

ENVIRONMENT RIVER PATROL™
AOTEAROA - NEW ZEALAND
Kaitiaki mo nga awa



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20.06.2014

To – Whangarei District Council
 and Northland Regional Council
 Cc ,DOC, NIWA, hapuu and stakeholders.

Report #071 – 2nd Hikurangi Swamp tuna fatality Survey 18.06.2014 Report to WDC & NRC

- The first report (#062) was sent to WDC & NRC 15.05.2014. To date, there has been no reply from WDC or NRC whatsoever. Pan hapu group NKONWM have continually lobbied to NRC and WDC for near three years to resolve tuna fatality issues at the Hikurangi Swamp Pump Stations. It is very disappointing that there is no apparent mitigation in place and no advice of any plans to date and the mutilation of tuna continuous. Previous Report #062 is tagged onto this report (it is in blue letters).
- This survey patrol was on 18.06.2014 on motor boat Kioriwai. Ngati Hau hapu Environmental representative Allan Haliday was on-board, together with Jeannie and Jordan Poutai (Ngati hau & Millan Ruka of Te Uriroroi. We are all active to members of Nga Kaitiaki o Nga Waimaori, pan hapu group dedicated to kaitiaki te awa Wairua and Mangakahia – the restoration of our river catchment and its tuna.
- Allan Haliday (Ngati Hau Environmental Representative) rang in 4.45pm, a “Hotline Report” to Northland Regional Council same day 18.06.2014. He reported the tuna fatalities at the pump stations that were visited that day. The NRC acknowledged the call but did not want to view the tuna in our possession. Several GPS tagged photos are provided with these reports. Allan awaits NRC feed-back to his call.
- The Hikurangi Swamp Drainage Scheme has been in place since the mid seventies. The pump scheme has had a devastating effect on the tuna life cycle since its inception. Tuna in this northern region age/mature to about 30 to 35 years on average (NIWA report Oct 2013). The recruitment of elvers has been severely hampered for the 35 years and the adult migrators male and female, have suffered extremely high fatalities in this period also. We are witnessing the severe depletion of adult stock in the catchments behind the pump stations and authorities responsible have not heeded research and advice that appropriate action is way overdue.

- On this survey patrol we covered 29 klm (58 klm return) on the Wairua, Mangahahuru, Waiotu and Whakapara Rivers. Tuna was our focus, but we also saw the following – several herds of cattle grazing the river banks / a digger has recently cut through the stop-bank of the Junction Pocket / a dairy cow dump graveyard is located on the side of the Te Mata stream and only metres from the Wairua River. Reports will be done in the near future on these sightings.
- Eight dead tuna were recovered on this patrol. They would have made their migratory –run in the recede of the floods some 4 to 7 days earlier. Due to the cold water temperature, the dead tuna do not rise, but rather sink to the river bed in depths of 7 to 12 feet. Our “matauranga maori” of the whakapapa of these tuna says that what we see is the tip of the iceberg. However where 11 tons a day tuna catch at the Wairua Power Station was recorded in the late 70s, we say that there may well only be less than 10% of the adult stock left now.
- * **Recommendation** That NRC and WDC meet with NKONWM_asap to sort the issues and form an “action plan”

* Again, the consent for the operation of the Hikurangi Flood pump Scheme does not meet its consent criteria. Both NRC and WDC are the Local government bodies that are the responsible for the operations of this scheme. Hapu have exhausted all avenues to get an action plan in place. There are options to consider and we just need to actually get started on a pump station with the selected best option on the table.

naku noa

Millan Ruka -

Environment River Patrol - Aotearoa

also represent my hapu –

Te Uriroroj, Te Parawhau, Te Mahure ki Whatitiri

** Previous Report # 062 follows (in blue colour)*

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15.05.2014

To – Whangarei District Council

Cc NRC ,DOC, NIWA, WDC, hapuu and stakeholders.

Report #062 - Hikurangi Swamp tuna fatality report to WDC.

- Since the commissioning of the Hikurangi Swamp Drainage Scheme in the mid 1970s, tuna fatalities have been reported to authorities over the past approx. 38 years.
- During summer floods (Feb 2011 example) tuna migrators in their thousands have come out of the high country around the swamp and have been stranded behind the pumps in the pockets of heated de-oxygenated waters after the initial big rains. Here they often died (lack of oxygen), or been cut up in the pumps. Their carcasses of hundreds and thousands have been seen by eel fishermen (and other rivers users) in these flood situations. This scenario could be largely mitigated by pump management at the critical time of their migration run.
- In normal high rains of March April the migration tuna heke make their run for the sea and the tuna located behind the pumps have only one path to take which is through one of the seven pump stations. This is the time that the pumps are operational and there is no co-ordination or consideration for the tuna life cycle at this time. Consequently a great deal are cut up in 500mm lengths as they pass through the operating pumps. These tuna, males and females are on average 30 to 40 years old (or older) and are on their way to the Tongan trenches some 4,500 klm away. With the luck of sea currents, their offspring (elvers) return to the waters of Aotearoa.

