

Irrigation Water Requirements

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Carbon County, Wyoming

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Irrigation Water Requirements Crop Data Summary

Job: Encampment	Crop: Grass Hay
Location: Encampment	County: Carbon, WY
By: L Cornia	Date: 01/17/07
Weather Station: ENCAMPMENT 11 ESE	Sta No: WY3045
Latitude: 4111 Longitude: 10637	Elevation: 7600 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: 5/6 End Growth: 10/9	

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	2.70	0.96	0.74	1.26	0.45	0.10	
June	6.02	0.78	5.24	1.03	4.99	0.20	0.23
July	7.57	0.91	6.66	1.19	6.38	0.24	0.29
August	6.63	0.73	5.90	0.95	5.68	0.21	0.25
September	4.12	0.56	3.31	0.73	3.09	0.13	0.15
October	0.90	0.14	0.00	0.19	0.00	0.10	
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	27.93	4.08	21.86	5.34	20.59		

(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: Encampment	Crop: Pasture (grass)
Location: Encampment	County: Carbon, WY
By: L Cornia	Date: 01/17/07
Weather Station: ENCAMPMENT 11 ESE	Sta No: WY3045
Latitude: 4111 Longitude: 10637	Elevation: 7600 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: 5/6 End Growth: 10/9	

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	2.70	0.96	0.74	1.26	0.45	0.10	
June	6.02	0.78	5.24	1.03	4.99	0.20	0.23
July	7.57	0.91	6.66	1.19	6.38	0.24	0.29
August	6.63	0.73	5.90	0.95	5.68	0.21	0.25
September	4.12	0.56	3.31	0.73	3.09	0.13	0.15
October	0.90	0.14	0.00	0.19	0.00	0.10	
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	27.93	4.08	21.86	5.34	20.59		

(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

Figure 3 Encampment – Grass Hay (August 1 limited season)

Irrigation Water Requirements Crop Data Summary

Job: Encampment Special1	Crop: Grass Hay
Location: Encampment limited season	County: Carbon, WY
By: L Cornia	Date: 01/22/07
Weather Station: ENCAMPMENT 11 ESE	Sta No: WY3045
Latitude: 4111 Longitude: 10637	Elevation: 7600 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: 5/6 End Growth: 8/1	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	1.80	0.54	0.25	0.72	0.08	0.07	
June	4.27	0.65	3.61	0.86	3.40	0.14	0.16
July	5.70	0.73	4.13	0.96	3.89	0.18	0.21
August	0.18	0.02	0.00	0.03	0.00	0.18	
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	11.95	1.95	8.00	2.57	7.38		

(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

Figure 4 Encampment – Pasture (grass) (August 1 limited season)

Irrigation Water Requirements Crop Data Summary

Job: Encampment Special1	Crop: Pasture (grass)
Location: Encampment limited season	County: Carbon, WY
By: L Cornia	Date: 01/22/07
Weather Station: ENCAMPMENT 11 ESE	Sta No: WY3045
Latitude: 4111 Longitude: 10637	Elevation: 7600 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: 5/6 End Growth: 8/1	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	1.80	0.54	0.25	0.72	0.08	0.07	
June	4.27	0.65	3.61	0.86	3.40	0.14	0.16
July	5.70	0.73	4.13	0.96	3.89	0.18	0.21
August	0.18	0.02	0.00	0.03	0.00	0.18	
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	11.95	1.95	8.00	2.57	7.38		

(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

Figure 5 Encampment – Grass Hay (July 1 limited season)

Irrigation Water Requirements Crop Data Summary

Job: Encampment Special2	Crop: Grass Hay
Location: Encampment limited season	County: Carbon, WY
By: L Cornia	Date: 01/22/07
Weather Station: ENCAMPMENT 11 ESE	Sta No: WY3045
Latitude: 4111 Longitude: 10637	Elevation: 7600 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: 5/6 End Growth: 7/1	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	1.80	0.54	0.25	0.72	0.08	0.07	
June	4.27	0.65	2.75	0.86	2.53	0.14	0.16
July	0.16	0.02	0.00	0.03	0.00	0.16	
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	6.22	1.22	3.00	1.61	2.61		

