

SEWAGE AND WASTEWATER ADVISORY COMMITTEE
Advisory to the Board of Clark County Commissioners

Conveyed virtually in accordance with changes to Open Meeting Law during the 2021 Legislative Session
Meeting Minutes of February 5, 2025

MEMBERS	Present	Absent
Clark County (2 Members)		
John Solvie (Member)	X	
Joseph Leedy (Member)	X	
VACANT (Alternate)		
Daylin Sigler (Alternate)	X	
City of Las Vegas (3 Members)		
John Bettencourt (Member)		X
Charles Trushel (Member)		X
VACANT (Member)		
Dawn Boyer (Alternate)	X	
Tom Hornsby (Alternate)		X
Chris Marinch (Alternate)		X
City of Henderson (2 Members)		
Brian Carlson (Member) VICE-CHAIR	X	
Adrian Edwards (Member)	X	
VACANT (Alternate)		
James Koloskie (Alternate)	X	
City of North Las Vegas (1 Member)		
Alan Wolfley (Member)	X	
Bryce Burrell (Alternate)	X	
Clark County Water Reclamation District (1 Member)		
Daniel Fischer (Member) CHAIR	X	
Richard Donahue (Alternate)	X	
Moapa Valley Water District (1 Member)		
Joe Davis (Member)		X
Lon Dalley (Alternate)		X
Las Vegas Valley Water District (1 Member)		
Todd Tietjen (Member)	X	
Xiaoping Zhou (Alternate)	X	
Mesquite (1 Member)		
Bill Tanner (Member)		X
Travis Anderson (Alternate)		X
Virgin Valley Water District (1 Member)		
VACANT (Member)		
Aaron Bunker (Alternate)		X
Boulder City (1 Member)		
Joseph Stubitz (Member)	X	
Jim Keane (Alternate)	X	

Guests Present

Terin George	CCWQ
Deena Hanoun	SNWA
Emily Clements	SNWA
Daniel Isler	SNHD
JD Dotchin	NDEP
William Bruninga	Boulder City
Yifredew Teklu	WPCF

1. CALL TO ORDER

The Sewage and Wastewater Advisory Committee (SWAC) meeting was called to order by Chair, Dan Fischer, of 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 NOVEMBER 13, 2024

Todd Tietjen motioned to approve the November 13, 2024, minutes, and Alan Wolfley seconded. The motion was approved.

4. APPROVAL OF AGENDA

Todd Tietjen motioned to approve the agenda, and Alan Wolfley seconded. The motion was approved.

5. PRESENTATION: USING MACHINE LEARNING TO QUANTIFY DE FACTO REUSE

Presentation provided by Emily Clements, a post-doctoral researcher at SNWA

6. DISCUSSION OF QUARTERLY FLOW REPORT

The group discussed the flow report for the fourth quarter of 2024.

7. MEMBER UPDATES

A. Moapa Valley Water District

- N/A

B. Las Vegas Valley Water District

- Treatment plant maintenance has been completed

C. Boulder City

- Plant upgrades are ongoing
- Two staff retired. Will have vacancies in the future

D. Virgin Valley Water District

- N/A

E. City of Mesquite

- N/A

F. City of Las Vegas

- O&M Manager position is open
- Capital improvement projects and the Facility Plan update are ongoing

G. Clark County Water Reclamation District

- Plant and lift station construction is ongoing
- Hired a research scientist and are obtaining instrumentation to identify various trace organics

H. City of North Las Vegas

- Construction is ongoing and plant maintenance is being finalized

I. City of Henderson

- Plant and new lift station construction is ongoing

J. Clark County

- The update project of Clark County's Area-Wide Water Quality Management Plan continues moving forward
- MS4 co-permittees are awaiting feedback from NDEP on the new Draft Stormwater Management Plan

8. MEMBER VACANCIES

- A. Clark County – 1 alternate vacancy
- B. City of Las Vegas – 1 member vacancy
- C. City of Henderson – 1 alternate vacancy
- D. Virgin Valley Water District – 1 member vacancy

9. COMMENTS BY THE GENERAL PUBLIC

- A. Daniel Isler – Have incorporated suggestions/comments in the proposed changes to the septic regulations. Will be starting business impact surveys and beginning public comment period

10. SCHEDULE NEXT MEETING

The next meeting is scheduled for May 7, 2025, at 9:00 am. A meeting invite will be sent.

11. ADJOURNMENT

The meeting was adjourned at 10:22 a.m.

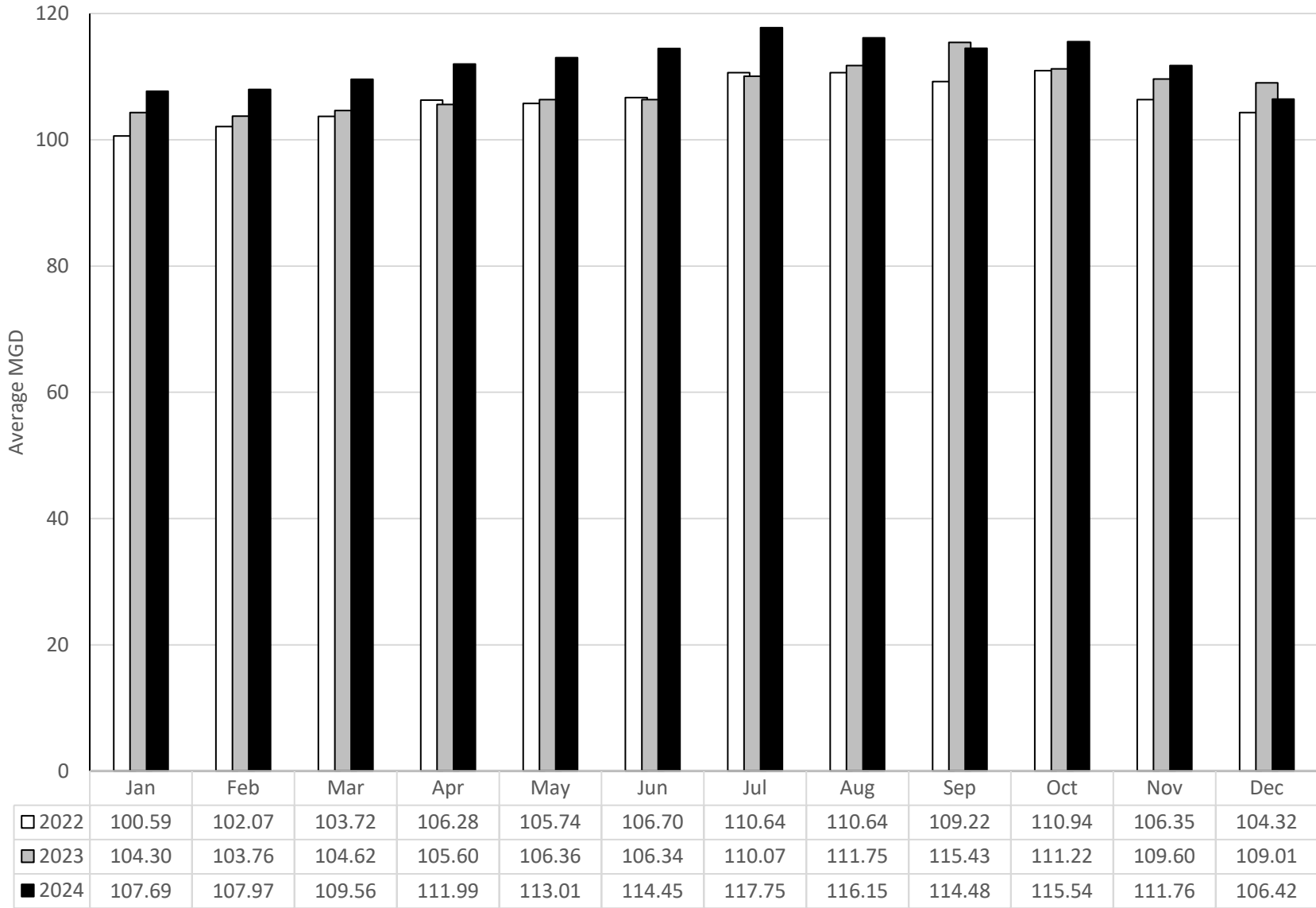
2024
4th Quarter Flow Report For
Clark County Sewage And
Wastewater Advisory
Committee
(SWAC)

