UNIFYING CLIMATE ACTIONS IN THE WELLINGTON REGION

Sponsor: Greater Wellington Regional Council (GWRC)
Advisors: Prof. Fred J. Looft and Prof. Ingrid Shockey

Emily Adams l Isabelle Mellor l Matthew Spofford

The project was partly proposed due to climate change.

"The May 14 downpours flood State Highway 2 at Petone, forcing its closure in one 2015 extreme weather event." (Wannan, 2015)

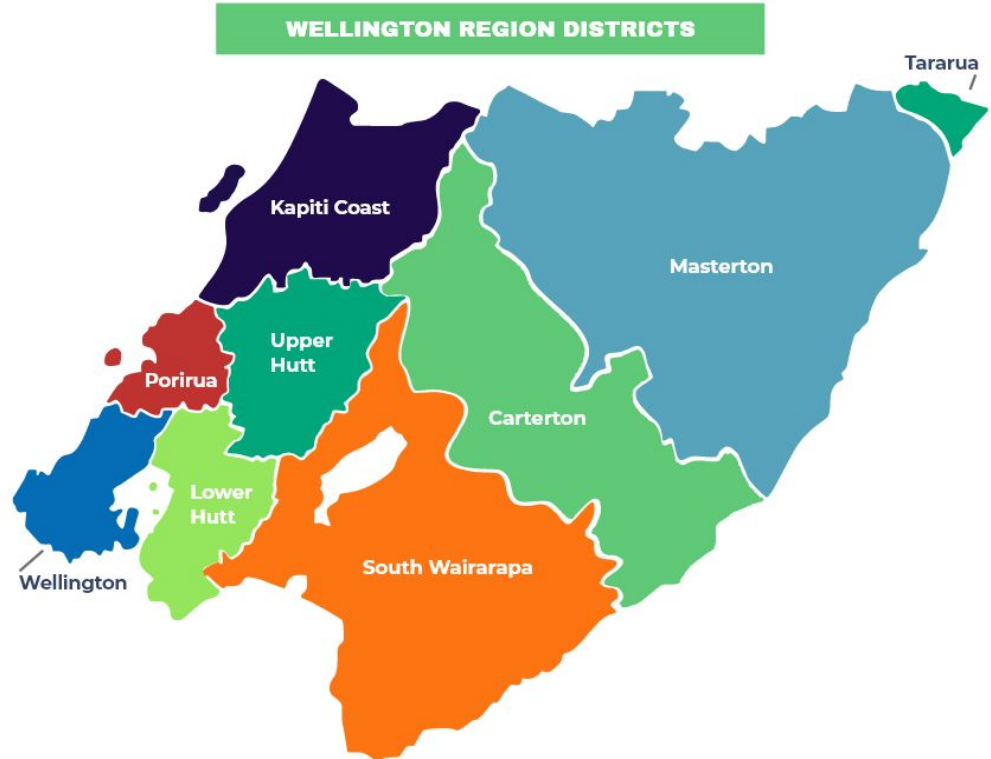(Greater Wellington Regional Council, 2019)

The project was also proposed to coordinate climate action efforts in the Wellington Region.

> **"**
>
> There appears on the surface no coordinated effort across the region but that may be due to there being no one place to source information.
>
> - Survey Participant
>
> **"**

WELLINGTON REGION DISTRICTS

Tararua

Kapiti Coast

Masterton

Porirua

Upper Hutt

Carterton

Wellington

Lower Hutt

South Wairarapa

We identified a goal to focus our approach to the problem.

- Collaborate with GWRC

- Produce a streamlined resource

- Highlight climate change actions

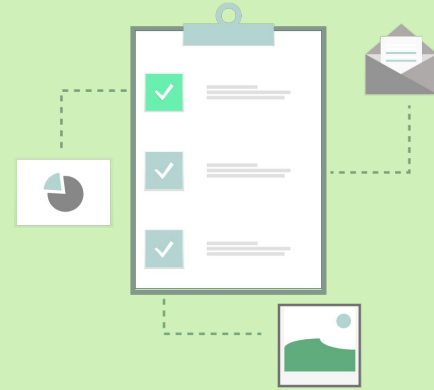# We reached our goal with 4 objectives.

