

Kaimoana survey guidelines complement management tools

Guidelines designed to assist hapu and iwi to survey kaimoana resources were released recently by the Ministry for the Environment. The guidelines were developed in Taranaki and provide a further tool for environmental management.

The guideline project grew out of pioneering work related to the Pohokura Project. The North Taranaki Otaraua Hapu Trust in partnership with the Ministry for the Environment and Shell Petroleum Mining undertook to develop the guidelines. Ngati Rahiri hapu were also closely involved. The Council was associated with the earlier work, was consulted on both the methods used and the scientific background behind the surveys, and provided comments on the draft guidelines.

The Kaimoana Survey Guidelines for Hapu and Iwi provide a hands-on means of carrying out a kaimoana survey and an environmental monitoring survey. The process encourages participants to make the most use of existing knowledge, including that held by local authorities.

As a result of the work the North Taranaki hapu are more familiar with the Council's procedures and methodology and more aware of its commitment to increasing its understanding of the marine environment. For its part, the Council has gained a closer appreciation of cultural perspectives that might not fit the traditional scientific viewpoint.

Council officers and representatives of Ngati Ruanui iwi have been monitoring the Fonterra outfall discharge since 1996 and will consider the guidelines as part of the review of iwi involvement in the



Council scientific officer, Dan Govier (left), and Ngati Ruanui representative Matt Adam survey the marine ecology for the Fonterra Whareroa monitoring programme.

monitoring programme.

A second interim document *A Cultural Health Index for Streams and Waterways* also released by the Ministry for the Environment follows three years work by South Island runanga. The Index links scientific methods and cultural knowledge about stream health,

identifying stream health indicators and developing a recording form for runanga members to assess the health and mahinga kai at each stream site. The Council and Taranaki tangata whenua will investigate the use of the *Cultural Health Index* as part of the testing programme in the region in due course.

Inside Recount

Page two
Councillor resigns;
Taranaki's clean air

Page three
Waste dealt with

Page four
Record rainfall; flood
controls work well

Page five
Work in Waitotara

Page six
Sand dredging and
deposition monitored

Page seven
Consent monitoring results

Page eight
World wetland day; sites
clean



From the Chair

Each year in the past the Taranaki Regional Council has produced a draft annual plan for community comment and as a blueprint for the year's activities. This year, the format has changed. For the first time, the Council has prepared a ten-year *Long-Term Community Plan 2004/2014*, a development that meets the requirements of the Local Government Act 2002.



Chairman David Walter

This is not to say that all the plans for 10 years are to be set in concrete now, but rather that the *Long-Term Community Plan* outlines proposals and programmes for the year ahead within the bigger picture of 10 years.

Prior to the completion of the *Plan*, a number of community meetings were held to discuss and formulate a set of community outcomes Taranaki should work towards. The result of these discussions was a set of seven outcomes including a clearly expressed desire to ensure that our natural environment and physical resources are sustained and protected in the long term. The Council can certainly contribute in this regard by building on the comprehensive work already achieved in a number of relevant areas. Accordingly, while the Council now has wider powers available, it has opted to continue to focus on its core business of achieving a "sustainable Taranaki", while allowing flexibility to support other community projects where appropriate.

The *Plan* the Council has prepared will ensure that Taranaki progresses in the areas of Council business. It makes effective and efficient use of ratepayer funds with only minimal changes to rating levels.

Enclosed in this copy of *Recount* is a summary of the Council's *Long-Term Community Plan* with instructions on how to obtain the full *Plan* and how to make a submission. Community comment on the *Plan* is an important part of the process. The Council invites you to respond.

David Walter - CHAIRMAN

Councillor resigns

Former New Plymouth Mayor Claire Stewart resigned from her position on the Taranaki Regional Council towards the end of 2003. Mrs Stewart was elected to the Council in 2001 after deciding not to stand for a fourth term as Mayor. The Council received her resignation with regret. While a member of the Taranaki Regional Council she chaired the Regional Land Transport and Emergency Management (Civil Defence) committees.

"We all wish Claire well in her retirement from public life, and appreciate the notable contribution she has made to Taranaki during her involvement in various roles for many years," Council Chairman David Walter said.

The Council has decided to not fill the vacancy in the New Plymouth constituency until the triennial elections in November.