There are seven pump stations -

- Junction
 - Te Mata
 - Tanekaha
 - Otonga
 - Mountain
 - Ngararatunua
 - Okarika
- Each pocket consists of a series of open drains serving low lying farmland leading to a pump station which discharges to one of the rivers. The hills surrounding the pockets comprise farmland and some areas of native bush

and runoff from these areas drains to the pockets. The catchment areas contributing to the pockets are shown in Table 3.1. The locations of the pockets are shown in Figure 3.1 and Figure 3.2.

| Table 3.1 Pocket Catchment Areas | <u>Lowland Land Area</u> (ha) | <u>Upland Catchment Area</u> (ha) | <u>Total Catchment Area</u> (ha) |
|---|---|---|--|
| Pocket | | | |
| Junction | 275 | 170 | 445 |
| Te Mata | 919 | 1571 | 2490 |
| Tanekaha | 190 | 235 | 425 |
| Otonga | 943 | 1547 | 2490 |
| Mountain | 506 | 142 | 648 |
| Ngararatunua | 1619 | 2834 | 4453 |
| Okarika | 1182 | 3757 | 4939 |

- 15,890 hectares = 39,265 acres, a massive natural habitat for tuna. This was the highest most populated tuna/eel waterway of the world, prior to mid 1970s. It is now in critical decline and it need not be. It needs sound management from all stake holders to regain its former status. Restoration and sustainability of these waterways can have commercial benefits to match and exceed dairy in the the same rohe. Thirteen million eelers have been transferred in three seasons to date. If they gain maturity in the swamps natural (improved) environment, the return would be huge.
- The Wairua Power Station was commissioned in 1917 and it to has been been a major impediment to the recruitment and migration of tuna ever since. A recent North Power and hapu eel transfer program has been very successful and North Power are working on mitigation of migrating tuna fatalities within the turbine and canal system. Thank you North Power.
- Pan hapuu group Nga Kaitiaki o Nga Waimaori (NKONWN) commissioned NIWA to perform research and study on tuna in the Hikurangi Swamp and its catchment. The report (Oct 2013) clearly shows that the swamp no longer sustains tuna as it once did, and that it is in a declining environmental state.
- At a recent stakeholders group hui on the catchment with WDC it was apparent that there is no coordinated management plan for the operation and coordination of the “switch on/off” of the pumps and little or no monitoring of tuna mitigation at this critical time. Recently ERP observed the Ngaratunua Pump recycling on and off in low waters that would certainly kill tuna unnecessarily. At another pump a farmer operates the switch and apparently leaves the pump going when not needed and cuts up tuna as they pass through it on their migration. Clearly all pumps need to be managed and a tuna fatality mitigation plan must be an outcome. Tuna have been photographed cut up at the pumps and on the river as per attached in the online Picasa link.

- **The WDC Consent# 20031137501 to operate the Hikurangi Swamp Drainage Scheme requires -**
- *(i) Management of the flood gates Scheme, including assessment of provision of fish passage both upstream and downstream including during summer low flow conditions.*
- *(ii) Monitoring any fish fatality within the scheme, distribution and likely cause.*
- *(iii) On going monitoring of spillway flow distribution by continuing water level data collection from existing recorders and installation of durable flow depth /time recorders at each pocket spillway crest, or other suitable alternative method.*
- Despite awareness of many reports to NRC and WDC in regard to tuna fatalities over an extensive period, it seems that little or no fatalities are registered in accordance with the consent criteria.
- WDC has achieved little progress in the past three years of meetings with stakeholders in regards to tuna fatality mitigation outcomes. It is understood that funding from the schemes own resources is minimal. However missed opportunities for Government funding that other regions have been granted for the enhancement of waterways ie. Lake Ellsmere, Manawatu River etc were not pursued by WDC despite prompting by way of submissions and hui from stakeholders.

Recommendations

1. That the Whangarei District Council, sets up a designated task force of stakeholders who's sole designated task will be to "restore the environment and tuna life-cycle of the Wairua River, its catchment and tributaries". This is to encourage motivation by way of "endorsed stakeholder participation" that will pursue to meet the conditions of the issued consent in a relationship driven manner. The Swamp pumps and the Wairua Power Station infrastructure should be a priority focus to get right in regards to tuna impediments and fatalities. Environment enhancement for habit and water quality should also be a focus as this benefits tuna and all of the biodiversity of the river and its catchments. This initiative (if adopted) will be a driver for for WDC to meet the commitments of the Freshwater Management Policy 2011. The Northland Regional_Council needs influence from WDC to ensure we meet the FWM targets.
2. That WDC bring together all relevant written studies and information into one section of the WDC Library and lodge them in section "**Wairua River Catchment and Environment**" that has been established from negotiations between hapu Te Uriroro and WDC. That WDC encourage all stakeholders to deposit any relevant documentation, reports, studies, photos etc. that enhance the knowledge and understanding of this vital waterway. This facility will ensure that all important and current and historic information is located in one repository for our universities (our student,s and scholars and researchers) to study and benefit this taonga awa. Anticipated contributors would include WDC, NRC, DOC, Niwa hapuu, NKONWM , IKHMG,eel fisherman Northtec and others. This library section is managed solely by WDC the same as all its other research sections. * WDC Library correspondence dated 14.09.2012 is attached.

It is hoped that this (brief) report and its suggestions / recommendations are received in the spirit that is intended. The problems of the Wairua River, the Hikurangi Swamp and the catchments are historic. We that are here today can make a difference, but we have to ensure that we pass on an enduring legacy that has sound foundations for all our mokopuna to build on.

*He waka eke noa
A canoe which we are all in with no exception.
We are all in this together*

naku noa
Millan Ruka -
Environment River Patrol - Aotearoa