City Manager's Office

MEMORANDUM

DATE: 06/13/2023

TO: Mayor and City Council

THROUGH: Doug Thornley, City Manager Approved Electronically

FROM: Trina Magoon, Director of Utility Services
John Flansberg, Regional Infrastructure Administrator

SUBJECT: North Valleys PFAS Sampling Results

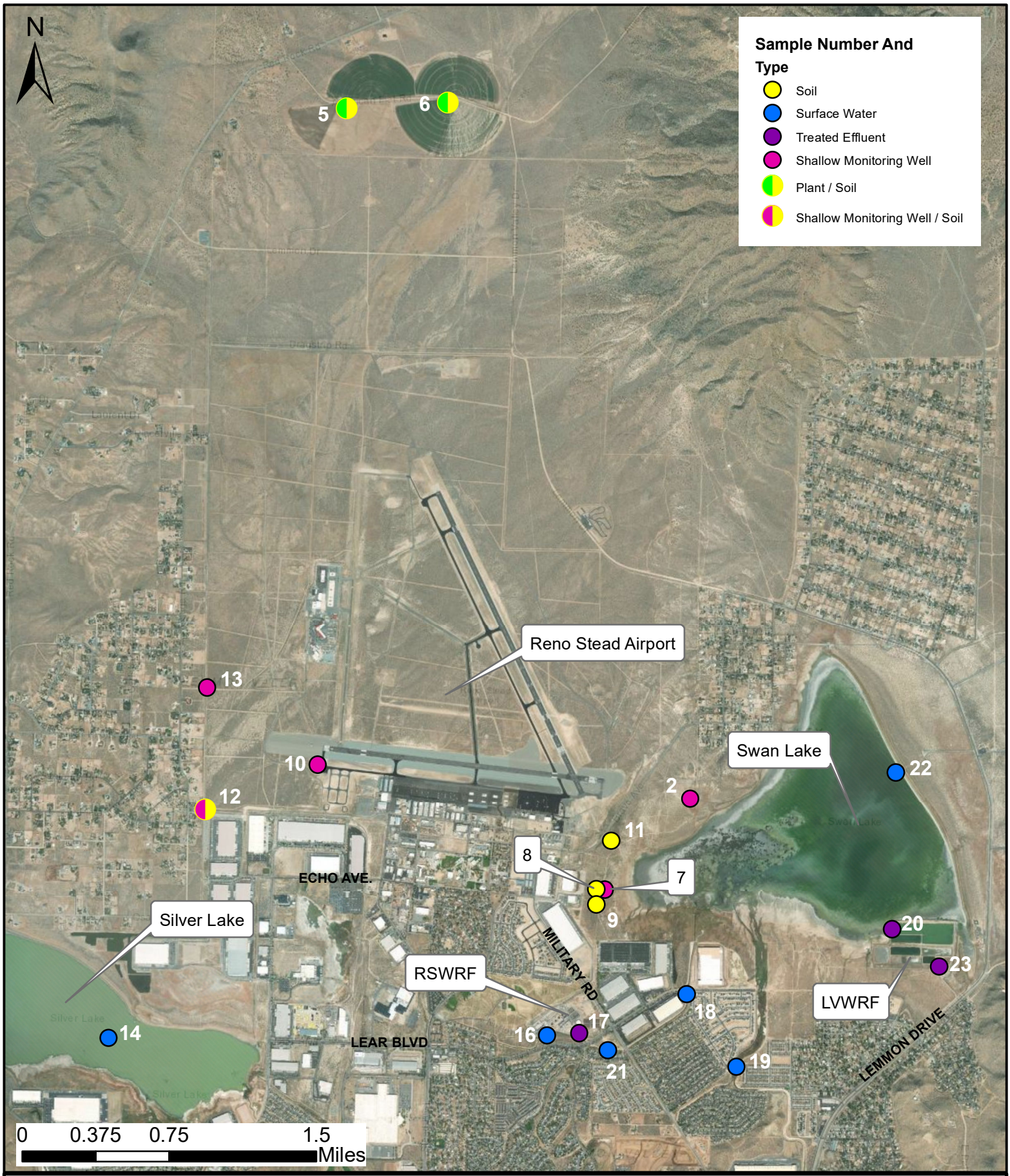
The City of Reno (City), Truckee Meadows Water Authority (TMWA) and Washoe County (County) were recently made aware of a single water sample of Swan Lake that was tested for per-and polyfluoroalkyl (PFAS) substances, by a University of Nevada Reno (UNR) student. Although the sample was taken in 2019, the result of the sample was not made aware to the City, County or TMWA until it was presented at a Nevada Water Environment Association (NWEA) conference in late March of 2023.

The City of Reno, TMWA and County then jointly contracted with the Desert Research Institute to obtain additional surface water, groundwater, shallow monitoring well, soil and plant tissue samples at 19 locations in the North Valleys. Results of those samples were received on May 22, 2023. Please see the attached "North Valleys PFAS Sampling Locations" map and the associated sample test results spreadsheet and note the following initial key takeaways:

- Swan and Silver Lake are not drinking water sources. For individuals who use Truckee Meadows Water Authority (TMWA) water, there is no evidence the water contains PFAS. All drinking water well sample results were non-detect for PFAS and all federal and state drinking water standards are being met by TMWA.
- All TMWA drinking water well sample results were non-detect for PFAS and meet the EPAs proposed drinking water quality standards of 4 parts per trillion (ppt).
- Wastewater treatment plant (WWTP) effluent test results at the Reno Stead Water Reclamation Facility (RSWRF) and the Lemmon Valley Water Reclamation Facility (LVWRF) were in the single digit or low double digit (ppt) range and similar to results found at WWTPs across the United States.
- Out of an abundance of caution, we recommend avoiding contact with surface waters in the North Valleys. Similar to signs posted for seasonal algae blooms, warning signs have been posted at Swan Lake and will be posted at Silver Lake, shortly.

