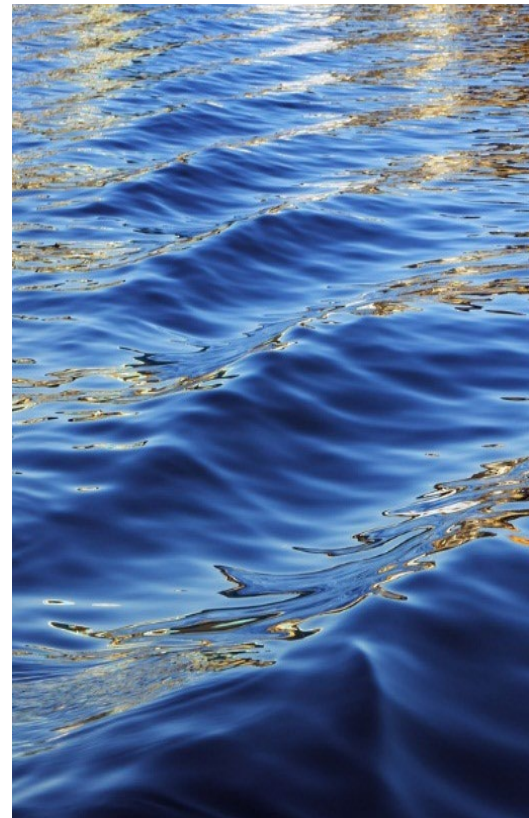


Overview of 2024-25 Water Allocation Process

City of Carmel

David J. Stoldt
General Manager

July 1, 2025

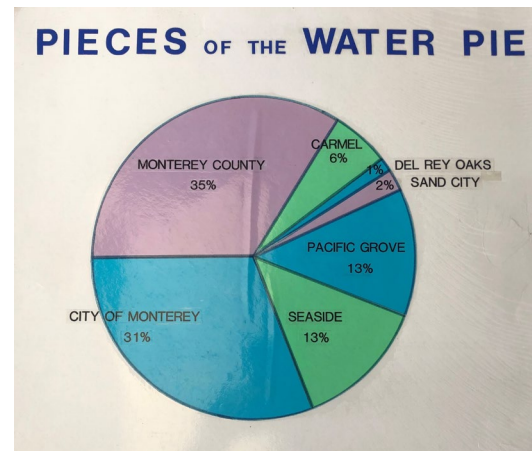


Allocation and the Permit Process

District History of Water Allocation

- 1980s – Each jurisdiction was assigned a portion of existing water supply so each could plan for future with a known amount of water.
- 1985 – District initiates review of building plans to determine capacity to use water
- 1990 – District develops “Allocation EIR” to determine viable capacity of existing supplies and to determine mitigations required
- 1993 – Moves to allocation of new supplies. e.g. Paralta Well

Photo of a poster from the 1980s:



Why Do We Allocate Water?



- Scarcity of Supplies
- Order 95-10 and Cease & Desist Order
- Tracking of New Demand for Water

