

Water balances Forsmark

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From R-10-02 (Bosson et al., 2010)

Figure 8-3. Illustration of the distribution of lakes and mires for the six objects (green areas are mires)

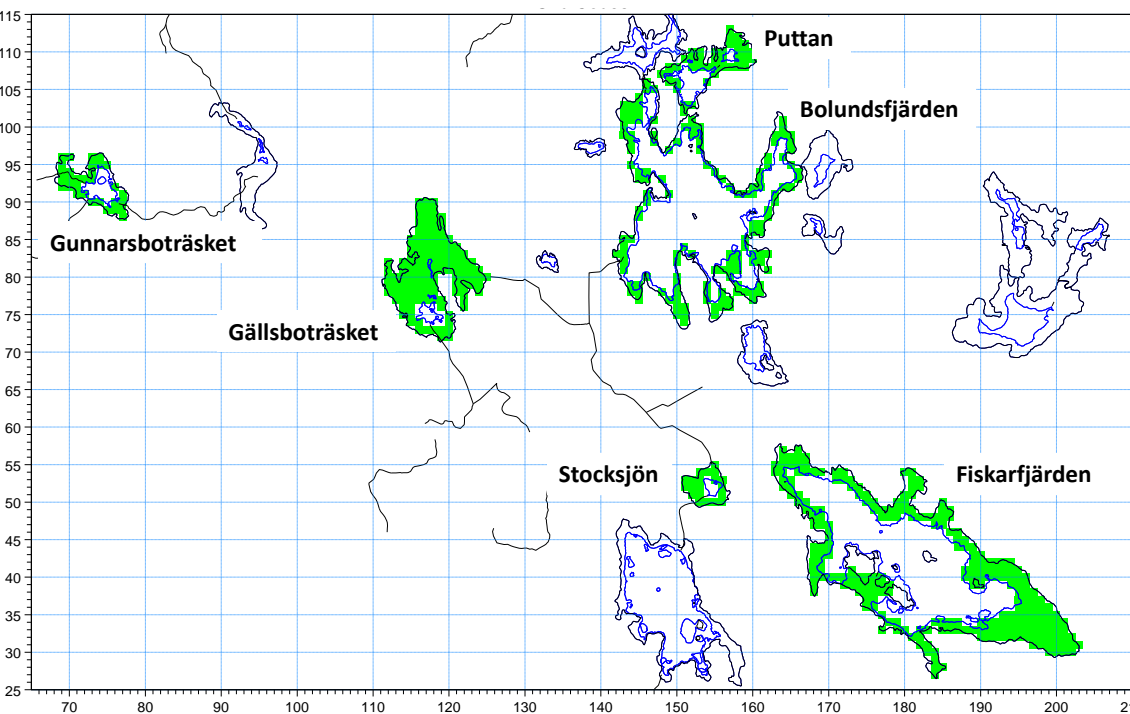


Table 8-1. Areas and number of grid cells used in each water balance

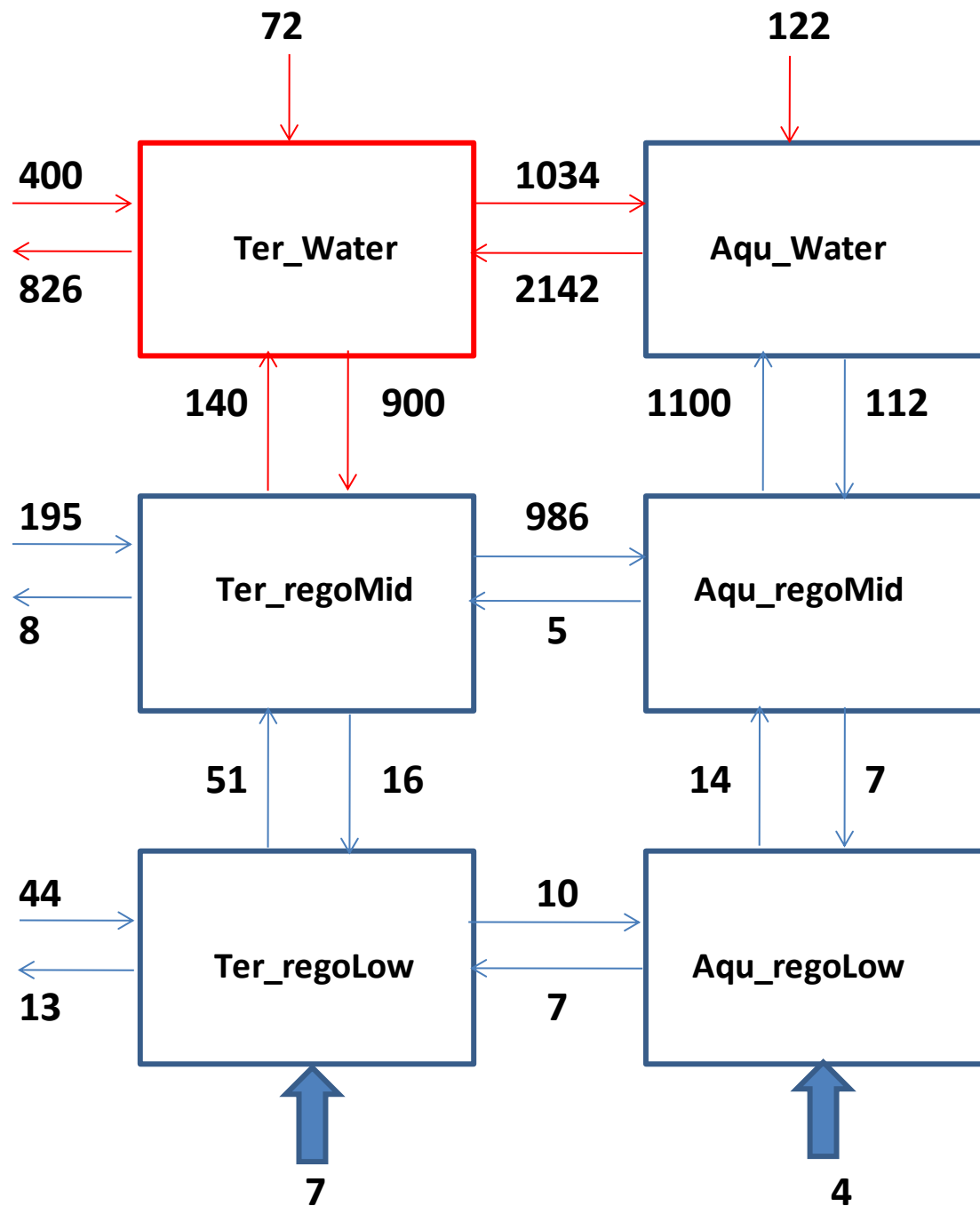
		No of cells	Area
		(40x40m)	(km ²)
Bolundsfjärden	Lake	246	0.39360
	Mire	139	0.22240
	Lake+Mire	385	0.61600
Fiskarfjärden	Lake	252	0.40320
	Mire	247	0.39520
	Lake+Mire	499	0.79840
Gunnarsboträsket	Lake	13	0.02080
	Mire	31	0.04960
	Lake+Mire	44	0.07040
Gällsboträsket	Lake	10	0.01600
	Mire	120	0.19200
	Lake+Mire	130	0.20800
Puttan	Lake	16	0.02560
	Mire	41	0.06560
	Lake+Mire	57	0.09120
Stocksjön	Lake	5	0.00800
	Mire	20	0.03200
	Lake+Mire	25	0.04000



Total catchments:		
Bolundsfjärden	(areas 136+142+149)	8003175 m ²
Fiskarfjärden	(area 148)	2925862 m ²
Gunnarsboträsket	(area 129)	2734424 m ²
Gällsboträsket	(area 142)	2141497 m ²
Puttan	(area 124)	243809 m ²
Stocksjön	(areas 149+AFM001105)	2476831 m ²

