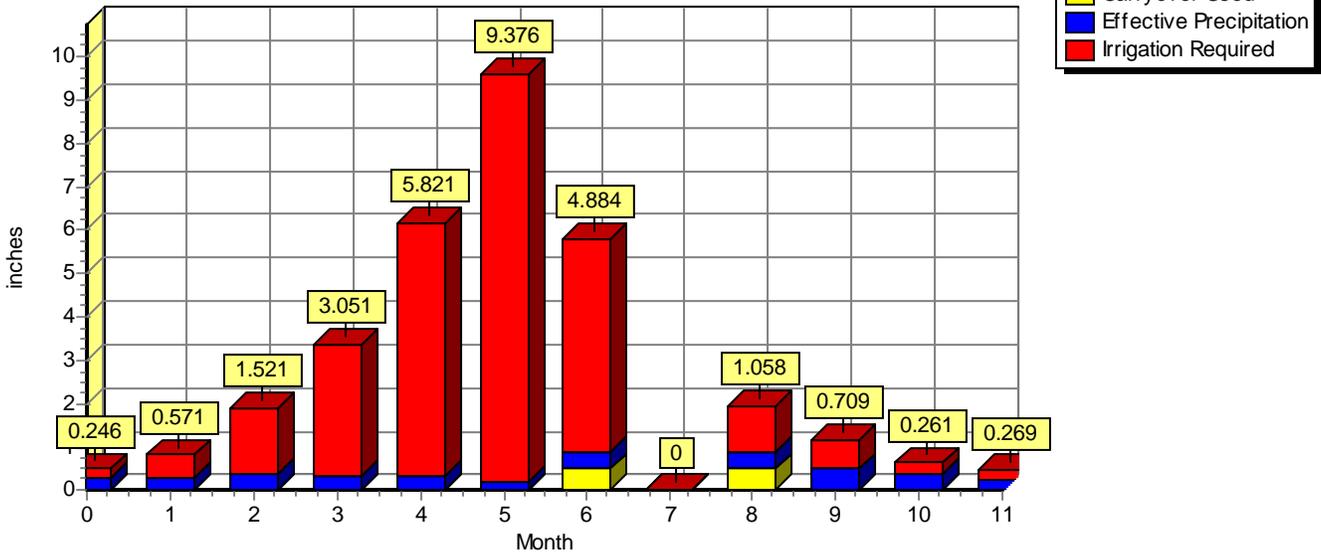
Begin Growth: **9/1** End Growth: **7/15**

Net irrigation application: **1** inches

Estimated carryover moisture used at season:

Begin: **0.5** inches End: **0.5** inches

**Irrigation Water Requirements
Normal Year (50% chance)**



**Irrigation Water Requirements
Dry Year (80% chance)**