January 23, 2025

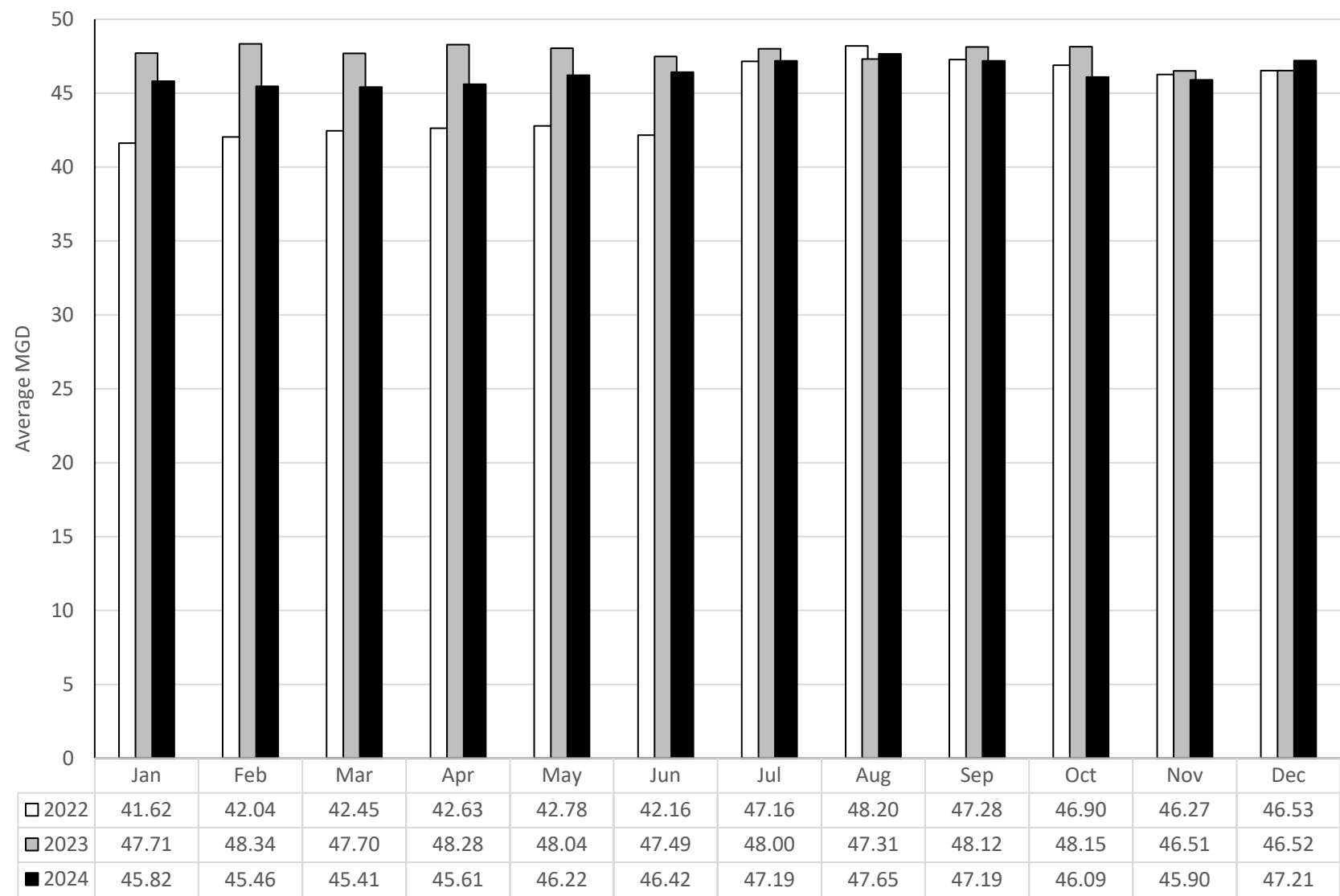
Wastewater Flows

2022 through 2024

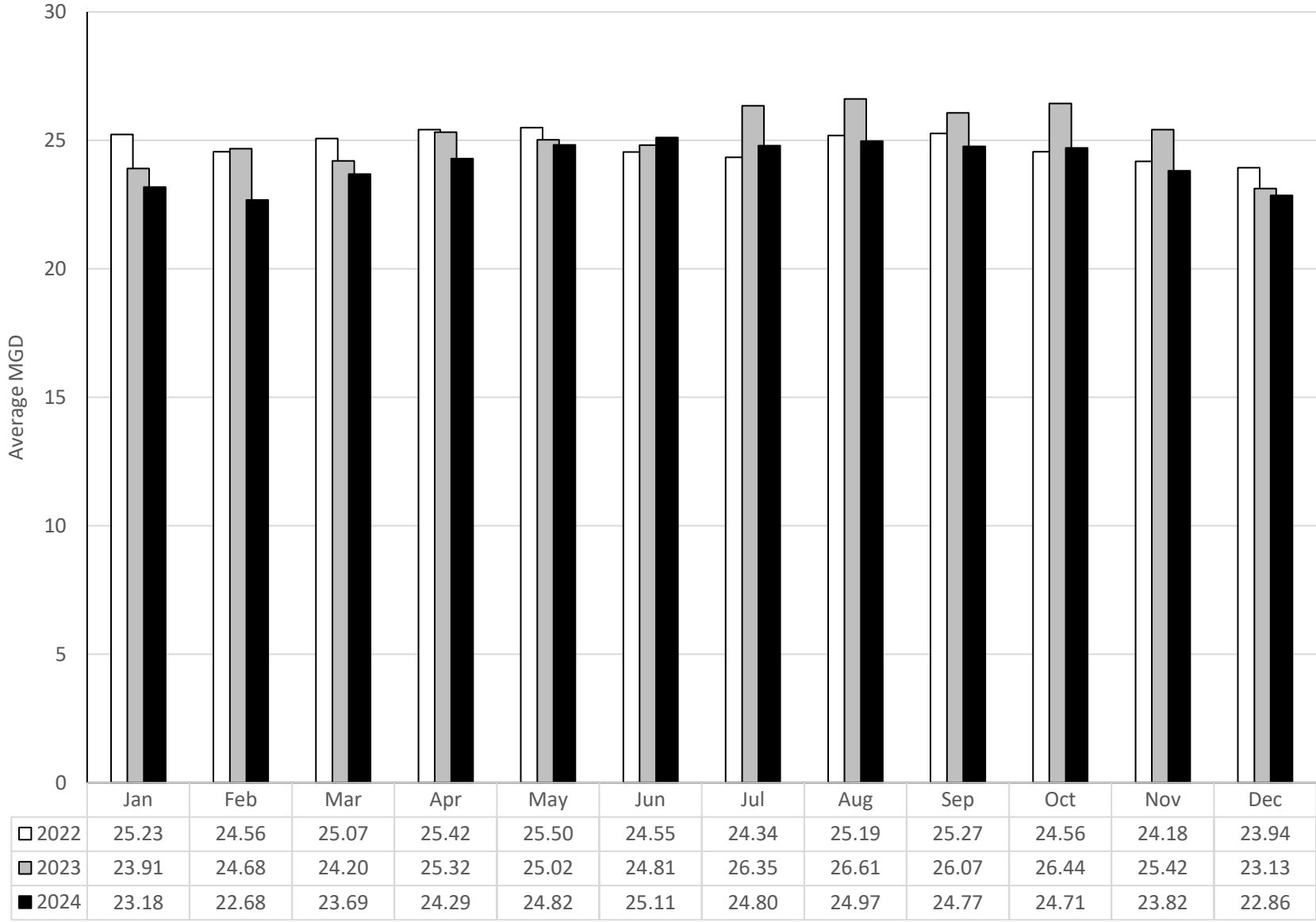
Clark County Water Reclamation District Wastewater Flows



