



“A multicounty agency authorized to plan for and acquire supplemental water supplies, encourage water conservation and use of recycled water on a regional basis.”

[BAWSCA Act, AB2058 (Papan-2002)]

BAWSCA’s 2025 Regional Water Demand and Conservation Study

RMCP Meeting

April 14, 2026

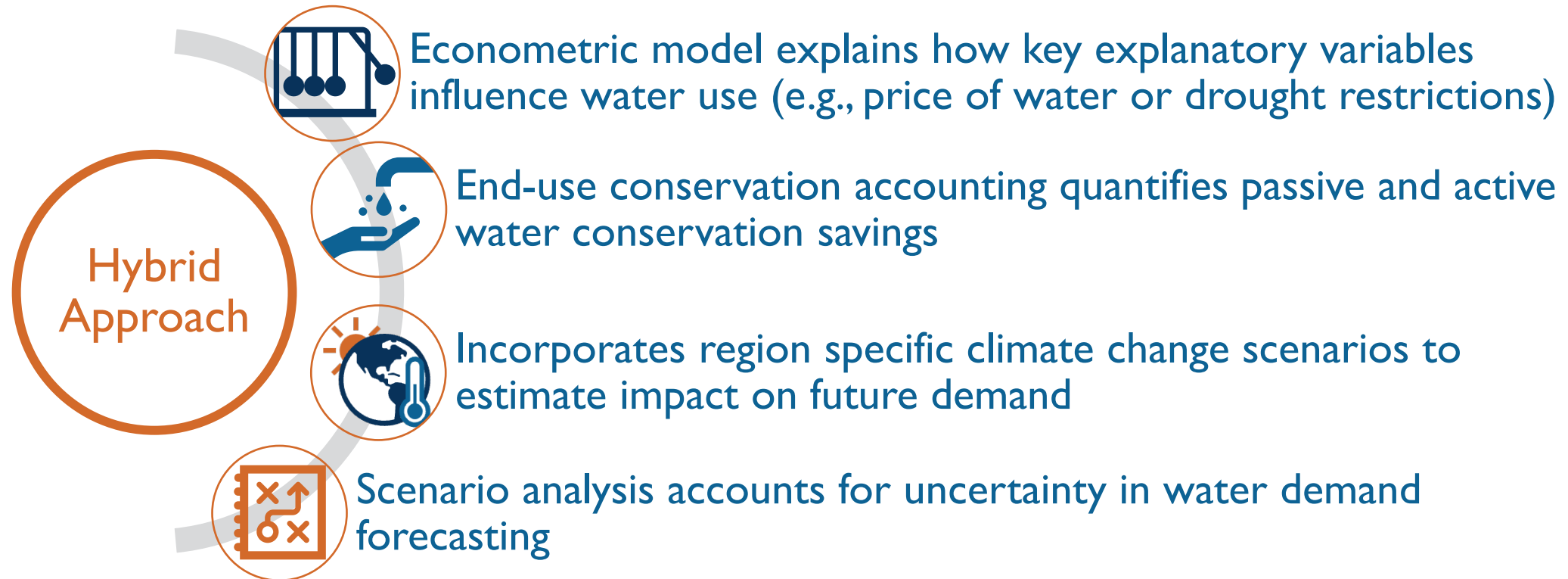


Demand Projections Support Individual Agency and Regional Planning Efforts

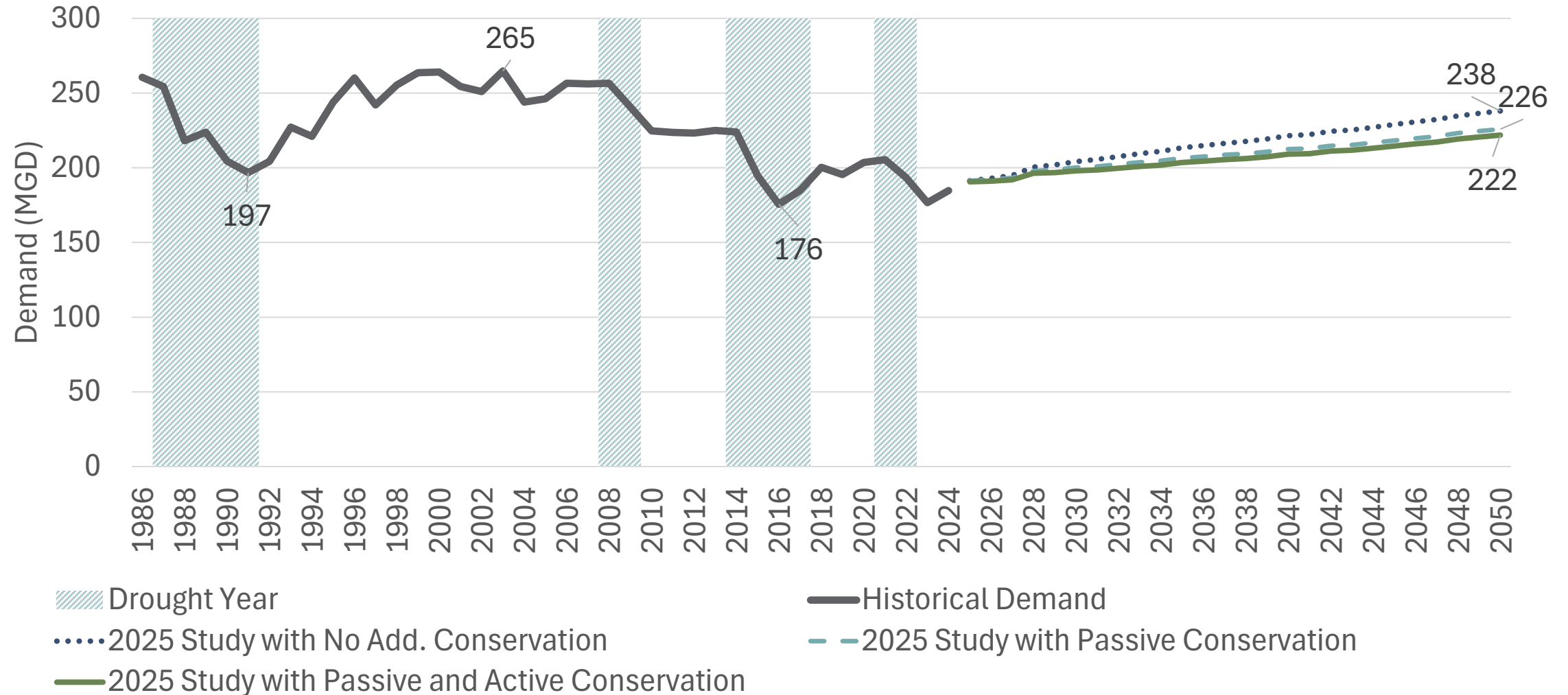
- BAWSCA facilitates update to agency-specific demand projections every five years
- Updated demand projections support local and regional planning efforts
 - Urban Water Management Plans (UWMPs)
 - Compliance with new state-wide water use efficiency regulations
 - BAWSCA's Long-Term Regional Water Supply Strategy (Strategy 2050)
- Baseline demand forecasts reflect agency-approved demographic projections
 - Align with individual agency planning documents (e.g., City-wide Master Plans and approved developments)
- Approach and assumptions comply with CA state law under Urban Water Management Planning Act
 - Unconstrained demand (i.e., absent water supply restrictions)

