

CITY OF NEEDLES
 WATER ACCOUNTING
 MONTHLY CALCULATION SHEET
 CALENDAR YEAR 2024

| Diversions - Pumped from Wells | Pumped (Acre-Feet) | | | | | | | | | | | | Total | |
|---|--------------------|--------------|---------------|---------------|---------------|---------------|---------------|-------------|-------------|-------------|-------------|-------------|-------------|-----------------|
| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | | |
| Well #8 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Well # 15 (formerly #10) | 89.95 | 70.21 | 103.04 | 113.54 | 132.90 | 153.86 | 168.50 | | | | | | | 832.00 |
| Well #11 | 0.00 | 0.00 | 0.09 | 0.00 | 0.07 | 0.00 | 0.00 | | | | | | | 0.16 |
| Well #12 | 10.74 | 6.78 | 13.56 | 51.77 | 56.20 | 77.87 | 69.79 | | | | | | | 286.71 |
| Sub-Total | 100.69 | 76.99 | 116.69 | 165.31 | 189.17 | 231.73 | 238.29 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1,118.87 |
| Delivered to Ft. Mojave Indian Tribe (AZ) | 2.78 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | | | 2.78 |
| Delivered to Ft. Mojave Indian Tribe (CA) | 0.00 | 8.30 | 1.79 | 1.90 | 6.20 | 5.07 | 3.63 | | | | | | | 26.89 |
| Sub-Total | 2.78 | 8.30 | 1.79 | 1.90 | 6.20 | 5.07 | 3.63 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 29.67 |
| City of Needles' Net Diversion | 97.91 | 68.69 | 114.90 | 163.41 | 182.97 | 226.66 | 234.66 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1,089.20 |
| Uses of Water | | | | | | | | | | | | | | |
| Commercial Accounts | 45.45 | 32.92 | 50.17 | 53.28 | 60.59 | 64.62 | 78.80 | | | | | | | 385.83 |
| Residential Accounts | 36.34 | 27.32 | 46.60 | 52.64 | 57.40 | 71.00 | 69.00 | | | | | | | 360.30 |
| Golf Course | 10.74 | 6.78 | 13.56 | 51.77 | 56.20 | 77.87 | 69.79 | | | | | | | 286.71 |
| Parks, Ballparks, Cemetery | 5.37 | 1.67 | 4.48 | 5.72 | 8.77 | 13.18 | 17.06 | | | | | | | 56.25 |
| Total | 97.90 | 68.69 | 114.81 | 163.41 | 182.96 | 226.67 | 234.65 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1,089.09 |

**CALENDAR YEAR 2024
WASTEWATER TREATMENT PLANT**

| | Mean Flow | # Days | A/F | A/F Return |
|--------------|------------------|---------------|---------------|-------------------|
| Jan | 0.481 | 31 | 45.76 | 44.39 |
| Feb | 0.421 | 29 | 37.47 | 36.35 |
| Mar | 0.429 | 31 | 40.82 | 39.59 |
| Apr | 0.436 | 30 | 40.14 | 38.94 |
| May | 0.425 | 31 | 40.44 | 39.22 |
| Jun | 0.482 | 30 | 44.38 | 43.05 |
| Jul | 0.495 | 31 | 47.10 | 45.68 |
| Aug | | 31 | 0.00 | 0.00 |
| Sep | | 30 | 0.00 | 0.00 |
| Oct | | 31 | 0.00 | 0.00 |
| Nov | | 30 | 0.00 | 0.00 |
| Dec | | 31 | 0.00 | 0.00 |
| | | | | |
| TOTAL | 3.169 | 366 | 296.10 | 287.22 |

Daily mean flow x #days mo X 1,000,000 = gal/mo
divided by 7.48 divided by 43560 = A/F mo