Map the Network

- Baseline assessment
- Interviews
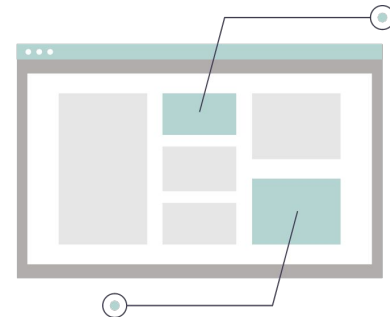
Determine Content

- Interviews
- Survey

User Interface

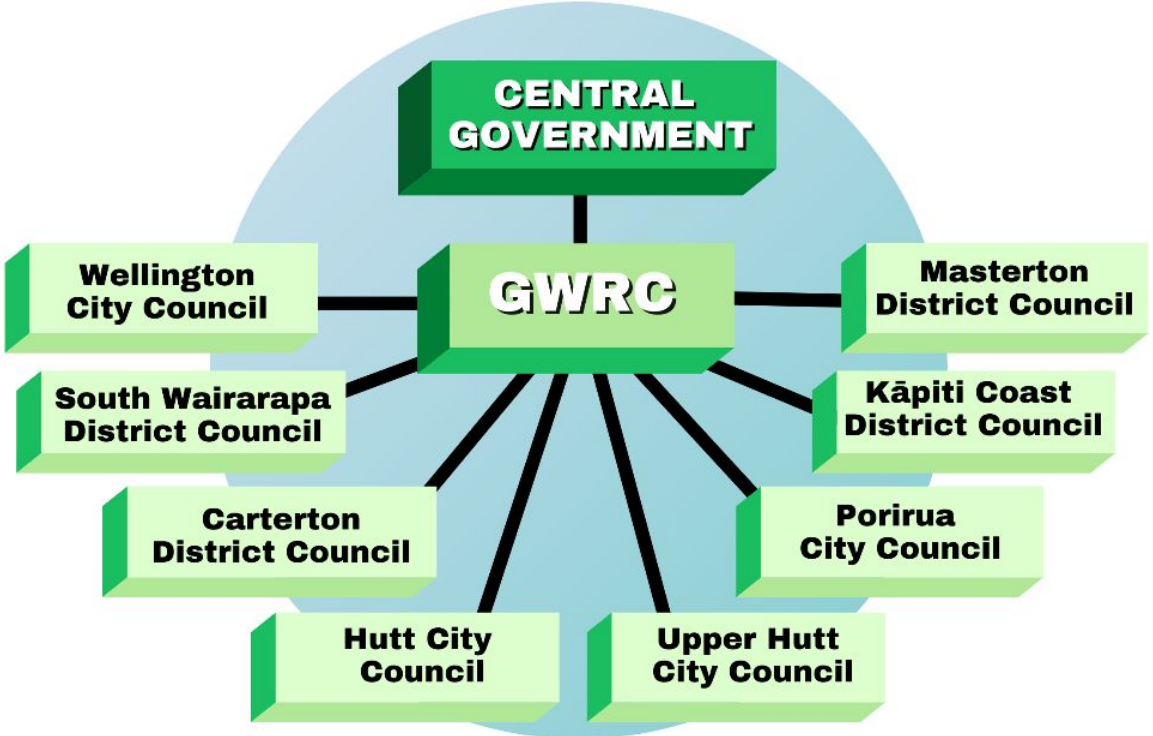- Usability testing
- Feedback group

User Experience

- Feedback group
- Expert interviews

Our baseline assessment informed us of government structure and helped prepare website content.

