

City drinking water safe during floods thanks to upgrade

Council Water Manager Alister Murray gives an update on how our water treatment plant fared during last week's flood:

COUNCIL'S recent \$12 million dollar upgrade of its water treatment facility at Branxholme on the bank of the Oreti River proved its worth again during the February 2020 major flood event.

Invercargill's water is drawn from the Oreti River which became extremely turbid (dirty) following very high rainfall in the Oreti catchment.

Peak water level at the intake was five metres above normal on February 5, with turbidity exceeding 500 turbidity units. The river under normal conditions runs at turbidity less than five units with a typical flood 'topping out' at 200-250 units.

The turbidity of the water after filtration at worst, was only a little over 0.1 units which was well within what is permitted by the Drinking Water Standards.

This flood was much larger than any experienced for many years and would have resulted in considerable difficulty for the Branxholme plant to handle prior to the upgrade, probably to the extent of requiring a 'boil water notice'.

CENTRE RIGHT: The water intake pump station set on the river terrace below the main treatment plant. The intake screen which faces the camera is completely submerged and so cannot be seen, as are the sludge ponds located in the central part of the image, there being in excess of two metres of water over ground level in that area. The plant security fencing showing in the background running from right to left from the top third of the image sustained some damage which will require straightening of fence standards and re-attachment of diamond wire mesh. The Oreti River main channel can be seen beyond the tree line in the upper part of the image.

The Oreti 'boiling' in flood about 100 metres downstream of the Branxholme Plant intake just as it passed under the Nightcaps-Oporo rail bridge.



RIGHT: Water samples taken at various points throughout the treatment process. The far left sample shows the 'raw' water of the Oreti prior to treatment, which was reading 560 turbidity units. The sample to the far right shows the water leaving the plant.



First Youth Council for 2020



WE were thrilled to welcome 24 new and past members to the Invercargill City Youth Council for their first meeting of 2020. This year we have members from the six secondary schools in Invercargill, which is fabulous!

The year started off with a bang with many topics being discussed, from the Environment Southland consultation on proposed vehicle restrictions on Oreti beach, to engaging activities that helped the young people get their head around/understand “civics” and the

responsibilities of Local Government, specifically the Invercargill City Council. The School Representatives gave their reports and the Youth Council Committees for 2020 were decided upon.

This year the Youth Council will start their meetings as separate “Unders” and “Overs” groups and then move through to the Council chambers for a combined meeting. This works well as it enables years 9, 10 and 11, and years 12 and 13 respectively, to have open

discussions with their peer group before moving through to attend to items as a whole Youth Council.

We are eager to see what ideas and opinions emerge from the chambers on Wednesday afternoons and look forward to supporting the young people in their growth in civics participation and enabling them to have a voice for the goings-on in our city!

Gemma, Mary and Ollie
COMMUNITY DEVELOPMENT

Te kupu o te wiki

word of the week

Goodbye

Here are a few different ways to say goodbye...

E noho rā:

Farewell - from a person leaving

Haere rā:

Farewell - from a person staying

Hei konā rā:

Farewell, goodbye - less formal

Ka kite:

See you again, see you soon - informal



Image: Emergency Management Southland



People helping people affected by the floods.

ICC staff answer call for emergency volunteers

BY JUDY CHRISTIE

Environmental Information Officer

SINCE the Civil Defence emergency was declared on February 3, many Council staff have been asked or have volunteered to assist Emergency Management Southland, based at Environment Southland.

Some staff members have received specialised training in the past, but many have gone with no previous training, happy to pitch in where they were needed, and were quickly slotted into one of the teams to learn on the job.

It is a fitting analogy to say that a lot of us were thrown in at the deep end, but we have all managed to swim. Some have been rostered for just a few hours while others have done several stints, including 12-hour overnight shifts.

We can train for Civil Defence emergencies as part of our job description for many years without an opportunity to put what we have learned into practice.

Mia Morgan, an Environmental Monitoring Officer, had the chance to work in a real event just a month into her time here with Council, and found it an interesting experience.

Mia reported that she worked in the Intelligence Team, collecting and recording incoming information and making sure it was distributed to the right place.

Kirsty Bell, by day a Team Leader in Financial Administration, also joined the Intelligence Team for a Sunday shift.

