Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

Planning Annual Report

Fiscal Year 2021/2022

October 2022

Contents

INTRODUCTION

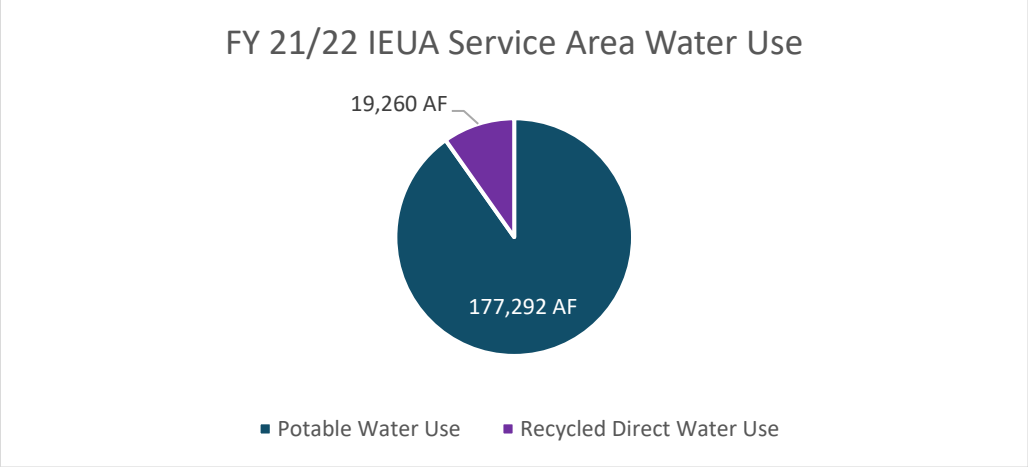
The Inland Empire Utilities Agency (IEUA) is located in Western San Bernardino County and serves approximately 920,000 residents in a 242-square mile service area. As a regional wastewater treatment agency, IEUA provides wastewater utility services to seven regional contracting agencies (RCAs) under the Chino Basin Regional Sewage Service Contract: cities of Chino, Chino Hills, Fontana, Montclair, Ontario, Upland, and Cucamonga Valley Water District (CVWD) in the city of Rancho Cucamonga. In addition to the RCAs, the Agency provides wholesale imported water from the Metropolitan Water District of Southern California (MWD) to seven retail agencies: the cities of Chino, Chino Hills, Ontario, Upland, CVWD in the city of Rancho Cucamonga, Fontana Water Company in the city of Fontana, and the Monte Vista Water District in the city of Montclair.

In addition to providing these key services, IEUA also produces and distributes high quality recycled water, implements the Chino Basin stormwater/groundwater recharge program, and provides regional water resources planning to ensure reliable, cost-effective environmentally responsible water supplies for current and future customers. The purpose of the Planning Annual Report (PAR) is to provide annually updated information about the IEUA service area's potable water, recycled water, groundwater, and wastewater. This report also provides a holistic summary of historic trends, usage patterns, current programs, and future forecasts.

SECTION 1: ANNUAL IEUA SERVICE AREA WATER USE

IEUA monitors and compiles water use data from each of its retail agencies to track overall water demands and sources of supply. Annual water use is split between potable water usage and the direct use of recycled water. IEUA's regional water usage in FY 21/22 was 196,552 AF (177,292 AF potable usage and 19,260 AF recycled direct usage). Recycled water used for groundwater recharge is not included in this total but can be found in Section 2 of the PAR.

Figure 1 –Service Area Potable and Recycled Water Use



Current Potable Water Use

Total potable water consumption within IEUA's service area for FY 21/22 was 177,292 AF. This is approximately a 3% decrease (5,950 AF) from FY 2020/21 potable consumption of 183,242 AF. The region is now using approximately 14% less potable water than before the drought in FY 13/14 when potable consumption was at 205,381 AF. MWD Tier 1 imported water use in the region slightly decreased from 71,444 AF in FY 20/21 to 65,877 AF in FY 21/22. Both FY 20/21 and FY 21/22 MWD usage includes Dry Year Yield (DYY) water supplies. For more information on DYY, see "Dry Year Yield" in section 2 of the PAR. A breakdown of the IEUA regional usage can be found in Table 2, while a breakdown of the retail water agencies' FY 21/22 water usage can be found in Appendix B.

Projected Imported Water Use

Demands for MWD Tier 1 imported water brought into the region through IEUA were projected to 2045 as part of the 2020 Urban Water Management Plan (2020 UWMP). The 2020 UWMP imported water demand projections were supplied by the retail agencies to IEUA. IEUA expects imported demand to increase over the next 25 years based on the 2020 UWMP projections. The forecast presented on Table 1 below does not take into account imported water restrictions that may be implemented by MWD due to the recent drought.

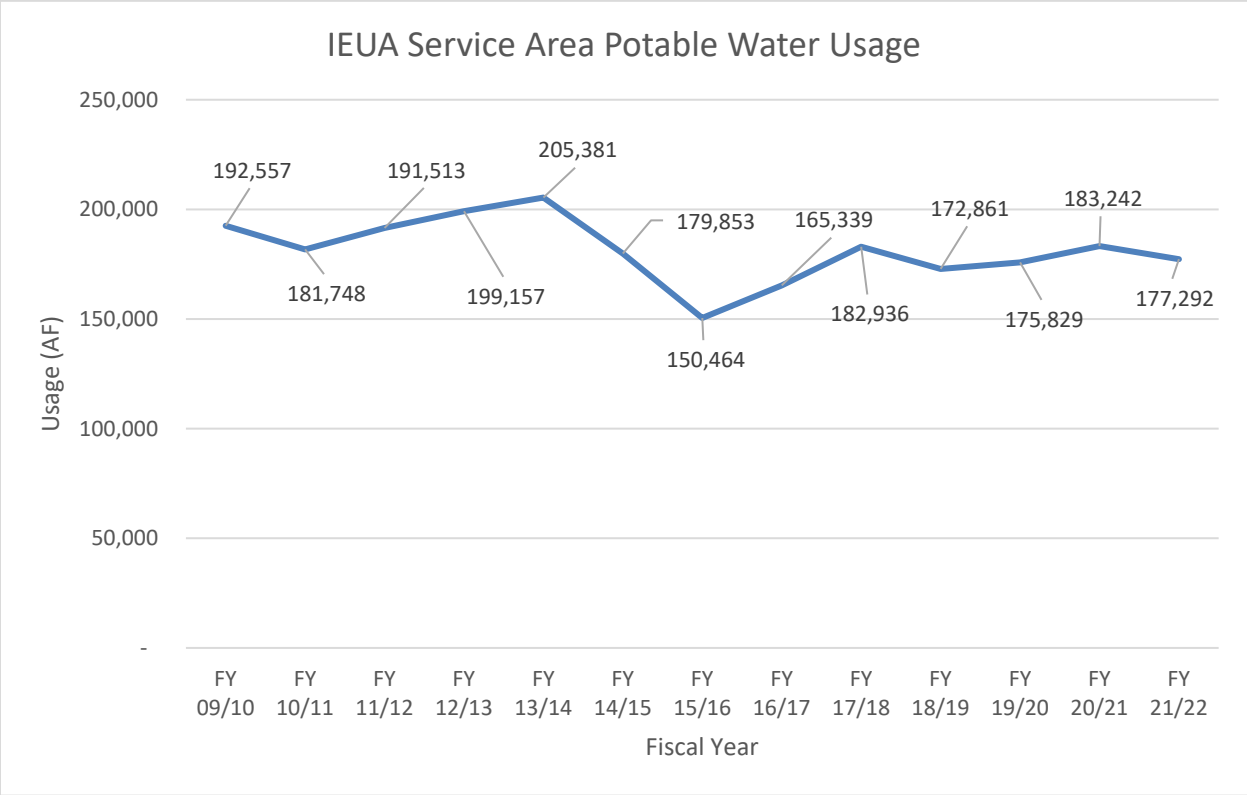
Table 1 – Projected Imported Water Use Demands by Retail Agency (AF)

Retail Agency	2025	2030	2035	2040	2045
Chino	5,353	5,353	5,353	5,353	5,353
Chino Hills	7,153	7,367	7,711	7,758	7,802
CVWD	28,369	28,369	28,369	28,369	28,369
FWC	15,000	15,000	15,000	15,000	15,000
MVWD	5,000	5,000	5,000	5,000	5,000
Ontario	11,000	13,000	15,000	17,000	17,000
Upland	5,541	5,541	5,541	5,541	5,541
Total	**77,416**	**79,630**	**81,974**	**84,021**	**84,065**

Table 2 – Fiscal Year 2021/2022 Regional Potable Monthly Water Use

		IEUA Service Area Potable Water Use FY21/22 (AF)												
		July	August	September	October	November	December	January	February	March	April	May	June	Total
Purchases from IEUA	Imported MWD	5,913	5,729	5,131	4,298	3,977	3,353	2,677	2,170	2,364	1,747	2,359	3,246	*42,965*
	DYY Take	2,800	2,800	2,600	2,000	6,800	1,000	-	-	-	2,400	2,513	-	*22,913*
Subtotal		***8,713***	***8,529***	***7,731***	***6,298***	***10,777***	***4,353***	***2,677***	***2,170***	***2,364***	***4,147***	***4,872***	***3,246***	***65,877***
Production	Chino Groundwater	4,668	4,418	3,910	4,021	3,407	2,463	3,952	5,892	7,001	5,476	6,508	8,332	*60,049*
	Other Groundwater	3,119	3,573	3,004	1,979	1,944	1,840	1,871	1,819	2,139	2,052	2,608	2,937	*28,885*
	Local Surface Water	358	262	203	227	302	386	1,141	968	681	700	599	391	*6,218*
Subtotal		***8,144***	***8,253***	***7,118***	***6,227***	***5,652***	***4,688***	***6,964***	***8,680***	***9,821***	***8,228***	***9,715***	***11,660***	***95,152***
Purchases	CDA	1,457	1,541	1,600	1,638	1,577	1,474	1,535	1,123	1,600	1,621	1,482	1,557	*18,205*
	CVWD	-	-	-	-	-	-	-	-	-	-	-	-	-
	MVWD	594	697	675	313	286	165	218	330	324	271	438	290	*4,601*
	SAWCo	916	861	649	391	552	463	672	664	873	864	934	910	*8,749*
	West End	161	149	135	77	86	68	127	142	133	110	103	119	*1,409*
Subtotal		***3,128***	***3,247***	***3,059***	***2,419***	***2,501***	***2,170***	***2,552***	***2,259***	***2,930***	***2,866***	***2,958***	***2,876***	***32,964***
Sales	Chino Hills	(877)	(941)	(878)	(643)	(571)	(276)	(266)	(496)	(506)	(478)	(764)	(598)	(7,294)
	Ontario	(39)	(39)	(37)	(38)	(37)	(38)	(40)	(35)	(37)	(29)	(36)	(26)	(430)
	MVWD	(44)	(44)	(42)	(43)	(92)	(142)	(57)	(40)	(41)	(33)	(41)	(29)	(647)
	Upland	(877)	(822)	(612)	(353)	(465)	(498)	(620)	(629)	(836)	(835)	(898)	(884)	(8,330)
Subtotal		***(1,837)***	***(1,845)***	***(1,569)***	***(1,078)***	***(1,165)***	***(953)***	***(982)***	***(1,200)***	***(1,420)***	***(1,375)***	***(1,739)***	***(1,538)***	***(16,701)***
Total		**18,149**	**18,184**	**16,339**	**13,867**	**17,765**	**10,257**	**11,211**	**11,909**	**13,695**	**13,866**	**15,805**	**16,244**	**177,292**

Figure 2 – IEUA Service Area Potable Water Use



Current Recycled Water Use

IEUA is the wholesale recycled water provider to the RCAs which work as or with retail agencies to directly serve their customers. IEUA contracting/retail water agencies which served recycled water in 2021/22 include:

- City of Chino
- City of Chino Hills
- Cucamonga Valley Water District (CVWD)
- City of Fontana (through FWC)
- City of Montclair (through MVWD)
- City of Ontario
- City of Upland

Fontana Water Company (FWC) and Monte Vista Water District (MVWD) are the water retailers in the Cities of Fontana and Montclair, respectively, but are not IEUA regional contracting agencies. FWC and MVWD retail recycled water obtained from their overlying cities, which are IEUA regional contracting agencies. San Bernardino County is currently a direct use customer of IEUA based on long standing historical contracts. Total recycled water direct use within the region was 19,260 AF in FY 21/22.

Table 3 – Recycled Water Demand by Agency for FY 21/22

Retail Agency	Direct Use (AF)	Percent of Direct Demand
Chino	5,222	27%
Chino Hills	1,615	8%
CVWD	1,154	6%
Fontana/FWC	375	2%
Montclair/MVWD	342	2%
Ontario	9,593	50%
Upland	747	4%
IEUA	145	1%
San Bernardino County	67	0.4%
Total	**19,260**	**100%**

Projected Recycled Water Use

Direct recycled water use in the IEUA service area has been projected out to 2040 in both the 2020 UWMP and as part of the Recycled Water Demand Forecast Technical Memorandum (Demand Forecast). The 2020 UWMP recycled water projections were supplied by the retail agencies to IEUA as part of the 2020 UWMP. The Demand Forecast recycled water projections utilized land use-based demand modeling completed by IEUA in conjunction with the retail agencies in 2015 and were subsequently updated in 2021.

Table 4 – Projected Recycled Water Direct Use Demand by Retail Agency (AF)

Retail Agency	Projection Source	2025	2030	2035	2040
Chino	2020 UWMP	4,500	4,500	4,000	3,800
	Demand Forecast	5,498	5,780	5,961	6,178
Chino Hills	2020 UWMP	1,609	1,609	1,609	1,609
	Demand Forecast	1,858	2,047	2,047	2,626
CVWD	2020 UWMP	1,800	2,000	2,000	2,000
	Demand Forecast	2,032	2,288	2,513	2,674
FWC	2020 UWMP	1,000	1,500	2,000	2,500
	Demand Forecast	994	1,392	1,911	2,000
MVWD	2020 UWMP	1,100	1,100	1,100	1,100
	Demand Forecast	359	363	396	398
Ontario	2020 UWMP	12,168	13,465	14,330	16,059
	Demand Forecast	9,188	10,383	10,814	12,820
Upland	2020 UWMP	703	703	703	703
	Demand Forecast	940	1,022	1,062	1,158
Total	**2020 UWMP**	**22,880**	**24,877**	**25,742**	**27,771**
	Demand Forecast	**20,869**	**23,275**	**24,704**	**27,854**

Projected Regional Water Use

Projected water use was calculated as part of the development of the 2020 UWMP. IEUA collected each retail agencies' projected water use from their respective UWMP and totaled the use to obtain a regional water use projection. Regional water use projections include both potable and recycled water direct use.

