Water Supply Update

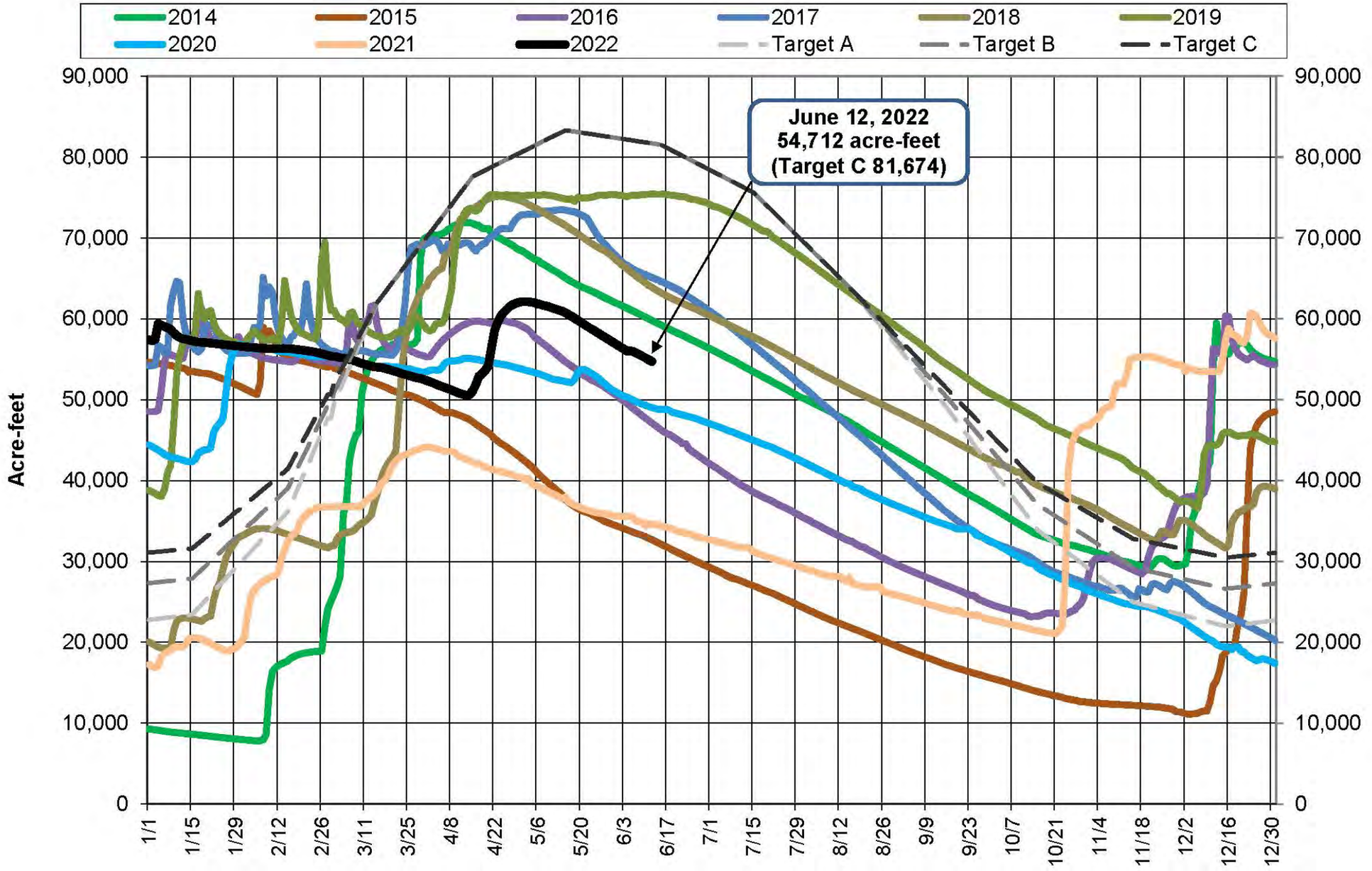
Board of Public Utilities Meeting

June 16, 2022

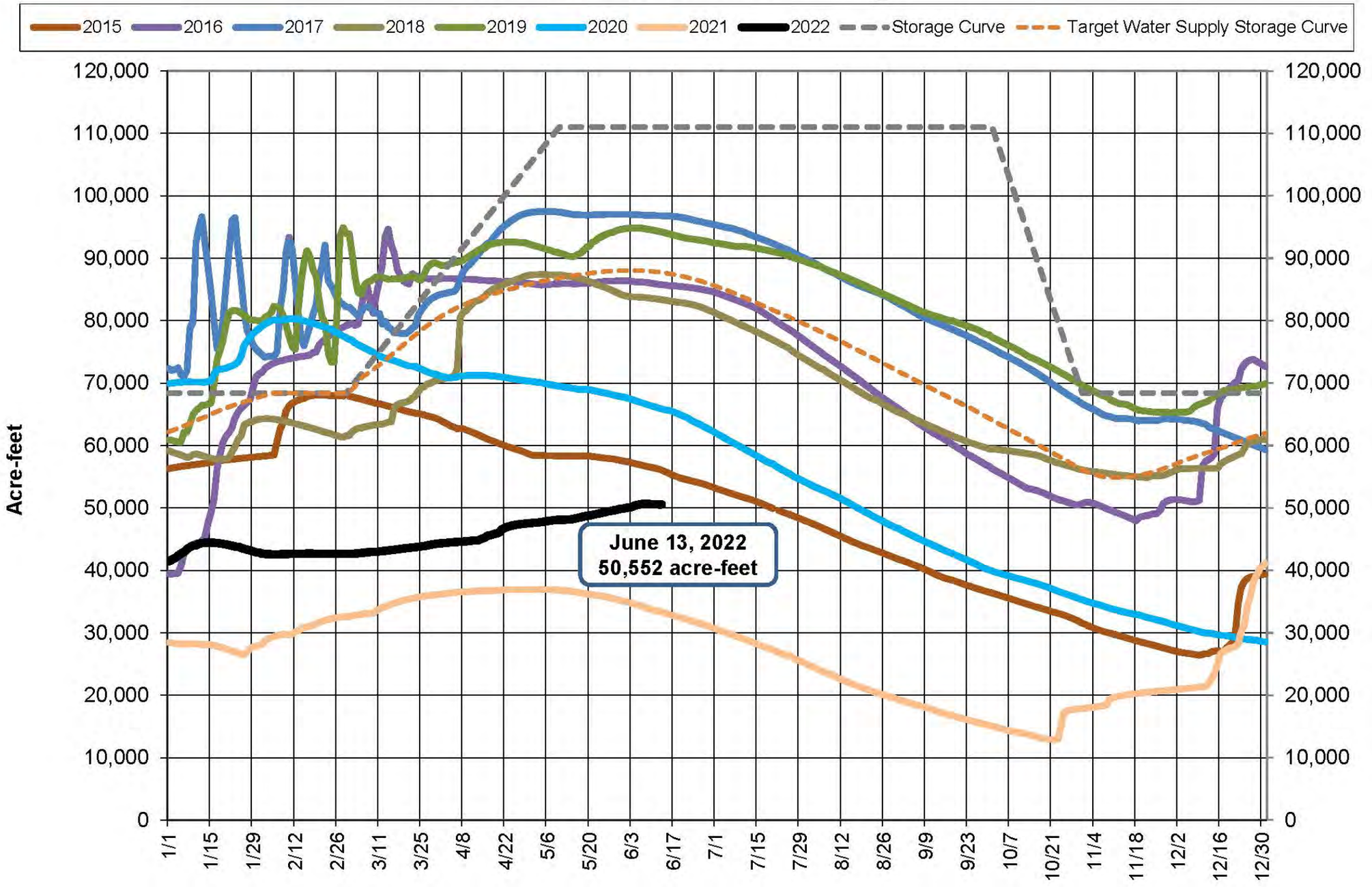
Peter Martin – Deputy Director Water Resources

