Water in Mesopotamia

A **water budget** is a way to analyze the water situation of an area - a town, state, country, small watershed, or even an entire river system like the Colorado or Nile.

To analyze the water budget of a river, geographers use four key terms:

Inflow: water in a river at the point where the river enters an area (e.g. a country)
Addition: water added to a river (by precipitation and snowmelt) within the area
Withdrawal: water taken out of a river for use within the area
Outflow: water in a river at the point where the river leaves the area

These four terms are related in this way:

INFLOW + ADDITION – WITHDRAWAL = OUTFLOW

This formula can be used for one river or for several rivers together.
Do the calculations and write the results on the blanks in this summary table (the 4th column shows what happens if every country finishes its current plans):

	Euphrates River	Tigris River	Combined Rivers	Predicted Flow (Combined) in 2040
Turkey				
Inflow	0	0	0	0
Addition	+23	+15	+38	+38
Withdrawal	-2	-2	-4	-26
Outflow	21	___	___	___
Syria				
Inflow	21	13	___	___
Addition	+1	+0	+1	+1
Withdrawal	-5	-2	__	-18
Outflow	17	___	___	-5
Iran				
Inflow	0	0	0	0
Addition	0	+33	__	+33
Withdrawal	0	-4	-4	-8
Outflow	0	29	___	___
Iraq				
Inflow from Syria	17	___	___	___
Inflow from Iran	0	___	___	___
Addition	+0	+1	___	+1
Withdrawal	-12	-26	-38	-47
Outflow	5	___	___	___
Persian Gulf				
Inflow	5	___	___	___

Data source: adapted from Kliot 1994.

If your calculations ended with a negative number for inflow into the Persian Gulf in 2040, you can see why people in this region are worried. Here's the simple fact:

There is not enough water in the rivers for all the planned uses.

That fact sets the stage for international arguments about water rights.