Table 5 – 2020 UWMP Projected Water Demand by Retail Agency (AF)

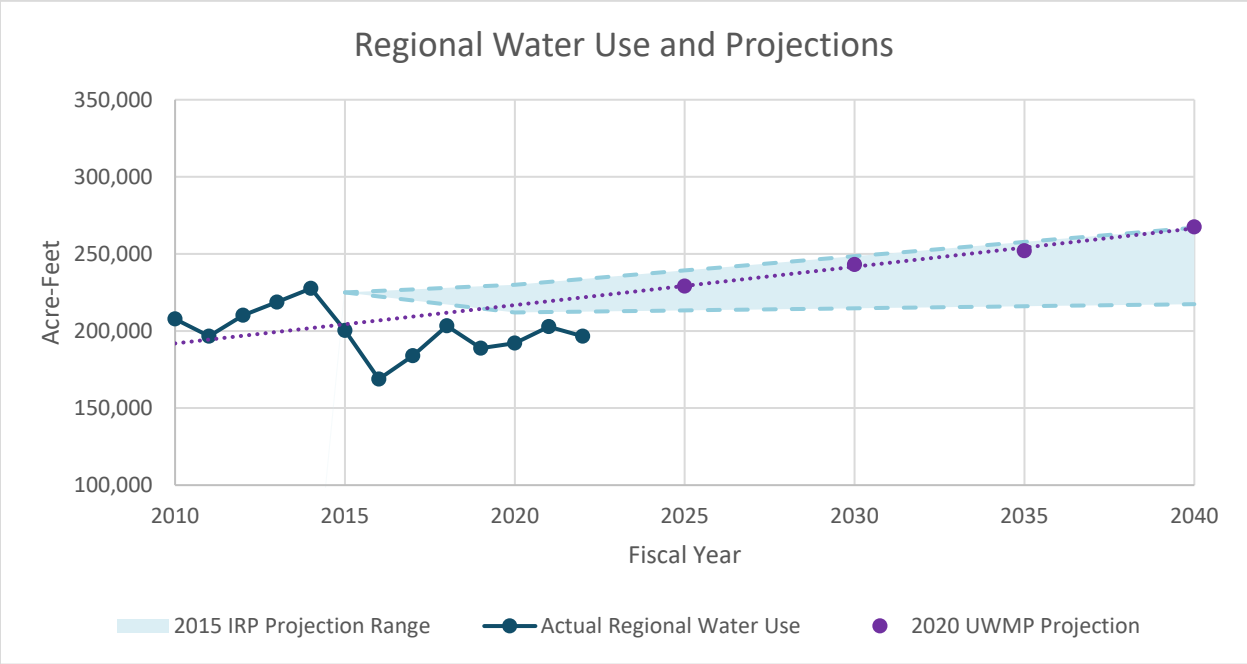
Retail Agency	2025	2030	2035	2040	2045
Chino	20,843	22,310	23,087	23,963	25,108
Chino Hills	17,120	17,334	17,678	17,725	17,769
CVWD	53,369	58,092	59,650	60,949	60,949
FWC	45,593	46,909	47,665	50,442	51,943
MVWD	14,232	14,564	15,175	15,437	15,706
Ontario	52,550	58,513	63,406	73,668	73,668
Upland	25,328	25,328	25,328	25,328	25,328
Total	**229,035**	**243,050**	**251,989**	**267,512**	**270,471**

Projected water use was also calculated as part of the 2015 Integrated Resources Plan (2015 IRP), which developed a range of demand possibilities to accommodate for future uncertainty caused by the various demand factors including climate change. This analysis came from demand modeling conducted as part of the 2015 IRP and 2015 Urban Water Management Plan (2015 UWMP), which found that new developments in the region are more water efficient due to changes in the plumbing code, higher density developments with less landscaping, and compliance landscape ordinance requirements set forth in AB1881.

Table 6 – 2015 IRP Demand Forecast (AF)

Urban M&I Forecast	2015	2020	2040
High Forecast	225,000	230,000	267,000
Medium Forecast	225,000	220,100	238,600
Low Forecast	225,000	212,000	217,400

Figure 3 – IEUA Regional Water Use and Projections



The 2020 UWMP and 2015 IRP both reach approximately 267,000 AF in the year 2040. However, IEUA's actual FY 21/22 regional water use of 196,552 AF (177,292 AF potable use and 19,260 AF recycled direct use) is below the 2020 low demand forecast of 212,000 AF outlined in IEUA's 2015 IRP. A continuous focus on water use efficiency and per capita reductions, as required in SB X7-7, AB 1668, and SB 606 is anticipated to reduce per capita water use and demands. IEUA anticipates a slight decrease in FY22/23 water use due to conservation efforts related to the severe drought impacting the region. Long-term demands are not expected to exceed the peak 10-year demand reached during FY 13/14.

An increase to the number of Meter Equivalent Units (MEUs) in the region is anticipated. For FY 22/23 it is projected that the region will contain 418,094 MEUs, an increase of 4,268 MEUs from FY 21/22's actual MEUs count of 413,826.

Table 7 – Projected MEUs

Retail Agency	FY 21/22 Actual MEUs	FY 22/23 Projected MEUs
Chino	40,238	40,367
Chino Hills	38,924	39,305
CVWD	106,006	106,172
FWC	91,413	92,440
MVWD	21,979	22,009
Ontario	78,166	79,788
Upland	33,966	34,384
WVWD	3,134	3,629
Total	**413,826**	**418,094**

SECTION 2: GROUNDWATER RECHARGE DELIVERIES

Historical Groundwater Recharge Deliveries

The Chino Basin is one of the largest groundwater basins in Southern California containing approximately 5,000,000 AF of water with an un-used storage capacity of approximately 1,000,000 AF. Groundwater from the Chino Basin accounts for approximately 34% of FY 21/22, regional water supplies. The Chino Basin is an adjudicated basin and has been overseen by the Chino Basin Watermaster (CBWM) since 1978. The basin is dependent on rainfall and supplemental sources for recharge.

IEUA, in coordination with CBWM, the Chino Basin Water Conservation District (CBWCD), and San Bernardino County Flood Control District (SBCFCD) capture water for replenishment. Sources include recycled water from IEUA's regional water recycling plants, stormwater and dry weather flow capture, and imported water recharge.

Recharged imported water is either purchased by a local agency, requested by the Chino Basin Watermaster to maintain safe operating yield of the basin, used to blend down recharged recycled water TDS levels, or as part of the Chino Basin Dry-Year Yield (DYY) Program. Total groundwater recharge delivered to the Chino Basin in FY 21/22 was 25,441 AF. Groundwater recharge deliveries is water delivered to recharge facilities and does not take into consideration evaporative or other losses that may occur prior to recharge.

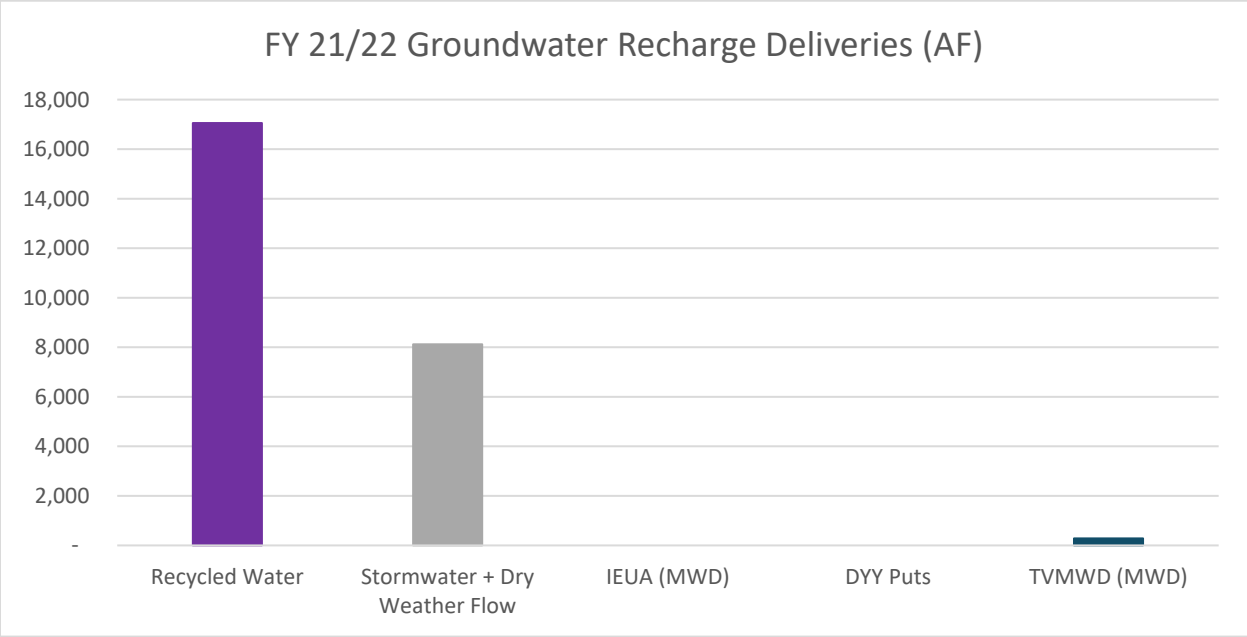
Table 8 – FY 21/22 Groundwater Recharge Sources

Groundwater Recharge Source	Recharge (AF)
Recycled Water	17,054
Stormwater & Dry Weather Flow	8,120
Imported Water	267
IEUA (MWD)	0
*DYY Puts**	0
*TVMWD (MWD)***	267
Total	**25,441**

**DYY Puts Exclude aquifer storage and recovery*

*** Three Valleys Municipal Water District (TVMWD) purchases water directly from MWD.*

Figure 4 – FY 21/22 Groundwater Recharge Deliveries



Recycled water groundwater recharge use was 17,054 AFY in FY 21/22, up 5% from FY 20/21's recycled water ground water recharge of 16,253 AF. Recycled water is recharged by IEUA on behalf of its RCAs and retail water agencies.

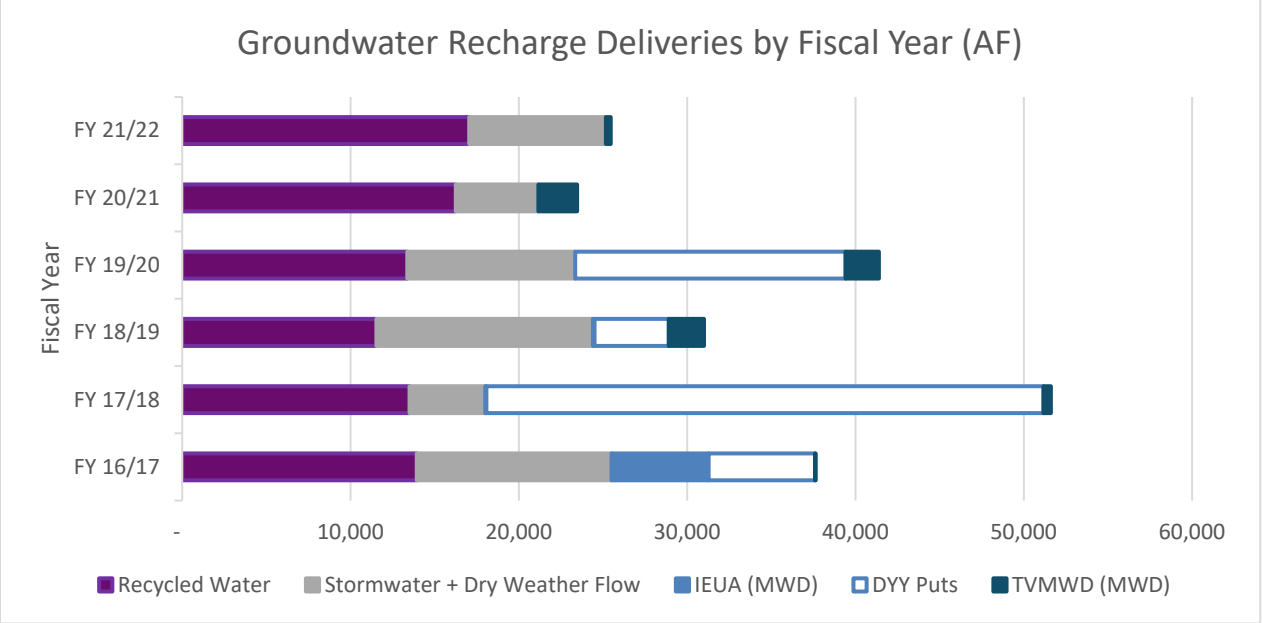
Table 9 – FY 21/22 Recycled Groundwater Recharge Deliveries by Agency

Retail Agency	Recharge (AF)
Chino	-
Chino Hills	1,472
CVWD	5,090
Fontana/FWC	4,311
Montclair/MVWD	687
Ontario	3,933*
Upland	1,562
Subtotal	**17,054**

**Value may adjust as allocations are still being finalized*

FY 21/22 was the highest recycled water recharge recorded to date at over 17,000 AF. The decrease in overall recharge from all sources compared to previous years is due in part to lower precipitation rates reducing stormwater availability and MWD not requesting the storage of any water for the DYY program in FY 21/22.

Figure 5 – Historical Groundwater Recharge Deliveries



Projected Groundwater Recharge Deliveries

It is projected that future groundwater recharge delivery projections will remain at an estimated 16,420 AFY of recycled water as outlined in the 2018 Recharge Master Plan Update. Due to the unpredictability of storm events and variability of imported water for groundwater recharge in the IEUA region, the five-year average was taken to determine the projected recharge of stormwater and dry weather flows and imported water. Table 10 below shows the 5-year

recharge averages for recycled water, stormwater and dry weather flows, and imported water. The imported groundwater projections do not include DYY program values.

Table 10 – Projected Groundwater Recharge Deliveries by Source

Groundwater Recharge Source	Projected Groundwater Recharge (AF)
Recycled Water	16,420
Stormwater + Dry Weather Flow	8,071
Imported Water (No DYY)	2.163
Total	26,653

Dry Year Yield

The DYY program provides for the storage of up to 100,000 AF of water in a MWD Storage Account in the Chino Basin pursuant to the Groundwater Storage Program Funding Agreement dated June 2003 and as subsequently amended. Signatories to the Phase I Agreement are:

- Metropolitan Water District of Southern California
- Inland Empire Utilities Agency
- Three Valleys Municipal Water District
- Chino Basin Watermaster

The DYY Agreement provides for storage of up to 25,000 AF per year unless Chino Basin Watermaster allows for more, and extraction, at MWD's call during dry years, of up to 33,000 AF per year not to exceed the amount of water in the Metropolitan Storage Account (DYY Account). In February 2019, the signatories expanded the extraction provisions so that water could be voluntarily extracted from the DYY Account outside of call years, with approval from the signatories.

From June 2017 through June 2020 a total of 63,308 AF were stored in the DYY Account; 58,372 AF by groundwater recharge and 4,936 AF by Aquifer Storage and Recovery (ASR) injected water. From July 2019 through June 2022 Cucamonga Valley Water District and Fontana Water Company have voluntarily extracted 63,308 AF, leaving the account with a balance of 0 AF.

