For the flows into and out of Layer 1, the changes in well withdrawals for the 2009 no-pumping simulation resulted in 29% greater simulated constant head outflows, 0.90% greater drainage outflows, 5.2% increase in river outflows, 1.9% increase in GW ET and a 97.3% increase in upward vertical flow from Layer 2 to Layer 1 (Figure 6-33). Upward vertical flow from Layer 3 to Layer 2 increased similarly by 97.4%. Spring outflows from Layer 3 increased by 2.2 percent and total general head boundary flows changed from a 0.17 in/yr inflow to a 1.36 in/yr outflow from Layer 3. The vertical flow of water from Layer 4 to Layer 3 decreased by 1.8% and the vertical flow of water from Layer 5 to Layer 4 decreased by the same percentage. General head boundary flows into Layer 5 decreased by 4%. The small (0.01 in/yr) positive inflows to Layer 3 from wells in the no-pumping simulation represented the natural influx to the Floridan aquifer system via sinks. See Table 6.32 for simulated mass balance of GWB7 for no-pumping.

Overall Summary

Figures 6-34 through 6-37 provide a simplified summary of simulated model wide mass balances for years 2001, 2009, 2010 and a no-pumping scenario, respectively. These bar graphs illustrate inflows and outflows from the major model components: recharge, Et, wells, springs, rivers and other drains, constant head and lateral leakage.

Table 6-28. Simulated mass balance of GWB 6 for no pumping (all flows in/yr)

Layer	CH	DRN	GHB	GHB Spring Flows	GW ET	LAT, Q/LAT	Q_WEL	RCH	RIV	Flow to Lower Layer
Layer 1	-0.56	-1.07	0.00	0.00	-2.96	1.53E-03	0.00	10.49	-0.36	-5.55
Layer 2	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	-0.10	-5.49
Layer 3	0.00	0.00	-2.51	-6.54	0.00	0.10	0.04	0.00	0.00	3.43
Layer 4	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	3.23
Layer 5	0.00	0.00	1.87	0.00	0.00	1.36	0.00	0.00	0.00	-1.98E-03
Layer 6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-1.98E-03
Layer 7	0.00	0.00	0.00	0.00	0.00	-1.98E-03	0.00	0.00	0.00	