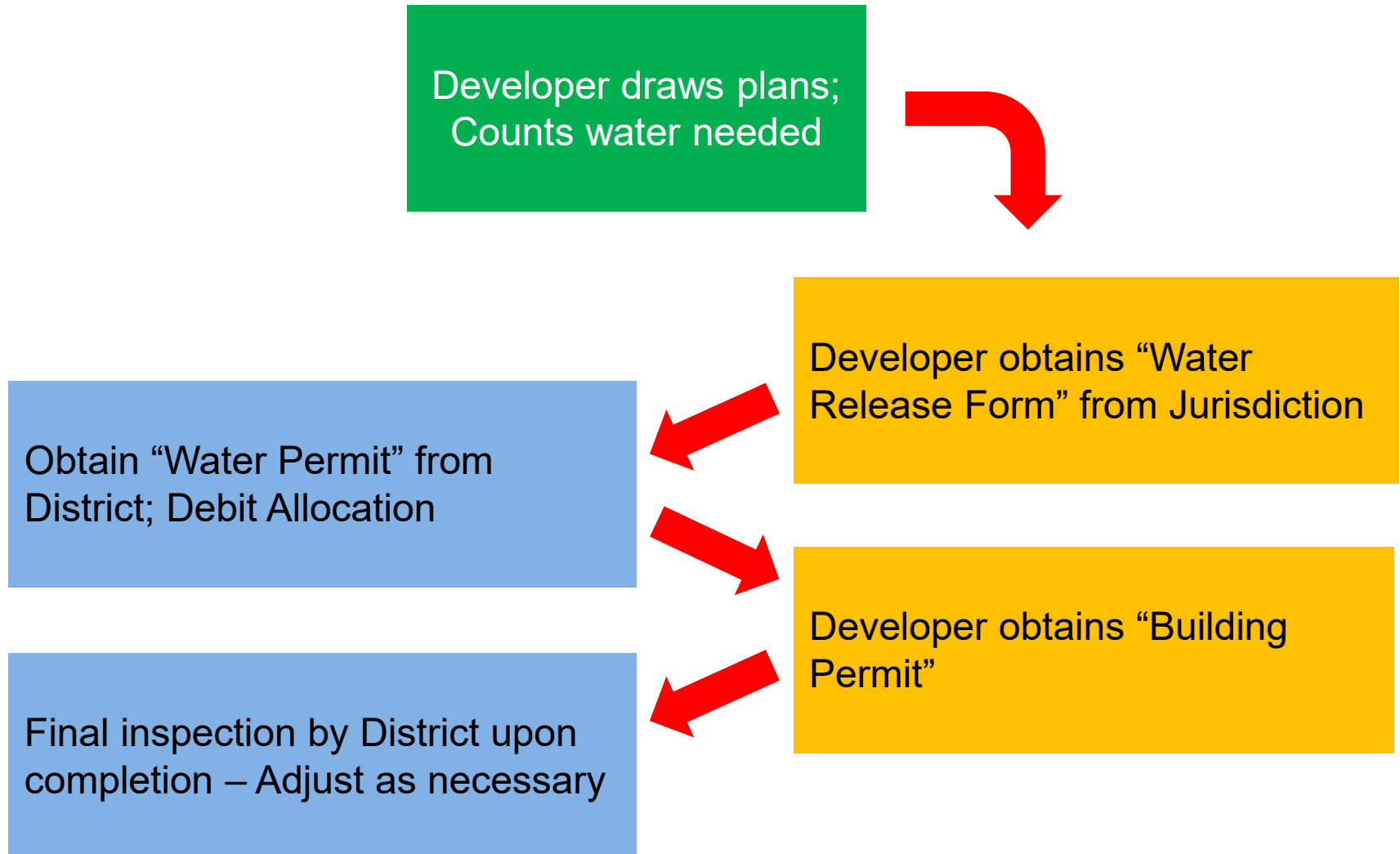
How is an Allocation Like a Bank Account?



ABC BANK 123 St., Apple Avenue Newtown, NY			
Account No. 0123456789			
Date	Particulars	Debit	Credit
Nov 15	Transfer from Branch		\$10,000.00
Oct 25	12563	5.00	
Oct 10	Cheque Book	650.00	
Sept 2	12364	800.00	

- District places allocation into Jurisdiction's account (a credit)
- As Jurisdiction authorizes water for projects, utilizing a "Water Release Form," District debits Jurisdiction's account
- As Jurisdiction's account balance diminishes, it may request a new allocation (credit) from the District
- As available unallocated supply diminishes, a new water supply project must be brought online

How Does an Allocation Affect the Permit Cycle?



What Brings Us to Allocation of New Water?



Schedule



	Item
September 12	Technical Advisory Committee meeting
October 21	Update to District Board
Oct/Nov	Visit Board of Supervisors/City Councils
November 18	Follow-Up to District Board
December 16	First Reading of Ordinance
January 27	Second Reading of Ordinance
30 Days Later	Ordinance Becomes Effective
Q4 2025	PWM Expansion Online

