

Restoring Urban Habitat with a Functional Requirements Approach

Chloe Nelson, Emellia Treece, Gabby Kretschmer, Amber Smith, Tia Tumaliuan, Victoria Chavez, Nathaniel Torres-Figueroa, Cynthia Updegrave

Our project at Titlow Park, WA is a mixed lowland deciduous forest that includes a brackish lagoon and freshwater stream. However, due to invasive species establishment, intervention was necessary in order to restore the native biodiversity and ecological functions that the site provides. The approach that we used in this restoration project was based on the concept of functional requirements. These functional requirements were a list of concepts that we needed to follow in order to accomplish our goals in this project. The functional requirements we chose encourage the restoration of ecosystem functions and services through maintaining biodiversity at the site. These functional requirements were also constructed based on Metro Parks Tacoma's goals for the site. The functional requirements include the enhancement and management of plant species, enhanced aesthetic of the trail, care of the surrounding lagoon and stream, and increased community involvement. These led us to identify specific actions in our restoration to ensure that these objectives were met. After an extensive evaluation of the site, invasive species removal and native planting, we hope to better control the invasive species and promote the native biodiversity. By following the best practices of invasive removal and mulching, planting success rates increase, decreasing the likelihood of invasive reestablishment.