Author(s): Sahar Fazelvalipour, Atticus Lee, Chris Otte, Clarence Vong, & Jiyoon Kim

Title: EVERY LAST DROP

Term: Spring 2023

Department: Landscape Architecture

Abstract: Like many communities in Southern California, the City of San Fernando is challenged with diminishing water resources and increasing state regulation. “Every Last Drop” leads the community toward front yard landscapes that are drought tolerant and are in compliance with California’s statewide Model Water Efficient Landscape Ordinance (MWELO). As students of landscape architecture, our knowledge concerning drought tolerant plants, low impact design, and culturally-responsive design can assist the community with the permitting process as it relates to MWELO and move them toward low water use front yard landscapes that retain San Fernando’s unique cultural identity. Issues facing the City include challenges with yards that are out of compliance, drought and runoff concerns as well as socioeconomic challenges that make it difficult for many residents to implement low water use landscapes. High single-family home ownership rates, consistent lot sizes and conditions, and San Fernando’s rich cultural heritage as a predominantly Latino community are some of the unique opportunities present. Existing rebate and grant programs are also available provide financial assistance to residents. This project aims to position the City of San Fernando as a leader in low water use landscapes and climate change action by providing tools, designs, and educational resources that can serve as resources for the community. We achieve this by outlining goals such as managing residential stormwater runoff, educating residents on water use efficiency best practices, reducing residential water use, and enhancing the city’s unique cultural identity. The report provides an intuitive spreadsheet-based calculator for estimating water use and evaluating compliance, prototypical front yard designs that illustrate compliant designs and planting plans for a large percentage of the community, and swale designs for the parkways to reduce runoff by capturing and treating runoff from the street and from residential properties. San Fernando’s Latino culture is incorporated into the design vision and goals to enhance the city’s unique cultural identity while addressing low water use best practices and compliance with state guidelines.

Keywords: designs, climate change, landscapes
Committee Chair: Kyle Brown

Committee Member(s): Barry Lehrman