MEMORANDUM

Date: December 26, 2024

To: The Honorable Chair and Members
Pima County Board of Supervisors

From: Jan Lesher
County Administrator

Re: **Water Use by Golf Courses in Pima County Based on 2023 Reporting**

At the October 1, 2024 meeting of the Board of Supervisors, Supervisor Scott requested a list of golf courses in Pima County that identifies the source of water to serve each course. Using Arizona Department of Water Resources (ADWR) public records, Regional Flood Control District staff developed the attached table providing this information as well as the volume of water use reported each course. Due to irregular reporting or lack of reporting to ADWR, water usage is comprised of various reporting years. Reporting year is noted on the table when not 2023 records.

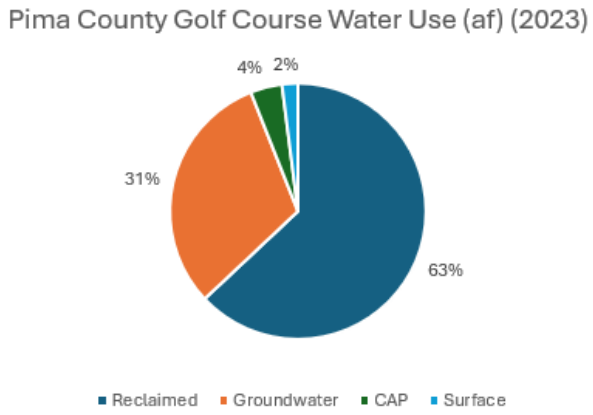
According to the ADWR records, there are 37 active golf courses in Pima County that are either municipal or privately owned. Of these, 21 golf courses reported using only reclaimed water provided by municipal reclaimed systems operated by the City of Tucson and the Town of Oro Valley, while Crooked Tree at Arthur Pack Park receives reclaimed water from Pima County. Though it has a groundwater right, Quail Creek reported using only reclaimed water delivered from Pima County's Green Valley water reclamation facility to a Robson Ranch Quail Creek recharge facility for recovery.

The water used for the remaining 16 golf courses is either groundwater, Central Arizona Project (CAP) water, surface water, or a combination of the three sources:

- 11 courses reported using only groundwater – Canoa Ranch, Desert Hills and San Ignacio, are served by Green Valley Domestic Water Improvement District and the remaining 8 courses pump based on a groundwater right.
- 2 courses, Pusch Ridge and Tucson Estates, use only CAP water.
- Sewailo Golf Course, owned by the Pascua Yaqui Tribe, last reported in 2017 that it uses groundwater and CAP.
- Del Lago Golf Course has both a surface water allocation from Cienega Creek and a recovery permit for its stored CAP water. Though legally recognized as CAP water, the recovered water at Del Lago is pumped groundwater and not direct delivery of CAP water.
- Tucson Country Club also reports using groundwater and reclaimed water.

Omni Tucson National reported using only groundwater in 2023. However, as the County Administrator reported to the Board in a memorandum on October 1, 2024, Omni Tucson National has made improvements to accept reclaimed water and Metro Water made the first delivery of 225 acre-feet of reclaimed water to the course in 2024, which is about 20% of their reported water usage.

As shown on the chart below, approximately two-thirds of the water used for golf course irrigation is reclaimed water or CAP, which does not affect the local aquifer. The remaining 33% is groundwater or surface water, which does have an impact on the long-term health of the aquifer. Of these, 6 golf courses are located in Green Valley and 5 are dispersed through the metro area.



Green Valley Golf Courses Using Groundwater (2023)	AFY
Canoa Ranch	378.38
Country Club of GV	560.00
Desert Hills	377.80
Haven	705.24
San Ignacio	367.00
Torres Blancas	555.00
Total	2,943.92

Metro Area Golf Courses Using Groundwater (2023)	AFY
Dorado	273.80
Omni Tucson National	1,179.34
Oro Valley Country Club	484.92
Quarry Pines	361.50
Rolling Hills	300.35
Total	2,599.91

The Water Working Group intends to consider the groundwater demand associated with these golf courses and potential mitigation opportunities as part of the County's overall water resource policy recommendations.

Please let me know if there are any questions regarding this memo.