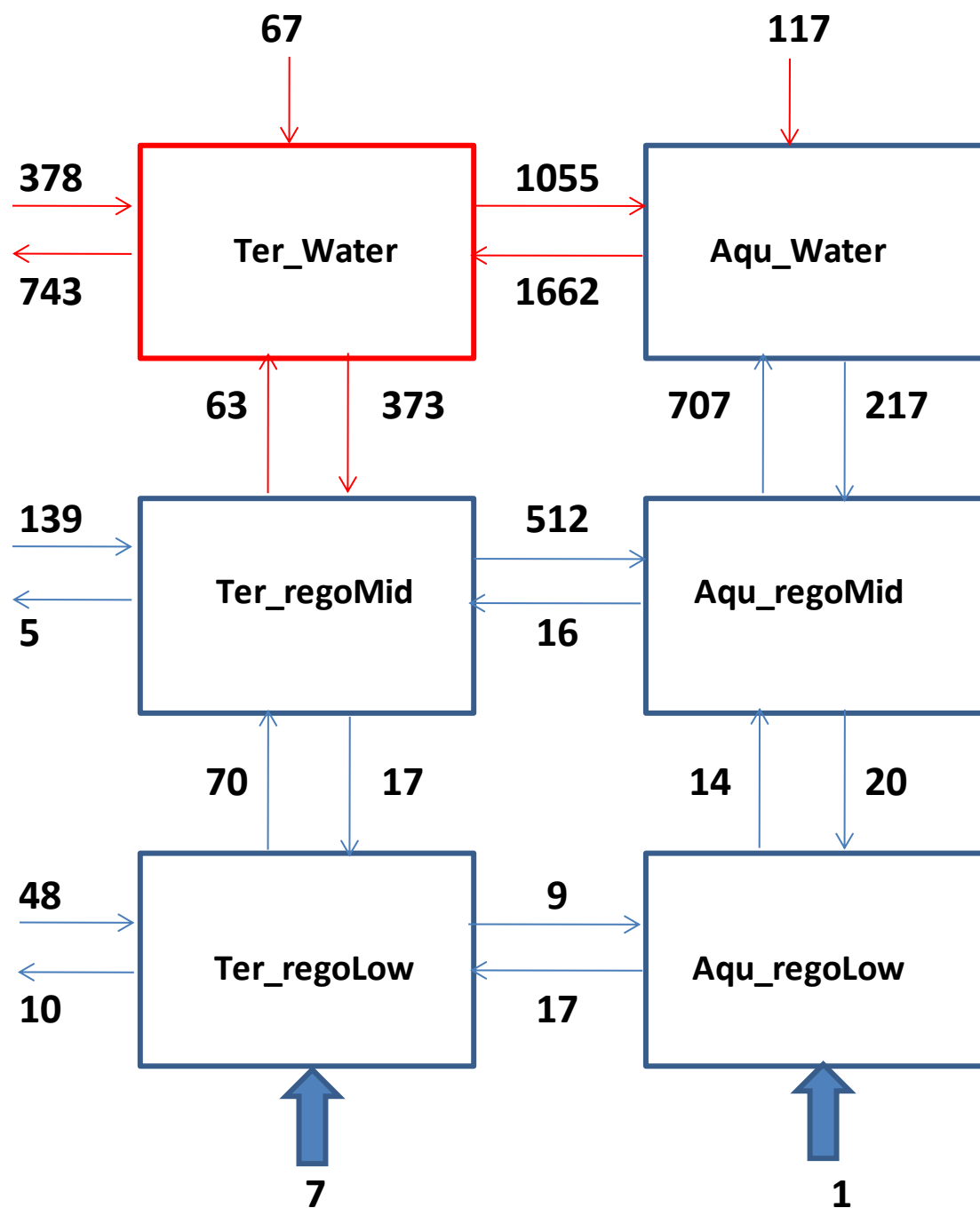
Bolundsfjärden

2000 AD
(mm/yr)



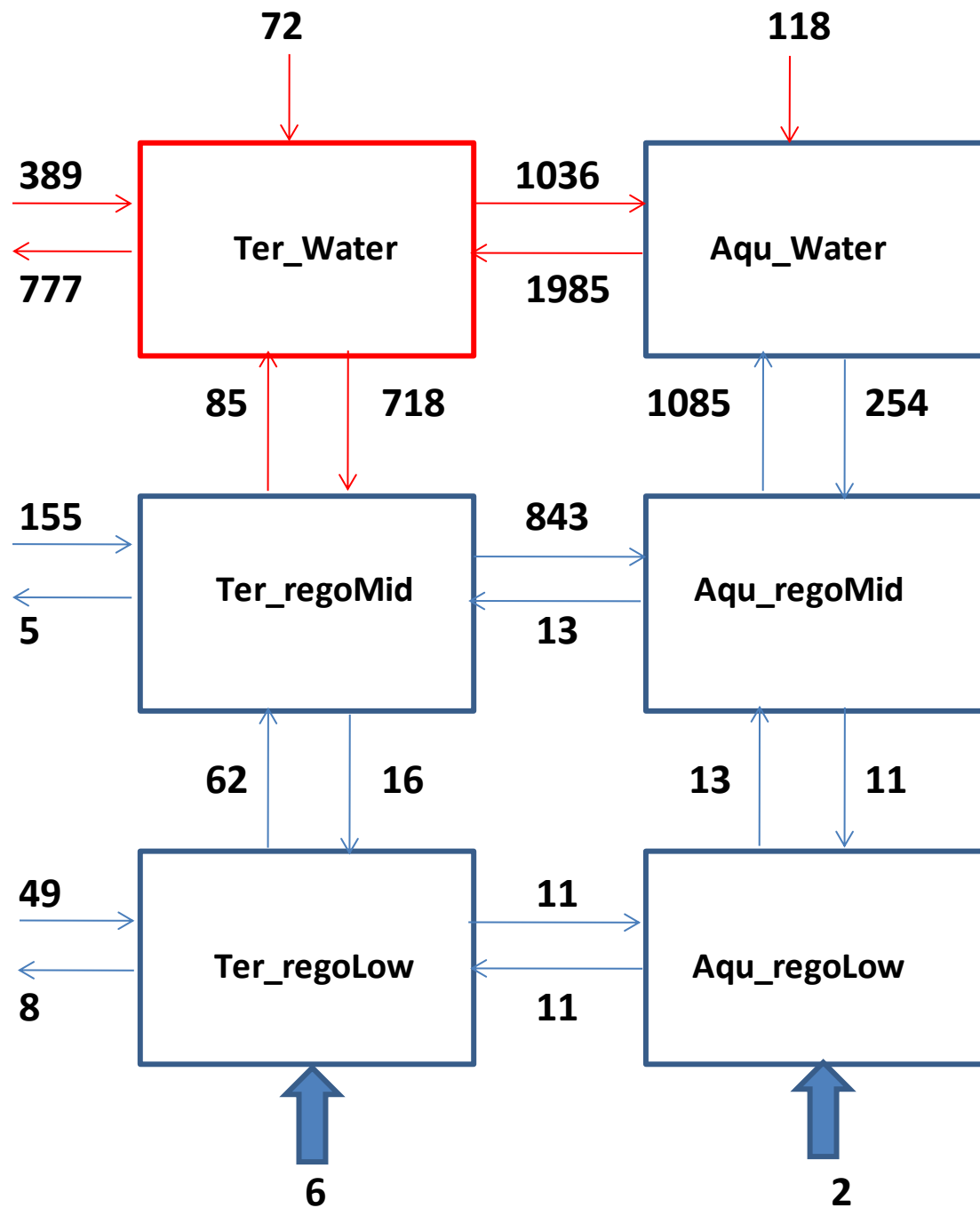
Bolundsfjärden

3000 AD
(mm/yr)



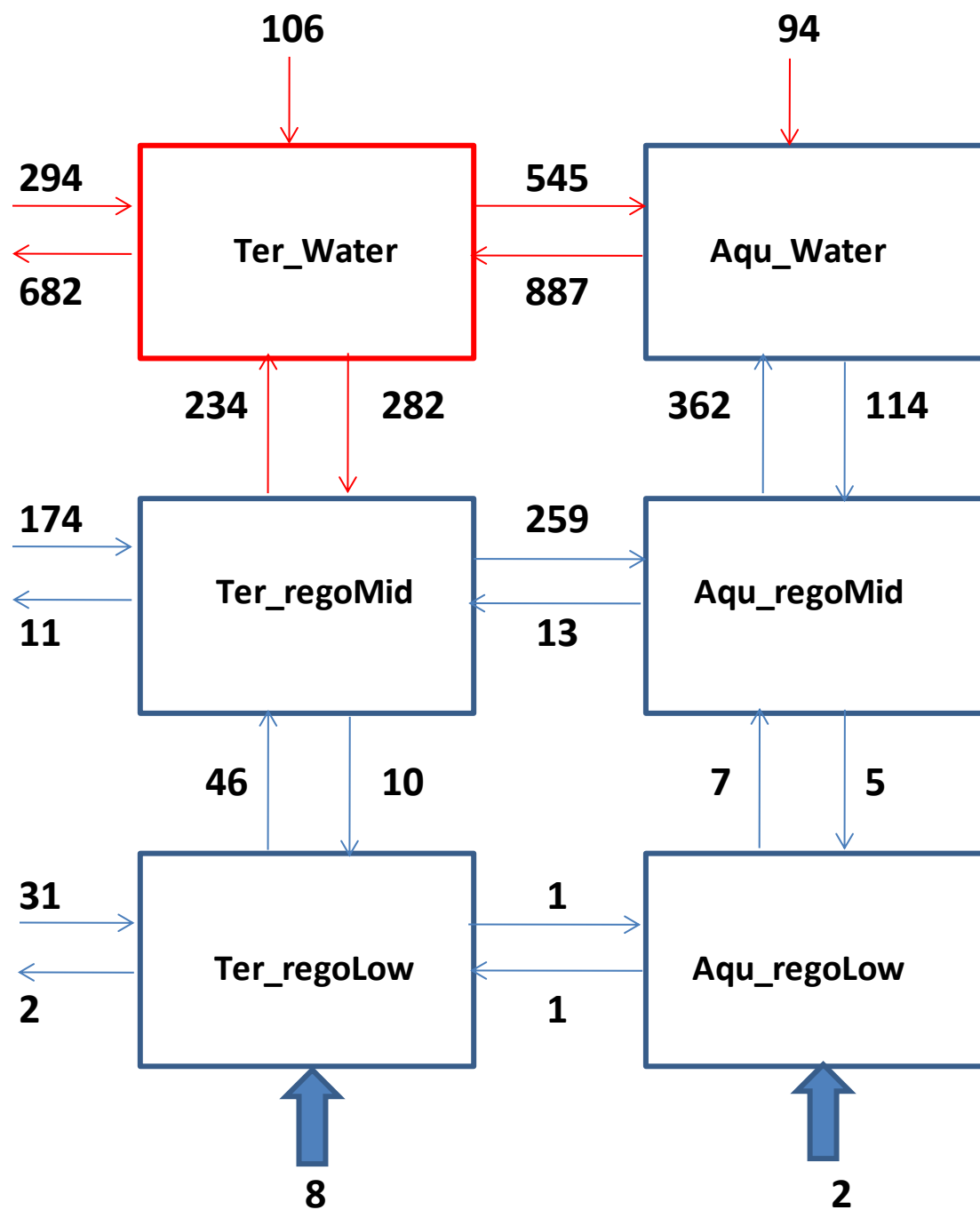
Bolundsfjärden

5000 AD
(mm/yr)



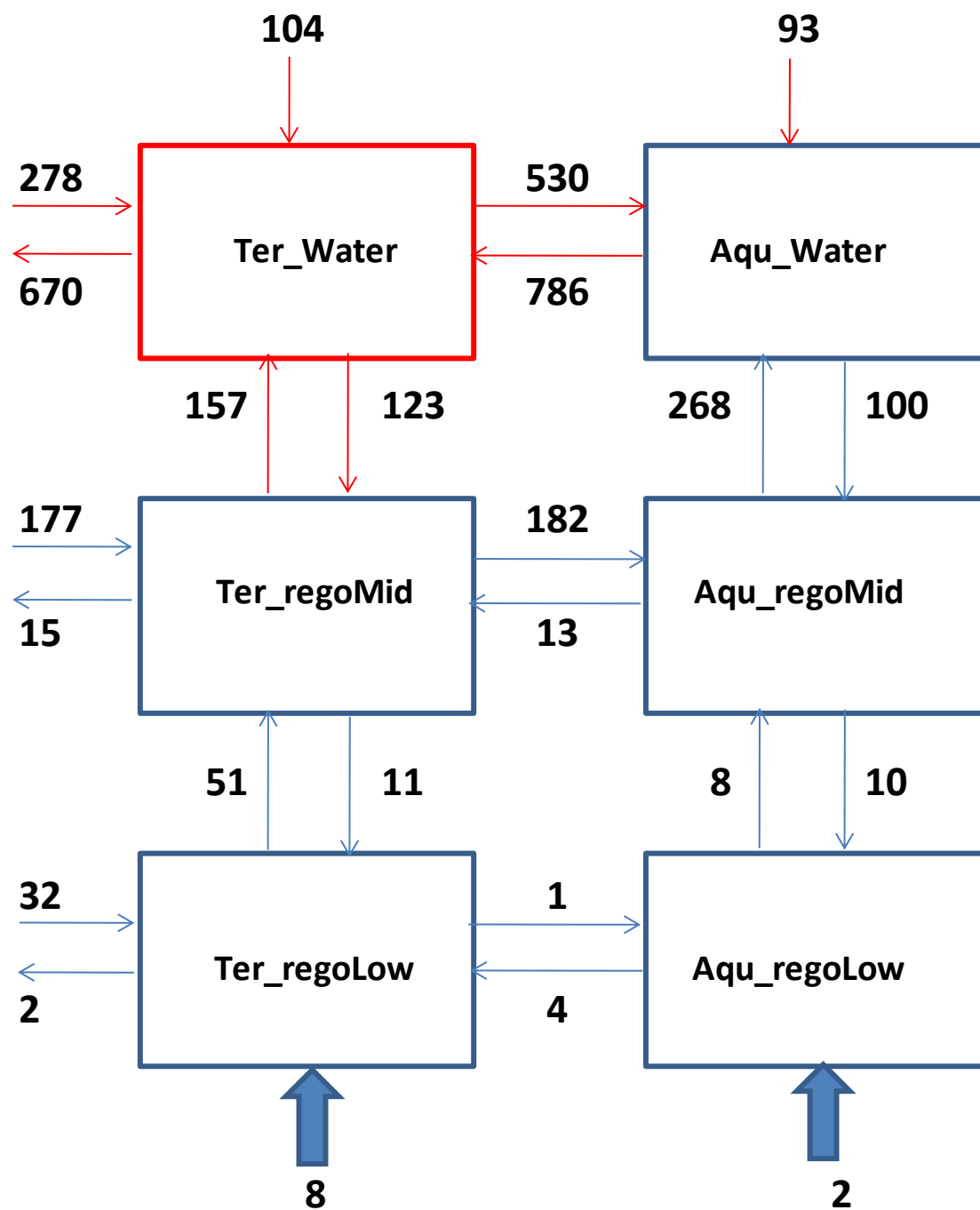
Fiskarfjärden

2000 AD
(mm/yr)



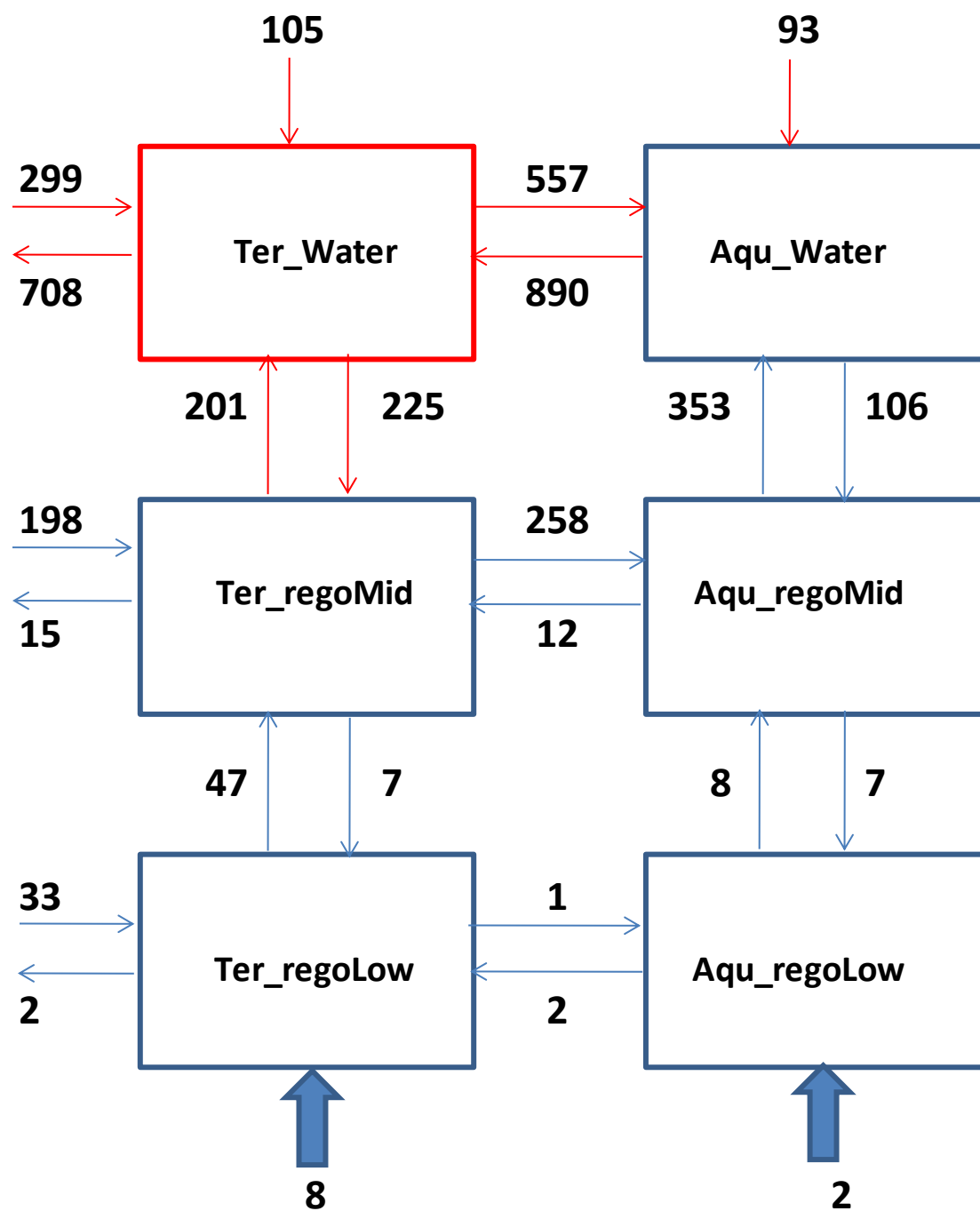
Fiskarfjärden

3000 AD
(mm/yr)