Colin Close – Senior Water Resources Planner

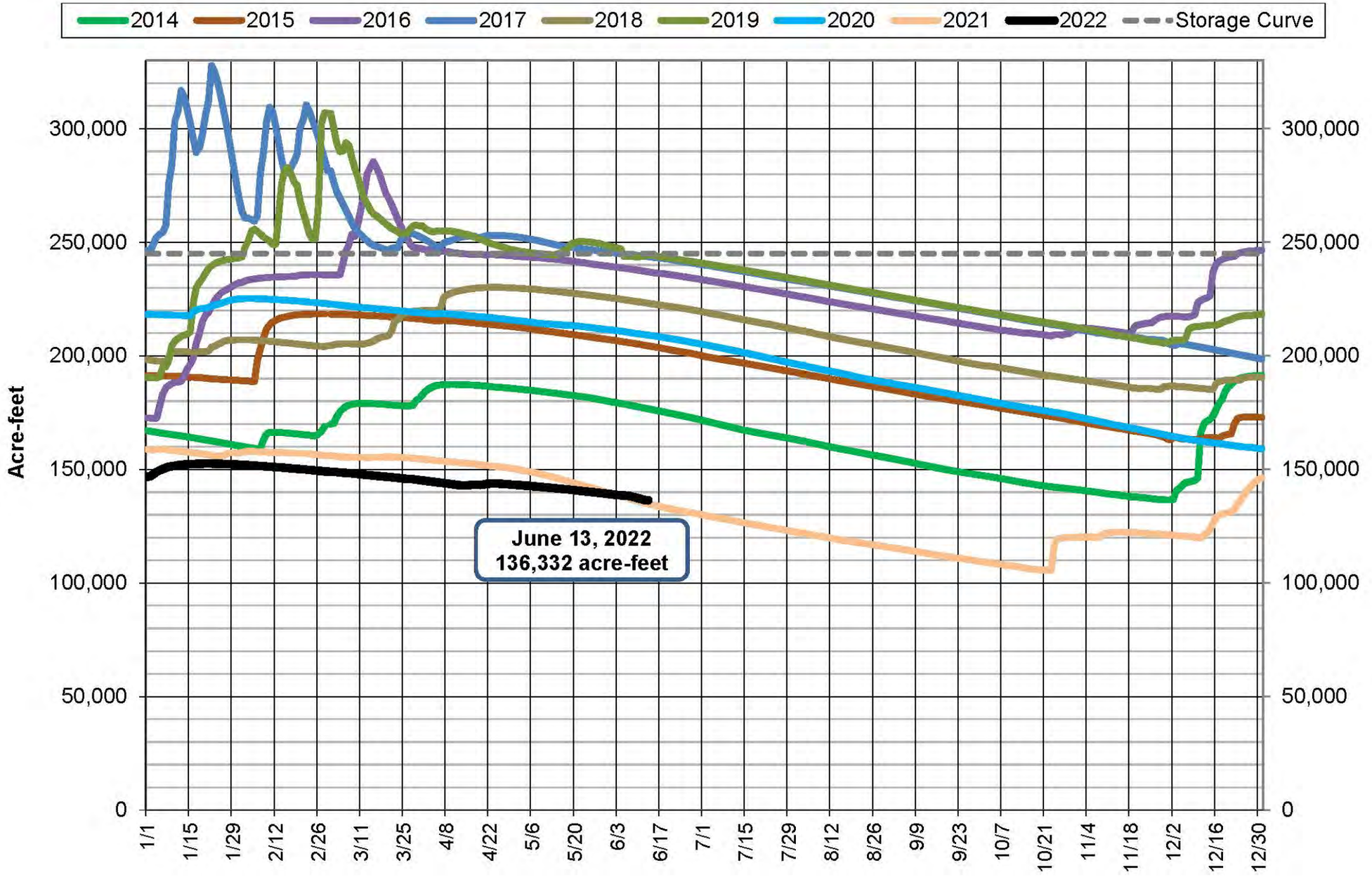
Lake Pillsbury Storage and Target Storage Scenarios



