

RESTORING OUR URBAN STREAMS

ELIZABETH WALKER



St Lukes Environmental
Protection Society

WAITĪTIKO MEOLA CREEK AND STEPS

- Protect and enhance Waititiko Meola Creek, Roy Clements Treeway, Kerr Taylor Park, and underlying aquifer
- Inform and educate people in use of Waititiko Meola Creek in a sustainable way
- Promote and encourage community involvement and support in the restoration of Waititiko Meola Creek
- Consult and work alongside iwi, community groups, schools and other stakeholders
- Work in partnership with local, regional and central government
- Co-operate or join with other associations or bodies having similar objects

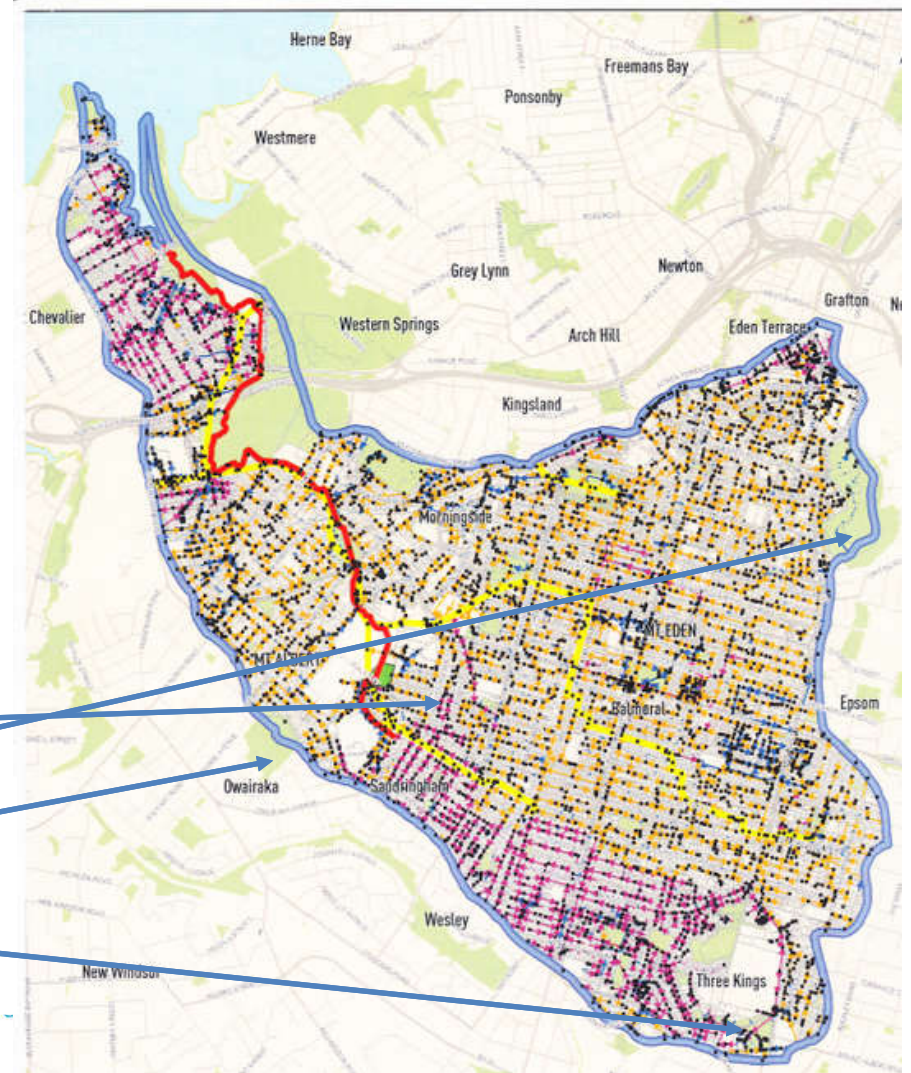
PROBLEM:

Meola Creek carries half of ALL the pollution carried by stormwater to Waitemata Harbour -near 2 full Olympic pools per day of sewer overflows