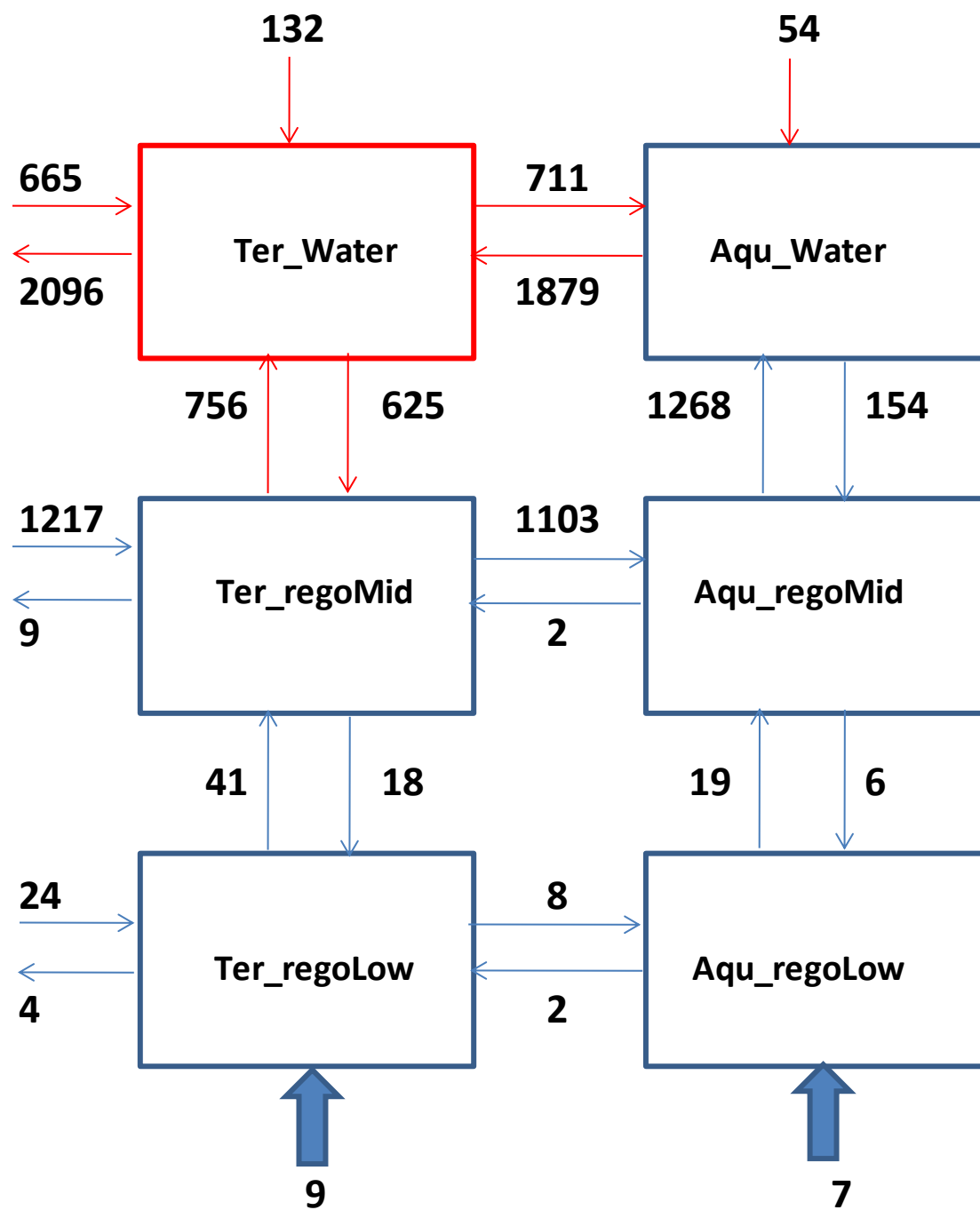
Fiskarfjärden

5000 AD
(mm/yr)



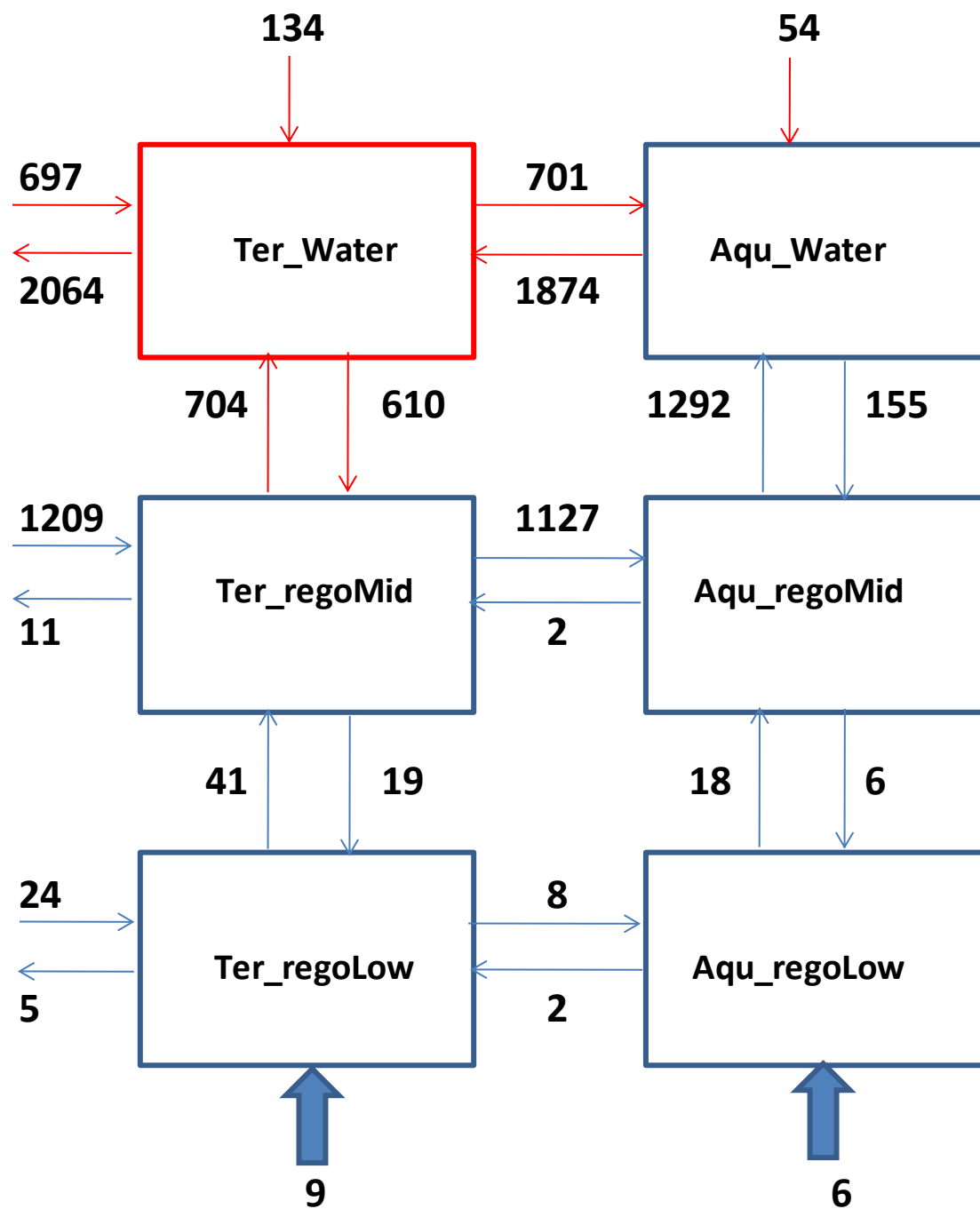
Gunnarsboträsket

2000 AD
(mm/yr)



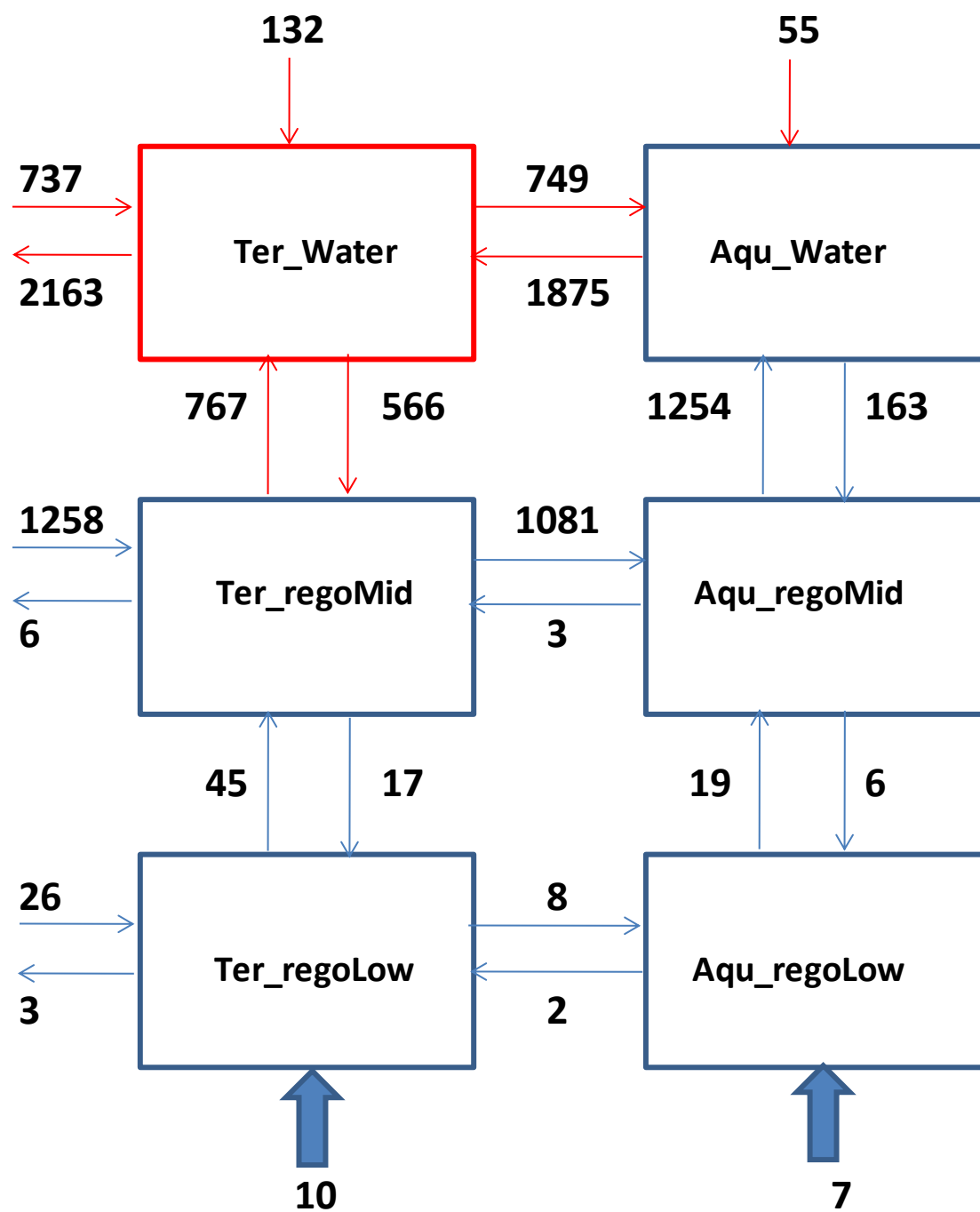
Gunnarsboträsket

3000 AD
(mm/yr)



Gunnarsboträsket

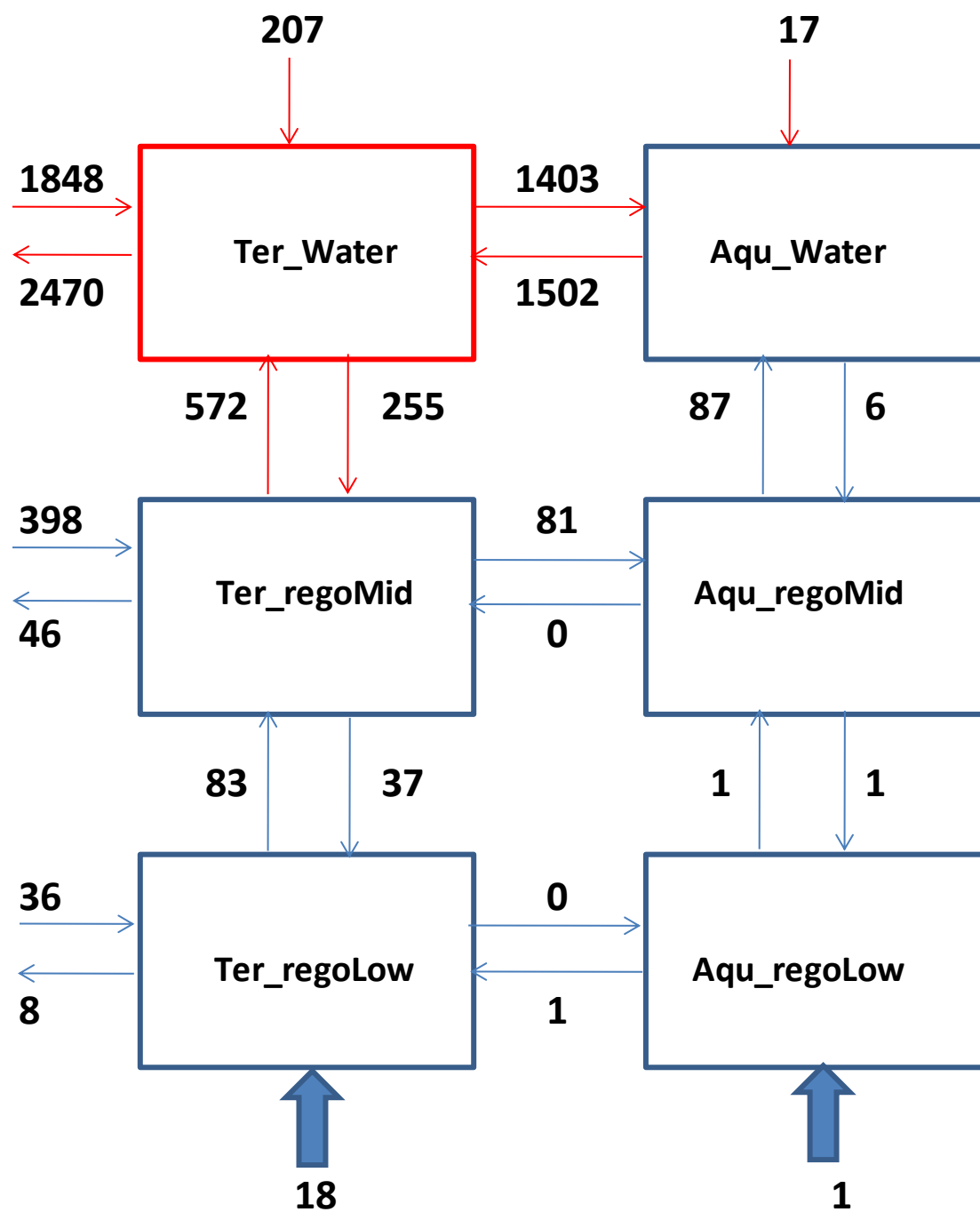
5000 AD
(mm/yr)



Gällsboträsket

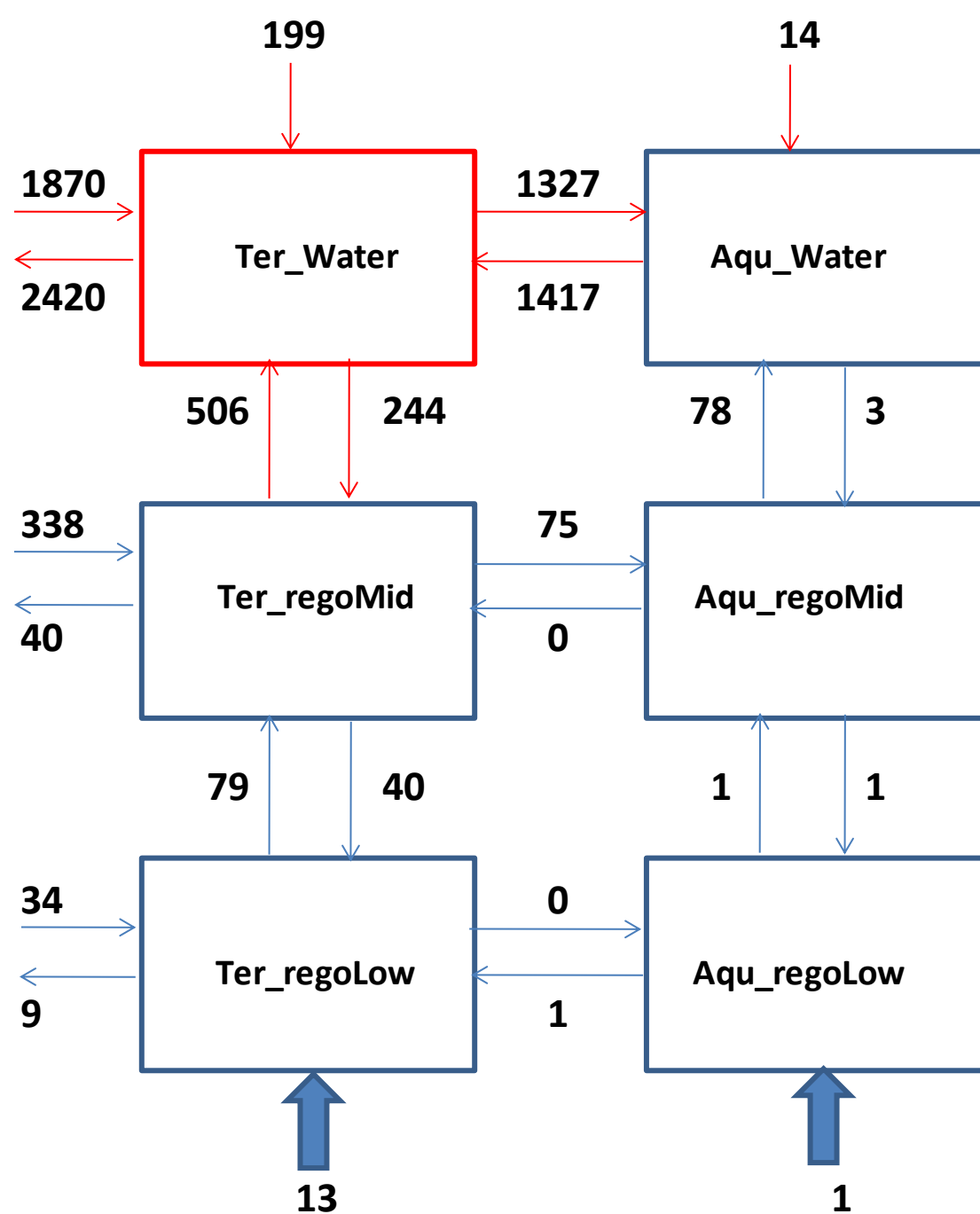
2000 AD

(mm/yr)