Allocations Will Not Solve Everything

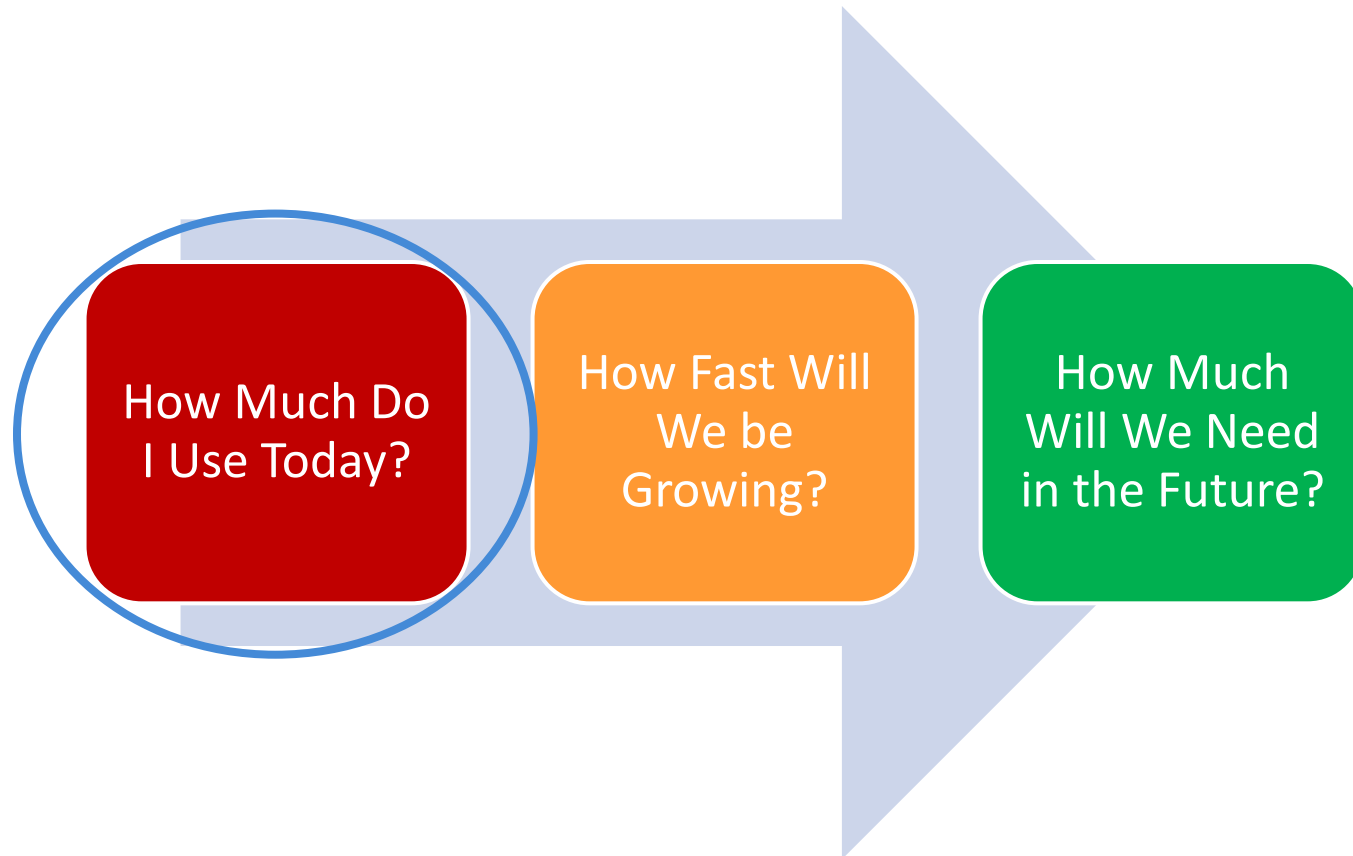
- Cease & Desist Order (CDO) remains outstanding until State Water Board lifts it.
- Moratorium on new meters remains until CDO is lifted.
- Only remodels or renovations on sites with existing meters will be possible until then.
- Permits only for long-term projects until PWM Expansion is online.

How Much Water is There to Allocate?

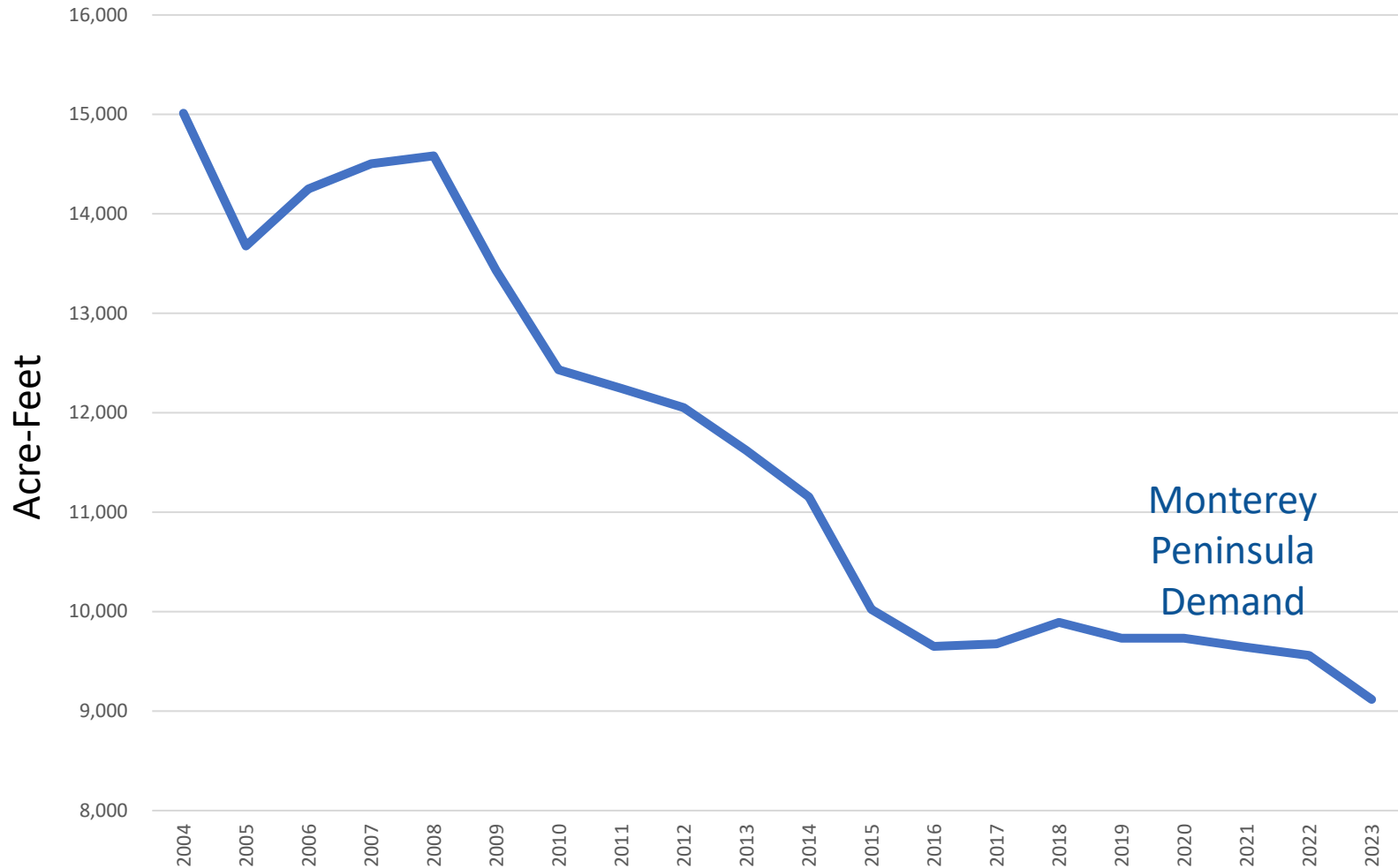
How Much Water is There?