Regional Study Utilizes Best Practices for Demand Forecasting

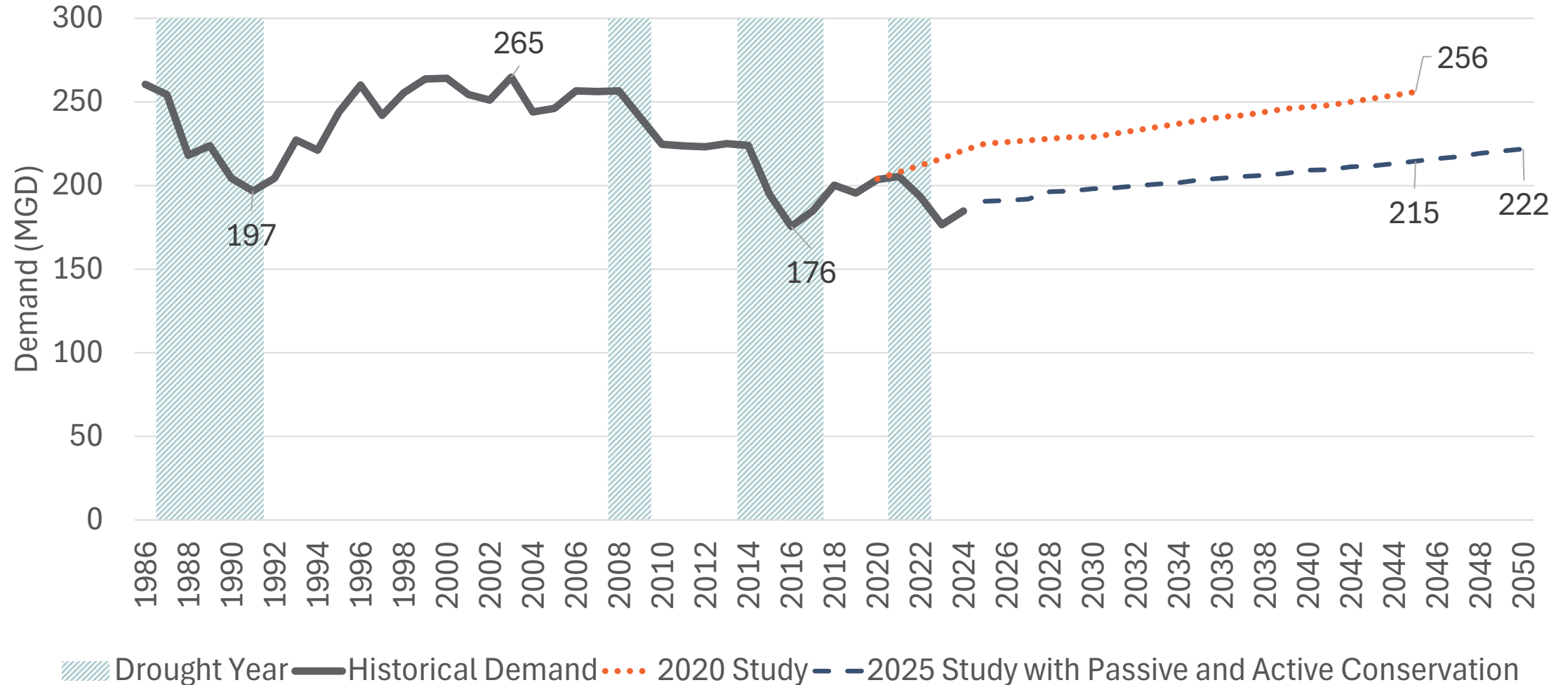
- Hybrid water demand modeling framework integrates econometric regression techniques with