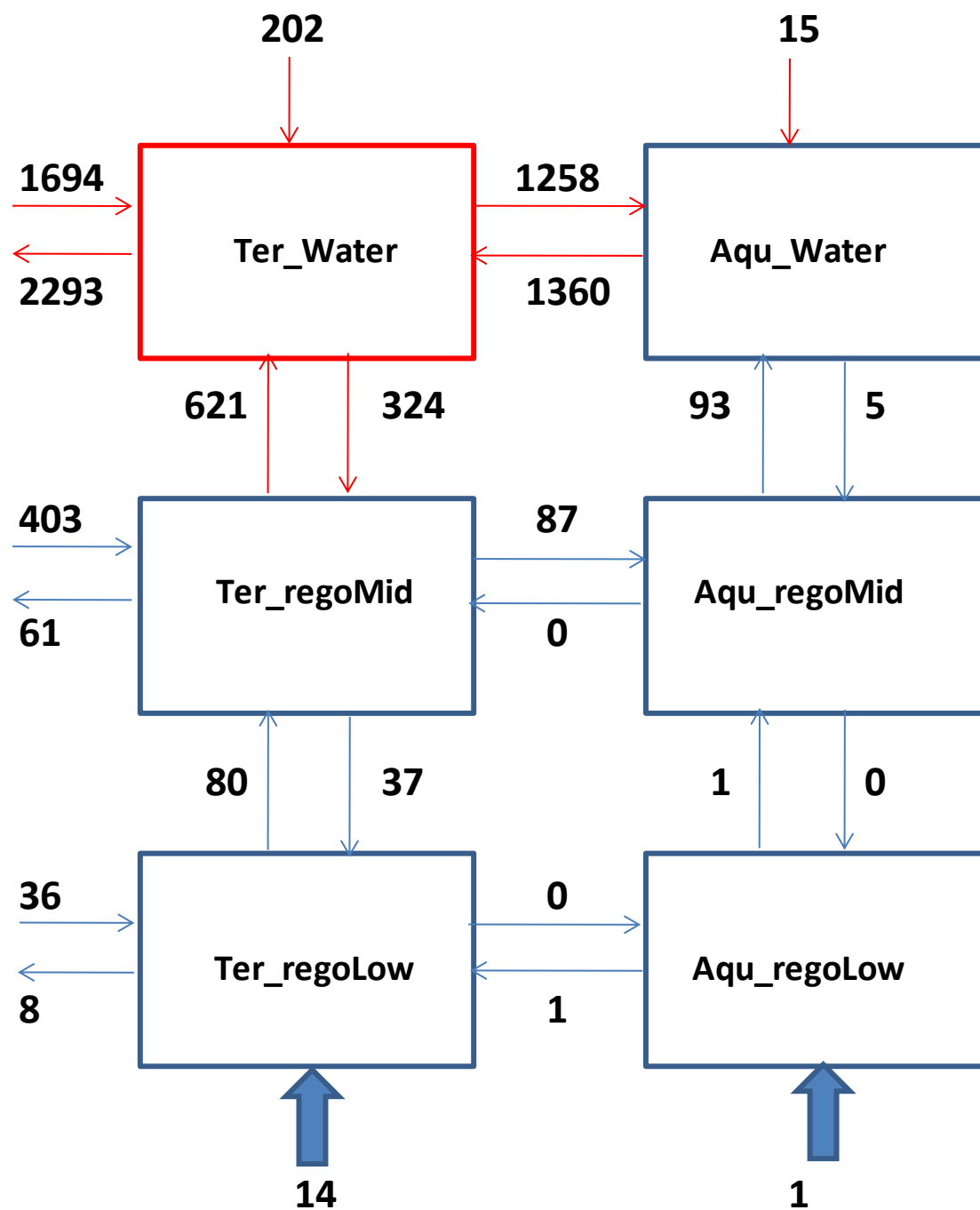
Gällsboträsket

3000 AD
(mm/yr)

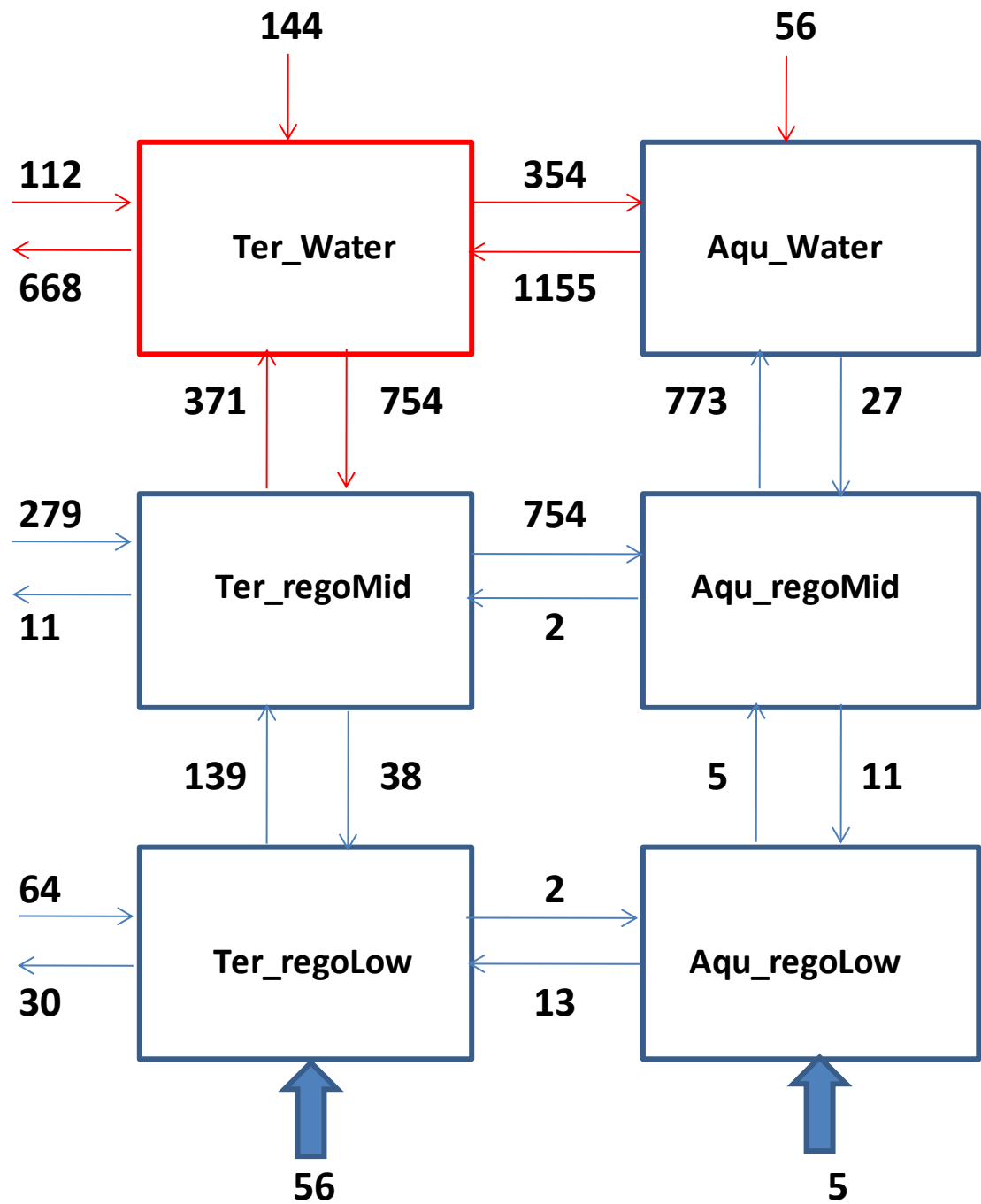


Gällsboträsket

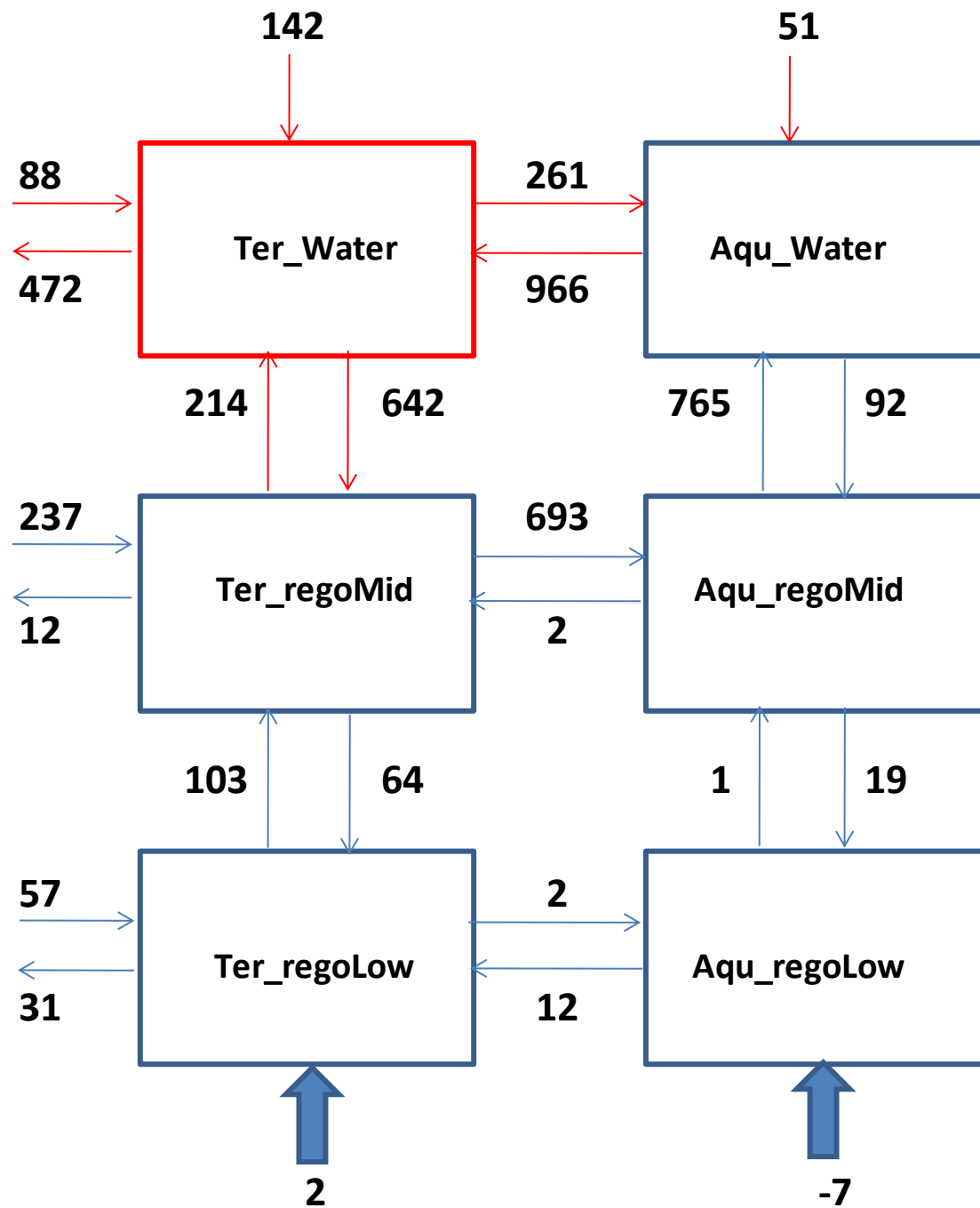
5000 AD
(mm/yr)



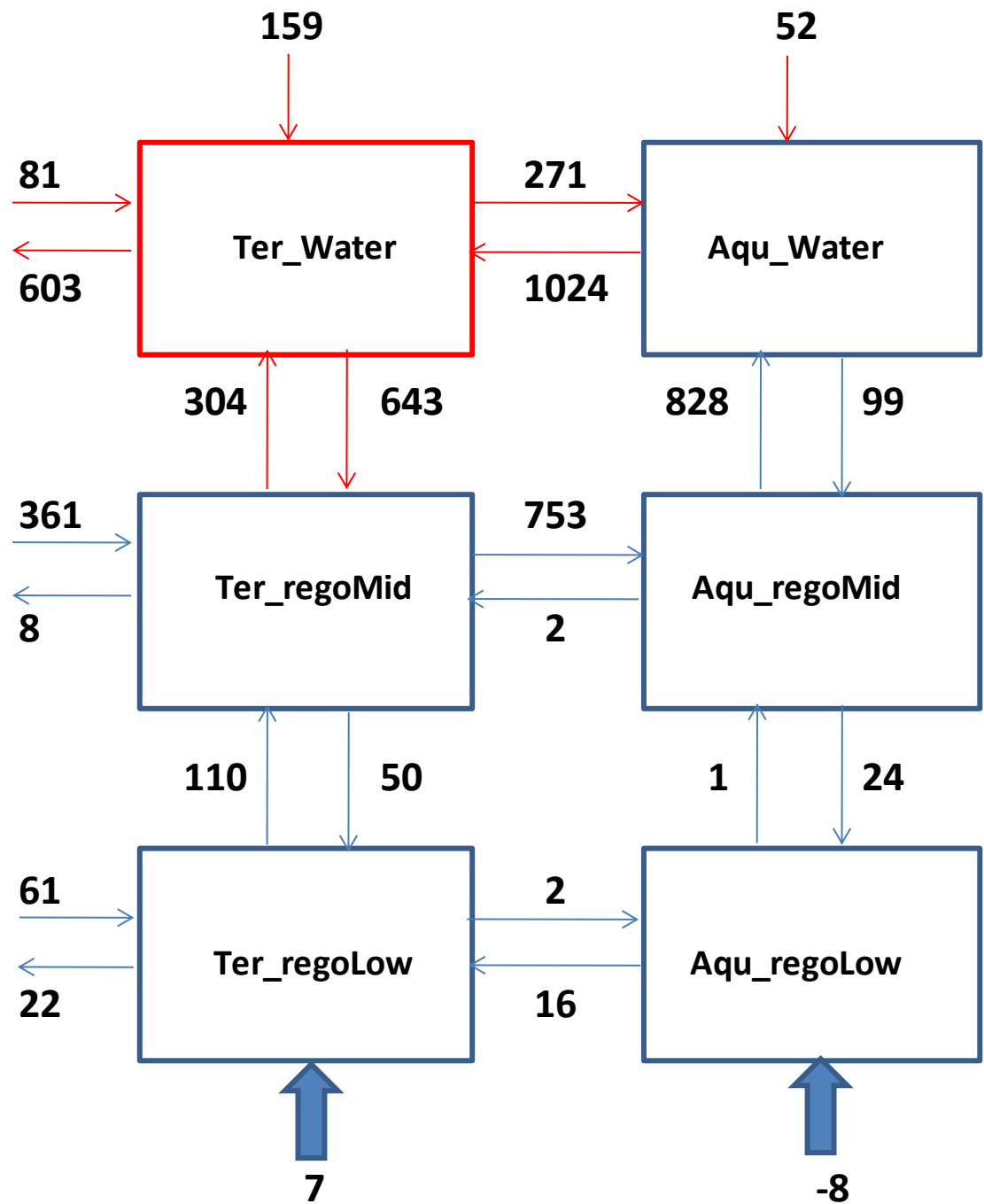
Puttan
2000 AD
(mm/yr)



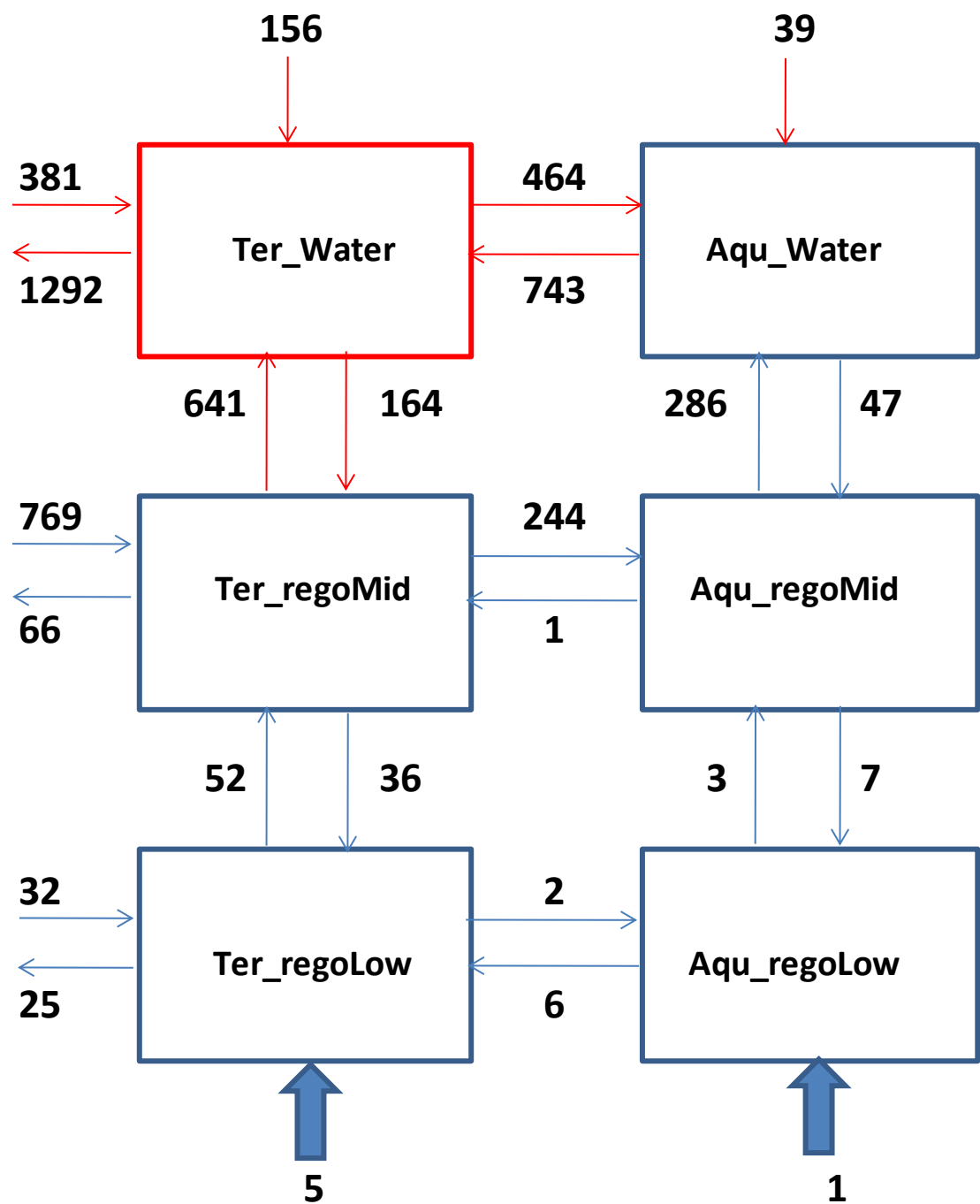
Puttan
3000 AD
(mm/yr)



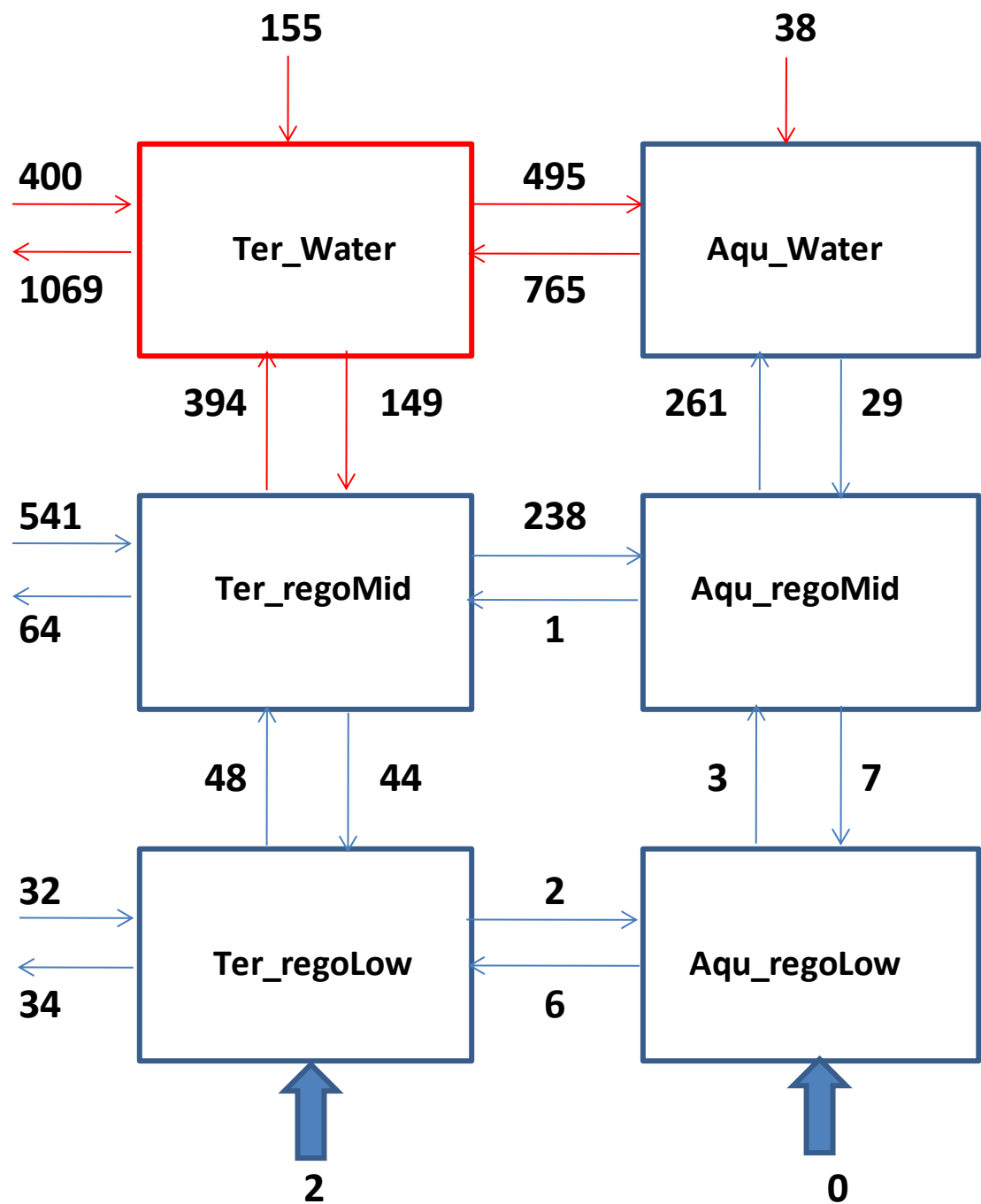
Puttan
5000 AD
(mm/yr)



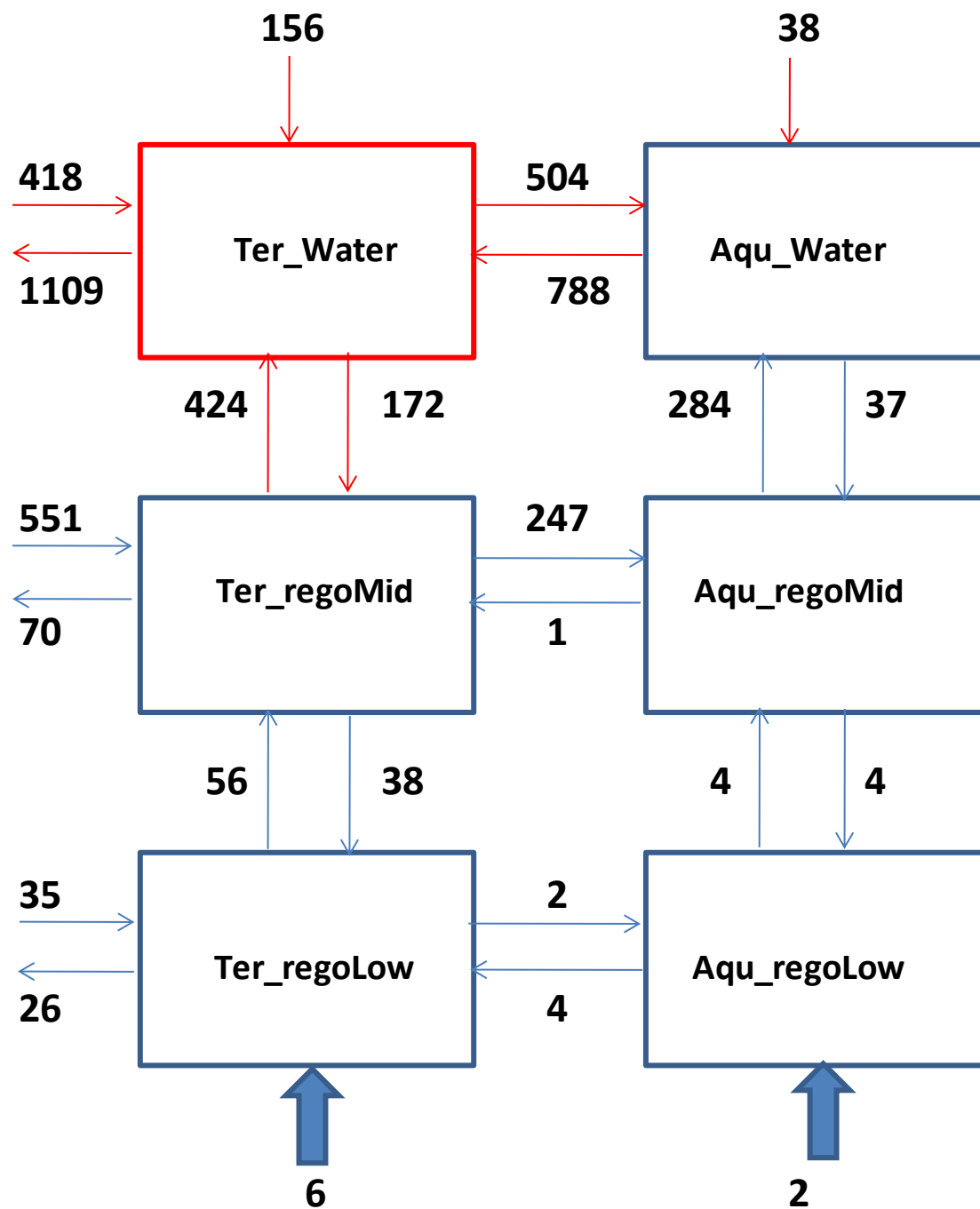
Stocksjön 2000 AD (mm/yr)