WAITĪTIKO MEOLA

- 3 Volcanic cones, springs, large aquifer
 - Feeds protected Meola Reef Te Tokaroa
- Largest catchment on isthmus
 - 5% pasture, 1% forest
 - 45% urban residential and
 - 47% permeable -2002
- AUP target > **60% impermeable**
- Westfield St Lukes
- Combined sewers **in pink**
- Maungawhau Mt Eden
- Owairaka Mt Albert
- Te Tātua-a-Riukiuta Big King



AUCKLAND WATER QUALITY

- **Urban streams** – “poor cousins” of large (rural) NZ rivers ?
 - Many convey **stormwater overflows** to harbours
 - **Raw Sewage designed** to flow into creeks during storms
 - **Road pollutants** containing oil, lead etc (47% of volume)
 - **Sediment** pollutes rivers and harbours
- **Storm Water**
 - Caused by **loss of permeable surface** areas (like forest or wetland)
 - Where rain falls on **paved surfaces**,
 - more **runoff** is generated compared to runoff from the same storm falling over a forest.
 - **Large volumes of water** are swiftly carried to **local streams, lakes, wetlands** and rivers, causing flooding, erosion
 - washing away important habitat for critters that live in the stream



AUCKLAND ISTHMUS SITUATION

- **Reduce Stormwater Runoff**

Most effective way to minimize the impacts :

- **limit the amount of paved surfaces** created during development,
- **preserve** as possible the **natural topography, vegetation.**

- **Mitigation:** Rain gardens, detention tanks, WETLANDS

–slow and detain stormwater

- **Problem** – caused by **humans, especially in cities**

- **Solutions** – **also in our hands** as residents of Auckland



•

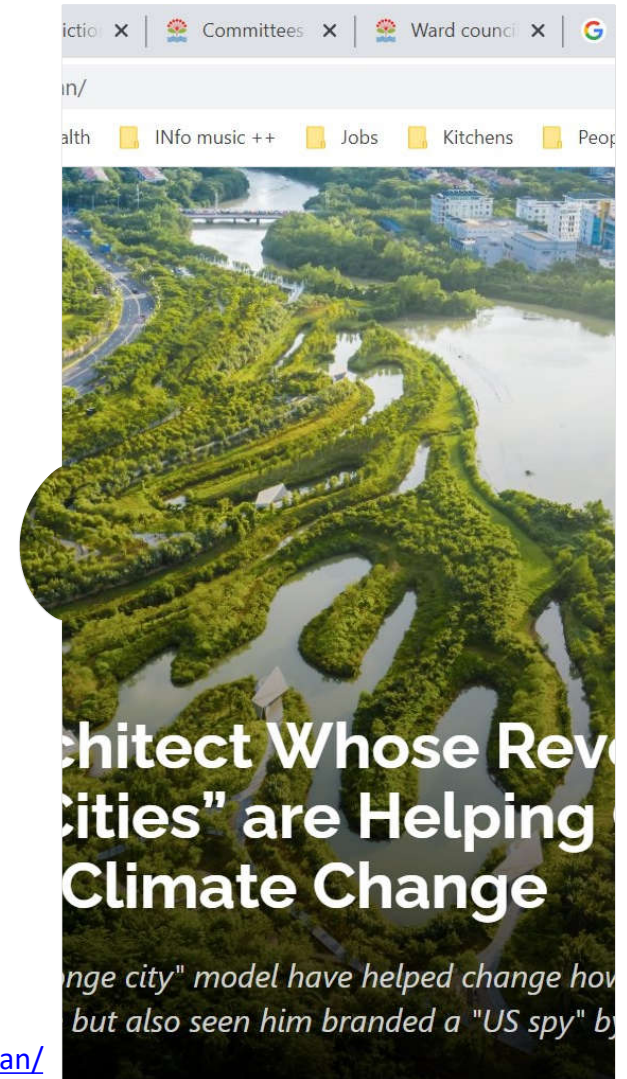
VISION: NATURE IS OUR BEST OPTION

*Slow the water – let it go into the ground or tanks...
Imagine our landscape full of clean water and
our creeks becoming healthy again*

