

Study Abroad: Environmental Restoration in Aotearoa

Eamon Challinor
Computer Science

INTRODUCTION

- Program focused on taking a multifaceted approach to lake restoration in New Zealand and how different influences shape New Zealand's unique lake management strategy including:
 - Legislative policy and governance
 - Māori native cultural influence
 - Local community members/organizations
 - Scientist researching lake management
- Understand the complexities of managing populations of native and nonnative species
- Connect the lake management strategies/conditions of New Zealand to methods implemented in Washington state



Lake Rotokawau

COMPARE/CONTRAST

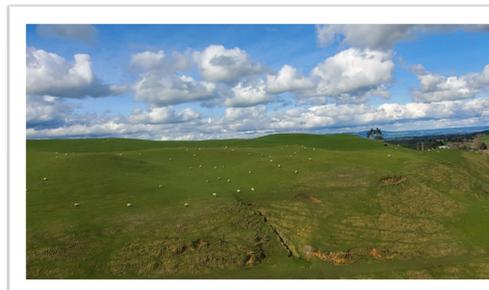
- Statistics and data on lake management done by each county in Washington and by the national government in New Zealand
- Geographic isolation of New Zealand compared to Washington creates unique environmental challenges
- New Zealand lakes largely result from geothermal activity versus glacial retreat for Washington
 - Affects lake stratification
 - Nutrient sources/deposit levels
- Both have native populations with strong ties to the environment/native land
 - New Zealand co-governance

EXPERIENCES

- University of Auckland presentation on legislative structure and strengths/weaknesses:
 - Government levels (local, regional and national)
 - Policies created with as many perspectives in mind as possible
 - Policies can be stalled/compromises made difficult
- Exploration of Māori influenced public art
- Witnessing the various eutrophic states of different lakes throughout the Rotorua area
- Working with various community groups (Greening Taupo, etc.)
- Going to different sites along Waikato River and various lakes for presence of invasive gold clams
- Sampling lake water from various sites collected throughout trip at Cawthon Labs
- Discovering the nuances of upholding nonnative trout populations at National Trout Hatchery
- Experiencing eco-restoration projects such as Zealandia in Wellington



Cawthon Labs – Nelson

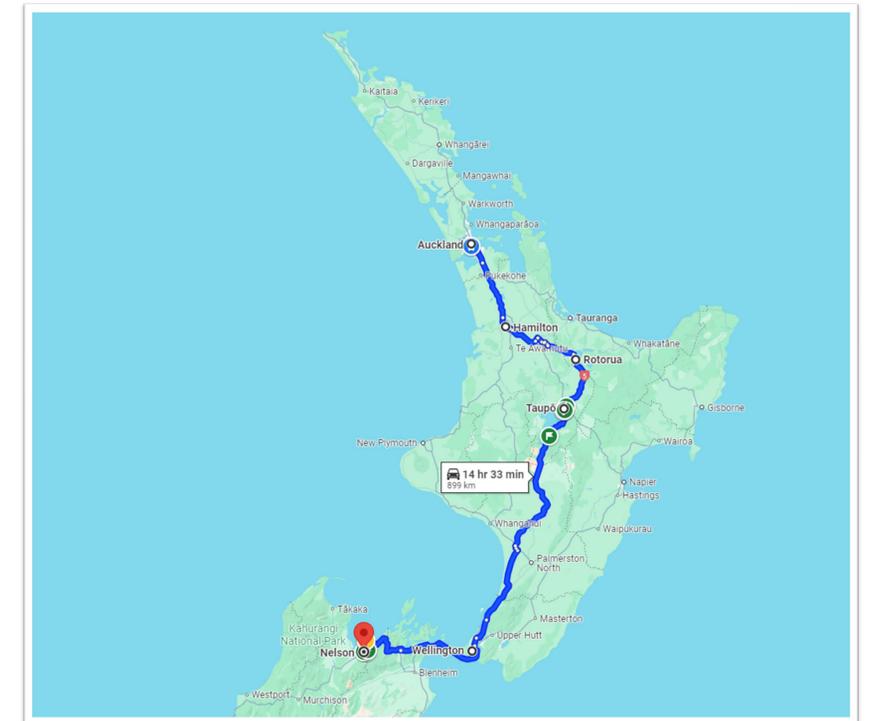


Sheep Pasture - Hobbiton



Lakehead - Rotoiti Circuit

MAP



CONCLUSION

- While the study abroad was predominantly environmental, restoration involves a variety of intersecting influences
- Even though environmental sustainability is a pressing global concern, the issue fragments and shifts with national, regional and local conditions
- Despite distinctions, commonalities in legislative structure, presences of indigenous tribes and freshwater create avenues for new solutions
- Nuances in how native and nonnative or invasive species should be managed