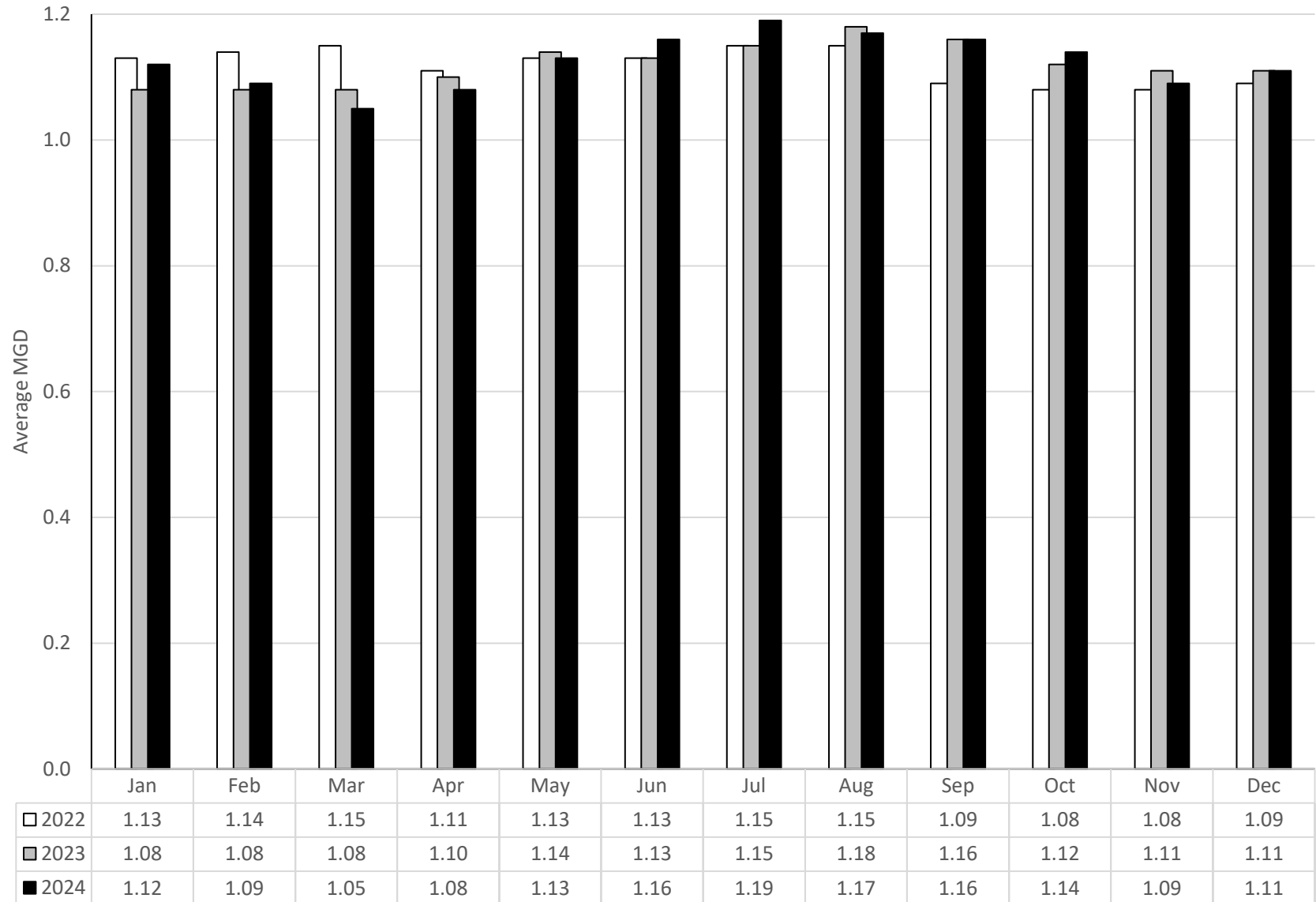
City of Las Vegas Wastewater Flows



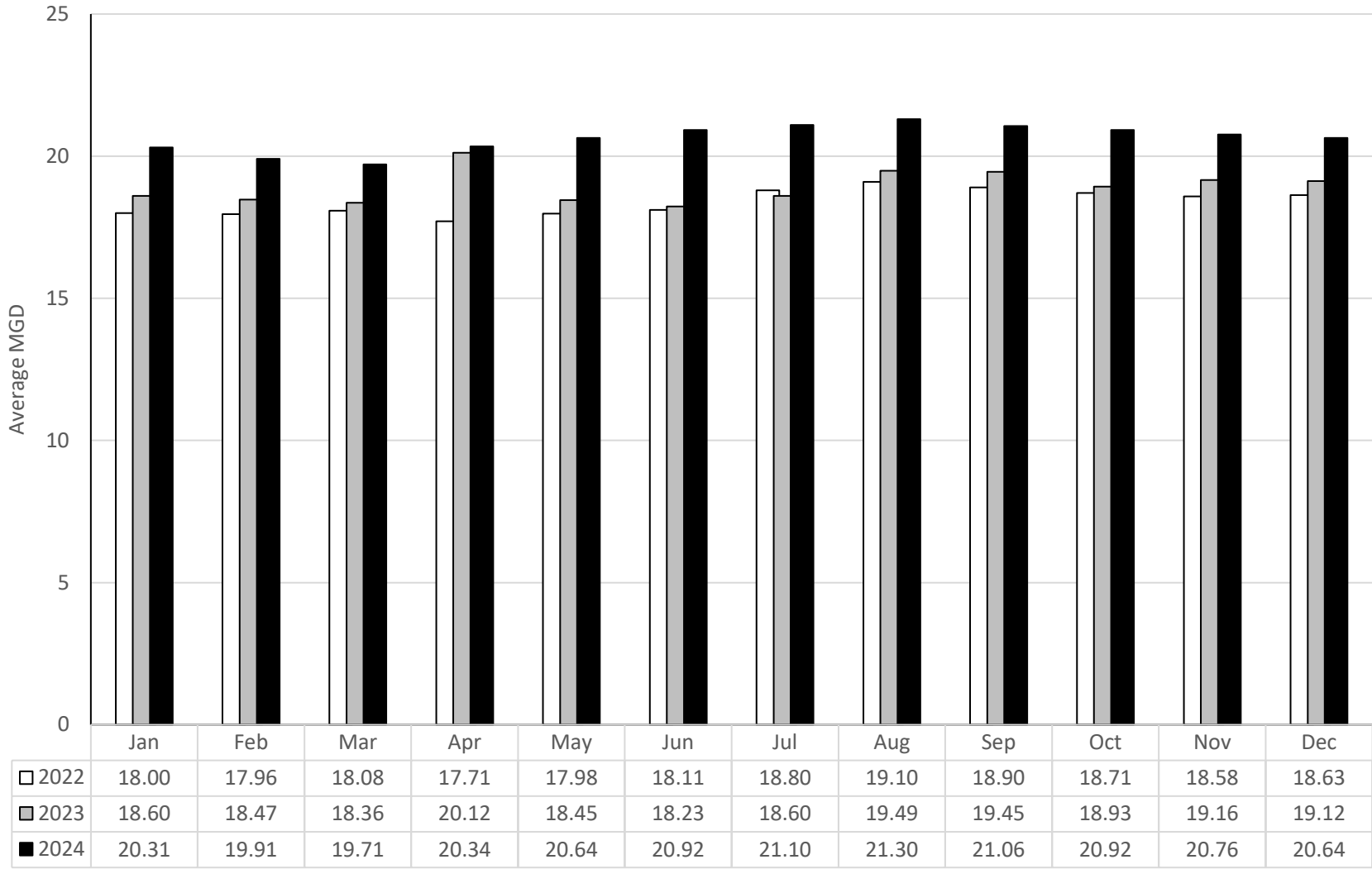
City of Henderson Wastewater Flows



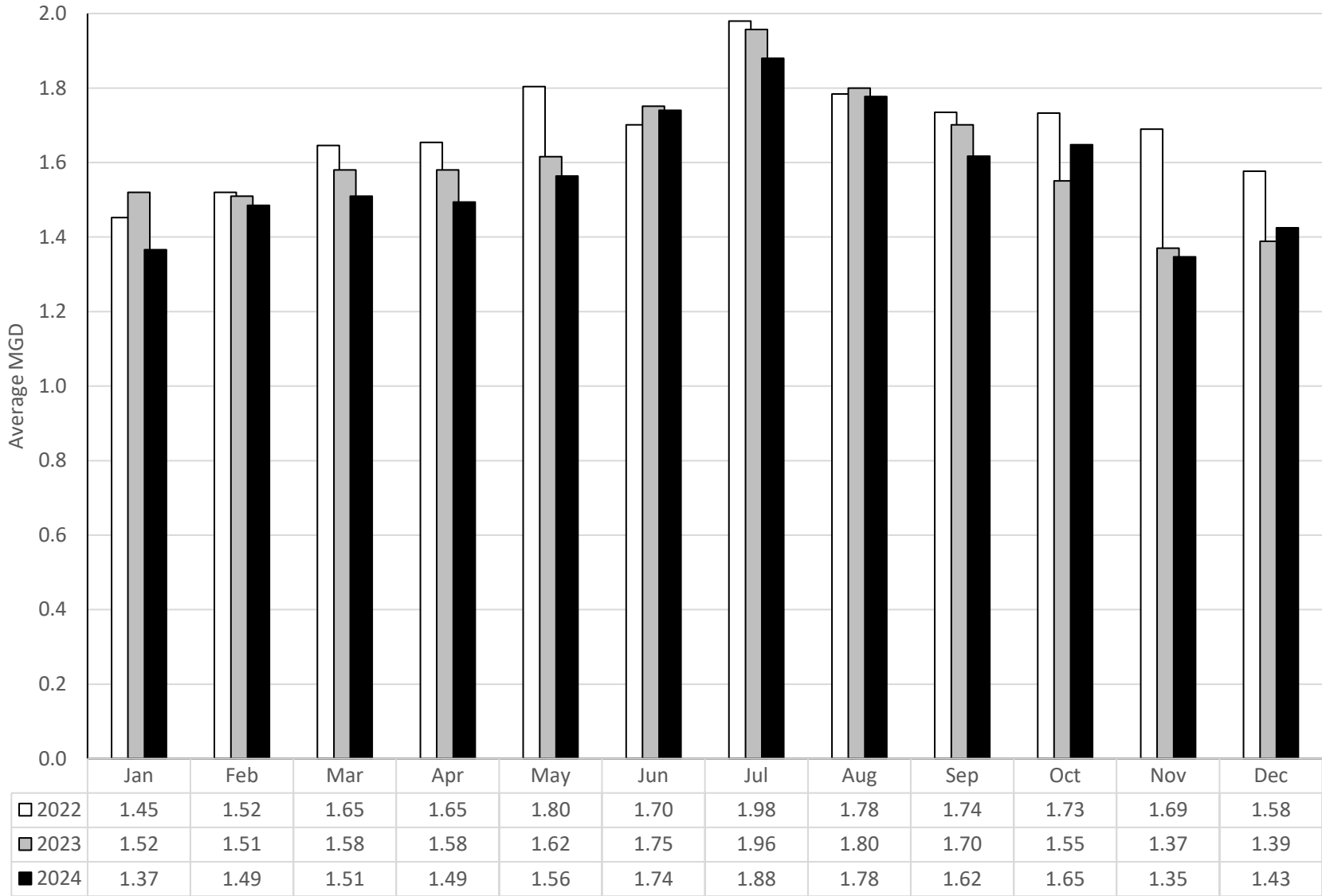
Boulder City Wastewater Flows



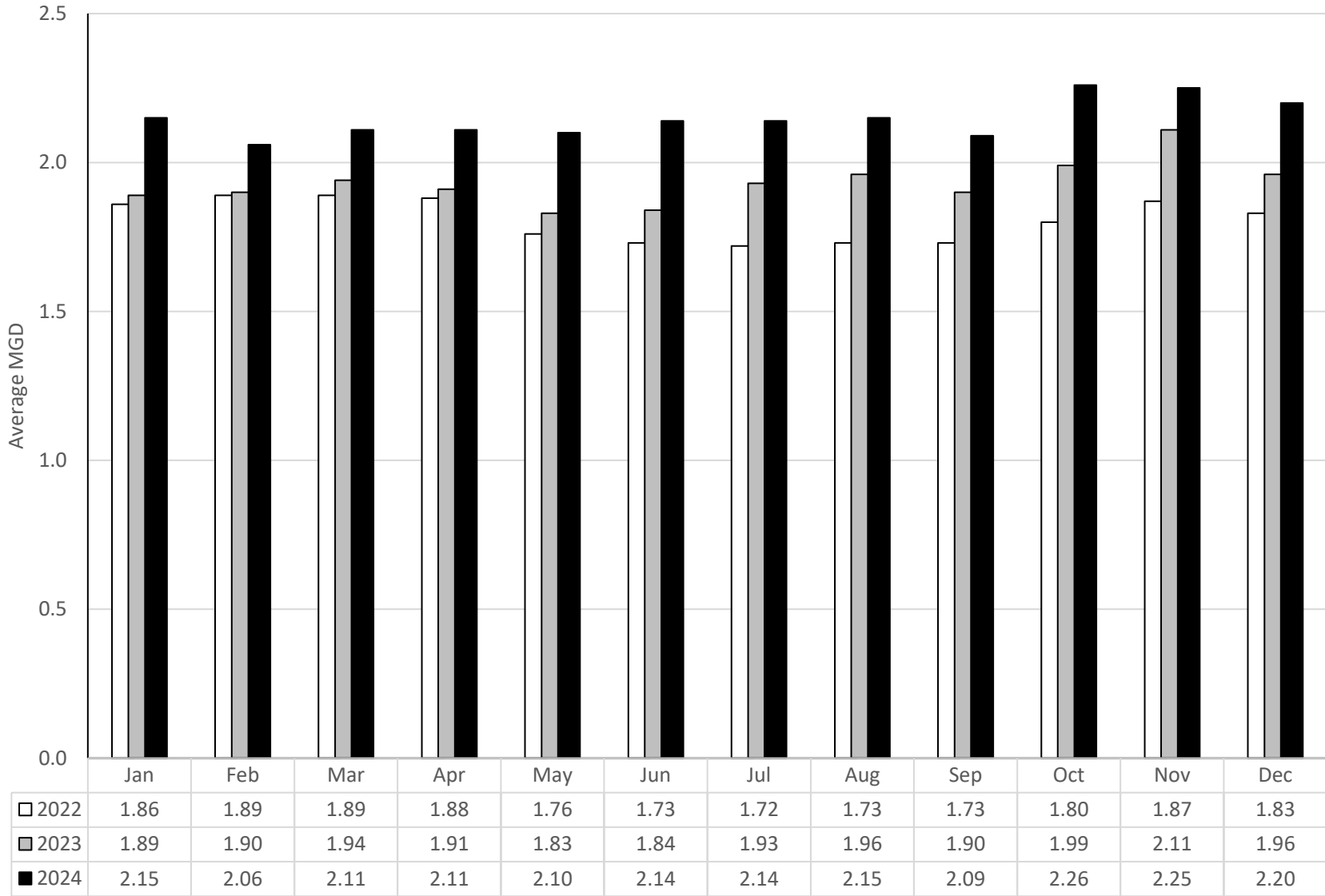
City of North Las Vegas Wastewater Flows