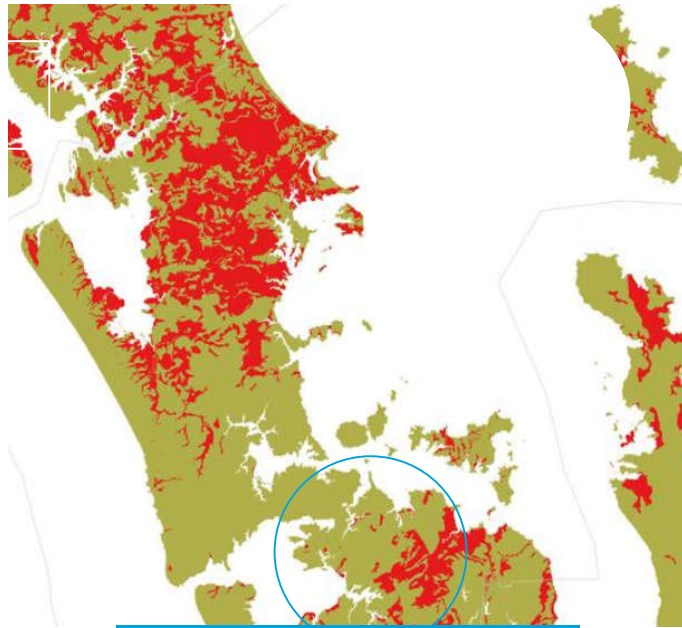
•

Sponge cities

<https://radiichina.com/sponge-cities-architect-yu-kongjian/>



AUCKLAND WETLANDS



PRE HUMAN WETLANDS

• NZ Herald



WETLANDS NOW

• NZ Herald

-

RESTORING OUR URBAN STREAMS AND WETLANDS

Ko te wai te ora ngā mea katoa.
Water is the life giver of all things.

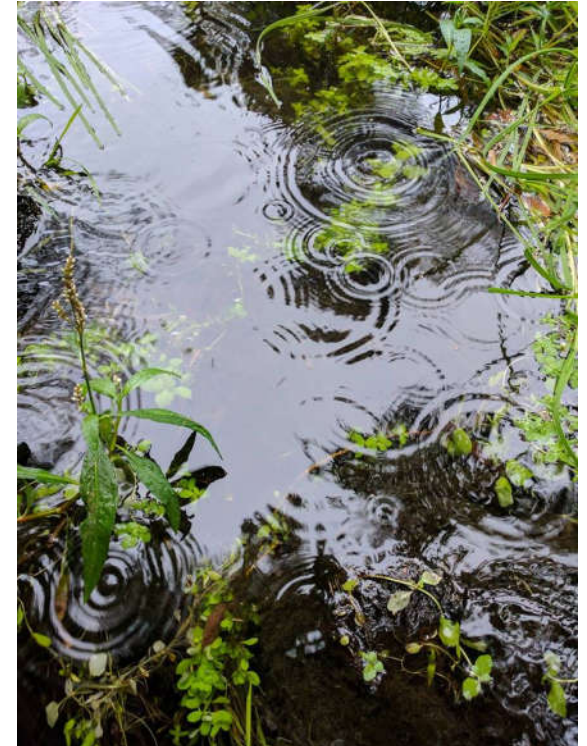


Photo STEPS

-

WAI – CONNECTEDNESS OF WATER

- Restore nature's solutions
 - Wetlands act like a sponge to filter water entering the aquifer and
 - Restore wetlands – eg **Waatarua, Roy Clements Treeway** (part of “Cabbage tree swamp”)
 - Other possible locations?
- Align with mana whenua, iwi, ngā kura kaupapa, urban marae
 - Core values – connectedness of water
 - ***Ko au te awa, Ko te awa ko au***
 - Strategic focus
- START TODAY! Climate change amplifies these problems



Meola Wetland Photo STEPS

PERSONAL ACTIONS

- Become involved with your local creek or catchment
- Learn about ecology, native species and current problems
 - Visit Meola Creek wetland!
- Volunteer for a local group - planting, weeding, trapping, clean-ups, & measure water quality with Wai-care
- **Minimise paved surfaces**
 - in your home and at your work
- Install rainwater tank – community resilience
- Water Sensitive Design principles



Meola Wetland Photo STEPS

POLITICAL - CENTRAL GOVERNMENT

- Read **National Freshwater Policy 2020** – coming into force in 1 week
www.mfe.govt.nz/fresh-water/national-policy-statement/about-nps
 - Need NZ to **follow the science**
- Read **DIA 3 Waters Review** – major regulatory changes likely
www.dia.govt.nz/Three-Waters-Review
- **\$\$\$** needed for Auckland water infrastructure
 - waste water and stormwater
 - Auckland Council reached loan limit because of transport projects



