

Irrigation Water Requirements

Crop Data Summary

Job: Grants	Crop: Alfalfa, hay, northern
Location: Cibola County	County: Cibola, NM
By: MAS	Date: 07/20/05
Weather Station: GRANTS AIRPORT	Sta No: NM3682
Latitude: 3510 Longitude: 10754	Elevation: 6520 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: 5/1 End Growth: 9/30	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	0.00	0.00	0.00	0.00	0.00	0.00	
May	3.96	0.24	3.22	0.32	3.13	0.13	
June	7.43	0.23	7.20	0.32	7.11	0.25	0.28
July	8.73	0.83	7.90	1.15	7.58	0.28	0.32
August	7.30	0.92	6.38	1.26	6.03	0.24	0.27
September	4.58	0.55	3.53	0.76	3.32	0.15	
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	32.00	2.78	28.23	3.83	27.18		

(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: 7/26/2005

Irrigation Water Requirements

Monthly Crop Water Requirements

Job: **Grants**

Crop: **Alfalfa, hay, northern**

Location: **Cibola County**

Date: **07/20/05**

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

Crop Curve: **Blaney Criddle Perennial Crop**

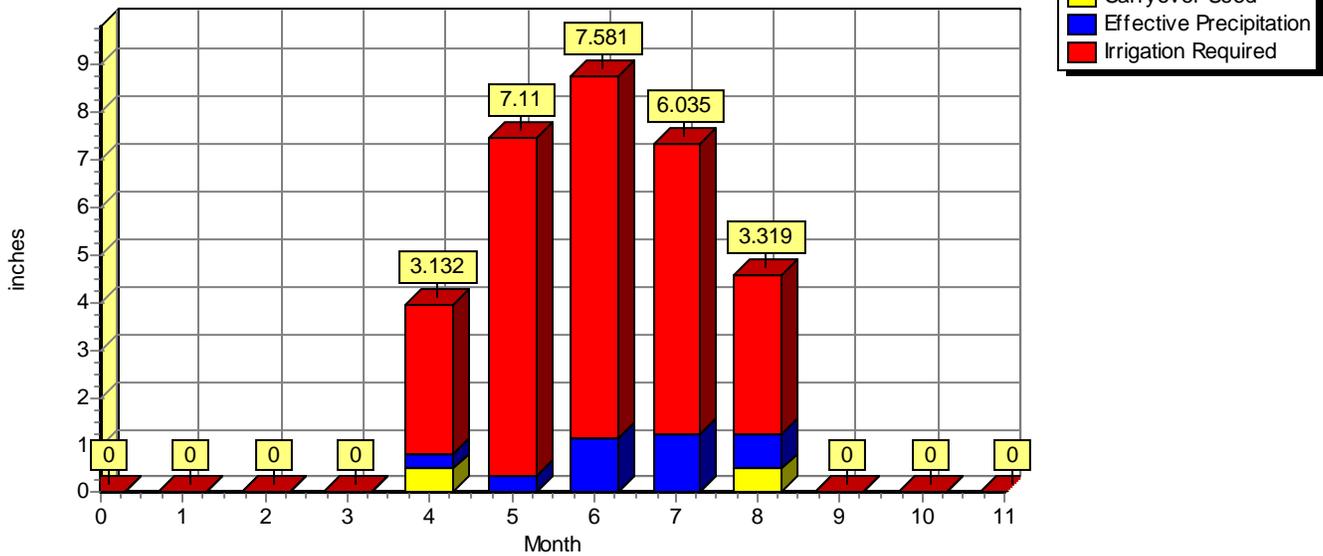
Begin Growth: **5/1** End Growth: **9/30**

Net irrigation application: **1** inches

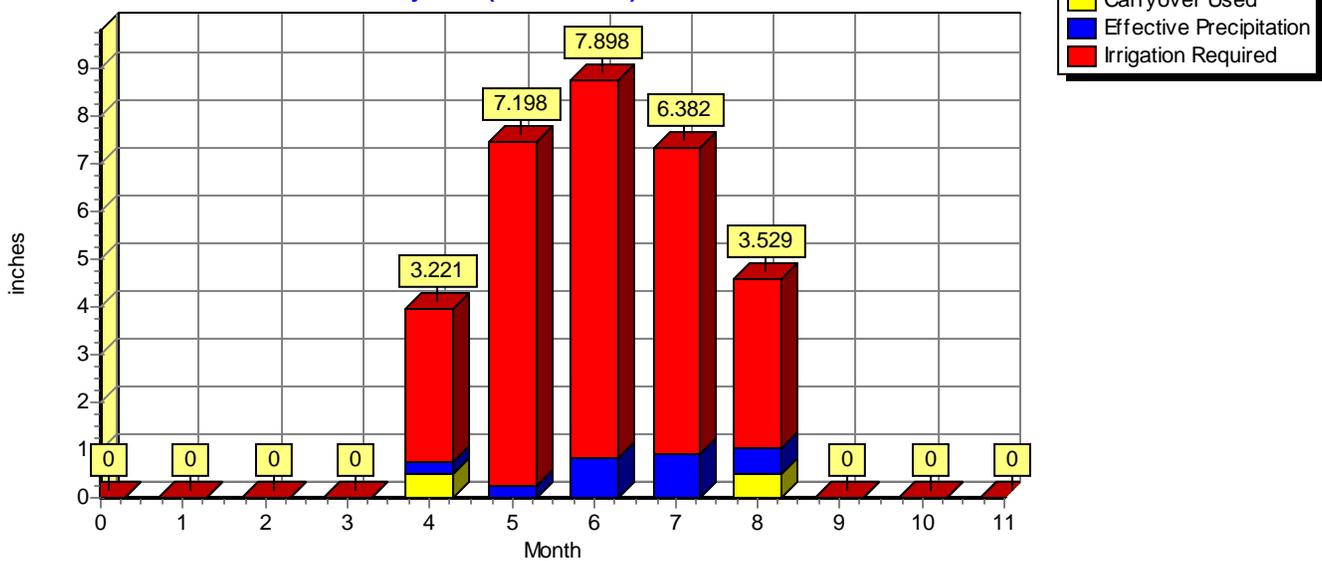
Estimated carryover moisture used at season:

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: Grants	Crop: Apples, mature w cover
Location: Cibola County	County: Cibola, NM
By: MAS	Date: 07/20/05
Weather Station: GRANTS AIRPORT	Sta No: NM3682
Latitude: 3510 Longitude: 10754	Elevation: 6520 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: 9/30	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	2.19	0.16	1.53	0.22	1.47	0.07	
May	5.02	0.26	4.76	0.36	4.66	0.16	0.18
June	7.43	0.23	7.20	0.32	7.11	0.25	0.28
July	8.73	0.83	7.90	1.15	7.58	0.28	0.32
August	7.30	0.92	6.38	1.26	6.03	0.24	0.27
September	4.58	0.55	3.53	0.76	3.32	0.15	
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	35.26	2.96	31.30	4.08	30.18		

(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: 7/26/2005

Irrigation Water Requirements

Monthly Crop Water Requirements

Job: **Grants**

Crop: **Apples, mature w cover**

Location: **Cibola County**

Date: **07/20/05**

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

Crop Curve: **Blaney Criddle Perennial Crop**

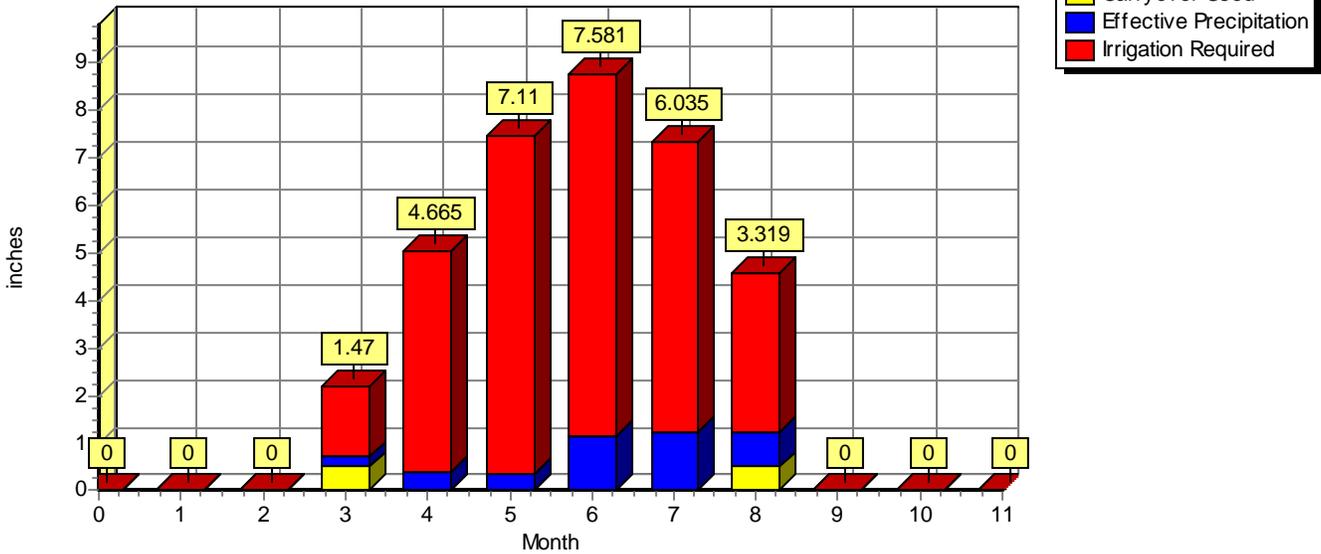
Begin Growth: **4/1** End Growth: **9/30**