Lake Mendocino Storage



Lake Sonoma Storage



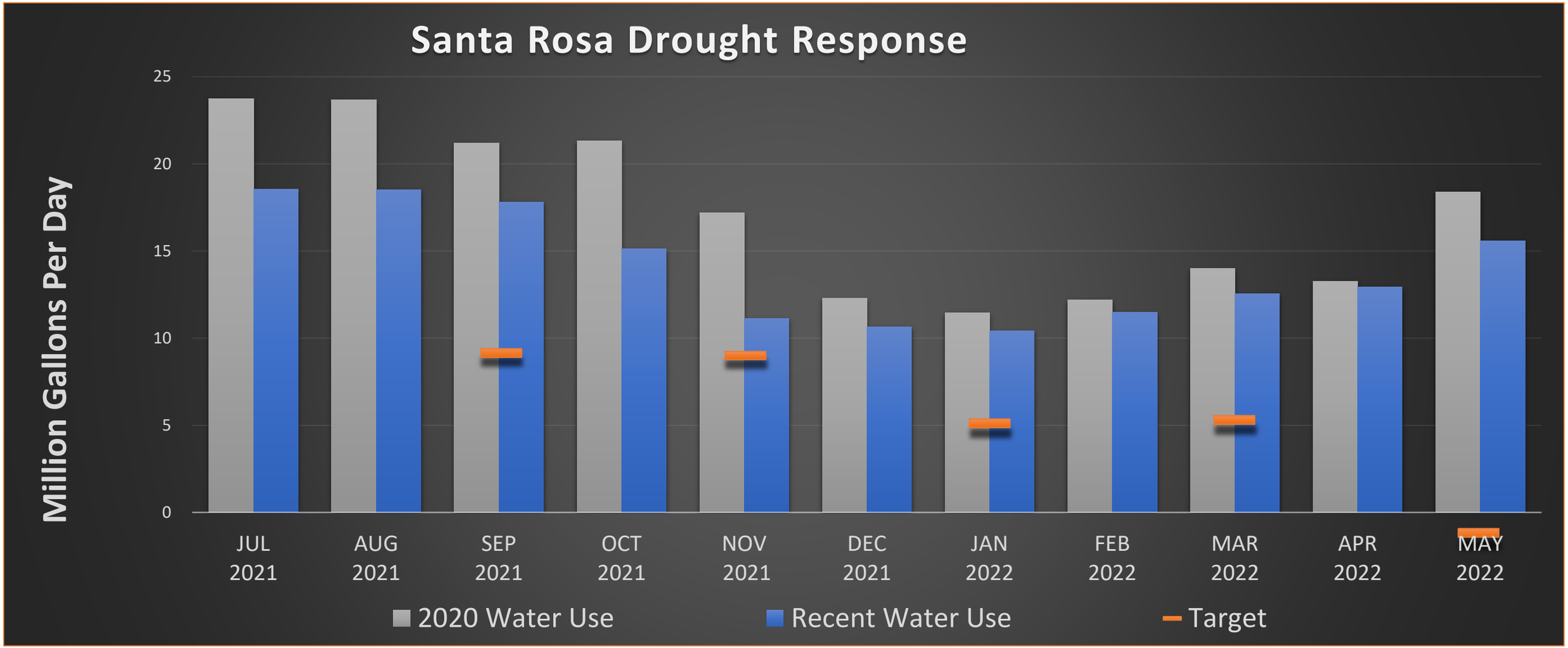
Sonoma Water TUCP

- Filed on May 25, 2022
- Existing TUCO expires June 8, 2022
- Extends establishment of “critical” water supply conditions
  - 25 CFS Upper / 35 CFS Lower
- Commits to a 20% reduction in diversions
  - July 1 to October 31, when compared to 2020

PG&E Flow Variance – FERC Filing

- May 15 - FERC mandated flow schedule for East Branch of Upper Russian River is 75 CFS
- PG&E requests a variance to bypass 5 CFS (minus PVID contract obligations) beginning in June
- Target 30,000 Acre feet in Lake Pillsbury by Sept 15
  - Cold water pool necessity for Eel River species
  - Last year’s target: 12,000 acre-feet by September

Santa Rosa Cumulative Drought Reductions



- In May 2022, Santa Rosa residents reduced water use by **15%** in compared to 2020
- From July 2021 - May 2022, water use has been reduced by **18%** compared to 2020

State Water Resources Control Board Emergency Conservation Regulations adopted May 24th

- Effective June 16th, commercial, industrial and institutional (CII) “non-functional turf” is no longer allowed to be irrigated.
  - Some limited exceptions
  - Enforcement authority resides with SWRCB
  - Direct Outreach to CII by Santa Rosa Water ongoing
- *Preliminary* Annual Water Supply and Demand Assessment was required to be submitted by June 1
- Urban water suppliers to implement all conservation actions in their locally adopted plans meant to address at least a water shortage level of 10 to 20 percent (Level 2) by June 16, 2022.

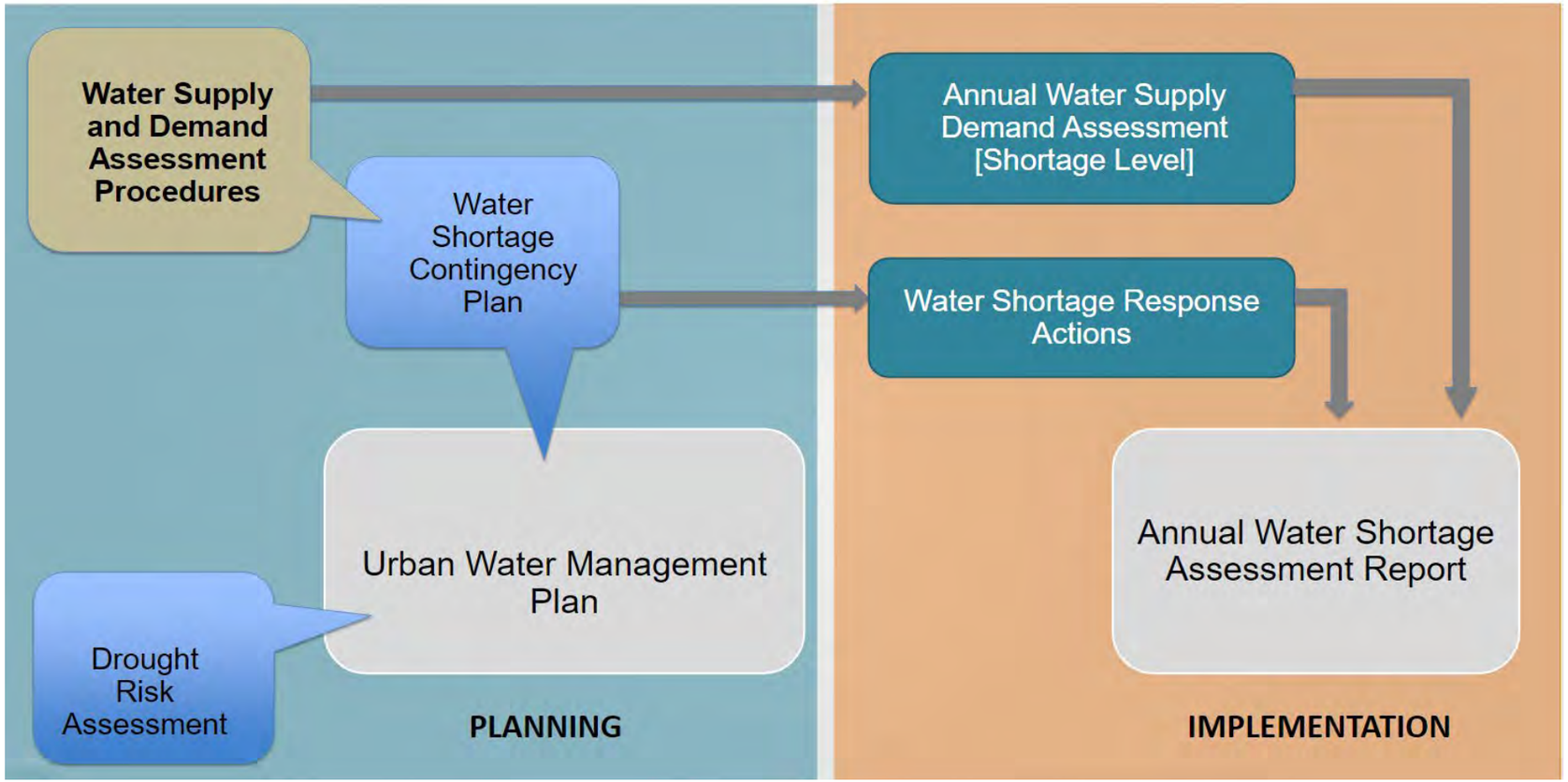
Annual Water Supply and Demand Assessment

CA Water Code Section 10632.1

Urban water suppliers must:

- Assess supply versus “unconstrained” (ordinary) demand for upcoming year (Jul 1 – June 30).
- Assume the upcoming year will be dry.
- If shortage anticipated, list triggered shortage response actions.
- Submit Annual Water Shortage Assessment Report (tables) to DWR.
- Due by July 1 each year, beginning in 2022.