end-use conservation accounting



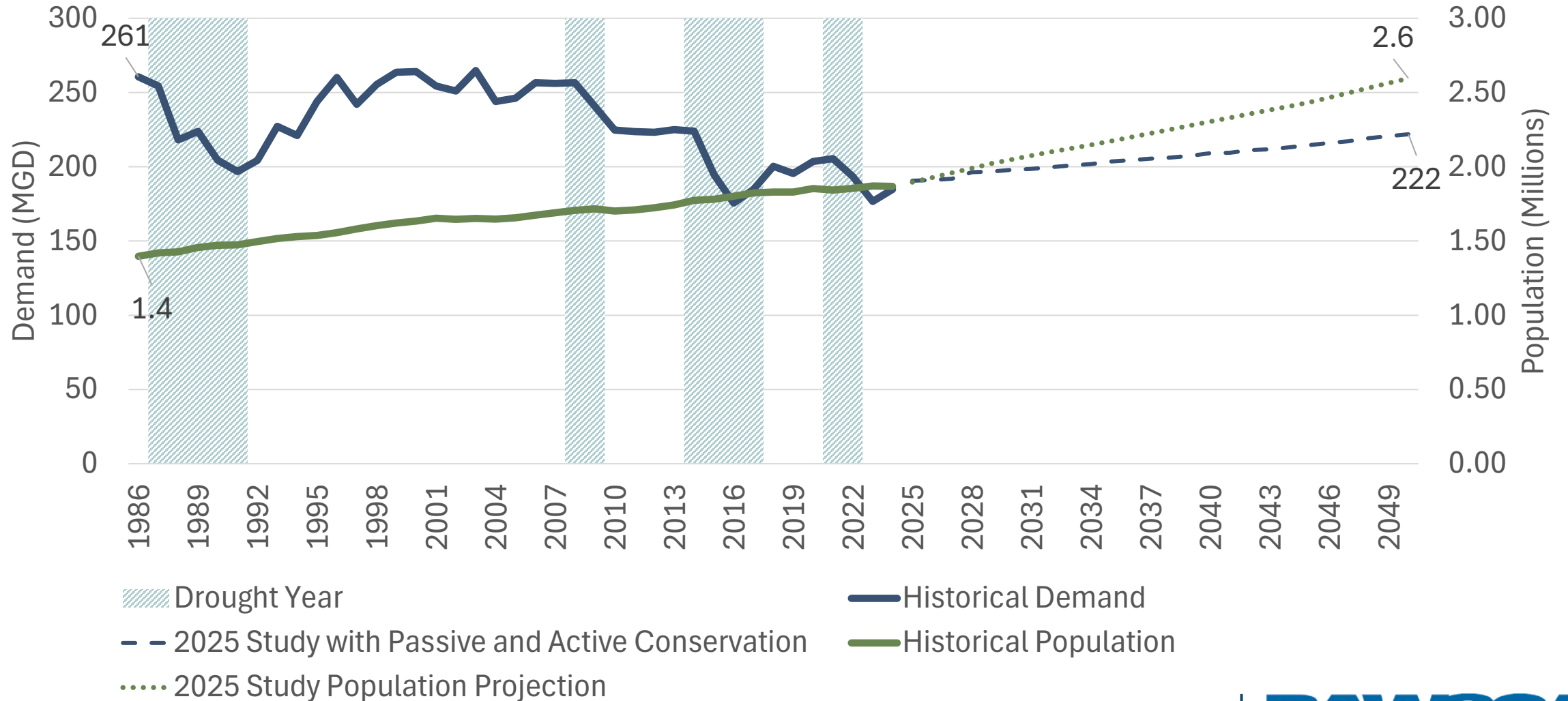
Regional Demand is Projected to Increase Gradually Through 2050, Moderated by Ongoing Conservation and Efficiency