Claire Stewart

Tests confirm that Taranaki's air is clean

Recent air quality tests have delivered Taranaki a clean bill of health.

The tests made up part of a survey carried out by the Council on behalf of the Ministry for the Environment. The Ministry required information for its environmental monitoring and reporting programme: the Council gained good data to support its air quality management policies and practices.

Monitoring was carried out between May and October last year from a unit placed on the New Plymouth District Council building. The location avoided influences from local sources but picked up the air stream flowing toward or from the elevated residential areas to the south.

The results were good and the work confirmed the "excellent" air quality of Taranaki.

The survey was measuring levels of inhalable particles possibly derived from a number of sources including motor vehicles, solid fuel burning, industry, photochemical processes and natural sources such as dust, pollens and sea spray.

Small-sized particles have been linked to bad health especially in elderly people, people with respiratory diseases, cardiovascular diseases or infections, and in children.



Council scientific officer Brian Cheyne monitors Taranaki's air quality in New Plymouth.



Regional waste strategy implementation makes good progress

While February's wet weather meant a short delay for the Council's survey of rural waste generation and disposal, the planned activities are now well under way.

The survey, which is believed to be the first of its kind in New Zealand, will be an important first step to deal with the disposal of solid waste from farms in the region. Around 100 farms of varying types, sizes and locations within Taranaki are being investigated. The information sought includes the types and quantities of wastes produced or stored on farms, and their methods of disposal.

While Taranaki farmers have responded well to previous environmental initiatives, such as the collections of unused agrichemicals or hazardous wastes, they are often unable to readily access recycling schemes or other waste collection options. The regular disposal of empty 20-litre agrichemical containers and bale wrap, for example, remains an unsolved problem. Disposal of hazardous wastes from farms that may be some distance from the drop-off facilities provided by district councils at their transfer stations is often inconvenient and potentially unsafe.

The end aim of the survey is the identification of sustainable and environmentally effective waste management strategies for farmers that are economically viable and able to be adopted throughout New Zealand. A team made up of representatives from Federated Farmers, Stratford District Council, Queen Elizabeth II National Trust, Farm Wise Consultants, Fonterra, the Fonterra Shareholder Council and the Taranaki Regional Council has prepared the survey.

An associated collection of hazardous and special wastes in rural Taranaki was carried out this month. This was part of a nationwide project to encourage farmers to clear out any unwanted or banned agricultural chemicals from their storage sheds or garages and to check for any other types of rural hazardous wastes needing disposal.

The Ministry for the Environment funded an informative brochure distributed to farmers and the Council organised 10 disposal points with assistance from the region's district councils. The Council contracted a Hazmobile to collect and dispose of the hazardous wastes in an environmentally friendly manner.

Both the survey and the collection are key elements in the recently adopted *Regional Waste Strategy for Taranaki*, prepared by a forum made up of representatives of Council and the New Plymouth, Stratford and South Taranaki district councils.

Also in line with the *Regional Waste Strategy* was last year's appointment of a regional waste minimisation officer who can implement the *Strategy*, coordinating activities, and thereby avoiding duplication and saving costs. Currently, the officer is carrying out waste minimisation case studies for a variety of businesses and institutions throughout the region, establishing a waste generation database for use in future decision making, working with local industries to reduce trade waste and examining re-cycling options with district councils.

A further achievement within the framework of the *Regional Waste Strategy* has been the compliance of all 13 clean fills in



Contractors Ray McGregor and Scott McGregor package rural hazardous waste for transport and disposal.

the region with national guidelines.

The Regional Waste Strategy for Taranaki is based on the *New Zealand Waste Strategy – towards zero waste and a sustainable New Zealand* that was released in March 2002. The *Strategy* deals with big picture waste scenarios – waste minimisation (including organic, special and construction and demolition wastes), hazardous wastes (including contaminated sites, organochlorines and trade wastes) and waste disposal.

Unlike past waste policies that have tended to focus on 'end-of-pipe' solutions that dealt primarily with the effects of waste disposal, both the national and regional strategies emphasize the need to cut down waste rather than directing most of the available energy and resources on methods for its continued disposal.

The aim of the *Regional Waste Strategy* is to achieve integration and coordination of waste management activities tailored to the needs of the region. The collaboration of all four local authorities in Taranaki, therefore, is crucial to its success. The three district councils are currently preparing their own district waste plans modelled on the *Regional Waste Strategy*.



