



**Civil Engineering
College of Engineering**

Date: May 1st, 2024

To: South Santa Monica Bay (SSMB) Watershed Area Steering Committee

Dear Members of the SSMB Watershed Area Steering Committee,

This intent of this letter to provide insights regarding the community investment benefits of the proposed Scientific Study entitled "Identifying Best Practices for Maintaining Stormwater Drywells," led by Cal Poly Pomona

The proposed scientific study aims to fill a critical knowledge gap by investigating best practices for maximizing the effectiveness of drywell infrastructure in Los Angeles County. With the installation of thousands of drywells and plans for more, understanding their long-term capacity and maintenance requirements is paramount. Utilizing data science and machine learning, the study will carefully select sites and conduct infiltration testing to assess the impact of runoff volume and maintenance on drywell performance. The findings will inform recommendations for cost-effective design, maintenance frequency, and pre-treatment methods tailored to varying land-use and soil characteristics.

This multi-institutional research effort, led by Cal Poly Pomona in collaboration with UC Santa Barbara, involves students, primarily from underrepresented minority groups. The project encompasses significant community investment components, particularly in workforce development and education. Cal Poly Pomona, as a Hispanic Serving Institution, serves a diverse student body, with a significant proportion being first-generation and ethnic minorities. Figure 1 is an infographic that illustrates Cal Poly Pomona's student population demographics. With serving more than 26,000 students, our first-generation student population stands at 55%, and ethnic minorities make up 56% of the total student body. Overall, the proposed scientific study presents direct opportunities for educational growth and development for a significant population of young adults, primarily from underserved minority backgrounds.

There are other broader impacts of the scientific study for regional workforce development including: offering Senior Project (EGR 4810/4820/4830) course series focused on stormwater engineering; developing innovative technical elective courses focused on Low Impact Development and Green Infrastructure; developing a certificate program focused on stormwater engineering through Cal Poly Pomona College of Professional and Global Education; hosting minority students sponsored by NSF and other sponsored programs in our scientific study project; and directly impacting social mobility of students from underrepresented groups while they are student.



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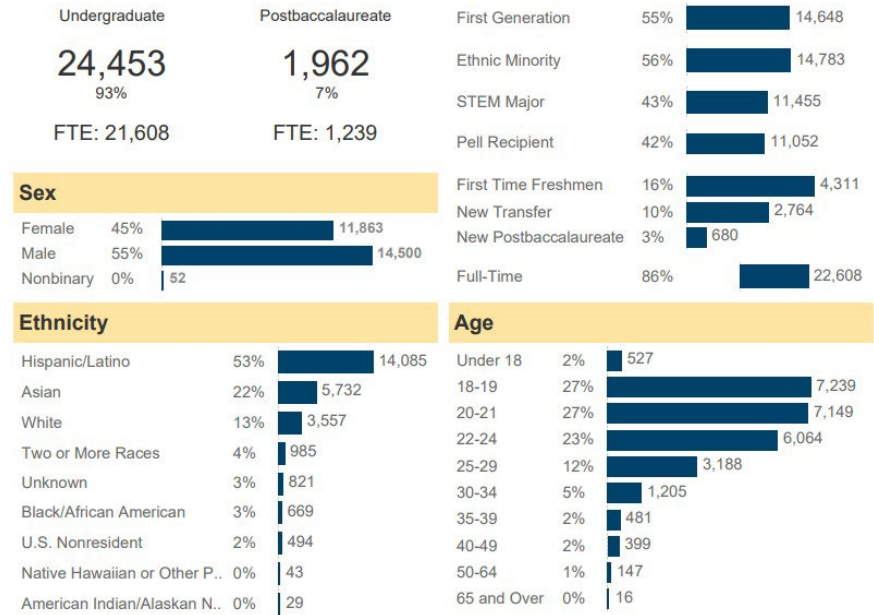


Figure 1. Cal Poly Pomona’s student population demographics

We are grateful for the committee's attention and support for this scientific study, which seeks an annual budget of approximately \$80K from the SSMB WASC throughout its duration. This amount represents merely less than half a percent of the watershed’s annual budget, highlighting the substantial return on investment.

Thank you for considering the community benefits and broader impacts of this scientific study project.

Best regards,

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