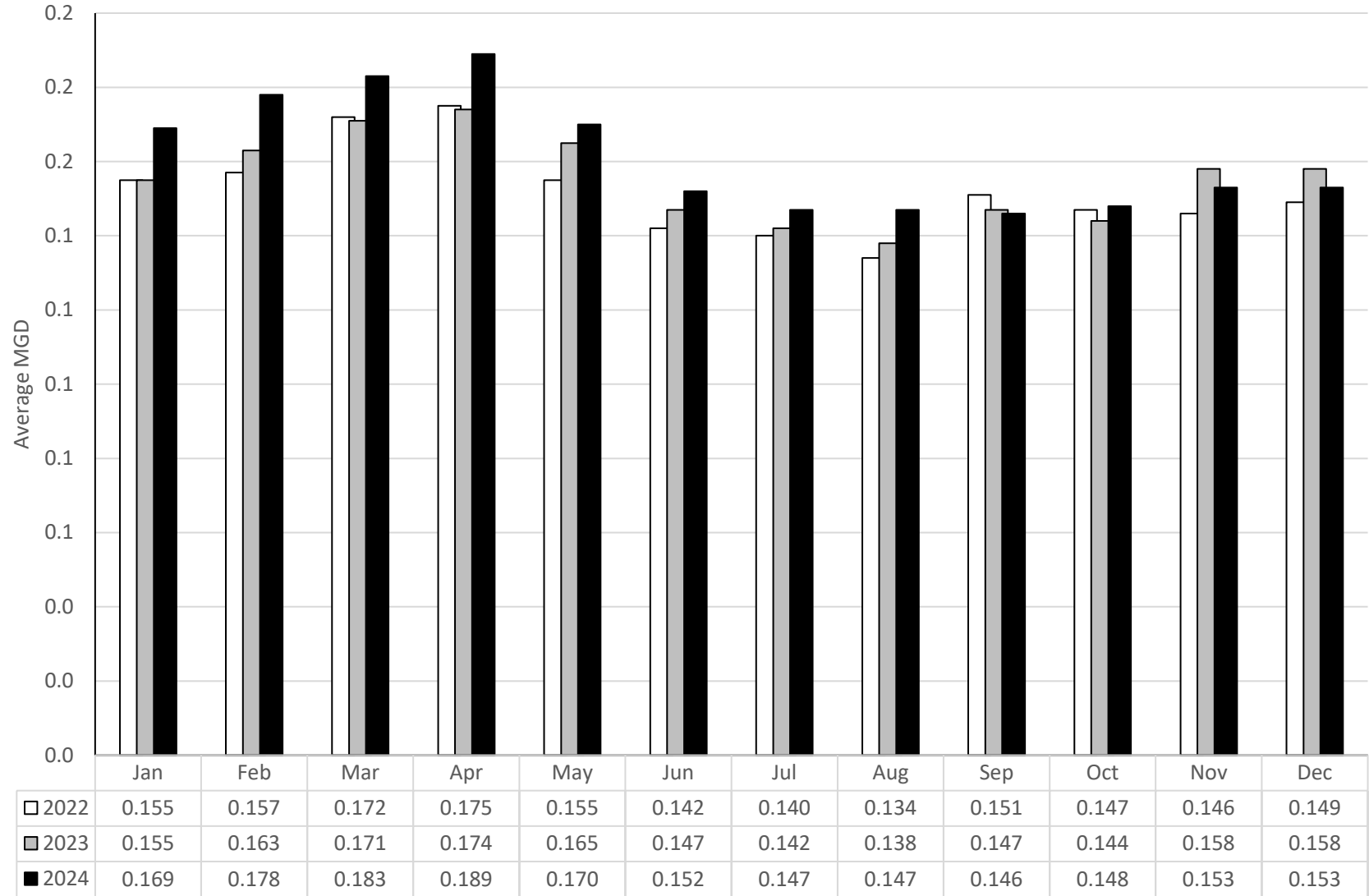
Laughlin Wastewater Flows



City of Mesquite Wastewater Flows

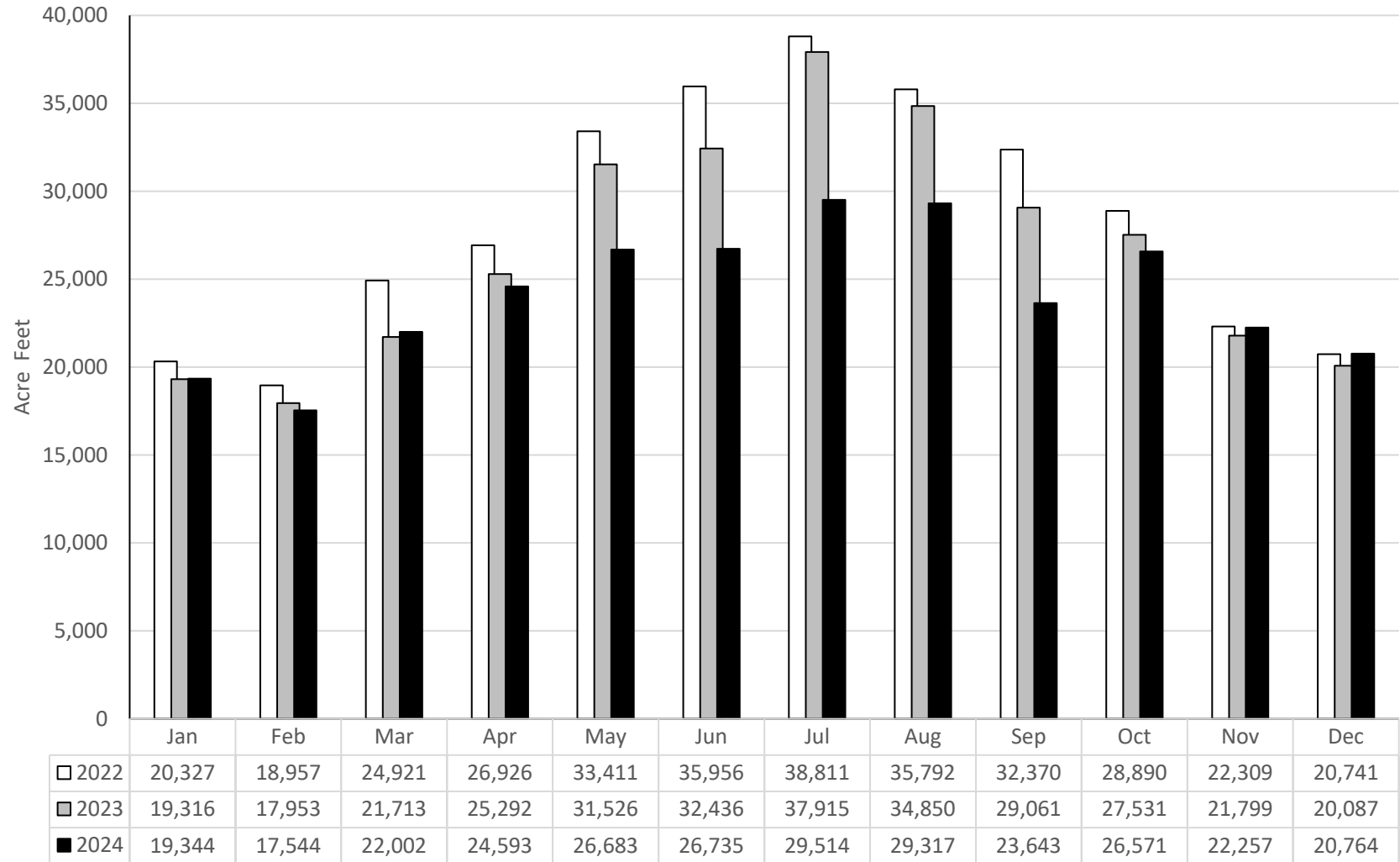


Moapa Wastewater Flows