February's rainfall sets new records

While it may have seemed like it never stopped raining in February, it was only three days of rain that gave the greatest cause for concern in the region.

On February 15 and 16 the skies opened up above south-eastern Taranaki and caused major damage in the Waitotara area. Then almost two weeks later on February 28 the rain poured down again across central and northern Taranaki raising river levels and causing further problems.

A watch for heavy rain was issued by the Met Service at 3.55 p.m. on 15 February and at 4.35 p.m. the Council's Rimunui Station hydrological recorder on the Waitotara River sounded a flood warning alarm. The Met Service issued a heavy rain warning at 8.30 that evening.

The river levels and rainfall figures for the month recorded at gauges located throughout Taranaki illustrate the intensity and speed of the events. February 2004 was the wettest February on record at all of the Council's rain gauge sites. Most of the totals were four to five times greater than normal.

North Egmont received the most rain with 1880mm. Of this, 404mm fell on 28 February and 335mm was recorded on the first day of the month. The normal rainfall expected at this site for February, is 329mm.

Most sites in northern and central Taranaki recorded over 100mm of rain on 28 February. In other words, they received their average February rainfall all in one day.

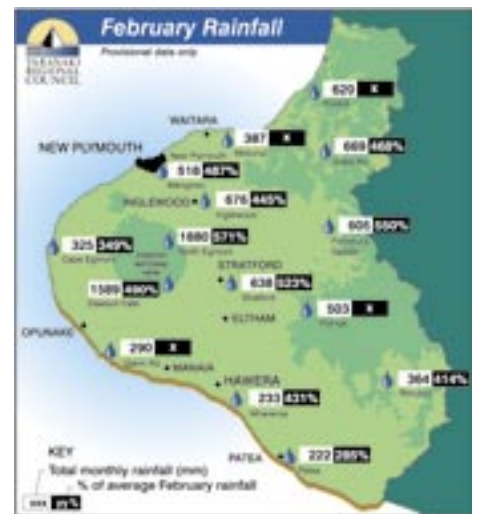
Not only was there a great deal of rain, but it fell hard and fast. The maximum hourly rainfall recorded at Dawson Falls on the afternoon of 28 February was 53mm. Inglewood, Egmont Village, Uruti, New Plymouth and two mountain rain gauges all recorded intensities higher than 20mm/hour at some time during the month.

Understandably, the February dousing has significantly raised the rainfall totals for the year and March figures show that most sites had already recorded 170-200% of the rain expected for the year to date. It is a far cry from the situation last year when *Recount* was reporting the results of drought conditions in the region. In February last year New Plymouth received only 15.5mm of rain: this year over the same period it received a massive 518mm (more than 30 times as much).

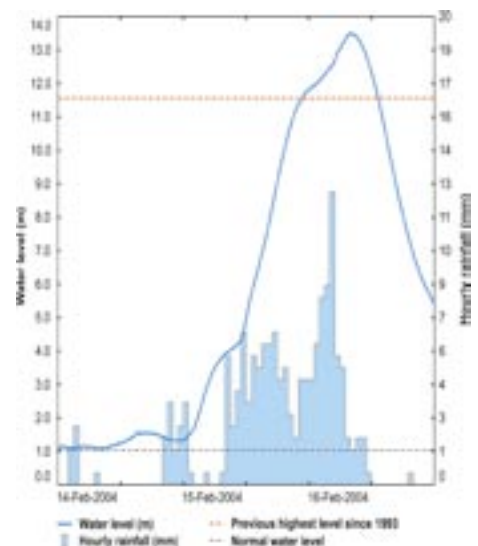
As a result of the general dampness, water temperatures plummeted, and groundwater reached peak levels in the last few days of the month, with Motunui recording the highest levels since recording began in 1981. Similarly, river levels and flows were well above normal for the whole month.

And just to set the records straight, it didn't rain every day in February – it just felt like it. In fact, the number of wet days ranged between 18 and 24 in all areas.

Information on rainfall and river flows is readily available to the public on the Council's web site www.trc.govt.nz. The rainfall figures recorded at 12 sites between Mt Messenger and Cape Egmont are updated every half-hour.



The map shows the total rainfall registered throughout Taranaki in February and the corresponding percentage of average February rainfall expected annually.



Hourly rainfall and water levels for Waitotara recorded at Rimunui Station 14–16 February 2004.

