

Irrigation Water Requirements

Crop Data Summaries

Natrona County, Wyoming

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Irrigation Water Requirements Crop Data Summary

Job: Casper	Crop: Alfalfa Hay
Location: Casper	County: Natrona, WY
By: L Cornia	Date: 01/17/07
Weather Station: CASPER WSO AP	Sta No: WY1570
Latitude: 4255 Longitude: 10628	Elevation: 5340 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: 1 inches End: 1 inches
Begin Growth: 5/8 End Growth: 9/28	

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	2.49	0.78	0.71	1.03	0.46	0.10	
June	6.31	1.11	5.20	1.46	4.85	0.21	0.24
July	8.13	1.23	6.90	1.62	6.50	0.26	0.31
August	6.75	0.94	5.82	1.24	5.52	0.22	0.26
September	3.54	0.55	1.98	0.73	1.81	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	27.22	4.61	20.61	6.08	19.14		

(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: 1/22/2007

Irrigation Water Requirements Crop Data Summary

Job: Casper	Crop: Barley
Location: Casper	County: Natrona, WY
By: L Cornia	Date: 01/17/07
Weather Station: CASPER WSO AP	Sta No: WY1570
Latitude: 4255 Longitude: 10628	Elevation: 5340 feet above sea level
Computation Method: Blaney Criddle (TR21)	Net irrigation application: 2 inches
Crop Curve: Blaney Criddle Annual Crop	Estimated carryover moisture used at season: Begin: 1 inches End: 1 inches
Begin Growth: 4/22 End Growth: 8/30	

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	0.24	0.15	0.00	0.19	0.00	0.03	
May	2.48	1.01	0.56	1.34	0.19	0.08	0.09
June	6.61	1.12	5.49	1.48	5.13	0.22	0.25
July	8.17	1.23	6.94	1.63	6.54	0.26	0.32
August	2.17	0.71	0.47	0.93	0.24	0.07	
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	19.68	4.22	13.46	5.57	12.11		

(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: 1/22/2007

Irrigation Water Requirements Crop Data Summary

Job: Casper	Crop: Corn, Grain
Location: Casper	County: Natrona, WY
By: L Cornia	Date: 01/17/07
Weather Station: CASPER WSO AP	Sta No: WY1570
Latitude: 4255 Longitude: 10628	Elevation: 5340 feet above sea level
Computation Method: Blaney Criddle (TR21)	Net irrigation application: 2 inches
Crop Curve: Blaney Criddle Annual Crop	Estimated carryover moisture used at season: Begin: 1 inches End: 1 inches
Begin Growth: 5/23 End Growth: 9/18	

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	0.58	0.25	0.00	0.34	0.00	0.06	
June	3.37	0.94	1.75	1.24	1.37	0.11	0.12
July	7.25	1.17	6.08	1.54	5.71	0.23	0.28
August	6.59	0.93	5.66	1.23	5.36	0.21	0.25
September	2.26	0.36	0.90	0.47	0.79	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	20.04	3.65	14.39	4.81	13.23		

(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: 1/22/2007

Irrigation Water Requirements Crop Data Summary

Job: Casper	Crop: Corn, Silage
Location: Casper	County: Natrona, WY
By: L Cornia	Date: 01/17/07
Weather Station: CASPER WSO AP	Sta No: WY1570
Latitude: 4255 Longitude: 10628	Elevation: 5340 feet above sea level
Computation Method: Blaney Criddle (TR21)	Net irrigation application: 2 inches
Crop Curve: Blaney Criddle Annual Crop	Estimated carryover moisture used at season:
Begin Growth: 5/23 End Growth: 9/18	Begin: 1 inches End: 1 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	0.57	0.25	0.00	0.33	0.00	0.06	
June	3.13	0.93	1.51	1.22	1.14	0.10	0.11
July	6.64	1.13	5.51	1.49	5.15	0.21	0.25
August	6.79	0.94	5.85	1.24	5.55	0.22	0.26
September	2.50	0.36	1.14	0.48	1.02	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	19.63	3.61	14.01	4.77	12.86		

(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: 1/22/2007

Irrigation Water Requirements Crop Data Summary

Job: Casper	Crop: Grass Hay
Location: Casper	County: Natrona, WY
By: L Cornia	Date: 01/17/07
Weather Station: CASPER WSO AP	Sta No: WY1570
Latitude: 4255 Longitude: 10628	Elevation: 5340 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: 1 inches End: 1 inches
Begin Growth: 4/22 End Growth: 10/18	

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	0.64	0.16	0.00	0.21	0.00	0.07	
May	3.27	1.06	1.70	1.40	1.31	0.11	0.12
June	5.16	1.04	4.13	1.37	3.79	0.17	0.19
July	6.75	1.14	5.61	1.50	5.25	0.22	0.26
August	5.77	0.89	4.88	1.17	4.60	0.19	0.22
September	3.36	0.59	2.73	0.78	2.48	0.11	0.12
October	1.15	0.19	0.00	0.25	0.00	0.06	
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	26.11	5.06	19.05	6.68	17.43		

(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: 1/22/2007

Irrigation Water Requirements Crop Data Summary

Job: Casper	Crop: Oats
Location: Casper	County: Natrona, WY
By: L Cornia	Date: 01/17/07
Weather Station: CASPER WSO AP	Sta No: WY1570
Latitude: 4255 Longitude: 10628	Elevation: 5340 feet above sea level
Computation Method: Blaney Criddle (TR21)	Net irrigation application: 2 inches
Crop Curve: Blaney Criddle Annual Crop	Estimated carryover moisture used at season:
Begin Growth: 4/22 End Growth: 8/30	Begin: 1 inches End: 1 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	0.24	0.15	0.00	0.19	0.00	0.03	
May	2.48	1.01	0.56	1.34	0.19	0.08	0.09
June	6.61	1.12	5.49	1.48	5.13	0.22	0.25
July	8.17	1.23	6.94	1.63	6.54	0.26	0.32
August	2.17	0.71	0.47	0.93	0.24	0.07	
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	19.68	4.22	13.46	5.57	12.11		

(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: 1/22/2007

Irrigation Water Requirements Crop Data Summary

Job: Casper	Crop: Pasture (grass)
Location: Casper	County: Natrona, WY
By: L Cornia	Date: 01/17/07
Weather Station: CASPER WSO AP	Sta No: WY1570
Latitude: 4255 Longitude: 10628	Elevation: 5340 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: 1 inches End: 1 inches
Begin Growth: 4/22 End Growth: 10/18	

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	0.64	0.16	0.00	0.21	0.00	0.07	
May	3.27	1.06	1.70	1.40	1.31	0.11	0.12
June	5.16	1.04	4.13	1.37	3.79	0.17	0.19
July	6.75	1.14	5.61	1.50	5.25	0.22	0.26
August	5.77	0.89	4.88	1.17	4.60	0.19	0.22
September	3.36	0.59	2.73	0.78	2.48	0.11	0.12
October	1.15	0.19	0.00	0.25	0.00	0.06	
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	26.11	5.06	19.05	6.68	17.43		

(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: 1/22/2007