

Guests Present

Elise Nguyen	CCWQ
Gil Cruz	CCWQ
AJ Rodrigues	CCWRD
Erik Anderson	CCWRD
Chris Marinch	CLV
Dawn Boyer	CLV
Tom Hornsby	CLV
Matt Thomas	COH
Michael Arrasate	COH

1. CALL TO ORDER

The Sewage and Wastewater Advisory Committee (SWAC) meeting was called to order by Chair Dan Fischer, Clark County Water Reclamation District at 9:03 a.m. It was confirmed that the meeting was properly noticed and posted in accordance with the Open Meeting Law.

2. COMMENTS BY THE GENERAL PUBLIC - None

3. APPROVAL OF THE MINUTES OF THE MEETING OF FEBRUARY 7, 2024

Adrian Edwards moved and Charles Trushel seconded to accept the February 7, 2024 minutes. The motion was unanimously approved.

4. APPROVAL OF AGENDA

Joe Stubitiz moved and Adrian Edwards seconded to approve the agenda. The motion was unanimously approved.

5. PRESENTATION: EVALUATING & INTERPRETING PFAS RESULTS AT CCWRD

6. DISCUSSION OF QUARTERLY FLOW REPORT

The group discussed the flow report for the first quarter of 2024:

- Flows in the Wash were a bit low for February and March despite CCWRD flows being slightly increased compared to previous years. The other discharges including, City of Las Vegas, City of Henderson, and Boulder City showed decreased flows; City of North Las Vegas flows remain constant. However, water production by LVVWD, City of Henderson, and City of North Las Vegas are all down this year, potentially leading to the decrease flow in the Wash.

7. MEMBER UPDATES

A. Moapa Valley Water District

- Nothing to report.

B. Las Vegas Valley Water District

- The water level in Lake Mead dropped by 3 feet in the last month, bringing the lake level to 1072 ft.
- There is an algae bloom in Overton Arm. The Water District is collecting additional samples and will closely monitor the conditions near Las Vegas Bay and Boulder Basin.
- The Annual Wash Tour was very successful.

C. Boulder City

- An update on the water reuse study will be presented to the City Council by March 2025.
- The Public Works Director position is currently vacant.

D. Virgin Valley Water District

- N/A

E. City of Mesquite

- N/A

F. City of Las Vegas

- O&M Updates:
 - No updates.
- CIP Updates:
 - Filtration building rehabilitation project is nearing completion. The building was brought back online at the end of February and is operating in time for permit season.
 - The development of a Facility Plan is about 10% underway. The plan will cover topics such as maintenance, staffing, and managing increasing construction costs.
 - Phase I of the process air blower replacement project is underway but electrical equipment deliveries have been delayed.
 - The BNR clarifier replacement project has been delayed for 10 months due to equipment delays.
 - Projects that are in design:
 - Dewatering building rehabilitation project is about 80% complete.
 - Headworks rehabilitation project is about 10% complete.
 - Lab expansion project is about to go into design.
- There was damage to some of the fine mesh screens due to large objects being improperly disposed of in the wastewater influent.
- The City received an administrative order and consent decree from EPA Region 9 due to several issues related to the pretreatment program and local regulatory limits. Brown and Caldwell was hired to conduct a local limit study, that included sample collection and analysis. Additionally, a financial group performed a cost-of-service analysis for the pretreatment program. In December 2023, the city submitted a draft copy of the revisions to EPA Region 9.
- Working on a new contract with Western Elite on the collection biosolids from the WWTP. Western Elite combines the biosolids with green waste and makes compost.
- The Club at Sunrise agreement went before the City Council on May 1, 2024.
- A new chemist recently started working at the lab, and a second chemist will start later this month. A quality assurance officer position is vacant and will go out soon.

G. Clark County Water Reclamation District

- Collection System Updates:
 - Whitney and Lincoln Lift Station improvement projects are scheduled to start January 2025 and December 2024, respectively.
- The Flamingo Plant Updates:
 - Demolition of old facilities on the east campus is progressing well.
 - Plant expansion is on-going:

- Construction of new headworks, primaries, and secondaries are on-going.
- Construction of the sludge thickeners is on-going.
- There was an intruder on the Flamingo Plant. He disabled some equipment, but the SCADA system notified a WRD operator, who quickly resolved the issue.