Flood control schemes perform well

The February rains put the Council's flood control schemes to some rigorous tests.

The Waitara River at the Bertrand Road recorder measured flows of 1750 cumecs – the highest flow since 1990. Fortunately the hill country catchment and mountain catchment peaked at times about eight hours apart and as a result the peak flows in the lower Waitara catchment were manageable. The groyne and stopbanks installed at Waitara performed well and there was

only light damage to the groyne heads and settlement of the groyne rock.

The Waiwhakaiho and Mangaone Rivers schemes also coped well with the deluge of 28 February and similarly suffered only minimal wear and tear damage. On the same day, flood control and river training works on the Kaihihi Stream above State Highway 45 near Okato were significantly damaged by the high water levels. Overflow diversion banks, however, operated at near maximum capacity and prevented the flood-water

from entering the Okato swimming baths and reserve area.

Some further damage occurred in a number of other rivers throughout Taranaki and Council staff have assessed the situation and begun remedial work. After any rainfall as intense as that recorded in February, the region's rivers remain vulnerable to damage from any further heavy rain that falls before the catchments have dried out.



Council staff respond in Waitotara emergency

When a civil defence emergency in Waitotara was declared by the South Taranaki District Council on 17 February, emergency management staff were on hand to help assess the situation, advise on options for action and provide assistance.

Staff members were able to set up an emergency operations centre in Waverley, coordinate emergency grocery deliveries by helicopter to the stranded families in the Waitotara Valley, assist with communications, keep the Civil Defence headquarters in Wellington informed and help with the clean up.

Although a new Taranaki Civil Defence Emergency Management (CDEM) structure is in place, as required by the CDEM Act 2002, the new Group Plan will not be adopted until the end of the year. Under the transitional arrangements of the previous Civil Defence Act, the South Taranaki District Council was the agency to address the situation.

Hydrology staff members were busy too during the emergency as power was lost on 15 February to both the recording site and the repeater site in the Waitotara Catchment. As the telephone network in the area went down at this time as well, staff members were unable to telephone the site to check the river level. Replacement batteries and back-up generators were flown in, the communications frequency adjusted and full power and communications were restored on 22 February.

In the meantime, land management officers assessed the damage in the Waitotara Valley. An estimated \$6.3 million damage of rural properties followed the heavy rainfall. The estimate includes costs on private land for repairs to tracks, bridges, culverts and fencing, for slip and deposition re-vegetation and of forestry wind-throw, stock losses, damage to buildings and loss of production. It doesn't take into account costs amounting from damage to public roads, bridges, power and phone supply.

Eight property owners in the stricken valley have since expressed an interest in having a comprehensive farm plan prepared for them for a total area of nearly 8000 hectares.



The effects of flooding in Waitotara township seen several days later.



Slumping of Waitotara river banks seen two months after the flood.



A large slip on the Waitotara River illustrates the magnitude of the damage caused by the heavy rainfall.



Monitoring and reporting of sand dredging and deposition is under way

Ongoing communications will keep community members well informed on progress in the current Port dredging and sand deposition project. Meetings with submitters and interested members of the public are planned for later this year.

Three coastal permits were granted to Westgate Transport Ltd early in 2002 to dredge Port Taranaki and deposit clean sand west of the Kawaroa Reef. They allow the inshore deposition of up to 400,000 cubic metres of clean sand in any one dredging campaign and up to 730,000 cubic metres in any three successive dredging campaigns of seven-year periods.

The permit applications attracted more than 60 submissions both for and against the project, and wide community interest. The permits were granted under the Resource Management Act on the recommendations of independent commissioners.

The Hearing Commissioner's decision included rigorous consent conditions that require extensive monitoring and reporting of the 25-year programme both of which are now under way. Special conditions of the permit ensure that there is no long-term build up of sand in the inshore disposal area or on the sub-tidal area of Kawaroa Reef. They protect the area between the Lee Breakwater and the mouth of the Te Henui Stream from harmful effects to kaimoana or to the ecology of the coastline.

The permits are essentially a contract between the permits-holder Westgate Transport Ltd and the Taranaki community. The Taranaki regional Council administers and monitors the permits and would stop the inshore deposition if any of the permit conditions were breached.

