

# Irrigation Water Requirements

## Crop Data Summaries

### Converse County, Wyoming

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## Irrigation Water Requirements Crop Data Summary

Job: <b>Douglas</b>	Crop: <b>Alfalfa Hay</b>
Location: <b>Douglas</b>	County: <b>Converse, WY</b>
By: <b>L Cornia</b>	Date: <b>01/17/07</b>
Weather Station: <b>DOUGLAS AVIATION</b>	Sta No: <b>WY2693</b>
Latitude: <b>4245</b> Longitude: <b>10523</b>	Elevation: <b>4810</b> feet above sea level
Computation Method: <b>Blaney Criddle (TR21)</b>	Net irrigation application: <b>2</b> inches
Crop Curve: <b>Blaney Criddle Perennial Crop</b>	Estimated carryover moisture used at season:
Begin Growth: <b>5/6</b> End Growth: <b>9/25</b>	Begin: <b>1</b> inches      End: <b>1</b> 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	2.64	0.85	0.79	1.12	0.52	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	3.28	0.50	1.79	0.66	1.63	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	
<b>TOTAL</b>	<b>27.11</b>	<b>4.62</b>	<b>20.49</b>	<b>6.09</b>	<b>19.02</b>		

(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: <b>Douglas</b>	Crop: <b>Barley</b>
Location: <b>Douglas</b>	County: <b>Converse, WY</b>
By: <b>L Cornia</b>	Date: <b>01/17/07</b>
Weather Station: <b>DOUGLAS AVIATION</b>	Sta No: <b>WY2693</b>
Latitude: <b>4245</b> Longitude: <b>10523</b>	Elevation: <b>4810</b> feet above sea level
Computation Method: <b>Blaney Criddle (TR21)</b>	Net irrigation application: <b>2</b> inches
Crop Curve: <b>Blaney Criddle Annual Crop</b>	Estimated carryover moisture used at season: Begin: <b>1</b> inches      End: <b>1</b> inches
Begin Growth: <b>4/20</b> End Growth: <b>8/28</b>	

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	0.30	0.18	0.00	0.24	0.00	0.03	
May	2.61	1.02	0.71	1.35	0.33	0.08	0.09
June	6.74	1.13	5.61	1.49	5.24	0.22	0.26
July	7.90	1.21	6.68	1.60	6.29	0.25	0.30
August	1.87	0.65	0.22	0.86	0.01	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	
<b>TOTAL</b>	<b>19.42</b>	<b>4.20</b>	<b>13.22</b>	<b>5.55</b>	<b>11.88</b>		

(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: <b>Douglas</b>	Crop: <b>Corn, Grain</b>
Location: <b>Douglas</b>	County: <b>Converse, WY</b>
By: <b>L Cornia</b>	Date: <b>01/17/07</b>
Weather Station: <b>DOUGLAS AVIATION</b>	Sta No: <b>WY2693</b>
Latitude: <b>4245</b> Longitude: <b>10523</b>	Elevation: <b>4810</b> feet above sea level
Computation Method: <b>Blaney Criddle (TR21)</b>	Net irrigation application: <b>2</b> inches
Crop Curve: <b>Blaney Criddle Annual Crop</b>	Estimated carryover moisture used at season:
Begin Growth: <b>5/22</b> End Growth: <b>9/20</b>	Begin: <b>1</b> inches      End: <b>1</b> 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	0.64	0.29	0.00	0.38	0.00	0.06	
June	3.41	0.94	1.82	1.24	1.43	0.11	0.12
July	7.24	1.17	6.07	1.54	5.69	0.23	0.28
August	6.62	0.93	5.69	1.23	5.39	0.21	0.25
September	2.48	0.39	1.09	0.52	0.96	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	
<b>TOTAL</b>	<b>20.39</b>	<b>3.72</b>	<b>14.67</b>	<b>4.91</b>	<b>13.48</b>		

(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: <b>Douglas</b>	Crop: <b>Corn, Silage</b>
Location: <b>Douglas</b>	County: <b>Converse, WY</b>
By: <b>L Cornia</b>	Date: <b>01/17/07</b>
Weather Station: <b>DOUGLAS AVIATION</b>	Sta No: <b>WY2693</b>
Latitude: <b>4245</b> Longitude: <b>10523</b>	Elevation: <b>4810</b> feet above sea level
Computation Method: <b>Blaney Criddle (TR21)</b>	Net irrigation application: <b>2</b> inches
Crop Curve: <b>Blaney Criddle Annual Crop</b>	Estimated carryover moisture used at season: Begin: <b>1</b> inches      End: <b>1</b> inches
Begin Growth: <b>5/22</b> End Growth: <b>9/20</b>	

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	0.63	0.29	0.00	0.38	0.00	0.06	
June	3.15	0.93	1.57	1.22	1.19	0.11	0.11
July	6.61	1.13	5.48	1.49	5.12	0.21	0.25
August	6.80	0.94	5.86	1.24	5.56	0.22	0.26
September	2.75	0.40	1.34	0.53	1.21	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	
<b>TOTAL</b>	<b>19.94</b>	<b>3.69</b>	<b>14.26</b>	<b>4.86</b>	<b>13.08</b>		

(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: <b>Douglas</b>	Crop: <b>Dry beans</b>
Location: <b>Douglas</b>	County: <b>Converse, WY</b>
By: <b>L Cornia</b>	Date: <b>01/17/07</b>
Weather Station: <b>DOUGLAS AVIATION</b>	Sta No: <b>WY2693</b>
Latitude: <b>4245</b> Longitude: <b>10523</b>	Elevation: <b>4810</b> feet above sea level
Computation Method: <b>Blaney Criddle (TR21)</b>	Net irrigation application: <b>2</b> inches
Crop Curve: <b>Blaney Criddle Annual Crop</b>	Estimated carryover moisture used at season: Begin: <b>1</b> inches      End: <b>1</b> inches
Begin Growth: <b>6/6</b> End Growth: <b>9/14</b>	