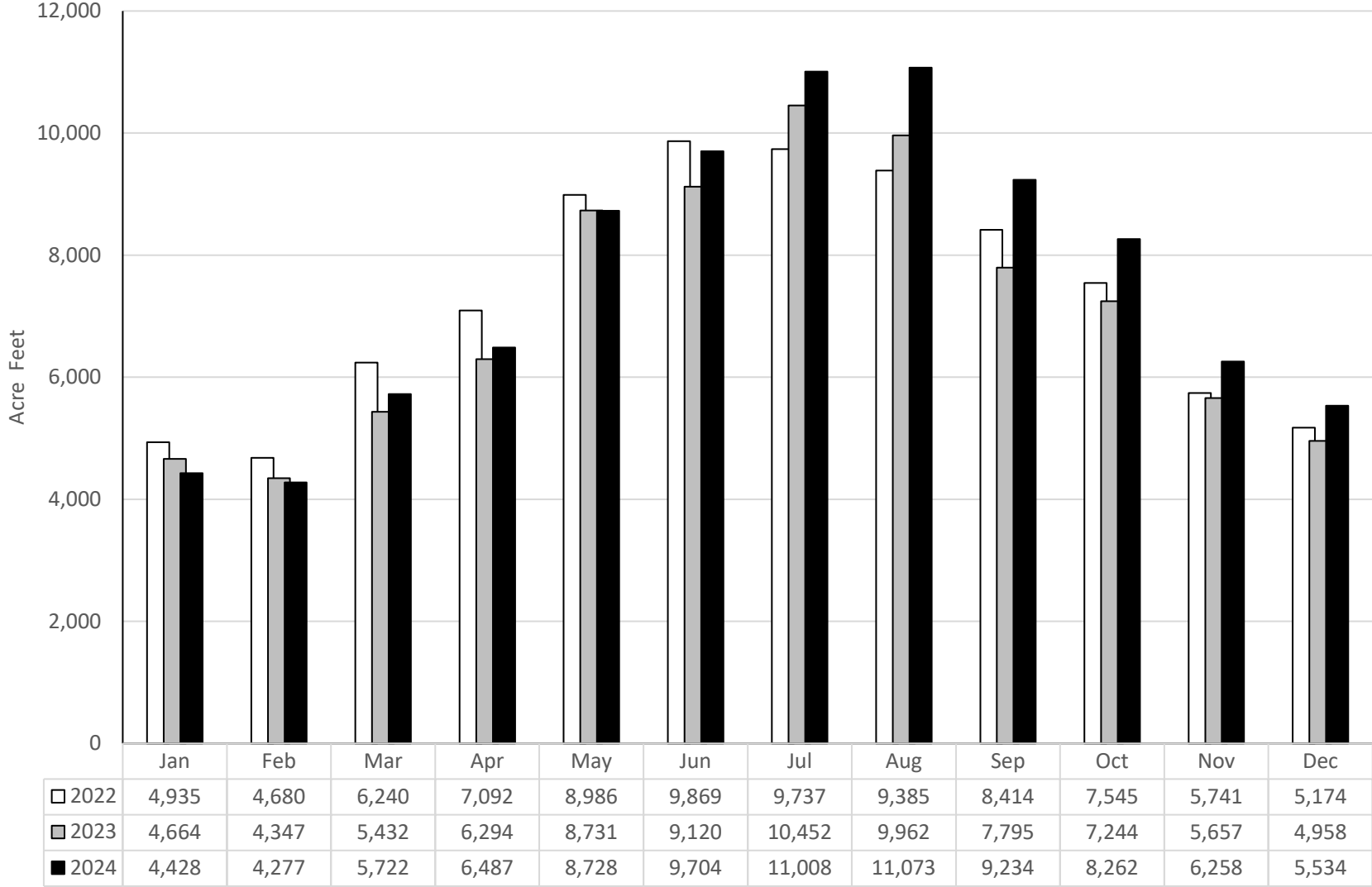


Water Production 2022 through 2024

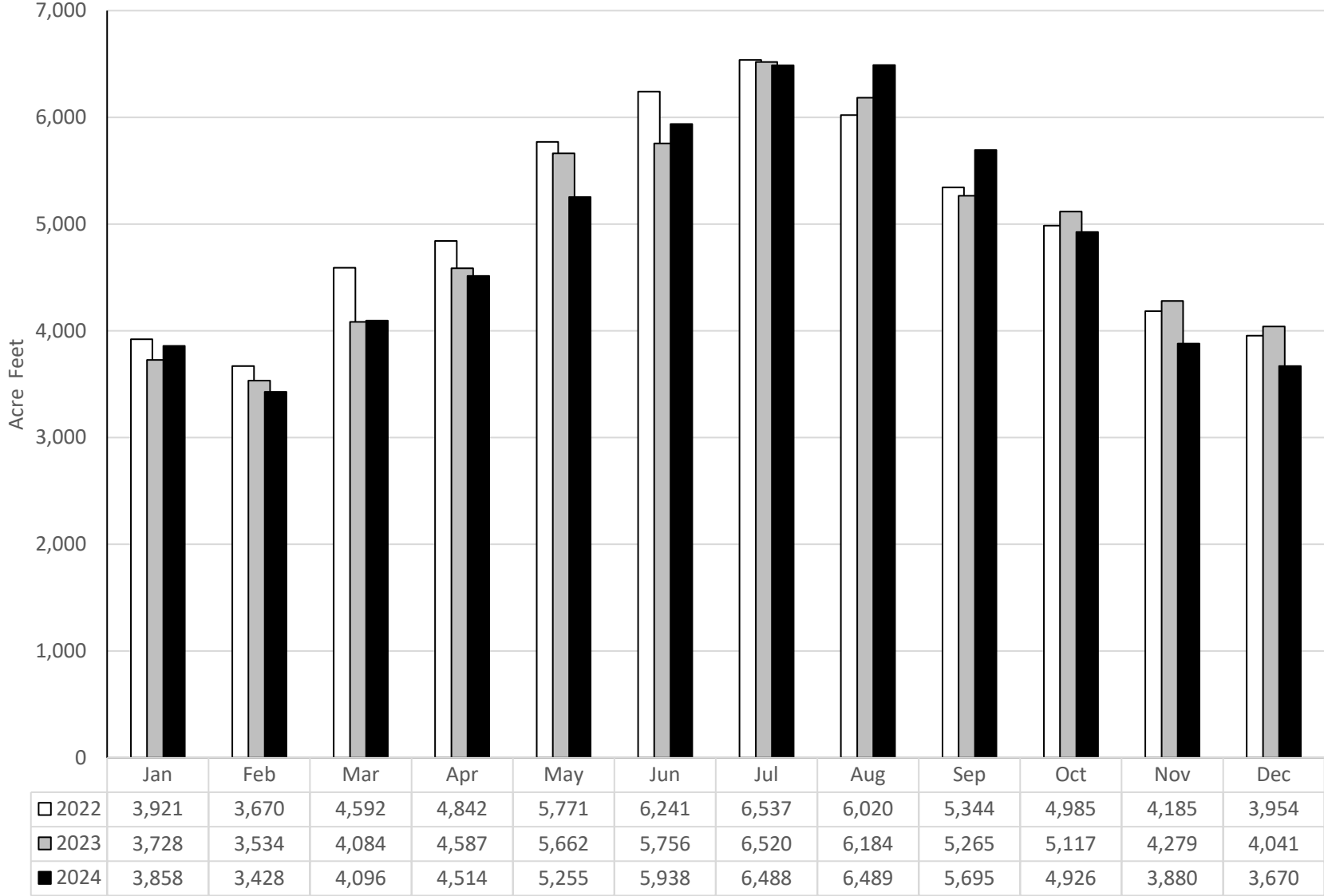
Las Vegas Valley Water District Water Production