Source of Supply	Amount Available
Carmel River	3,376 AF
Seaside Basin	1,474 AF
Pure Water Monterey (Base)	3,500 AF
Pure Water Monterey Expansion	2,250 AF
Aquifer Storage & Recovery (ASR)	1,210 AF
Sand City Desal	200 AF
Seaside Basin Wheeled from Others	20 AF
<u>Malpaso LLC</u>	<u>86 AF</u>
Total	12,116 AF

Water Demand Forecasting – 3 Simple Questions



Water Demand – Last 20 Years



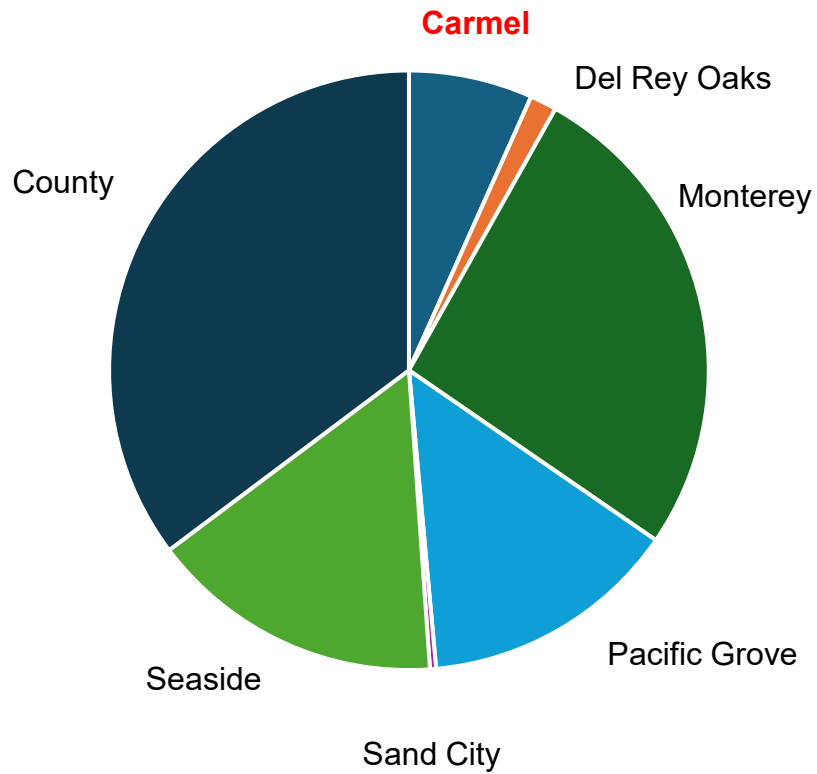
How Much Supply is Needed to Meet Current Demand?

Look to recent historical supply to meet customer demand

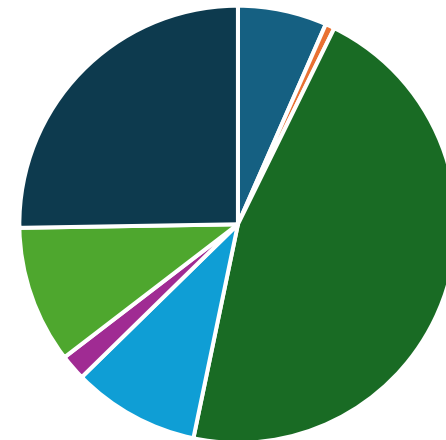
Supply to Meet Customer Demand	Amount
Last 3-Years	9,440 AF
Last 5-Years	9,557 AF
Last 10-Years	9,819 AF

Proportionate Water Demand Today

Residential Use



Non-Residential Use



How Much Supply is “Excess” Today?