Compliance began with updates to 2020 Urban Water Management Plan and Water Shortage Contingency Plan



- NEW – Preliminary report due June 1, 2022

Preliminary Report due June 1, 2022

- Proposed in Gov's Exec Order N-7-22 (May 8, 2022).
- Adopted by State Water Board (May 24, 2022).

Urban Water Suppliers must:

- Conduct AWSDA using best available info.
- Identify potential shortage level.
- List response actions considered.
- At minimum, consider activating State Level 2 actions (20% shortage response actions).

CALIFORNIA
Water Boards
STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS

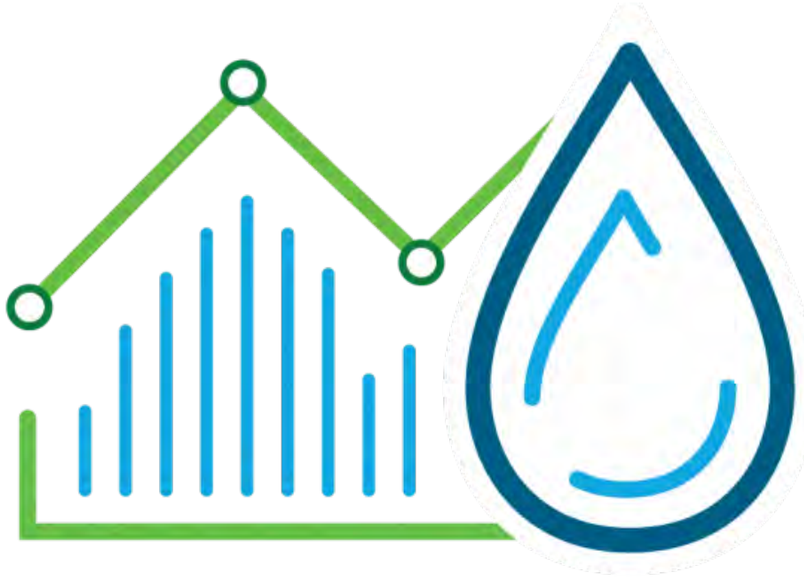
Santa Rosa Water – Supply and Demand Estimates

Supply Projection

- Sonoma Water: Supply adequate to meet unconstrained demand if winter 2022-23 is dry (about 93% of Santa Rosa's supply).
- City wells: Reliably produce about 7% of supply (dry & wet years).
- City recycled water: Reliably provides about 1% (dry & wet years).

"Unconstrained" Demand Estimate

- Based on 2021-2025 Drought Risk Assessment unconstrained demand estimates (in 2020 Water Shortage Contingency Plan).
- Includes growth projections (population, housing, CII).
- DRA calendar year estimates for 2022 and 2023 prorated to estimate FY 2022-2023 demands.



Santa Rosa Water – Preliminary Assessment

Analysis shows:

- Adequate supply to meet unconstrained demands for July 2022 - June 2023 (supply equals demand).

Drought response actions include:

- City will remain in Stage 3 through 2022 (and beyond if winter is dry) to ensure adequate supply.
- City Stage 3 response actions will continue.

  Continue implementing all current actions.

  Do not anticipate initiating Water Shortage Charge (would add 7.5% to current water rates)

Santa Rosa – Preliminary Annual Shortage Report

Required reporting tables

- Table 1. Supplier Information
- Table 2. Water Demands
- Table 3. Water Supplies
- Table 4. Water Shortage Assessment
- Table 5. Planned Shortage Response Actions