(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

Figure 6 Encampment – Pasture (grass) (July 1 limited season)

Irrigation Water Requirements Crop Data Summary

Job: Encampment Special2	Crop: Pasture (grass)
Location: Encampment limited season	County: Carbon, WY
By: L Cornia	Date: 01/22/07
Weather Station: ENCAMPMENT 11 ESE	Sta No: WY3045
Latitude: 4111 Longitude: 10637	Elevation: 7600 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: 5/6 End Growth: 7/1	

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	1.80	0.54	0.25	0.72	0.08	0.07	
June	4.27	0.65	2.75	0.86	2.53	0.14	0.16
July	0.16	0.02	0.00	0.03	0.00	0.16	
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	6.22	1.22	3.00	1.61	2.61		

(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: Rawlins	Crop: Alfalfa Hay
Location: Rawlins	County: Carbon, WY
By: L Cornia	Date: 01/17/07
Weather Station: RAWLINS FAA AIRPORT	Sta No: WY7533
Latitude: 4148 Longitude: 10712	Elevation: 6740 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: 5/16 End Growth: 9/23	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	2.18	0.26	0.92	0.37	0.81	0.14	
June	5.97	0.43	5.54	0.62	5.36	0.20	0.22
July	7.92	0.46	7.46	0.66	7.26	0.26	0.30
August	6.49	0.42	6.07	0.60	5.89	0.21	0.25
September	2.82	0.30	1.52	0.42	1.40	0.12	
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	25.38	1.87	21.51	2.67	20.71		

(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: Rawlins	Crop: Barley
Location: Rawlins	County: Carbon, WY
By: L Cornia	Date: 01/17/07
Weather Station: RAWLINS FAA AIRPORT	Sta No: WY7533
Latitude: 4148 Longitude: 10712	Elevation: 6740 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: 5/1 End Growth: 9/8	

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		
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	1.24	0.44	0.00	0.62	0.00	0.04	
June	5.59	0.42	4.97	0.60	4.60	0.19	0.21
July	8.82	0.49	8.33	0.70	8.12	0.28	0.34
August	3.51	0.35	2.19	0.51	2.01	0.11	0.13
September	0.08	0.05	0.00	0.08	0.00	0.01	
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	19.24	1.75	15.49	2.51	14.74		

(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: Rawlins	Crop: Grass Hay
Location: Rawlins	County: Carbon, WY
By: L Cornia	Date: 01/17/07
Weather Station: RAWLINS FAA AIRPORT	Sta No: WY7533
Latitude: 4148 Longitude: 10712	Elevation: 6740 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: 5/1 End Growth: 10/11	

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	2.13	0.46	0.67	0.66	0.48	0.07	
June	4.89	0.41	4.48	0.58	4.31	0.16	0.18
July	6.58	0.43	6.15	0.61	5.97	0.21	0.25
August	5.54	0.40	5.15	0.57	4.98	0.18	0.21
September	3.05	0.38	2.27	0.55	2.05	0.10	0.11
October	0.72	0.12	0.00	0.18	0.00	0.07	
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	22.92	2.20	18.72	3.14	17.78		

(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: Rawlins	Crop: Oats
Location: Rawlins	County: Carbon, WY
By: L Cornia	Date: 01/17/07
Weather Station: RAWLINS FAA AIRPORT	Sta No: WY7533
Latitude: 4148 Longitude: 10712	Elevation: 6740 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: 5/1 End Growth: 9/8	

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	1.24	0.44	0.00	0.62	0.00	0.04	
June	5.59	0.42	4.97	0.60	4.60	0.19	0.21
July	8.82	0.49	8.33	0.70	8.12	0.28	0.34
August	3.51	0.35	2.19	0.51	2.01	0.11	0.13
September	0.08	0.05	0.00	0.08	0.00	0.01	
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	19.24	1.75	15.49	2.51	14.74		

