September 1, 2015

California Air Resources Board
Greenhouse Gas Reduction Fund Program
1001 "I" Street
Sacramento, CA 95814

Subject: Comments on the Cap-and-Trade Auction Proceeds – Draft Concepts for the Second Investment Plan

Dear Air Resources Board Members and Staff:

Eastern Municipal Water District (EMWD) would like to express its appreciation for the opportunity to provide comments to the California Air Resources Board (CARB) on the Cap-and-Trade Auction Proceeds Second Investment Plan Draft Concepts for the appropriation of moneys from the Greenhouse Gas Reduction Fund (GGRF). EMWD is pleased that water use efficiency continues to be prioritized within the Draft Concepts for the Investment Plan, and we further support the recognition that water use efficiency measures have a direct impact on greenhouse gas (GHG) emissions reductions.

California's historic and long-lasting drought has forced residents and water providers to rethink how they use and prioritize water use. The investments and advancements in water use efficiency that have resulted from this drought need to transcend the immediate emergency and become a way of life for California to have a sustainable and lasting water supply future. The momentum behind the changing perceptions of what is considered appropriate for outdoor landscaping in California needs to continue, and there is a willingness by residents and businesses throughout the state to embrace this change. An offshoot of this change has been very real and measurable reductions in greenhouse gas emissions, in addition to the anticipated water use reductions.

As residents replace water intensive turf, not only are they reducing their water use footprint – which reduces GHG by reducing the development and transmission of water – they are also eliminating the need for lawnmowers, hedgers, trimmers and other gas powered lawn maintenance tools. EMWD is located within the South Coast Air Quality Management District (SCAQMD) and older gas powered lawn mowers have been identified by the SCAQMD as strong pollutant emitters. SCAQMD has indicated that an older gas mower can emit more pollution in a single year than a car driven more than 22,000 miles. Aggregated statewide this translates into a significate GHG savings.

Expiring Turf Replacement Programs Leave Future Need

The Metropolitan Water District of Southern California (MWD), a wholesale water agency serving twenty-six cities and water agencies in six counties - of which EMWD is a member agency, has concluded a highly successful and largest of its kind in the nation, $450 million turf replacement program. The initial $100 million investment in this conservation program was expended at such a rapid rate that MWD Board of Directors more than tripled the initial investment. MWD conservatively estimates that the program in total funded the removal of more than 150 million square feet of turf, conserves more than 20,255 acre feet of water annually, and eliminates more than 16,042 megatons of GHG emissions annually. MWD and the various member agencies continue to receive correspondence inquiring into turf rebate opportunities which underscores the need for continued investment in a similar buy-back program.

In addition to the MWD program, the Department of Water Resources has announced an additional $24 million in turf replacement funding that would benefit residents outside of the MWD service area. This investment will serve to reduce water use, however it is anticipated that need will greatly outpace available resources, as was demonstrated in the MWD service area.

The popularity of the turf replacement programs demonstrates the willingness of residents in California to shift towards a more sustainable lifestyle, especially when the funds are provided to residents that can least afford to convert their landscaping.

Investments in Disadvantaged Communities

The current drought has clearly demonstrated that a majority of Californians want to “do the right thing” when it comes to conserving water. However, in many areas of the state it is hard to convert to a more sustainable way of life when it could mean that core needs may not be met. Many of our financially challenged residents want to reduce their water usage and costs. However, they are stuck because it is costly to retrofit landscaping. Turf replacement programs have made landscaping conversions affordable for many low-income and senior residents. More assistance is needed in these communities.

EMWD has a number of disadvantaged communities within our service area, as is the case for many water providers throughout the state. The turf replacement program is strongly embraced, and broadly adopted by many residents within these communities; and water providers, like EMWD are pleased to have had the opportunity to help beautify communities in a sustainable and water saving manner.

