

Meeting Notes

Kai Iwi Lakes Dune Lake Galaxias Working Group

Date : Tuesday 07 July 2020
Time : 11:05 am start, concluded at 1.56pm
Venue : Northern Wairoa War Memorial Hall, Dargaville.

Attendance

Dave West	Department of Conservation
Matthew Calder	Department of Conservation
Andrew Knock	Department of Conservation
Karen Joyce-Paki	Department of Conservation
Snow Tane	Te Roroa
Taoho Patuawa	Te Roroa
Ric Parore	Te Kuihi
Jim Sephton	Kaipara District Council
Jason Marris	Kaipara District Council
Mark Schreurs	Kaipara District Council
Hannah Van Waelsden	Kaipara District Council
Francis Toko	Kaipara District Council
Tanya Cook	NorthTec
Dylan Smith	Northland Regional Council

In attendance

Yeyi Teng Wong

Apologies

Tom Drinan (Department of Conservation), Rudi Hoetjes (Northland Fish and Game Council), Carol Nicholson (Northland Regional Council) and Lisa Forester (Northland Regional Council).

Opening

Jason welcomed everyone and invited Francis to open with a karakia.

Everyone was invited to introduce themselves.

Jason explained the agenda for today.

Preliminary findings

The members of the Working Group provided an update on the research programmes they had been progressing.

The Department of Conservation (DOC) explained that they had been unable to undertake any of the regularly scheduled spotlight monitoring during the COVID-19 Lockdown. They are intending to undertake this monitoring as soon as the weather allows (they need calm weather as ripples on the water make this method inaccurate).

There was some discussion on Tom's work to reanalyse the spotlight data (refer to the notes of previous meetings for more detail on this). This work has been completed. The recommendation from this work was to alter the methodology to reduce the number of passes from two to one and to include additional monitoring sites. This modified methodology will be implemented going forward.

Consideration was given to using fyke netting to support the spotlighting method. DOC considered this is a possibility.

NorthTec said their work has also been affected by the COVID-19 Lockdown. The trout gut sample analysis was able to be completed as it could be done from home, however the otolith research had to

be put on hold as it required access to the laboratory. It is understood that the radio isotope research into trout diet also had to be put on hold over Lockdown.

There was some discussion on the Radio Isotope work. Radio Isotope investigations of this kind were considered to be a very robust method for gaining considerable insights. However, there was concern that this investigation may not be going far enough e.g. was it extending to looking at *Gambusia* (*Gambusia affinis*) predation on Dune Lake Galaxias (DLG)? If not, it was considered that providing some additional funding to extend this project could prove more cost effective than attempting to obtain these additional results through a further study.

Action: Dylan Smith to contact Rudi from Fish and Game to investigate what is being looked at in this Isotope study and what can be added.

Taoho reminded the Working Group of the recommendations of the NIWA report (Gee and Franklin, 2017) which had been circulated prior to the meeting by Carol Nicholson. It was recognised that the research the Working Group had undertaken to date was based on, yet fell far short of, what had been recommended by the NIWA report. The reason for this short fall has been the lack of resourcing available to the Working Group, an issue which has long been acknowledged.

It was considered that the Working Group had been very successful in progressing research given its resourcing constraints, however, to truly achieve results, some significant resourcing or an alternative approach would be needed.

It was remembered that the ultimate goal of the Working Group is to inform the Taharoa Domain Governance Committee on what actions can be taken to protect DLG in the Kai Iwi Lakes. This includes advising direction on future trout releases.

DOC suggested they could set up a Threatened Species Recovery Group for the DLG. A Recovery Group is a working group established by the Department of Conservation as a way for experts on the species to share knowledge and make informed decisions about the best way to save this precious taonga species. If formed, this group would comprise leading scientists in the fields of freshwater ecology and nonmigratory Galaxias conservation.

There was some discussion over if the mandate of the Working Group should transition to a DOC Threatened Species Recovery Group. There was concern that the DLG's indeterminant species status could prevent it from attracting sufficient resourcing from DOC given their priorities are based around species threat classification. It was agreed however that the DLG is a taonga that needs to be protected regardless of what its genetic species status is.