As this is an emerging concern, not much is known regarding safe non-drinking water standards and staff are working to obtain a consultant to interpret the data.

More information can be found on the City's website at: https://www.reno.gov/community/pfas



Date: June 2023

NORTH VALLEYS PFAS SAMPLING LOCATIONS

ID	5	6	8, top	8, bottom	9, top	9, bottom	11, top	11, bottom	5, plant	6, plant	12
Location	Soil 1	Soil 2	Soil 3		Soil 4		Soil 5		Soil 1	Soil 2	MW-09
Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Plant, unknown	Plant, Alfalfa	Soil
Units	ng/g (ppb)	ng/g	ng/g	ng/g	ng/g	ng/g	ng/g	ng/g	ng/g	ng/g	ng/g
PFBA	ND	ND	0.683	0.0498	0.0994	0.3641	0.1973	ND	ND	ND	ND
PFPeA	0.0134	0.151	0.2011	0.0891	0.5944	1.6698	0.1291	ND	1.596	0.3263	ND
PFHxA	<LOD	ND	ND	0.0318	0.4458	1.2784	0.019	<LOD	<LOD	0.3496	ND
PFHpA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PFOA	0.2132	ND	0.0572	<LOD	0.3446	0.6569	<LOD	0.0032	<LOD	1.3338	ND
PFNA	<LOD	0.0104	1.8465	2.1525	1.9866	3.8354	<LOD	ND	ND	0.3263	<LOD
PFDA	0.5542	0.2354	ND	0.2554	0.6338	0.4364	0.0638	ND	ND	ND	ND
PFUA	ND	ND	2.0201	ND	8.0717	10.3482	<LOD	0.0913	ND	ND	ND
PFDoA	0.2651	ND	ND	0.3399	ND	ND	ND	ND	ND	ND	ND
PFTrDA	0.0871	ND	0.0147	0.2979	0.9976	0.7139	0.2468	ND	ND	0.3621	0.1175
PFTeDA	0.0599	0.0233	0.0875	0.0896	0.0237	0.2077	0.2676	0.1488	1.588	0.606	0.0988
PFBS	ND	0.1877	1.1362	ND	1.0702	0.3394	ND	ND	ND	ND	ND
PFPeS	ND	ND	0.0195	0.0736	0.0474	0.6018	ND	ND	ND	ND	ND
PFHxS	0.6338	0.1048	0.2825	0.2216	2.0189	4.1877	0.0059	0.0014	0.708	0.1506	0.0729
PFHpS	ND	ND	ND	ND	0.1115	0.3185	ND	ND	ND	ND	ND
PFOS	0.1053	0.594	3.9569	12.8991	24.9728	49.5432	0.1731	0.0676	0.256	0.5701	0.106
PFNS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PFDS	ND	ND	ND	ND	0.1867	ND	ND	0.0473	ND	ND	ND
FBSA	ND	ND	ND	ND	0.1378	0.2785	ND	ND	ND	ND	ND
FHxSA	0.0024	0.0032	0.0024	0.0043	0.4054	0.6895	0.0235	0.0016	0.006	0.0161	0.0095
FOSA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4:2FTS	ND	0.0368	ND	0.0375	ND	ND	ND	<LOD	ND	ND	0.011
6:2FTS	ND	ND	ND	ND	0.8629	1.86	ND	ND	ND	ND	ND
8:2FTS	0.016	ND	0.0667	0.1608	0.4491	1.1707	ND	ND	ND	ND	ND
N-MeFOSAA	0.0048	0.0626	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-EtFOSAA	ND	ND	0.1192	ND	ND	ND	0.7324	0.0735	ND	ND	ND
HFPO-DA	0.0075	0.0109	0.0009	0.0078	ND	ND	ND	ND	ND	0.0789	0.017
9Cl-PF3ONS	ND	ND	ND	0.3925	0.381	ND	0.0317	ND	ND	ND	ND
11Cl-PF3OUdS	ND	0.6457	ND	0.2518	ND	0.2044	ND	0.0334	ND	ND	ND

ND - Non-detect. Below detection limits
LOD - Limit of detection

Soil and plant samples were lyophilized for 12 hours, then extracted

	Pre-weight (g)	Post-weight (g	Water content (g)		Extraction (g dw)
5	5.2161	4.8452	0.3709	7.1%	0.9356
6	5.157	4.8615	0.2955	5.7%	1.0067
8, top	5.3239	5.0095	0.3144	5.9%	1.1538
8, bottom	5.4763	5.1663	0.31	5.7%	1.0943
9, top	5.0409	4.566	0.4749	9.4%	0.9909
9, bottom	5.2194	4.4524	0.767	14.7%	1.0519
11, top	5.157	4.6389	0.5181	10.0%	1.011
11, bottom	5.6168	4.9623	0.6545	11.7%	1.1092
5, plant	6.4567	3.5157	2.941	45.5%	0.5052
6, plant	7.4562	2.4445	5.0117	67.2%	0.4798
MW-09	6.9942	5.6214	1.3728	19.6%	1.1789