David Whelan and Karen Drummond, who have day jobs working as our GIS experts, worked on the mapping systems, updating data as it came through so that the decision makers had an accurate record of what was happening.

David was given a different job on Saturday, going out and about to take photos of volunteers as they helped those affected by the floods.

Auditor Raewyn Thompson found herself in the middle of the night recording the details of a high level meeting from which an action plan was produced to work out what needed to be done, by when and by whom. She also worked as the Controller's personal assistant for some day shifts.

Hannah McLeod transferred her skills as Interim Communications Team Leader to work in PIM (Public Information Management), making sure that the word got out, and responding to enquiries from media.

Paul Horner, by day the Manager of Building Assets, put on a different hat and worked two twelve hour overnight shifts in the Operations Team while the flood was at its height. His tasks included checking on road conditions throughout the Southern Scenic Route, as these details were not reported on the NZ Transport Authority's websites.

The examples above are just a few from the many staff members of our Council who responded to the call for help.

Several personnel were flown in from northern centres to help, but they would have been severely disadvantaged without the local knowledge and hard work of local staff.

The call has gone out again this week for more staff to help, so the need is ongoing.

And a final word – a Civil Defence army, like all armies, would seem to march on its stomach. The catering was amazing and much appreciated!



Yarrow Street water main failure



BY ALISTER MURRAY
Manager - Water Services

THE 200mm diameter asbestos cement water main in Yarrow Street by Adamson Crescent failed on Sunday morning 9 February about 11am.

Fortunately, because of the proximity of isolation valves, only a few properties were left without water although several would have experienced a significant drop in pressure until the isolation of the damaged section of pipe was completed.

The repair was completed by 5pm but there were several instances of 'dirty' water reported by telephone and recorded in social media, some of which were some distance away from the repair site.

This was most likely due to a combination of increased flow velocities and changed flow paths within the pipe network disturbing bio film from pipe walls.

Affected residents were advised to run their taps until the water ran clear to flush away the dirty water. Additionally, hydrants were flushed the day after. There was no risk to health.

The water main failure badly damaged the Yarrow Street carriageway on both sides of the median strip. Road repair alone is expected to cost \$40,000.

The section of Yarrow Street served by the 200mm asbestos cement main runs from Isabella Street to Racecourse Road.

It was installed in 1962 and so is approaching 58, years which is well short of its nominal life of 72 years.

Inspection of the failed pipe section is associated with deteriorated pipe condition and therefore highlights the variability of asbestos cement pipe life.

Council has an ongoing programme of asbestos cement water main renewal of about \$2million per year. The Yarrow Street 200mm main is scheduled for renewal in the 2025/26 year before road reseal.

Any further failures in that water main will result in bringing its renewal forward.



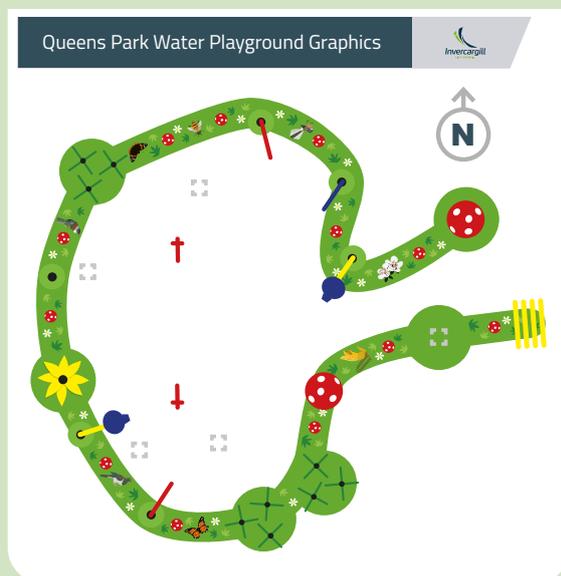
Queens Park Water Play Maintenance

We are renewing the Queens Park Water Play Area!

Work is scheduled for a week between 14 February and 8 March (weather dependant).

During this time the water play area and pool will be fenced off and closed to the public.

We apologise for any inconvenience.



For more information please contact Invercargill City Council Parks and Recreation on: (03) 211 1777 or email parks@icc.govt.nz