Stocksjön 3000 AD (mm/yr)



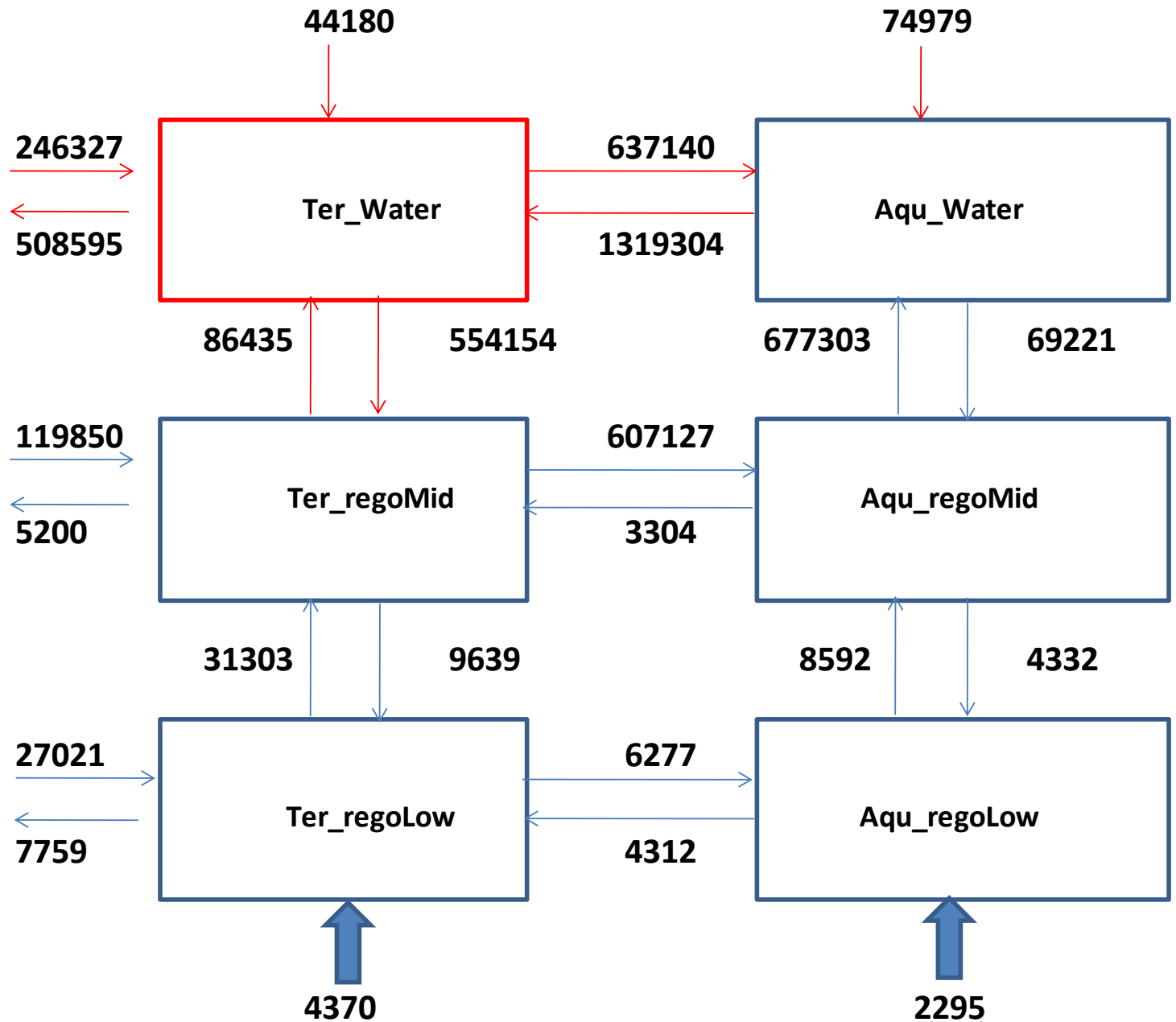
Stocksjön 5000 AD (mm/yr)



Bolundsfjärden

2000 AD

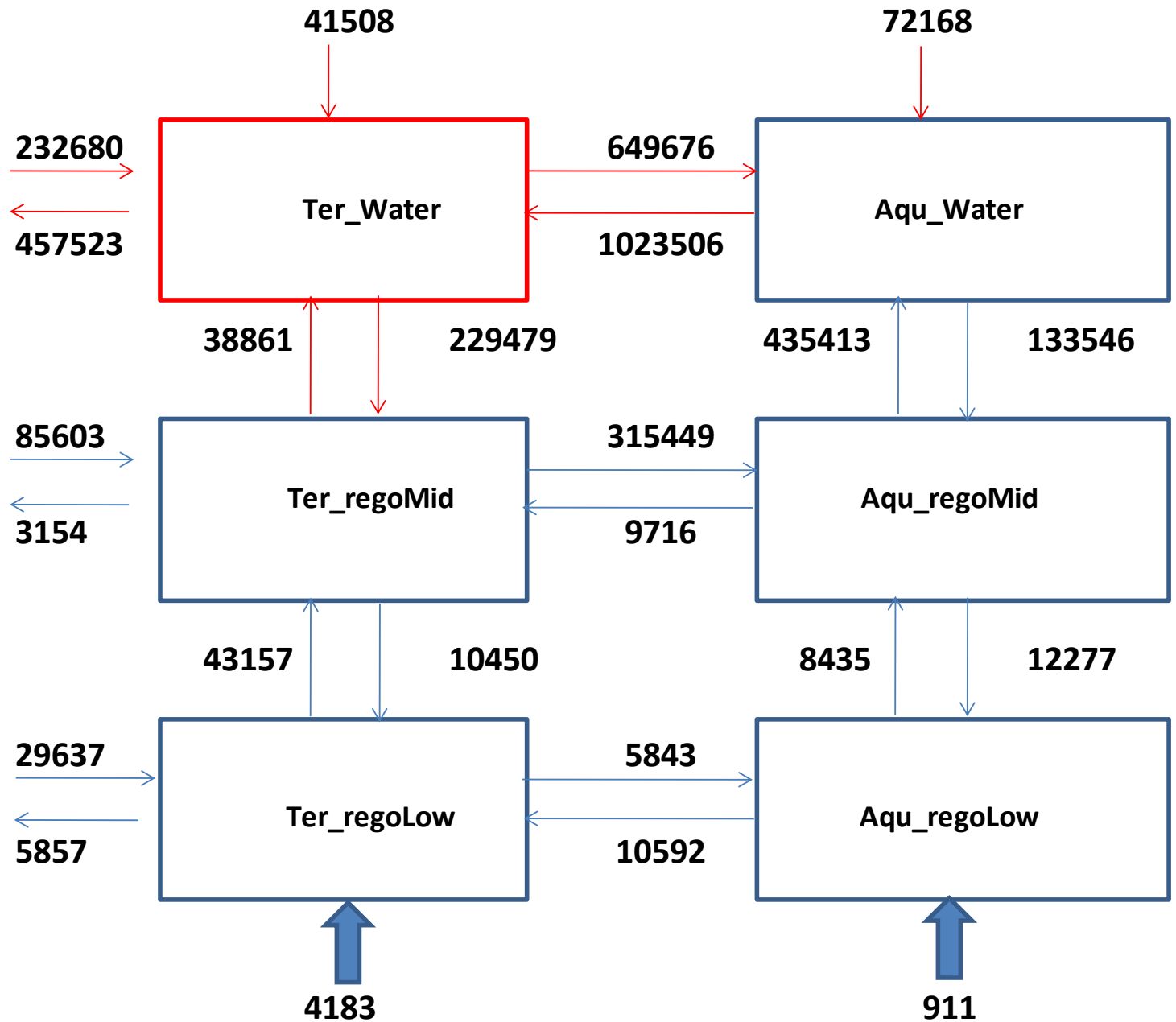
(m³/yr)



Bolundsfjärden

3000 AD

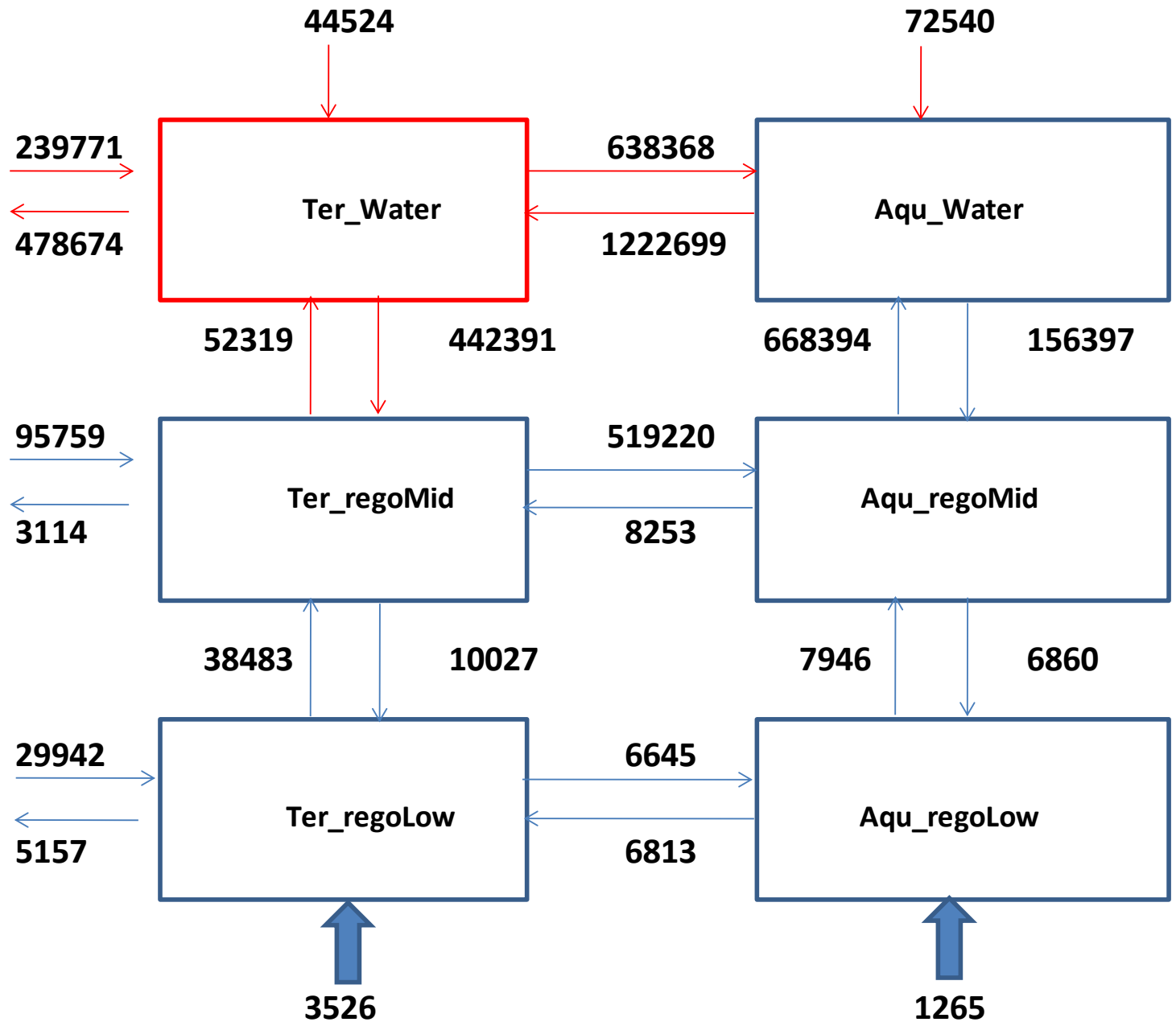
(m³/yr)



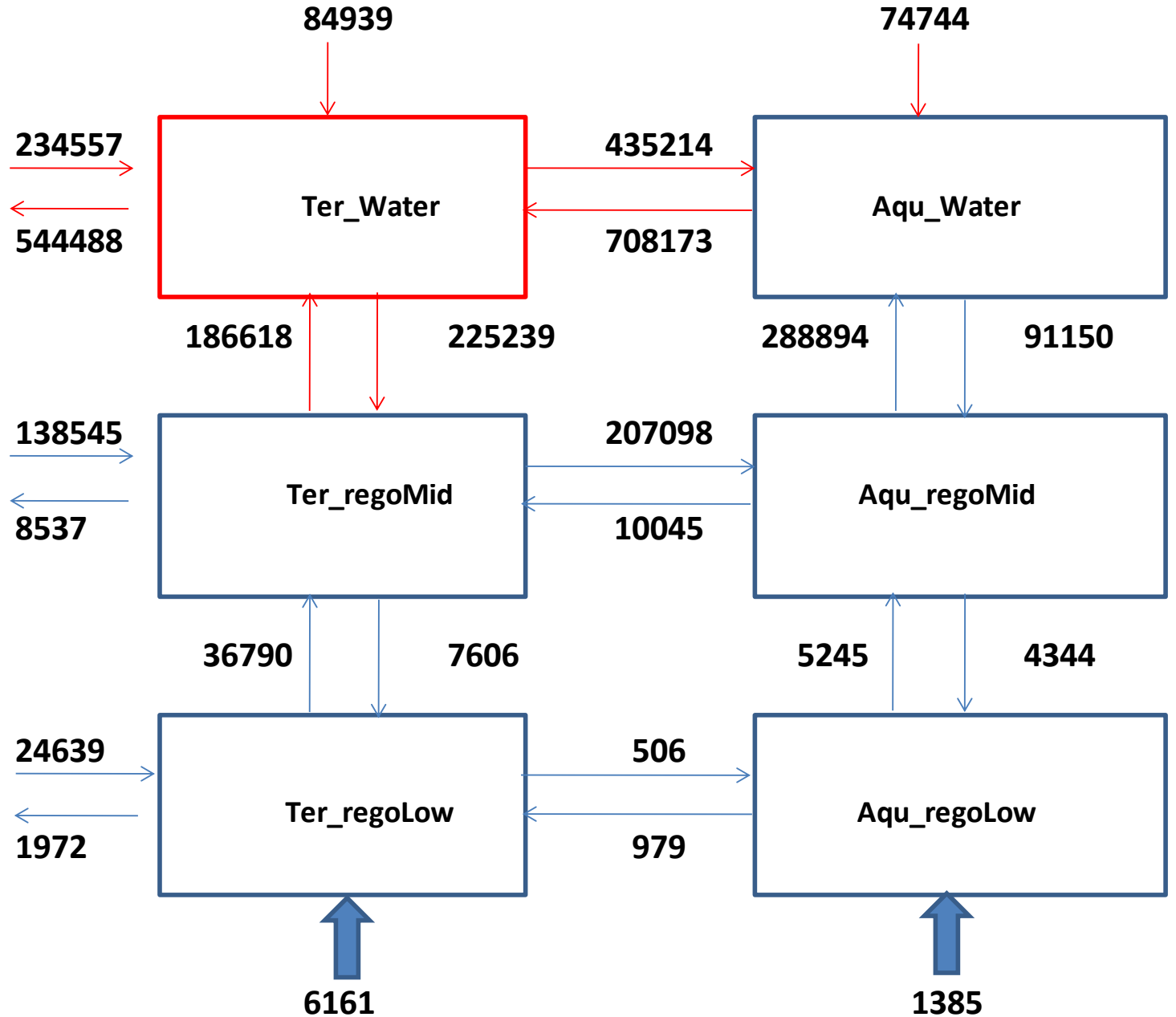
Bolundsfjärden

5000 AD

(m³/yr)