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WATER ACCOUNTING
MONTHLY CALCULATION SHEET
CALENDAR YEAR 2024**

| Diversions | | | | | | | | | | | | | |
|---|---------------|--------------|---------------|---------------|---------------|---------------|---------------|-------------|-------------|-------------|-------------|-------------|-----------------|
| Pumped (Acre-Feet) | | | | | | | | | | | | | |
| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total |
| Pumped from Wells | | | | | | | | | | | | | |
| Well #8 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Well # 15 (FKA #10) | 89.95 | 70.21 | 103.04 | 113.54 | 132.90 | 153.86 | 168.50 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 832.00 |
| Well #11 | 0.00 | 0.00 | 0.09 | 0.00 | 0.07 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.16 |
| Well #12 | 10.74 | 6.78 | 13.56 | 51.77 | 56.20 | 77.87 | 69.79 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 286.71 |
| Sub-Total | 100.69 | 76.99 | 116.69 | 165.31 | 189.17 | 231.73 | 238.29 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1,118.87 |
| Delivered to Ft. Mojave Indian Tribe (AZ) | 2.78 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.78 |
| Delivered to Ft. Mojave Indian Tribe (CA) | 0.00 | 8.30 | 1.79 | 1.90 | 6.20 | 5.07 | 3.63 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 26.89 |
| Sub-Total | 2.78 | 8.30 | 1.79 | 1.90 | 6.20 | 5.07 | 3.63 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 29.67 |
| City of Needles' Net Diversion | 97.91 | 68.69 | 114.90 | 163.41 | 182.97 | 226.66 | 234.66 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1,089.20 |

| Return and Other Credits | | | | | | | | | | | | | |
|--|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|-------------|-------------|-------------|-------------|---------------|
| Measured Returns | | | | | | | | | | | | | |
| Sewer Plant's Rapid Infiltration Ponds ¹ | 44.39 | 36.35 | 39.59 | 38.94 | 39.22 | 43.05 | 45.68 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 287.22 |
| Unmeasured Returns | | | | | | | | | | | | | |
| Percolation from Golf Course ² | 0.00 | 0.00 | 0.00 | 30.79 | 11.66 | 28.12 | 24.29 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 94.86 |
| Percolation from Parks ³ | 2.15 | 0.67 | 1.79 | 2.29 | 3.51 | 5.27 | 6.82 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 22.50 |
| Percolation from Large Commercial Users ⁴ | 1.09 | 0.79 | 1.20 | 1.28 | 1.45 | 1.55 | 1.89 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 9.26 |
| System Losses ⁵ | 0.01 | 0.00 | 0.09 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.12 |
| Septic Tank Returns ⁶ | 4.12 | 3.84 | 4.41 | 4.22 | 4.12 | 3.96 | 4.54 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 29.23 |
| Total Unmeasured Returns | 7.37 | 5.30 | 7.50 | 38.57 | 20.75 | 38.91 | 37.56 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 155.97 |
| Total Returns | 51.76 | 41.65 | 47.09 | 77.51 | 59.97 | 81.96 | 83.24 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 443.19 |

Footnotes:

- 1/Calculated as WWTP Total Discharge*0.97.
- 2/Calculated as Monthly Delivery to Golf Course*Efficiency-Monthly ET. Efficiency =0.9
- 3/Calculated as Delivery to Parks, Ballparks, Cemetry*0.40.
- 4/Calculated as 24% of Deliveries to Commercial Accounts*0.10.
- 5/Calculated as City of Needles' Net Diversions-Total Uses.
- 6/Total Annual UMRF from septic tanks = 50; assumes 210 septic units*0.6 AF/yr*0.40 (where 0.40 = UMRF Factor). Annual volume is distributed monthly using a monthly distribution factor.

| Consumptive Use | | | | | | | | | | | | | |
|--------------------|-------|-------|--------|--------|--------|--------|--------|------|------|------|------|------|----------|
| Diversions | 97.91 | 68.69 | 114.90 | 163.41 | 182.97 | 226.66 | 234.66 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1,089.20 |
| Measured Returns | 44.39 | 36.35 | 39.59 | 38.94 | 39.22 | 43.05 | 45.68 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 287.22 |
| Unmeasured Returns | 7.37 | 5.30 | 7.50 | 38.57 | 20.75 | 38.91 | 37.56 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 155.97 |
| Consumptive Use | 46.15 | 27.04 | 67.81 | 85.90 | 123.00 | 144.70 | 151.42 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 646.01 |