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Weaving the Strands

around the Hauraki Gulf – Tikapa Moana

Big news

It has been a huge month for the Gulf. We witnessed the release of the first endangered species on officially-declared, pest-free Motutapu and Rangitoto islands. Sixteen bursts of orange and brown feathers signalled the arrival of tieke, or saddlebacks, to their new home. This was followed by the waddling runs of four takahe as they left their carry boxes for the sanctuary of the island's shrub lands. Congratulations to the Department of Conservation and all the volunteers involved in this project.

The following day a similar crowd of conservation supporters applauded the unveiling of a plaque at our newest marine reserve, after years of work by the former Auckland Regional Council, DoC and community groups.

The 400 hectare Tāwharanui Marine Park has been a 'no take' fishing zone for 30 years. More than 50 species of fish have been recorded in the area and schools of red moki, blue maomao, red mullet, bigeye and koheru are commonly seen.

Protected places enable our native plants, animals, birds and fish to thrive, without disturbance from harvesting or introduced predators.

The history of human settlement of New Zealand is remarkably short but its environmental consequences have been profound. In evolutionary terms these islands have been described as "as close as we can come to studying life on another planet."

The Forum's recent state of the environment report charts our performance in care taking this



Fullers' Michael Fitchett and Waikato Conservator Greg Martin release a takahe on Motutapu

inheritance. It is prepared under the Hauraki Gulf Marine Park Act 2000 which recognises the national significance of the Gulf, and requires the protection, and where appropriate enhancement, of the Gulf, its islands and catchments.

The creation of marine reserves and restored islands are good news but we have much more to do if we are to reverse the story of incremental environmental decline in much of the Gulf.

Even with Tāwharanui less than one percent of the Hauraki Gulf Marine Park has marine reserve status. Most of the Gulf is subject to heavy pressures from fishing and increasing runoff from farming and urban activities.

Protected areas, and management practices that help enhance natural abundance and water quality, will create new economic opportunities for the region. Whether tourism and recreational activities from 'destination' Auckland, or primary produce from the fields and waters of the Waikato, our future will depend on high value, low impact uses of our environmental assets.

Hauraki Gulf Forum Tikapa Moana



Mayor John Tregidga, Chair, Hauraki Gulf Forum



Auckland Councillor Mike Lee, DoC's Hazel Speed and Ngati Rehua's Bruce Davies release tieke on Motutapu

State of our Gulf findings

The Hauraki Gulf Forum's latest State of our Gulf report has received widespread attention following its launch on August 9.

Environmental improvements were noted in some areas, but most of the indicators examined in the report suggest the Gulf is experiencing ongoing environmental degradation and resources are continuing to be lost or suppressed at environmentally low levels.

The report notes that:

- Current fisheries management rules keep stocks of fish such as snapper and crayfish well below natural levels. Having about three quarters of potential fish numbers missing from the system, particularly large individuals, has altered other plant and animal life around the Gulf.
- Fishing methods, particularly bottom trawling used in 30-40 percent of commercial catch, are likely to cause substantial reductions in species and habitat diversity.
- Endangered Bryde's whales may be in decline due to vessel strike and entanglement in mussel farm spat lines.
- A large amount of plastic litter continues to enter the coastal environment, with long term persistence in the environment and effects on wildlife and aesthetics. Toxic metals and organic

contaminants are causing localised effects in Auckland estuaries and a number of metal contaminants also

exceed sediment guidelines in the southern Firth of Thames. • The Waihou and Piako rivers dominate nutrient loads to the Gulf with 70 percent originating from diffuse agricultural sources. The 1 percent per annum increase in nitrogen in rivers is consistent with increasing dairy cow numbers and uses of fertiliser and supplementary feeds. Mangrove expansion and other habitat changes are implicated in the decline of about half of the most common wading birds of the southern Firth of Thames.

Encouraging signs were found in relation to improving water clarity from better regulation and management of sediment run-off, declining trends in nutrients in Auckland Rivers and a rebuild of the north-eastern stock of kahawai.

Insufficient intensity and scale of many initiatives, the absence of clear goals, a lack of responses to address non-point source discharges from rural uses and the broader environmental impacts of fishing activity, and fragmented management were cited as reasons for the failure to protect and enhance the Gulf.

