

# SB 610 Water Supply Assessment for Santa Rosa Downtown Station Area Specific Plan Update



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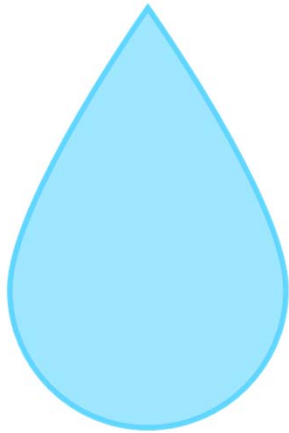
City Council

Colin Close, Senior Water Resources Planner

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# Overview

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- Background – SB 610
- Project Information
- Estimated Project Water Demand
- Estimated Total Water Demand
- Existing and Projected Water Supply
- Sufficiency Determination
- Recommendation

# Background - SB 610

- SB 610 adopted by State in 2002
- Requires water suppliers to
  - Analyze total projected water demand and supply
  - For next 20 years under normal and dry water year conditions
  - Determine sufficiency of water supplies for the Project
- This Water Supply Assessment (WSA) will be included in the CEQA document for the Project.

# Project Information

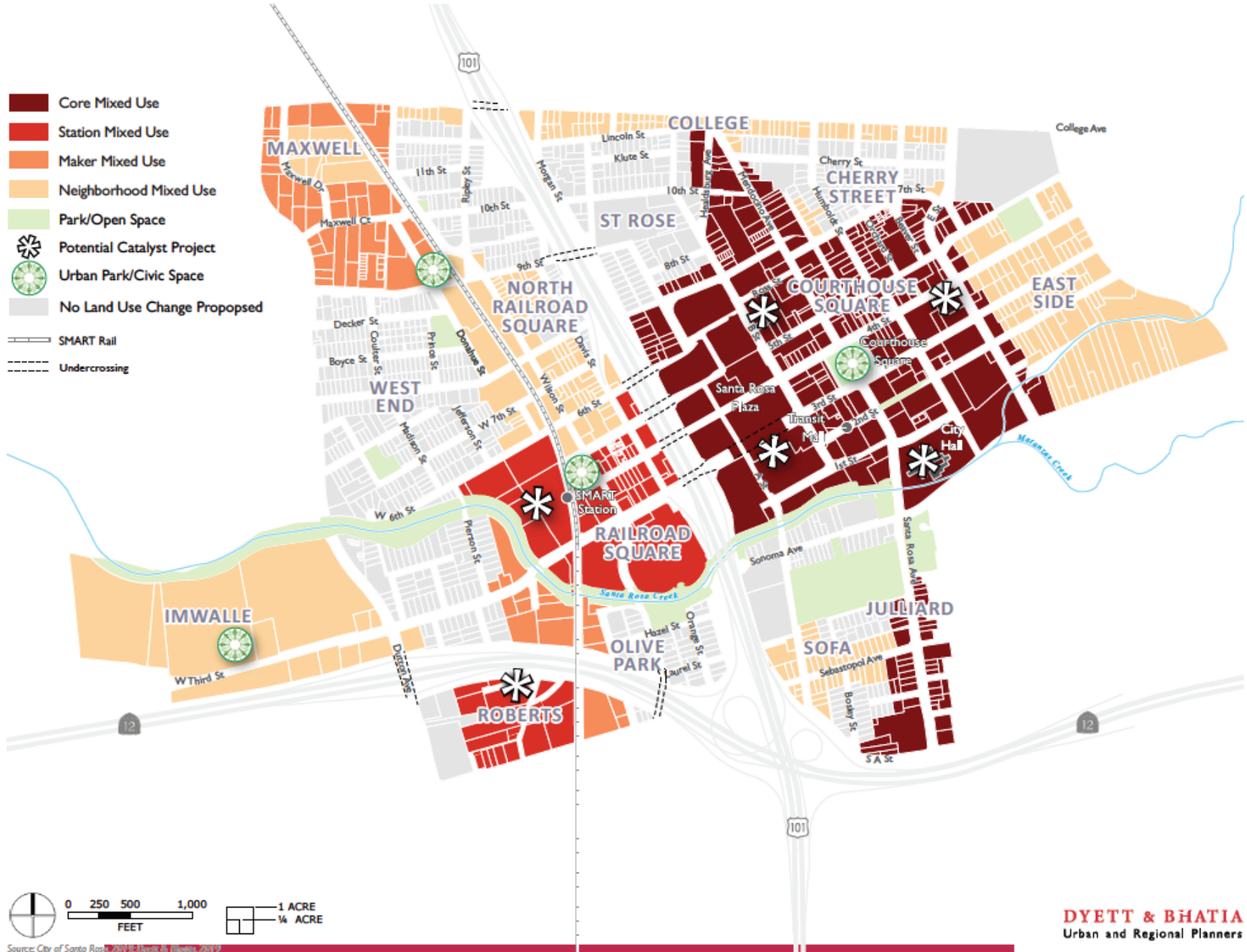
## Santa Rosa Downtown Station Area Specific Plan Update

