Sustainable Landscape Design and Management

Program Name / Project Descriptions

Project 1: Sustainable Landscape Design and Management Outline
I researched and produced a compendium of information and metrics for sustainable landscape design and landscape management. This included information on the Urban Heat Island effect, air and soil quality, carbon sequestration through terrestrial means, water conservation and quality, and improving human health. I also looked at the environmental cost of construction and maintenance. This information will provide a strong case for MIG when promoting green space solutions to climate change.

Project 2: El Dorado Park Improvements Application
This application of Project 1, Sustainable Landscape Design and Management Outline, looks at the park’s climate impact, air quality, soil quality, water quality, water conservation, biodiversity, health and wellness, and construction and maintenance cost. It also discusses the park’s job as an eco-friendly filter, absorbing and collecting pollutants before it reaches the Pacoima wash.

Achievements / Results / Outcomes

Sustainable Landscape Design and Management Outline
- Provided research statistics and information regarding the environmental benefits of landscape architecture
- Included models for calculating carbon sequestration for trees and soils as well as a working template for future application

El Dorado Park Sustainable Landscape Application
I was able to apply my outline on Sustainable Landscape Design to the El Dorado Park Improvement being implemented in Pacoima, California. From this information, these statistics were gathered:
- The trees scheduled to be planted in the El Dorado Park will sequester about 6,002.47 lbs. or 3 short tons of CO₂ in a 50 year time frame.
- The forebay system being implemented will be used as a buffer during flooding or storm surges and will filter and recharge water within 48 hours.

Lessons Learned / Intern Experience

Successful Strategies:
1. Utilize all of your resources
2. Don’t be afraid to ask questions

Recommendations for Improvement / Program Expansion:
1. Provide more direction with tasks

Lillian Penix
Intern background: Third year Mt. SAC student majoring in Political Science, transferring to UCSD Fall 2017. Looking to minor in Environmental Systems and pursue a career in Public Policy.

Acknowledgements:
A Special thank you to Xiomara Chavez, Steve Lang, Oscar Johnson, and the staff at MIG. You have truly made me feel welcome and expanded my outlook when it comes to the importance of landscape architecture.