

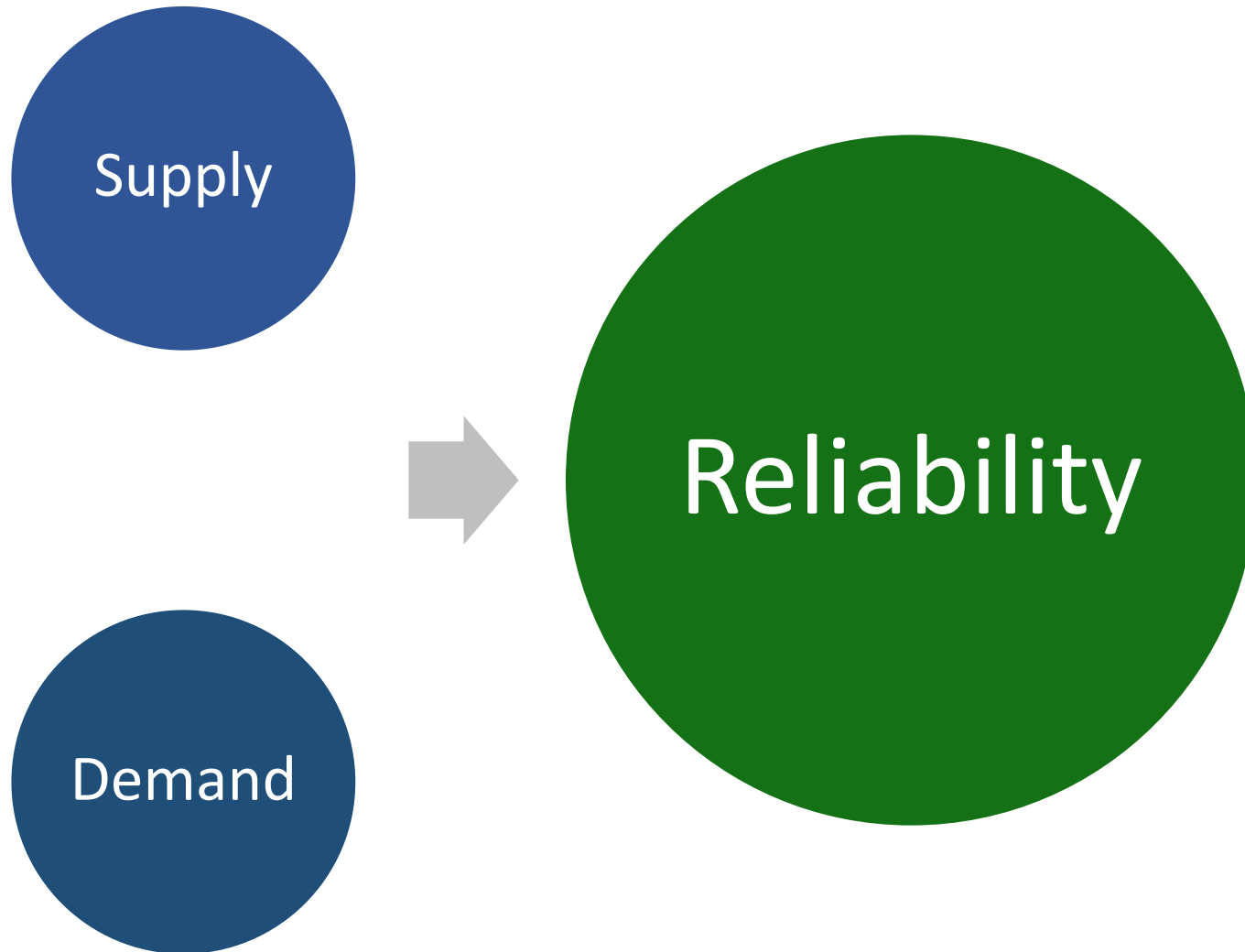


Urban Water Management Plan Preliminary Findings

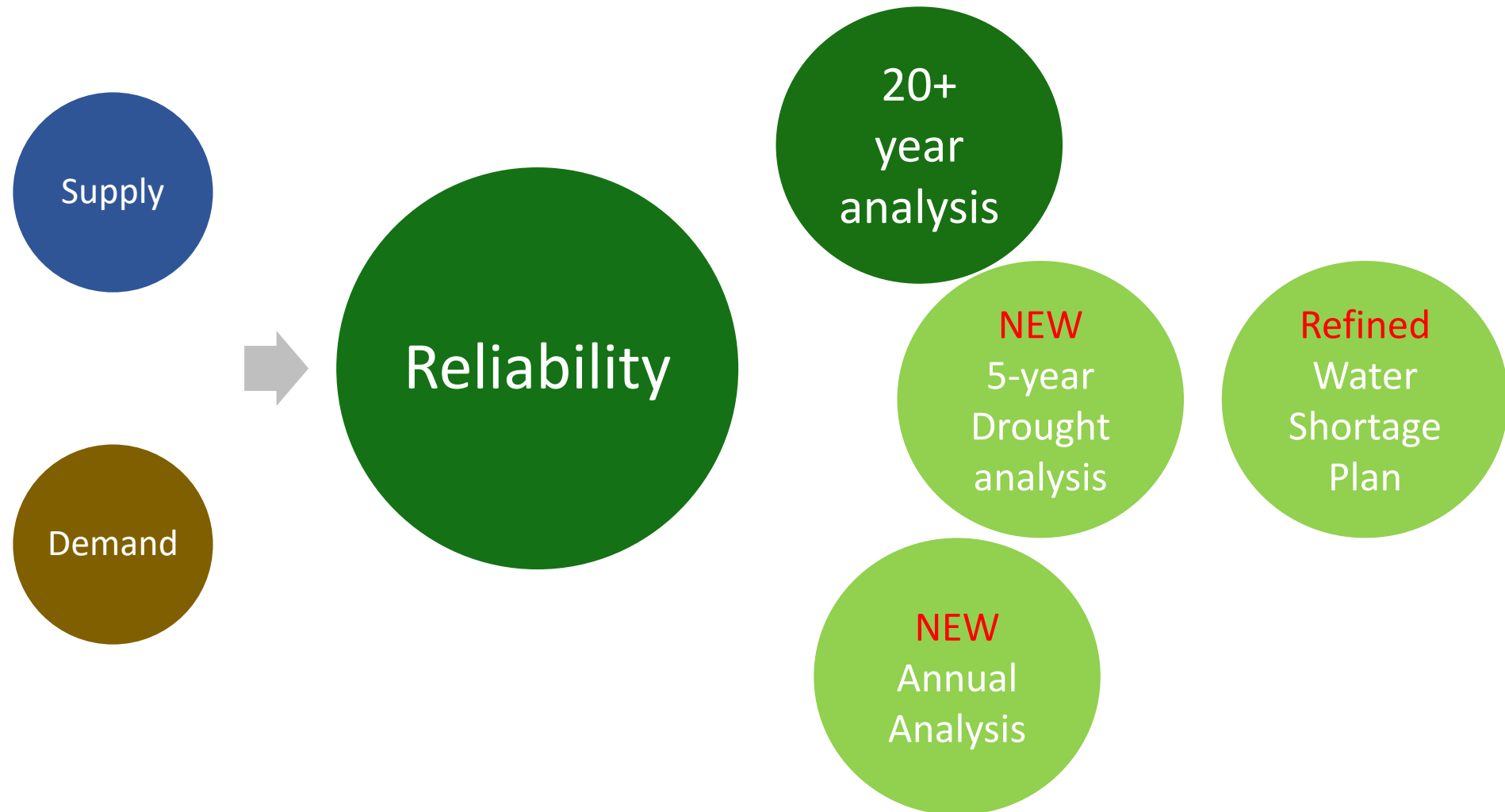
May 18, 2021
CWD Board Meeting

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The UWMP requires a demonstration of the ability to meet customer demands under various supply conditions...



...and the UWMP requires several reliability assessments.



Key UWMP Considerations

- **This is the CWD's Water Planning Document**
- Evaluate CWD's service reliability
- Consider CWD's unique circumstances
 - Historic
 - Anticipated
 - Trends
- Integrate with regional planning actions

Fundamental 2020 UWMP Findings

- Projected demands are stable
- Per Capita water demands decreasing
- Reliable water supplies in 5-year drought
 - Supplies require active management from CWD
 - Short-term actions to augment reliability outlook
- Reliable water supplies through 2045

Current and Forecast Water Use (AFY)

Classification		2025	2030	2035	2040	2045
Existing	Single-family Residential	5,400	5,400	5,400	5,400	5,400
	Multi-family Residential	1,400	1,400	1,400	1,400	1,400
	Commercial/Institutional	950	950	950	950	950
	Landscape and Other	275	275	275	275	275
New	Single-family Residential	2	4	6	8	10
	Multi-family Residential	10	60	130	190	250
	Commercial/Institutional	10	40	80	100	140
Customer Water Use Subtotal		8,050	8,130	8,240	8,320	8,430
Distribution System Water Loss		810	820	830	840	850
Total Water Use		8,860	8,950	9,070	9,160	9,280