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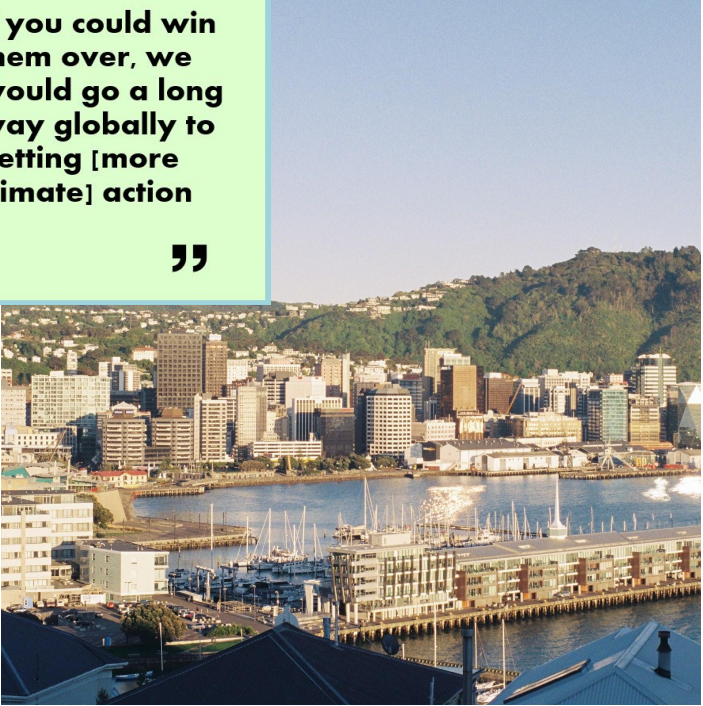
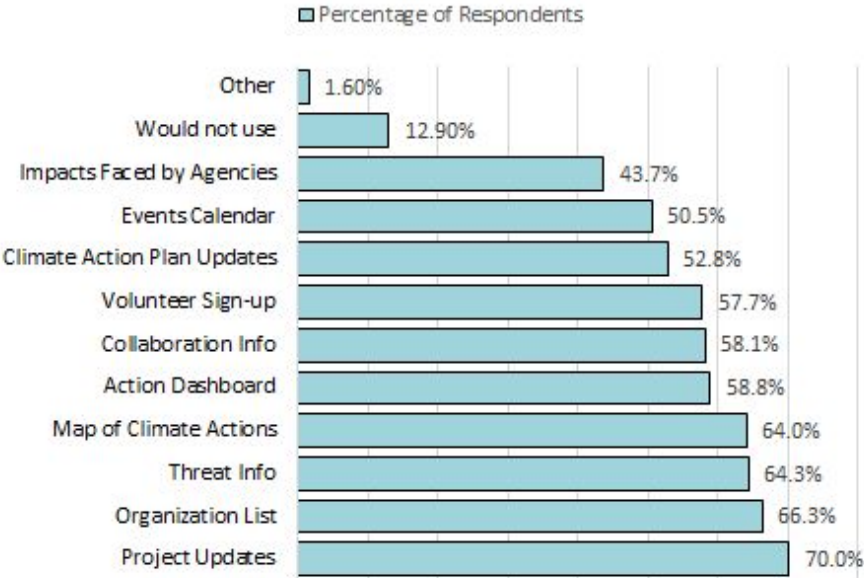# We determined content with the interviews and survey.

> **"**
>
> **if you could win them over, we would go a long way globally to getting [more climate] action**
>
> **"**

What Features Were Desired by Respondents (373 Responses)

□ Percentage of Respondents

Feature	Percentage
Other	1.60%
Would not use	12.90%
Impacts Faced by Agencies	43.7%
Events Calendar	50.5%
Climate Action Plan Updates	52.8%
Volunteer Sign-up	57.7%
Collaboration Info	58.1%
Action Dashboard	58.8%
Map of Climate Actions	64.0%
Threat Info	64.3%
Organization List	66.3%
Project Updates	70.0%

Sample posters are included on the website.

