# Irrigation Water Requirements Crop Data Summary

Job: Chama Crop: Alfalfa, hay, northern

Location: Rio Arriba County County: Rio Arriba, NM

By: Rhett Date: 01/25/05
Weather Station: CHAMA Sta No: NM1664

Latitude: 3655 Longitude: 10635 Elevation: 7850 feet above sea level

Computation Method: Blaney Criddle (TR21)

Crop Curve: Blaney Criddle Perennial Crop

Net irrigation application: 1 inches
Estimated carryover moisture used at season:

Begin Growth: 5/15 End Growth: 9/30 Begin: 0.5 inches End: 0.5 inches

| Month     | Total<br>Monthly<br>ET<br>(3) | Dry Year<br>80% Chance (1) |                               | Normal Year<br>50% Chance (1) |                               | Average      | Peak          |
|-----------|-------------------------------|----------------------------|-------------------------------|-------------------------------|-------------------------------|--------------|---------------|
|           |                               | Effective<br>Precipitation | Net Irrigation<br>Reqirements | Effective<br>Precipitation    | Net Irrigation<br>Reqirements | Daily<br>ETc | Daily<br>ETPk |
|           | inches                        | inches                     | inches (2)                    | inches                        | inches (2)                    | inches       | inches        |
| 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       | 2.97                          | 0.13                       | 2.35                          | 0.18                          | 2.29                          | 0.17         |               |
| June      | 8.00                          | 0.08                       | 7.92                          | 0.11                          | 7.89                          | 0.27         | 0.30          |
| July      | 9.54                          | 0.48                       | 9.06                          | 0.69                          | 8.85                          | 0.31         | 0.35          |
| August    | 8.03                          | 0.57                       | 7.46                          | 0.82                          | 7.21                          | 0.26         | 0.30          |
| September | 5.05                          | 0.38                       | 4.18                          | 0.55                          | 4.01                          | 0.17         |               |
| 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     | 33.59                         | 1.63                       | 30.97                         | 2.35                          | 30.24                         |              | •             |

<sup>(1)</sup> 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.

Date: 7/21/2005

<sup>(2)</sup> Net irrigation requirements is adjusted for carryover moisture used at the beginning of the season and carryover moiature used at the end of the growing season.

<sup>(3)</sup> ET Evapotranspiration) is adjusted upwards 10% per 1000 meters above sea level.

## **Irrigation Water Requirements**

#### **Monthly Crop Water Requirements**

Job: Chama

Location: Rio Arriba County

Computation Method: Blaney Criddle (TR21)

Begin Growth: 5/15 End Growth: 9/30

Crop: Alfalfa, hay, northern

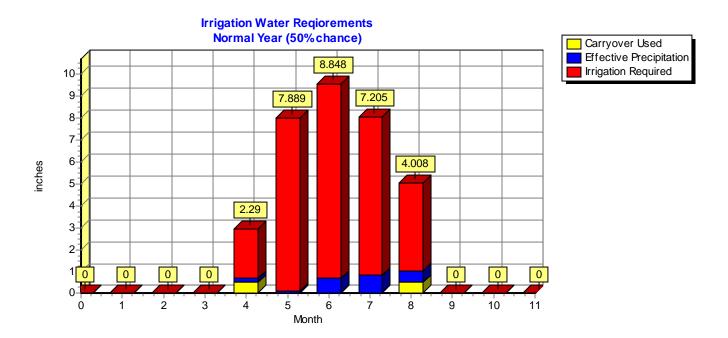
Date: 01/25/05

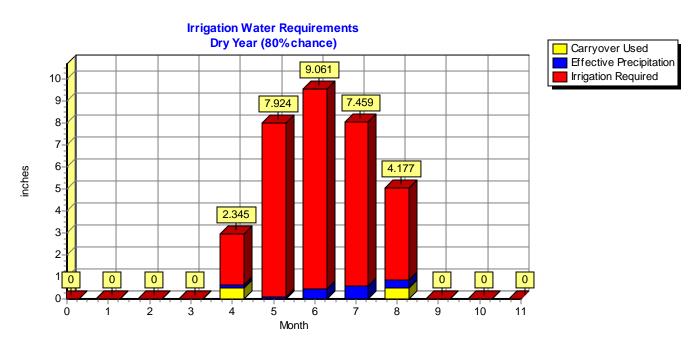
Crop Curve: Blaney Criddle Perennial Crop