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	0.00	0.00	0.00	0.00	0.00	0.00	
June	2.27	0.72	0.55	0.96	0.32	0.09	
July	7.33	1.18	6.15	1.55	5.78	0.24	0.28
August	6.13	0.91	5.22	1.19	4.93	0.20	0.23
September	1.55	0.27	0.28	0.36	0.19	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	
<b>TOTAL</b>	<b>17.27</b>	<b>3.08</b>	<b>12.20</b>	<b>4.06</b>	<b>11.22</b>		

(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: <b>Douglas</b>	Crop: <b>Grass Hay</b>
Location: <b>Douglas</b>	County: <b>Converse, WY</b>
By: <b>L Cornia</b>	Date: <b>01/17/07</b>
Weather Station: <b>DOUGLAS AVIATION</b>	Sta No: <b>WY2693</b>
Latitude: <b>4245</b> Longitude: <b>10523</b>	Elevation: <b>4810</b> feet above sea level
Computation Method: <b>Blaney Criddle (TR21)</b>	Net irrigation application: <b>2</b> inches
Crop Curve: <b>Blaney Criddle Perennial Crop</b>	Estimated carryover moisture used at season:
Begin Growth: <b>4/20</b> End Growth: <b>10/18</b>	Begin: <b>1</b> inches      End: <b>1</b> 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	0.77	0.20	0.00	0.26	0.00	0.07	
May	3.27	1.06	1.78	1.40	1.38	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	
<b>TOTAL</b>	<b>26.24</b>	<b>5.10</b>	<b>19.13</b>	<b>6.73</b>	<b>17.51</b>		

(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: <b>Douglas</b>	Crop: <b>Oats</b>
Location: <b>Douglas</b>	County: <b>Converse, WY</b>
By: <b>L Cornia</b>	Date: <b>01/17/07</b>
Weather Station: <b>DOUGLAS AVIATION</b>	Sta No: <b>WY2693</b>
Latitude: <b>4245</b> Longitude: <b>10523</b>	Elevation: <b>4810</b> feet above sea level
Computation Method: <b>Blaney Criddle (TR21)</b>	Net irrigation application: <b>2</b> inches
Crop Curve: <b>Blaney Criddle Annual Crop</b>	Estimated carryover moisture used at season:
Begin Growth: <b>4/20</b> End Growth: <b>8/28</b>	Begin: <b>1</b> inches      End: <b>1</b> 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	0.30	0.18	0.00	0.24	0.00	0.03	
May	2.61	1.02	0.71	1.35	0.33	0.08	0.09
June	6.74	1.13	5.61	1.49	5.24	0.22	0.26
July	7.90	1.21	6.68	1.60	6.29	0.25	0.30
August	1.87	0.65	0.22	0.86	0.01	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	
<b>TOTAL</b>	<b>19.42</b>	<b>4.20</b>	<b>13.22</b>	<b>5.55</b>	<b>11.88</b>		

(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: <b>Douglas</b>	Crop: <b>Pasture (grass)</b>
Location: <b>Douglas</b>	County: <b>Converse, WY</b>
By: <b>L Cornia</b>	Date: <b>01/17/07</b>
Weather Station: <b>DOUGLAS AVIATION</b>	Sta No: <b>WY2693</b>
Latitude: <b>4245</b> Longitude: <b>10523</b>	Elevation: <b>4810</b> feet above sea level
Computation Method: <b>Blaney Criddle (TR21)</b>	Net irrigation application: <b>2</b> inches
Crop Curve: <b>Blaney Criddle Perennial Crop</b>	Estimated carryover moisture used at season:
Begin Growth: <b>4/20</b> End Growth: <b>10/18</b>	Begin: <b>1</b> inches      End: <b>1</b> 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	0.77	0.20	0.00	0.26	0.00	0.07	
May	3.27	1.06	1.78	1.40	1.38	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	
<b>TOTAL</b>	<b>26.24</b>	<b>5.10</b>	<b>19.13</b>	<b>6.73</b>	<b>17.51</b>		

(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: <b>Douglas</b>	Crop: <b>Sugar beet</b>
Location: <b>Douglas</b>	County: <b>Converse, WY</b>
By: <b>L Cornia</b>	Date: <b>01/17/07</b>
Weather Station: <b>DOUGLAS AVIATION</b>	Sta No: <b>WY2693</b>
Latitude: <b>4245</b> Longitude: <b>10523</b>	Elevation: <b>4810</b> feet above sea level
Computation Method: <b>Blaney Criddle (TR21)</b>	Net irrigation application: <b>2</b> inches
Crop Curve: <b>Blaney Criddle Annual Crop</b>	Estimated carryover moisture used at season:
Begin Growth: <b>5/10</b> End Growth: <b>9/20</b>	Begin: <b>1</b> inches      End: <b>1</b> 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	1.05	0.65	0.00	0.85	0.00	0.05	
June	4.21	0.98	2.63	1.30	2.10	0.14	0.15
July	8.09	1.23	6.86	1.62	6.47	0.26	0.31
August	7.82	1.00	6.82	1.31	6.50	0.25	0.30
September	3.01	0.41	1.60	0.54	1.47	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	
<b>TOTAL</b>	<b>24.17</b>	<b>4.27</b>	<b>17.91</b>	<b>5.63</b>	<b>16.54</b>		

(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