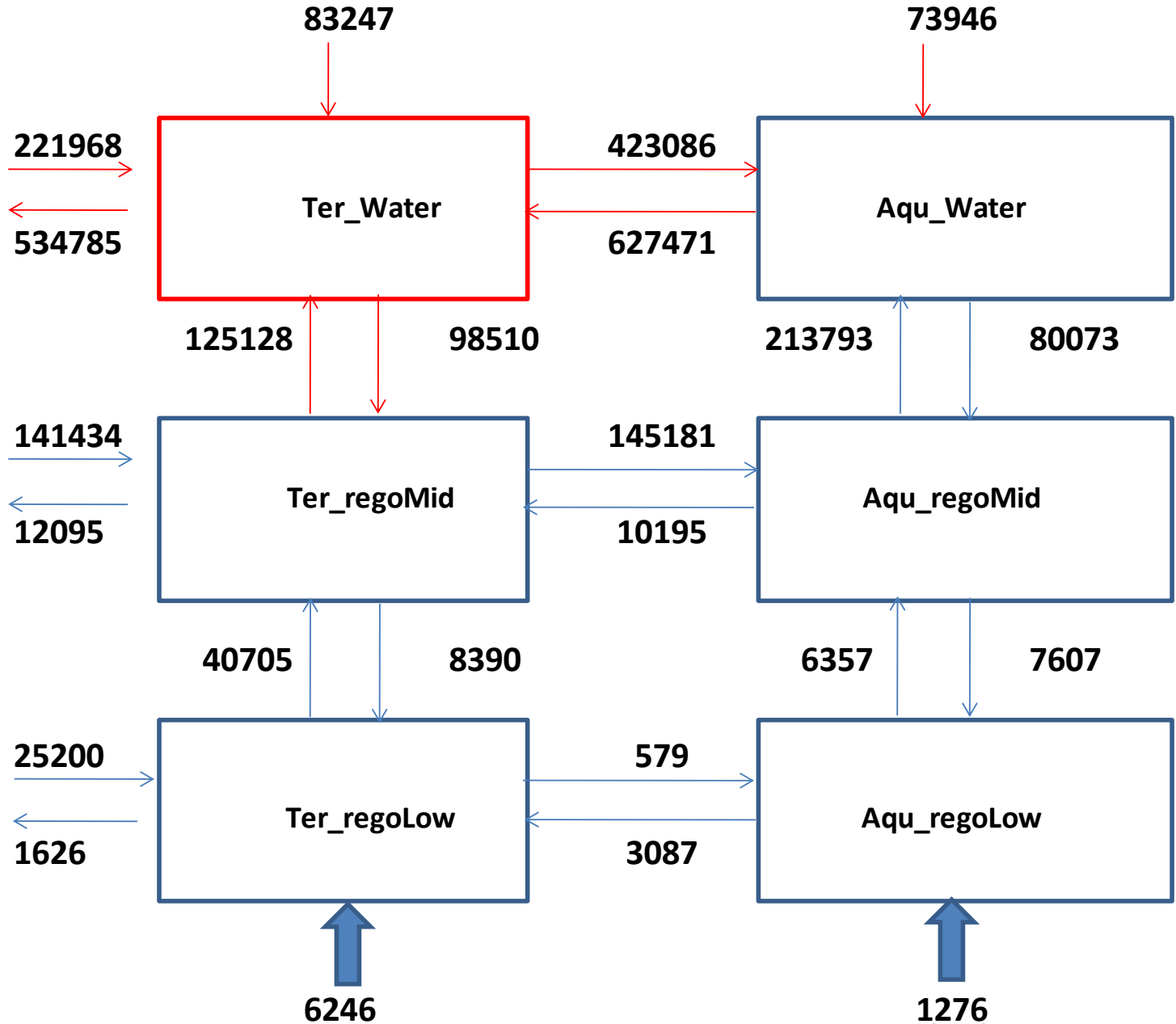
Fiskarfjärden 2000 AD (m³/yr)



Fiskarfjärden

3000 AD

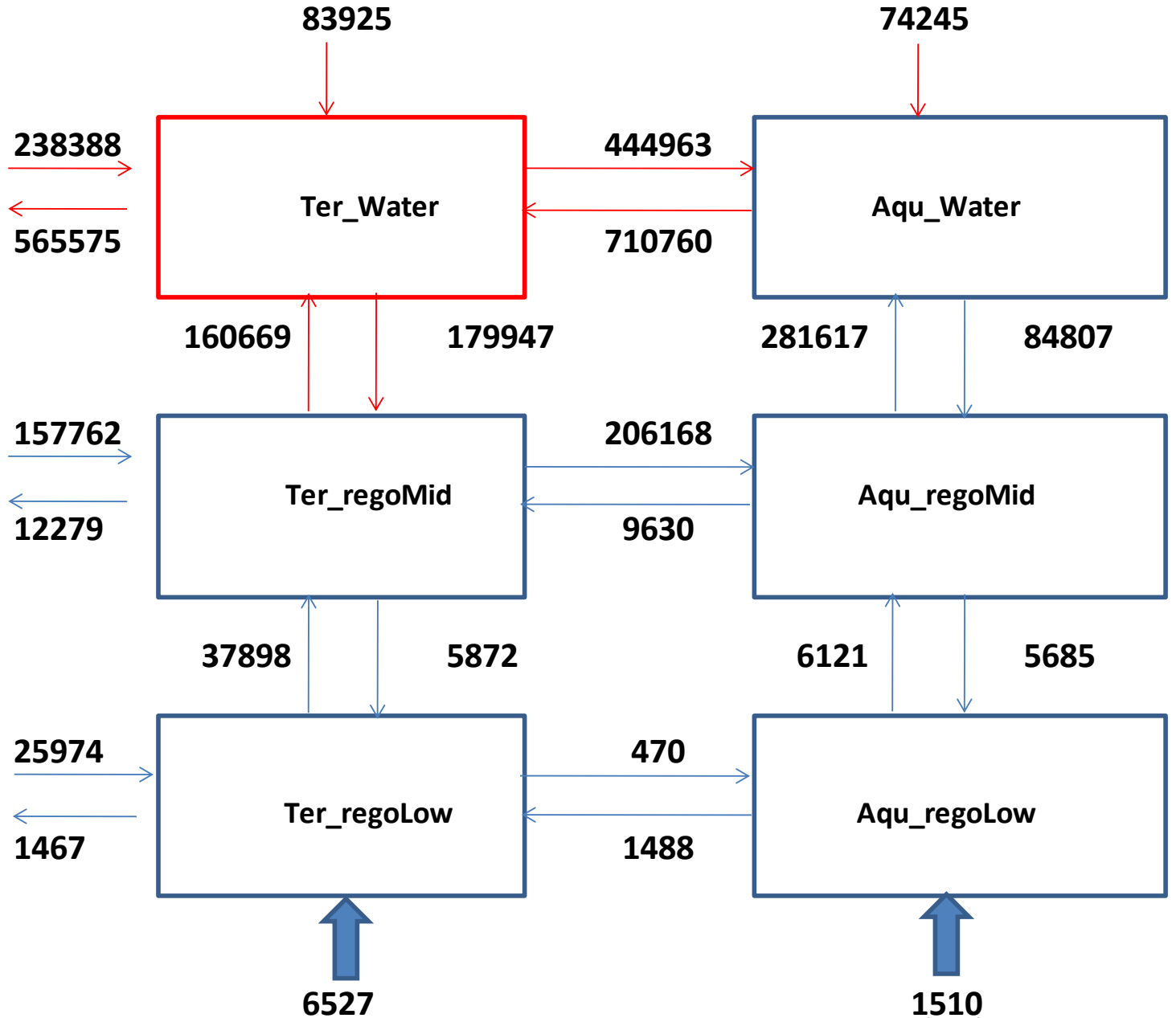
(m³/yr)



Fiskarfjärden

5000 AD

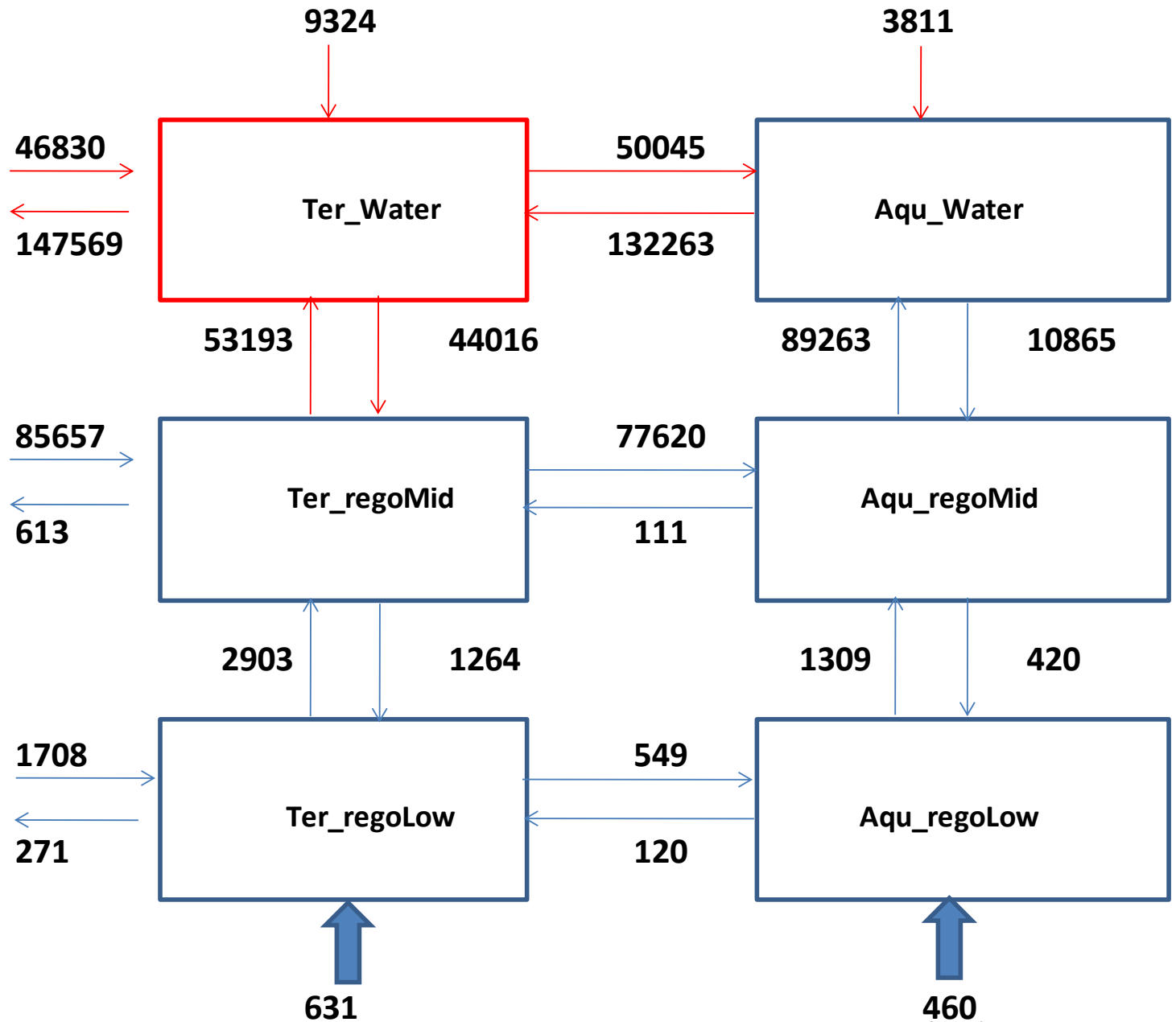
(m³/yr)



Gunnarsboträsket

2000 AD

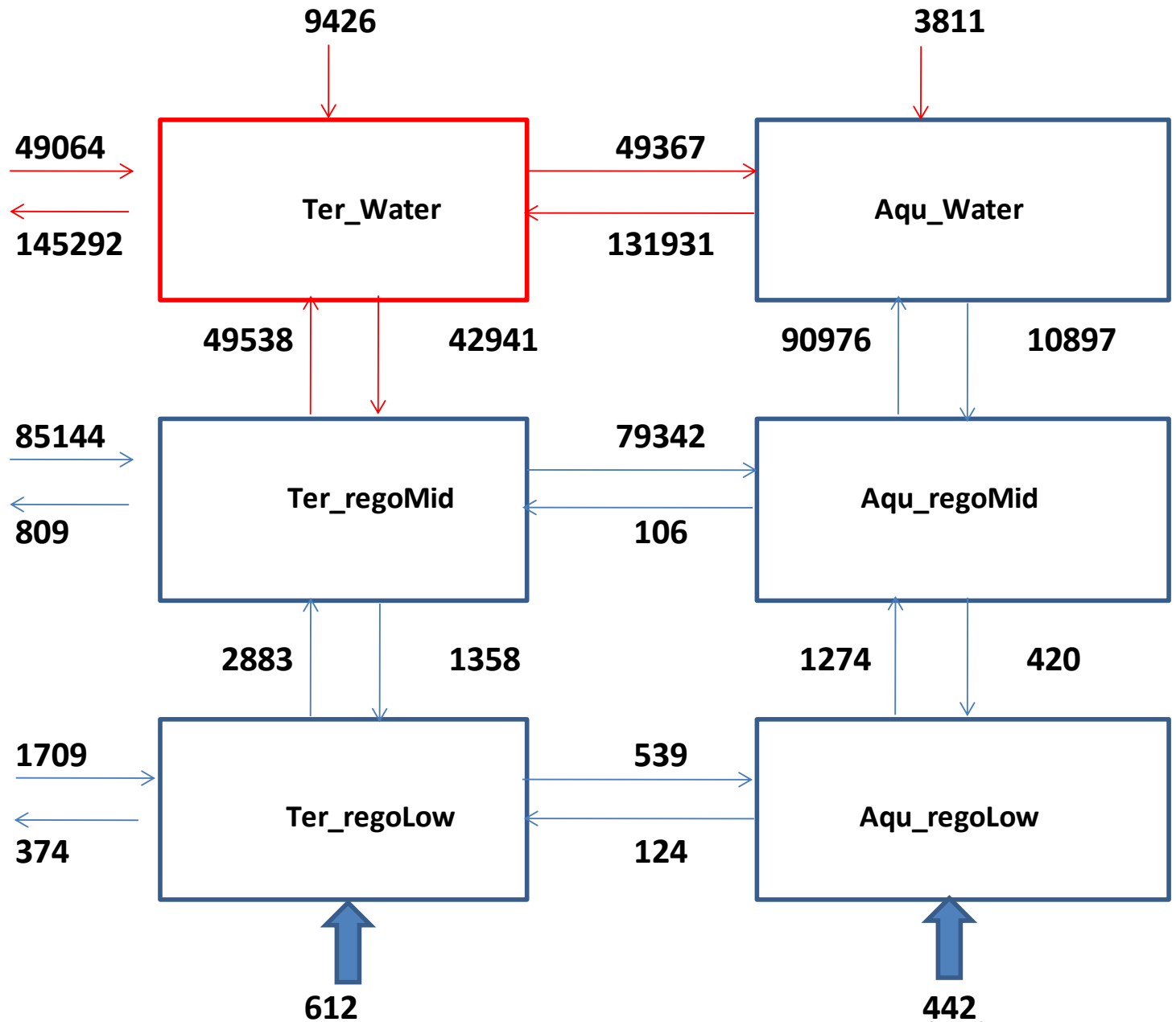
(m³/yr)



Gunnarsboträsket

3000 AD

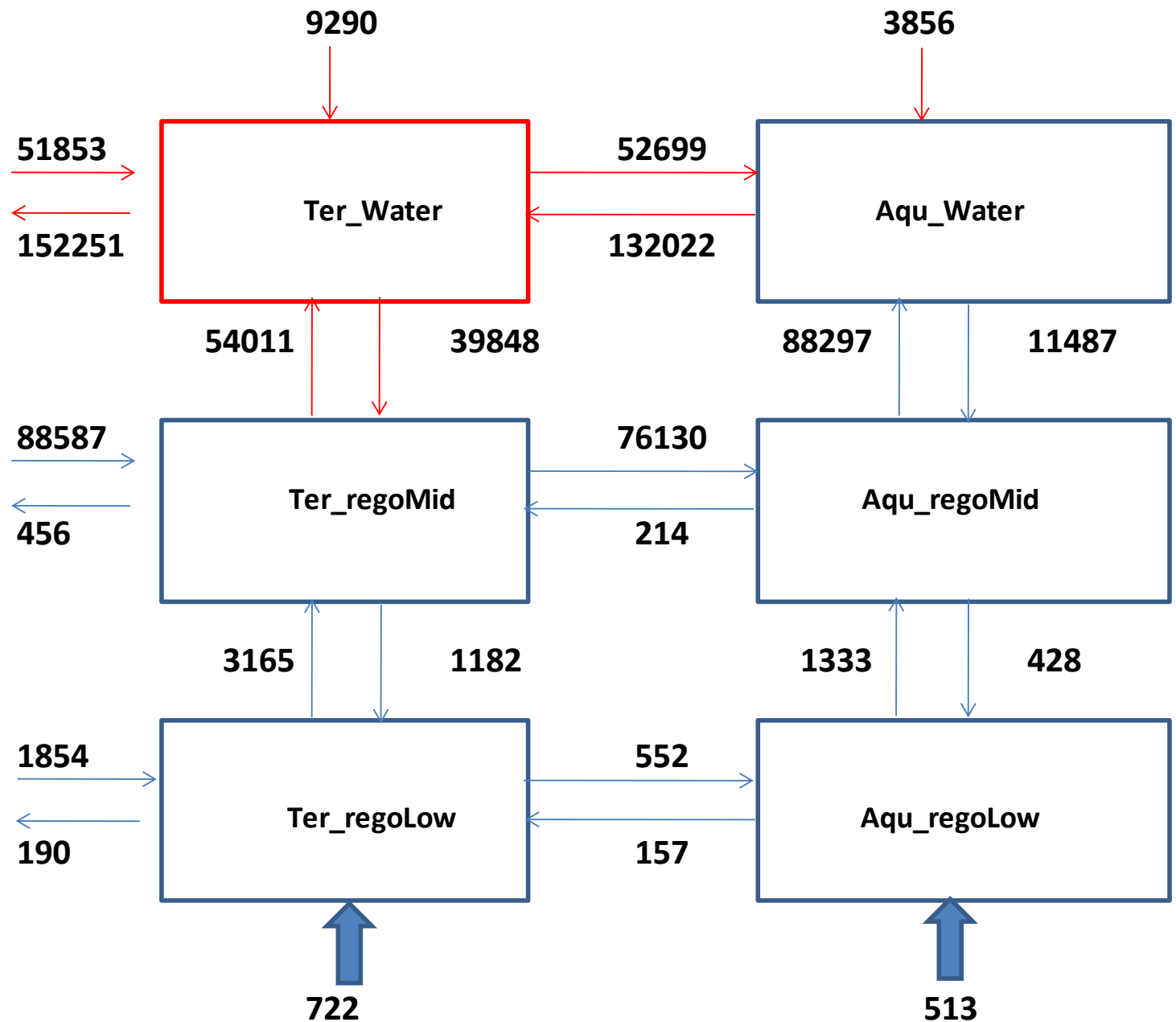
(m³/yr)



