

Irrigation Water Requirements

Crop Data Summaries

Campbell County, Wyoming

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Irrigation Water Requirements Crop Data Summary

Job: Gillette	Crop: Alfalfa Hay
Location: Gillette	County: Campbell, WY
By: L Cornia	Date: 01/17/07
Weather Station: GILLETTE 9 ESE	Sta No: WY3855
Latitude: 4416 Longitude: 10519	Elevation: 4640 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: 5/7 End Growth: 9/29	

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	2.25	0.45	0.81	0.63	0.63	0.09	
June	5.81	0.58	5.22	0.82	4.99	0.19	0.22
July	7.35	0.59	6.75	0.83	6.51	0.24	0.28
August	5.88	0.44	5.44	0.62	5.27	0.19	0.22
September	3.13	0.43	1.70	0.60	1.53	0.11	
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	24.42	2.49	19.93	3.49	18.93		

(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: Gillette	Crop: Barley
Location: Gillette	County: Campbell, WY
By: L Cornia	Date: 01/17/07
Weather Station: GILLETTE 9 ESE	Sta No: WY3855
Latitude: 4416 Longitude: 10519	Elevation: 4640 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: 4/21 End Growth: 8/29	

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	0.14	0.00	0.19	0.00	0.02	
May	2.27	0.56	0.82	0.79	0.54	0.07	0.08
June	6.14	0.59	5.55	0.83	5.31	0.20	0.23
July	7.26	0.59	6.67	0.83	6.43	0.23	0.28
August	1.77	0.33	0.44	0.46	0.30	0.06	
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	17.69	2.21	13.48	3.10	12.59		

(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: Gillette	Crop: Grass Hay
Location: Gillette	County: Campbell, WY
By: L Cornia	Date: 01/17/07
Weather Station: GILLETTE 9 ESE	Sta No: WY3855
Latitude: 4416 Longitude: 10519	Elevation: 4640 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: 4/21 End Growth: 10/20	

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	0.63	0.14	0.00	0.20	0.00	0.06	
May	2.91	0.58	1.82	0.81	1.53	0.09	0.10
June	4.75	0.55	4.20	0.77	3.98	0.16	0.17
July	6.10	0.55	5.55	0.78	5.33	0.20	0.23
August	5.03	0.42	4.61	0.59	4.44	0.16	0.19
September	2.87	0.44	2.22	0.62	1.95	0.09	0.10
October	1.01	0.22	0.00	0.31	0.00	0.05	
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	23.31	2.91	18.40	4.09	17.22		

(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.

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Date: 1/22/2007

Irrigation Water Requirements Crop Data Summary

Job: Gillette	Crop: Oats
Location: Gillette	County: Campbell, WY
By: L Cornia	Date: 01/17/07
Weather Station: GILLETTE 9 ESE	Sta No: WY3855
Latitude: 4416 Longitude: 10519	Elevation: 4640 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: 4/21 End Growth: 8/29	

Month	Total Monthly ET (3) inches	Dry Year 80% Chance (1)		Normal Year 50% Chance (1)		Average Daily ETc inches	Peak Daily ETPk inches
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March	0.00	0.00	0.00	0.00	0.00	0.00	
April	0.24	0.14	0.00	0.19	0.00	0.02	
May	2.27	0.56	0.82	0.79	0.54	0.07	0.08
June	6.14	0.59	5.55	0.83	5.31	0.20	0.23
July	7.26	0.59	6.67	0.83	6.43	0.23	0.28
August	1.77	0.33	0.44	0.46	0.30	0.06	
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	17.69	2.21	13.48	3.10	12.59		

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Date: 1/22/2007

Irrigation Water Requirements Crop Data Summary

Job: Gillette	Crop: Pasture (grass)
Location: Gillette	County: Campbell, WY
By: L Cornia	Date: 01/17/07
Weather Station: GILLETTE 9 ESE	Sta No: WY3855
Latitude: 4416 Longitude: 10519	Elevation: 4640 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: 4/21 End Growth: 10/20	

Month	Total Monthly ET (3) inches	Dry Year 80% Chance (1)		Normal Year 50% Chance (1)		Average Daily ETc inches	Peak Daily ETPk inches
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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	0.63	0.14	0.00	0.20	0.00	0.06	
May	2.91	0.58	1.82	0.81	1.53	0.09	0.10
June	4.75	0.55	4.20	0.77	3.98	0.16	0.17
July	6.10	0.55	5.55	0.78	5.33	0.20	0.23
August	5.03	0.42	4.61	0.59	4.44	0.16	0.19
September	2.87	0.44	2.22	0.62	1.95	0.09	0.10
October	1.01	0.22	0.00	0.31	0.00	0.05	
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	23.31	2.91	18.40	4.09	17.22		

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