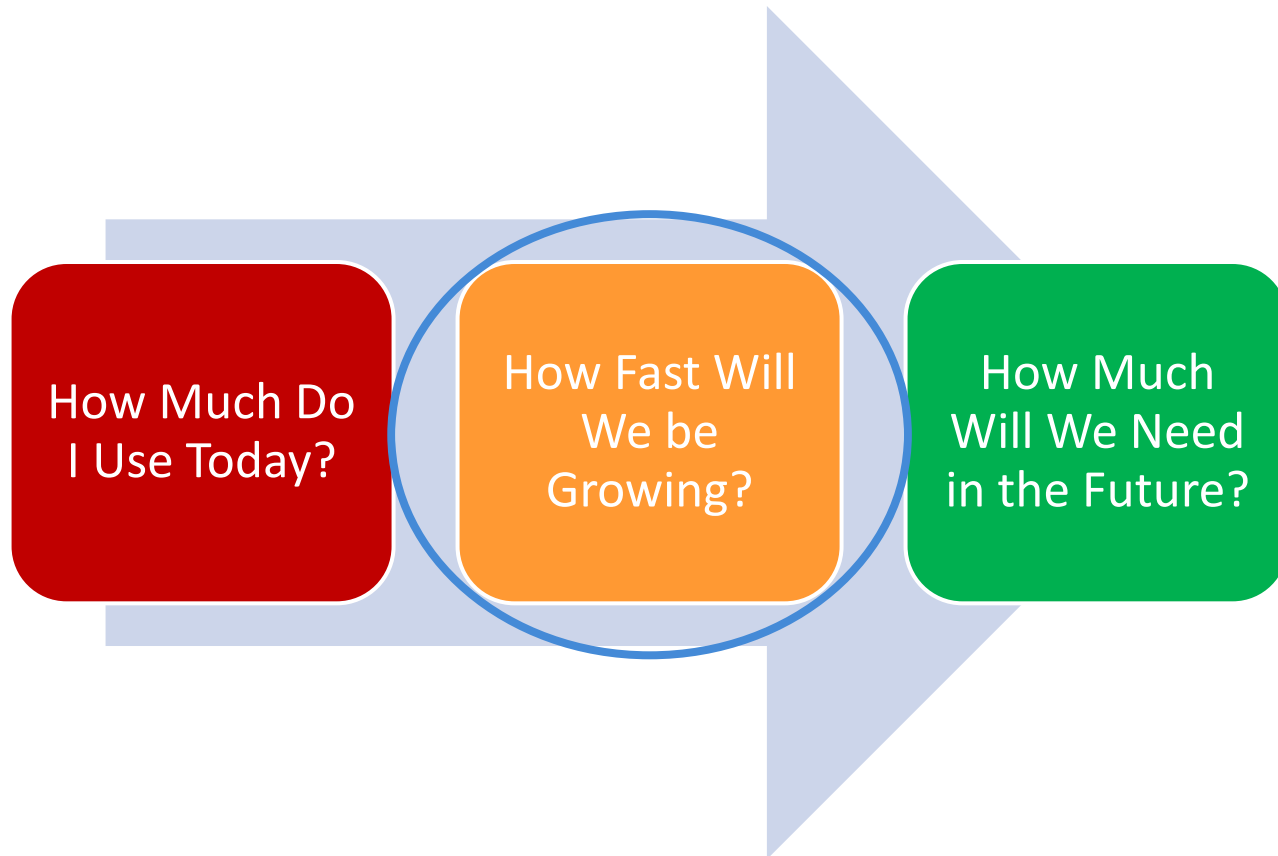
Factors affecting available supplies:

- Cal-Am in-lieu storage program for Seaside Groundwater Basin could require 700 AFY
- In dry years, PWM Expansion could be 345 AFY less, Sand City desal 40 AFY less, and ASR must rely on storage
- Demand can fluctuate based on weather & economy
- Losses
- Initially, leave a “factor of safety” of 1,000 AFY