Table 11 – DYY Account Balance

DYY Account Balance (June 2017-June 2022)	
"PUTS"	
Recharged Water	58,372 AF
ASR Injection	4,936 AF
"TAKES"	
CVWD	55,808 AF
FWC	7,500 AF
Total	**0 AF**

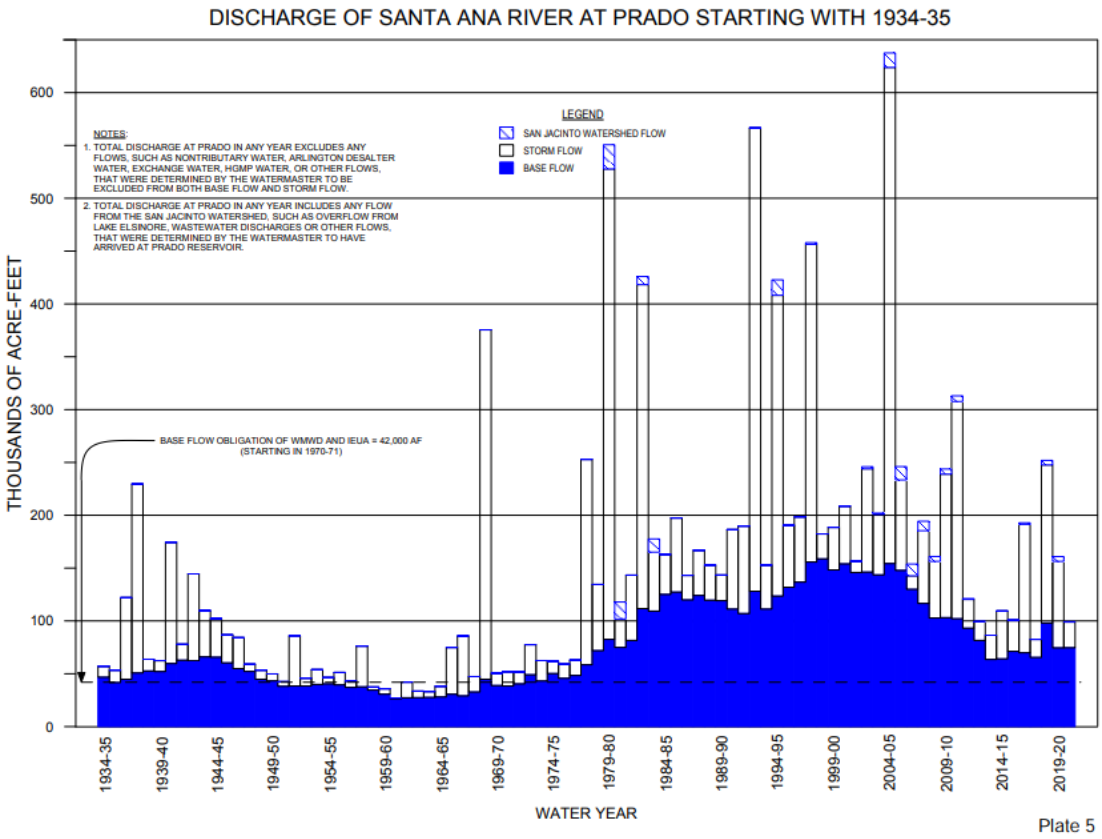
The DYY account balance for FY 21/22 is shown in Table 11. The account balance is currently at 0 AF. At this time, there is no plan to store additional water in the DYY account.

SECTION 3: SANTA ANA REGIONAL BASEFLOW OBLIGATION

Santa Ana River Regional Baseflow Obligation

The Santa Ana River has a regional baseflow obligation established by past judgment. The baseflow obligation is a joint obligation between IEUA and Western Municipal Water District to ensure an average of 42,000 AF at Prado Dam. The minimum baseflow obligation was reduced to 34,000 AF after 1986 as long as no cumulative baseflow debt exists. In Water Year 2020/2021, baseflow at Prado Dam was 74,580 AF. More information about the Santa Ana River baseflow obligation can be found in the Santa Ana River Watermaster Annual Report.

Figure 6 – Discharge of Santa Ana River at Prado



SECTION 4: WASTEWATER

Wastewater Actuals

Over the past decade the IEUA service area has experienced an increase in indoor water use efficiency as a direct result of drought, shifting public policy, more efficient building and plumbing codes, and effective conservation program campaigns. This increased efficiency has decreased the volume of wastewater flows received by IEUA treatment plants by approximately 10% since 2010. The flows have slightly increased over the last year, likely due to the regional population continuing to grow. Still, the combination of an increased population but overall reduced wastewater flow has resulted in an increase in the strength of the wastewater coming into IEUA's treatment facilities. This trend of increased wastewater strength is expected to continue as both the population and regional water efficiency standards continue to increase. Current and future wastewater treatment plant expansions are driven by the increased strength of wastewater flows to the facilities, rather than the volume of flows to the facilities.

Figure 7 – Monthly Concentrations: April 2000 – June 2022

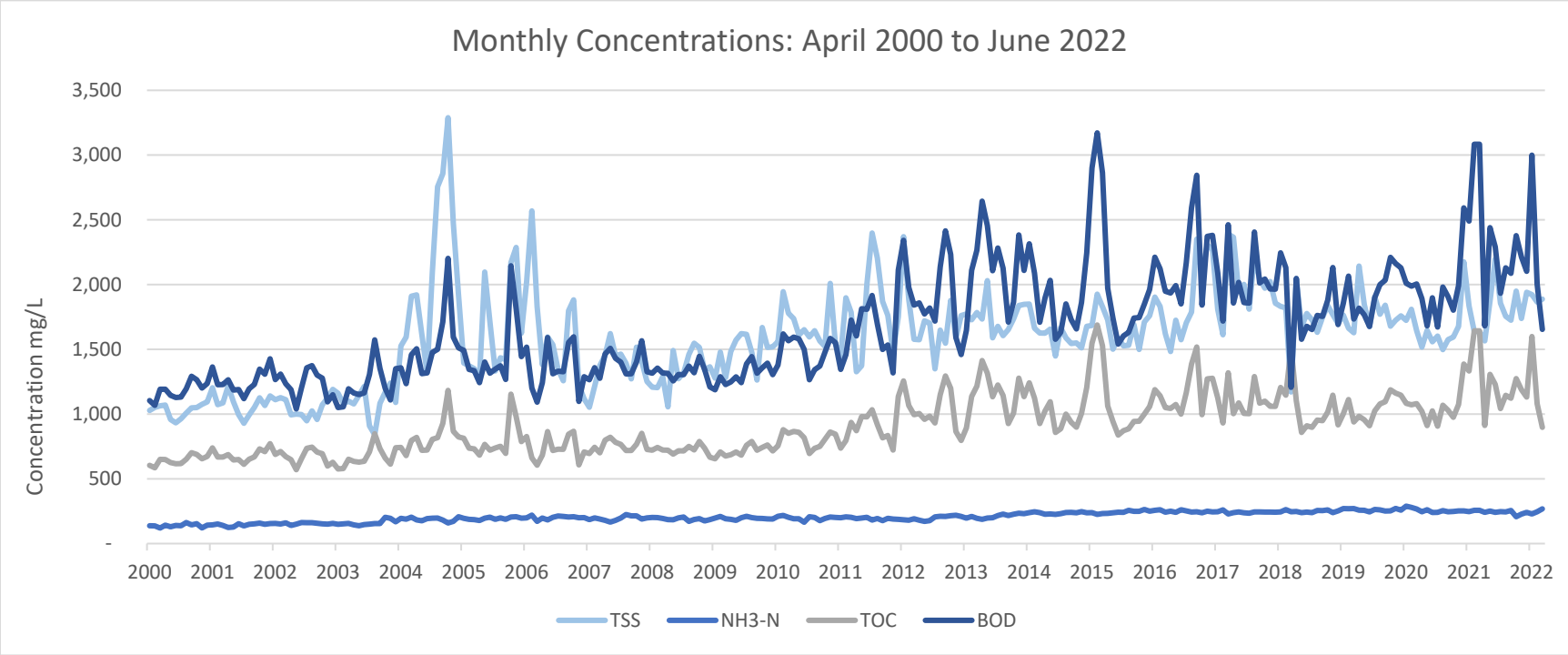
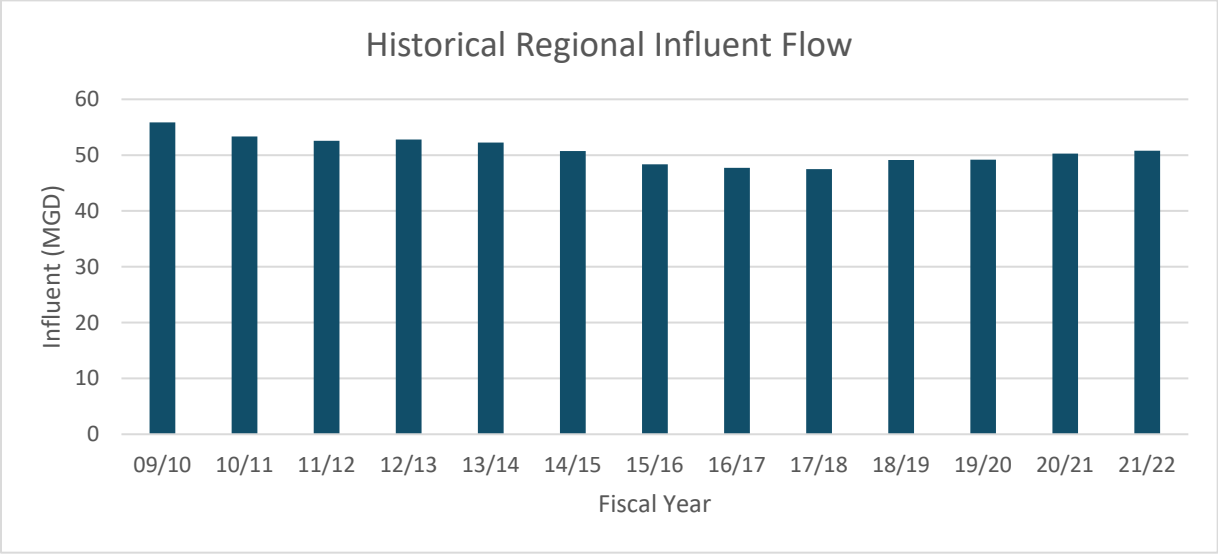


Figure 8 – Historical Regional Influent Flows



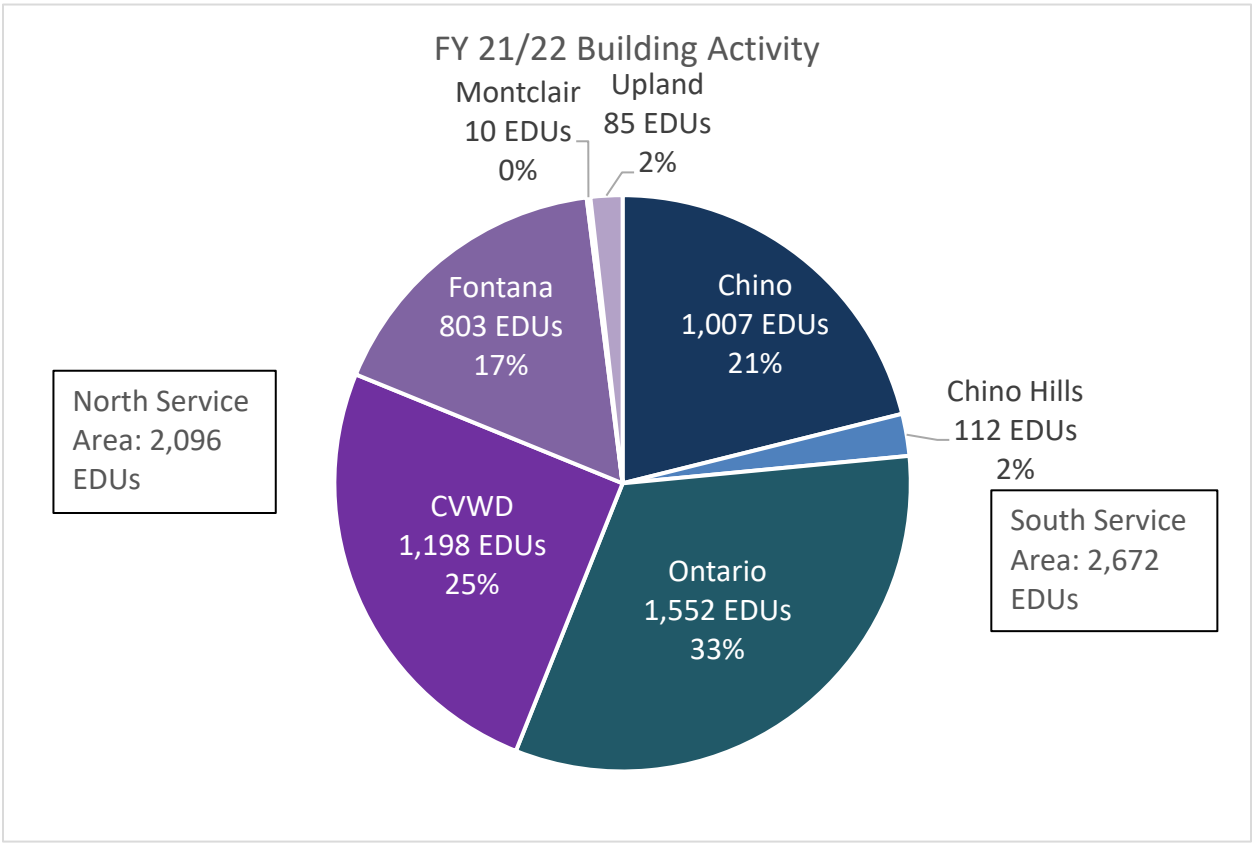
While wastewater flows have generally decreased since FY 09/10, recycled water use has increased. This increase in recycled water utilization can at least partially be attributed to the San Bernardino Avenue Lift Station and the Montclair Lift Station. The Montclair Lift Station pumps wastewater from portions of Montclair, Upland, and Chino to IEUA's RP-1 and CCWRF treatment plants. The San Bernardino Ave Pump Station pumps a portion of the flow from the City of Fontana to IEUA's RP-4 treatment plant. Together, these lift stations help shift flows that would naturally flow from one portion of the service area to a different treatment plant to balance flows and keep water in the northern portion of the service area. This shift in flows allows IEUA to maximize the potential for recycled water use, especially as the majority of recycled water groundwater recharge activity occurs in the northern portion of the service area. These lift stations also increase regional system flexibility and allow the treatment plants to operate as an interconnected system.

