

## Drivers of Change

### General Comments:

- Economic depression following COVID
- Uncertainty regarding extreme climate impacts
  - Changes in variability and intensity of the most extreme events
  - Warming temperatures, evaporation changes, loss of snowpack, increased fire season
  - More forest fires and its watershed impacts
- Cost of water
  - Cost effective solutions
  - Rate relief for those impacted by COVID-19
- Regionalism
  - Lost sense of shared purpose / fracturing member agencies
- Fear of MWD unreliability
- Impacts to Disadvantage Communities (DACs)
- Adding technology will improve water reliability
- Uncertainty in future conditions
  - i.e. multiple areas of science/future projections (i.e. climate change, demographic change, economic change)
- Storage capacity and ability to get water in and out of storage
  - Reduced snowpack and larger flows
- Population changes in supply watersheds (outside of MWD service area) leading to changes in demand on those supplies
- Better understanding of life-cycle and full cost accounting principles
- Political will
- Catastrophic events - earthquakes, fires, terrorist attacks, loss of powers, etc.

### *(General Comments continued)*

- Community engagement and education
  - Water and energy nexus could help in educating the public on the intersection of water usage and costs to bring water to masses

### Legislative

- Political uncertainty (i.e. changing of administrations)
- Uncertainty of future water rights and access to traditional imported supplies and local supplies
- Hertzberg bill restricting discharge of sewer treatment plant effluent to the ocean
- State and local initiatives to address economic inequality
  - Can lead to potential partnership

### Regulatory

- Environmental Regulations
- Potential climate change regulations (i.e. carbon footprint) on water infrastructure projects
- Constituents of Emerging Concerns: PFOS/PFAS
- Regulatory uncertainty regarding direct potable reuse of recycled water
- Regulations regarding discharge treatment levels at wastewater treatment plants
  - Ratio of discharge to watershed vs recycled water reuse

## **State Water Project**

- The need for more storage
- Fragility of the Bay Delta ecosystem
- Seismic risk in the delta and potential long-term outages

## **Local Water Supply**

- Regional differences in local storage basins
  - i.e. San Diego has limited storage basins
  - Limited stormwater capture opportunities
- Loss of local water supplies
  - Due to groundwater contamination
  - Pre-regulatory identification of potential health effects that cause precautionary reductions in use
- Uncertainty in remediation efforts by local groundwater managers and its relationship to loss of supply due to contamination
- Institutional relationships with wastewater agencies
- Acute and Long-term declines in groundwater production
  - Financial impacts to large and small member agencies
- Technologic advancement in wastewater treatment for recycled water
- Funding source for stormwater capture facilities
  - Ex: LA County Measure W
- Support on on-site potable treatment for reuse in new buildings
- Direct Potable Reuse (DPR) legislation
- Reduction in local surface water storage as a result of Division of Safety of Dams (DSOD) requiring upgrades to existing dams at high significant cost

## **Colorado River**

- Metropolitan's priority on the Colorado River
- Increased demands on Colorado River from other states on the river and impacts to the agreement
- Colorado River uncertainty due to global warming and climate change

## **Water Demands**

- Population change
- Increase demands to maintain urban green spaces in extreme heat
- Increase of remote working due to COVID
- Changes in water use behavior

## **Infrastructure**

- Economic uncertainty to improve water infrastructure
- Risk of stranded assets
- Public Private Partnerships - unknown level of such partnerships, which have the potential to diversify supplies