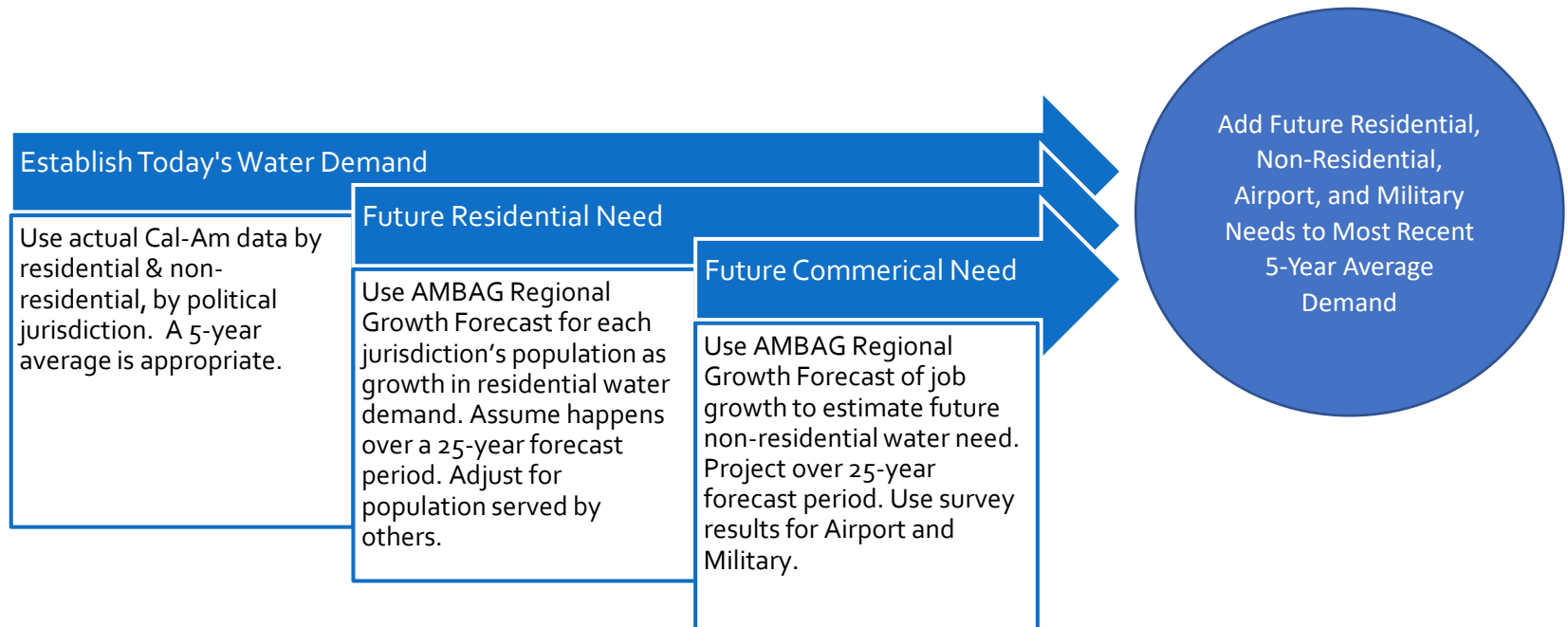
	Amount
Total Supplies Available	12,116 AF
Minus Current Demand	(9,557 AF)
Available	2,559 AF
Less Initial “Factor of Safety”	(1,000 AF)
Net Available	1,559 AF

How Much Water do Jurisdictions Need?

Water Demand Forecasting – 3 Simple Questions



The Tools to Answer Those Questions



Future Need Based on AMBAG Regional Growth Forecast

Jurisdiction	Current Demand (5-Yr Avg)	AMBAG Growth Rates Res / NonRes	Residential AF Served By Others	25-Year Water Need
Carmel	636 AF	0.9%/9.8%	0 AF	25 AF
Del Rey Oaks	113 AF	59.4%/11.5%	38 AF	19 AF
Monterey	3,168 AF	5.2%/11.0%	0 AF	253 AF
Pacific Grove	1,185 AF	3.6%/5.4%	0 AF	48 AF
Sand City	84 AF	211%/8%	0 AF	49 AF
Seaside	1,330 AF	14.2%/10.2%	100 AF	76 AF
Unincorporated	3,041 AF	5.2%/11.0%*	17 AF	189 AF
Airport	Included	Survey	n/a	88 AF
<u>Defense</u>	<u>Included</u>	Survey	n/a	<u>54 AF</u>
TOTAL	9,557 AF			801 AF

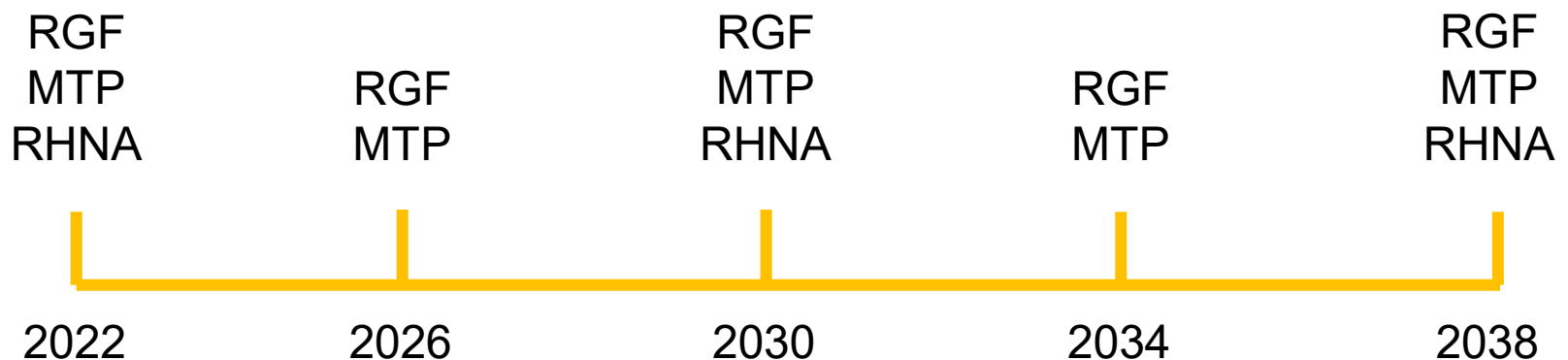
*: Unincorporated population and jobs growth calculated based on City of Monterey growth rate