(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: Rawlins	Crop: Pasture (grass)
Location: Rawlins	County: Carbon, WY
By: L Cornia	Date: 01/17/07
Weather Station: RAWLINS FAA AIRPORT	Sta No: WY7533
Latitude: 4148 Longitude: 10712	Elevation: 6740 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: 5/1 End Growth: 10/11	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	2.13	0.46	0.67	0.66	0.48	0.07	
June	4.89	0.41	4.48	0.58	4.31	0.16	0.18
July	6.58	0.43	6.15	0.61	5.97	0.21	0.25
August	5.54	0.40	5.15	0.57	4.98	0.18	0.21
September	3.05	0.38	2.27	0.55	2.05	0.10	0.11
October	0.72	0.12	0.00	0.18	0.00	0.07	
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	22.92	2.20	18.72	3.14	17.78		

(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: Saratoga	Crop: Alfalfa Hay
Location: Saratoga	County: Carbon, WY
By: L Cornia	Date: 01/17/07
Weather Station: SARATOGA 1 SSE	Sta No: WY7990
Latitude: 4127 Longitude: 10649	Elevation: 6790 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: 5/14 End Growth: 9/21	

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	1.87	0.29	0.58	0.41	0.46	0.10	
June	5.96	0.49	5.48	0.69	5.28	0.20	0.22
July	7.64	0.62	7.02	0.88	6.76	0.25	0.29
August	6.23	0.46	5.77	0.65	5.58	0.20	0.23
September	2.62	0.28	1.34	0.40	1.22	0.12	
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	24.32	2.13	20.19	3.02	19.30		

(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: Saratoga	Crop: Barley
Location: Saratoga	County: Carbon, WY
By: L Cornia	Date: 01/17/07
Weather Station: SARATOGA 1 SSE	Sta No: WY7990
Latitude: 4127 Longitude: 10649	Elevation: 6790 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: 4/28 End Growth: 9/5	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	0.07	0.02	0.00	0.03	0.00	0.02	
May	1.96	0.49	0.52	0.69	0.31	0.06	0.07
June	5.83	0.48	5.35	0.68	5.15	0.19	0.22
July	8.29	0.65	7.64	0.92	7.37	0.27	0.32
August	2.88	0.38	1.51	0.54	1.35	0.09	0.10
September	0.03	0.02	0.00	0.02	0.00	0.01	
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	19.06	2.03	15.02	2.89	14.17		

(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: Saratoga	Crop: Grass Hay
Location: Saratoga	County: Carbon, WY
By: L Cornia	Date: 01/17/07
Weather Station: SARATOGA 1 SSE	Sta No: WY7990
Latitude: 4127 Longitude: 10649	Elevation: 6790 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: 4/28 End Growth: 10/13	

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	0.21	0.03	0.00	0.04	0.00	0.07	
May	3.08	0.52	1.75	0.74	1.52	0.10	0.11
June	4.88	0.46	4.42	0.65	4.23	0.16	0.18
July	6.35	0.58	5.77	0.82	5.53	0.20	0.24
August	5.32	0.43	4.89	0.62	4.71	0.17	0.20
September	3.07	0.40	2.37	0.56	2.14	0.10	0.11
October	0.86	0.16	0.00	0.22	0.00	0.07	
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	23.76	2.57	19.19	3.64	18.12		

(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: Saratoga	Crop: Oats
Location: Saratoga	County: Carbon, WY
By: L Cornia	Date: 01/17/07
Weather Station: SARATOGA 1 SSE	Sta No: WY7990
Latitude: 4127 Longitude: 10649	Elevation: 6790 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: 4/28 End Growth: 9/5	

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	0.07	0.02	0.00	0.03	0.00	0.02	
May	1.96	0.49	0.52	0.69	0.31	0.06	0.07
June	5.83	0.48	5.35	0.68	5.15	0.19	0.22
July	8.29	0.65	7.64	0.92	7.37	0.27	0.32
August	2.88	0.38	1.51	0.54	1.35	0.09	0.10
September	0.03	0.02	0.00	0.02	0.00	0.01	
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	19.06	2.03	15.02	2.89	14.17		

(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: Saratoga	Crop: Pasture (grass)
Location: Saratoga	County: Carbon, WY
By: L Cornia	Date: 01/17/07
Weather Station: SARATOGA 1 SSE	Sta No: WY7990
Latitude: 4127 Longitude: 10649	Elevation: 6790 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: 4/28 End Growth: 10/13	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	0.21	0.03	0.00	0.04	0.00	0.07	
May	3.08	0.52	1.75	0.74	1.52	0.10	0.11
June	4.88	0.46	4.42	0.65	4.23	0.16	0.18
July	6.35	0.58	5.77	0.82	5.53	0.20	0.24
August	5.32	0.43	4.89	0.62	4.71	0.17	0.20
September	3.07	0.40	2.37	0.56	2.14	0.10	0.11
October	0.86	0.16	0.00	0.22	0.00	0.07	
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	23.76	2.57	19.19	3.64	18.12		