Net irrigation application: 1 inches

Estimated carryover moisture used at season:

Begin: 0.5 inches End0.5 inches





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## Irrigation Water Requirements Crop Data Summary

Job: Chama Crop: Oat hay

Location: Rio Arriba County County: Rio Arriba, NM

By: Rhett Date: 01/25/05
Weather Station: CHAMA Sta No: NM1664

**Blaney Criddle Annual Crop** 

Crop Curve:

Latitude: 3655 Longitude: 10635 Elevation: 7850 feet above sea level

Computation Method: Blaney Criddle (TR21)

Net irrigation application: 1

Begin Growth: 5/1 End Growth: 7/15 Estimated carryover moisture used at season:

Begin: 0.5 inches

inches

Normal Year Dry Year Total 80% Chance (1) 50% Chance (1) Average Peak Monthly Daily Daily Month ET Effective **Net Irrigation** Effective **Net Irrigation** ETc **ETPk** (3)Precipitation Regirements Precipitation Regirements inches inches inches (2) inches inches (2) inches inches 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 0.00 0.00 0.00 0.00 0.00 0.00 March April 0.00 0.00 0.00 0.00 0.00 0.00 5.24 0.23 4.51 0.34 4.40 0.17 May 0.25 June 7.49 0.08 7.41 0.11 7.38 0.28 0.92 0.15 0.27 0.22 0.20 0.06 July August 0.00 0.00 0.00 0.00 0.00 0.00 0.00 September 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 0.00 0.00 0.00 0.00 0.00 0.00 December **TOTAL** 13.65 0.46 12.19 0.66 11.98

Date: 7/21/2005

<sup>(1)</sup> 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.

<sup>(2)</sup> Net irrigation requirements is adjusted for carryover moisture used at the beginning of the season and carryover moiature used at the end of the growing season.

<sup>(3)</sup> ET Evapotranspiration) is adjusted upwards 10% per 1000 meters above sea level.

## **Irrigation Water Requirements**

#### **Monthly Crop Water Requirements**

Job: Chama

Location: Rio Arriba County

Computation Method: Blaney Criddle (TR21) End Growth: 7/15

Begin Growth: 5/1

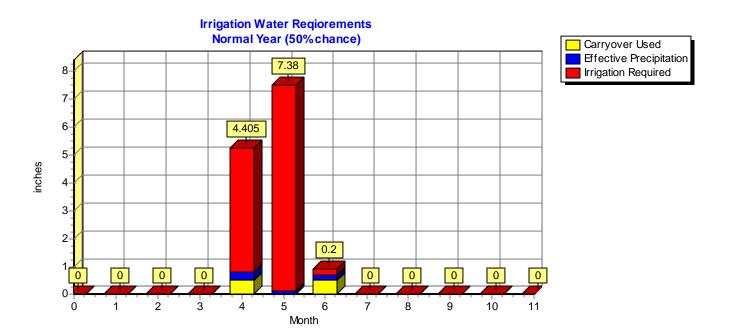
Oat hay Crop:

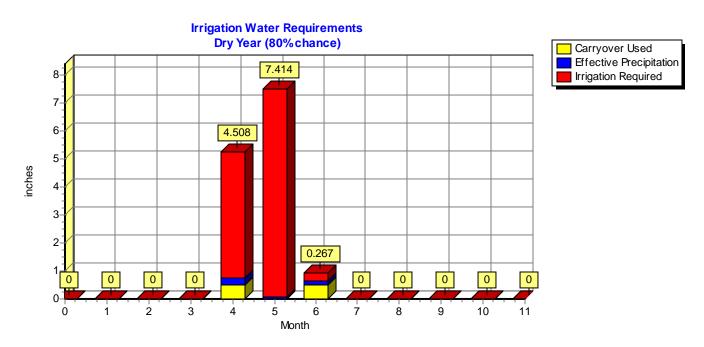
01/25/05 Date:

Crop Curve: Blaney Criddle Annual Crop

Net irrigation application: 1 inches

Estimated carryover moisture used at season: Begin: **0.5** inches End**0.5** inches





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## Irrigation Water Requirements Crop Data Summary

