MARIN WATER

Public Hearing: Updated 2020 Urban Water Management Plan

Board of Director's Meeting

December 19, 2023

Agenda

- Urban Water Management Plans (UWMP)
- Edited Sections of the UWMP
- Water Shortage Contingency Plan Background and Revisions
- Recommendation

Urban Water Management Plan

- Urban Water Management Plans are prepared by urban water suppliers every 5 years to support long-term resource planning and water supply sustainability
- Water Code prescribes specific analysis to describe and quantify historical and projected water demands and supplies over a 20-year planning horizon
- Includes a Water Supply Assessment of projected demands and supplies under normal and drought year conditions
- Discusses water conservation measures implemented and planned
- Includes the Water Shortage Contingency Plan to address supply shortfalls

Background and Rationale for Update

- 2020 Urban Water Management Plan (UWMP) finalized in June 2021
- In December 2021, Regional Housing Needs Assessment (RHNA) Plan was adopted and updated in March 2022 resulting in need to adjust water demand projections in UWMP
- Water Shortage Contingency Plan was updated in February 2023
- Water Shortage Contingency Plan (WSCP) edits to align with District water efficiency goals

Updated UWMP Sections

- Future Population (Section 3.1)
- Projected Water Demand (Section 4.2 and subsections)
- Supply And Demand Assessment (Section 7.3)
- Water Shortage Contingency Planning (Section 8.2)

Future Population

- Projected population adjusted per 2022 Regional Housing Needs Allocation (RHNA)
- Updated population are consistent with SWSA

	2020	2025	2030	2035	2040	2045
2020 UWMP	191,269	197,939	201,987	204,750	208,324	211,961
Updated UWMP (with RHNA)	191,269	202,510	218,444	223,251	227,005	230,996

PROJECTED Potable Water Demands

- RHNA assigns the required additional housing units for Single-Family and Multi-Family Units
- These units were translated into population and water service connections to determine the impact on demands
  - Additional Single-Family Connections: 4,266
  - Additional Multi-Family Connections: 1,145
- In 2045, projected demand is 2,401 acft higher than the 2020 UWMP
  - Forecasted demands projected to increased by 8%

Supply and Demand Assessment

- The Updated Forecast demands are utilized to determine the prescribed Supply and Demand Assessments
- Prescribed analysis of Normal Year, Single Dry Year, and Multiple Dry Years
  - Supply is unchanged from 2020 UWMP analysis
  - All scenarios result in a 2,401 acft increase in demands and no supply deficits

Water Shortage Contingency Plan

- Water Shortage Contingency Plan was updated in February 2023
- Provides an action plan for responding to water supply shortfalls
  - Establishes Shortage Levels and Shortage Response Actions
  - Outlines District Actions
  - Detailed restrictions on end use to achieve each Shortage Level
- Proposed update focuses on changing Stage 3 restrictions for golf courses

Demand Reduction Actions- Golf Course

- The existing Stage 3 requirement unintentionally discourages the implementation of water efficiency measures for golf courses in non-drought years
  - Current WSCP: Golf course irrigation shall be reduced by 30% compared to the average use of the last three normal years or shall be irrigated to the sites Maximum Applied Water Allowance, whichever is less.
- Due to ongoing water efficiency, golf courses currently irrigate to ~70% of MAWA, linking reduction levels in drought to average water use disincentivizes water efficiency and potentially encourages golf courses to irrigate to the maximum threshold.
  - If all golf course irrigation aligned with MAWA, current use may increase by 230 acft/year.
    - MAWA: 860 acft/year
    - Average of 3 Normal Years: 630 acft/year
  - Cumulative impact of water demands through 2045 (assuming four Stage 3 occurrences): 4,370 acft

Revised Stage 3 Demand Reduction Action

- Proposed revision is intended to encourage and maintain water efficiency at golf courses
- Updated Stage 3 Response Action:
  - Golf course irrigation, with potable or raw water, shall be reduced by *either* 30% compared to the average use of the last three normal years or shall be *deficit* irrigated *by 30% of* ~~to~~ the sites Maximum Applied Water Allowance, whichever is ~~less~~ more.
- All other Demand Reduction Actions remain unchanged.
- WSCP proposed edits are intended align with District water efficiency goals

Recommendation

Recommendation: Approve Resolution Adopting the Updated 2020 Urban Water Management Plan and the Water Shortage Contingency Plan