



September 27, 2024

Kimberly Greene  
County of San Diego  
Office of Sustainability and Environmental Justice

*Via Email to [Kimberly.Greene@sdcounty.ca.gov](mailto:Kimberly.Greene@sdcounty.ca.gov)*

**Re: San Diego Coastkeeper Comments on Draft Water Ways Report – A Regional Assessment of Drought Management and Water Use Best Practice Strategies with Equitable Considerations for Our Future**

Ms. Greene:

Please accept these comments regarding Draft Water Ways Report (Report) on behalf of San Diego Coastkeeper (Coastkeeper). Coastkeeper is the San Diego region’s leading clean water advocacy organization, member supported since 1995. Our mission is to protect and restore coastal and inland waters in San Diego County using advocacy, community science, and education. Coastkeeper actively seeks agency implementation of federal, state, and local laws, regulations, and permits; regularly engages in the administrative review and public comment procedures for agency actions; and, where necessary, directly initiates enforcement actions on behalf of itself and its members.

Coastkeeper supports the County’s effort to better prepare for drought management and water infrastructure sustainability, with an equitable lens, in the face of a rapidly changing climate. 19% of California’s total energy is used to transport and treat water, which directly impacts greenhouse gas (GHG) emissions and the cost of water. As such, water supply, energy, climate change, and environmental justice are all inextricably linked.

Coastkeeper commends the Report’s identification of numerous water supply strategies, and strongly supports the expanded focus on water conservation, stormwater collection, and water reuse. However, Coastkeeper strongly opposes any continued consideration of ocean desalination.

Coastkeeper also strongly supports the County’s focus on equity and the principles of environmental justice. However, Coastkeeper suggests the Report consider more applications than solely “affordable housing, agriculture, and County facilities and roads.” For example, the County’s policies, permitting schemes, and regulations can impact all new development and redevelopment projects, which, applied strategically, could massively impact water affordability, accessibility, quality, and reliability – the primary objective of this Report.

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### **Opposition to Desalination**

Coastkeeper strongly opposes any consideration of ocean desalination. The County should not spend another penny further assessing or considering this supply source any time in the near future. The cost of ocean desalination, by far the most expensive and energy intensive water source, is directly in conflict with water affordability and equity. While the Report states “[t]here is a need for water managers to complete practical feasibility studies for ocean desalination, especially for Western San Diego County and Mexico Border Cities due to proximity to the ocean,” we could not disagree more. Ocean desalination has disastrous consequences on marine life, water quality, sensitive habitat areas, and comes with significant risks associated with sea level rise, floods, tsunamis, geologic hazards, and environmental justice and equity. As such, Coastkeeper asks that the County heed lessons from the Carlsbad desalination facility boondoggle, the devastating impacts from which our region continues to suffer. In 2022, the California Coastal Commission unanimously rejected a similar desalination project proposed for Huntington Beach for these same concerns. (*See Attachment 1, Opposition to the Brookfield-Poseidon Huntington Beach Seawater Desalination Project*).

### **Support and Emphasis for Conservation and Efficiency**

A vast body of science and literature, recognized and incorporated in the Report, has established that the best water supply and management strategy is simply to use less water. It is far and away the most cost-effective strategy compared to the development of any additional supplies. That said, while region has made improvements over the past 30 years with regard to per capita water use and total water use, there is still significant room for improvement. According to the San Diego County Water Authority (SDCWA), our region uses about 135 gallons per capita per day. That may be an improvement from the 1990s, but it’s a far cry optimal. Australians use closer to 75 gallons per capita per day, and San Franciscans use close to 42 gallons per capita per day.