Job: Chama Crop: Pasture, cool seasson grass

Location: Rio Arriba County County: Rio Arriba, NM

By: Rhett Date: 01/25/05
Weather Station: CHAMA Sta No: NM1664

Latitude: 3655 Longitude: 10635 Elevation: 7850 feet above sea level

Computation Method: Blaney Criddle (TR21)

Crop Curve: Blaney Criddle Perennial Crop

Net irrigation application: 1 inches
Estimated carryover moisture used at season:

Begin Growth: 5/15 End Growth: 9/30 Begin: 0.5 inches End: 0.5 inches

| Month     | Total<br>Monthly<br>ET<br>(3) | Dry Year<br>80% Chance (1) |                               | Normal Year<br>50% Chance (1) |                               | Average      | Peak          |
|-----------|-------------------------------|----------------------------|-------------------------------|-------------------------------|-------------------------------|--------------|---------------|
|           |                               | Effective<br>Precipitation | Net Irrigation<br>Regirements | Effective<br>Precipitation    | Net Irrigation<br>Regirements | Daily<br>ETc | Daily<br>ETPk |
|           | inches                        | inches                     | inches (2)                    | inches                        | inches (2)                    | inches       | inches        |
| 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       | 2.44                          | 0.12                       | 1.83                          | 0.17                          | 1.77                          | 0.14         |               |
| June      | 6.55                          | 0.07                       | 6.47                          | 0.10                          | 6.44                          | 0.22         | 0.25          |
| July      | 7.92                          | 0.44                       | 7.49                          | 0.63                          | 7.29                          | 0.26         | 0.29          |
| August    | 6.86                          | 0.53                       | 6.32                          | 0.77                          | 6.09                          | 0.22         | 0.25          |
| September | 4.43                          | 0.36                       | 3.57                          | 0.53                          | 3.40                          | 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     | 28.20                         | 1.52                       | 25.68                         | 2.20                          | 25.00                         |              |               |

<sup>(1)</sup> 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.

Date: 7/21/2005

<sup>(2)</sup> Net irrigation requirements is adjusted for carryover moisture used at the beginning of the season and carryover moiature used at the end of the growing season.

<sup>(3)</sup> ET Evapotranspiration) is adjusted upwards 10% per 1000 meters above sea level.

### **Irrigation Water Requirements**

#### **Monthly Crop Water Requirements**

Job: Chama

Location: Rio Arriba County

Computation Method: Blaney Criddle (TR21)

End Growth: 9/30 Begin Growth: 5/15

Pasture, cool seasson grass Crop:

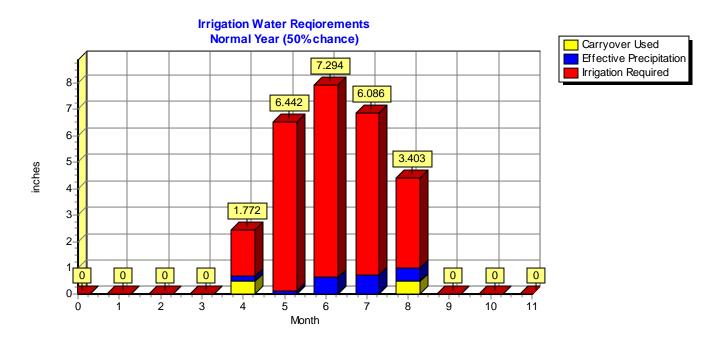
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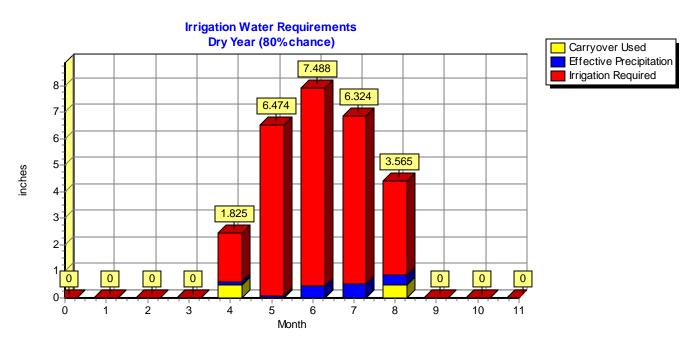
Crop Curve: Blaney Criddle Perennial Crop

Net irrigation application: 1 inches

Estimated carryover moisture used at season:

Begin: **0.5** inches End**0.5** inches





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