Net irrigation application: **1** inches

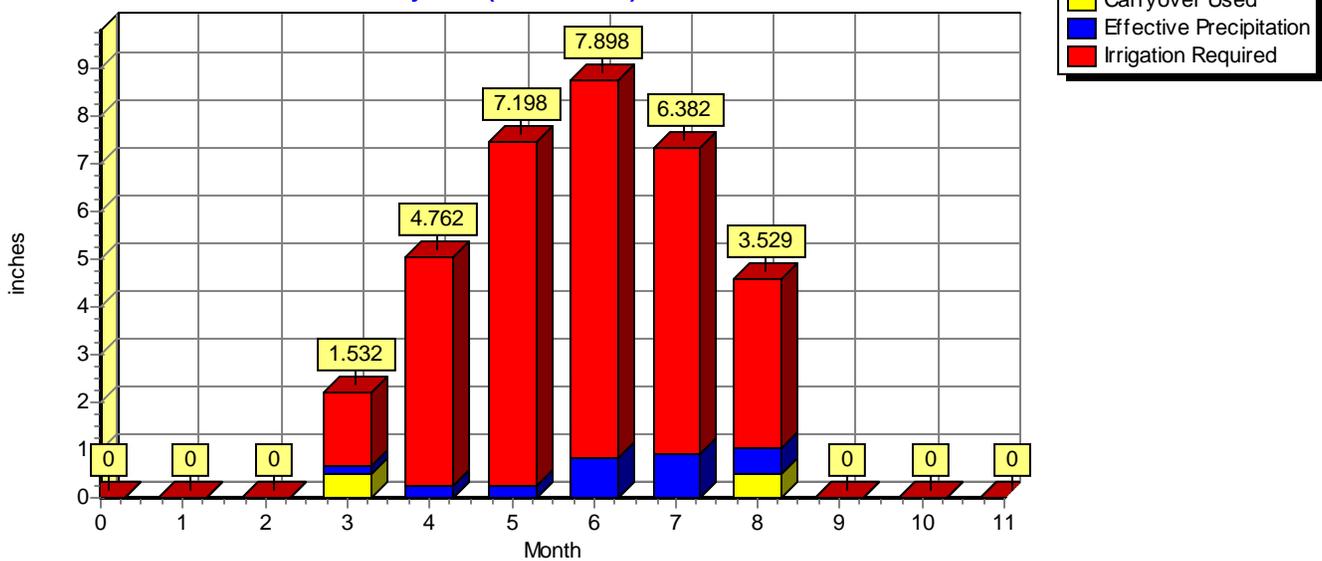
Estimated carryover moisture used at season:

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: Grants	Crop: Apples, mature w/o cover
Location: Cibola County	County: Cibola, NM
By: MAS	Date: 07/20/05
Weather Station: GRANTS AIRPORT	Sta No: NM3682
Latitude: 3510 Longitude: 10754	Elevation: 6520 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: 9/30	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	1.41	0.15	0.75	0.21	0.69	0.05	
May	3.99	0.24	3.74	0.34	3.65	0.13	0.15
June	6.31	0.22	6.09	0.30	6.01	0.21	0.24
July	7.45	0.78	6.67	1.07	6.37	0.24	0.27
August	5.58	0.83	4.74	1.15	4.43	0.18	0.20
September	2.51	0.49	1.52	0.68	1.34	0.08	
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	27.24	2.72	23.52	3.75	22.49		

(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: 7/26/2005

Irrigation Water Requirements

Monthly Crop Water Requirements

Job: **Grants**

Crop: **Apples, mature w/o cover**

Location: **Cibola County**

Date: **07/20/05**

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

Crop Curve: **Blaney Criddle Perennial Crop**

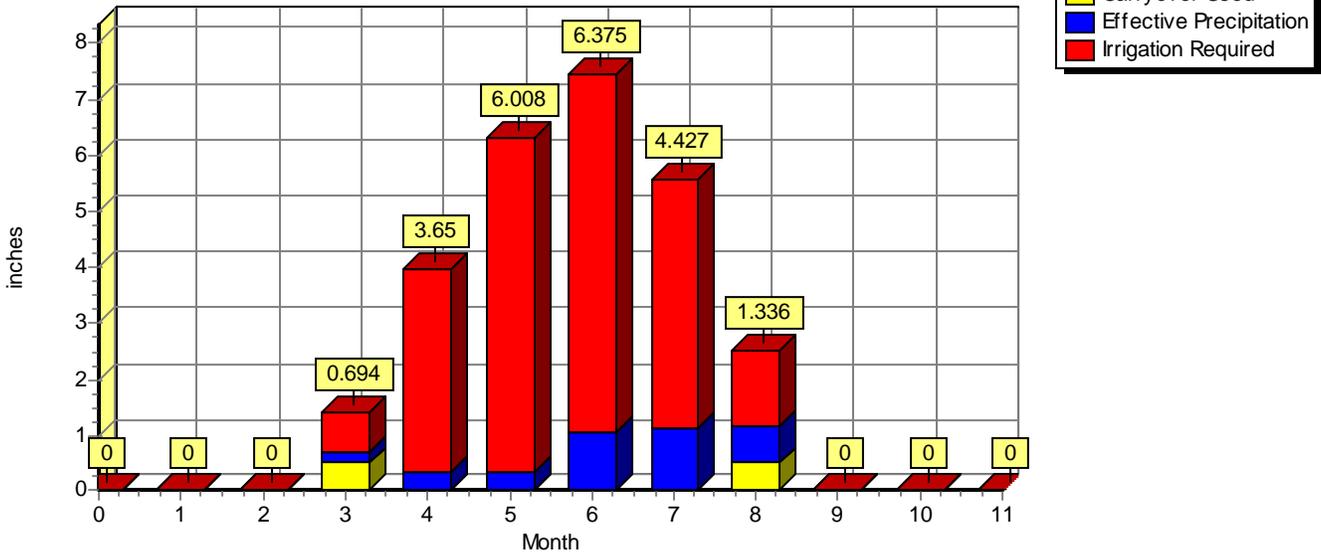
Begin Growth: **4/1** End Growth: **9/30**