H. City of North Las Vegas

- Construction of the flow equalization basin is nearly complete. The basin is expected to be brought online for raw influent testing early next week.
- Construction of the permanent septage station is nearly complete.
- Preparing to replace a diffuser in one of the bioreactors.
- Completed Phase II of the membrane replacement project. Phase III is expected to being in late September or early October.
- City Council approved the replacement of all the granulated activated carbon. The project will soon go out for bid.

I. City of Henderson

- Phase 4 expansion project is on-going.
- Biosolids were sent out for PFAS testing.
- Pretreatment group sent notices to local industries to outline the new PFAS regulations and sampling requirements.
- EPA released additional guidance on the new lead and copper rule, with a new requirement to take an inventory of all drinking water pipes to ensure that there are no lead pipes in the system. The deadline to complete the inventory is October 2024.

J. Clark County

- 208 Area-Wide Water Quality Management Plan: Budgeted to begin updates in FY25.
- 2025 CBER Population Forecast meetings are underway.
- MS4 Permit: Work continues with Valley co-permittees on creating a new Water Quality Management Plan.
- Public Outreach: The team is working the Science and Technology festival on Saturday.

8. MEMBER VACANCIES

- A. Virgin Valley Water District – 1 member vacancy
- B. City of Las Vegas – 2 member vacancies

9. COMMENTS BY THE GENERAL PUBLIC - None

10. SCHEDULE NEXT MEETING

The next meeting is scheduled for August 14, 2024 at 9:00 am. A meeting invite will be sent out.

11. ADJOURNMENT

The meeting was adjourned at 10:40 am.

2024

1st Quarter Flow Report For
Clark County Sewage And
Wastewater Advisory
Committee
(SWAC)

April 29, 2024

Wastewater Flows

2022 through 2024

Water Production 2022 through 2024

Historic Trends Influent Wastewater Flows

(Avg. in MGD)

	Clark County Water Reclamation District *			City of Las Vegas			City of North Las Vegas			City of Henderson			Boulder City		
Month	2022	2023	2024	2022	2023	2024	2022	2023	2024	2022	2023	2024	2022	2023	2024
Jan	100.59	104.30	107.69	41.62	47.71	45.82	18.00	19.83	20.31	25.23	23.91	23.18	1.13	1.08	1.12
Feb	102.07	103.76	107.94	42.04	48.34	45.46	17.96	19.70	19.91	24.56	24.68	22.68	1.14	1.08	1.09
Mar	103.72	104.62	107.93	42.45	47.70	45.41	18.08	19.71	19.71	25.07	24.20	23.69	1.15	1.08	1.05
Apr	106.28	105.60		42.63	48.28		17.71	20.12		25.42	25.32		1.11	1.10	
May	105.74	106.36		42.78	48.04		17.98	20.40		25.50	25.02		1.13	1.14	
Jun	106.70	106.34		42.16	47.49		18.11	20.30		24.55	24.81		1.13	1.13	
Jul	110.64	110.07		47.16	48.00		18.80	20.80		24.34	26.35		1.15	1.15	
Aug	110.64	111.75		48.20	47.31		19.10	21.37		25.19	26.61		1.15	1.18	
Sep	109.22	115.43		47.28	48.12		18.90	21.10		25.27	26.07		1.09	1.16	
Oct	110.94	111.22		46.90	48.15		18.71	20.62		24.56	26.44		1.08	1.12	
Nov	106.35	109.60		46.27	46.51		18.58	20.45		24.18	25.42		1.08	1.11	
Dec	104.32	109.01		46.53	46.52		18.63	20.32		23.94	23.13		1.09	1.11	
ANNUAL	106.43	108.17	107.85	44.92	47.68	45.56	18.38	20.39	19.98	24.82	25.16	23.18	1.12	1.12	1.09