Photo STEPS

CENTRAL GOVERNMENT ELECTION 2020

- Make sure your local MP knows your creek – take a walk
 - Other major party candidates should also know!
- **Questions:**
 - Why still **no national limits for nitrogen and phosphorous in streams?**
 - Future stormwater regulation?
 - What is the plan for **Auckland water infrastructure money** from central Govt ?
- Stay informed and submit when policy changes are planned

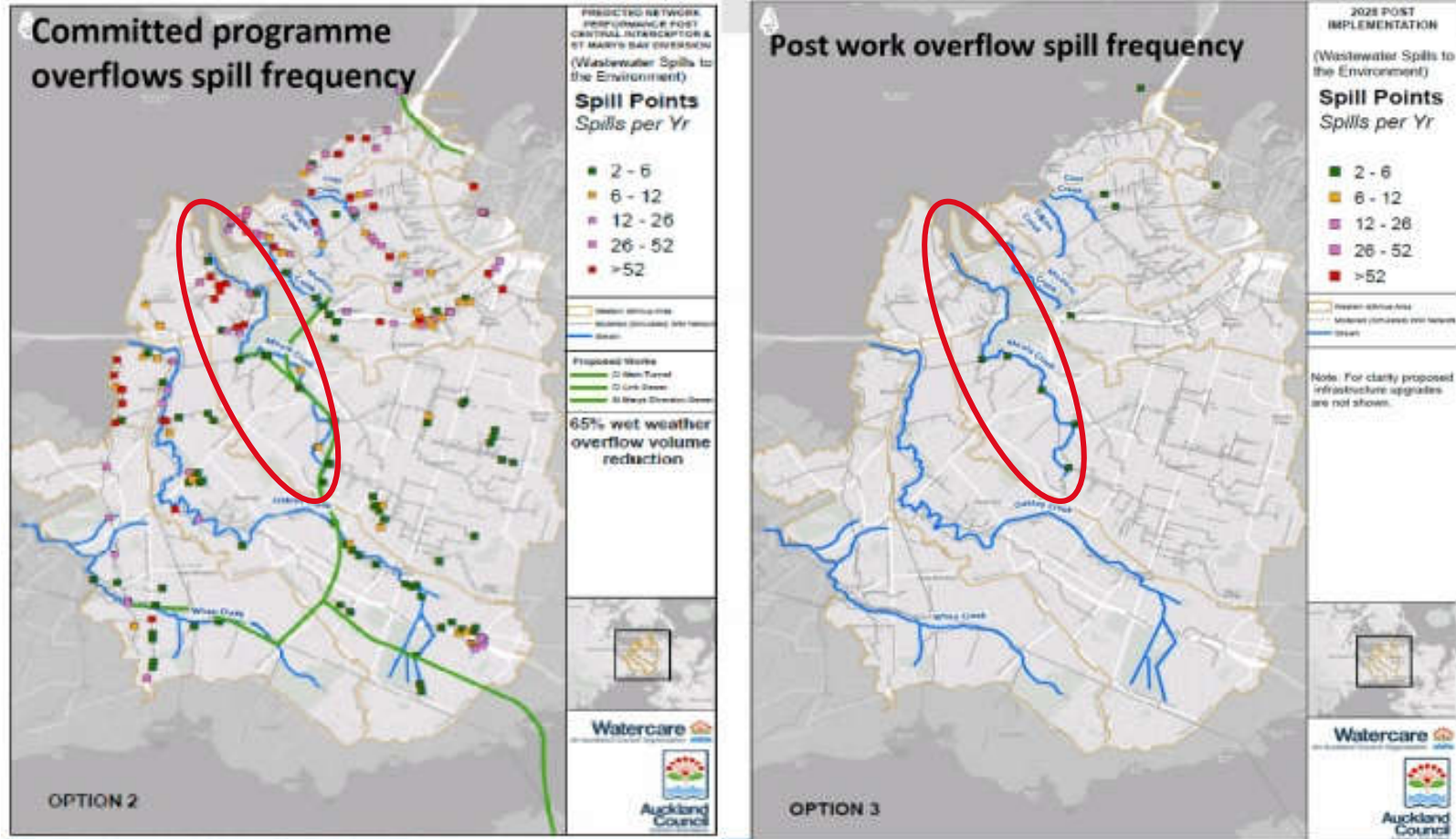


LOCAL GOVERNMENT – AUCKLAND COUNCIL

- Lobby Auckland Council through your ward Councillor
 - **Auckland Council and Watercare** are key agencies who work together on stormwater and restoration of streams and wetlands
 - **Auckland Transport and NZTA**
 - Build roads contributing nearly 50% of combined sewer runoff in Auckland
 - What policies for use of permeable surfaces on urban roads, footpaths?
 - Why use bitumen and concrete for bus stops, car parks etc?
 - need Gobi blocks and similar
 - Make your Local Board aware of water problems



WESTERN ISTHMUS PROJECT GOALS



AUCKLAND COUNCIL WATER QUALITY TARGETED RATE

- Most importantly
 - For decades **stormwater budget has been spent elsewhere**
- **Water Quality Targeted Rate (WQTR)**
 - a 10 year program for stormwater on the isthmus is in place – separation of sewers
 - extend to Eastern suburbs – needed at least for another 10 years
- **VOTE FOR WQTR** in your **long term plan** submissions
- Water sensitive design standards – should be mandatory in **Unitary plan**



