

C1.06 – Sustainable Biogarden Solutions

Bryce Kennedy – Selina Padilla (PM) – Madison Silvernail

Sponsors: Brittney Moore, Amy Thomaides



Team



Project Overview

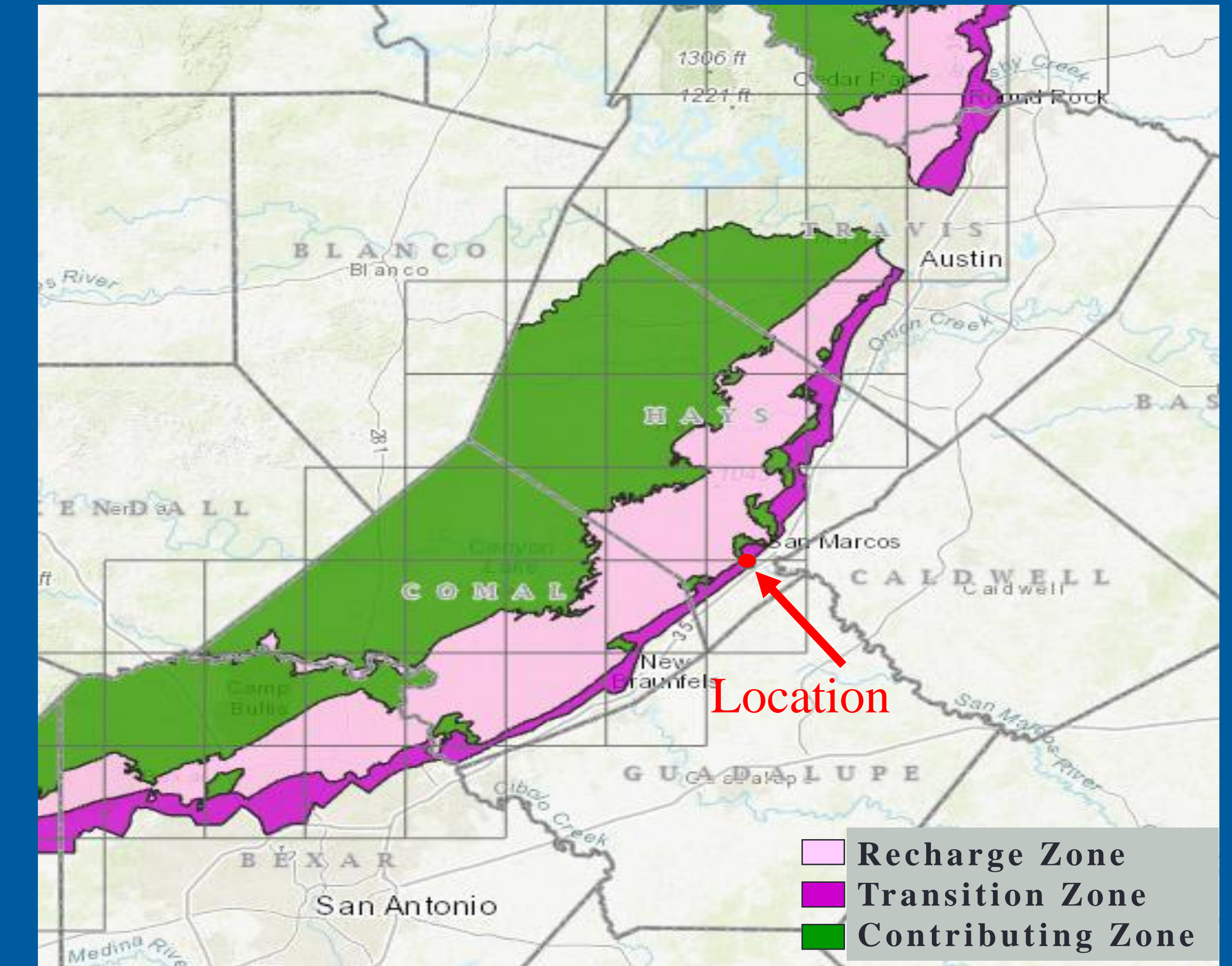
Background

Current stormwater management practices are not sufficiently sustainable with the use of impermeable materials that prohibit necessary infiltration and filtration adding pollution to natural water resources. San Marcos is especially of concern due to its proximity to the Edwards Aquifer and ongoing drought conditions.