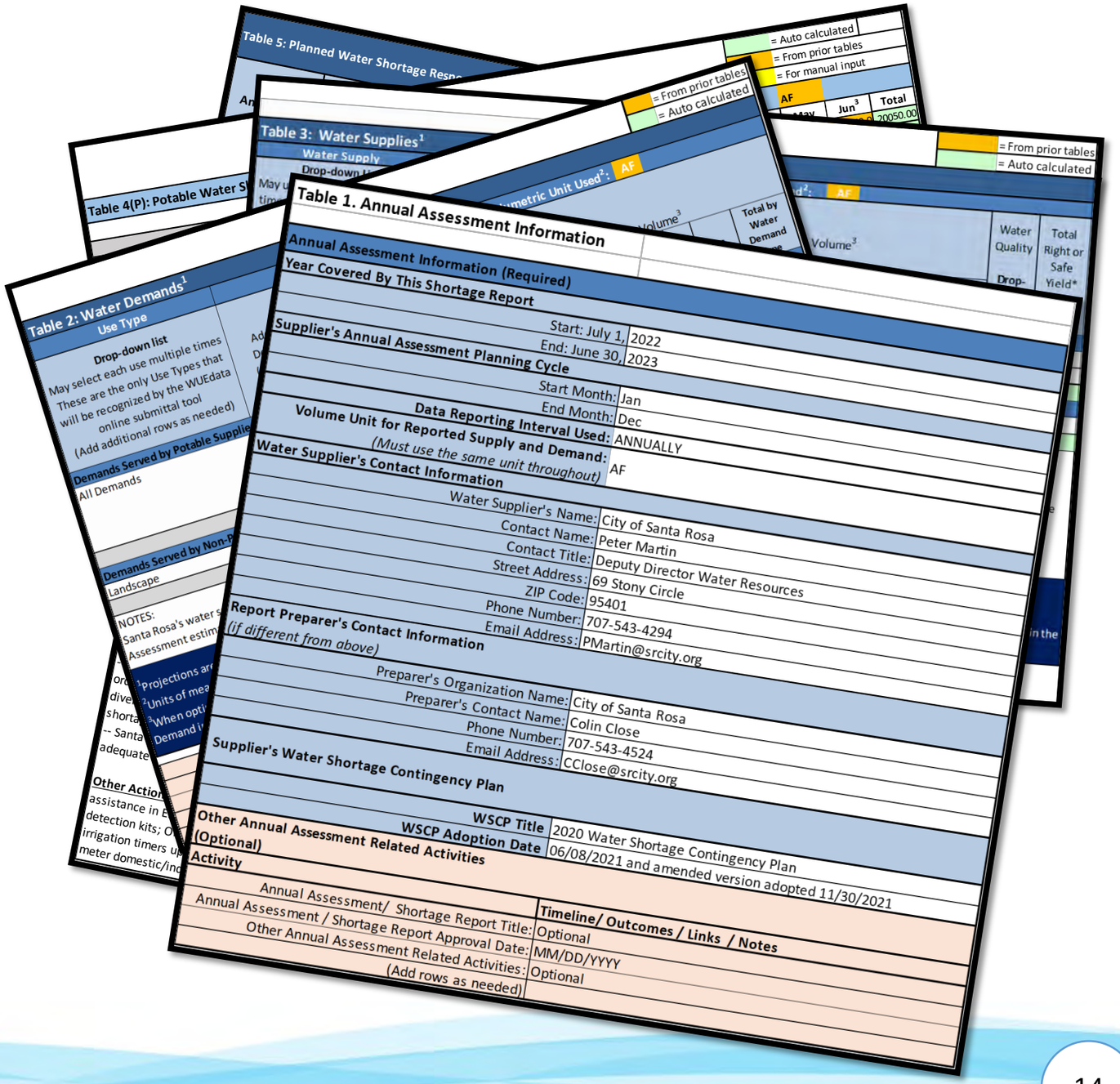


Table 1: Supplier Info

Table 1. Annual Assessment Information	
Annual Assessment Information (Required)	
Year Covered By This Shortage Report	
Start: July 1,	2022
End: June 30,	2023
Supplier's Annual Assessment Planning Cycle	
Start Month:	Jan
End Month:	Dec
Data Reporting Interval Used:	ANNUALLY
Volume Unit for Reported Supply and Demand: *(Must use the same unit throughout)*	AF
Water Supplier's Contact Information	
Water Supplier's Name:	City of Santa Rosa
Contact Name:	Peter Martin
Contact Title:	Deputy Director Water Resources
Street Address:	69 Stony Circle
ZIP Code:	95401
Phone Number:	707-543-4294
Email Address:	PMartin@srcity.org
Report Preparer's Contact Information *(if different from above)*	
Preparer's Organization Name:	City of Santa Rosa
Preparer's Contact Name:	Colin Close
Phone Number:	707-543-4524
Email Address:	CClose@srcity.org
Supplier's Water Shortage Contingency Plan	
WSCP Title	2020 Water Shortage Contingency Plan
WSCP Adoption Date	06/08/2021 and amended version adopted 11/30/2021
Other Annual Assessment Related Activities (Optional)	
Activity	**Timeline/ Outcomes / Links / Notes**
Annual Assessment/ Shortage Report Title:	Optional

Table 2:
Water Demands
(Jul 2022-Jun 2023)

= From prior tables
= Auto calculated

Table 2: Water Demands[1]

Use Type			Start Year: 2022	Volumetric Unit Used[2]: AF											
Drop-down list May select each use multiple times These are the only Use Types that will be recognized by the WUEdata online submittal tool (Add additional rows as needed)	Additional Description (as needed)	Level of Treatment for Non-Potable Supplies **Drop-down list**	Projected Water Demands - Volume[3]												
			Jul	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Total by Water Demand Type**
Demands Served by Potable Supplies															
All Demands	All revenue and nonrevenue water uses, including system water loss													20,050	20,050
Total by Month (Potable)			0	0	0	0	0	0	0	0	0	0	0	20,050	20,050
Demands Served by Non-Potable Supplies															
Landscape	Annual Data	Tertiary												140	140
Total by Month (Non-Potable)			0	0	0	0	0	0	0	0	0	0	0	140	140

NOTES:
Santa Rosa's water supplies are determined on an annual basis. Therefore demands have been projected on an annual basis, based on Drought Risk Assessment estimates (in 2020 Water Shortage Contingency Plan) for calendar years 2022 and 2023 (prorated to estimate Jul 2022 through Jun 2023).

[1]Projections are based on best available data at time of submitting the report and actual demand volumes could be different due to many factors.
[2]Units of measure (AF, CCF, MG) must remain consistent.
[3]When opting to provide other than monthly volumes (bi-monthly, quarterly, or annual), please see directions on entering data for Projected Water Demand in the Table Instructions.

Optional (for comparison purposes)	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Total**
Last year's total demand													0
Two years ago total demand													0
Three years ago total demand													0
Four years ago total demand													0

Table 3:
Water Supplies
(Jul 2022-Jun 2023)

= From prior tables

= Auto calculated

Table 3: Water Supplies[1]

Water Supply		Start Year: 2022							Volumetric Unit Used[2]: AF							
Drop-down List May use each category multiple times.These are the only water supply categories that will be recognized by the WUEdata online submittal tool (Add additional rows as needed)	Additional Detail on Water Supply	Projected Water Supplies - Volume[3]													Water Quality **Drop-down List**	Total Right or Safe Yield* (optional)
		Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total by Water Supply Type		
Potable Supplies																
Purchased/Imported Water	Sonoma Water												18,647	18,647		
Groundwater (not desal.)	City wells												1,403	1,403		
Total by Month (Potable)		0	0	0	0	0	0	0	0	0	0	0	20,050	20,050		0
Non-Potable Supplies																
Recycled Water	City Regional System												140	140		
Total by Month (Non-Potable)		0	0	0	0	0	0	0	0	0	0	0	140	140		0

Notes:
Santa Rosa's water supplies are determined on an annual basis. Therefore, supplies are being provided on an annual basis.
- About 93% of Santa Rosa's water is purchased from a wholesaler, Sonoma County Water Agency (Sonoma Water). Based on modeling for a dry winter 2022-23, Sonoma Water reports in its preliminary AWSDA that it has adequate supply to meet unconstrained demands for its customers including City of Santa Rosa, as the model shows supply equals demand for July 2022 through June 2023.
- City wells reliably produce about 7% of supplies each year (in dry and wet years).
- City recyled water for urban landscape irrigation consistently provides about 0.7% of total demand each year (in dry and wet years).

[1]Projections are based on best available data at time of submitting the report and actual supply volumes could be different due to many factors.
[2]Units of measure (AF, CCF, MG) must remain consistent.
[3]When opting to provide other than monthly volumes (bi-monthly, quarterly, or annual), please see directions on entering data for Projected Water Supplies in the Table Instructions.