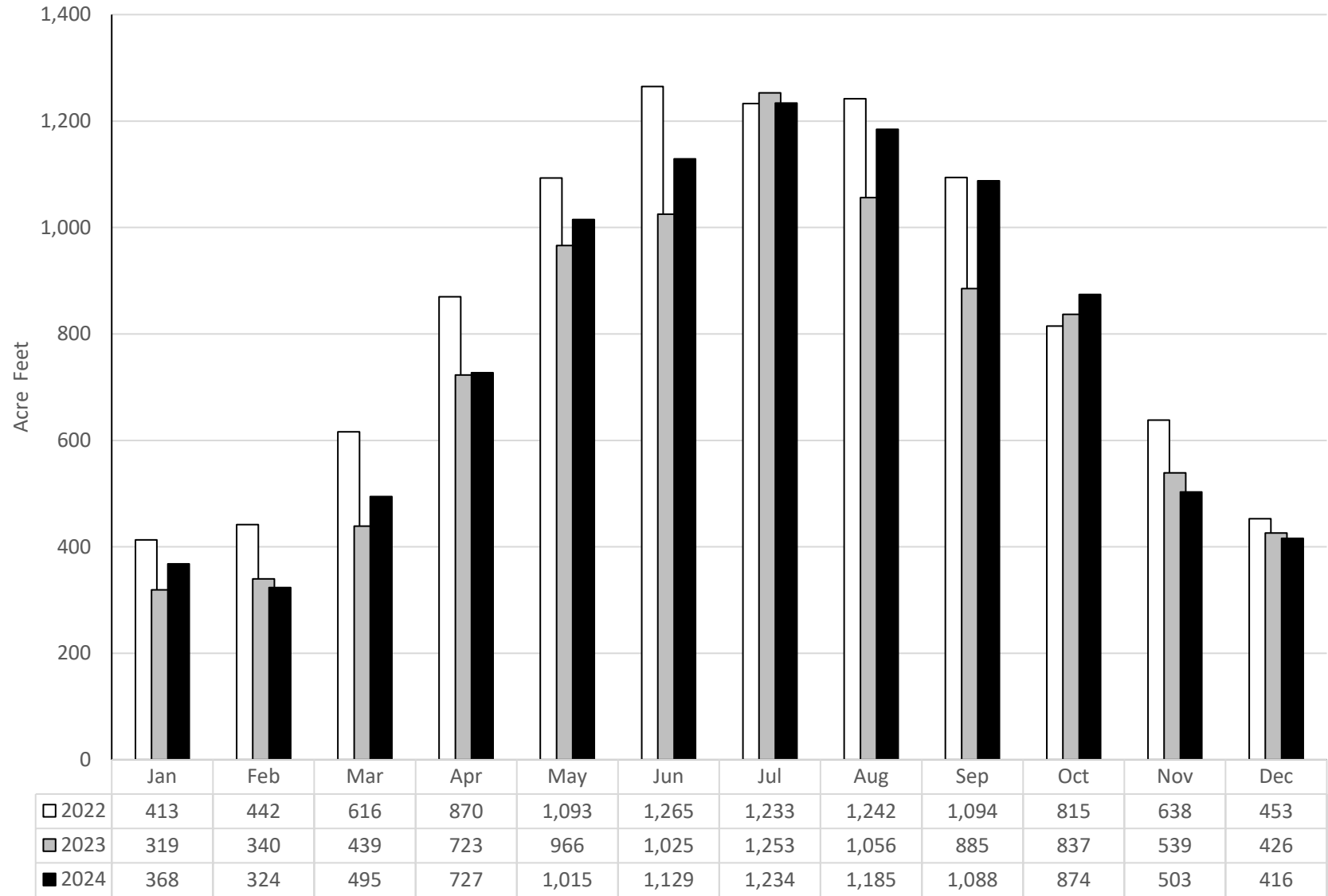
City of Henderson Water Production



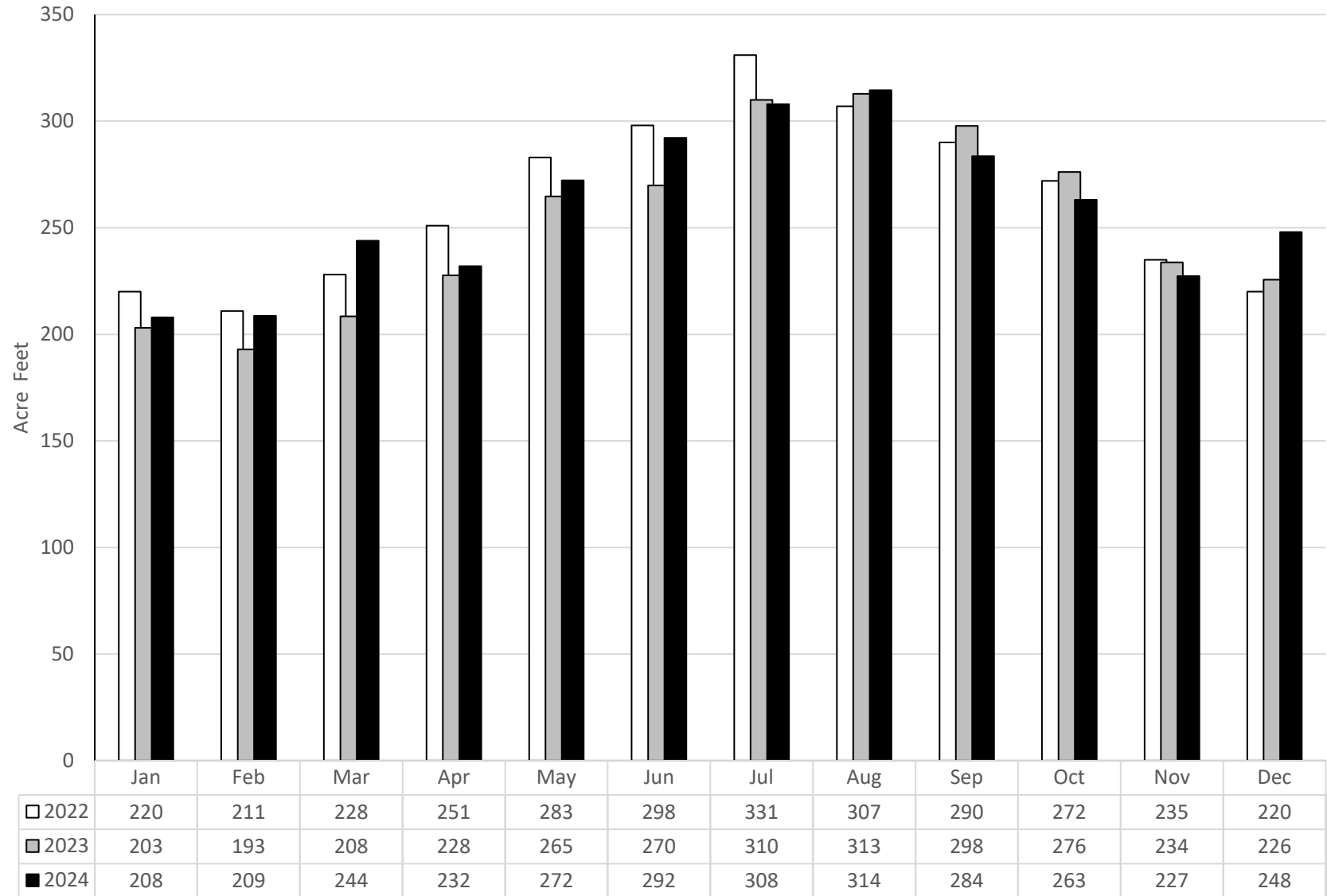
City of North Las Vegas Water Production