Gunnarsboträsket

5000 AD

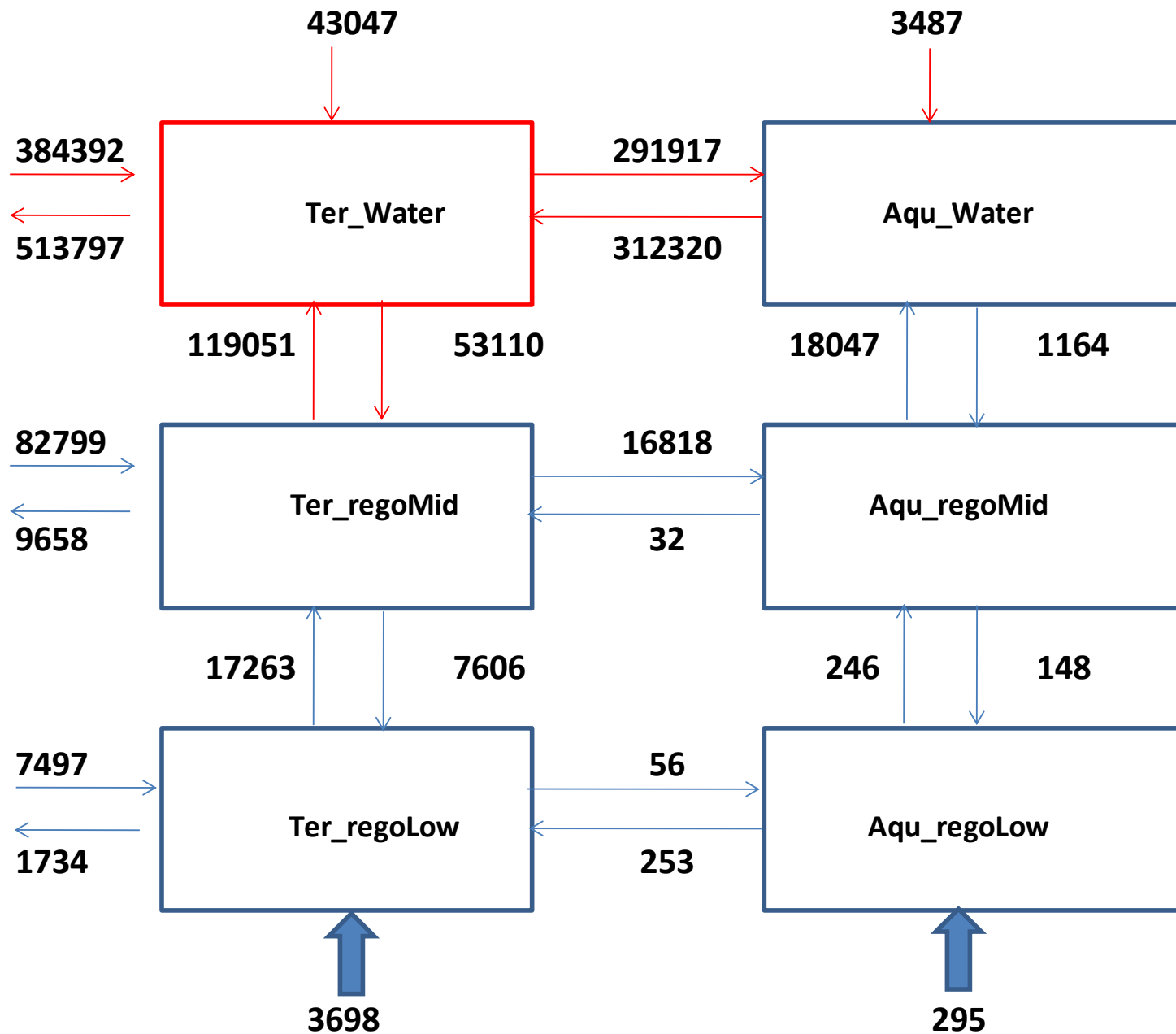
(m³/yr)



Gällsboträsket

2000 AD

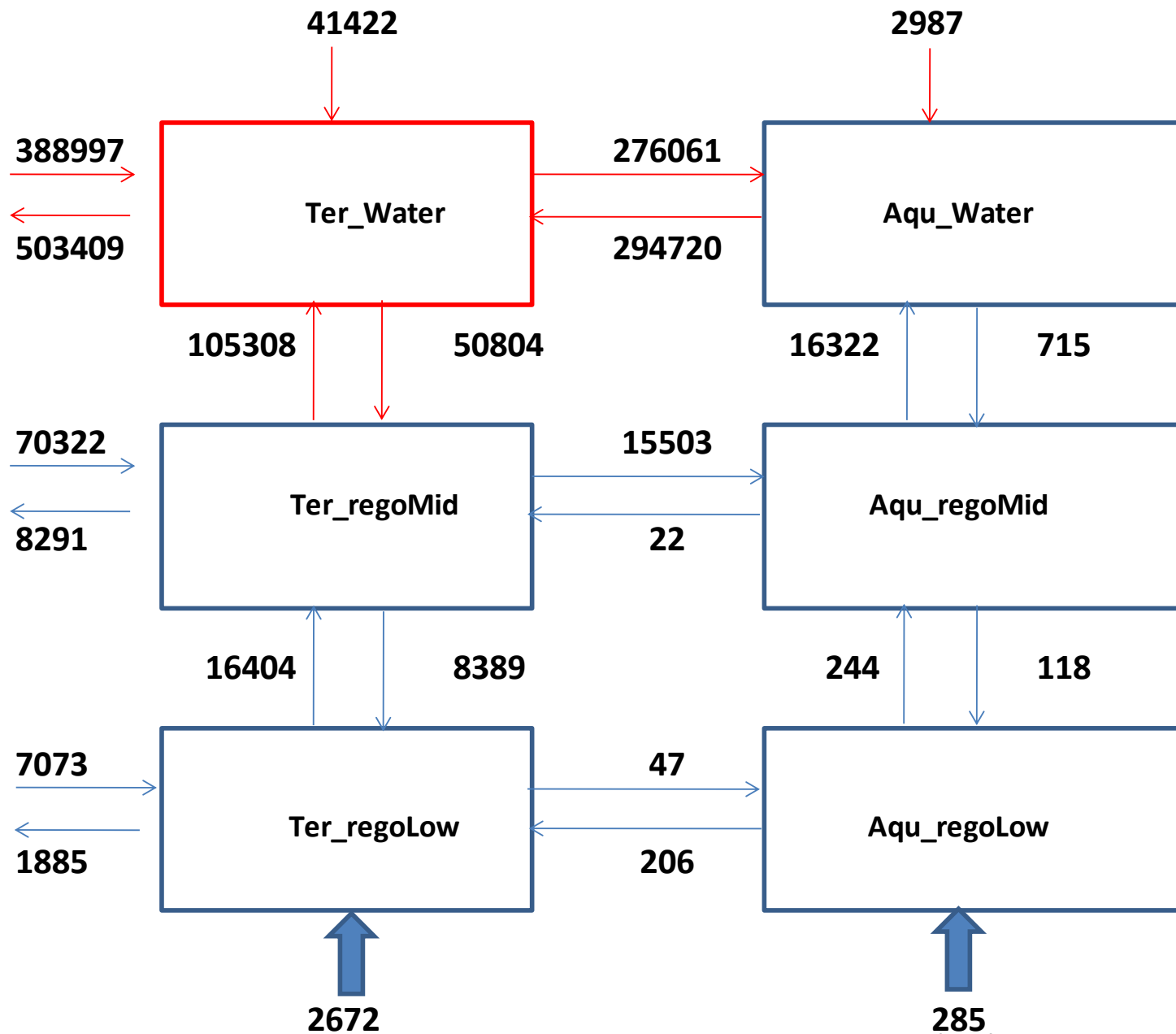
(m³/yr)



Gällsboträsket

3000 AD

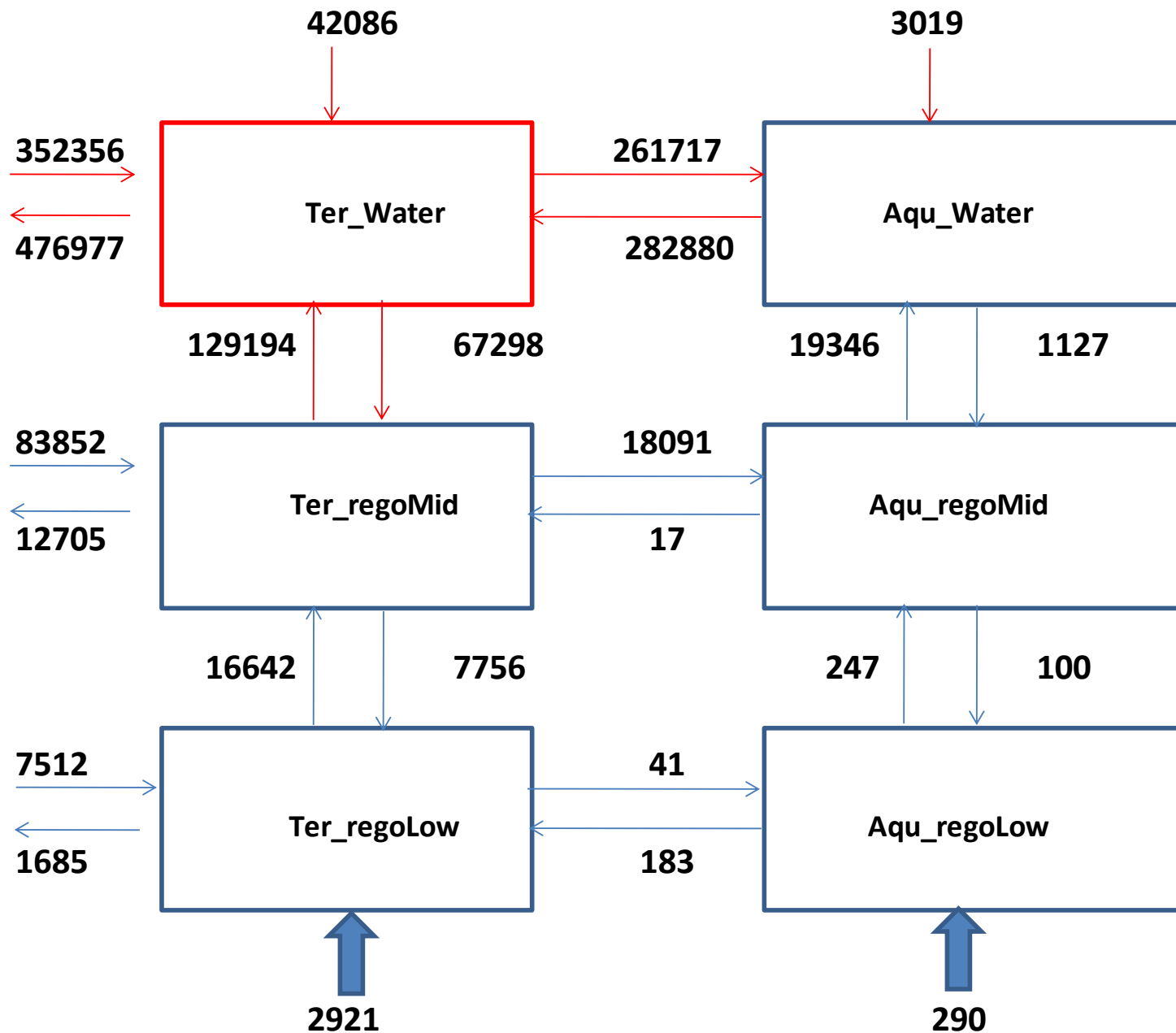
(m³/yr)



Gällsboträsket

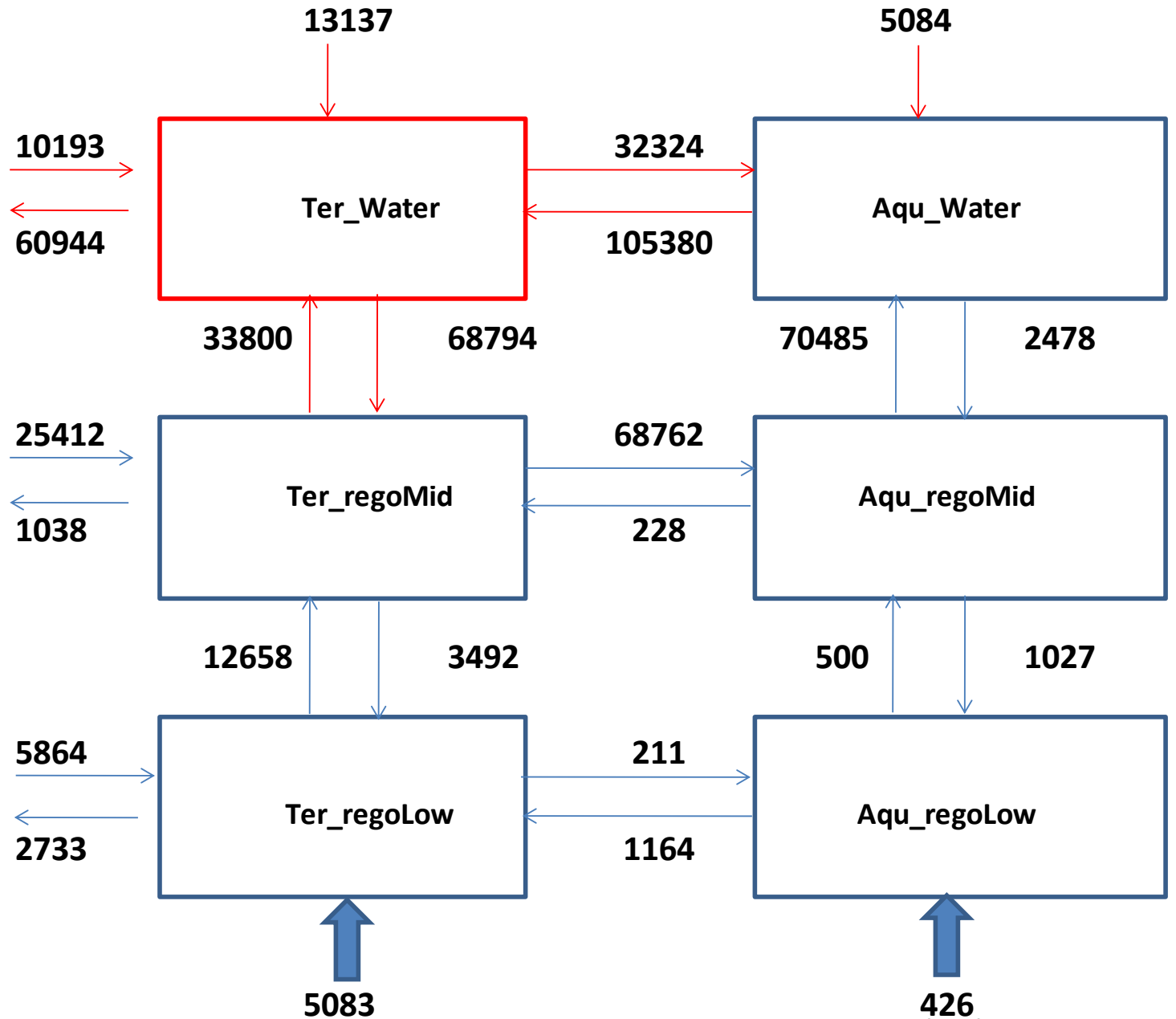
5000 AD

(m³/yr)