Equivalent Dwelling Unit (EDU) activity had increased in FY 21/22 with the addition of 4,767 EDUs to the region. The additional EDUs added in FY 21/22 were 4,377 EDUs lower than the RCAs projections of 9,144 EDUs and 767 EDUs more than the IEUA Budgeted Projections of 4,000 EDUs. Two sets of projections exist to allow for conservative estimates on both the flow and financial aspects of EDUs. The RCAs provide growth projections per the Regional Sewage Service Contract, which are then used to determine plant treatment capacity needs. Budgeted projections on the other hand are used by IEUA to project future funding needs. To ensure fund availability, budgeted projections are conservatively low. The result of both sets of projections is the assumption that projections are conservative, ensuring IEUA treatment plants can handle the added load while also ensuring the agency does not over project fund availability. Moving forward, IEUA will work with the RCAs to develop land use model-based growth projections to enhance projection reliability.

Table 12 – Historical EDU Activity

Building Activity FY 15/16 through FY 21/22			
Year	**Building Activity (EDUs)**	**IEUA Projections (EDUs)**	**RCA Projections (EDUs)**
FY 15/16	4,787	4,330	5,849
FY 16/17	5,189	3,000	5,277
FY17/18	5,223	4,000	5,442
FY 18/19	3,459	4,000	6,149
FY 19/20	3,435	4,000	6,390
FY 20/21	5,281	4,000	9,013
FY 21/22	4,767	4,000	9,144

Figure 9 – FY 21/22 Building Activity



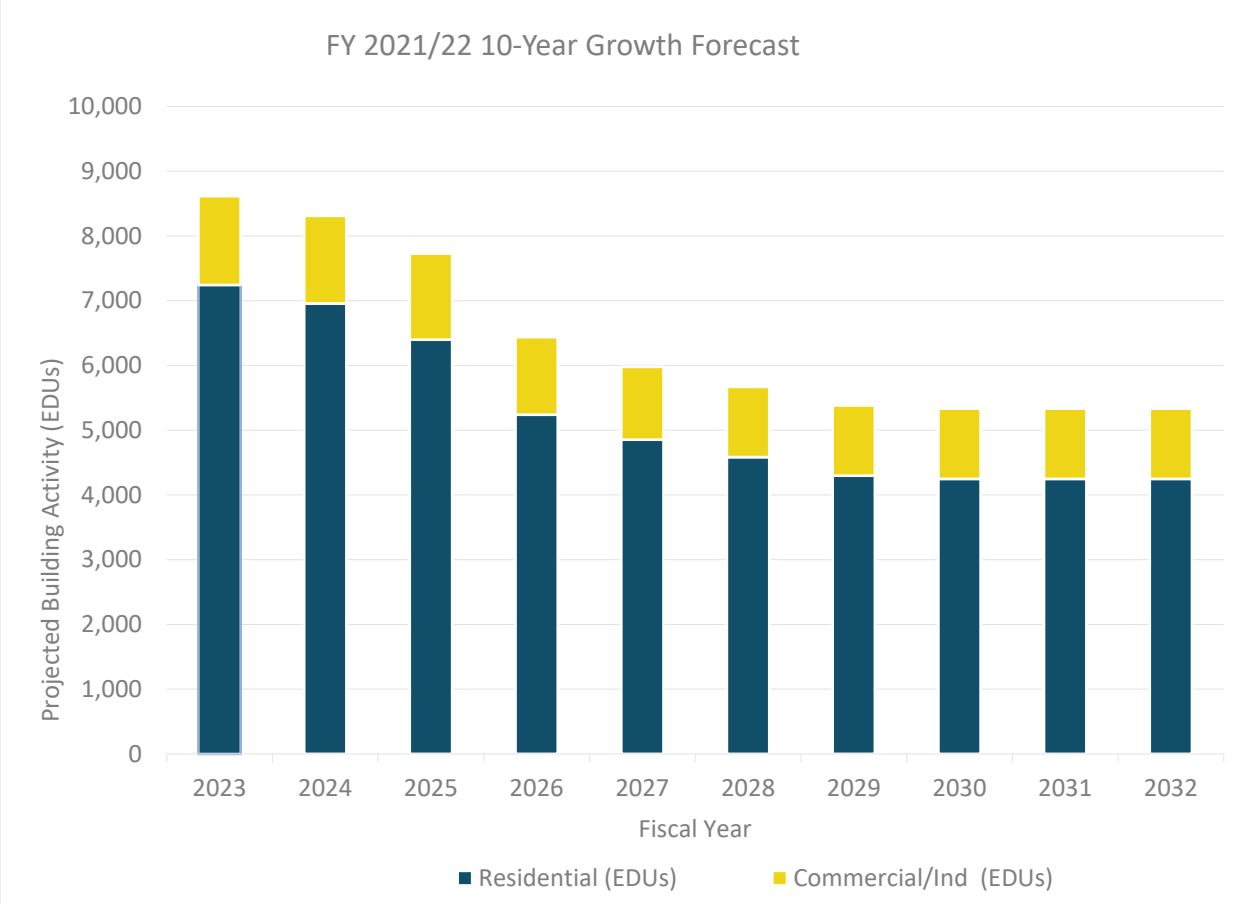
Wastewater Projections

Wastewater flow forecasts are conducted annually and are based on four main components: (1) historical wastewater flow trends; (2) per dwelling unit wastewater generation factors, based on the 2015 Wastewater Facilities Master Plan Update (WWFMPU) projections; (3) actual influent flows measured at the treatment plants; and (4) expected future growth numbers provided by the RCAs. These projections are used to determine future demands on the Agency's facilities and help anticipate the need for modifications to treatment plants and solids handling facilities.

The WWFMPU identified the projected flows to the treatment plants in 2035 through 2060. The WWFMPU estimates that there will be a regional flow of 73.5 MGD by 2035 and an ultimate/build-out flow of 80 MGD by 2060. The increase in flows implies that there will be facility expansions over the next 20 years.

IEUA staff and RCAs are in the process of updating the 10-year demand forecast. The draft results of the 10-year capacity demand forecast survey are summarized in Figure 10 below. Approximately 73% of the projected growth over the next ten years is anticipated to be from new development in the City of Ontario and City of Fontana service areas; building activity is projected to be approximately 80% residential and 20% commercial/industrial.

Figure 10 – FY 21/22 10-Year Growth Forecast



**Projected building activity is expected to change once forecast is finalized*

APPENDIX A: ACRONYMS

AF: Acre Feet

AFY: Acre Feet per Year

ASR: Aquifer Storage and Recovery

CBWCD: Chino Basin Water Conservation District

CBWM: Chino Basin Water Master

CDA: California Desalter Authority

CVWD: Cucamonga Valley Water District

DYY: Dry Year Yield Program

EDU: Equivalent Dwelling Unit

FWC: Fontana Water Company

IEUA: Inland Empire Utilities Agency

IRP: 2015 Integrated Resource Plan

MEUs: Meter Equivalent Units

MGD: Million Gallons per Day

MVWD: Monte Vista Water District

MWD: Metropolitan Water District of Southern California

SPAR: Strategic Planning Annual Report

RCAs: Regional Contracting Agencies

SAR: Santa Ana River

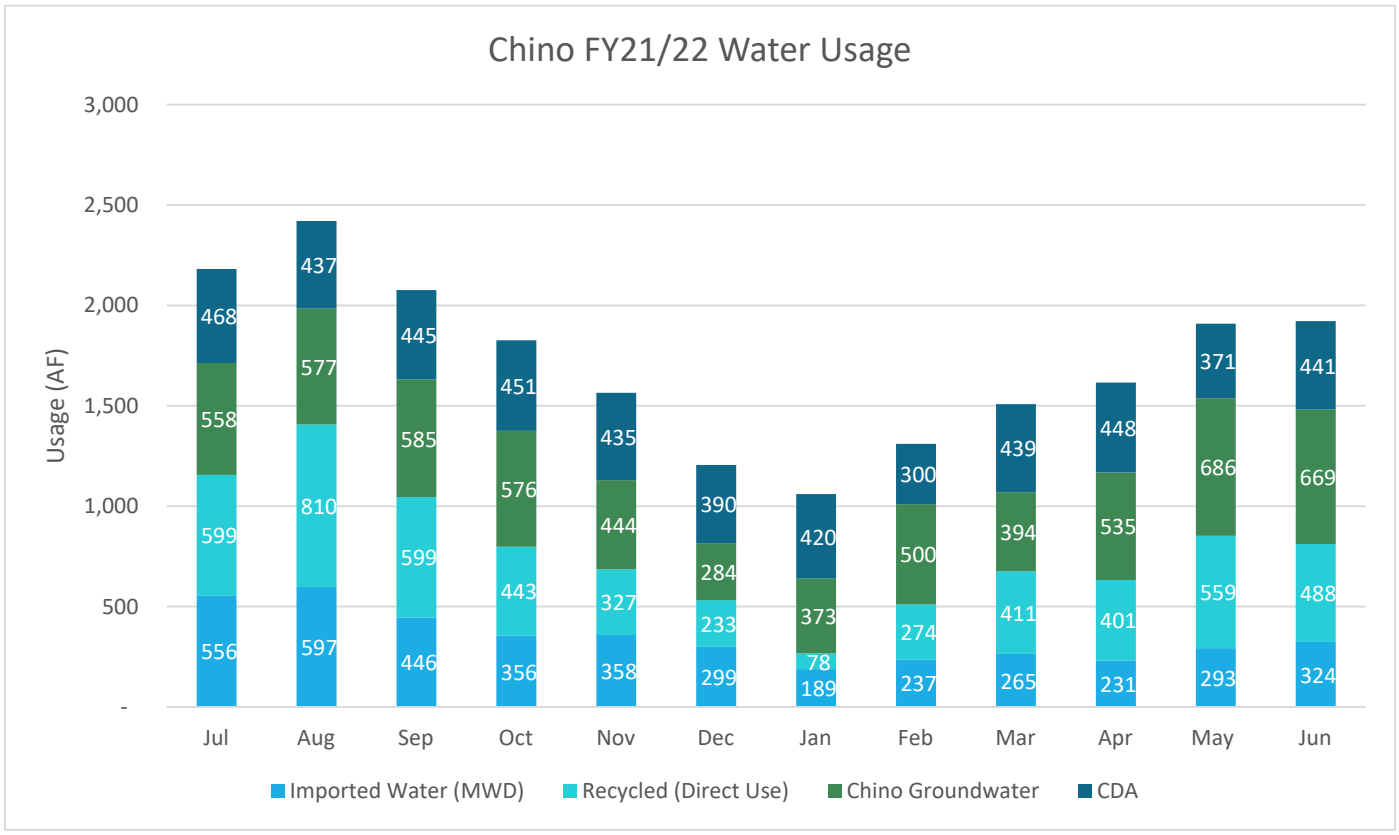
SBCFCD: San Bernardino County Flood Control District