JKL/anc

Attachment

c: Carmine DeBonis, Jr., Deputy County Administrator
Francisco Garcia, MD, MPH, Deputy County Administrator & Chief Medical Officer
Steve Holmes, Deputy County Administrator
Eric Shepp, Director, Regional Flood Control District
Sarah Davis, Senior Advisor, County Administrator's Office

Facility	#/Holes	Water Source	Water Supply	58 Rights – 62 Facility	2023 Use (or noted)
Arizona National	18	City of Tucson	Reclaimed	62-303044.0000	436.73
Canoa Ranch	18	Green Valley DWID	Groundwater	62-303086.0000	378.38 (2022)
Crooked Tree	18	Pima County	Reclaimed	62-303087.0000	673.04
CC of Green Valley	18	Type 2 GFR	Groundwater	58-101735.0001	560.00
Del Lago	18	Surface & CAP	Surface & CAP	62-303084.0000	364.69/86.19
Dell Urich	18	City of Tucson	Reclaimed	62-303045.0000	473.29
Desert Hills	18	Green Valley DWID	Groundwater	62-303038.0000	377.80 (2022)
Dorado	18	Type 2 GFR	Groundwater	58-108946.0000	273.80 (2020)
Dove Mt #1	27	City of Tucson	Reclaimed	62.303091.0000	546.36
Dove Mt #2				62-303092.0000	299.04
El Conquistador	36	Town of Oro Valley	Reclaimed	25-625006.0000	763.06 (2015)
El Rio	18	City of Tucson	Reclaimed	62-303002.0000	357.48
Forty-Niners	18	City of Tucson	Reclaimed	62-303035.0000	305.46
Fred Enke	18	City of Tucson	Reclaimed	62-303003.0000	396.45
The Gallery at Dove Mountain	36	City of Tucson	Reclaimed	62-303053.0000	690.00
The Gallery – South Course	18	City of Tucson	Reclaimed	62-303088.0000	595.29
The Golf Club Vistoso CLOSED 2018	18	Town of Oro Valley	Reclaimed	-	-
Haven	18	Type 2 GFR	Groundwater	58-104567.0000	705.24
Highlands	18	City of Tucson	Reclaimed	62-303048.0000	532.61
La Paloma	27	City of Tucson	Reclaimed	62-303026.0000	612.69
Oro Valley CC	18	Type 2 GFR	Groundwater	58-101530.0002	484.92 (2019)
Quail Canyon CLOSED 2018	18	Type 2 GFR	Groundwater	-	-
Quail Creek	27	Type 1 GFR	Groundwater & Reclaimed	74-581381.0001	0.00/1,808.28
Quarry Pines	18	Type 1 / Type 2 GFRs	Groundwater	58-112446.0006	361.50
Pusch Ridge Hilton Resort	9	Town of Oro Valley	CAP	62-303033.0000	130.36 (2016)
Randolph	18	City of Tucson	Reclaimed	62-303001.0000	489.89
Rolling Hills	18	Type 2 GFR	Groundwater	58-112457.0001	300.35
San Ignacio	18	Green Valley DWID	Groundwater	62-303024.0000	367.00 (2022)
Sewailo	18	Pascua Yaqui	Groundwater & CAP	62-303099.0000	41.30/500.00 (2017)
Silverbell	18	City of Tucson	Reclaimed	62-303004.0000	493.45
Skyline	18	City of Tucson	Reclaimed	62-303027.0000	298.35
Starr Pass	27	City of Tucson	Reclaimed	62-303028.0000	662.87
Stone Canyon	18	Town of Oro Valley	Reclaimed	62-303083.0000	504.55
The Views Sun City Vistoso	18	Town of Oro Valley	Reclaimed	62-303036.0000	456.53
Torres Blancas	18	Type 1 / Type 2 GFRs	Groundwater	62-303037.0000	555.00 (2015)
Tucson CC	18	Type 2 GFR / City of Tucson	Groundwater & Reclaimed	58-106007.0002	450.06/23.51
Tucson Estates	18	City of Tucson	CAP	62-303029.0001	101.05
Omni Tucson National	36	Type 2 GFR	Groundwater	58-102307.0002	1,179.34
Ventana Canyon	36	City of Tucson	Reclaimed	62-303030.0000	918.81