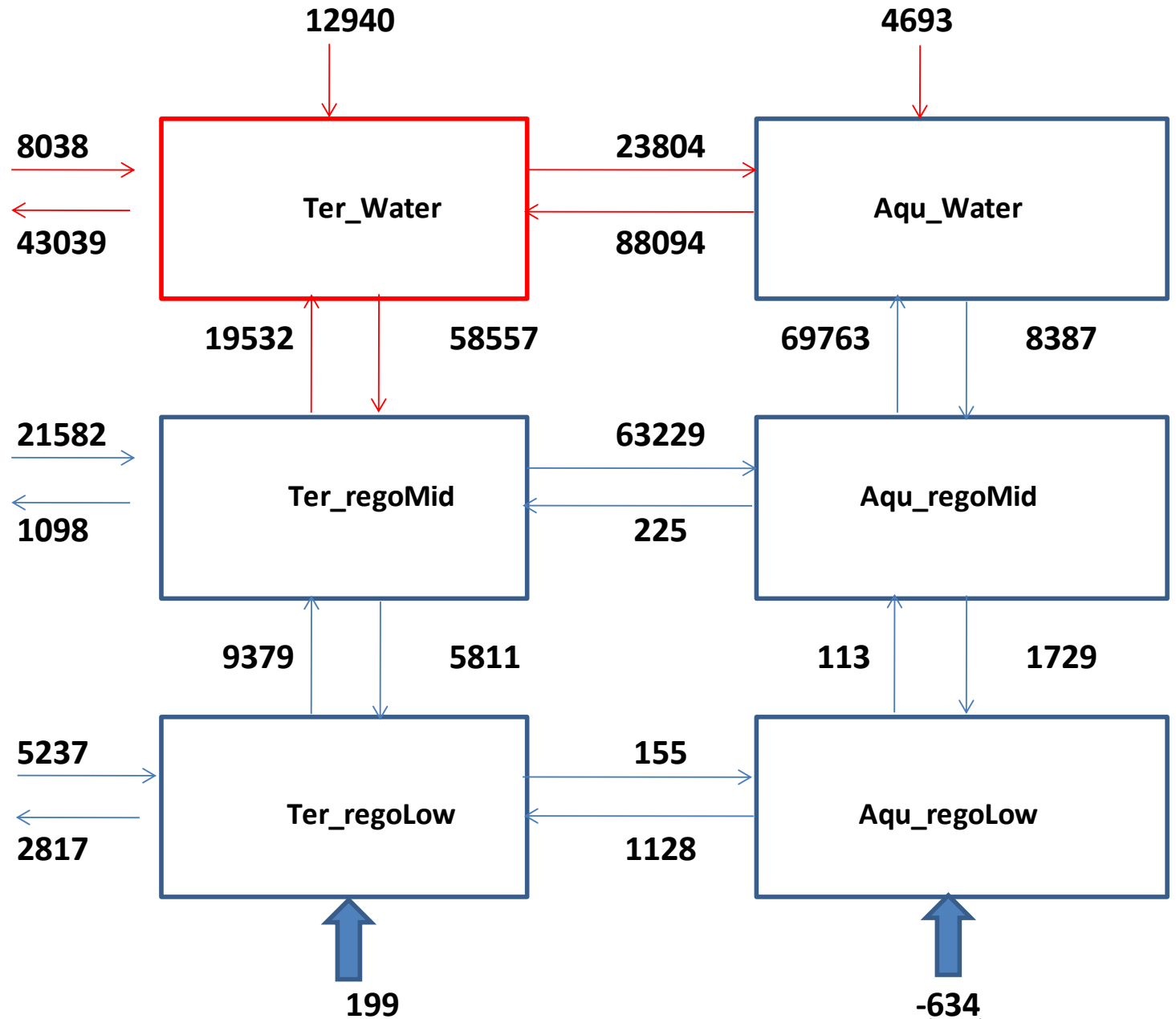
Puttan

2000 AD
(m³/yr)



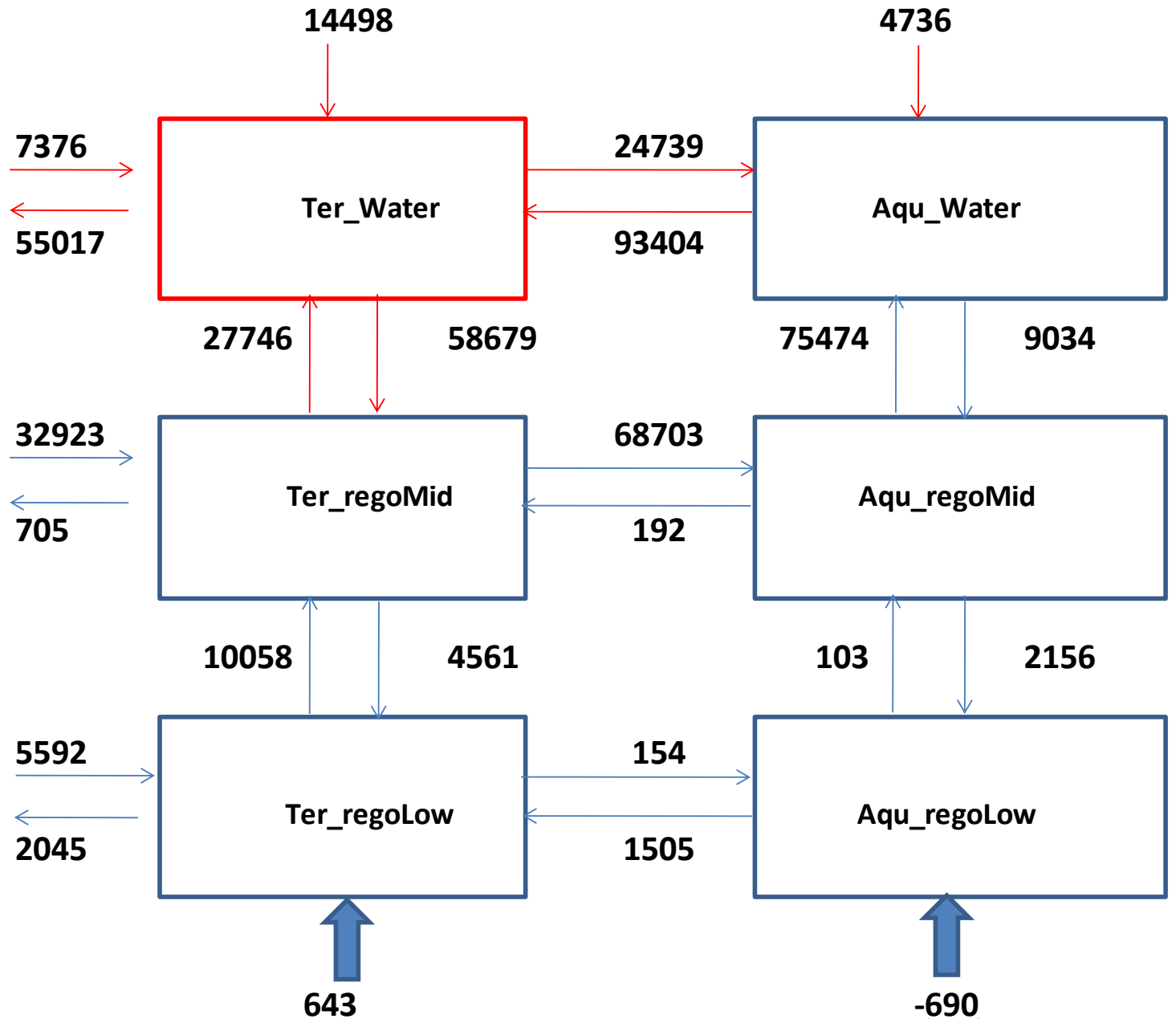
Puttan

3000 AD
(m³/yr)

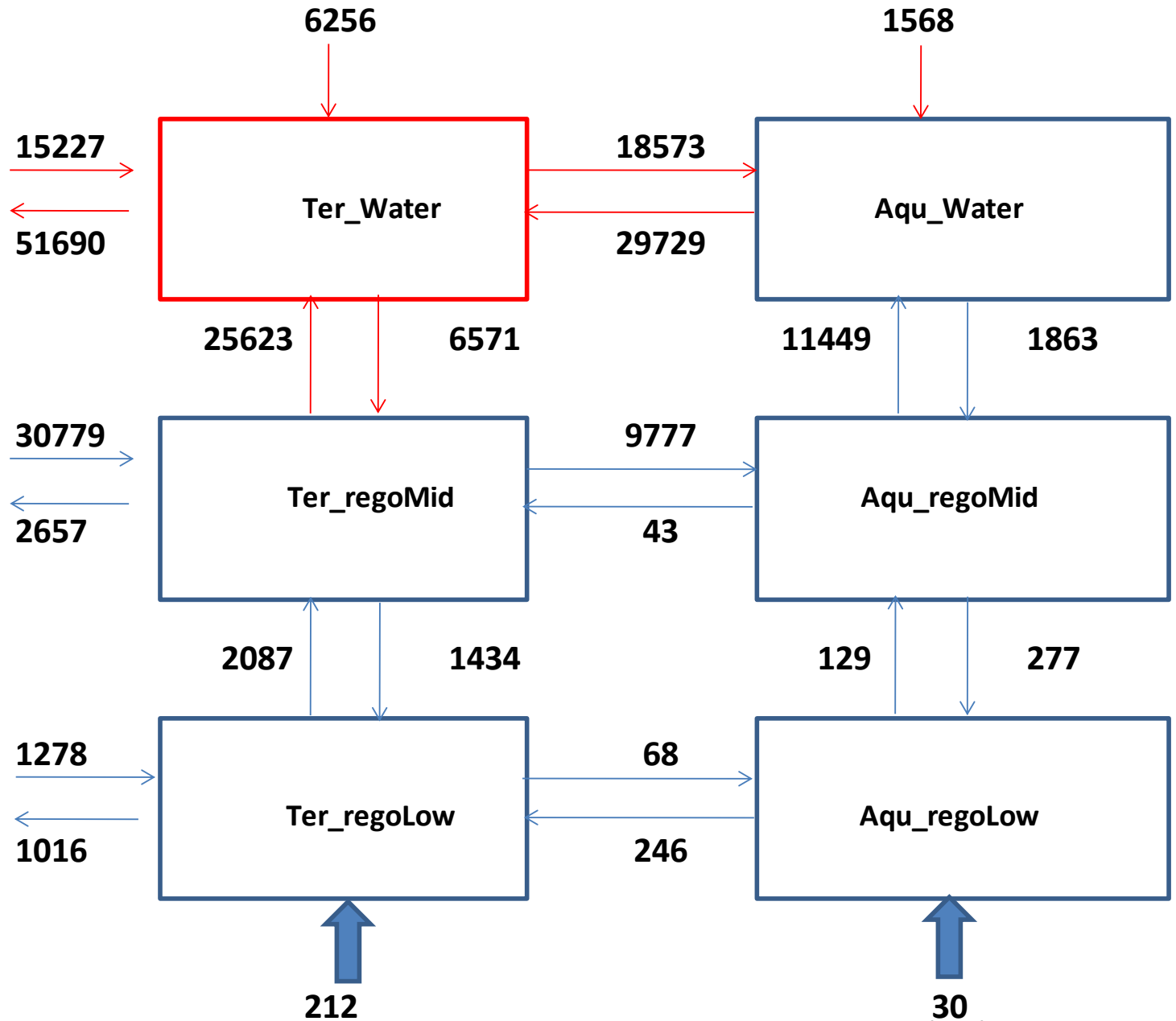


Puttan

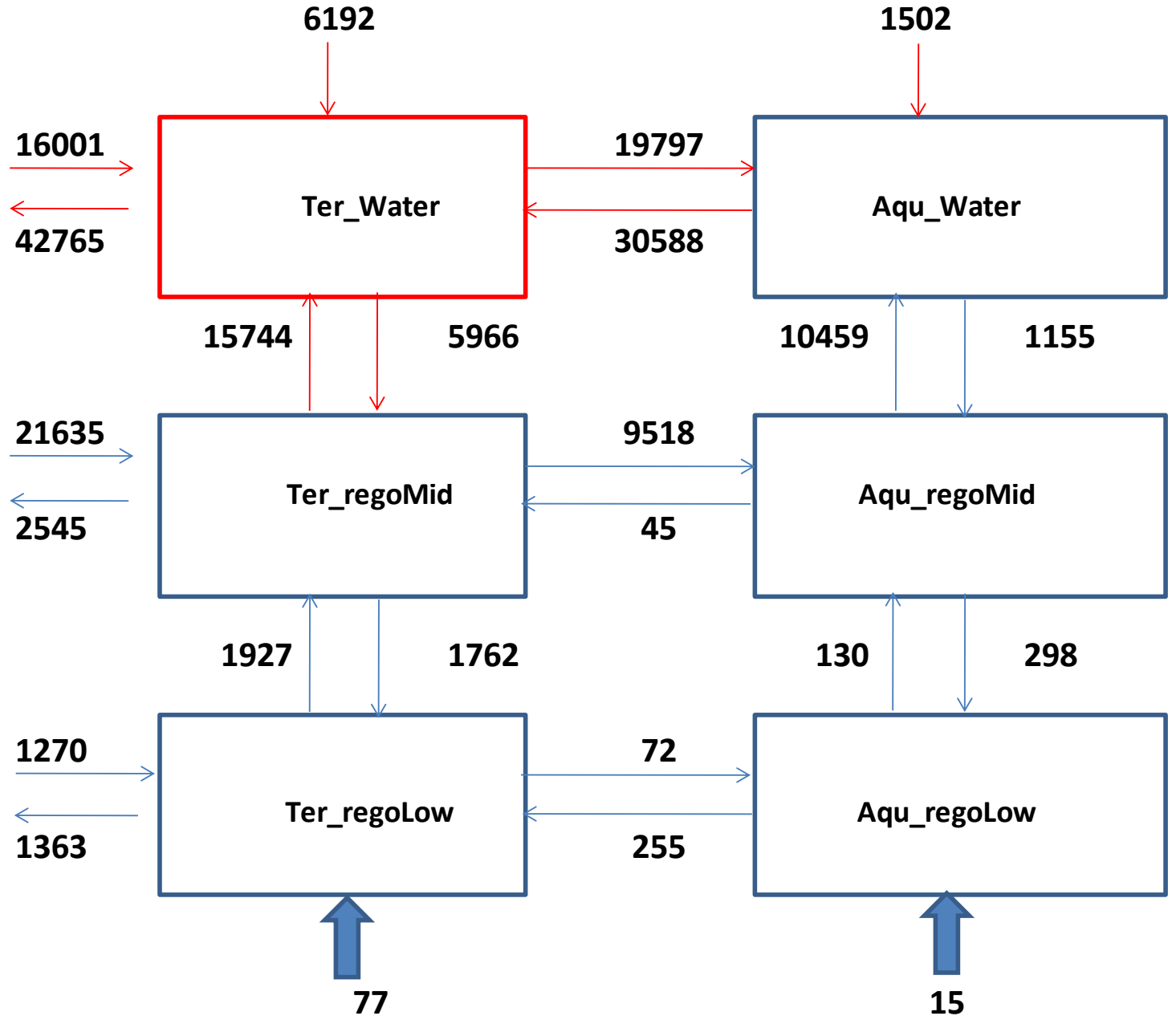
5000 AD
(m³/yr)



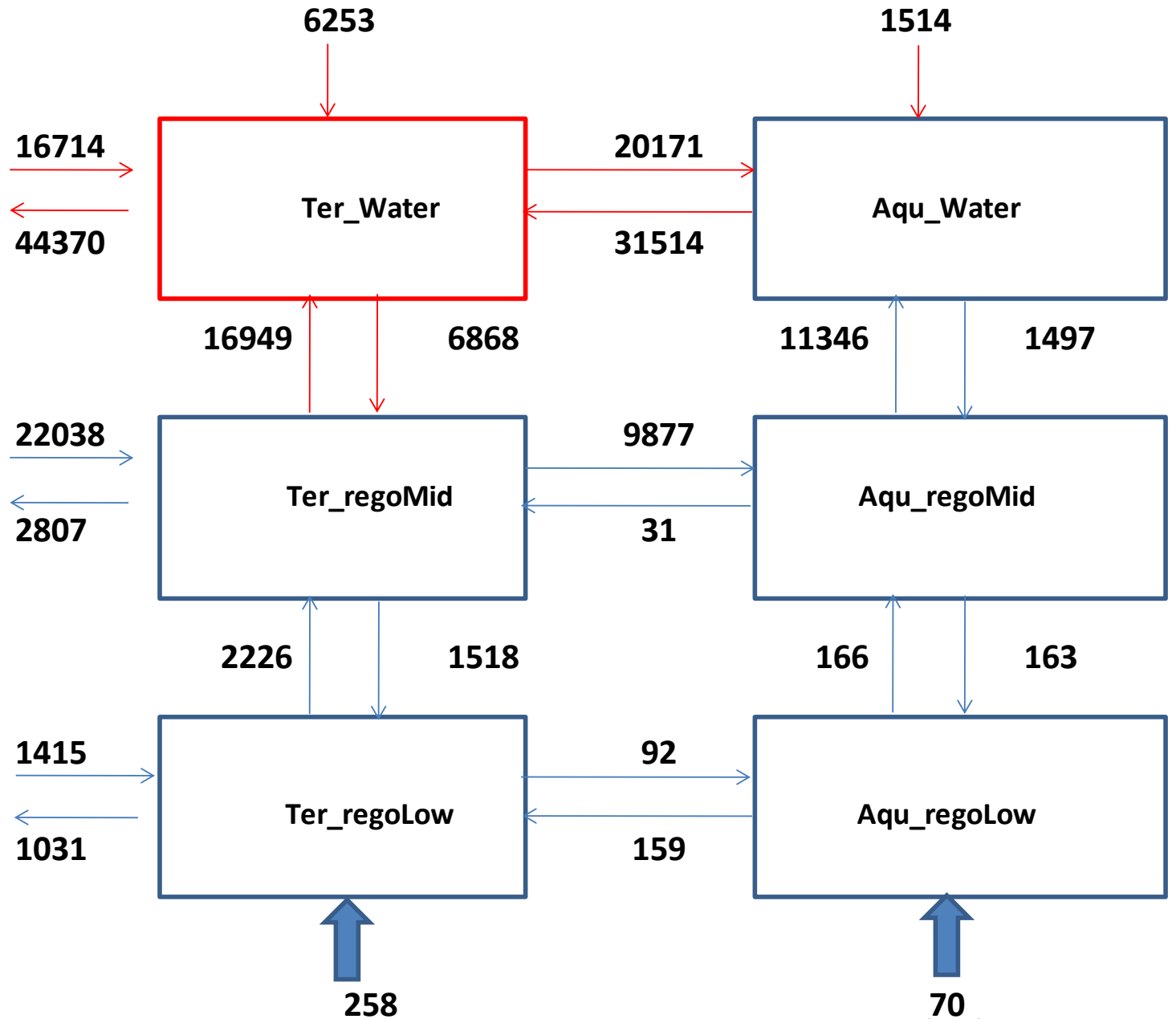
Stocksjön 2000 AD (m³/yr)



Stocksjön 3000 AD (m³/yr)



Stocksjön 5000 AD (m³/yr)



Comments:

- All water balances are calculated based on the SR-Site pre-modelling exercise, as described in R-10-02 (Section 8.1.1)
- The water balance illustrated in Figure 8-5 in R-10-02 is based on all six objects and extracted for the model representing 5000 AD
- In some of the water balances there is a discrepancy between in- and out flows in the Ter_water box. The difference between in- and out flows depends on either storage or an error in the unsaturated zone calculations.
- For the water balances with flows illustrated in m^3/s , it was decided to show all figures with whole numbers, although in many cases it means having several significant digits.
- The biggest changes are seen as the sea shoreline is displaced further from the objects, i.e. between 2000 AD and 3000 AD. Especially for lake Puttan, which goes from being a discharge area to a recharge area in the lake. The differences between the 3000 AD and 5000 AD results are generally small.