BEACH CLEAN UP DAY

MAKE THE BEACHES #PLASTICFREE!
JOIN US ON 3 APRIL 2021

WE WILL BE NEEDING VOLUNTEERS.
TO KNOW MORE ABOUT BEACH CLEAN UP DAY,
VISIT WWW.GW.GOVT.NZ/EVENTS

THE OCEAN IS RISING

STOP SEA LEVEL RISE

GET INVOLVED AT WWW.GW.GOVT.NZ/EVENTS

Science Learning Hub – Pokapū Akoranga Pūtaiao, University of Waikato, www.sciencelearn.org.nz

Protect the Wetlands

Wetlands:
- Are home to many native fish and bird species
- Reduce the impact of flooding
- Improve water quality
- Have important cultural and historical significance
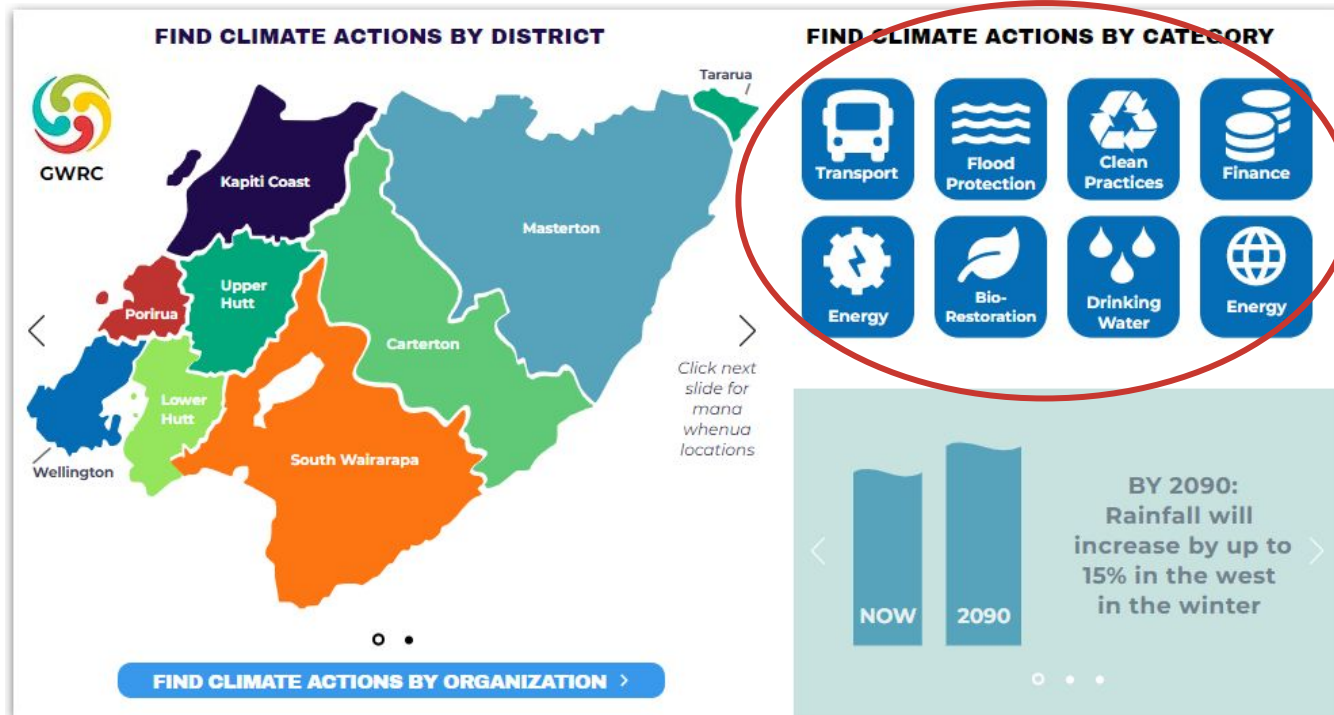
For more information visit www. gw.govt.nz

