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Action Memo #2:
Proposed Actions to Address Drought & Long-Term Water Changes

Input from Participants @ Bay Area Water in a Changing Climate (June 2015)

Economics

- Revamp the water rate system so reducing water use does not cause financial problems for water agencies.

- Price water correctly to produce more action (urban and rural) on conservation and water efficiency.

- Develop incentives and financing programs that will reach renters in multi-family buildings (40% of California residents) and get them to conserve.

- Change regulatory regimes to allow rational economic water pricing. Example: Three tiers. 1) essential use virtually free, 2) moderate use at X rate and 3) luxury use at 10X rate. Another example: Use fees on excess use to provide badly needed funding for long-term contingencies and storage.

- Study and analyze the economic impacts of severe drought and long-term water shortages on the Bay Area's economy, including job loss, business relocations outside the area, Port of Oakland business losses (agricultural exports) and other factors.

Diversifying Supplies

- Create a comprehensive groundwater policy.

- Accelerate the pace of statewide and regional groundwater management reforms.

- Create better Bay Area understanding of:
    - Groundwater basins in Bay Area
    - Hazardous waste sites and contamination of aquifers

- Water quality issues associated with extraction of contaminated groundwater vs. treatment of groundwater before use

- Create new engineering solutions for large-scale water capture and storage systems.

- Develop policies and funding for expanded grey water use.

- Develop a major near-term effort to advance potable re-use (direct and indirect) ASAP.

- Invest substantially more in all forms of water reuse.

- Achieve <u>sustained</u> reductions through a wide range of institutional actions—e.g., incorporating water efficiency into building/development permitting, improved stormwater management

- Create programs to make water catchment and water reclamation more affordable for individuals, households and multi-family buildings.

- Reform water rights to meet 21st century needs.

Planning

- Grow more through infill rather than sprawl for greater water efficiency— smaller lots, less outdoor space, less infrastructure to leak, etc.

- Provide incentives and funding to maintain open space and rangelands to sustain water supply and improve resilience to climate change.

- Design and implement better land use planning and zoning to preserve important groundwater recharge areas.

- Bring water issues into regional and local planning for the Bay Area, including Plan Bay Area II.

- Include water in all sustainable community planning.

- Don't build new housing where there is not sufficient water.

- Integrate water planning with sea level rise planning. As BCDC and other state agencies are revising their policies and programs, water agencies should work more closely with them.

- Get water agencies more involved in the sea level rise discussions since sea level rise will greatly impact fresh water supplies, water treatment, and infrastructure.

- Build better relationships between water agencies and local governments.

- Facilitate greater regional cooperation among water agencies, including co-investment in infrastructure.

- Conduct more long-term planning for on-going impacts of climate change.

- Put more focus on regional and statewide policies and programs. Behavior change at the local level is good but it won't address the large infrastructure and storage problems.

Health

- Identify public health issues from drought and water supply changes and develop mitigation strategies, particularly for vulnerable communities and populations
  - Food costs and food insecurity
  - Drinking water quality, affordability and availability
  - Vector borne diseases
  - Air pollution
  - Wildfire
  - Unemployment
  - Mental health

- Engage in long-term planning where health sector (public health departments, environmental health organizations, hospitals) are at the table in multi-sectoral planning

Equity

- Develop a focused plan to address disproportionate risks and burdens placed on low income communities and communities of color by both climate change and historical practices

- Advocate and support a statewide water affordability safety net (lifeline rate)

- Address affordability issues for low-income communities as water rates are increased

- Build capacity in vulnerable communities so residents can take an active role in water planning

Forest/Watershed Restoration

- Explore investment in upstream forest restoration like the Denver Water "Forest to Faucet" program with USFS.

- Protect water resource areas with forest restoration in the Sierra.

- Develop greater emphasis on forest restoration to enhance Bay Area and Sierra watersheds.

- More and improved planning at the watershed level.

- Develop more resilient groundwater supplies to stabilize terrestrial ecosystems

- Re-water selected natural areas to protect and enhance ecosystems' resilience to increased heat and changes in precipitation.

Outreach and Education

- Increase public education on the need for long-term changes in Bay Area water supply.

- Build more political will to support water portfolio diversification. This will increase costs so political support required.

- Design and conduct better public outreach with clearer messages on conservation.

- Increase community commitment to sustainable water use, including lifestyle changes and expectations.

- Invest in public education and engagement using public health resources and messengers.

Other Key Actions

- Address salinity issues in the Delta and for groundwater supplies near SF Bay.

- Provide better access to water use data for use by cities and others.

- Obtain funding for full implementation smart meters (AMI – Advanced Metering Infrastructure). While this is an expensive transformation, full implementation will change the water business profoundly.

- Prohibit the planting of permanent crops dependent on depleted aquifers.

- Create a system of equitable water rationing.

- Take a fix it first approach to water infrastructure