Project

- Sponsor is City of San Marcos
- Goal is to incorporate Low Impact Designs (LID)
- Designed to capture all runoff from home property during a typical rainstorm

Site

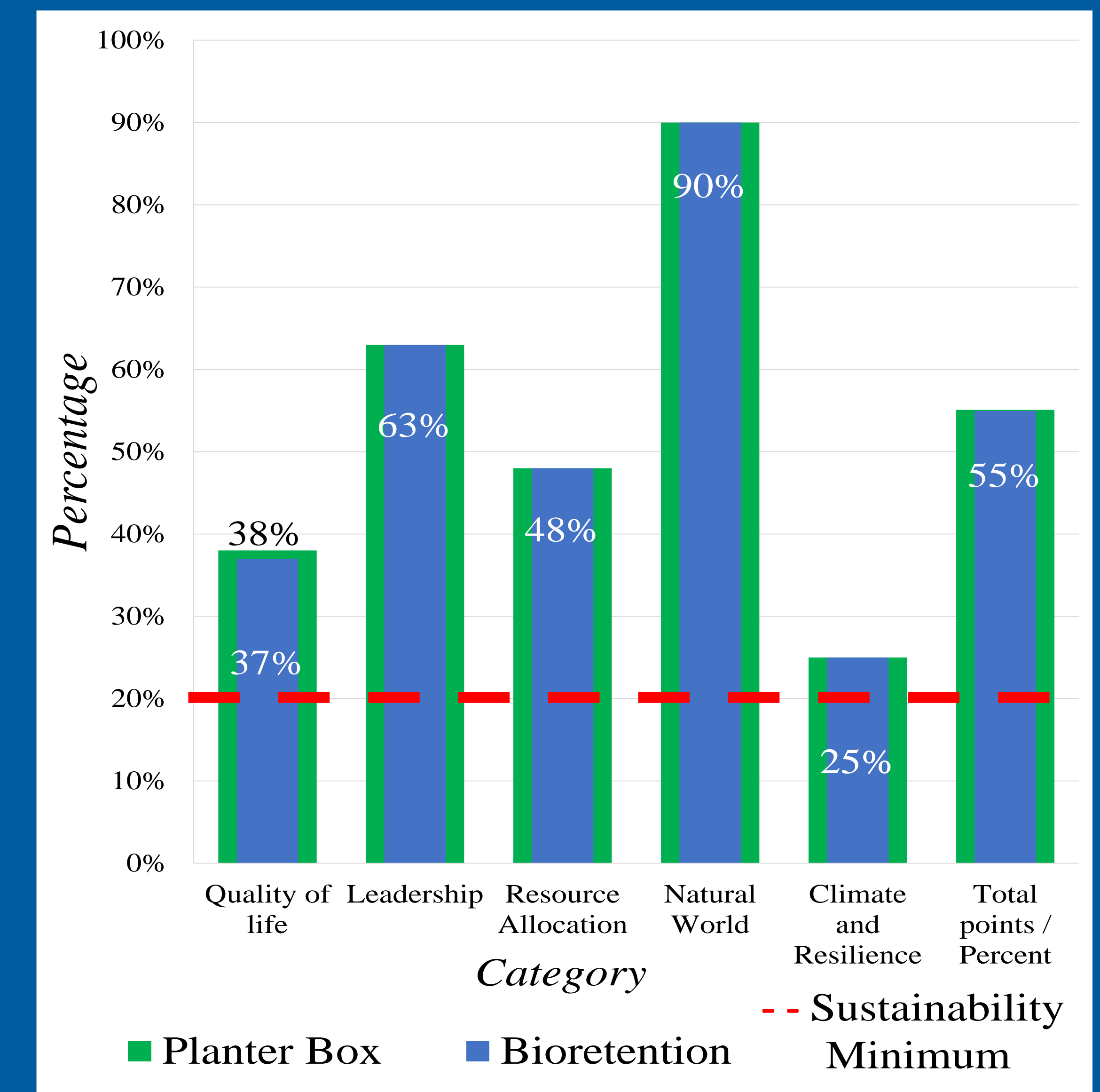


Alternatives



Bioretention & Planter Box Criteria:
 – Infiltration – Filtration – Runoff Capture