* Includes estimated .5 MGD NLV

Historic Trends Influent Wastewater Flows

	Searchlight			Blue Diamond			MVWRC			Laughlin			Mesquite			Indian Springs		
Month	2022	2023	2024	2022	2023	2024	2022	2023	2024	2022	2023	2024	2022	2023	2024	2022	2023	2024
Jan	0.041	0.039	0.045	0.017	0.019	0.009	0.155	0.155	0.169	1.45	1.52	1.37	1.86	1.89	1.87	0.088	0.106	0.117
Feb	0.042	0.040	0.045	0.026	0.009	0.010	0.157	0.163	0.178	1.52	1.51	1.49	1.89	1.90	2.02	0.091	0.098	0.110
Mar	0.039	0.042	0.039	0.017	0.016	0.110	0.172	0.171	0.183	1.65	1.58	1.51	1.89	1.94	2.00	0.095	0.138	0.115
Apr	0.043	0.040		0.015	0.016		0.175	0.174		1.65	1.58		1.88	1.91		0.095	0.139	
May	0.044	0.041		0.010	0.016		0.155	0.165		1.80	1.62		1.76	1.83		0.098	0.145	
Jun	0.042	0.042		0.009	0.015		0.142	0.147		1.70	1.75		1.73	1.84		0.101	0.150	
Jul	0.048	0.042		0.011	0.011		0.140	0.142		1.98	1.96		1.72	1.93		0.101	0.157	
Aug	0.045	0.042		0.012	0.013		0.134	0.138		1.78	1.80		1.73	1.96		0.104	0.191	
Sep	0.042	0.041		0.011	0.015		0.151	0.147		1.74	1.70		1.73	1.90		0.101	0.156	
Oct	0.039	0.041		0.012	0.014		0.147	0.144		1.73	1.55		1.80	1.99		0.094	0.151	
Nov	0.039	0.042		0.016	0.012		0.146	0.158		1.69	1.37		1.87	2.11		0.094	0.146	
Dec	0.039	0.039		0.012	0.010		0.149	0.158		1.58	1.39		1.83	1.96		0.120	0.159	
ANNUAL	0.042	0.041	0.043	0.014	0.014	0.043	0.152	0.155	0.177	1.69	1.61	1.45	1.81	1.93	1.96	0.099	0.145	0.114

Indian Springs calculation revised in 2021

Non-Discharging Facilities

Month	Boulder City			
	(Avg. in MGD)		(Total in MG)	
	Influent Flow	Reuse	Influent Flow	Reuse
Jan	1.12	0.01	34.7	0.31
Feb	1.09	0.01	31.6	0.28
Mar	1.05	0.1	2.6	3.1
Apr				
May				
Jun				
Jul				
Aug				
Sep				
Oct				
Nov				
Dec				
Annual				

Las Vegas Wash and Colorado River Dischargers (2024)

Month	Clark County Water Reclamation District* (Avg. in MGD)					City of Las Vegas (Avg. in MGD)						City of Henderson (Avg. in MGD)			City of North Las Vegas (Avg. in MGD)		
	Influent Flow	Main Plant Reuse	DBWRC Reuse	Total Reuse	Effluent to LV Wash	Influent Flow	WPCF Reuse	BMWRC Reuse	DHWRC Reuse	Total Reuse	Effluent to LV Wash	Influent Flow	Reuse	Effluent to LV Wash	Influent Flow	Reuse	Effluent to LV Wash
Jan	107.69	0.48	0.00	0.48	107.57	45.82	0.19	0.00	0.00	0.19	47.76	23.18	2.55	21.46	20.31	0.02	19.13
Feb	107.97	0.20	0.00	0.20	107.94	45.46	0.11	0.00	0.00	0.11	47.91	22.68	3.02	20.40	19.91	0.02	18.88
Mar	109.56	0.26	0.00	0.26	109.30	45.41	0.24	0.00	0.00	0.24	46.37	23.69	4.88	18.68	19.71	0.31	18.41
Apr																	
May																	
Jun																	
Jul																	
Aug																	
Sep																	
Oct																	
Nov																	
Dec																	
Average	108.41	0.31	0.00	0.31	108.27	45.56	0.18	0.00	0.00	0.18	33.01	23.18	3.48	20.18	19.98	0.12	19.12
YTD total	325.22	0.93	0.00	0.93	324.81	136.69	0.54	0.00	0.00	0.54	99.04	69.55	10.45	60.54	59.93	0.35	56.42

Net to LV Wash is measured effluent at each treatment plant

Las Vegas Wash and Colorado River Dischargers (2024)