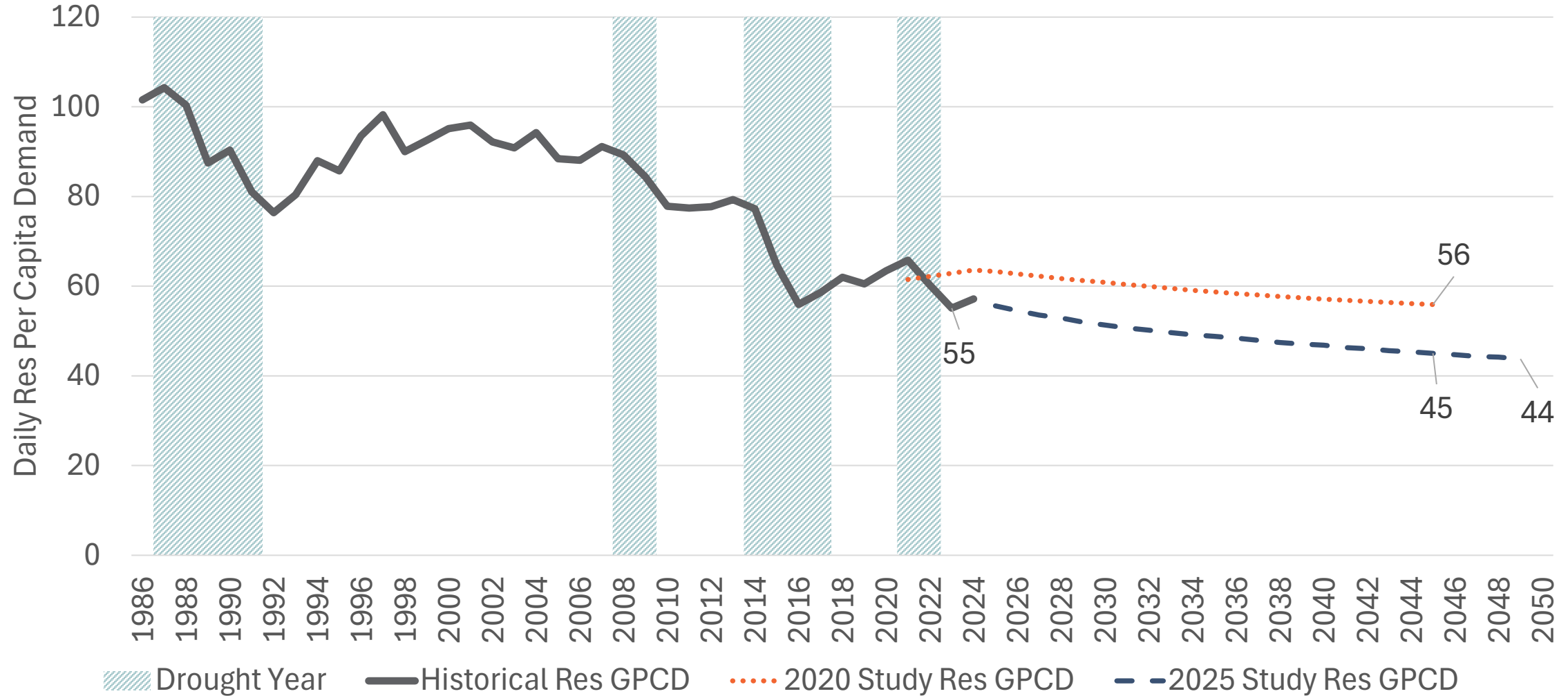
2050 Demand is Projected to be 13% Less Than Prior 2045 Demand Projection