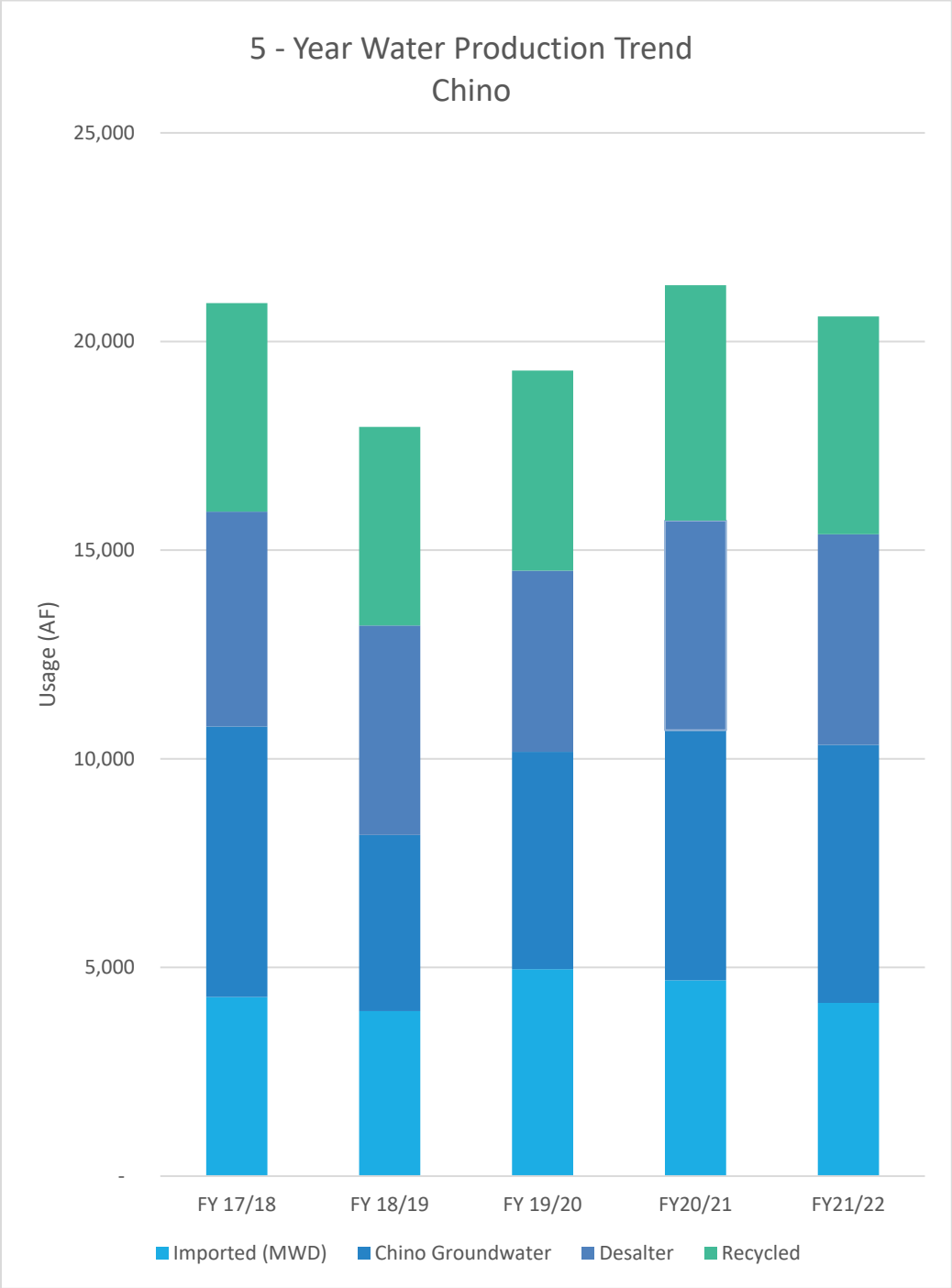
UWMP: Urban Water Management Plan

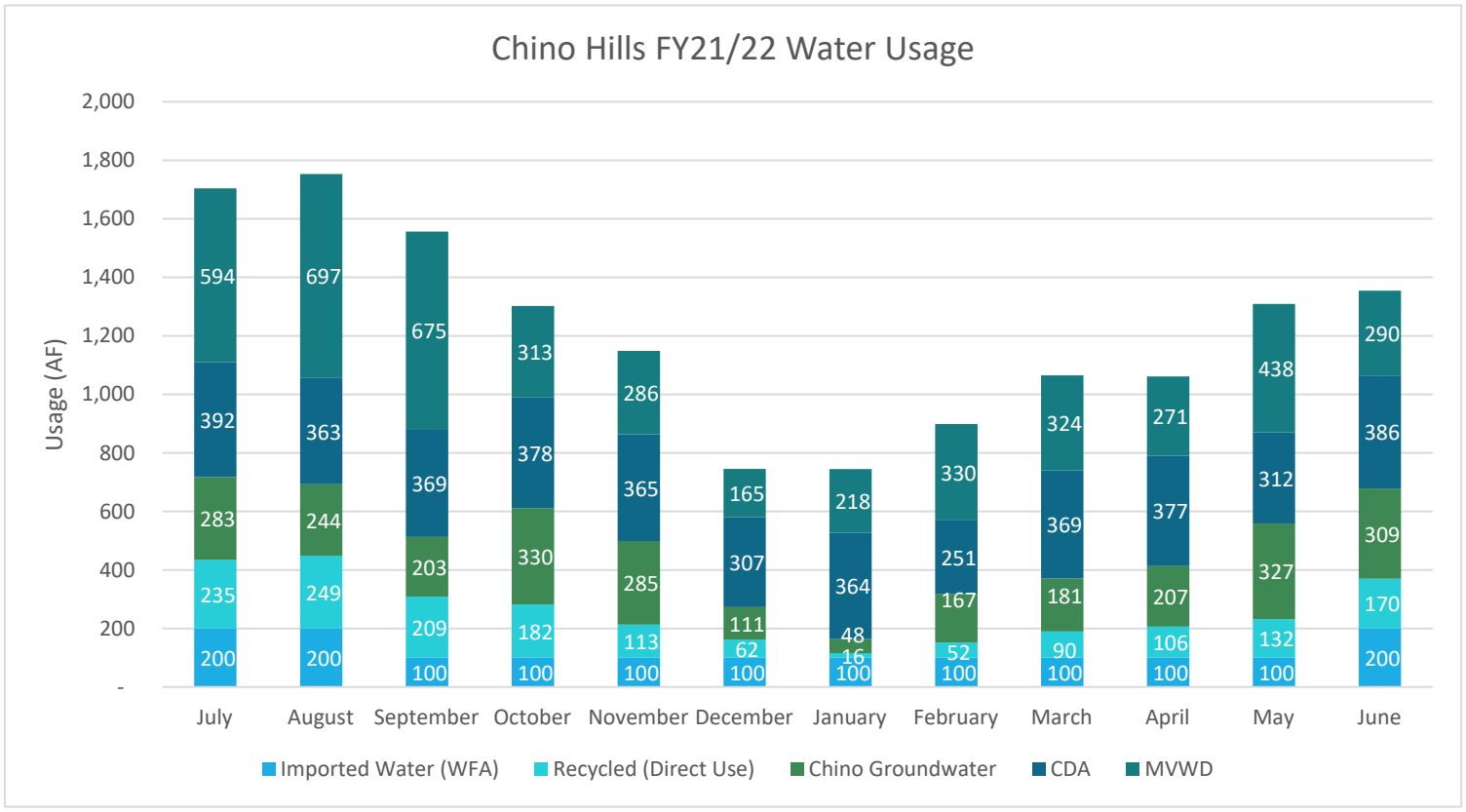
WVWD: West Valley Water District

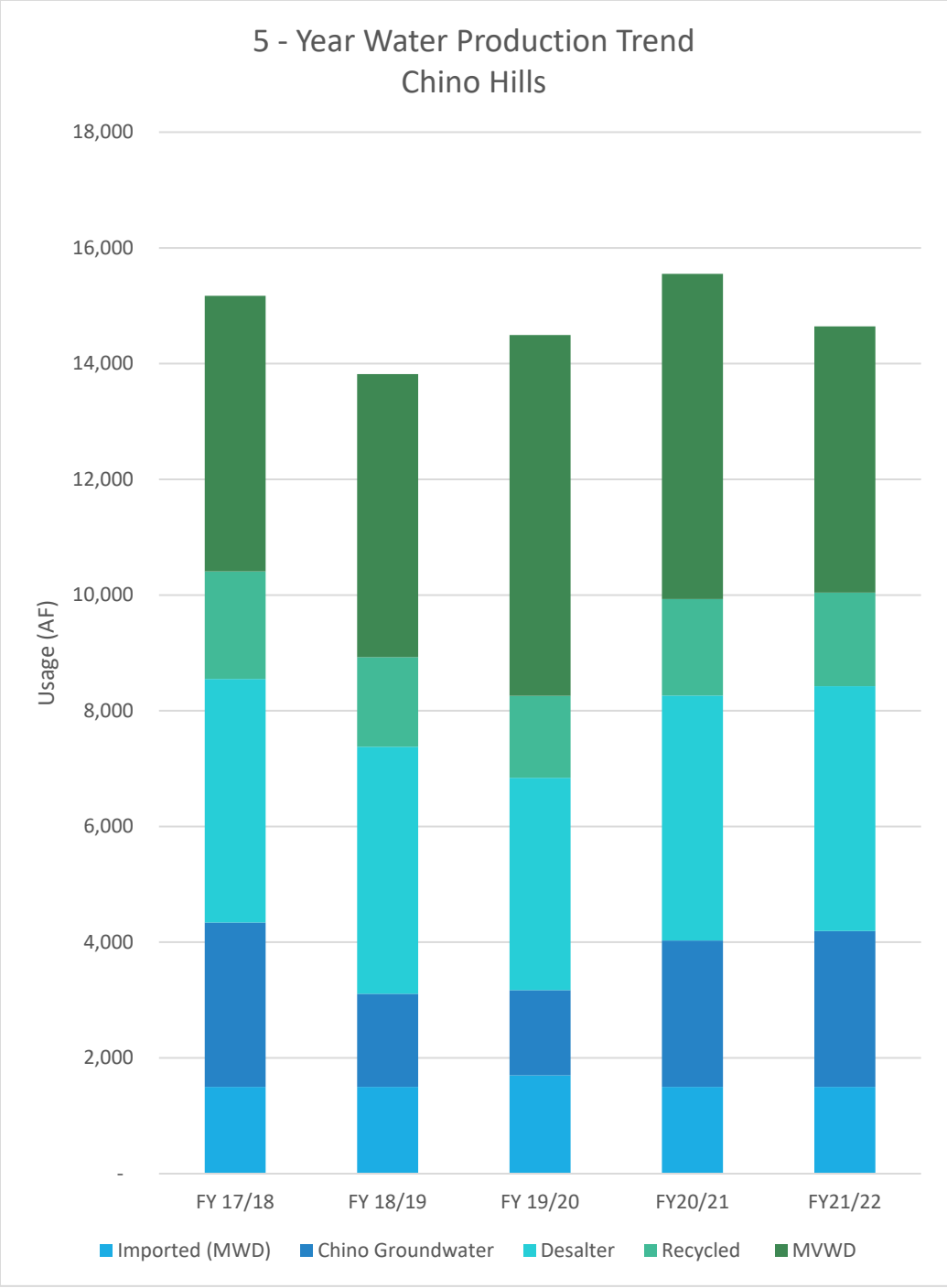
WWFMPU: 2015 Wastewater Facilities Master Plan Update

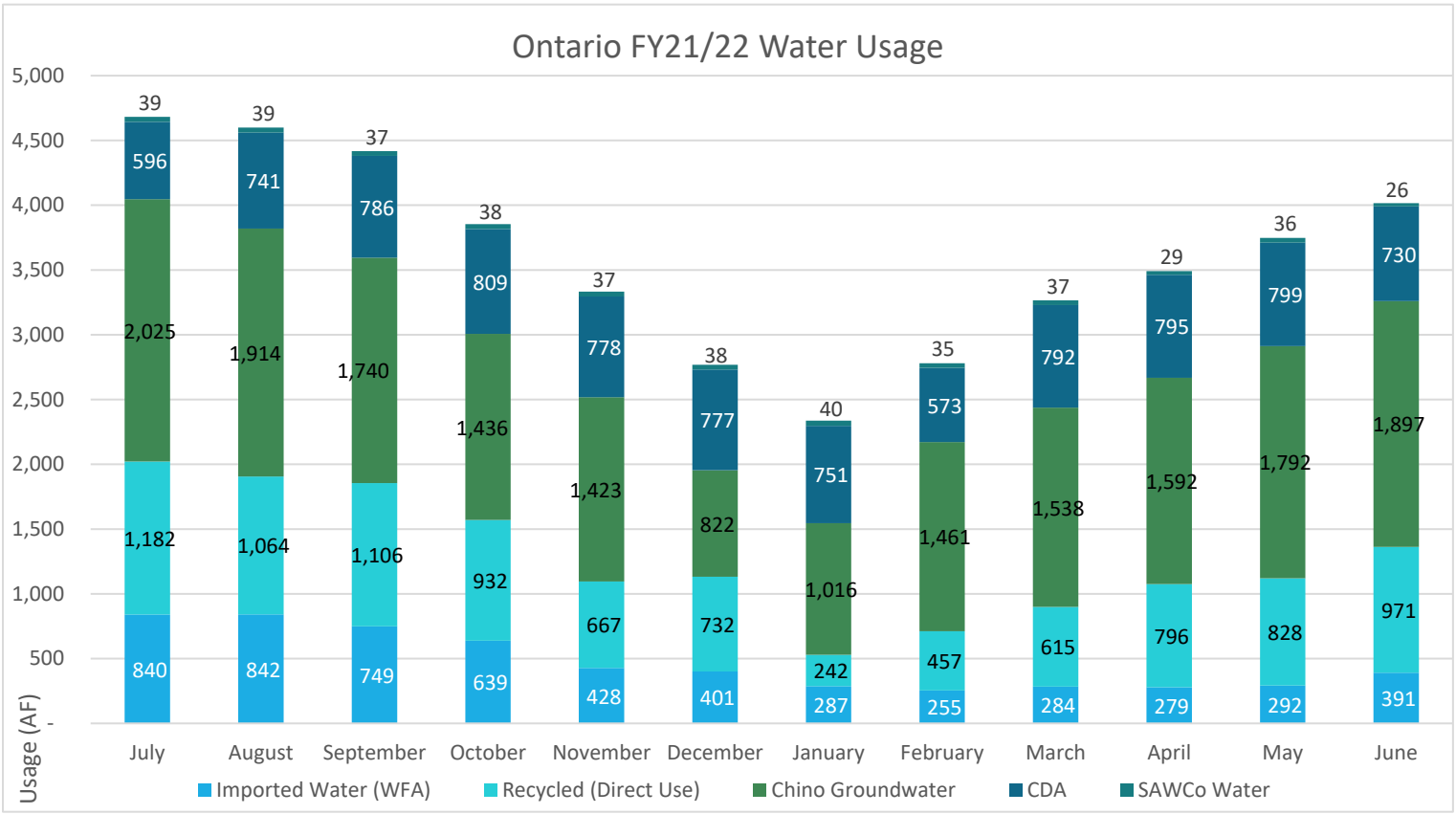
APPENDIX B: RETAIL AGENCY WATER USE CHARTS

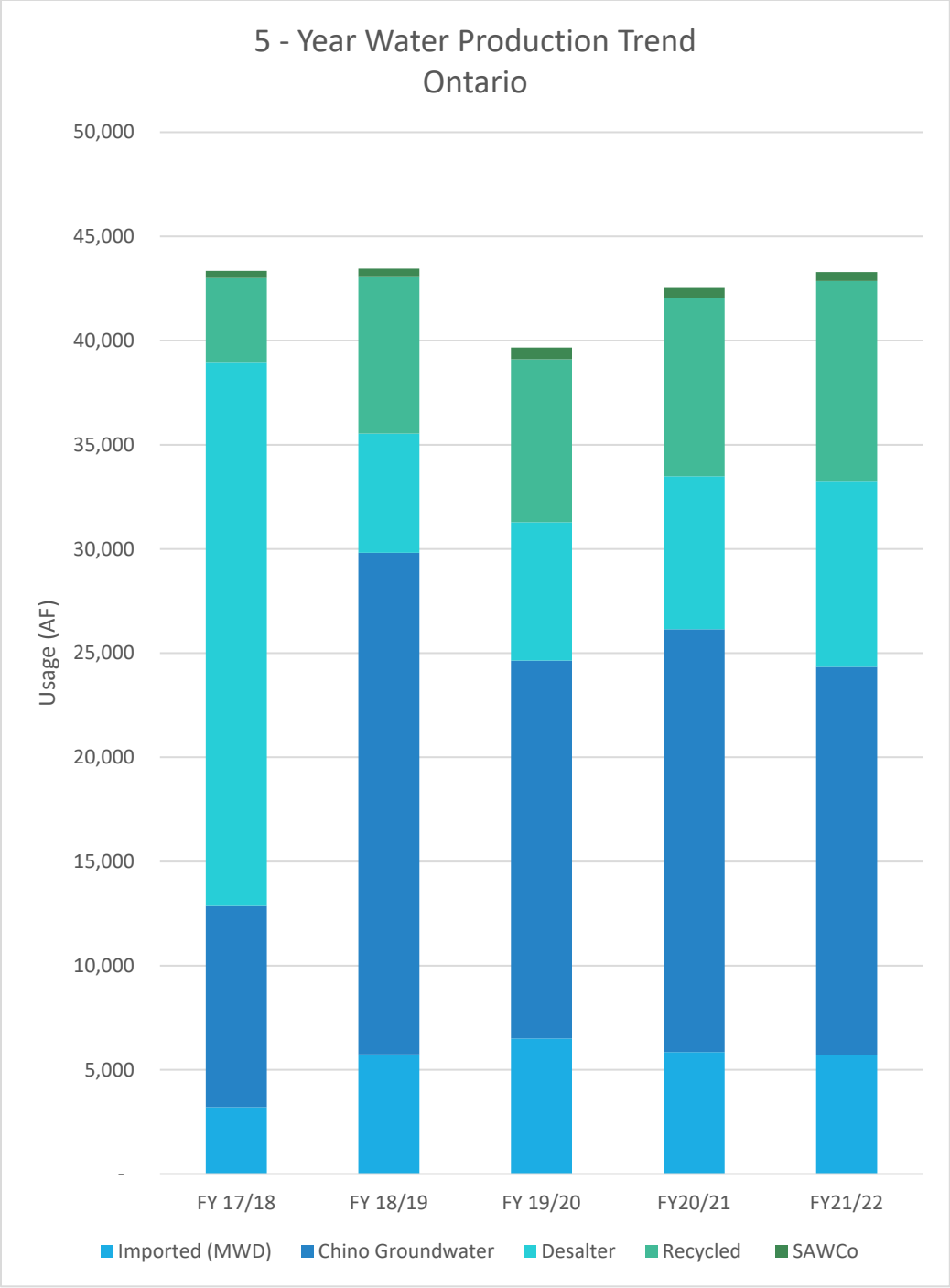

Chino FY21/22 Water Usage
Usage (AF)
3,000
2,500
2,000
1,500
1,000
500
-
Jul
Aug
Sep
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
556
599
558
468
597
810
577
437
446
599
585
445
356
443
576
451
358
327
444
435
299
233
284
390
189
78
373
420
237
274
500
300
265
411
394
439
231
401
535
448
293
559
686
371
324
488
669
441
Imported Water (MWD)
Recycled (Direct Use)
Chino Groundwater
CDA