Net irrigation application: **1** inches

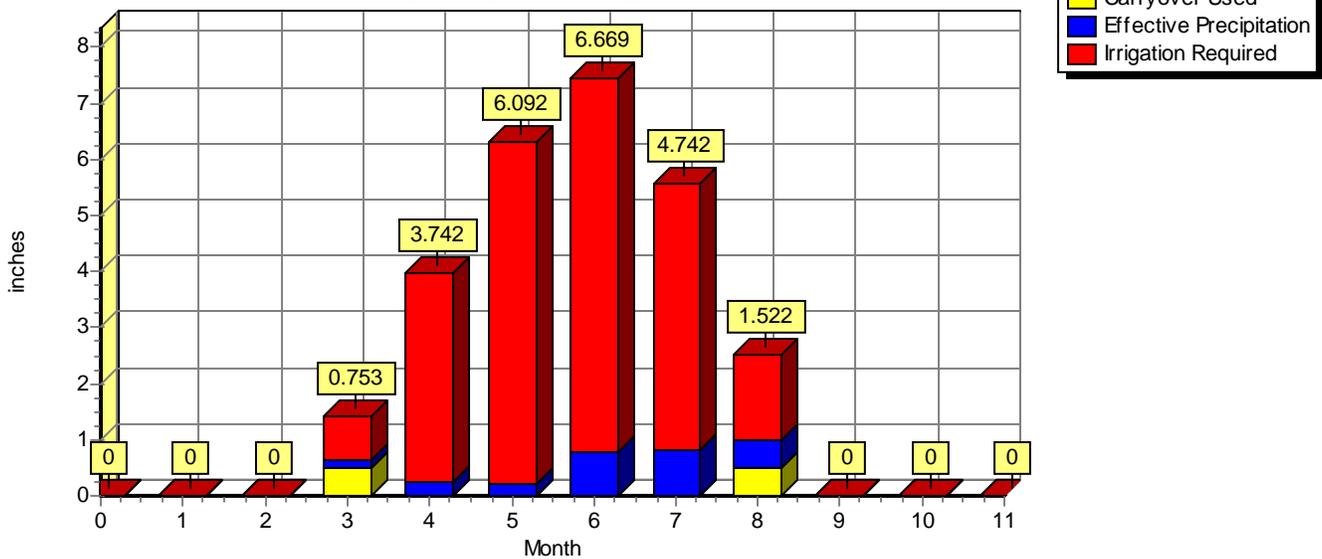
Estimated carryover moisture used at season:

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: Grants	Crop: Corn, sweet
Location: Cibola County	County: Cibola, NM
By: MAS	Date: 07/20/05
Weather Station: GRANTS AIRPORT	Sta No: NM3682
Latitude: 3510 Longitude: 10754	Elevation: 6520 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: 5/1 End Growth: 8/30	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	0.00	0.00	0.00	0.00	0.00	0.00	
May	1.95	0.21	1.24	0.29	1.16	0.06	
June	5.80	0.21	5.59	0.29	5.51	0.19	0.22
July	8.46	0.82	7.64	1.13	7.32	0.27	0.31
August	6.90	0.88	5.52	1.21	5.19	0.23	
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	23.11	2.13	19.99	2.93	19.18		