Optional (for comparison purposes)	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total
eAR Reported Total Water Supplies													0

Table 4: Shortage Assessment (Jul 2022-Jun 2023)

= Auto calculated
= From prior tables
= For manual input

Table 4(P): Potable Water Shortage Assessment[1] — Start Year: 2022 — Volumetric Unit Used[2]: AF

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun[3]	Total
Anticipated Unconstrained Demand	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20050.0	20050.00
Anticipated Total Water Supply	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20050.0	20050.00
Surplus/Shortage w/o WSCP Action	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
% Surplus/Shortage w/o WSCP Action	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0%	0%
State Standard Shortage Level	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0	0
Planned WSCP Actions													
Benefit from WSCP: Supply Augmentation												0.0	0.0
Benefit from WSCP: Demand Reduction												4010.0	4010.0
Revised Surplus/Shortage with WSCP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4010.0	4010.0
% Revised Surplus/Shortage with WSCP	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	20%	20%

[1]Assessments are based on best available data at time of submitting the report and actual volumes could be different due to many factors.

[2]Units of measure (AF, CCF, MG) must remain consistent.

[3]When optional monthly volumes aren't provided, verify Tables 2 and 3 use the same columns for data entry and are reflected properly in Table 4 and make sure to use those same columns to enter the benefits from Planned WSCP Actions. Please see directions on the shortage balancing exercise in the Table Instructions. If a shortage is projected, the supplier is highly recommended to perform a monthly analysis to more accurately identify the time of shortage.

= Auto calculated
= From prior tables
= For manual input

Table 4(NP): Non-Potable Water Shortage Assessment[1] — Start Year: 2022 — Volumetric Unit Used[2]: AF

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun[3]	Total
Anticipated Unconstrained Demand: Non-Potable	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	140.0	140.00
Anticipated Total Water Supply: Non-Potable	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	140.0	140.0
Surplus/Shortage w/o WSCP Action: Non-Potable	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
% Surplus/Shortage w/o WSCP Action: Non-Potable	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0%	0%
Planned WSCP Actions													
Benefit from WSCP: Supply Augmentation												0.0	0.0
Benefit from WSCP: Demand Reduction												0.0	0.0
Revised Surplus/Shortage with WSCP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
% Revised Surplus/Shortage with WSCP	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0%	0%

[1]Assessments are based on best available data at time of submitting the report and actual volumes could be different due to many factors.

[2]Units of measure (AF, CCF, MG) must remain consistent.

[3]When optional monthly volumes aren't provided, verify Tables 2 and 3 use the same columns for data entry and are reflected properly in Table 4 and make sure to use those same columns to enter the benefits from Planned WSCP Actions. Please see directions on the shortage balancing exercise in the Table Instructions. If a shortage is projected, the supplier is highly recommended to perform a monthly analysis to more accurately identify the time of shortage.

Table 4: Shortage Assessment (Jul 2022-Jun 2023)

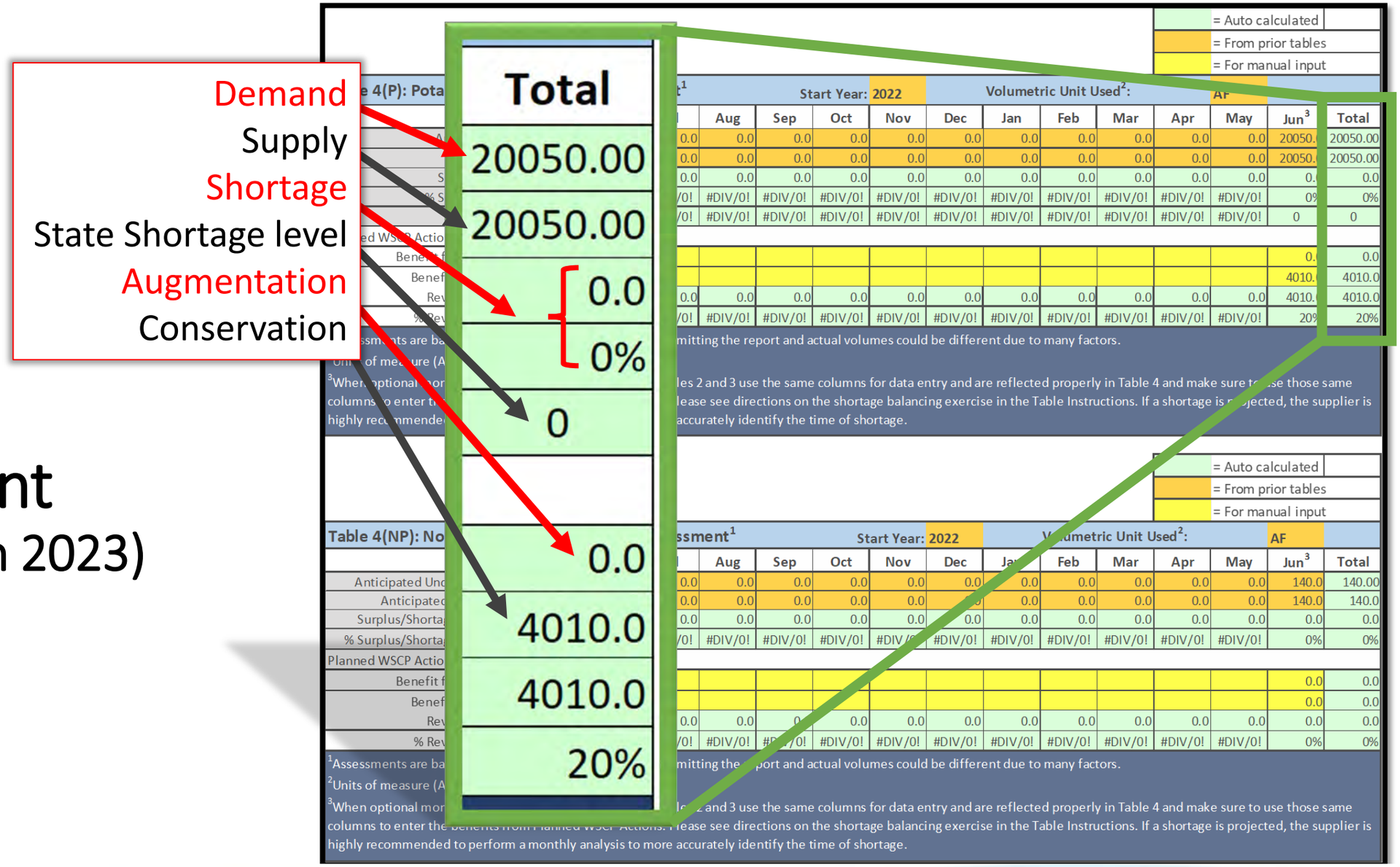


Table 5: Planned Shortage Response Actions (Jul 2022-Jun 2023)