Month	Las Vegas Wash Discharge (Avg in MGD)			Discharge Directly to Colorado River (Avg in MGD)			Total Discharge (Totals in A/F)
	Influent Flow	Reuse	Effluent to LV Wash	Laughlin Influent Flow	Laughlin Reuse	Net to River	Effluent Flow
Jan	197.00	3.23	195.92	1.37	0.00	1.37	18,768.90
Feb	196.02	3.35	152.13	1.49	0.00	1.49	13,671.39
Mar	198.37	5.69	192.76	1.51	0.00	1.51	17,289.59
Apr							
May							
Jun							
Jul							
Aug							
Sep							
Oct							
Nov							
Dec							
Annual Avg	197.13	4.09	180.27	1.45	0.00	1.45	49729.88

Water Production (2024)

(Totals in AF)

	Las Vegas Valley Water District			City of Henderson			City of North Las Vegas			Boulder City			Nellis Air Force Base			Totals	
Month	WELLS	SNWS	TOTAL	SNWS	BMI	TOTAL	WELLS	SNWS	TOTAL	RMTP	SNWS	TOTAL	WELL	SNWS	TOTAL	WELLS	SNWS
Jan	0	19,344	19,344	4,428	0	4,428	0	3,858	3,858	84	285	368	8.31	18	26	8	28,017
Feb	0	17,544	17,544	4,277	0	4,277	0	3,428	3,428	65	259	324	10.59	43	54	11	25,616
Mar	0	22,002	22,002	5,722	0	5,722	0	4,096	4,096	138	356	495	1.63	60	61	2	32,374
Apr			0			0			0			0			0	0	0
May			0			0			0			0			0	0	0
Jun			0			0			0			0			0	0	0
Jul			0			0			0			0			0	0	0
Aug			0			0			0			0			0	0	0
Sep			0			0			0			0			0	0	0
Oct			0			0			0			0			0	0	0
Nov			0			0			0			0			0	0	0
Dec			0			0			0			0			0	0	0
YTD	0	58,890	58,890	14,427	0	14,427	0	11,382	11,382	287	900	1,186	21	121	142	21	86,006

Historic Trends Water Production
(Totals in AF)

	Las Vegas Valley Water District			City of Henderson			City of North Las Vegas			Boulder City			Big Bend Water District			Virgin Valley Water District			Moapa Valley Water District		
Month	2022	2023	2024	2022	2023	2024	2022	2023	2024	2022	2023	2024	2022	2023	2024	2022	2023	2024	2022	2023	2024
Jan	19,734	20,327	19,344	4,946	4,935	4,428	3,773	3,915	3,858	453	413	368	201	220	208	381	395	378	157	160	140
Feb	18,489	18,957	17,544	4,650	4,680	4,277	3,539	3,649	3,428	483	442	324	216	211	209	345	376	342	142	145	122
Mar	23,496	24,921	22,002	6,102	6,240	5,722	4,371	4,586	4,096	628	616	495	244	228	244	449	488	462	194	181	168
Apr	27,257	26,926		7,266	7,092		4,825	4,856		870	780		260	251		546	588		213	233	
May	33,792	33,411		9,325	8,986		5,721	5,764		1,093	1,024		292	283		667	686		297	263	
Jun	37,597	35,956		10,133	9,869		6,262	6,234		1,265	1,145		318	298		800	752		320	307	
Jul	38,902	38,811		10,352	9,737		6,612	6,532		1,233	1,114		302	331		835	806		313	335	
Aug	39,072	35,792		10,295	9,385		6,569	6,015		1,242	929		311	307		848	727		306	308	
Sep	33,330	32,370		8,994	8,414		5,460	5,344		1,094	920		291	290		773	681		287	263	
Oct	28,794	28,890		7,501	7,545		5,107	5,344		815	765		260	272		617	644		226	246	
Nov	23,359	22,309		6,003	5,741		4,370	5,344		638	497		238	235		484	476		185	194	
Dec	20,561	20,741		5,256	5,174		4,019	5,344		453	385		220	220		393	398		143	136	
ANNUAL	344,383	339,413	58,890	90,823	87,798	14,427	60,627	62,926	11,382	10,266	9,029	1,186	3,152	3,145	661	7,137	7,018	1,182	2,783	2,771	430