Measurable Results and Multiple Co-Benefits

Turf replacement programs produce measurable and lasting water and GHG savings. The water industry is experienced at tracking and quantifying results that stem from conservation investments. Funds that are expended through these efforts can be tracked, verified, measured, and as a result of past efforts, best practices for replacement programs have been established to maximize program benefits. Further investment in this area would serve to benefit the entire state with minimal investments in new administrative management, as existing protocols and management efforts are already in-place.

Maximizing the co-benefits of the financial investments from GGRF resources has been identified as a goal for the Cap-and-Trade Investment Proceeds. Turf replacement programs

will generate multiple co-benefits that can benefit the communities individually and the state as a whole. Co-benefits from turf replacement programs include:

- Water savings from the reduction in water usage - which is the clearest and most easily quantified benefit;
- GHG reductions from a reduction in the use of gasoline powered lawn maintenance tools;
- GHG reductions from the decrease in electricity needed to produce, and transport water;
- Cost savings to disadvantaged communities from the reduction in water use; and
- Reduction in waste transported to area landfills – lawn clippings will be reduced which will reduce demand on landfills and result in a reduction of vehicle miles traveled by waste haulers, which also results in GHG savings.

Water Related GHG Reduction Opportunities Beyond Turf Replacement Programs

Turf replacement programs provide an excellent source of direct investment that translates into GHG and water use reductions. However, there are a number of other opportunities for further advancement through the GGRF that would translate into substantial water and GHG savings that EMWD would also like to highlight. One such area is the continued examination and exploration of the water and energy nexus. This relatively recent area of concentration is one that could generate benefits for both utility industries and result in water and GHG emission reductions. Further advancements in funding eligibility for emerging technologies could push conservation of water and energy into new and expanded areas.

The Alliance for Water Efficiency and the American Council for an Energy-Efficient Economy in their jointly released *Addressing the Energy-Water Nexus: A Blueprint for Action and Policy* Agenda, identified a need for deeper understanding "…on the contributions of water to energy use and vice versa[1]." Additionally, key findings in the *Water-Energy Nexus Research Recommendations for Future Opportunities* also released by the Alliance for Water Efficiency suggests that there are opportunities to regard wastewater treatment plants less like waste facilities and more like the possible resource recovery facilities that they are[2]. Wastewater treatment facilities are not only a source of alternative energy feedstock, there are a number of efficiency efforts, such as the inclusion of membrane treatment technologies that can be maximized in treatment plants throughout the state that would expand efficiencies and translate into GHG reductions.

Additional conservation measures pertaining to remote water metering, specifically advanced metering infrastructure (AMI) holds considerable promise for small, medium, and larger water service providers. AMI has been relatively slow to take hold within much of the water industry, as these systems can be costly to deploy, however the contributions that AMI has to offer to the greater implementation of conservation measures is undeniable. Remote monitoring reduces the need to deploy fleets of meter reading vehicles and instead allows water providers to retrain employees to use more modern and efficient technology to remotely assess water usage. Many water providers, especially those that support disadvantaged communities are not able to incorporate an AMI system due to costs and technology requirements - yet, investments in remote metering technology provides numerous benefits such as reduced vehicle miles traveled by meter readers, maximization of leak detection, and a reduction in water usage and related costs by residents as they are able to monitor real-time water usage. AMI is a readily available technology that holds a lot of promise by empowering ratepayers with the information that they require to track and modify water use habits.

EMWD hopes you will consider the inclusion of additional water and wastewater related elements when you are considering funding opportunities for the Cap-and-Trade Auction Proceeds. Thank you again for the opportunity to submit comments. If you or your staff has any questions, please feel to call me at (951) 928-6130, or e-mail me at jonesp@emwd.org.

Sincerely,

Paul D. Jones II, P.E.
General Manager

cc. EMWD Board of Directors

[1] Alliance for Water Efficiency and American Council for an Energy-Efficient Economy: *Addressing the Water-Energy Nexus: A Blueprint for Action and Policy Agenda, May 2011;*

[2] Alliance for Water Efficiency and American Council for an Energy-Efficient Economy: *Water-Energy Nexus Research Recommendations for Future Opportunities,* Final Report, June 2013, Project No. 130240