

ESTIMATE ADDITIONAL COSTS FOR CHANGES TO WATER SYSTEM OPERATION

WATER SYSTEM CAPACITY AND CAPABILITY:

- 1. CURRENTLY (13) ACTIVE WELLS WITH TOTAL CAPACITY OF 44.350 MGD, OR APPROX. 30,800 GPM (REF. 2015 PSC REPORT).
- 2. AVERAGE PUMPING CAPACITY OF EXISTING WELLS IS 2,246 GPM (REF. 2015 PSC REPORT).
- 3. ANNUAL AVERAGE (2015 DATA) WATER PRODUCTION OF 10.6 MGD, OR APPROX. 7,361 GPM.
- 4. AVERAGE WATER SYSTEM FLUSHING RATE OF APPROX. 8,900 GPM WHILE SIMULTANEOUSLY FILLING RESERVOIR.

ESTIMATED UNIT COSTS RELATED TO WATER SYSTEM OPERATION:

- 1. WATER VOLUME PER FOOT OF DEPTH IN RESERVOIR IS 250,000 GALLONS
- 2. POWER COST:
 - ANNUAL POWER USED (2015 ACTUAL): 5,278,720 KWH
 - ANNUAL PUMPAGE (2015 ACTUAL): 3,866,134 X 1000 GALLONS
 - POWER USE RATE (2015 ACTUAL) OF 1.37 KWH PER 1000 GALLONS OF WATER PUMPED
 - CURRENT XCEL RATE - ON PEAK ENERGY USE (SUMMER)* \$0.073 PER KWH
 - CURRENT XCEL RATE - ON PEAK ENERGY USE (WINTER)* \$0.068 PER KWH
 - CURRENT XCEL AVERAGE RATE - ON PEAK ENERGY USE \$0.070 PER KWH
 - CURRENT XCEL RATE - OFF PEAK ENERGY USE* \$0.058 PER KWH
 - AVERAGE INCREMENTAL ADDED COST FOR ON PEAK OPERATION \$0.012 PER KWH
- * PEAK HOURS ARE 9:00 AM TO 9:00 PM; DAILY.
- 3. AVERAGE DEMAND CHARGE (2016 XCEL ENERGY RATES) OF \$2,090 PER MONTH PER WELL

MINIMUM COSTS PER ADDITIONAL FOOT OF WATER STORED IN RESERVOIR: ANNUAL COST

- 1. POWER COST TO PUMP ADDITIONAL 250,000 GALLONS PER DAY - ON PEAK \$1,121
- 2. DEMAND CHARGE FOR MINIMUM OF ONE ADDITIONAL WELL OPERATING PER DAY: \$25,080
- ESTIMATED MIN. ADDITIONAL COST \$26,201

OTHER POTENTIAL CONSIDERATIONS:

- 1. WATER AGE AND WATER QUALITY.
- 2. MINIMUM CHLORINE RESIDUAL REQUIREMENTS THROUGHOUT DISTRIBUTION SYSTEM.
- 3. EQUIPMENT WEAR AND MAINTENANCE.