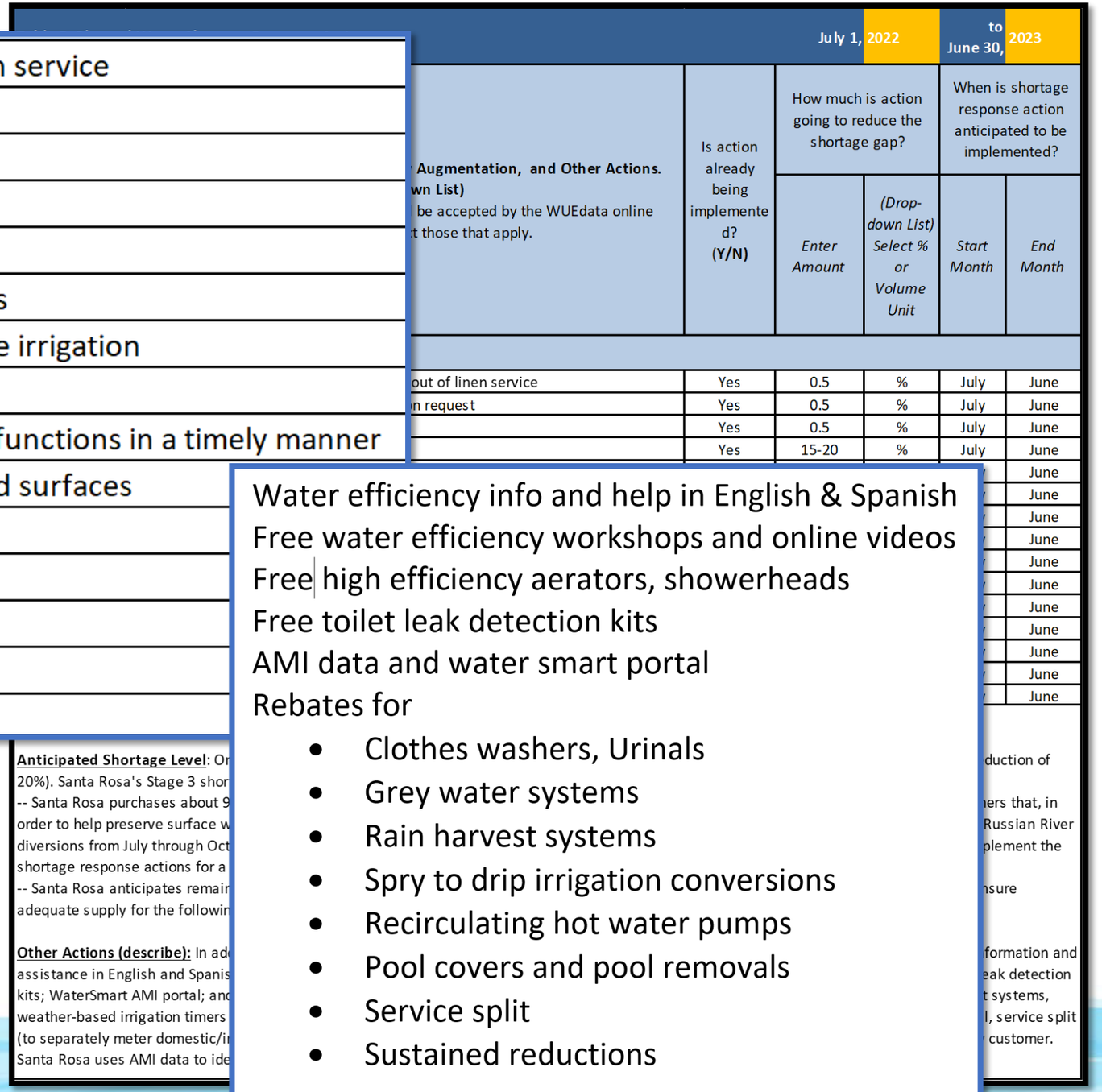
Table 5: Planned Water Shortage Response Actions			July 1, 2022		to June 30, 2023	
Anticipated Shortage Level Drop-down List of State Standard Levels (1 - 6) and Level 0 (No Shortage)	**ACTIONS: Demand Reduction, Supply Augmentation, and Other Actions. (Drop-down List)** These are the only categories that will be accepted by the WUEdata online submittal tool. Select those that apply.	Is action already being implemented? **(Y/N)**	How much is action going to reduce the shortage gap?		When is shortage response action anticipated to be implemented?	
			Enter Amount	*(Drop-down List) Select % or Volume Unit*	*Start Month*	*End Month*
Add additional rows as needed						
2	CII - Lodging establishment must offer opt out of linen service	Yes	0.5	%	July	June
2	CII - Restaurants may only serve water upon request	Yes	0.5	%	July	June
2	Decrease Line Flushing	Yes	0.5	%	July	June
2	Expand Public Information Campaign	Yes	15-20	%	July	June
2	Increase Water Waste Patrols	Yes	0.5	%	July	June
2	Landscape - Limit landscape irrigation to specific times	Yes	0.5	%	July	June
2	Landscape - Restrict or prohibit runoff from landscape irrigation	Yes	0.5	%	July	June
2	Offer Water Use Surveys	Yes	0.5	%	July	June
2	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	Yes	0.5	%	July	June
2	Other - Prohibit use of potable water for washing hard surfaces	Yes	0.5	%	July	June
2	Other - Require automatic shut of hoses	Yes	0.5	%	July	June
2	Other Actions (describe in Notes at bottom of Table)	Yes	0.5	%	July	June
2	Provide Rebates for Landscape Irrigation Efficiency	Yes	0.5	%	July	June
2	Provide Rebates for Turf Replacement	Yes	0.5	%	July	June
2	Provide Rebates on Plumbing Fixtures and Devices	Yes	0.5	%	July	June

NOTES:

Anticipated Shortage Level: On June 29, 2021, the Santa Rosa City Council declared a City Stage 3 water shortage (mandatory communitywide reduction of 20%). Santa Rosa's Stage 3 shortage falls within the State's Level 2 shortage category.
-- Santa Rosa purchases about 93% of its water from Sonoma County Water Agency (Sonoma Water). Sonoma Water has informed its retail customers that, in order to help preserve surface water supply, Sonoma Water is filing a TUCP with the State Board that includes a voluntary 20 percent reduction in Russian River diversions from July through October 2022, consistent with the Governor's Executive Order N-7-22 and the developing emergency regulation to implement the shortage response actions for a shortage level up to 20 percent (State Level 2).
-- Santa Rosa anticipates remaining in a City Stage 3 shortage through the end of calendar year 2022 (and beyond if dry conditions continue), to ensure adequate supply for the following year.

Other Actions (describe): In addition to the actions listed in the table above, Santa Rosa offers the following to all customers: Water efficiency information and assistance in English and Spanish; Free water efficiency workshops and DIY online videos; Free high efficiency aerators, showerheads, and toilet leak detection kits; WaterSmart AMI portal; and Rebates for residential and commercial clothes washers, high efficiency urinals, grey water systems, rain harvest systems, weather-based irrigation timers upgrades, spray to drip irrigation conversions, residential recirculating hot water pumps, pool covers, pool removal, service split (to separately meter domestic/indoor use from irrigation use), and demonstrated sustained reductions achieved through other means proposed by customer. Santa Rosa uses AMI data to identify high water uses (and alerts customer via letters) and leaks (and follows up with water waste enforcement).