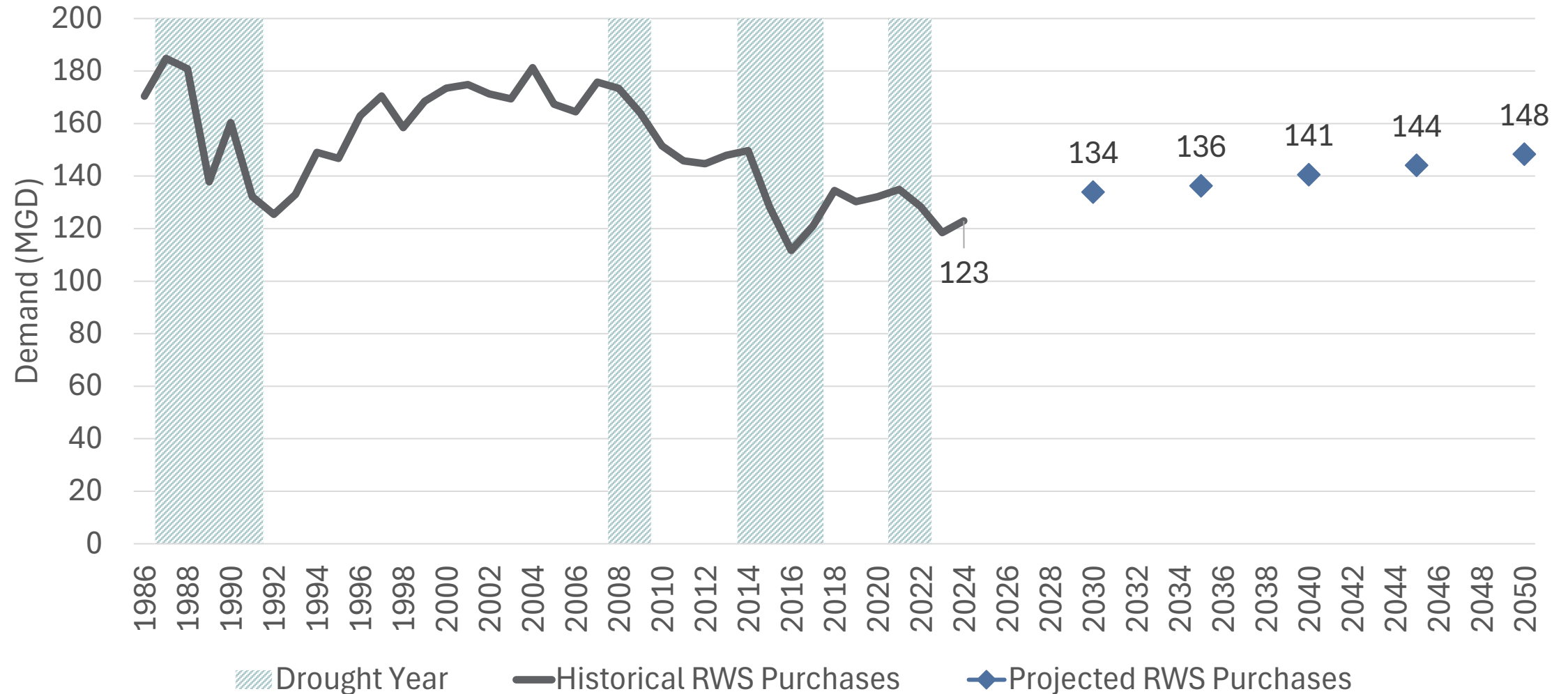
From 1986 to 2050, Projected Population Increases 86% while Demand Decreases 15%