(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: 7/26/2005

Irrigation Water Requirements

Monthly Crop Water Requirements

Job: **Grants**

Crop: **Corn, sweet**

Location: **Cibola County**

Date: **07/20/05**

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

Crop Curve: **Blaney Criddle Annual Crop**

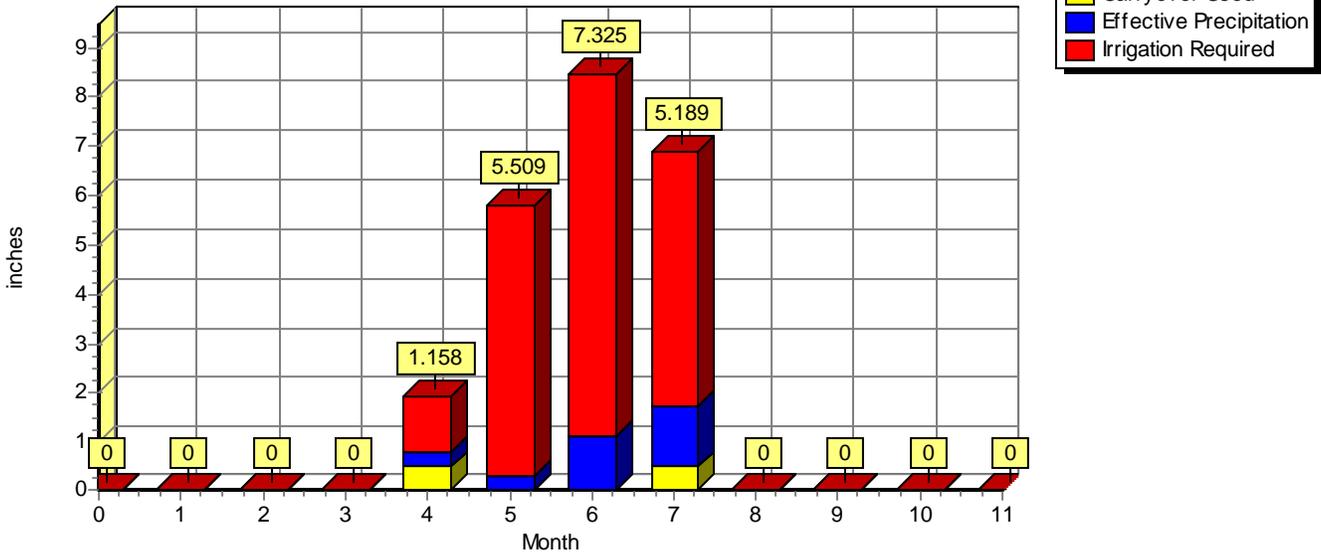
Begin Growth: **5/1** End Growth: **8/30**

Net irrigation application: **1** inches

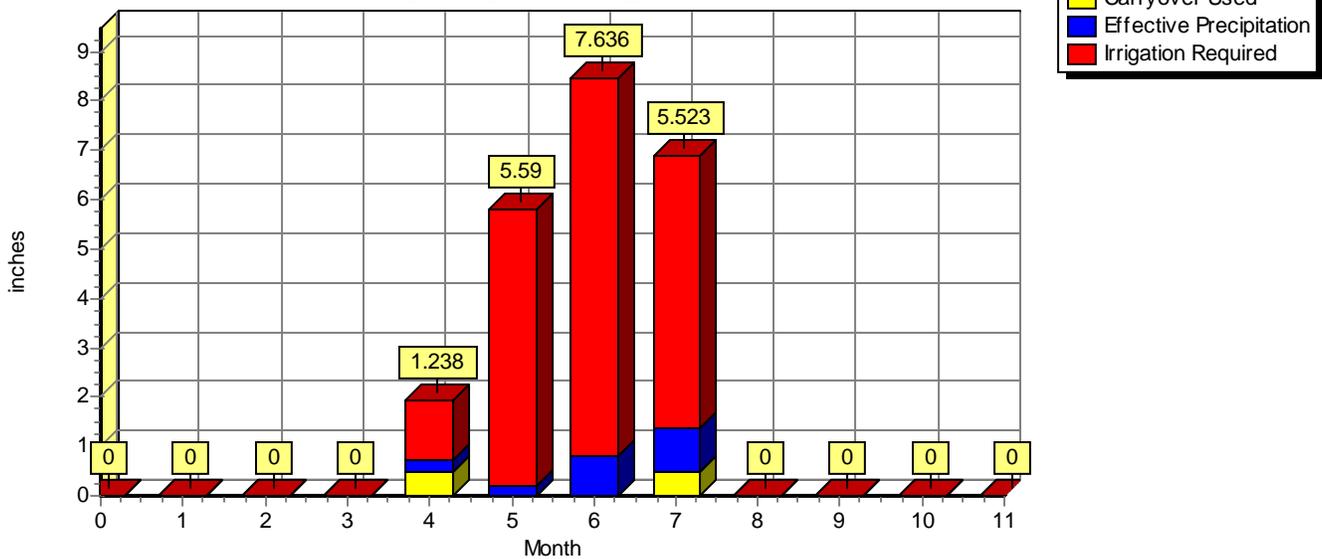
Estimated carryover moisture used at season:

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: Grants	Crop: Grain, spring
Location: Cibola County	County: Cibola, NM
By: MAS	Date: 07/20/05
Weather Station: GRANTS AIRPORT	Sta No: NM3682
Latitude: 3510 Longitude: 10754	Elevation: 6520 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: 6/1 End Growth: 8/30	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	0.00	0.00	0.00	0.00	0.00	0.00	
May	0.00	0.00	0.00	0.00	0.00	0.00	
June	3.52	0.18	2.84	0.25	2.77	0.12	
July	9.60	0.88	8.72	1.21	8.39	0.31	0.35
August	3.53	0.72	2.31	1.00	2.03	0.12	
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	16.66	1.78	13.87	2.46	13.20		