- CII - Lodging establishment must offer opt out of linen service
- CII - Restaurants may only serve water upon request
- Decrease Line Flushing
- Expand Public Information Campaign
- Increase Water Waste Patrols
- Landscape - Limit landscape irrigation to specific times
- Landscape - Restrict or prohibit runoff from landscape irrigation
- Offer Water Use Surveys
- Other - Customers must repair leaks, breaks, and malfunctions in a timely manner
- Other - Prohibit use of potable water for washing hard surfaces
- Other - Require automatic shut of hoses
- Other Actions (describe in Notes at bottom of Table)
- Provide Rebates for Landscape Irrigation Efficiency
- Provide Rebates for Turf Replacement
- Provide Rebates on Plumbing Fixtures and Devices



July 1, 2022 to June 30, 2023

Augmentation, and Other Actions. wn List) be accepted by the WUEdata online t those that apply.	Is action already being implemented? (Y/N)	How much is action going to reduce the shortage gap?		When is shortage response action anticipated to be implemented?	
		Enter Amount	*(Drop-down List) Select % or Volume Unit*	*Start Month*	*End Month*
out of linen service	Yes	0.5	%	July	June
n request	Yes	0.5	%	July	June
	Yes	0.5	%	July	June
	Yes	15-20	%	July	June
					June
					June
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					June
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					June
					June

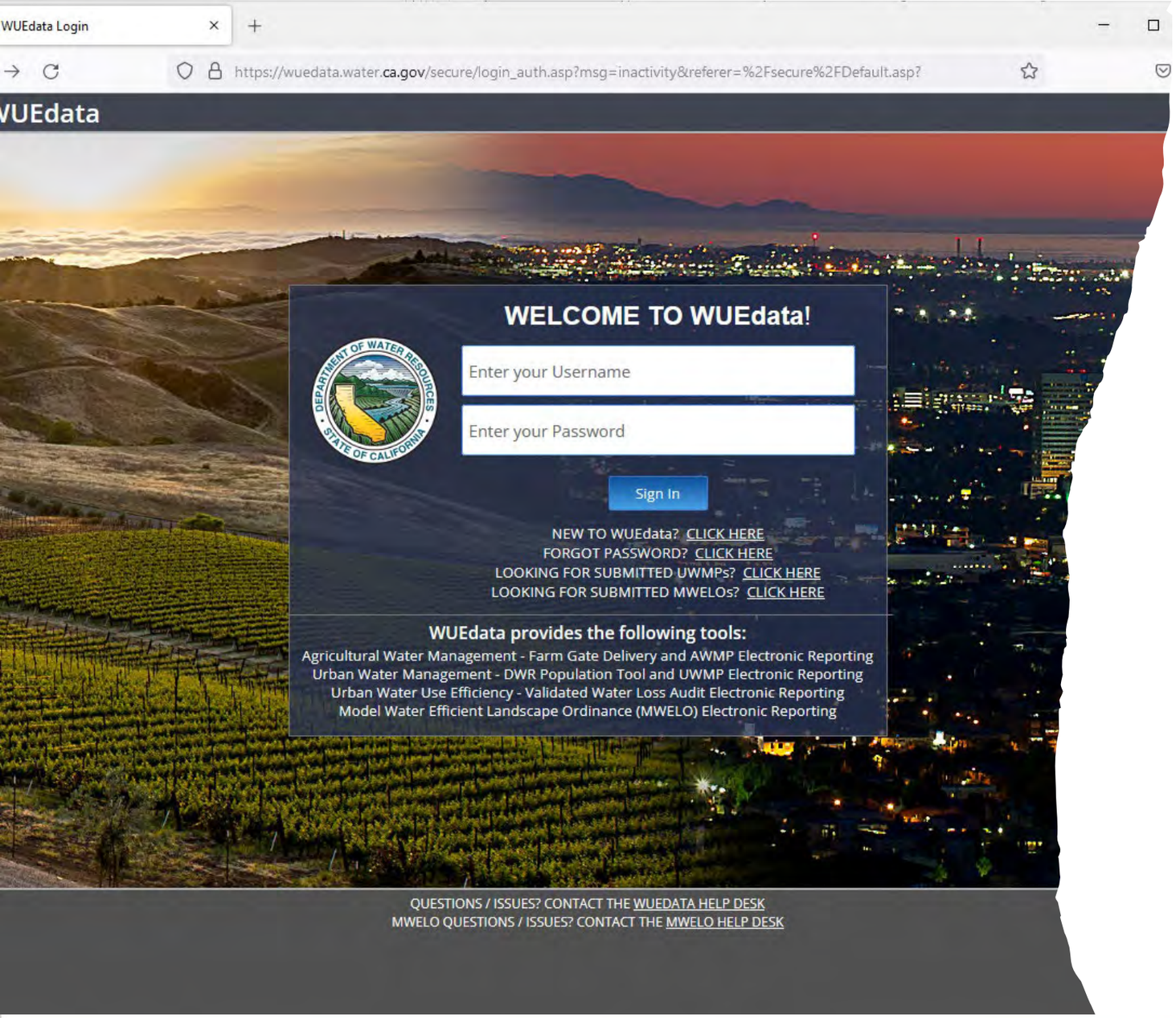
Anticipated Shortage Level: Or
20%). Santa Rosa's Stage 3 shor
-- Santa Rosa purchases about 9
order to help preserve surface w
diversions from July through Oct
shortage response actions for a
-- Santa Rosa anticipates remair
adequate supply for the followir

Other Actions (describe): In ad
assistance in English and Spanis
kits; WaterSmart AMI portal; and
weather-based irrigation timers
(to separately meter domestic/ir
Santa Rosa uses AMI data to ide

duction of
ers that, in
Russian River
plement the
nsure
formation and
eak detection
t systems,
l, service split
customer.

Water efficiency info and help in English & Spanish
Free water efficiency workshops and online videos
Free high efficiency aerators, showerheads
Free toilet leak detection kits
AMI data and water smart portal
Rebates for

- Clothes washers, Urinals
- Grey water systems
- Rain harvest systems
- Spry to drip irrigation conversions
- Recirculating hot water pumps
- Pool covers and pool removals
- Service split
- Sustained reductions



Final Assessment due July 1, 2022

- No substantive changes anticipated in water supply outlook.
- No changes anticipated in water demand estimates.
- No changes anticipated in water shortage response actions.

Santa Rosa Water is here to help you save!

For WaterSmart Resources, visit:

srcity.org/WaterSmart

For the latest drought updates, visit:
srcity.org/SaveWater