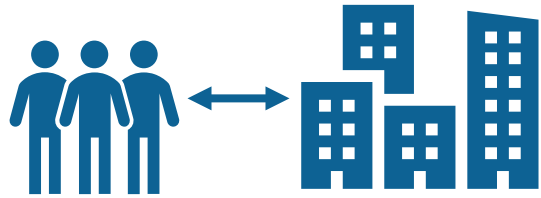
Residential Per Capita Use in 2050 Projected to Be 23% Less than Lowest Recorded Use for Region



SF Regional Water System Purchases Projected to Stay Below 184 MGD Supply Assurance Through 2050

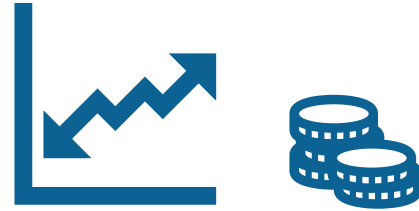


Water Demand Forecasting is Sensitive to Uncertainties in Assumptions Around Future Condition



Population Growth & Demographic Shifts

Sensitivity: Migration patterns, urbanization trends



Economic Development & Industrial Activity

Fluctuations: Economic output, market demand for goods/services
Sensitivity: Changes in water-intensive industries (biotech, data centers)



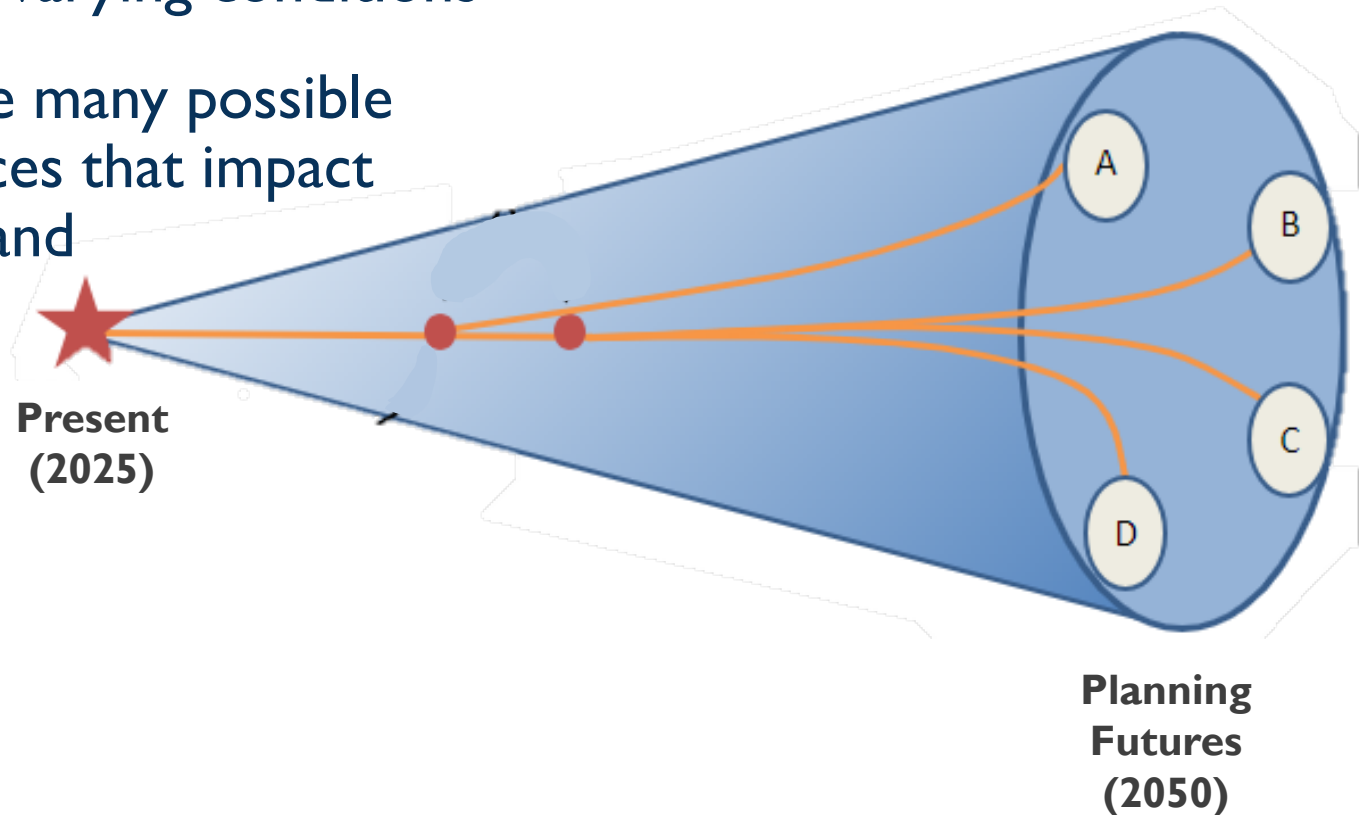
Technological Adoption & Policy

Uncertainty: Adoption of water-saving devices and water reuse systems
Influence: Behavioral changes and policies