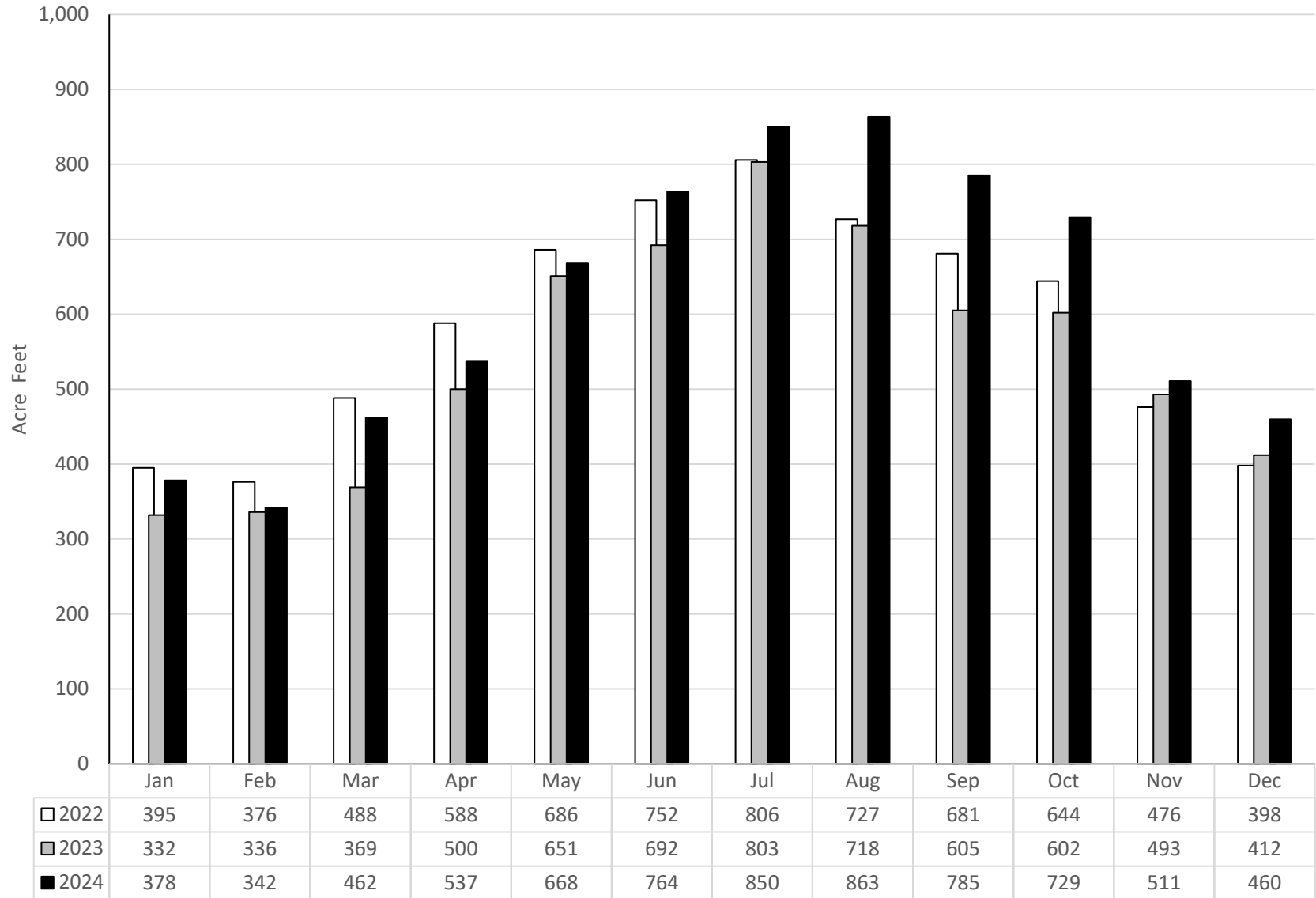
Boulder City Water Production



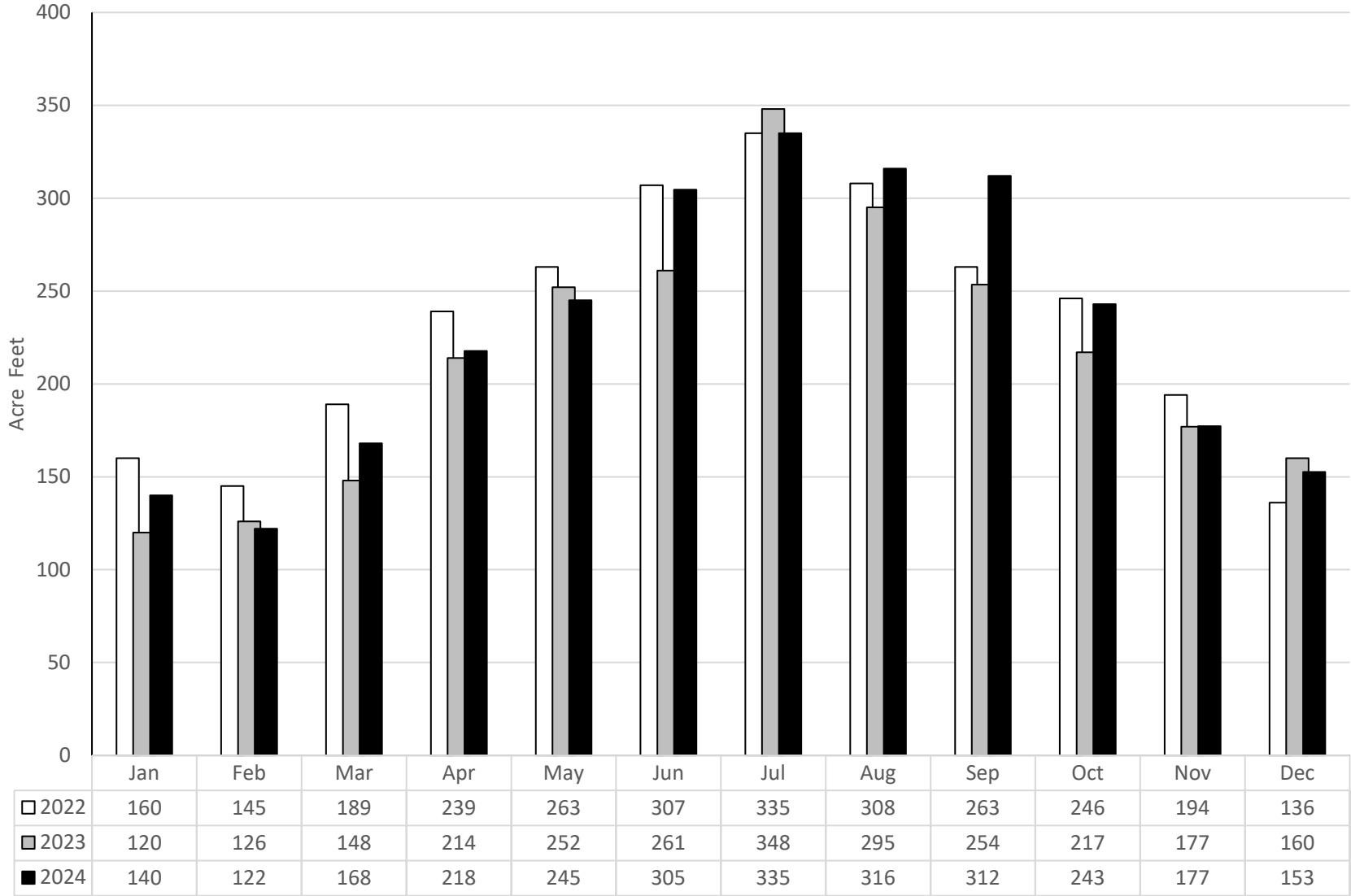
Big Bend Water District Water Production



Virgin Valley Water District Water Production



Moapa Valley Water District Water Production



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	18.60	20.31	25.23	23.91	23.18	1.13	1.08	1.12
Feb	102.07	103.76	107.97	42.04	48.34	45.46	17.96	18.47	19.91	24.56	24.68	22.68	1.14	1.08	1.09
Mar	103.72	104.62	109.56	42.45	47.70	45.41	18.08	18.36	19.71	25.07	24.20	23.69	1.15	1.08	1.05
Apr	106.28	105.60	111.99	42.63	48.28	45.61	17.71	20.12	20.34	25.42	25.32	24.29	1.11	1.10	1.08
May	105.74	106.36	113.01	42.78	48.04	46.22	17.98	18.45	20.64	25.50	25.02	24.82	1.13	1.14	1.13
Jun	106.70	106.34	114.45	42.16	47.49	46.42	18.11	18.23	20.92	24.55	24.81	25.11	1.13	1.13	1.16
Jul	110.64	110.07	117.75	47.16	48.00	47.19	18.80	18.60	21.10	24.34	26.35	24.80	1.15	1.15	1.19
Aug	110.64	111.75	116.15	48.20	47.31	47.65	19.10	19.49	21.30	25.19	26.61	24.97	1.15	1.18	1.17
Sep	109.22	115.43	114.48	47.28	48.12	47.19	18.90	19.45	21.06	25.27	26.07	24.77	1.09	1.16	1.16
Oct	110.94	111.22	115.54	46.90	48.15	46.09	18.71	18.93	20.92	24.56	26.44	24.71	1.08	1.12	1.14
Nov	106.35	109.60	111.76	46.27	46.51	45.90	18.58	19.16	20.76	24.18	25.42	23.82	1.08	1.11	1.09
Dec	104.32	109.01	106.42	46.53	46.52	47.21	18.63	19.12	20.64	23.94	23.13	22.86	1.09	1.11	1.11
ANNUAL	106.43	108.17	112.23	44.67	47.68	46.35	18.38	18.92	20.63	24.82	25.16	24.14	1.12	1.12	1.12

* 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	2.15	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	2.06	0.091	0.098	0.110
Mar	0.039	0.042	0.039	0.017	0.016	0.011	0.172	0.171	0.183	1.65	1.58	1.51	1.89	1.94	2.11	0.095	0.138	0.115
Apr	0.043	0.040	0.038	0.015	0.016	0.012	0.175	0.174	0.189	1.65	1.58	1.49	1.88	1.91	2.11	0.095	0.139	0.118
May	0.044	0.041	0.042	0.010	0.016	0.012	0.155	0.165	0.170	1.80	1.62	1.56	1.76	1.83	2.10	0.098	0.145	0.136
Jun	0.042	0.042	0.045	0.009	0.015	0.009	0.142	0.147	0.152	1.70	1.75	1.74	1.73	1.84	2.14	0.101	0.150	0.125
Jul	0.048	0.042	0.046	0.011	0.011	0.008	0.140	0.142	0.147	1.98	1.96	1.88	1.72	1.93	2.14	0.101	0.157	0.133
Aug	0.045	0.042	0.044	0.012	0.013	0.012	0.134	0.138	0.147	1.78	1.80	1.78	1.73	1.96	2.15	0.104	0.191	0.135
Sep	0.042	0.041	0.042	0.011	0.015	0.015	0.151	0.147	0.146	1.74	1.70	1.62	1.73	1.90	2.09	0.101	0.156	0.130
Oct	0.039	0.041	0.042	0.012	0.014	0.027	0.147	0.144	0.148	1.73	1.55	1.65	1.80	1.99	2.26	0.094	0.151	0.127
Nov	0.039	0.042	0.045	0.016	0.012	0.034	0.146	0.158	0.153	1.69	1.37	1.35	1.87	2.11	2.25	0.094	0.146	0.122
Dec	0.039	0.039	0.043	0.012	0.010	0.012	0.149	0.158	0.153	1.58	1.39	1.43	1.83	1.96	2.20	0.120	0.159	0.114
ANNUAL	0.042	0.041	0.043	0.014	0.014	0.014	0.152	0.155	0.161	1.69	1.61	1.57	1.81	1.93	2.15	0.099	0.145	0.124

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	32.6	3.1
Apr	1.08	0.07	32.4	2.1
May	1.13	0.24	35.00	7.44
Jun	1.16	0.24	34.80	7.20
Jul	1.19	0.15	36.90	4.65
Aug	1.17	0.16	36.30	4.96
Sep	1.16	0.12	34.80	3.60
Oct	1.14	0.13	35.30	4.03
Nov	1.09	0.02	32.70	0.60
Dec	1.11	0.03	34.40	0.93
Annual	1.12	0.11	412.00	39.20

Las Vegas Wash and Colorado River Dischargers (2024)

	Clark County Water Reclamation District*					City of Las Vegas						City of Henderson			City of North Las Vegas		
	(Avg. in MGD)					(Avg. in MGD)						(Avg. in MGD)			(Avg. in MGD)		
Month	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	111.99	0.67	0.00	0.67	111.32	45.61	0.37	0.00	0.00	0.37	46.67	24.29	6.63	17.25	20.34	0.49	18.66
May	113.01	1.03	0.00	1.03	111.98	46.22	0.46	0.00	0.00	0.46	46.32	24.82	7.82	16.42	20.64	0.84	18.67
Jun	114.45	2.48	0.00	2.48	111.97	46.42	0.51	0.00	0.00	0.51	46.24	25.11	8.52	15.77	20.92	0.87	18.92
Jul	117.75	4.06	0.00	4.06	113.69	47.19	0.52	0.00	0.00	0.52	46.30	24.80	8.25	16.28	21.10	0.82	19.20
Aug	116.15	3.54	0.00	3.54	112.98	47.65	0.53	0.00	0.00	0.53	46.50	24.97	9.04	15.59	21.30	0.91	19.32
Sep	114.48	0.85	0.00	0.85	113.60	47.19	0.53	0.00	0.00	0.53	46.59	24.77	9.34	15.81	21.06	0.65	19.43
Oct	115.54	1.48	0.00	1.48	113.96	46.09	0.46	0.00	0.00	0.46	46.37	24.71	7.22	17.81	20.92	0.46	19.44
Nov	111.76	1.16	0.00	1.16	110.56	45.90	0.40	0.00	0.00	0.40	46.15	23.82	5.85	19.45	20.76	0.09	19.68
Dec	106.42	0.65	0.00	0.65	110.63	47.21	0.19	0.00	0.00	0.19	47.03	22.86	4.07	20.88	20.64	0.11	16.43
Average	112.23	1.40	0.00	1.40	111.29	46.35	0.38	0.00	0.00	0.38	46.68	24.14	6.43	17.98	20.63	0.47	19.12