Interviews and a feedback group helped us design our prototype.
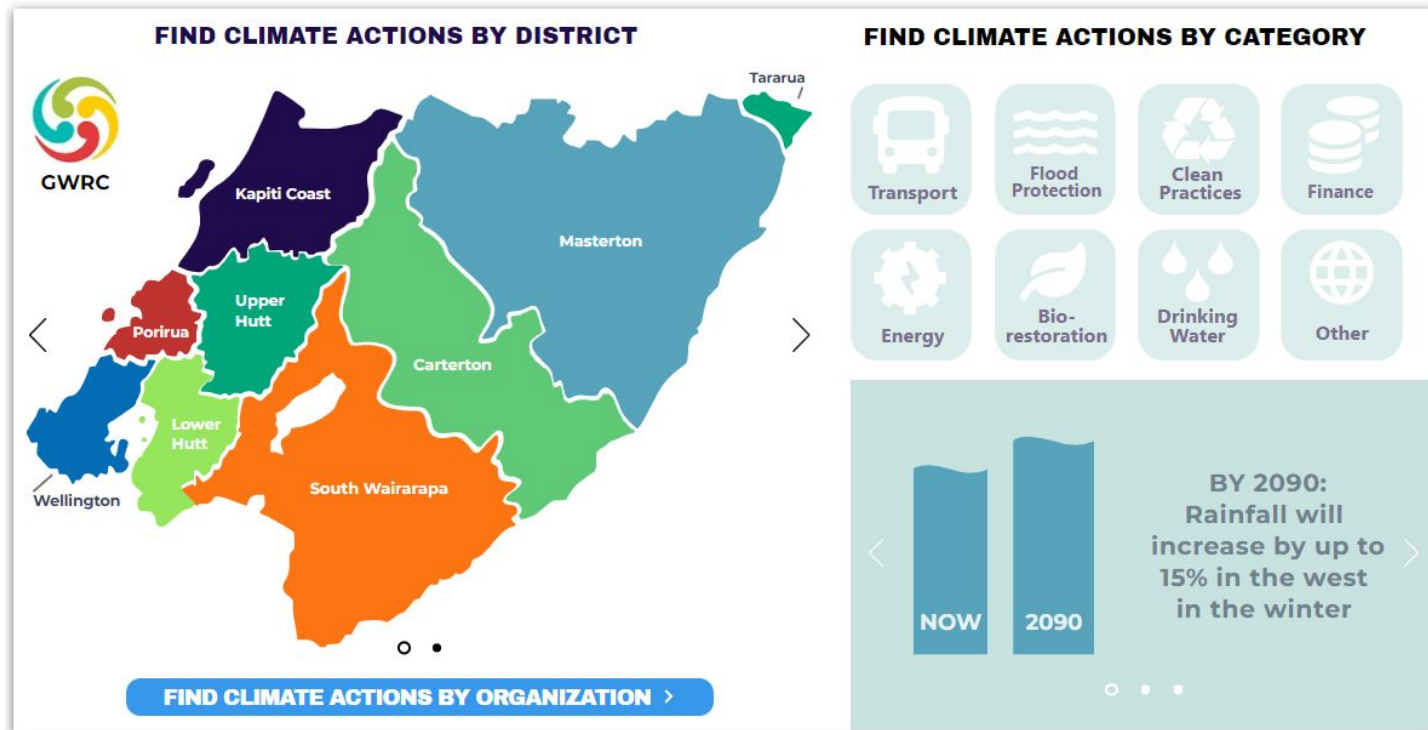
BEFORE

Interviews and a feedback group helped us design our prototype.