- Water agencies do not have control over the external factors that ultimately determine whether the current forecast correctly anticipates future conditions

Alternative Scenario Analysis Provides Practical Framework to Explore a Range of Plausible Futures

- Scenario analysis enables water suppliers to test assumptions and assess the resilience of strategies under varying conditions
- Developed by considering the many possible combinations of external forces that impact member agency's water demand



Five Alternative Scenarios Developed Collaboratively with Member Agencies, External Stakeholders, and SFPUC

- Three workshops and several one-on-one meetings held over two-month period
- Feedback categorized into four general groups aligning with water demand model inputs



Demographic and Development

- Housing
- Employment
- Population
- Housing density



Socioeconomic

- Income/Output (GDP)
- Industry types
- Household size



Conservation and Pricing

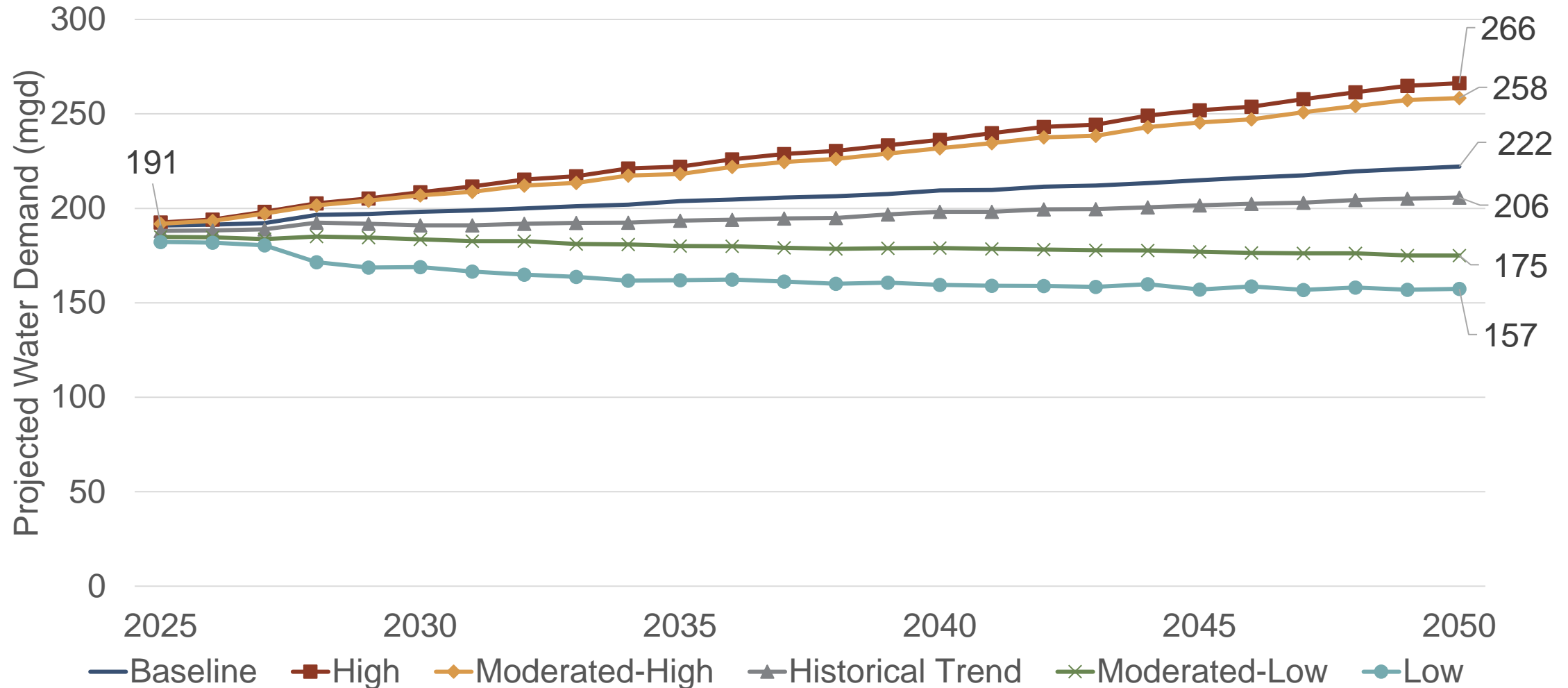
- Water rates/pricing
- Passive conservation
- Active conservation