AMBAG Documents & Data Intend to be Consistent

AMBAG's "Big 3" Work Products:

- Regional Growth Forecast (RGF) every 4 years
- Metropolitan Transportation Plan / Sustainable Communities Strategy (MTP/SCS) every 4 years
- Regional Housing Need Allocation (RHNA) every 8 years

SB 375 links RHNA and MTP/SCS to same cycle; RGF is linked to MTP/SCS adoption cycle.



Problem: AMBAG Creates Confusion

Jurisdiction	25-Year Population Growth	6 th Cycle Housing Units
Carmel	35	349
Del Rey Oaks	988	184
Monterey	1,469	3,654
Pacific Grove	552	1,125
Sand City	813	260
Seaside	4,779	616
Unincorporated	839 *	1,314 *

*: Unincorporated population growth calculated based on Cal-Am population and City of Monterey growth rate; Housing units based on draft housing element.

Future Need Based Adjusted for RHNA

Based on Housing Elements, water required for mix of housing stock can be estimated for each jurisdiction:

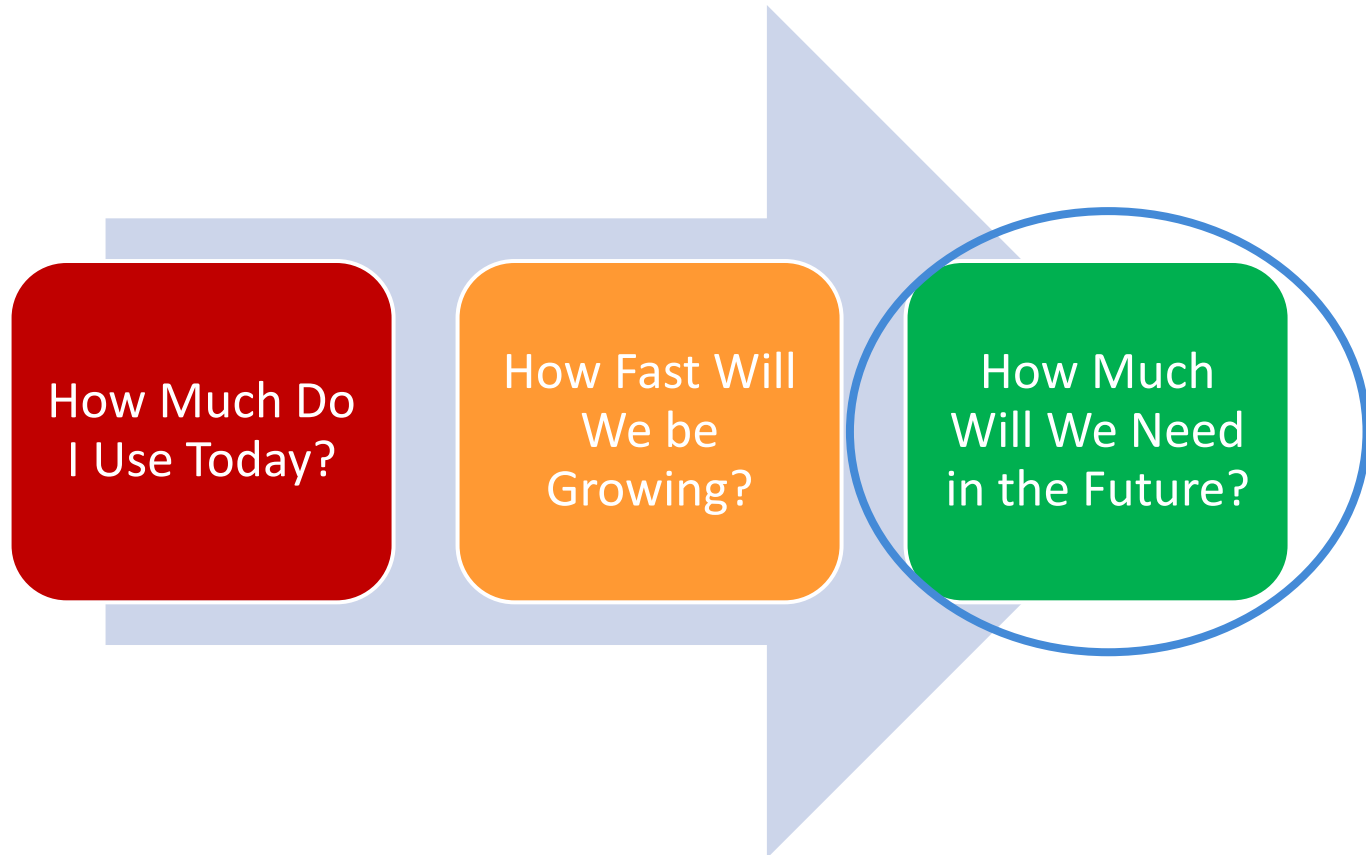
	Very Low Income	Low Income	Moderate		Above Moderate		Total Allocation
	100% Multifamily	100% Multifamily	50% Multifamily	50% Singlefamily	33% Multifamily	67% Singlefamily	Total Allocation
Total Water Req'd (AF)	196.36	126.20	34.37	64.80	85.14	291.54	798.41