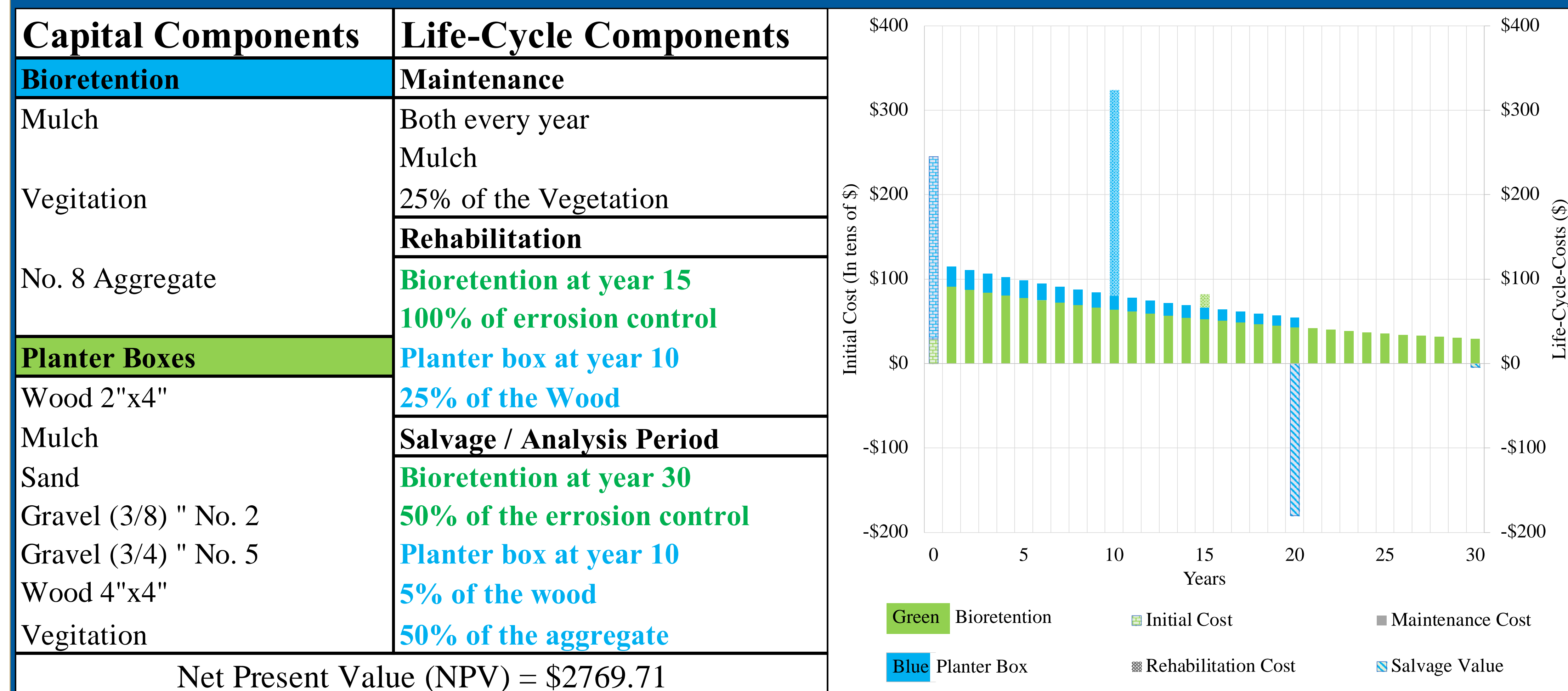
Sustainability Summary



Next Steps

Detailed Site Visit	Soil Property Analysis
Update Life Cycle Cost	Update Sustainability Score
Reconsider Planter Box	System Design

Costs



Utilizing Envision, the Planter Box and Bioretention both received a platinum score of 55% total.