The report identifies the need for clear water quality targets, expanded green and blue protected areas, an eco-system research focus, enhanced fisheries, and partnerships with tangata whenua.

Hauraki Gulf Forum Chairman John Tregidga, the Mayor of Hauraki District, and Forum Deputy Chair Chris Fletcher, an Auckland Councillor, said the report shows we are not accounting properly for the benefits and services provided by the Hauraki Gulf.

state of our Gulf

State of our Gulf reports



Fish farms expected

Auckland Mayor Len Brown and Waikato Regional Council Chairman Peter Buckley backed calls for greater investment in protection and enhancement of the Hauraki Gulf Marine Park.

www.arc.govt.nz/environment/coastal-andmarine/hauraki-gulf-forum/hauraki-gulf-stateof-the-environment-report.cfm

Aquaculture gets green light

Aquaculture reform legislation comes into effect on 1 October 2011 and will have effects in the Waikato region.

A new fish farming zone of 300 hectares has been created off Coromandel which can accommodate 8000 tonnes of fish farming per annum. Up to 4000 tonnes of fish farming will be allowed within 90 hectares of vacant space in the Wilson Bay zone. The new space will be tendered out to prospective farmers after 20 percent has been set aside for settlement of claims between iwi and the Crown.

Existing farms outside the Wilson Bay zone can apply for small extensions, enabling a total of 48 hectares of expansion every five years. Existing farms can apply to diversify into new species and structures, though only farms in deep water outside the Firth can apply for fed aquaculture.

5000 hectares of spat catching applications in the western Firth of Thames remain on hold until 2015, unless the applicant requests that councils process them earlier.



Tāwharanui Regional Park



Tāwharanui Marine Reserve plaque unveiled

Tags reveal behaviour of endangered Gulf Bryde's whales

The Act does not contain specific provisions for Auckland and the Auckland Council is expected to develop policy for aquaculture within its new unitary plan.

Under the new legislation consents will be sought through the standard Resource Management Act process and the establishment of an Aquaculture Management Area in a coastal plan is no longer a prerequisite.

Fisheries Minister Phil Heatley said the legislation was "all about enabling sustainable use of our valuable natural resources to build the economy, create jobs and get more people into work, especially in the regions. The target is a three-fold increase on the current aquaculture industry sales level."

www.aquaculture.govt.nz

www.waikatoregion.govt.nz/News-and-events/ Media-releases/Reaional-council-ready-for-role in-new-aauaculture-zone/

Motutapu and **Rangitoto declared** pest-free

Motutapu and Rangitoto islands were officially declared pest-free wildlife sanctuaries by Conservation Minister Kate Wilkinson on August 27.

Possums and wallabies were eradicated in the 1990s. Ship rats, Norway rats, stoats, mice, feral cats, hedgehogs and rabbits were removed in a major eradication operation that began in June 2009.

Two breeding pairs of takahe and 16 tieke, or saddleback, were released by the minister, iwi, and representatives

of the agencies, volunteer organisations and sponsors that have helped restore the islands.

Ms Wilkinson says the release of endangered species in Auckland's backyard was a big occasion and would benefit tourism.

As many as 30 species of threatened native wildlife are expected to be released onto the islands in the future, including kiwi, hihi or stitchbird, tuatara and several species of native reptile.

The islands are now New Zealand's second largest pest-free sanctuary covering more than 3800 hectares.

www.beehive.govt.nz/release/motutapu-andrangitoto-declared-pest-free

Good news, bad news

After months of planning and trying University of Auckland researchers have recorded the dive patterns and acoustic environment of Hauraki Gulf Bryde's whales.

A small boat, a long pole and suction cup-equipped tags were used to attach the recording devices to five whales for several hours.

Researcher Dr Rochelle Constantine says recovered tags show the whales diving repeatedly to depths as shallow as 10 metres. Once reaching the bottom of the dive they appear to lunge sideways, stall, and float slowly to the surface. In several recordings the sound of passing boats can be heard.