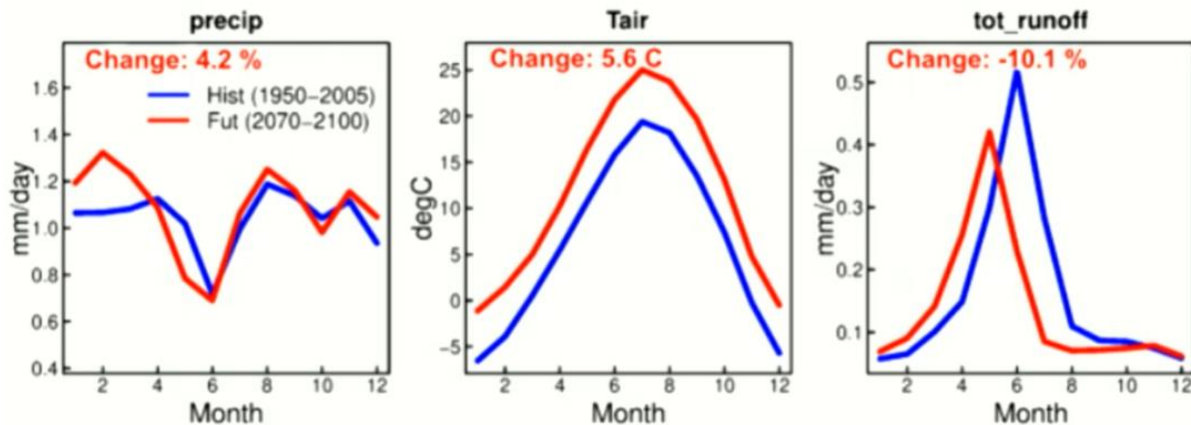
Notably, estimates state that outdoor residential irrigation accounts for approximately 40% of our region’s entire water use! We import almost 80% of our water from hundreds of miles away, over and through fault lines, and desalinate the ocean, which will soon cost \$4000 per acre foot, using massive amounts power, just to water our lawns and ornamental plants. That must change. Outdoor landscape conservation efficiency measures must be prioritized across the County. Thus, we strongly support the Report’s statement that “[t]hroughout the Region, opportunities exist to implement or enhance large-scale water conservation programs. Importantly, a related impact of water conservation strategies is that energy demand is similarly reduced in conjunction with reduced water demands, and results in reduced greenhouse gas (GHG) emissions associated with energy required for transporting water supplies.”

Conservation and efficiency are also highly equitable. San Diego’s water rates are already among the highest in the nation, and low income areas are more heavily impacted by the high price of water. Capital intensive projects only exacerbate this problem. As such, the Report must emphasize conservation and efficiency strategies to the maximum extent feasible, as these strategies provide the most benefit for the lowest cost, which in turn helps minimize the financial strain on low income communities.

Coastkeeper must also point out that the SDCWA is experiencing a debt servicing crisis because it invested in unnecessary on overly expensive infrastructure, most notably, the Carlsbad desalination plant. However, due to greater efficiency, higher rates, regulatory actions, social awareness and landscape transitions, SDCWA is now selling less water. SDCWA has also repeatedly over-estimated demand in each and every Urban Water Management Plan (UWMP) for decades. The 1995, 2000, 2005, 2010, and 2015 UWMPs all forecasted that demand would increase, and all of those forecasts were wrong, as we have seen both overall demand, and per capita demand decrease, which is a trend that has been reflected across the state for decades. (*See* Attachment 2, Coastkeeper Comment Letter on SDCWA 2020 UWMP). Coastkeeper implores the County not to double down on these mistakes simply because SDCWA has a need to sell water to recoup their misguided capital expenditures. Coastkeeper recommends the Report acknowledge SDCWA's inflated demand forecasts and the resultant water rate and ongoing debt servicing issues at SDCWA. These have hugely significant impacts on the region's water supplies, planning efforts, and equity.

Furthermore, the region must conserve water because supplies are becoming increasingly scarce, a problem that will be deeply exacerbated by climate change. According to the Scripps Institution for Oceanography, climate change's impact on the region's long term water supply is daunting. The entire southwest is expected to warm significantly. Researchers expect at least a 10% reduction in Colorado River supplies as soon as 2070, and it could be much worse. The rule of thumb is that with every degree of Celsius warming, we will experience a 5% reduction in available water. By 2070-2100, unfortunately the southwestern United States is on track to experience 3-4 degrees C warming, which would mean a 15-20% reduction in Colorado River runoff. The outlook for the Sierra snowpack is even worse. Researchers expect the available water supplies to decline by 50% between 2070 and 2100 "optimistically," and could be considerably worse. As such, we simply must use less water, and thus the Report should emphasize conservation and efficiency.