- 2020 Compliance GPCD = 216 (target was 237)

- Assumptions:

- Current customer use unchanged
- Growth tied to Fair Oaks Corridor Plan which is mostly mixed use (e.g. MFR above retail)

CWD Water Supplies

- License 1387: 10,860 AFY (15 cfs Jan-Dec)
- License 8371: 3,670 AFY (10 cfs May-Oct)
- Permit 7356: 18,100 AFY (25 cfs Jan-Dec)
- Groundwater: 8,066 AFY (7.2 MGD)

ANNUAL NORMAL YEAR WATER SUPPLIES: ~40,696 AFY

Potential GET LB: 850 AFY (70 af-month Jan – Dec)

*CWD has a ***monthly*** reliability issue in critically dry years (potentially in 2021)

Water Supply Worksheet - Details

Part 1: Individual: Existing Potable Supply (current monthly conditions)

Potable Supply Source		M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	Total
Source 1:		[describe source here]												
2020 Actual use of supply														0
Normal Year														0
Single Dry Year														0
Multi-Year Drought	2021 (1st year)													0
	2022 (2nd year)													0
	2023 (3rd year)													0
	2024 (4th year)													0
	2025 (5th year)													0

Part 2: Individual: Existing and Planned Potable Supplies

Potable Supply Source		2025	2030	2035	2040	2045 (opt)
Normal						
Single Dry Year						
Multi-Year Drought	Year 1					
	Year 2					
	Year 3					
	Year 4					
	Year 5					

Supply Actions and Augmentation

KEY ISSUES

- Annual and Monthly Supply Limitations with each Water Asset
- Created Five Consecutive Dry Year Scenario (~2012-2016)
- Increase groundwater supply by a minimum of 2,000 gpm by 2023

SUPPLY MANAGEMENT

- Water Rights curtailment more frequent than past
- Focus on June through October during critically dry periods
- Improve Conjunctive Use Capabilities and System Inerties

Five Year Drought Risk Assessment (Supply in acre-feet)

		Jan-May	June	July	Aug	Sept	Oct	Nov-Dec	Total
Normal Year		3,098	3,688	3,710	3,710	3,688	3,710	3,076	40,695
Single Dry Year		3,098	663	685	685	663	685	3,076	22,546
Multi-Year Drought	(1st year)	3,098	3,688	3,710	3,710	3,688	3,710	3,076	40,695
	(2nd year)	3,098	663	685	685	663	685	3,076	22,546
	(3rd year)	3,372	928	959	959	928	959	3,341	25,771
	(4th year)	3,372	3,953	3,984	3,984	3,953	3,984	3,341	43,920
	(5th year)	3,372	3,953	3,984	3,984	3,953	3,984	3,341	43,920

Five Year Drought Risk Assessment (Supply Deficit in acre-feet)

		Jan-May	June	July	Aug	Sept	Oct	Nov-Dec	Total
Normal Year									
Single Dry Year			-220	-306	-692	-598	-418		
Multi-Year Drought	(1st year)								
	(2nd year)		-220	-306	-692	-598	-418		
	(3rd year)			-198	-418	-334	-145		
	(4th year)								
	(5th year)								

Water Shortage Contingency Plan

❖ Reduce Demand

- Stages of Implementation (UWMP Act requires 6 stages)
- Communication Plan

❖ Increase Supply

- Increase groundwater production
- Water Assets from neighboring Agencies

Supply Augmentation Actions

- ❑ Temporary Supply Contract with San Juan Water District for American River surface water for 2021
- ❑ More groundwater wells for use by CWD
- ❑ Additional Options:
 - ❑ Supply Contract with Sacramento Suburban Water District for water through intertie
 - ❑ Supply Contract with GSWC or SCWA for GET supplies
 - ❑ Supply Contract with Fair Oaks Water District for water through intertie

Timeline

- Urban Water Management Plan kickoff (Feb 12, 2021)
- CWD staff work with Tully & Young to review data and draft UWMP chapters (March – May 2021)
- Tully & Young and CWD Staff present fundamental findings to CWD Board (May 18, 2021)
- Draft report shared with the public (June 1, 2021)
- CWD Board holds Public Hearing to adopt UWMP (June 15, 2021)

Questions?