(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

Figure 17 Saratoga – Grass Hay (August 1 limited season)

Irrigation Water Requirements Crop Data Summary

Job: Saratoga Special1	Crop: Grass Hay
Location: Saratoga limited season	County: Carbon, WY
By: L Cornia	Date: 01/22/07
Weather Station: SARATOGA 1 SSE	Sta No: WY7990
Latitude: 4127 Longitude: 10649	Elevation: 6790 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: 4/28 End Growth: 8/1	Begin: 2 inches End: 0 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	Net Irrigation Requirements	Effective Precipitation	Net Irrigation Requirements		
		inches	inches (2)	inches	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	0.21	0.03	0.00	0.04	0.00	0.07	
May	3.08	0.52	0.75	0.74	0.52	0.10	0.11
June	4.88	0.46	4.42	0.65	4.23	0.16	0.18
July	6.35	0.58	5.77	0.82	5.53	0.20	0.24
August	0.20	0.01	0.19	0.02	0.18	0.20	
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	14.72	1.60	11.12	2.26	10.46		

(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

Figure 18 Saratoga – Pasture (grass) (August 1 limited season)

Irrigation Water Requirements Crop Data Summary

Job: Saratoga Special1	Crop: Pasture (grass)
Location: Saratoga limited season	County: Carbon, WY
By: L Cornia	Date: 01/22/07
Weather Station: SARATOGA 1 SSE	Sta No: WY7990
Latitude: 4127 Longitude: 10649	Elevation: 6790 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: 2 inches End: 0 inches
Begin Growth: 4/28 End Growth: 8/1	

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	0.21	0.03	0.00	0.04	0.00	0.07	
May	3.08	0.52	0.75	0.74	0.52	0.10	0.11
June	4.88	0.46	4.42	0.65	4.23	0.16	0.18
July	6.35	0.58	5.77	0.82	5.53	0.20	0.24
August	0.20	0.01	0.19	0.02	0.18	0.20	
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	14.72	1.60	11.12	2.26	10.46		

(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

Figure 19 Saratoga – Grass Hay (July 1 limited season)

Irrigation Water Requirements Crop Data Summary

Job: Saratoga Special2	Crop: Grass Hay
Location: Saratoga limited season	County: Carbon, WY
By: L Cornia	Date: 01/22/07
Weather Station: SARATOGA 1 SSE	Sta No: WY7990
Latitude: 4127 Longitude: 10649	Elevation: 6790 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: 2 inches End: 0 inches
Begin Growth: 4/28 End Growth: 7/1	

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	0.21	0.03	0.00	0.04	0.00	0.07	
May	3.08	0.52	0.75	0.74	0.52	0.10	0.11
June	4.88	0.46	4.42	0.65	4.23	0.16	0.18
July	0.18	0.02	0.16	0.03	0.15	0.18	
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	8.35	1.02	5.33	1.45	4.91		

(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

Figure 20 Saratoga – Pasture (grass) (July 1 limited season)

Irrigation Water Requirements Crop Data Summary

Job: Saratoga Special2	Crop: Pasture (grass)
Location: Saratoga limited season	County: Carbon, WY
By: L Cornia	Date: 01/22/07
Weather Station: SARATOGA 1 SSE	Sta No: WY7990
Latitude: 4127 Longitude: 10649	Elevation: 6790 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: 2 inches End: 0 inches
Begin Growth: 4/28 End Growth: 7/1	

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	0.21	0.03	0.00	0.04	0.00	0.07	
May	3.08	0.52	0.75	0.74	0.52	0.10	0.11
June	4.88	0.46	4.42	0.65	4.23	0.16	0.18
July	0.18	0.02	0.16	0.03	0.15	0.18	
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	8.35	1.02	5.33	1.45	4.91		

(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