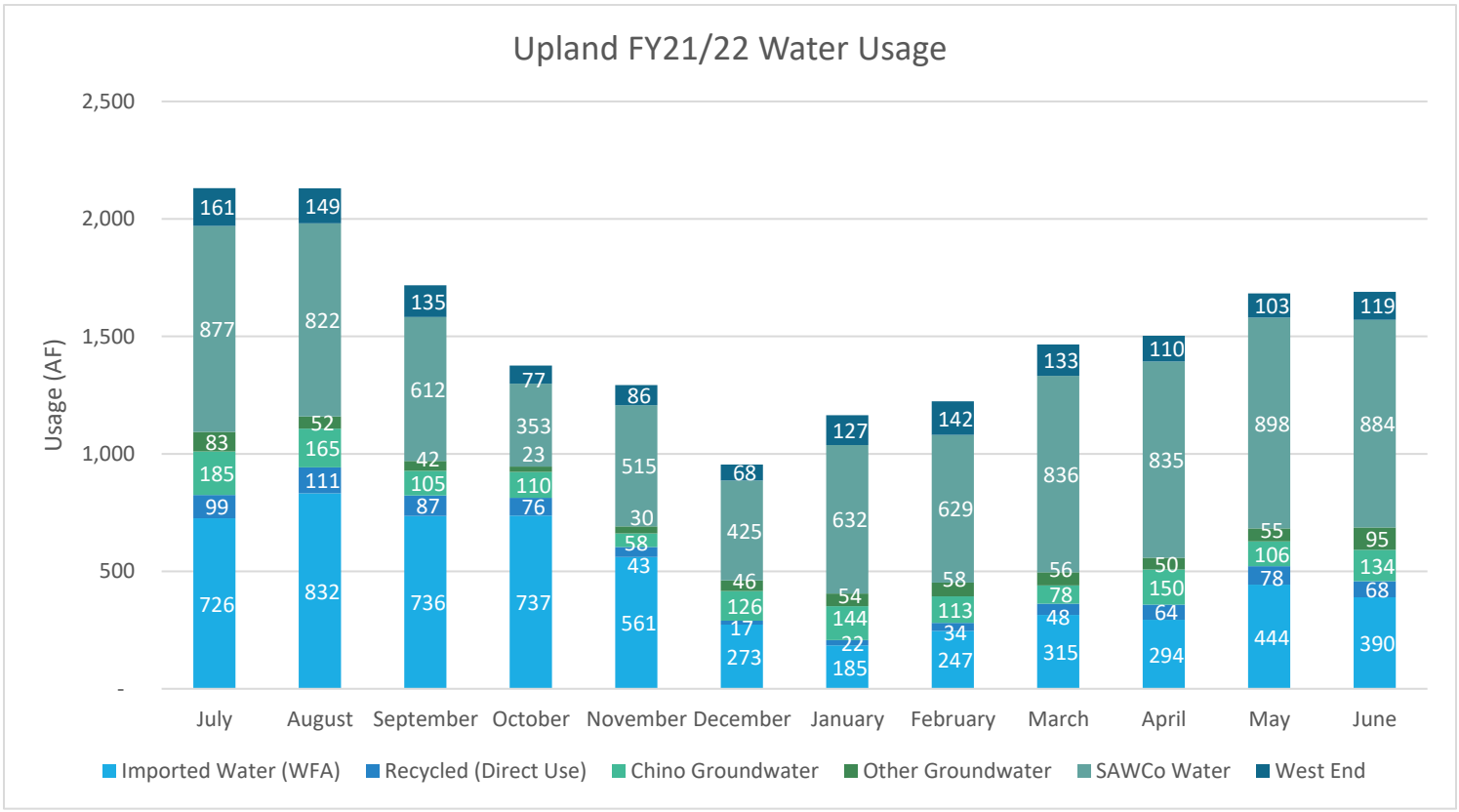

5 - Year Water Production Trend
Chino
25,000
20,000
15,000
10,000
5,000
-
Usage (AF)
FY 17/18
FY 18/19
FY 19/20
FY20/21
FY21/22
Imported (MWD)
Chino Groundwater
Desalter
Recycled

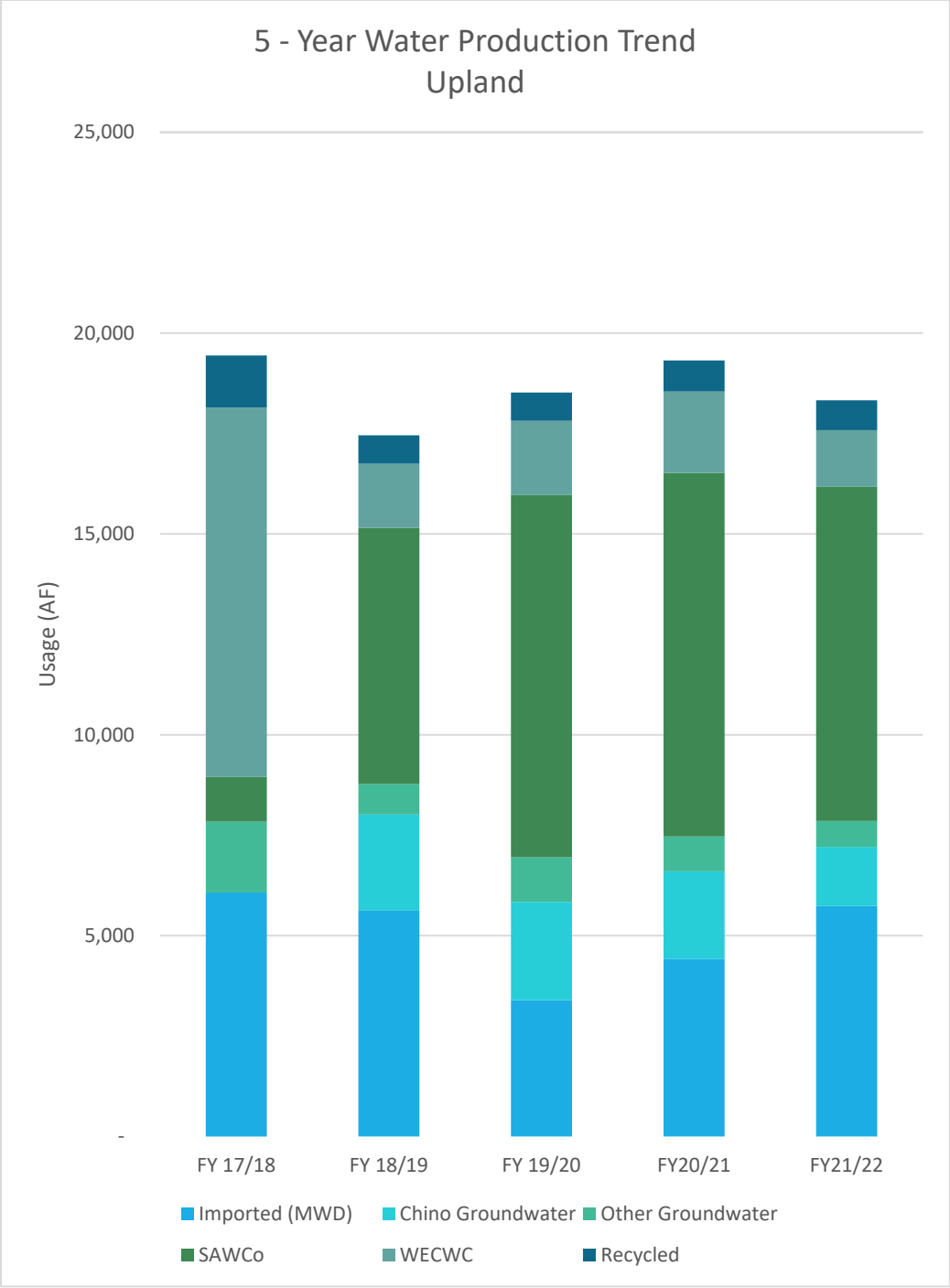

Chino Hills FY21/22 Water Usage
Usage (AF)
2,000
1,800
1,600
1,400
1,200
1,000
800
600
400
200
-
July
August
September
October
November
December
January
February
March
April
May
June
200
235
283
392
594
200
249
244
363
697
100
209
203
369
675
100
182
330
378
313
100
113
285
365
286
100
62
111
307
165
100
16
48
364
218
100
52
167
251
330
100
90
181
369
324
100
106
207
377
271
100
132
327
312
438
100
200
170
309
386
290
Imported Water (WFA)
Recycled (Direct Use)
Chino Groundwater
CDA
MVWD

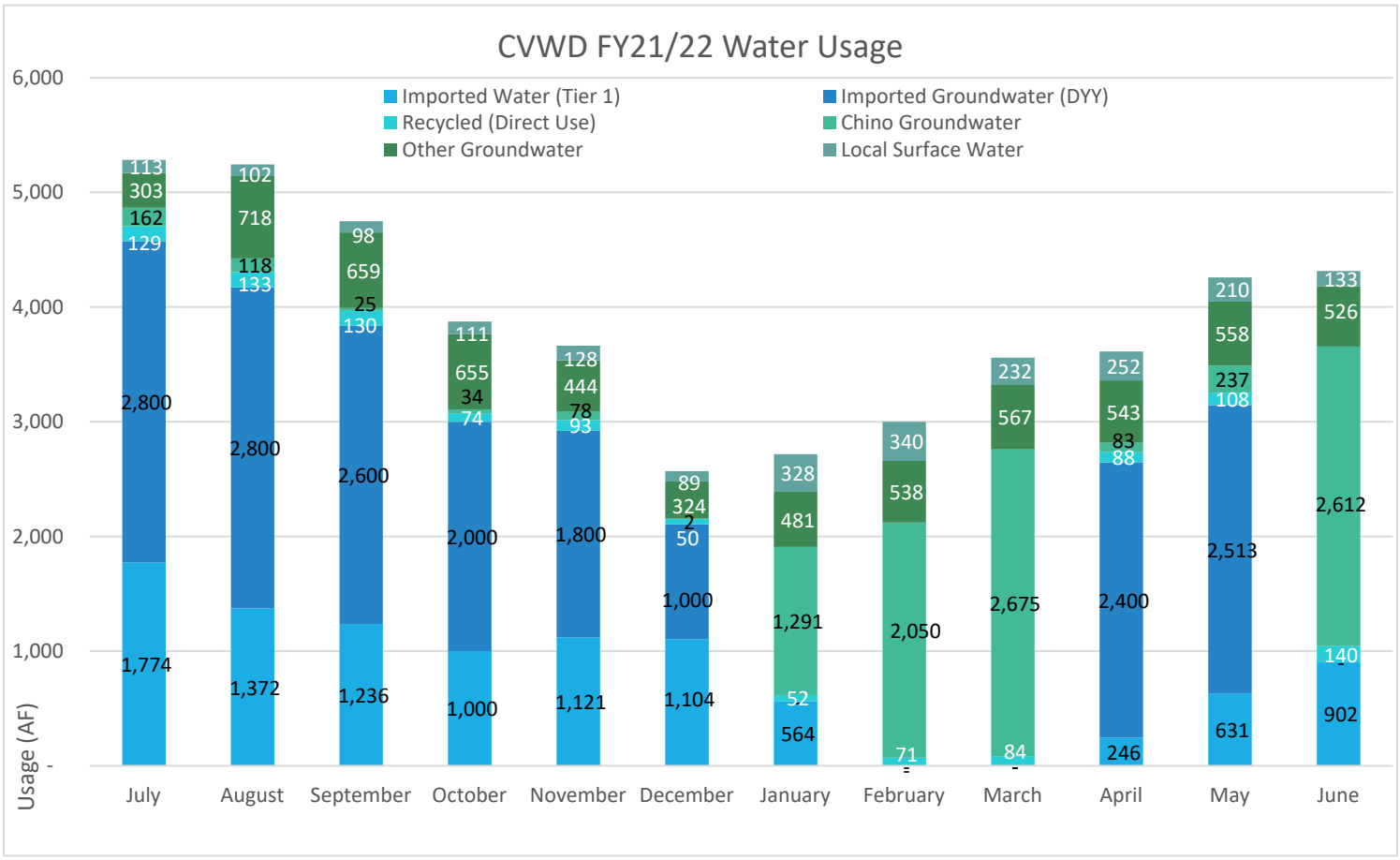

5 - Year Water Production Trend
Chino Hills
18,000
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
-
Usage (AF)
FY 17/18
FY 18/19
FY 19/20
FY20/21
FY21/22
Imported (MWD)
Chino Groundwater
Desalter
Recycled
MVWD

