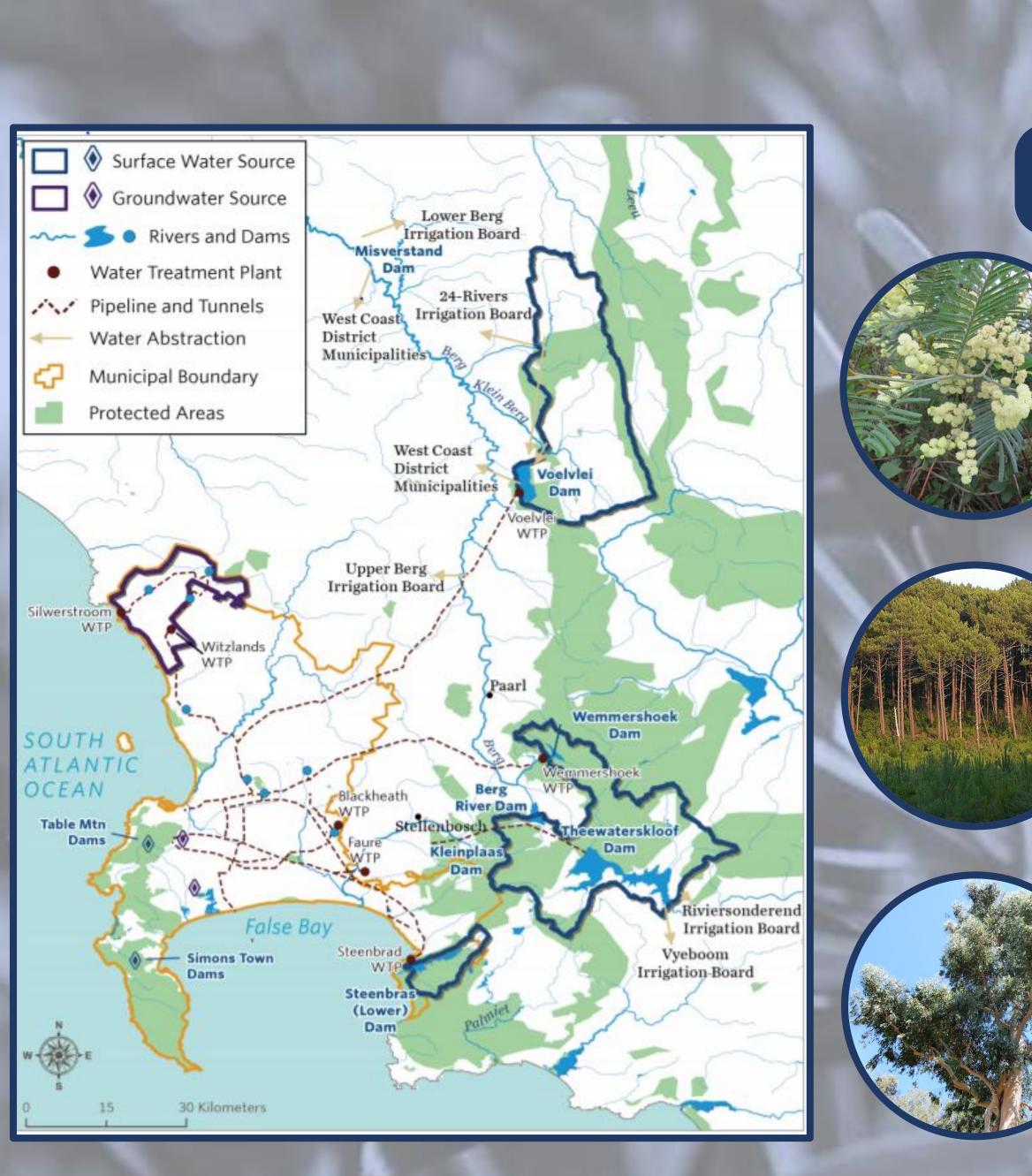


Problem: Cape Town Water Crisis

Cape Town has been struggling for the past three years with a major water crisis. One of the main contributors to the issue is the amount of water being consumed by invasive plant species.



Our group had to consider many factors when confronting this project in order to ensure that it was done effectively. We also took into consideration that the entire community of Cape Town must be satisfied by any solution our group provided.

Water Consumption and Invasive Species in Cape Town, South Africa Aaron Boyer (RBE), Alex Demirs (ECE), Sydney Gardner (CS), Bethany McCullars (EVE), Marcel Paolillo (BME) Professors: Dr. Bethel Eddy, Dr. Katherine Foo

Water Intensive Invasive Species



Black Wattle (Acacia mearnsii) Native to Australia



<u>Cluster Pine (Pinus pinaster)</u> Native to the Mediterranean Region

Sydney Blue Gum (Eucalyptus saligna) Native to Australia

Considerations



Solution: Remove and Replace

Our solution is removing invasive plant species through ring barking and cutting, and then allowing the natural fynbos plants to grow and back along the Berg River Catchment.

Step One Step Two Accumulate materials Girdle Ring Bark Harvest Lumber

Water: Over 29 billion gallons of water would be saved

> Economic: Costs 90% less than grey infrastructure

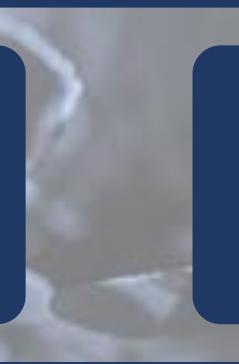
Acknowledgments and References:

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citizens-help

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Benefits





Step Three

Replant Fynbos

Social: Increases lower class accessibility to water

Environmental: Restores the natural biodiversity of the region

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