MEDIA AND SOCIAL MEDIA

- **Join Stop Sewage Overflows in Auckland**

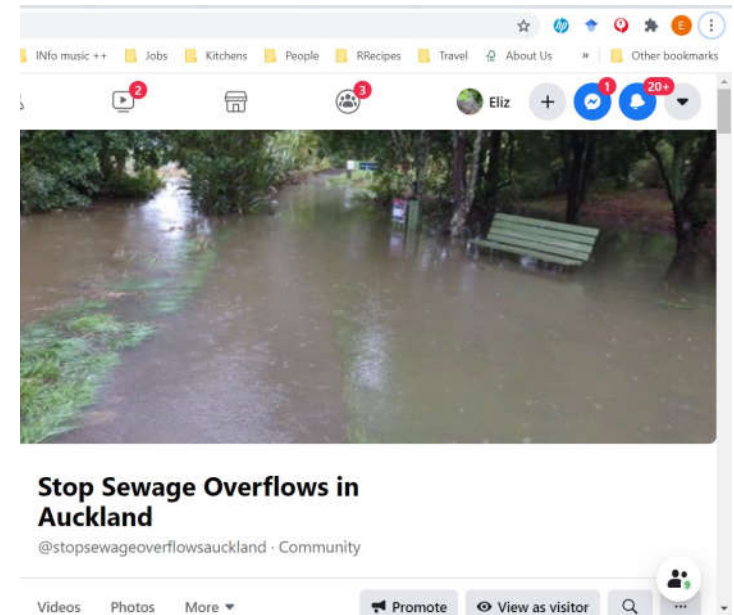
www.facebook.com/stopsewageoverflowsauckland

>600 followers

- State your case on TV and radio
- NZ Herald, STUFF NZ Geographic articles on Meola Creek's problems

- **Benefits of wetlands:**

- Filter and purify water
- Attenuate floodwaters and fast-flowing water
- Very effective at sequestering carbon
- Buffering against effects of storms and floods
- Provide valuable habitat for birds



Meola flood
Photo STEPS

-

LOCAL ACTION

Let's solve problems from previous generations
- so our mokopuna don't need to deal with them

-

Daniel Currin photo



LOCAL COMMUNITY

- Commit your time
- Join Hapua Thrive or your local stream group
- Align local groups with
 - local Ratepayers Associations and
 - SASOC (Stop Auckland Sewer Overflows Coalition)
- Report local pollution or parks problems to Auckland Council (3010101 or new app)





Water restrictions in Auckland Water restrictions are in effect across the Auckland region. [Learn more](#) ✕

Broken bench?



Report a maintenance problem online

You can now report a maintenance problem online.

We currently deal with problems at:

- parks
- community facilities or venues
- beaches or maunga
- roadside or public spaces.

The problem could be a broken park bench, a blocked toilet or an overflowing litter bin. Tell us the details, upload a picture and we will sort it.

[Report a maintenance problem](#)



