

IRRIGATION PLANNING WORKSHEET
Multiple Crops Weighted Peak Consumptive Use Computations
(Using TR-21 Blaney-Criddle Method)

Land user _____
 Job description _____
 Location _____
 Planner _____ Date _____ Checked by _____ Date _____

This procedure is used only if more than one crop is being grown at once under the planned irrigation system.

WEIGHTED MONTHLY CONSUMPTIVE USE

Crops <u>1/</u>	Acres (A) <u>2/</u>	Monthly Consumptive Use					
		June		July		August	
		MCU <u>3/</u> (in/mo)	A x MCU <u>4/</u>	MCU <u>3/</u> (in/mo)	A x MCU <u>4/</u>	MCU <u>3/</u> (in/mo)	A x MCU <u>4/</u>
Totals	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Weighted Average Consumptive Use = (A x MCU) / Total A		<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

COMPUTE PEAK DAILY CONSUMPTIVE USE

Net Irrigation Depth (Fn) <u>5/</u> (inches)	Highest Weighted Average Cons. Use (UM) <u>6/</u> (inches)	Peak Daily Consumptive Use (CU) <u>7/</u> (in/day)

This form is used to supplement Form MT-ENG-2A when more than one crop is grown under an irrigation system. This procedure weighs the consumptive use of each crop based on the percentage of the area covered by each crop. The result is a composite peak consumptive use.

- 1/ List all crops that will be grown at once under the planned irrigation system. The crop rotation that has a mix of crops using the most water at a point of time during the season should be analyzed. To find this mix may require analyzing more than one crop rotation.
- 2/ Enter the acres of each crop in the rotation.
- 3/ Monthly Consumptive Use (MCU) is the total consumptive use, in inches, estimated for the peak months for each crop. Get this from the second column of Appendix B of the Irrigation Guide or from the IWR computer program run (inches/month).
- 4/ For each crop, multiply acres times MCU and enter this product in the worksheet.
- 5/ For each irrigation system alternative being studied, there will be a design net application depth (F_n -inches). Enter each F_n value in the worksheet.
- 6/ For the month with highest weighted average consumptive use (UM), enter that weighted average consumptive use value (inches) in the worksheet.
- 7/ Use Table 4.2 on Page 4-17 of the Montana Irrigation Manual or Page 4-26 of the Montana Irrigation Guide to determine peak daily consumptive use.