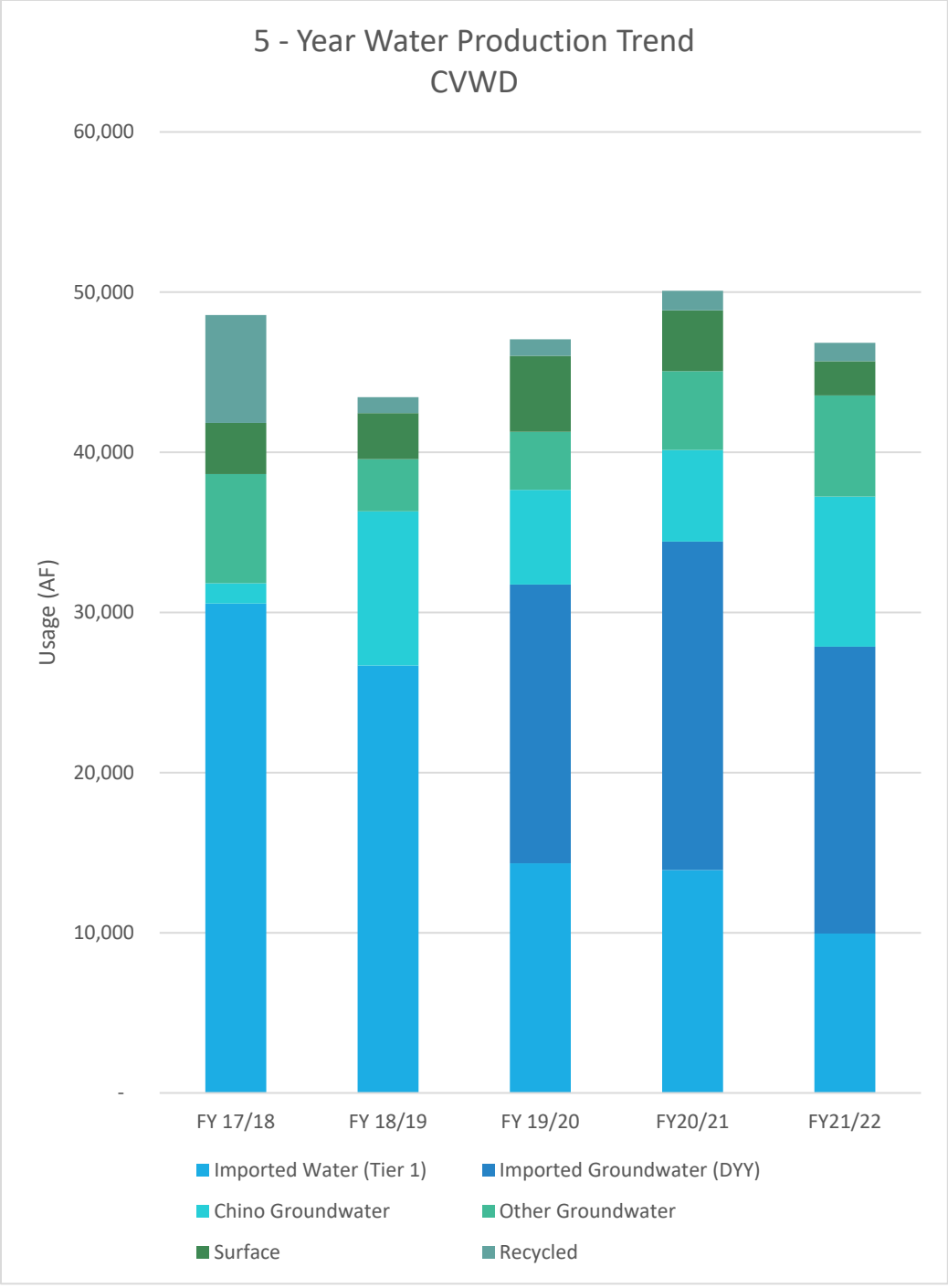

Ontario FY21/22 Water Usage
5,000
4,500
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
-
Usage (AF)
July
August
September
October
November
December
January
February
March
April
May
June
39
596
2,025
1,182
840
39
741
1,914
1,064
842
37
786
1,740
1,106
749
38
809
1,436
932
639
37
778
1,423
667
428
38
777
822
732
401
40
751
1,016
242
287
35
573
1,461
457
255
37
792
1,538
615
284
29
795
1,592
796
279
36
799
1,792
828
292
26
730
1,897
971
391
Imported Water (WFA)
Recycled (Direct Use)
Chino Groundwater
CDA
SAWCo Water

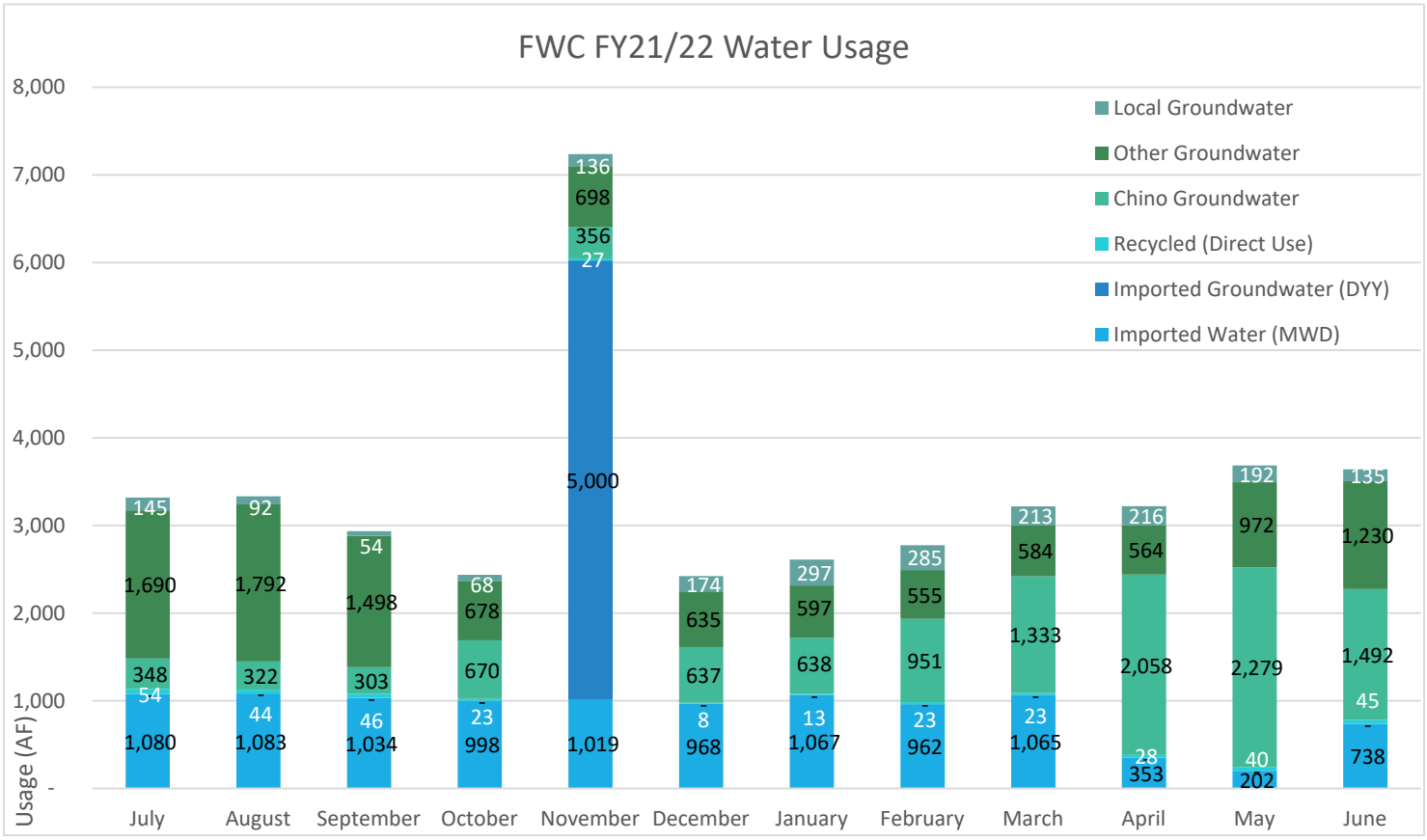

5 - Year Water Production Trend
Ontario
50,000
45,000
40,000
35,000
30,000
25,000
20,000
15,000
10,000
5,000
-
Usage (AF)
FY 17/18
FY 18/19
FY 19/20
FY20/21
FY21/22
Imported (MWD)
Chino Groundwater
Desalter
Recycled
SAWCo

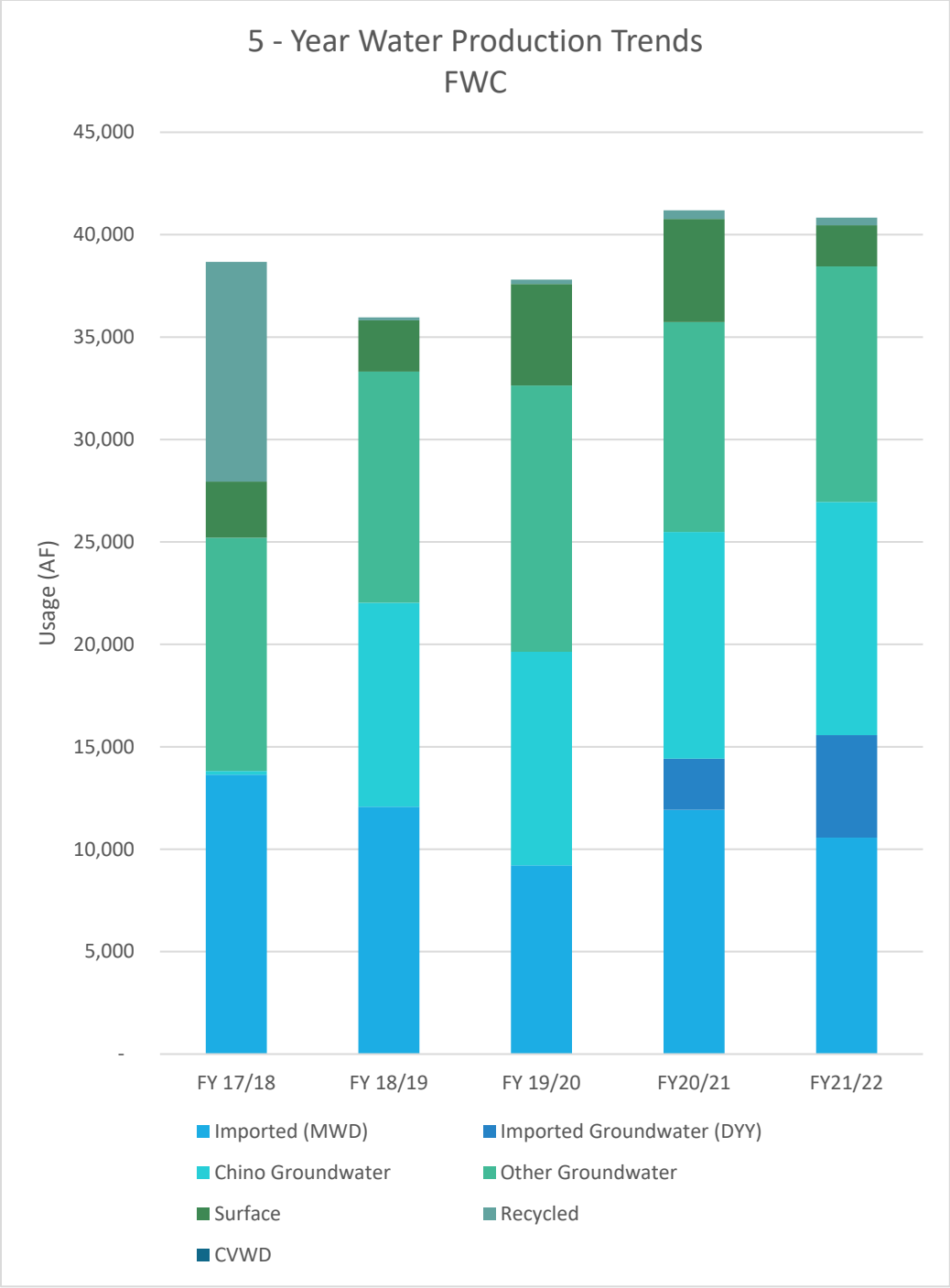

Upland FY21/22 Water Usage
Usage (AF)
2,500
2,000
1,500
1,000
500
-
July
August
September
October
November
December
January
February
March
April
May
June
161
877
83
185
99
726
149
822
52
165
111
832
135
612
42
105
87
736
77
353
23
110
76
737
86
515
30
58
43
561
68
425
46
126
17
273
127
632
54
144
22
185
142
629
58
113
34
247
133
836
56
78
48
315
110
835
50
150
64
294
103
898
55
106
78
444
119
884
95
134
68
390
Imported Water (WFA)
Recycled (Direct Use)
Chino Groundwater
Other Groundwater
SAWCo Water
West End

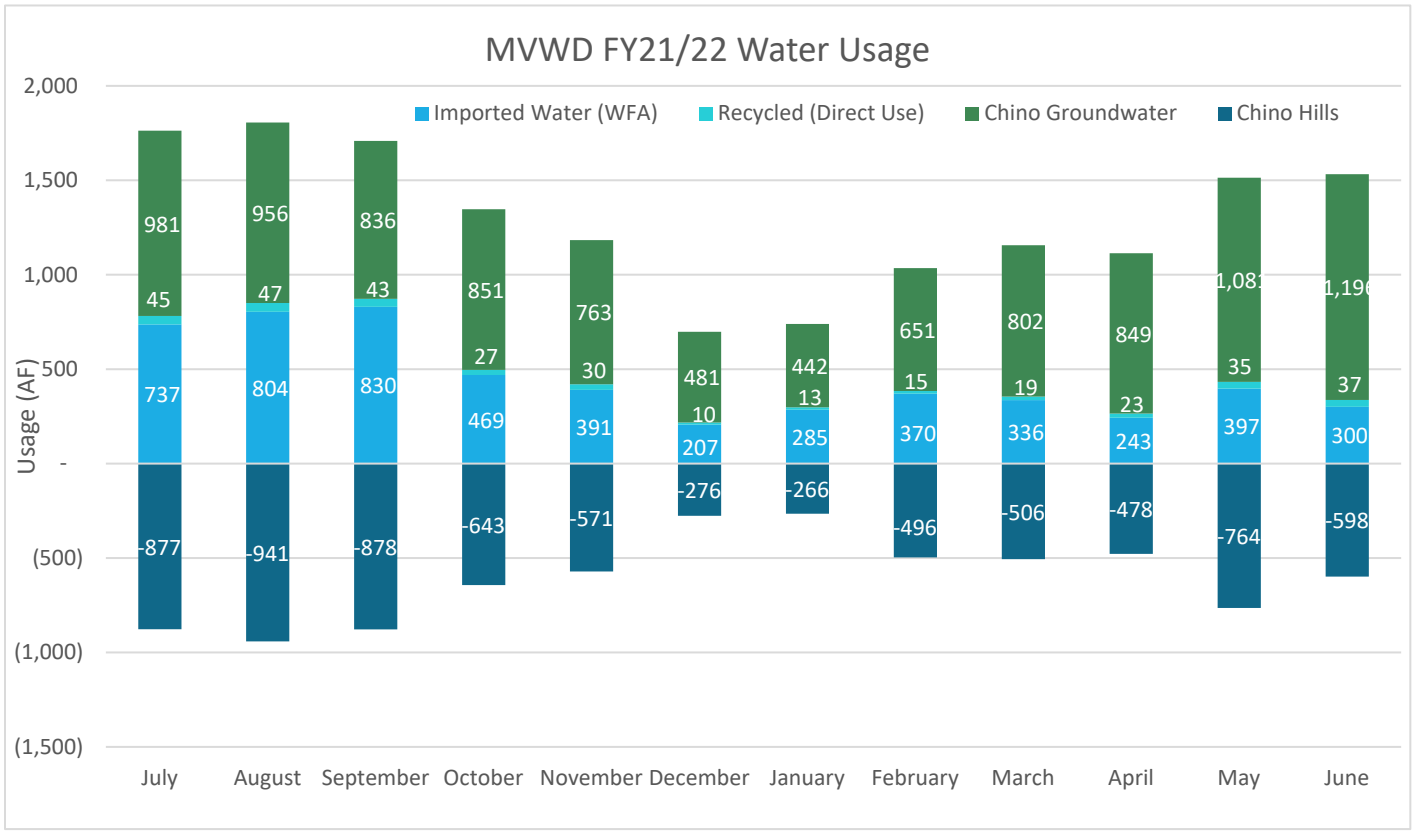

5 - Year Water Production Trend
Upland
25,000
20,000
15,000
10,000
5,000
-
Usage (AF)
FY 17/18
FY 18/19
FY 19/20
FY20/21
FY21/22
Imported (MWD)
Chino Groundwater
Other Groundwater
SAWCo
WECWC
Recycled