**Projected change in Upper Colorado Basin annual cycle**  
RCP 8.5 2070-2100 (w.r.t 1950-2005)



- Wetter in winter, drier in spring
- Strong year-round warming, somewhat more in summer (5.6 C = 10 F)
- Runoff shifts ~1 month earlier, reduces about 10% (big increases in April, declines in July)

**Support for Greywater Reuse and Rainwater Harvesting**

Both grey water and rainwater harvesting offer cheap and effective supply sources, particularly if incorporated into initial development projects, and not retrofitted. As such, this report should place greater emphasis on the County's opportunity to require the incorporation of these systems in new development, regardless of high or low income housing, commercial, industrial or otherwise.

As Table 13 indicates, there is massive room for improvement in greywater use across the County. However, as noted in the following section, Coastkeeper suggests Table 13 (and many others) should include more detail. (*See infra*).

Likewise, rainwater harvesting is dramatically underutilized throughout the County, with a large potential for enhancement. Coastkeeper suggests looking to Australia as a case study and for feasibility analysis. Approximately one in four Australian houses have a rainwater tank, which provide billions of gallons of water per year, amounting to about 9% of residential water in Australia worth \$540 million. Outside of urban areas rainwater provides 63% of residential water. Rainwater harvesting also offers the multiple benefits of reducing the costs of water infrastructure across the urban system; reducing household cost of water, and reducing polluted urban runoff.



**Additional Detail and Data Needed Throughout the Draft Report.**

While Coastkeeper appreciates the efforts of the County to compile the information in this Report, it lacks the level of detail and data needed to inform decision-makers about optimal and equitable investments regarding drought and water supply.

Numerous tables throughout the Report include basic symbols, reducing complex analysis to an extremely simplified graphic. Many of these tables require translations of symbols using a key. For example, see Table 21 on page 92. There is no need for water droplets, clocks, and dollar signs in this table. This report is not intended to provide an elementary-level analysis. It is to inform the public, the Board of Supervisors, high level County staff, and other decision-makers about the costs and benefits, pros and cons of various water supply strategies. Instead of clocks, Coastkeeper suggests simply stating 5 years, 5-15 years, or > 15 years. Similarly, for capital costs, simply state < \$100k, \$100k - \$5M, or > \$5M. For “potential yield” what does “low medium, and high” mean? Coastkeeper requests this column include an actual acre-feet of water saved or created. For the “funding opportunity” column, what is “few” and what is “many”?

This type of graphic/table is unhelpful for decision-makers who must balance numerous complex factors related to the allocation of limited resources. Unfortunately, this is a common theme throughout the Draft Report. Therefore, Coastkeeper suggests significantly revising the report to remove the aforementioned basic symbols from every table where a symbol can be translated to actual numbers, data, dollar amounts, volumes of water, etc.

Furthermore, Coastkeeper requests that the data underlying each table of the Report be included or linked in appendices. We acknowledge that the Report includes numerous citations, but it is nearly impossible for any member of the public to open and review each cited study to find the the specific data or statistic at hand. In order for this Report to meaningfully assist in important decision-making about our region’s water security and equity, such data must be compiled, organized, easily accessible, and digestible.

Coastkeeper appreciates the opportunity to provide comments regarding the Draft Water Ways Report. Please contact me via email at [patrick@sdcoastkeeper.org](mailto:patrick@sdcoastkeeper.org), or phone at 760-525-6838 if you have any questions or need more information regarding our comments.

Respectfully,

A handwritten signature in black ink that reads "Pat McDonough".

Patrick McDonough  
Senior Attorney  
San Diego Coastkeeper