The dredging operation at Port Taranaki was carried out from early January this year until the end of March. Before the work began, an extensive monitoring programme to record baseline data on the physical features, kaimoana and ecology of the area from the Lee Breakwater to the Te Henui Stream was completed. This monitoring included:

- a seabed sonar scan to map areas of sand and rock;

- aerial photography and regular inspection of Kawaroa and Arakaitai reefs;
- a survey of the inter-tidal ecology at Kawaroa and Arakaitai reefs and one control site;
- a survey of sub-tidal ecology;
- kaimoana inspections at Kawaroa and Arakaitai reefs.

Monitoring of a trial sand deposit in

early 1998 between the Lee Breakwater and Kawaroa Reef indicated that there were no significant harmful effects. Twelve months after the trial, 40% of the deposited sand had moved from the area. The Council will continue to monitor and report on the depositing of sand in the inshore area, checking the physical features, kaimoana and ecology of the area to ensure the conditions of the permits are met.



The *Pelican* dredges sand in Port Taranaki to be deposited west of the Kawaroa Reef.



The graphic summarises the comprehensive data gathered by the Council's coastline ecology monitoring programme.



Annual consent monitoring reports show pleasing results

Consent monitoring activities to ensure that consent holders are meeting their conditions account for a large part of the Council workload. The consent monitoring annual reports which are presented to the Council and the consent holders, therefore, amount to a weighty tome. Eighty reports have been completed for the 2002-2003 year and cover approximately 100 monitoring programmes.

In general, these reports indicate a high or good level of environmental performance by the consent holders during the periods under review.

The following three reports illustrate something of the range in both size and type of consent monitoring undertaken by Council officers.

TRUSTPOWER MOTUKAWA

Taranaki Generation Ltd, a subsidiary of TrustPower Generation, operates the Motukawa Hydroelectric Power scheme. Taranaki Generation Ltd draws water from behind a weir on the Manganui River near Tariki and diverts this water through a race to Lake Ratapiko and then through penstocks to the Motukawa Power Station. The power station discharges into the Makara Stream, which is a tributary of the Waitara River. Consents for the Motukawa scheme allow Taranaki Generation Ltd to maintain structures, to take, divert and discharge water, and to disturb the bed of Lake Ratapiko. The company holds 13 resource consents that include 92 conditions setting out the requirements that the Company must satisfy. Many of these conditions were developed in consultation with the local community.

During the 2002-2003 monitoring year, a new fish pass to accommodate the new residual flow was commissioned. Migrant adult eels were netted and manually transferred downstream past the power station weir in the autumn of 2003. The success of this pass will be monitored in the future. Surveys of macro-invertebrate communities, however, suggest that an increased residual flow released to the river has improved their physical habitat and reduced the large uninhabitable areas of dry riverbed. Peak temperatures were down too despite a dry, warm summer.

During the year, the company

demonstrated an excellent level of environmental performance and compliance with the resource consents.

RICHMOND HAWERA

A meat processing plant at Tawhiti Road, Hawera is operated by Richmond Limited who hold six resource consents including 33 conditions allowing water abstraction, water discharge into the Tawhiti Stream and emission discharges into the air.

Following the installation of a new evaporative condenser in 2002 the volume of water abstracted by the Company has decreased significantly and has remained within consent conditions. Comparisons between the performance of the past year and the year before show a marked improvement in compliance, especially in river conditions below the cooling water discharge point.

JOINT LOWER WAIWHAKAIHO RIVER CATCHMENT

At the end of the 2002-2003 monitoring period 18 consents had been granted to discharge wastewater, storm-water and leachate from the industrial area at Fitzroy, New Plymouth to the lower Waiwhakaiho River and Mangaone Stream.

The monitoring programme has included site inspections, discussions with site operators over site management, chemical surveys of discharges, ground water and receiving waters, and bio-monitoring of the two waterways.

Macro-invertebrate monitoring and fish surveys show no evidence of any recent significant detrimental impacts of any of the Fitzroy area discharges. In fact, recent surveys have shown a general improvement in the quality of the lower river.



The new fish pass at the Motukawa Power Station is designed to accommodate the new residual flow from the hydroelectric scheme.