Wastewater/Water Production Ratios

	City of Las Vegas/Clark County*			City of Henderson			City of North Las Vegas			Boulder City			Big Bend Water District			All Entities **		
Month	2022	2023	2024	2022	2023	2024	2022	2023	2024	2022	2023	2024	2022	2023	2024	2022	2023	2024
Jan	0.67	0.67	0.75	0.48	0.49	0.50	0.45	0.44	0.50	0.25	0.26	0.29	0.70	0.63	0.62	0.60	0.60	0.67
Feb	0.64	0.65	0.75	0.45	0.45	0.46	0.43	0.42	0.50	0.22	0.22	0.30	0.60	0.62	0.61	0.58	0.58	0.66
Mar	0.58	0.56	0.66	0.40	0.38	0.39	0.39	0.38	0.46	0.18	0.18	0.02	0.62	0.69	0.59	0.52	0.50	0.58
Apr	0.49	0.51		0.33	0.33		0.34	0.34		0.13	0.13		0.60	0.61		0.44	0.45	
May	0.42	0.42		0.26	0.27		0.29	0.30		0.11	0.10		0.58	0.61		0.37	0.37	
Jun	0.37	0.38		0.24	0.23		0.27	0.27		0.09	0.09		0.54	0.53		0.33	0.33	
Jul	0.38	0.39		0.25	0.24		0.27	0.27		0.09	0.10		0.67	0.57		0.34	0.34	
Aug	0.38	0.42		0.25	0.26		0.27	0.30		0.09	0.12		0.55	0.55		0.34	0.37	
Sep	0.42	0.45		0.27	0.28		0.31	0.33		0.10	0.11		0.53	0.55		0.38	0.40	
Oct	0.49	0.53		0.34	0.31		0.34	0.36		0.13	0.13		0.59	0.61		0.44	0.46	
Nov	0.58	0.63		0.40	0.39		0.38	0.41		0.17	0.20		0.53	0.66		0.51	0.55	
Dec	0.67	0.69		0.47	0.44		0.43	0.45		0.24	0.27		0.64	0.68		0.60	0.61	
AVG.	0.48	0.50	0.72	0.32	0.32	0.44	0.34	0.34	0.48	0.13	0.14	0.18	0.59	0.61	0.61	0.43	0.44	0.63

Water Production and Waste Flows

Monthly Flows in A/F

Month	CLV and Clark County Monthly Flow in AF		City of Henderson Monthly Flow in AF		City of North Las Vegas Monthly Flow in AF		Boulder City Monthly Flow in AF		Big Bend Water District Monthly Flow in AF		All Entities Monthly Flow in AF	
	Water Production	Waste Flow	Water Production	Waste Flow	Water Production	Waste Flow	Water Production	Waste Flow	Water Production	Waste Flow	Water Production	Waste Flow
Jan	19,344	14,604	4,428	2,205	3,858	1,932	368	106	208	130	28,207	18,978
Feb	17,544	13,181	4,277	1,949	3,428	1,711	324	97	209	128	25,781	17,066
Mar	22,002	14,588	5,722	2,254	4,096	1,875	495	8	244	144	32,558	18,869
Apr												
May												
Jun												
Jul												
Aug												
Sep												
Oct												
Nov												
Dec												
YTD	58,890	42,374	14,427	6,408	11,382	5,518	1,186	211	661	401	86,545	54,913

Recharge and Recovery

Monthly Flows In Acre-Feet

Month	Recharged			Recovered			
	LVVWD	NLV	Total	LVVWD	LV Paiute	NLV	Total
Jan	0	0	0	0	0	0	0
Feb	0	0	0	0	0	0	0
Mar	0	0	0	0	0	0	0
Apr	0	0	0	0	0	0	0
May	0	0	0	0	0	0	0
Jun	0	0	0	0	0	0	0
Jul	0	0	0	0	0	0	0
Aug	0	0	0	0	0	0	0
Sep	0	0	0	0	0	0	0
Oct	0	0	0	0	0	0	0
Nov	0	0	0	0	0	0	0
Dec	0	0	0	0	0	0	0
Total 2024	0	0	0	0	0	0	0
Total 2023	0	0	0	639	0	0	0
Total 2022	0	0	0	797	0	0	0

* Data provided by SNWA