AFTER

Usability testing revealed areas for improvement in the final design.
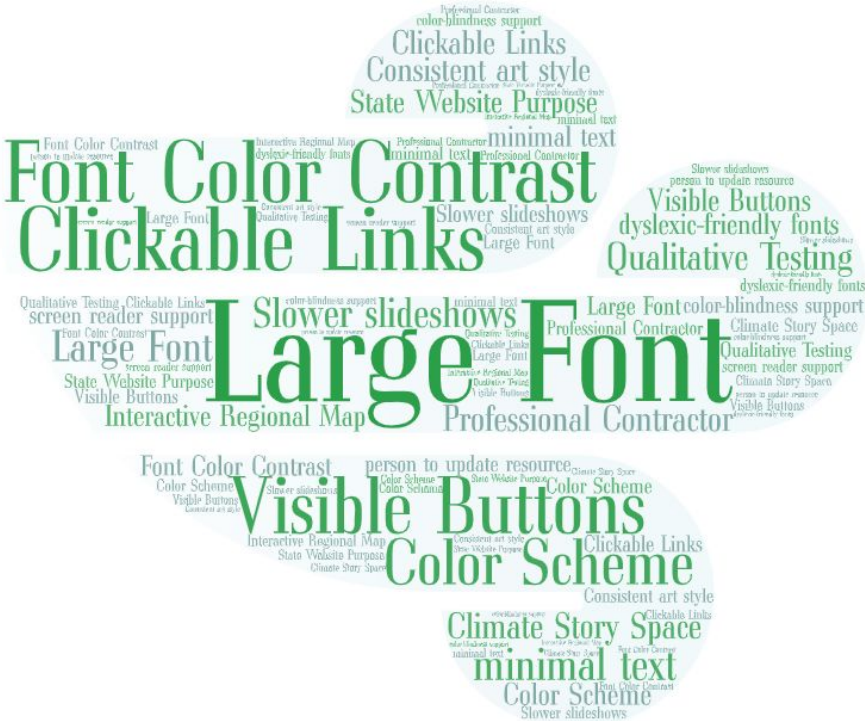

BEFORE

Usability testing revealed areas for improvement in the final design.

AFTER

Interviews with experts and a resource feedback group helped refine our prototype.

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(IEEE Computer Society & Visualization and Graphics Technical Committee, 2021)

To fulfill the goal, we have developed 4 recommendations.

Implementation

Maintenance

Promotion
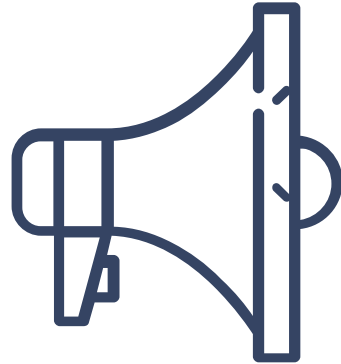
Inclusion
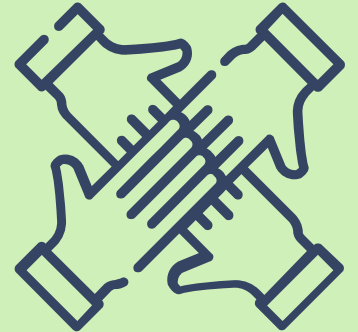
Our project meets the 13th UN Sustainable Development Goal.

"Take urgent action to combat climate change and its impacts"

- UN Sustainable Development Goal 13

(United Nations Division for Sustainable Development Goals, n.d.)

This project has fulfilled GWRC's 3rd objective.

- Increase community awareness

- Ensure all know how to take action

- Improve resilience and sustainability

(Greater Wellington Regional Council, 2015)

Acknowledgements

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Suze Keith (GWRC)

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Professor Fred Looft (WPI)
Professor Ingrid Shockey (WPI)

All the participants of our interviews, surveys, & feedback groups
The 2021 New Zealand IQP Class

Thank you for listening!

Does anyone have any questions?

Bibliography

Goal 13 l Take urgent action to combat climate change and its impacts. (n.d.). United Nations Department of Economic and Social Affairs. Retrieved December 4, 2020, from https://sdgs.un.org/goals/goal13

Greater Wellington Regional Council. (2015). Climate Change Strategy A strategy to guide the Wellington Regional Council's climate change response. Greater Wellington Regional Council.
http://www.gw.govt.nz/assets/Climate-change/GWRCClimateChangeStrategy7-10-15.pdf

Greater Wellington Regional Council. (2019). Wellington Region – Sea Level Rise – Commentary about sea level rise issues for the Greater Wellington Region, New Zealand. Wellington Region – Sea Level Rise. https://slr-gwrc.org/

IEEE Computer Society, & Visualization and Graphics Technical Committee. (2021). VIS 2021. Welcome to IEEE VIS 2021!
http://ieeevis.org/year/2021/welcome

Wannan, O. (2015, December 21). Wellington year of weather extremes, from hot dry days to fatal floods. Stuff.
https://www.stuff.co.nz/dominion-post/news/75317108/wellington-year-of-weather-extremes-from-hot-dry-days-to-fatal-floods

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