CUWA’s mission is to provide a forum for combining the expertise and resources of its member agencies to advance a reliable, high-quality water supply for the State's current and future urban water needs. Climate change presents uncertainties that are important to consider for future water supply reliability. CUWA’s member agencies are taking steps on many levels to address climate change, as summarized in the following policy principles.

Science

- CUWA acknowledges the far-reaching consequences of climate change impacts and the evolving state of climate change science, which dictate deliberate action to protect water supply reliability. The existing state of knowledge and remaining uncertainties about the scale and timing of impacts associated with climate change warrant immediate, incremental, and iterative strategies and actions. Many CUWA agencies utilize climate change science and will incorporate new developments into their planning.

Mitigation

- CUWA recognizes the importance of the water-energy nexus in mitigating climate change. CUWA member agencies support continued investment in programs to provide water savings and associated reductions in energy use and greenhouse gas emissions to help mitigate climate change. CUWA agencies are also committed to developing renewable energy sources.

- Cap-and-Trade revenues and other climate change sources of revenue should, in part, be invested in water-related mitigation efforts. As noted in the California Municipal Utilities Association (CMUA)/CUWA Joint Policy Principles on Cap and Trade General Auction Revenues, these revenues are an important source of funds to re-invest in other water-related projects that reduce the carbon footprint of the water sector.

Adaptation

- CUWA supports the development of flexible climate change adaptation strategies. CUWA agencies are taking steps to assess potential effects of climate change and develop flexible strategies that enable adaptation to changing future conditions to maintain reliable high quality water supplies.

- Early actions should focus on “no regrets” strategies. Given the high degree of uncertainty with climate change impacts, near-term agency investments, in most cases, are best directed toward actions that would be effective across a broad spectrum of possible future scenarios. Other adaptation activities can be added as climate change science evolves.

- CUWA considers a resilient water system to be a key strategy in adapting to climate change. Resilience is achieved through the following:
  - Diversifying water supply portfolios and including relatively drought-proof supplies (e.g., water reuse, conservation and desalination),
  - Securing reliability of current supplies, and
− Implementing regional cooperative practices and projects (e.g., joint storage management). Resilience is enabled by infrastructure or processes that can adapt to changing conditions, including:
  • Flexible infrastructure to optimize multiple sources and to enable sharing with regional partners,
  • Improved water storage management and capacity, and
  • Robust treatment processes that can handle fluctuations in source water quality.

Planning

• Climate change is an important consideration for long-term planning. Consistent with CUWA’s Water Supply Reliability Policy Principles, CUWA agencies are taking steps now to incorporate adaptation strategies in plans for water supply, demands and infrastructure to address potential impacts of climate change. Given the potentially far-reaching impacts of climate change on California water resources, broader re-consideration of traditional water resource management strategies may also be warranted.

  − Supply and demand. The risk of climate change impacts to the quality and quantity of water supplies can be accounted for through vulnerability assessments or other means, using the best available science to guide adaptation strategies. The effects of climate trends are also important considerations for long-term demand projections.

  − Infrastructure. Investment decisions must consider uncertainties created by climate change, given the multi-decade lifecycle of most water-related infrastructure.

  − Long-term decision-making tools. CUWA suggests agencies consider development and use of long-term decision-making tools, such as scenario planning, that could complement Urban Water Management Plan (UWMP) planning in assessing water supply vulnerability to climate change.

• Legislative and regulatory requirements developed for climate change planning and/or reporting need to be flexible and non-prescriptive. Given the highly uncertain nature of climate change effects, individual water agencies need flexibility to develop approaches that best meet future needs.

  − Planning horizon. The existing UWMP planning horizon of 20 to 25 years aligns with related planning factors, such as land use projections. The five-year UWMP reporting cycle is appropriate for providing periodic updates that reflect advancements in climate change science and other factors.

  − Recognition of site-specific needs. Climate change planning is not a one-size-fits-all approach. Local conditions and needs must be considered.

  − Adaptable, flexible requirements. Guidance for incorporating climate change into planning documents must be adaptable and flexible enough to recognize the evolving nature of climate change science, especially as related to down scaling of global impacts to local areas.