**Please put “Unknown” as a data source for the following estimation method and parameters**

***Estimation methods:***

1. Energy Balance Remote Sensing
2. METRIC
3. Empirical Data for Small Reservoirs
4. NM Spreadsheet-Based Consumptive Use Model
5. CO Municipal and Industrial Method
6. NDVI Remote Sensing
7. NDVIstar
8. RESET
9. Inflow-Outflow Approach
10. MODFLOW-OWHM: One Water Hydrologic Flow Model
11. Cal-SIMETAW Model
12. Return Flow Estimation Method
13. Drainage Area Ratio Method
14. USGS DR3M
15. Water Resource Associates HYSIM
16. University of Washington’s Variable Infiltration Capacity Model (VIC)
17. Vieux & Associates’ Vflo
18. Baseflow Separation Techniques
19. Change in Groundwater Level
20. Mass Balance
21. USS California Water Science Center – Groundwater Modeling
22. Estimate Conveyance Seepage Rate based on Canal Characteristics
23. Darcy’s law
24. Flow Net Analysis
25. Constant Percentage
26. Constant Seepage percentage
27. Water Use Models
28. Spatial Averaging Techniques
29. Runoff Curve Number Method

***Parameters:***

1. Annual Evaporation
2. Monthly Consumptive Use Coefficient (k)
3. Seasonal Consumptive Use Coefficients (K)
4. Consumptive Ratio
5. Gross Usage
6. Return Flow
7. Direct Flow Demand – Annual
8. Direct Flow Demand-Monthly
9. Potential Evapotranspiration
10. Divertible Flow
11. Return Flow
12. NDVI
13. State CU Output
14. Total Groundwater System Outflow
15. Operational Spill
16. Total Groundwater System Inflow-CA
17. Drainage area of site of interest (Ay)
18. Drainage area of streamflow gaging station (Ax)
19. Measure streamflow (Xij)
20. Average thickness of streambed (Bstream)
21. Bottom Elevation of Streambed Sediments (Hstreambed bottom)
22. Bottom elevation of the lakebed sediments (Hlakebed bottom)
23. Budget Zone Area
24. Recharge of Precipitation-CA
25. Groundwater Elevation
26. Specific Yield
27. Precipitation on Lakes-CA
28. Change in Lake Storage NA
29. Inflow from contributing or tributary streams
30. Streamflow at downstream gauge
31. Streamflow at upstream gauge
32. Distance between two points with known head (I)
33. Cross-sectional area subject to boundary flow (Ab)
34. Depth of cross section (b)
35. Hydraulic conductivity of the aquifer boundary (K)
36. Hydraulic gradient through the cross section (i)
37. Known groundwater elevation inside the boundary (hg)
38. Known groundwater elevation outside the boundary (hb)
39. Subsurface flow across the boundary (Qb)
40. Transmissivity of the Aquifer at the boundary (T)
41. Width of cross section (w)
42. Effective thickness of the aquifer (b)
43. Flow through a vertical plane that extends beneath the shoreline of a surface water body (Q)
44. Horizontal hydraulic conductivity of the aquifer at the boundary (K)
45. Number of equipotential head drops over the area of interest (n)
46. Number of streamtubes across a flow net (M)
47. Groundwater Level (Haquifer)
48. Surface area of lake (Al)
49. Vertical hydraulic conductivity of the surrounding aquifer (Kv)
50. Water level in lake (Hlake)
51. Wetted perimeter of lake multiplied by the average saturated thickness of aquifer around the lake (Awpl)
52. Effective area of flow exchange (Awps)
53. Hydraulic conductivity of the streambed material (Ks)
54. Water Stage in stream (Hstream)
55. Change in Ponded Water Storage
56. Change in Root Zone Soil Moisture
57. Change in Soil Moisture
58. Change in Unsaturated Zone Storage

**Components with no data source:**

1. Total Land System Inflow-CA
2. Total Surface Water Outflow-CA
3. Total Land System Outflow-CA
4. Total Outflow-CA
5. Total Inflow-CA
6. Change in Total System Storage-CA
7. Change in Land System Storage-CA
8. Riparian Depletions-UT
9. River Use By Wet Pasture-UT
10. Total Land Return Flow-UT
11. Livestock-NMOSE
12. Commercial-NMOSE
13. Mining-NMOSE
14. Power-NMOSE
15. Public Water Supply-NMOSE
16. Irrigated Agriculture-NMOSE
17. Mining: Reported-NMOSE
18. Power: Reported-NMOSE
19. Change in Ground Water Storage-CO
20. Ground Water Inflow-CO
21. Ground Water Outflow-CO