(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: 7/26/2005

Irrigation Water Requirements

Monthly Crop Water Requirements

Job: **Grants**

Crop: **Grain, spring**

Location: **Cibola County**

Date: **07/20/05**

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

Crop Curve: **Blaney Criddle Annual Crop**

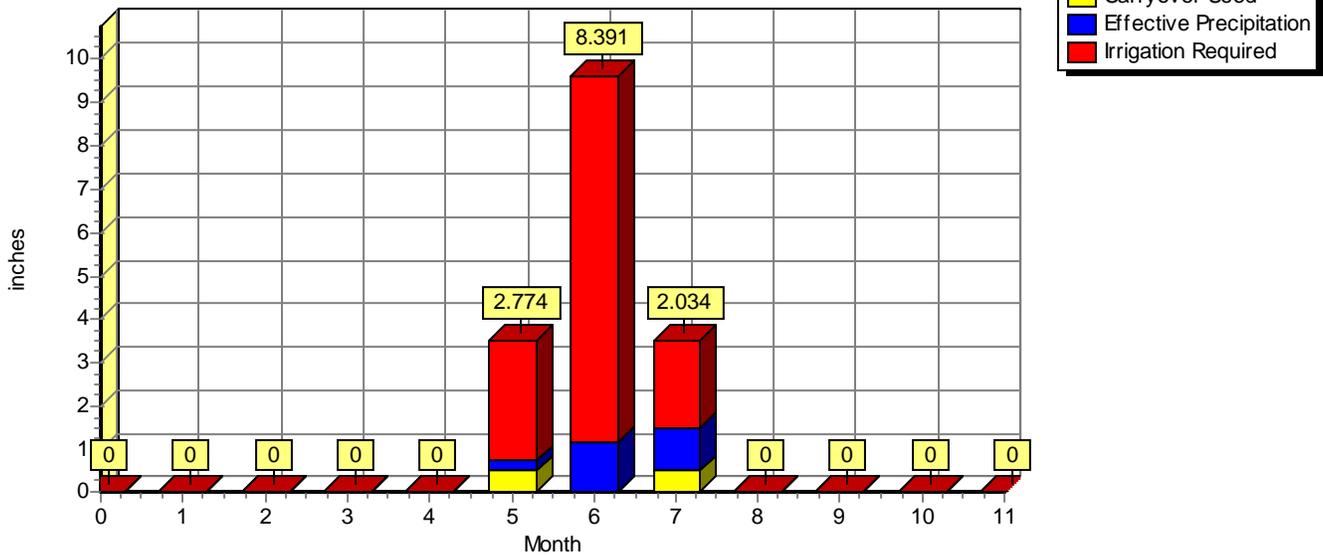
Begin Growth: **6/1** End Growth: **8/30**

Net irrigation application: **1** inches

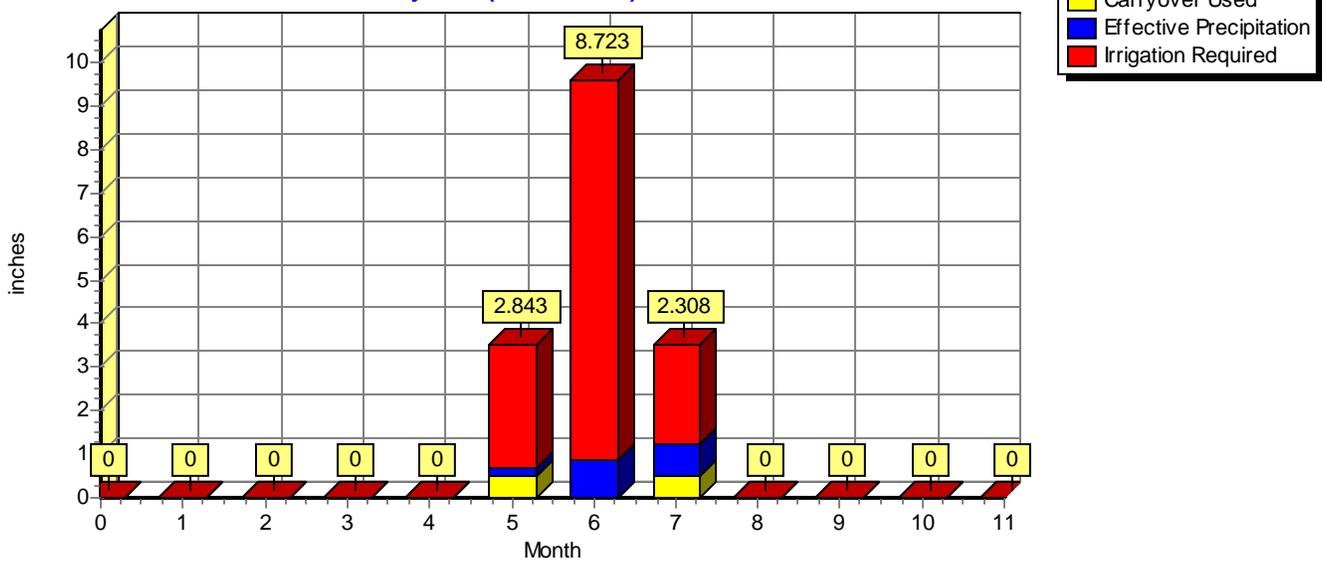
Estimated carryover moisture used at season:

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: Grants	Crop: Pasture, cool season grass
Location: Cibola County	County: Cibola, NM
By: MAS	Date: 07/20/05
Weather Station: GRANTS AIRPORT	Sta No: NM3682
Latitude: 3510 Longitude: 10754	Elevation: 6520 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: 5/1 End Growth: 9/30	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	0.00	0.00	0.00	0.00	0.00	0.00	
May	3.28	0.23	2.56	0.31	2.47	0.11	
June	6.08	0.22	5.86	0.30	5.78	0.20	0.23
July	7.26	0.77	6.49	1.06	6.20	0.23	0.27
August	6.23	0.86	5.37	1.19	5.04	0.20	0.23
September	4.02	0.54	2.98	0.74	2.78	0.13	
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	26.87	2.61	23.26	3.60	22.27		

(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: 7/26/2005

Irrigation Water Requirements

Monthly Crop Water Requirements

Job: **Grants**

Crop: **Pasture, cool season grass**

Location: **Cibola County**

Date: **07/20/05**

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

Crop Curve: **Blaney Criddle Perennial Crop**

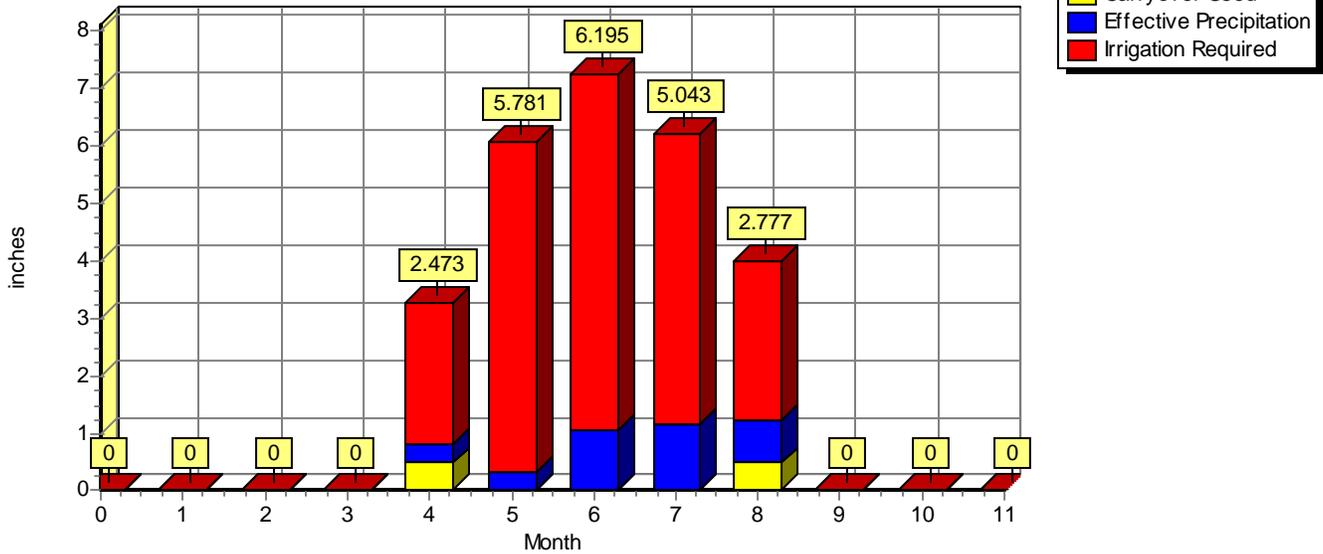
Begin Growth: **5/1** End Growth: **9/30**

Net irrigation application: **1** inches

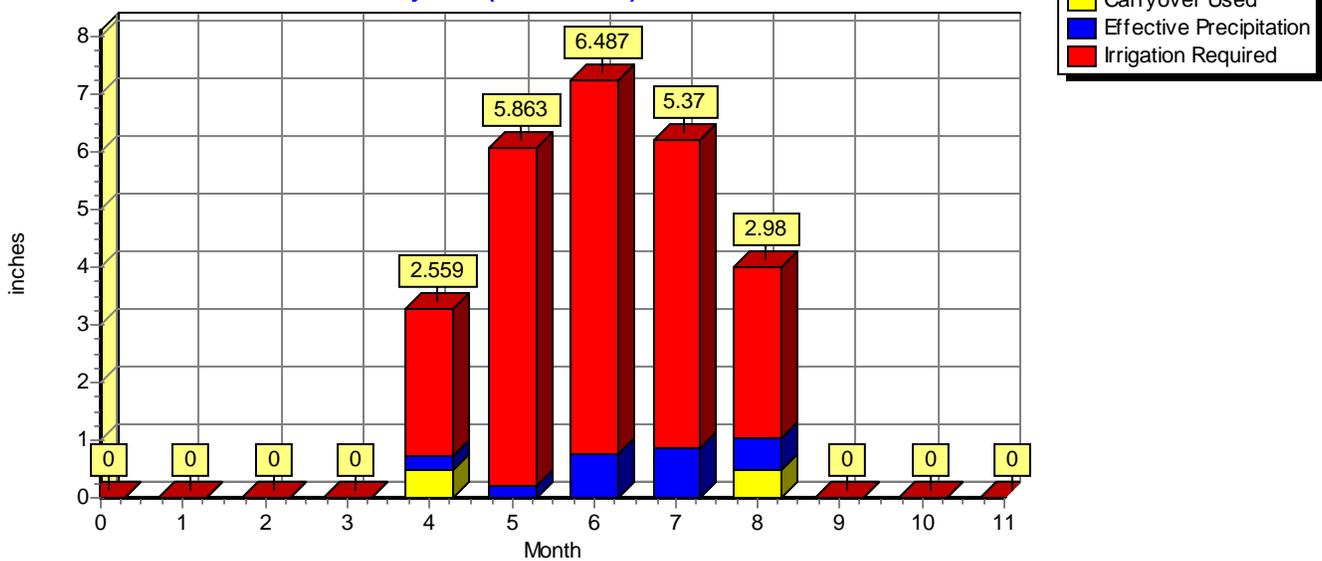
Estimated carryover moisture used at season:

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: Grants	Crop: Winter Barley, grain
Location: Cibola County	County: Cibola, NM
By: MAS	Date: 07/20/05
Weather Station: GRANTS AIRPORT	Sta No: NM3682
Latitude: 3510 Longitude: 10754	Elevation: 6520 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: 6/10	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	0.59	0.18	0.42	0.24	0.35	0.02	0.02
February	0.88	0.13	0.75	0.18	0.70	0.03	0.04
March	1.89	0.21	1.68	0.29	1.60	0.06	0.07
April	3.29	0.18	3.12	0.25	3.05	0.11	0.13
May	5.93	0.27	5.66	0.37	5.55	0.19	0.22
June	2.66	0.08	2.08	0.11	2.05	0.27	
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	1.77	0.47	0.80	0.65	0.62	0.06	
October	1.11	0.38	0.73	0.53	0.58	0.04	0.04
November	0.65	0.23	0.43	0.31	0.34	0.02	0.02
December	0.53	0.20	0.33	0.28	0.25	0.02	0.02
TOTAL	19.31	2.33	15.98	3.21	15.09		

(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: 7/26/2005

Irrigation Water Requirements

Monthly Crop Water Requirements

Job: **Grants**

Crop: **Winter Barley, grain**

Location: **Cibola County**

Date: **07/20/05**

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

Crop Curve: **Blaney Criddle Annual Crop**

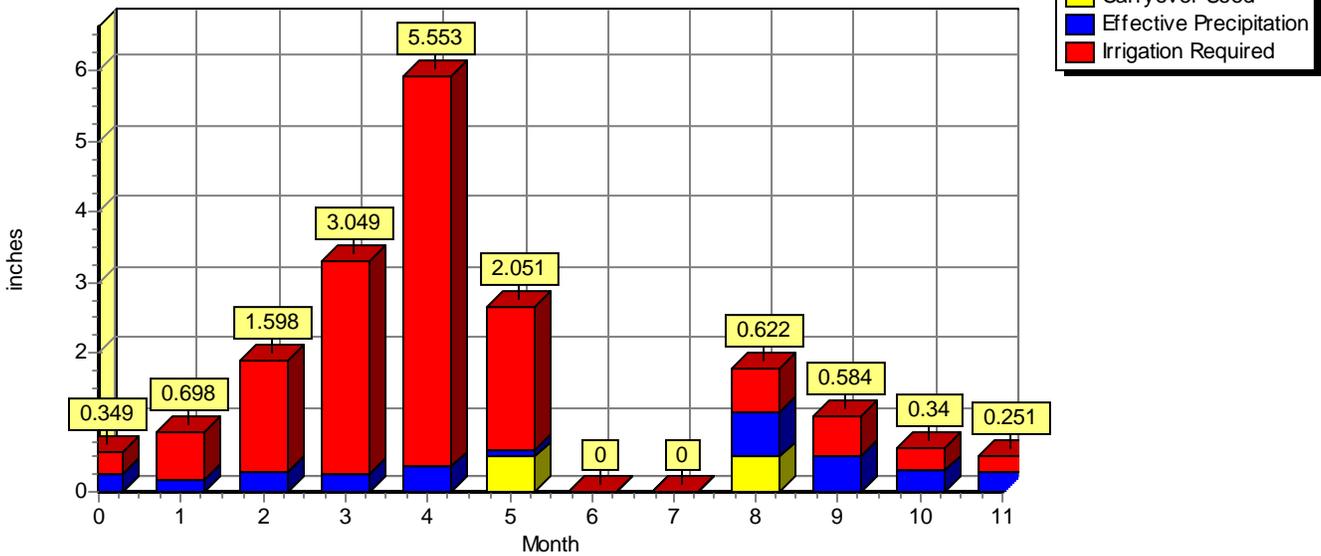
Begin Growth: **9/1** End Growth: **6/10**

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)**

