



City of Needles, California Employee Report

CITY COUNCIL/NPUA Board of Public Utilities Regular Special

Meeting Date: August 2, 2022

Title: Needles PPR Report – June 2022

Background: Current year comparison below;

**CURRENT YEAR:
June 2022**

	Current	YTD	% change prior year to current year YTD
Net Diversion	220.01	1,008.41	2%
Measured Returns	42.33	253.17	
Unmeasured Returns	36.55	191.89	
Consumptive Use	141.13	563.35	(based on consumptive use)

**PRIOR YEAR:
June 2021**

			% of PPR Remaining
Net Diversion	199.47	959.92	60%
Measured Returns	40.10	243.25	
Unmeasured Returns	14.71	165.52	
Consumptive Use	144.66	551.15	

*Based on CY21 Water Order of 2,528 diversion

The City of Needles water order for 2022 is;

PPR Limits	1,223	1,223
SCIA Agreement (145)		- 145
PPR Entitlement		1,078
LCWSP SCIA Limit		+ 527
2020 Consumption		1,605
2020 Diversion	2,261	

Fiscal Impact:

Recommended Action: No Action Needed – Information Only

Submitted By: Rainie Torrance

City Management Review: Ria

Date: 7/22/22

Approved: Not Approved: Tabled: Other:

Agenda Item: 8.

CITY OF NEEDLES
 WATER ACCOUNTING
 MONTHLY CALCULATION SHEET
 CALENDAR YEAR 2022

Diversion - Pumped from Wells	Pumped (Acre-Feet)												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
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 (formerly #10)	95.14	94.02	110.83	118.01	142.42	151.78							712.20
Well #11	0.00	0.00	0.00	1.09	0.00	0.00							1.09
Well #12	44.71	39.95	50.20	52.03	63.33	73.41							323.63
Sub-Total	139.85	133.97	161.03	171.13	205.75	225.19	0.00	0.00	0.00	0.00	0.00	0.00	1,036.92
Delivered to Ft. Mojave Indian Tribe (AZ)	0.22	0.01	0.00	1.00	0.07	0.42							1.72
Delivered to Ft. Mojave Indian Tribe (CA)	2.88	9.73	1.73	2.04	5.65	4.76							26.79
Sub-Total	3.10	9.74	1.73	3.04	5.72	5.18	0.00	0.00	0.00	0.00	0.00	0.00	28.51
City of Needles' Net Diversion	136.75	124.23	159.30	168.09	200.03	220.01	0.00	0.00	0.00	0.00	0.00	0.00	1,008.41
Uses of Water													
Commercial Accounts	43.02	41.87	63.04	51.40	66.45	72.09							337.87
Residential Accounts	45.74	38.13	41.77	57.87	60.74	57.64							301.89
Golf Course	44.71	39.95	50.20	52.03	63.33	73.41							323.63
Parks, Ballparks, Cemetery	3.28	4.29	4.28	6.79	9.52	16.87							45.03
Total	136.75	124.24	159.29	168.09	200.04	220.01	0.00	0.00	0.00	0.00	0.00	0.00	1,008.42

**CALENDAR YEAR 2022
WASTEWATER TREATMENT PLANT**

	Mean Flow	# Days	A/F	A/F Return
Jan	0.488	31	46.43	45.04
Feb	0.454	28	39.01	37.84
Mar	0.445	31	42.34	41.07
Apr	0.481	30	44.29	42.96
May	0.476	31	45.29	43.93
Jun	0.474	30	43.64	42.33
Jul		31	0.00	0.00
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	2.818	365	261.00	253.17

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
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CALENDAR YEAR 2022

Diversions													
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	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
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)	95.14	94.02	110.83	118.01	142.42	151.78	0.00	0.00	0.00	0.00	0.00	0.00	712.20
Well #11	0.00	0.00	0.00	1.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.09
Well #12	44.71	39.95	50.20	52.03	63.33	73.41	0.00	0.00	0.00	0.00	0.00	0.00	323.63
Sub-Total	139.85	133.97	161.03	171.13	205.75	225.19	0.00	0.00	0.00	0.00	0.00	0.00	1,036.92
Delivered to Ft. Mojave Indian Tribe (AZ)	0.22	0.01	0.00	1.00	0.07	0.42	0.00	0.00	0.00	0.00	0.00	0.00	1.72
Delivered to Ft. Mojave Indian Tribe (CA)	2.88	9.73	1.73	2.04	5.65	4.76	0.00	0.00	0.00	0.00	0.00	0.00	26.79
Sub-Total	3.10	9.74	1.73	3.04	5.72	5.18	0.00	0.00	0.00	0.00	0.00	0.00	28.51
City of Needles' Net Diversion	136.75	124.23	159.30	168.09	200.03	220.01	0.00	0.00	0.00	0.00	0.00	0.00	1,008.41

Return and Other Credits													
Measured Returns													
Sewer Plant's Rapid Infiltration Ponds ¹	45.04	37.84	41.07	42.96	43.93	42.33	0.00	0.00	0.00	0.00	0.00	0.00	253.17
Unmeasured Returns													
Percolation from Golf Course ²	24.42	20.41	23.04	31.02	18.07	24.11	0.00	0.00	0.00	0.00	0.00	0.00	141.07
Percolation from Parks ³	1.31	1.72	1.71	2.72	3.81	6.75	0.00	0.00	0.00	0.00	0.00	0.00	18.01
Percolation from Large Commercial Users ⁴	1.03	1.00	1.51	1.23	1.59	1.73	0.00	0.00	0.00	0.00	0.00	0.00	8.11
System Losses ⁵	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Septic Tank Returns ⁶	4.12	3.84	4.41	4.22	4.12	3.96	0.00	0.00	0.00	0.00	0.00	0.00	24.69
Total Unmeasured Returns	30.89	26.98	30.68	39.19	27.60	36.55	0.00	0.00	0.00	0.00	0.00	0.00	191.89
Total Returns	75.93	64.82	71.75	82.15	71.53	78.88	0.00	0.00	0.00	0.00	0.00	0.00	445.06

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,Cemetery*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													
Diversion													
Measured Returns	136.75	124.23	159.30	168.09	200.03	220.01	0.00	0.00	0.00	0.00	0.00	0.00	1,008.41
Unmeasured Returns	45.04	37.84	41.07	42.96	43.93	42.33	0.00	0.00	0.00	0.00	0.00	0.00	253.17
Consumptive Use	30.89	26.98	30.68	39.19	27.60	36.55	0.00	0.00	0.00	0.00	0.00	0.00	191.89
Total	60.82	59.41	87.55	85.94	128.50	141.13	0.00	0.00	0.00	0.00	0.00	0.00	563.35