In September a dead whale, reported floating in the Colville Channel by a Great Barrier pilot, was towed ashore to the Coromandel. A necropsy conducted with a Massey University vet and DoC revealed the 12 metre male whale had 15 broken vertebrae, two broken ribs, large areas of haemorrhaged tissue and ruptured intestines, consistent with being struck by a large vessel.

Forty endangered Bryde's whales have been found dead in the region in the last 16 years. Evidence of the cause of death is known for 17 and 14 appear to have died from ship strike.

The Gulf is thought to have a year-round population of around 150 Bryde's whales, with many calves sighted and many individuals who have been resident over a period of around ten years.

Dr Constantine said the recent findings highlights the importance of full necropsies of whales, greater vigilance by ships and all vessels in the Gulf, and a management solution which minimises the chances of whale strike mortality occurring in the future.

www.auckland.ac.nz/uoa/home/news/template/ news_item.jsp?cid=423376

Funding available

The Auckland City Natural Heritage Fund provides grants for natural heritage projects on private land in the Hauraki Gulf Islands.

The Fresh Start for Fresh Water Clean-Up Fund provides \$15 million in funding over two years to help communities clean up waterways that are affected by historical water quality issues.

www.mfe.govt.nz/issues/water/freshwater/ fresh-start-for-fresh-water/cleanup-fund.html



New island vision launched on Great Barrier's Motairehe marae

Leigh Visitor Centre opens

Auckland University's Marine Science Laboratory has officially opened its redeveloped campus and a new interpretation centre.

Marine Laboratory Director, Professor John Montgomery said "new knowledge generated by science is essential to the future we wish to create for ourselves as a nation. But we are also becoming increasingly aware that new knowledge of itself is not enough. We need to attract young people into science and have them experience the excitement of discovery and then go on to use the power of that new knowledge in their careers."

Professor Montgomery contributed to the Forum's State of the Environment Report, identifying research gaps and opportunities to support protection and enhancement of the Gulf.

He says new philanthropic and University of Auckland funding for the Hauraki Gulf. They will quantify the contribution of snapper larvae spawned in the Leigh Marine Reserve to surrounding harvested populations, and examine the potential for returning crayfish to the reefs of the Hauraki Gulf.

www.givingtoauckland.org.nz/News

New vision for **Great Barrier**

to the island.

Ngati Rehua's Sonia Williams says her aunty recalls hearing the kokako on the way to her favourite fishing spot in the north of the island 30 years ago.

Surveys in 1982 found a dozen birds, but by 1994 only two birds remained. Ngati Rehua assisted the Department of

Under consultation

Draft Auckland Plan	Auckland Council	www.aucklandplan.govt.nz
Draft Waterfront Plan	Auckland Council	www.waterfrontauckland.govt.nz

The Hauraki Gulf Forum is a statutory body charged with the promotion and facilitation of integrated management and the protection and enhancement of the Hauraki Gulf. The Forum has representation on behalf of the Ministers of Conservation, Fisheries and Maori Affairs, elected representatives from Auckland Council (including the Great Barrier and Waiheke local boards), Waikato Regional Council, and the Waikato, Hauraki, Thames Coromandel and Matamata Piako district councils, plus six representatives of the tangata whenua of the Hauraki Gulf and its islands.

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Photo credits: DoC, University of Auckland, Auckland Council, IslandStay/GBICT

Leigh Visitor Centre opened

two post-doctoral fellows would help addresses issues of significance for

Ngati Rehua and the Great Barrier Island Trust recently launched a new vision on Motairehe Marae to bring back kokako

Conservation with their capture and transfer to Hauturu, Little Barrier Island.

Sonia says the songbird is an important component of the historic cultural fabric of Ngati Rehua and restoration of Te Paparahi, the forested block at the island's northern tip, would allow for their return.

Great Barrier Trust Chair John Ogden says the kokako was once frequent on the island, but couldn't survive with mammalian pests.

John Ogden says rat and feral cat eradication is still central to the Great Barrier Island Trust's mission statement but the new vision creates a tangible goal.

"I believe we can work out together how to achieve the vision of bringing back kokako, if we as a community have the will to do so."

www.gbict.co.nz





Hauraki Gulf Forum