

DROUGHTS, FLOODS, SWIMMING...

Despite the recent and very welcome rain, it is still highly likely that Hawke's Bay will have another dry summer and autumn. This may make summer beach-goers happy but is a potential crisis situation for our agricultural producers who need water.

The Regional Council is preparing for drought and adding to our monitoring of the region's waterways, coast, rainfall and soil moisture, to provide even better information – whether you need it for work or play. And there's new approaches to managing land and water that may be long term solutions.



SWIMMING AND SHELLFISH CHECKS



Summer monitoring of our popular swimming and shellfish gathering spots starts at the beginning of November.

"Most of the spots we monitor are really good for swimming, especially our ocean beaches, but where you need to take care – and check before you swim – are spots close to river mouths and in lagoons," says Vicki Addison, Council's resource analyst for water quality and ecology.

A plus for families is that many of the ocean beaches are also patrolled by Surf Lifesaving HB during weekends and summer holidays.

Council staff and a holidaying university student will monitor 30 sites until mid March including 14 marine sites, four fresh water rivers, 11 estuaries and Lake Tutira.

"We also monitor five shellfish gathering sites - Mahia Beach at the golf club, the south end of Waipatiki Beach, Ahuriri Estuary, Te Awanga and Kairakau Beach. They had 100% compliance last summer but things like algal blooms or heavy rain can cause problems, so please take note of any notices put up at these places. District Health Board health warnings are usually short lived but need to be taken seriously."

What to watch for? Lake Tutira sometimes has an algal bloom in the warm summer months. The Puhokio Stream at Waimarama has persistent water quality issues although, in the long term, planting of riparian margins and fencing stock out of streams which is underway by farmers, plus better septic tank maintenance by home owners, should make a difference.

3 WAYS TO CHECK

Check a beach for water quality before you plunge in for a swim

1. phone the B4U Swim line 06 878 1368 or
2. check online at www.hbrc.govt.nz or
3. email beaches@hbrc.govt.nz.

Water quality testing is done on Mondays, November through to mid March. Results are posted on our website by Thursday.

Public Health is notified of any adverse results (using Ministry of Health guidelines) and is responsible for putting up signs to warn you of any water quality concerns.



NGARURORO WATER GAUGING

We're investigating the Ngaruroro River over the next year to see how much water is in the system when there is no irrigation taking place.

Concurrent gaugings will be carried out on scheduled days when irrigation, that may affect flows in the river, has been turned off. Consent holders will receive a schedule of days irrigation will be banned; these bans will not be imposed when a low flow ban could be pending.

"The same investigation was carried out in the Ruataniwha basin last year and the data will be reported later this year," says Rob Christie, Council's hydrology team leader.

"The information will help give us baseline data for statistics and assist us to determine water allocations across the catchment."

He says the team is hoping for eight runs down the river, trying for a minimum of one a month covering a range of high flow and low flow conditions.

In-stream habitat surveys are also carried out on different systems every summer - this year the focus is on the Ngaruroro and the Karamu. One use of the survey data will be to show how fish habitat reacts to changes in flows, which in turn gives us information on how to manage this aspect of stream ecology.

BETTER DATA RESOURCES FOR DROUGHT FARMING

Science and land management are developing new systems to help farmers deal with changing climate conditions in Hawke's Bay.

"Hawke's Bay has been geared to a drought for one year in ten. But after three years of drought we are looking at a fourth dry summer, so we need to get smarter about how we are operating - and that includes the Council," says land management advisor Ian Millner.

"We have to respond to the information that's available and not just do things by recipe – doing things a certain way or at a certain time because that's the way they've always been done," says Ian.

Using data collected by the science team from 13 climate stations can change how the region farms summer-dry conditions. Five more stations are being added by Council, one a year for the next five years.

Rainfall, river level, daily soil moisture and PET (potential evapotranspiration) data is now available on the Council's website.

"The data can show stress points – the point where decisions have to be made - to destock or to irrigate. Farmers can see from the data if that 20mm of rain had any effect on soil moisture," says Ian.

Our Science Manager, Graham Sevicke-Jones, says the Regional Council is moving to a more holistic approach to data use – not just looking at how low river flows are getting, but also trying to indicate what the pressures are on the land, irrespective of what's happening to the river.

"The information isn't just geared towards warning of lower water levels but knowing when the conditions are affecting soil moisture and therefore crop growth."

When the new climate stations come on line it will mean the region has data for each 15km radius in the region. Farmers could get their own mini climate stations to see if their farm management practices are making any difference compared to what is happening at their nearest official climate station, Graham says.



NEW WATER GROUP

A new group has been set up within the Regional Council's structure which recognises the importance of water in everything we do.

The new water group will focus on water storage, working with user groups and passing on new technology to ensure irrigation efficiency.

Heading the new Water Initiatives Group is Bruce Corbett, who is migrating from South Africa. He has a water engineering, economics and planning background with 33 years experience in the "water sector".

The identification of six potential sites for water storage in the Ruataniwha Plains catchment has moved to the next step, with a \$1.5 million feasibility study to be done over the coming 18 months. What makes this different from similar projects around the country is the involvement of landowners and key stakeholders, such as Fish and Game, DOC and iwi, right from the start, as well as the Regional Council's leadership role.

The group will be helping consent holders with the logistics of finding a cost effective way to buy and install large numbers of water meters across catchments. User groups will also be set up to work with Council on water rationing and possible roster arrangements to improve water management when the Karamu, Tukituki, Ngaruroro and Tukituki/Waipawa catchments get low.