For lack of better methodology, this can be added to water needed for population growth and divide by two.

Future Need Based Adjusted for RHNA

Jurisdiction	25-Year Need Per AMBAG	25-Year Need Adjusted for RHNA
Carmel	25 AF	43 AF
Del Rey Oaks	19 AF	13 AF
Monterey	253 AF	422 AF
Pacific Grove	48 AF	97 AF
Sand City	49 AF	43 AF
Seaside	76 AF	64 AF
Unincorporated	189 AF	215 AF
Airport	88 AF	88 AF
<u>Defense</u>	<u>54 AF</u>	<u>54 AF</u>
TOTAL	801 AF	1,039 AF

Water Demand Forecasting – 3 Simple Questions



Summary of Allocations

Jurisdiction	25-Year Water Need	Proposed Allocation %	Proposed Allocation AF	Existing Allocation 3/1/24	Revised Total Allocation
Carmel	43 AF	33%	14 AF	2.661 AF	16.661 AF
Del Rey Oaks	13 AF	50%	6 AF	0 AF	6.000 AF
Monterey	422 AF	33%	141 AF	4.170 AF	145.170 AF
Pacific Grove	97 AF	33%	32 AF	0.026 AF	32.026 AF
Sand City	43 AF	33%	14 AF	23.163 AF	37.163 AF
Seaside	64 AF	33%	21 AF	30.301 AF	51.301 AF
Unincorporated	215 AF	33%	72 AF	12.111 AF	84.111 AF
Airport	88 AF	50%	44 AF	5.197 AF	49.197 AF
Defense	<u>54 AF</u>	50%	<u>27 AF</u>	0 AF	<u>27.000 AF</u>
	1,039 AF		371 AF		448.629

MPWMD Retained 2094.044 AF in Reserve for Future Allocation



Questions?

RHNA Adjustment (as if houses use water)

	Acre-Feet Required	Multi-Family: 1 to 2 Bedroom 1 Bathroom	Multi-Family: 2 to 3 Bedroom 2 Bathroom	Single-Family: 1 Master Bath 1 Standard Bath 1 Half-Bath
Standard Bathroom(s)	0.043	0.043	0.086	0.043
Half Bathroom	0.023			0.023
Master Bathroom	0.053			0.053
Kitchen	0.015	0.015	0.015	0.015
Clothes Washer	0.010	0.010	0.010	0.010
Landscaping & Other*	Varies	0.000	0.000	0.036
Total per Unit		0.068	0.111	0.180

*: "Other" may include other fixtures such as utility sink, bar sink, vegetable sink, bidet, custom tub or showers.

RHNA Housing Type Category	Assumption of Housing Mix	Resulting Water Use Factor (AF)
Very Low Income	50% 1-Bath & 50% 2-Bath (100% Multi-Family)	0.0895 AF
Low Income	50% 1-Bath & 50% 2-Bath (100% Multi-Family)	0.0895 AF
Moderate Income	50% Single-Family & 50% Multi-Family	0.1348 AF
Above Moderate	67% Single-Family & 33% Multi-Family	0.1498 AF

RHNA Adjustment (as if houses use water)

	Very Low Income	Low Income	Moderate		Above Moderate		Total Allocation
	100% Multifamily	100% Multifamily	50% Multifamily	50% Singlefamily	33% Multifamily	67% Singlefamily	Total Allocation

Carmel							
# Units	113	74	22	22	39	79	349
Served by Others	0	0	0	0	0	0	0
Net # Units	113	74	22	22	39	79	349
Water per Unit (AF)	0.0895	0.0895	0.0895	0.1800	0.0895	0.1800	
Water Required (AF)	10.11	6.62	1.97	3.96	3.49	14.22	40.38