Water Supply Review

Bay Planning Coalition
September 9, 2022
Overview

- Marin Water Overview
- Drought Response
- Water Supply Resiliency Roadmap
- Next Steps
Marin Water Overview

- California’s oldest municipal water district (Chartered in 1912)
- Marin County’s largest drinking water provider, serving more than 191,000 people in central and southern Marin
- Protecting and preserving 22,000 acres of watershed land on Mt. Tamalpais
Drought Conditions

- Severe drought conditions 2020-21
  - Less rainfall than ‘76-’77
  - 2021 water year was second driest in 150 yrs of data
- Reservoir levels dropped historically low
- Planning efforts for an emergency water supply intertie
Record high rainfall events in October & December 2021

Storage levels have improved drastically:

- Current storage levels 106% of historical average
Strategic Water Supply Assessment: Key Project Scope Elements

Understanding Current Risks & Establishing Goals

- Confirm Water Supply Strategy and Goals
- Develop Decision Support Model
- Develop Water Supply and Demand Scenarios

Identifying & Evaluating Alternatives

- Develop Water Supply Alternatives
- Conduct Evaluation of Water Supply Alternatives

Recommendations & Path Forward

- Recommendations
- Prepare Roadmap and Report
Strategic Water Supply Assessment Process: Water Supply and Demand Scenarios

- Scenarios allow us to explore plausible future conditions and identify promising solutions
  - Historical droughts
  - Climate projections
  - Paleo reconstructions
  - Stress tests

Scenarios are alternative views of how the future might unfold. Scenarios are not predictions or forecasts of the future.
Marin County Water Year Average Temperature and Total Precipitation Anomaly (1886-2021)

- Warm, Dry
- Cool, Dry
- Warm, Wet
- Cool, Wet

Average Temperature Anomaly (F)

Total Precipitation Anomaly (inches)

2022?
Marin County Water Year Average Temperature and Total Precipitation Anomaly (Climate Projections 2005-2099)

- Warm, Dry
- Warm, Wet
- Cool, Dry
- Cool, Wet

Average Temperature Anomaly (F) vs. Total Precipitation Anomaly (inches)

- Average Temperature Anomaly
- Total Precipitation Anomaly

Years: 2006-2076

Note: The diagram shows the projected temperature and precipitation anomalies for each year from 2005 to 2099, categorized into four climate types: Warm, Dry, Warm, Wet, Cool, Dry, and Cool, Wet.
Water Management Alternatives under Consideration

- Conservation
- Desalination
- Recycled Water
- Local Surface Storage
- Sonoma-Marin Partnerships
- Water Purchases with Conveyance through Bay Interties
Summary

- Continue efforts on Water Use Efficiency (currently at 25% conservation)
- Develop Water Supply Resiliency Roadmap by end of 2022
- Continue efforts on regional collaboration and partnering