
Meeting Minutes

Meeting Date	01.27.2022
To	Mehran Mohtasham, Myra Nava
From	DLR Group
Location	via ZOOM
Project	RCCD: Sustainability and Climate Action Plan / IEMP / TCO
Project No.	N/A
Attendees	Mehran Mohtasham, Steve Marshall, Myra Nava, Prem Sundharam, Ron Kirkpatrick, Shona O'Dea
Purpose	Water goals and metrics



Goal for the discussion

Toward Water and Ecosystem Theme identified through the VALUES session, we want to set goals for water within and outside the building. We also want to identify metrics to measure success.

Specifically, we want to understand the following:

- Past challenges the facilities team has run into when replacing older plumbing fixtures with new high efficient fixtures.
- Any experience with reusing water or using non-potable water (say captured rainwater) within the building for toilet flushing etc.
- Stormwater retention and detention practices and challenges.
- Any challenges with wastewater discharge (sewer).

1. Review of AASHE Stars system

- a. <https://stars.aashe.org/reports-data/>
- b. Has reports of over 1,000 higher education institutions and their progress and strategies toward sustainability.
- c. Reviewed metrics that AASHE Stars requires for reporting as it aligns with the system goals and metrics.
- a. Noted that water-use intensity per weighted user or acreage metric allows for future growth. As users and the site/building stock grows at each campus, water-use will increase but the rate of water-use per user or acreage can remain below a baseline.
- b. Reviewed the point calculation methodology behind AASHE Stars for Water and identified that the larger Riverside District area has a **medium to high water risk** per the Aqueduct Water Analysis risk profile. See screenshot and link at the end of this document.

2. Norco College Best Practices

- a. Outdoor water-use
 - i. Drought tolerant plants and drip irrigation for the most part.
 - ii. One grass area in the quad for events and student gathering.
 - iii. Very limited opportunities to further reduce water unless the grass area is completely removed.
 - iv. Replacing a portion of grass area into meadow landscapes may be a consideration.
 - v. Flow sensors and irrigation valves are being requested through scheduled maintenance budget program.
 - vi. Between Calsense and Hunter, there is an opportunity to install weather monitoring irrigation control systems that will provide data on the cloud as to water consumption at each zone level.
 - vii. An opportunity exists with visualizing the water consumption data on the IEMP dashboard.
- b. Indoor water-use
 - i. Majority of existing plumbing fixtures are highly efficient and/or ultra-low flow already.

3. Moreno Valley College Best Practices

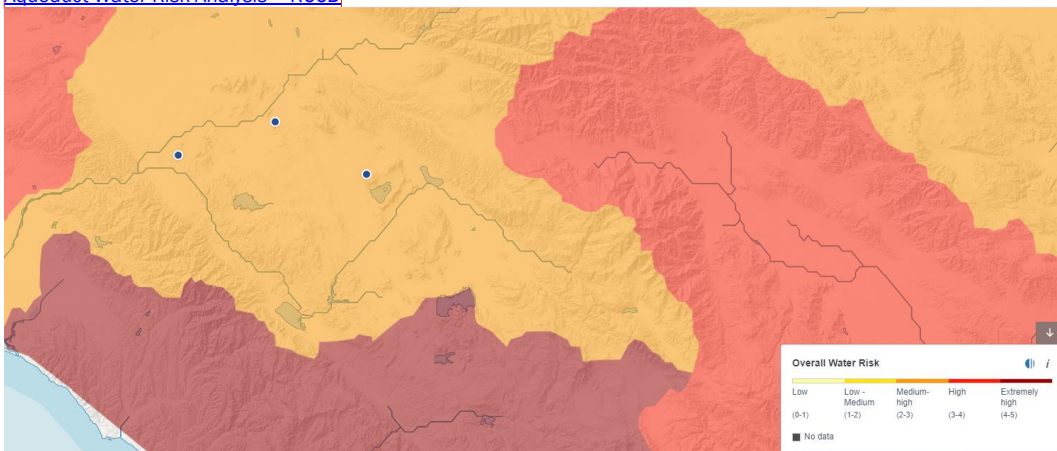
- a. Outdoor water-use

- i. Landscape irrigation is about 50% of the water use.
 - ii. Considerable strategies have been put in place in recent years to reduce outdoor water use.
 - iii. Identified water leaks in the past and managed them effectively. However, there are still opportunities to invest in flow sensors and shut-off valves to further save water.
 - iv. The joint-use park still consumes a lot of water for the grass area. There are opportunities to reduce grass area throughout the campus.
 - v. MVC has reclaimed water (almost at the same price of potable water).
- b. **ACTION:** DLR Group requested the college to markup on a site plan, a landscape zoning map that could be identified with a square footage using GIS.

4. Goals and Metrics for Water-use

- a. Indoor water-use – kgals/weighted user and gallons
- b. Outdoor water-use – kgals/acre and gallons of total water (potable and non-potable water)
- c. Metrics
 - i. Baseline
 - 1. Setting the baseline to the average of past 5 years' worth of water consumption data puts the district at a disadvantage as majority of the water conservation efforts took place in the recent years.
 - 2. Ideally, if we can acquire historical data, we will set the baseline to 2009.
 - 3. If reliable data is not available, then we could use engineering judgement to derive at an appropriate baseline set at 1990.
 - ii. 25% reduction by 2025 (per CCCCC system)
 - 1. If the baseline is set to 2009 or 1990 water consumption levels, then achieving this 25% reduction is highly likely.
 - iii. 50% reduction by 2030 (per CCCCC system)
 - 1. This is an aggressive target and would require additional investment to achieve it.
 - 2. At both colleges, reusing stored stormwater for irrigation and/or indoor flush water needs is possible, with awareness of the following
 - 1. Additional maintenance required over the grilles, filtration equipment, pest management etc.
 - 2. Funding to invest in these system
 - 3. Potential allocation of scheduled maintenance toward these measures.
 - 3. Norco college has an underground stormwater detention system currently in the football field. Water is not reused in the building.
 - iv. **ACTION:** An opportunity to apply stormwater re-use at Norco Center for Human Performance and Kinesiology project. DLR Group to connect with the design team.
 - v. **ACTION:** DLR Group to investigate exploring funding opportunities for water conservation.

[Aqueduct Water Risk Analysis – RCCD](#)



Commented [PS1]:

DLR Group