- Proposes updates to 2007 Downtown Station Area Specific Plan (2007 DSASP)
  - 2007 DSASP was subject to a WSA
  - 2007 DSASP amended 2035 General Plan

## Water Supply Assessment for updated Project

- Analyzes City's projected water demand and water supply through 2040
- Assumes Project buildout (and subsequent increase in water demand) will occur by 2040

**Map 1: Preferred Plan Concept: Land Use Changes**



Source: City of Santa Rosa, 2019; Dyett & Bhatia, 2019

# Proposed Project Development

## Residential Equivalency Factors (REFs)

Land Use Category	Project Area Square Feet (SF)	Residential Units	REF Conversion	REFs
Residential Detached	N/A	78	1 REF per unit	78
Residential Attached	N/A	7,321	$\frac{2}{3}$ REF per unit	4,881
Office space	(214,396)	N/A	1 REF per 500 SF	(430)
Commercial/Retail	1,259,481	N/A	1 REF per 500 SF	2518
Public/Institutional	555,669	N/A	1 REF per 500 SF	1,110
General Industrial	(169,046)	N/A	1 REF per 1,300 SF	(131)
Project Total	1,431,708	7,399		8,026

# Estimated Net Increase in Project Water Demand

## Project water demand projection

- ✓ 8,026 REFs = 1,845 acre-feet per year (AFY)
  - Based on 70,000 gallons/yr per Residential Equivalency Factor
  - Plus factor for nonrevenue water

## 2007 DSASP water demand projection

- ✓ 2,700 REFs = 975 AFY
  - Based on 110,000 gallons/yr per Residential Equivalency Factor
  - Plus factor for nonrevenue water
  - General Plan amended to include projected demand

## **Estimated Net increase in demand = 870 AFY**

- ✓ 1,845 AFY (Project) - 975 AFY (2007 DSASP) = 870 AFY

# Total Water Demand Projections (AFY)

Planned and future uses plus Project

Demand	2020	2025	2030	2035	2040
2015 UWMP *	24,289	25,730	26,946	28,243	28,280
Project	0	217	565	739	870
Total Demand	24,289	25,947	27,511	28,982	29,150

\* *Urban Water Management Plan*



## Existing and Projected Water Supply (AFY)

Supply Sources	2018 actual	2020	2025	2030	2035	2040
Sonoma Water	16,256	29,100	29,100	29,100	29,100	29,100
City Groundwater	0	2,300	2,300	2,300	2,300	2,300
City Recycled Water	140	140	140	140	140	140
Total	16,396	31,540	31,540	31,540	31,540	31,540

# Supply and Demand Comparison (AFY)

Normal Water Year

Comparison	2020	2025	2030	2035	2040
Supply	31,540	31,540	31,540	31,540	31,540
Demand	24,289	25,947	27,511	28,982	29,150
Difference	7,251	5,593	4,029	2,558	2,390

# Supply and Demand Comparison (AFY)

## Single-Dry Year Conditions

Single-dry year	2020	2025	2030	2035	2040
Supply	24,289	22,948	23,644	24,408	24,282
2015 UWMP demand	24,289	22,948	23,644	24,408	24,282
Project demand	0	217	565	739	870
Total Demand	24,289	23,165	24,209	25,147	25,152
Difference	0	-217	-565	-739	-870
% of supply	0.0%	-0.9%	-2.4%	-3.0%	-3.6%
% of demand	0.0%	-0.9%	-2.3%	-2.9%	-3.5%

# Supply and Demand Comparison (AFY)

## Multiple-Dry Year Conditions

Multiple-dry year	2020	2025	2030	2035	2040
Supply	24,289	25,730	26,946	28,243	28,280
2015 UWMP demand	24,289	25,730	26,946	28,243	28,280
Project demand	0	217	565	739	870
Total Demand	24,289	25,947	27,511	28,982	29,150
Difference	0	-217	-565	-739	-870
% of supply	0.0%	-0.8%	-2.1%	-2.6%	-3.1%
% of demand	0.0%	-0.8%	-2.1%	-2.5%	-3.0%

# Sufficiency Determination

The WSA finds that Santa Rosa has adequate existing and projected water supplies to meet projected demands plus the demand associated with this Project.

## Recommendation

It is recommended by the Water Department that the Council, by resolution, approve the Water Supply Assessment for the Santa Rosa Downtown Station Area Specific Plan Update.