

Input

Surface and
ground water
hydrology

Physical facilities
& capacities

Environmental
flow constraints

Urban values of
water (elasticities)

Agricultural
values of water
(SWAP)

Operating costs

CALVIN Economic Optimization Model:

Databases
of Input &
Meta- Data

HEC-PRM
(CALVIN)
or Pyomo
(PyVIN)

Output

Economic benefits
of alternatives

Conjunctive use &
cooperative
operations

Willingness-to-pay
for additional
water & reliability

Water operations
& delivery
reliabilities

Value of more
flexible operations

Values of
increased facility
capacities