Las Vegas Wash and Colorado River Dischargers (2024)

	Las Vegas Wash Discharge (Avg in MGD)			Discharge Directly to Colorado River (Avg in MGD)				Total Discharge (Totals in A/F)
Month	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	1.19		18,752.35
Feb	196.02	3.35	195.13	1.49	0.00	1.27		17,479.42
Mar	198.37	5.69	192.76	1.51	0.00	1.32		17,272.86
Apr	202.23	8.16	193.90	1.49	0.00	1.32		17,376.81
May	204.69	10.16	193.39	1.56	0.00	1.35		17,347.44
Jun	206.90	12.37	192.90	1.74	0.00	1.53		17,317.36
Jul	210.84	13.65	195.47	1.88	0.00	1.68		17,531.22
Aug	210.07	14.02	194.39	1.78	0.00	1.52		17,427.27
Sep	207.50	11.38	195.43	1.62	0.00	1.43		17,520.89
Oct	207.26	9.62	197.58	1.65	0.00	1.44		17,701.29
Nov	202.24	7.51	195.84	1.35	0.00	1.32		17,539.41
Dec	197.13	5.02	194.97	1.43	0.00	1.24		17,475.04
Annual Avg	203.35	8.68	194.81	1.57	0.00	1.38		210741.35

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	6	17,544	17,550	4,277	0	4,277	0	3,428	3,428	65	259	324	10.59	43	54	17	25,616
Mar	3	22,002	22,005	5,722	0	5,722	1	4,096	4,097	138	356	495	1.63	60	61	6	32,374
Apr	70	24,593	24,663	6,487	0	6,487	2	4,514	4,516	255	472	727	0.63	66	67	72	36,387
May	4,346	26,683	31,029	8,728	0	8,728	271	5,255	5,526	379	636	1,015	7.60	32	40	4,625	41,713
Jun	7,772	26,735	34,507	9,704	0	9,704	4	5,938	5,942	417	712	1,129	3.63	73	77	7,779	43,579
Jul	8,632	29,514	38,146	11,008	0	11,008	76	6,488	6,564	449	785	1,234	7.49	90	97	8,715	48,334
Aug	8,841	29,317	38,158	11,073	0	11,073	119	6,489	6,608	408	777	1,185	5.04	92	97	8,965	48,155
Sep	8,199	23,643	31,842	9,234	0	9,234	78	5,695	5,772	423	665	1,088	6.52	93	99	8,283	39,752
Oct	2,800	26,571	29,371	8,262	0	8,262	498	4,926	5,424	315	559	874	6.19	88	94	3,304	40,721
Nov	1	22,257	22,258	6,258	0	6,258	516	3,880	4,397	143	360	503	4.49	72	76	522	32,970
Dec	46	20,764	20,810	5,534	0	5,534	534	3,670	4,204	92	324	416	2.89	60	63	583	30,444
YTD	40,716	288,967	329,683	90,714	0	90,714	2,098	58,237	60,334	3,168	6,189	9,357	65	786	851	42,879	448,061

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	20,327	19,316	19,344	4,935	4,664	4,428	3,921	3,728	3,858	413	319	368	220	203	208	395	332	378	160	120	140
Feb	18,957	17,953	17,544	4,680	4,347	4,277	3,670	3,534	3,428	442	340	324	211	193	209	376	336	342	145	126	122
Mar	24,921	21,713	22,002	6,240	5,432	5,722	4,592	4,084	4,096	616	439	495	228	208	244	488	369	462	189	148	168
Apr	26,926	25,292	24,593	7,092	6,294	6,487	4,842	4,587	4,514	870	723	727	251	228	232	588	500	537	239	214	218
May	33,411	31,526	26,683	8,986	8,731	8,728	5,771	5,662	5,255	1,093	966	1,015	283	265	272	686	651	668	263	252	245
Jun	35,956	32,436	26,735	9,869	9,120	9,704	6,241	5,756	5,938	1,265	1,025	1,129	298	270	292	752	692	764	307	261	305
Jul	38,811	37,915	29,514	9,737	10,452	11,008	6,537	6,520	6,488	1,233	1,253	1,234	331	310	308	806	803	850	335	348	335
Aug	35,792	34,850	29,317	9,385	9,962	11,073	6,020	6,184	6,489	1,242	1,056	1,185	307	313	314	727	718	863	308	295	316
Sep	32,370	29,061	23,643	8,414	7,795	9,234	5,344	5,265	5,695	1,094	885	1,088	290	298	284	681	605	785	263	254	312
Oct	28,890	27,531	26,571	7,545	7,244	8,262	4,985	5,117	4,926	815	837	874	272	276	263	644	602	729	246	217	243
Nov	22,309	21,799	22,257	5,741	5,657	6,258	4,185	4,279	3,880	638	539	503	235	234	227	476	493	511	194	177	177
Dec	20,741	20,087	20,764	5,174	4,958	5,534	3,954	4,041	3,670	453	426	416	220	226	248	398	412	460	136	160	153
ANNUAL	339,413	319,479	288,967	87,798	84,656	90,714	60,065	58,756	58,237	10,173	8,813	9,357	3,145	3,023	3,102	7,018	6,512	7,349	2,785	2,571	2,733

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	0.67	0.40	0.38	0.39	0.39	0.38	0.46	0.18	0.18	0.20	0.62	0.69	0.59	0.52	0.50	0.59
Apr	0.49	0.51	0.59	0.33	0.33	0.34	0.34	0.34	0.41	0.13	0.13	0.14	0.60	0.61	0.59	0.44	0.45	0.51
May	0.42	0.42	0.49	0.26	0.27	0.27	0.29	0.30	0.36	0.11	0.10	0.11	0.58	0.61	0.55	0.37	0.37	0.42
Jun	0.37	0.38	0.43	0.24	0.23	0.24	0.27	0.27	0.32	0.09	0.09	0.09	0.54	0.53	0.55	0.33	0.33	0.37
Jul	0.38	0.39	0.41	0.25	0.24	0.21	0.27	0.27	0.31	0.09	0.10	0.09	0.67	0.57	0.58	0.34	0.34	0.36
Aug	0.38	0.42	0.41	0.25	0.26	0.21	0.27	0.30	0.31	0.09	0.12	0.09	0.55	0.55	0.54	0.34	0.37	0.35
Sep	0.42	0.45	0.47	0.27	0.28	0.25	0.31	0.33	0.34	0.10	0.11	0.10	0.53	0.55	0.52	0.38	0.40	0.40
Oct	0.49	0.53	0.52	0.34	0.31	0.28	0.34	0.36	0.37	0.13	0.13	0.12	0.59	0.61	0.60	0.44	0.46	0.45
Nov	0.58	0.63	0.65	0.40	0.39	0.35	0.38	0.41	0.43	0.17	0.20	0.20	0.53	0.66	0.55	0.51	0.55	0.56
Dec	0.67	0.69	0.70	0.47	0.44	0.39	0.43	0.45	0.47	0.24	0.27	0.25	0.64	0.68	0.55	0.60	0.61	0.61
AVG.	0.48	0.50	0.54	0.32	0.32	0.30	0.34	0.34	0.38	0.13	0.14	0.13	0.59	0.61	0.57	0.43	0.44	0.47

Water Production and Waste Flows

Monthly Flows in A/F

		CLV and Clark County		City of Henderson		City of North Las Vegas		Boulder City		Big Bend Water District		All Entities	
		Monthly Flow in AF		Monthly Flow in AF		Monthly Flow in AF		Monthly Flow in AF		Monthly Flow in AF		Monthly Flow in AF	
		Water	Waste	Water	Waste	Water	Waste	Water	Waste	Water	Waste	Water	Waste
	Month	Production	Flow	Production	Flow	Production	Flow	Production	Flow	Production	Flow	Production	Flow
31	Jan	19,344	14,604	4,428	2,205	3,858	1,932	368	106	208	130	28,207	18,978
28	Feb	17,550	13,184	4,277	1,949	3,428	1,711	324	97	209	128	25,787	17,068
31	Mar	22,005	14,743	5,722	2,254	4,097	1,875	495	100	244	144	32,562	19,116
30	Apr	24,663	14,510	6,487	2,236	4,516	1,873	727	99	232	138	36,624	18,856
31	May	31,029	15,148	8,728	2,361	5,526	1,964	1,015	107	272	149	46,571	19,730
30	Jun	34,507	14,811	9,704	2,312	5,942	1,926	1,129	107	292	160	51,573	19,316
31	Jul	38,146	15,692	11,008	2,359	6,564	2,007	1,234	113	308	179	57,260	20,350
31	Aug	38,158	15,583	11,073	2,376	6,608	2,026	1,185	111	314	169	57,338	20,266
30	Sep	31,842	14,884	9,234	2,280	5,772	1,939	1,088	107	284	149	48,219	19,360
31	Oct	29,371	15,377	8,262	2,351	5,424	1,990	874	108	263	157	44,194	19,983
30	Nov	22,258	14,515	6,258	2,193	4,397	1,911	503	100	227	124	33,643	18,844
31	Dec	20,810	14,616	5,534	2,175	4,204	1,964	416	106	248	136	31,212	18,995
	YTD	329,683	177,667	90,714	27,051	60,334	23,118	9,357	1,263	3,102	1,761	493,190	230,861

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	90	0	0	0
Sep	0	0	0	364	0	0	0
Oct	0	0	0	287	0	0	0
Nov	0	0	0	120	0	0	0
Dec	0	0	0	103	0	0	0
Total 2024	0	0	0	454	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