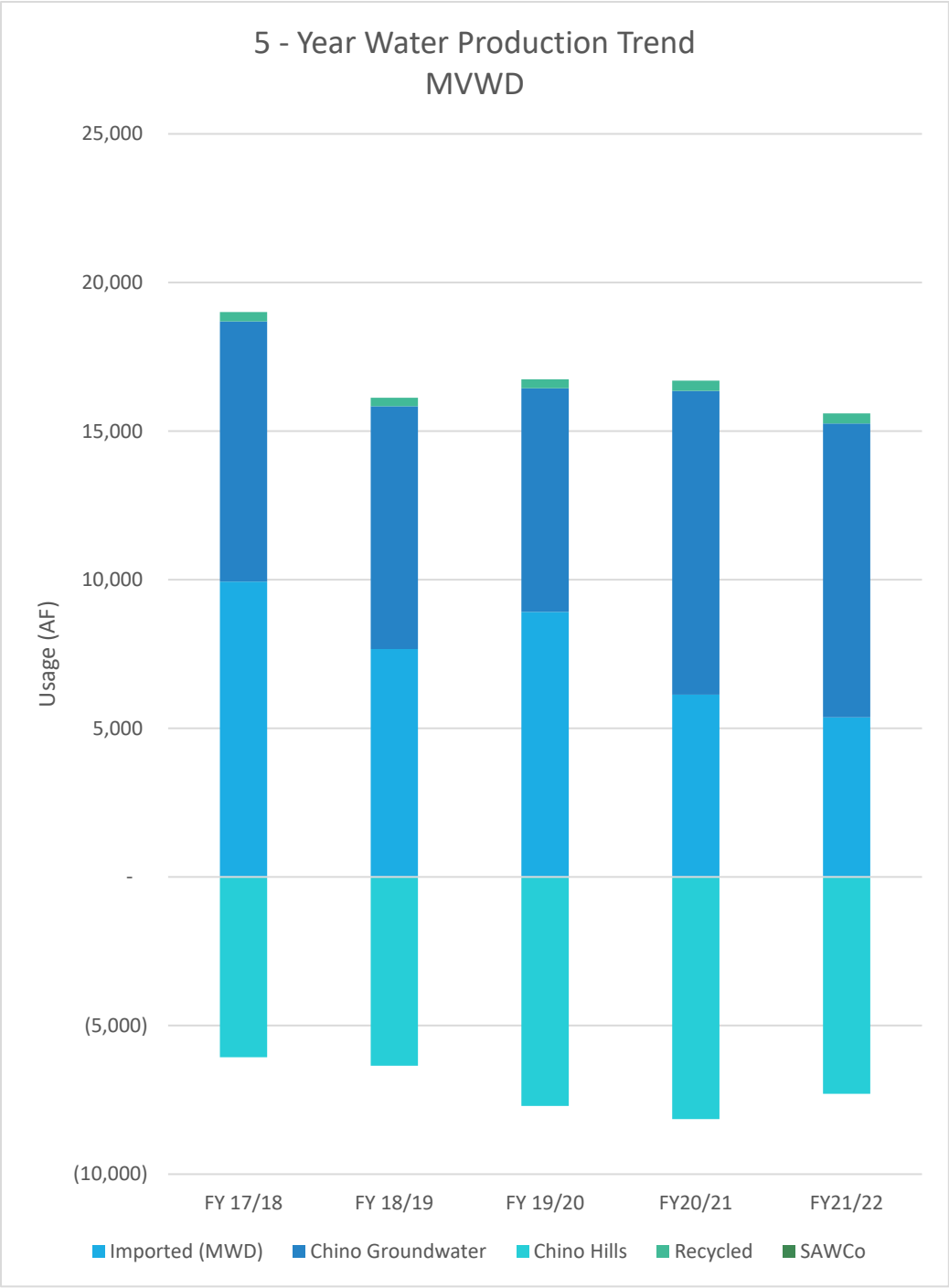

CVWD FY21/22 Water Usage
Imported Water (Tier 1)
Imported Groundwater (DYY)
Recycled (Direct Use)
Chino Groundwater
Other Groundwater
Local Surface Water
Usage (AF)
6,000
5,000
4,000
3,000
2,000
1,000
-
July
August
September
October
November
December
January
February
March
April
May
June
1,774
2,800
129
162
303
113
1,372
2,800
133
118
718
102
1,236
2,600
130
25
659
98
1,000
2,000
74
34
655
111
1,121
1,800
93
78
444
128
1,104
1,000
50
2
324
89
564
52
1,291
481
328
71
2,050
538
340
84
2,675
567
232
246
2,400
88
83
543
252
631
2,513
108
237
558
210
902
140
2,612
526
133

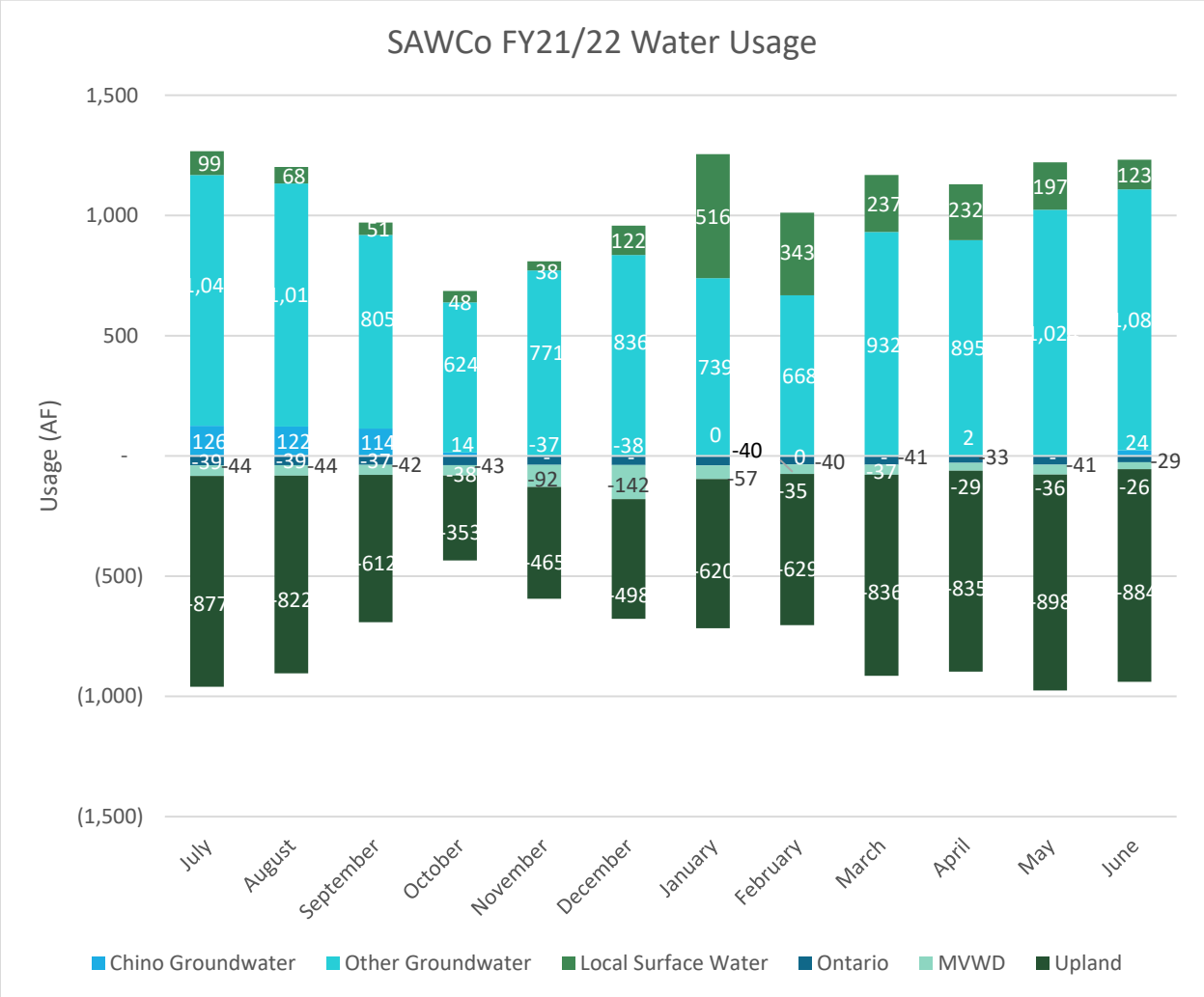

5 - Year Water Production Trend
CVWD
60,000
50,000
40,000
30,000
20,000
10,000
-
Usage (AF)
FY 17/18
FY 18/19
FY 19/20
FY20/21
FY21/22
Imported Water (Tier 1)
Imported Groundwater (DYY)
Chino Groundwater
Other Groundwater
Surface
Recycled

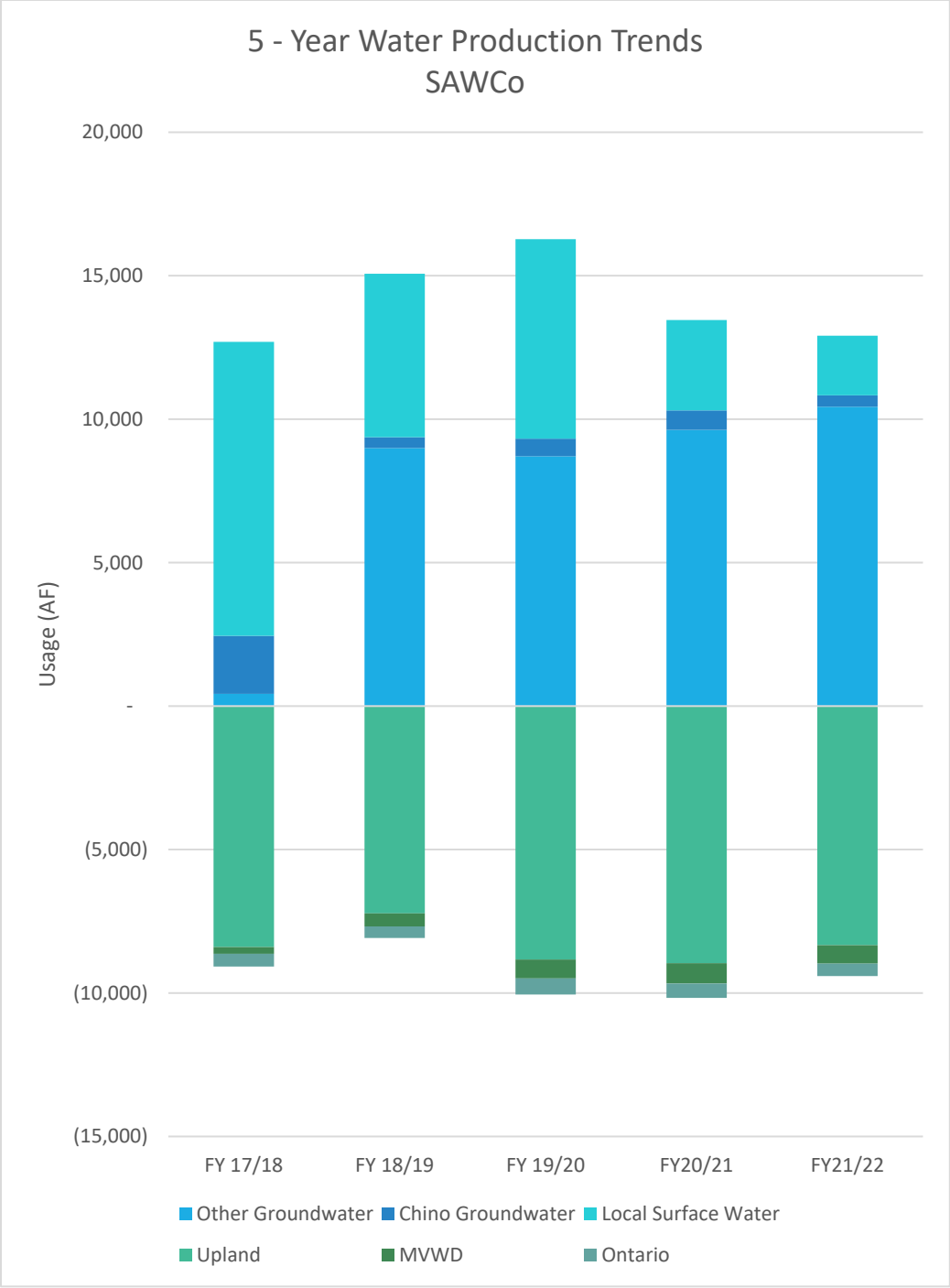

FWC FY21/22 Water Usage
Usage (AF)
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
-
Local Groundwater
Other Groundwater
Chino Groundwater
Recycled (Direct Use)
Imported Groundwater (DYY)
Imported Water (MWD)
July
145
1,690
348
54
1,080
August
92
1,792
322
44
1,083
September
54
1,498
303
46
1,034
October
68
678
670
23
998
November
136
698
356
27
5,000
1,019
December
174
635
637
8
968
January
297
597
638
13
1,067
February
285
555
951
23
962
March
213
584
1,333
23
1,065
April
216
564
2,058
28
353
May
192
972
2,279
40
202
June
135
1,230
1,492
45
738


5 - Year Water Production Trends
FWC
45,000
40,000
35,000
30,000
25,000
20,000
15,000
10,000
5,000
-
Usage (AF)
FY 17/18
FY 18/19
FY 19/20
FY20/21
FY21/22
Imported (MWD)
Imported Groundwater (DYY)
Chino Groundwater
Other Groundwater
Surface
Recycled
CVWD


MVWD FY21/22 Water Usage
Imported Water (WFA)
Recycled (Direct Use)
Chino Groundwater
Chino Hills
Usage (AF)
2,000
1,500
1,000
500
-
(500)
(1,000)
(1,500)
July
August
September
October
November
December
January
February
March
April
May
June
981
45
737
-877
956
47
804
-941
836
43
830
-878
851
27
469
-643
763
30
391
-571
481
10
207
-276
442
13
285
-266
651
15
370
-496
802
19
336
-506
849
23
243
-478
1,081
35
397
-764
1,196
37
300
-598


5 - Year Water Production Trend
MVWD
25,000
20,000
15,000
10,000
5,000
-
(5,000)
(10,000)
Usage (AF)
FY 17/18
FY 18/19
FY 19/20
FY20/21
FY21/22
Imported (MWD)
Chino Groundwater
Chino Hills
Recycled
SAWCo


SAWCo FY21/22 Water Usage
Usage (AF)
1,500
1,000
500
-
(500)
(1,000)
(1,500)
July
August
September
October
November
December
January
February
March
April
May
June
Chino Groundwater
Other Groundwater
Local Surface Water
Ontario
MVWD
Upland


5 - Year Water Production Trends
SAWCo
20,000
15,000
10,000
5,000
-
(5,000)
(10,000)
(15,000)
Usage (AF)
FY 17/18
FY 18/19
FY 19/20
FY20/21
FY21/22
Other Groundwater
Chino Groundwater
Local Surface Water
Upland
MVWD
Ontario