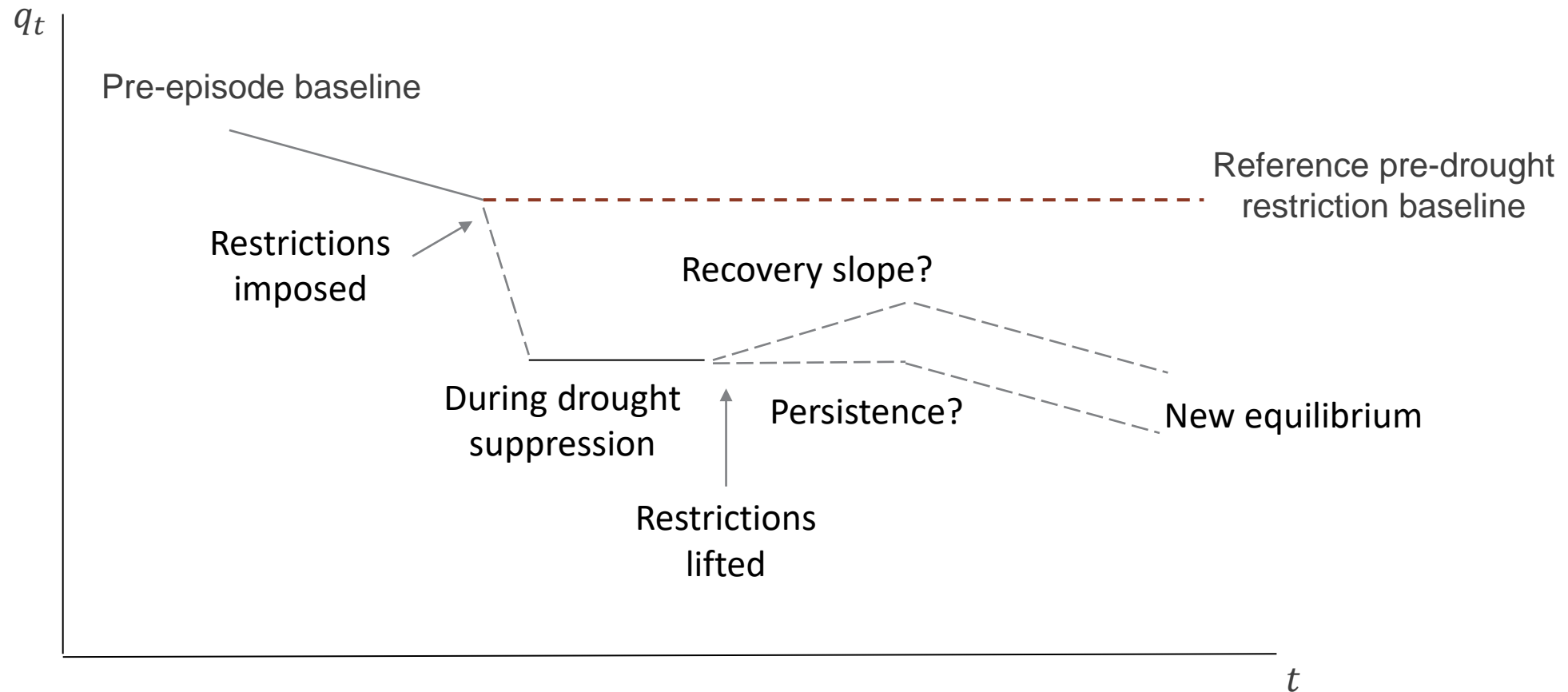
Climate and Other

- Climate and weather
- Potential large users
- Other regional trends/concerns

Comparison of Water Demand Scenarios



Drought Task: Simulate Impacts of Projected Future Droughts Considering the Potential for Future Demand Gardening



Summary and Next Steps

- Regional water demand is projected to remain relatively flat or grow only slightly through the planning period
 - 37% increase in population by 2050
- Growth is tempered by compounding passive conservation savings
 - Passive and active conservation savings are projected to reduce demand by 7%
- BAWSCA agencies continue to rely on Regional Water System purchases within the 184 mgd Supply Assurance
- BAWSCA will continue to work with Hazen to evaluate future uncertainty, particularly around drought