1. **Precipitation** - Monthly PRSIM data aggregated for given spatial scale

2. **Runoff** - Closure term when there is a deficit in the SW system, SW deficit is partitioned into runoff and baseflow using USGS 1-km gridded base flow index (BFI) map averaged for a given spatial scale

3. **$SW_{in}/SW_{out}$** - USGS gaged based measurements

4. **$Gw_{in}/Gw_{out}$** - Presently unknown terms. Set to zero to allow for calculation of GW storage change

5. **$ET_{GW}$** - Calculation based from USGS NLCD and Hargreaves reference ET estimate for riparian vegetation

6. **Human use** - Modeled/data based human/diversions/consumption/estimated gaged & ungaged return flows

7. **Recharge** - Model assumes long term steady state GW system on all non-human terms:
   \[ \text{Recharge} = 10 \text{ yr moving AVG(baseflow + } ET_{gw} + GW_{out} - GW_{in} \) \]

8. **Landsurface ET** - Closure term to balance Land Surface. Landsurface ET = Precip – Recharge – Runoff

9. **$ET_{SW}$** - Physically based estimate of open water evaporation from rivers + estimated ungaged SW return flows

10. **SW to GW** - Closure term to balance Surface Water System. Baseflow is one component of this term.

*12.1.2015*
Phase II (2015-2016) Objectives & Progress:

- Addition of Water Planning Region spatial scale (Oct 2015)
- Addition of County spatial scale (Dec 2015)
- Quantification and display of uncertainty (Feb 2016)
- Water energy nexus information (Mar 2016)
- Graphic User Interface enhancements (April 2016)
- Future base case scenario analysis (April 2016)
- Outreach (Ongoing)