Water Supply Reservoir Capacity Data

Proposed CCRC Site 4B
Drainage Area = 16,500 acres
Normal Pool Area = 790 acres
DAPA Ratio = 20.9 : 1
Normal Pool Elevation = 1001.0
Bottom Intake Elevation = 984.0
Total Volume Available = 11,030 acre-feet
Safe Withdrawal Capacity Determined = 2.0 MGD

West Lake
Drainage Area = 6,366
Normal Pool Area = 297
DAPA Ratio = 21.4 : 1
Normal Pool Elevation = 1072.0
Bottom Intake Elevation = 1052.0
Total Volume Available = 2,665 acre-feet
Safe Withdrawal Capacity Determined = 0.8 MGD

Osceola Treatment Capacity = 3.0 MGD
Osceola Design Average Day Demand = 2.8 MGD versus safe withdrawal capacity of 2.8 MGD

Three-Mile
Drainage Area = 23,230 acres
Normal Pool Area = 880 acres
DAPA Ratio = 26.4 : 1
Normal Pool Elevation = 1148.5
Bottom Intake Elevation = 1124.0
Total Volume Available = 12,609 acre-feet
Total Water Supply Volume = 9,000 acre-feet
Safe Withdrawal Capacity Estimated for 9,000 AF = 2.0 x 9,000/11,030 x 26.4/20.9 = 2.1 MGD
Safe Withdrawal Capacity Estimated for 12,609 AF = 2.0 x 12,609/11,030 x 26.4/20.9 = 2.9 MGD

SIRWA Treatment Capacity = 6.0 MGD
SIRWA Design Average Day Demand = 3.6 MGD versus total safe withdrawal capacity of 2.1-2.9 MGD

Twelve-Mile
DAPA Ratio = 23 : 1
Total Water Supply Volume = 8,000 acre-feet
Safe Withdrawal Capacity Estimated = 2.0 x 8,000/11,030 x 23/20.9 = 1.6 MGD

Creston Treatment Capacity = 8.0 MGD
Creston Design Average Day Demand = 1.0 MGD? versus total safe withdrawal capacity of 1.6 MGD

Combined Reservoirs and Entities

Total Safe Withdrawal Capacity of All Reservoirs = 2.0 + 0.8 + (2.1-2.9) + 1.6 = 6.5-7.3 MGD
Total Design Average Day Demand of All Entities = 2.8 + 3.6 + 1.0? = 7.4 MGD