Taranaki Regional Council Facts File

Address: Private Bag 713
Stratford
Street Address: 47 Cloten Road
Stratford
Telephone: 0-6-765 7127
Facsimile: 0-6-765 5097
Email: info@trc.govt.nz
Website: www.trc.govt.nz

EMERGENCY CONTACT NUMBERS

Emergency Management: 0-6-765 7127
Flood Alert: 0-6-765 7127
Pollution: 0-6-765 7127
Environmental Hotline: 0800 736 222

NON-EMERGENCY AFTER-HOURS CONTACT NUMBERS

Emergency Mgmt: Bev Raine 0-6-758 1110
Security: Dave Digby 0-6-765 6463
Port Taranaki: 24 hours Capt.
Ray Barlow 0-6-751 0200
Pest Animals: George Gallop 0-6-762 2894
Pest Plants: Brian Calkin 0-6-758 5359

REGIONAL COUNCILLORS

New Plymouth Constituency:

Tom Cloke 0-6-753 5586
David Lean 0-6-753 3325
Barry Marsh 0-6-758 2252

North Taranaki Constituency:

Roger Maxwell 0-6-752 3622
Donald McIntyre 0-6-762 4701

South Taranaki Constituency:

Ian Armstrong 0-6-761 8052
David MacLeod 0-6-278 5577
Neil Walker 0-6-278 7541

Stratford Constituency:

David Walter (Chairman) 0-6-762 7822

MEETING SCHEDULE:

The Taranaki Regional Council operates to a six-weekly committee and Council meeting schedule.

Monday 10 May, 10.30 am, Executive Committee

Wednesday 19 May, 10.30 am, Ordinary Meeting

Tuesday 25 May, 10.30 am, Civil Defence Emergency Management Group

Wednesday 9 June, 10.30 am, Consents and Regulatory Committee

Thursday 10 June, 10.30 am, Policy and Planning Committee

ISSN No 1171-1140



Taranaki marks international wetland day

World Wetland Day 2004 was – well, wet. But despite the conditions, 60 people gathered at New Plymouth's Barrett Lagoon to celebrate the February occasion and to learn more about the reserve.

The six-hectare lagoon is one of the small lakes that were once typical of the landscape around New Plymouth prior to European settlement. Many of the lakes were drained for the development of farmland and the city. Barrett Lagoon is now a popular recreational area and valuable water bird habitat and is administered by the New Plymouth District Council as a protected scenic reserve.

The stalwart souls who braved the weather listened to a series of talks about the history of the area, its wetland characteristics and its wildlife.

The gathering also marked the national launch of this year's Fish and Game NZ game-bird habitat stamp, featuring the Paradise Shelduck. The habitat stamp is fixed to every game-bird licence sold in New Zealand and, along with sales to collectors worldwide, generates funds for the protection of wetlands.

A framed habitat stamp print was presented to Council Chairman David Walter in recognition of the Council's excellence in protecting wetlands. As well as providing education, information and advice on wetlands, the Council provides funds each year through its Environmental Enhancement Grant Scheme for fencing, planting and legal



Fish and Game NZ's Public Awareness Manager Graham Ford congratulates Council Chairman David Walter and presents him with a framed print of this year's game-bird habitat stamp.

protection of regionally significant wetlands.

The Council is making good progress in protecting wetlands in Taranaki and has facilitated protection or gained the landowner's agreement to protect more than half of the regionally significant wetlands in Taranaki. Council work to ensure the future of the region's wetlands

continues with landowners, interest groups and a range of agencies such as Fish and Game NZ, Department of Conservation and the Taranaki Tree Trust.

Potentially contaminated sites get the all clear

Taranaki can now claim to have no significantly contaminated sites.

As a result of a survey of 1018 potentially contaminated sites in the region, 26 sites were found to have an unacceptable level of contamination. Remedial work was carried out immediately and successfully on 25 of the sites. The Council has now confirmed with the appropriate district council and the Ministry of Health that the remaining site poses such a low risk to health that it will not require remedial work.

Another 204 sites had some contamination but posed no risk to human health or to the environment and 788 of the sites showed no evidence of contamination at all.

A Ministry for the Environment study 10 years ago, drew national attention to contaminated sites. Since then Council officers have been investigating the situation in Taranaki and identified a list of about 1100 potentially contaminated sites. They checked out the condition of

each site including former timber yards, garage sites, rubbish dumps, dry-cleaning businesses and other sources of potential contamination.

The completion of the project equates to a significant milestone in the management of contaminated sites. It is understood that few, if any, other regions are at or near this point.