If a DLG Recovery Group were to be set up, the Taharoa Domain Governance Committee would be able to task the Recovery Group with looking at the issue of protecting the DLG and reporting back within a specified time frame with recommendations on what actions should be taken.

Action: Dave West will investigate the possibility of setting up a Threatened Species Recovery Group for the DLG.

Recommendation: The Working Group recommend the Taharoa Domain Governance Committee write to DOC requesting a Dune Lake Galaxias Recovery Group be formed and resourced.

It was stated that from Mana Whenua's perspective, the trout have always been regarded as a "pest fish" rather than a "sports fish". It is the desire of Mana Whenua to see the lakes ecology restored to a fully native state.

It was noted that this is a wider objective than just considering what actions could be taken to protect the DLG. It is also wider than what a Threatened Species Recovery Group would advise on.

It was suggested that this objective could be approached in two phases, with the first phase being to secure the survival of the DLG in the Lakes and the second phase being to progress towards a fully native state.

The meeting broke for lunch at 12:36pm and reconvened at 12:57pm

Monitoring in response to the 2020 trout release not occurring

The Taharoa Domain Governance Committee had not given permission for Fish and Game's annual release of trout. This means there will be no smaller trout in the Lakes coming into spring as the Gambusia population begins to increase. It is unknown what effect this will have on the Gambusia population and on the DLG.

The Working Group discussed what additional monitoring could be put in place to keep watch on the effects of this decision.

DOC will implement their improved spotlight monitoring methodology. It was noted that this method misses larval fish and consideration was given to running another method alongside it.

It was suggested that the Gambusia population also needs to be monitored. DOC will undertake this, beginning with a review of the work NorthTec have done.

There was some discussion on how this could be resourced. It was considered that a "citizen science" approach could be taken to make efforts go further. This could include working with Whitebait Connection. Jobs for Nature could be another avenue.

It was asked what budget Kaipara District Council is able to contribute. Kaipara District Council does not have any budgets allocated to this project specifically but does have some ability to support these initiatives. It was noted that now is a good time to consider allocating additional funds as planning is underway for Council's next Long Term Plan.

It was considered there should also be monitoring of koura (freshwater crayfish), especially given the low lake levels will have reduced their access to the reeds and therefore their ability to hide.

Action: Dylan, Matt, Dave and Taoho will get together to discuss options for DLG and Gambusia monitoring.

It was noted that Northland Regional Council are also running a project to monitor changes in the reed belt in Lake Waikare. This includes taking samples of the reeds and analysing these in the laboratory to see if they contain higher concentrations of nitrogen in some areas than in others. If this is found to be the case, it may identify the location of nutrient rich inflows into the lake.

Adequacy of current environmental monitoring programs

A report had been pre-circulated to the Working Group providing a stocktake of the environmental monitoring and research programmes presently being undertaken in the Taharoa Domain. The Working Group was asked if the current suite of programmes was sufficient or if more investigations were needed.

When this matter was considered by the Working Group at its last meeting, the recommendation had been made that traffic counts of vehicles entering the Taharoa Domain should be monitored by Kaipara District Council. This has been implemented with traffic counts recorded over summer 2019-20. The results of this monitoring had been circulated to the Working Group previously. It was requested these also be shared with the Committee.

Action: the traffic count data is to be provided to the Taharoa Domain Governance Committee for their information.

It was agreed that the current suite of programmes was sufficient to monitor the health of the Domain environment. That said, there was a request for information that would provide a better understanding of how many people are using the trout fishery and what the demand for this fishery is in the community. There was some discussion on this.

It was reiterated that inadequate resourcing is a key limitation to the Working Group completing further research.

Action: All members were asked to investigate what additional resourcing their respective organisations may be able to contribute.

Matt suggested that the Taharoa Domain Governance Committee should write to DOC, inviting the Department to further assist with the recovery of DLG within the Taharoa Domain. This would help both Matt and Dave with seeking additional resources for this project. The letter could also invite the Department to help support the wider delivery of restoration objectives for the domain, both aquatic and terrestrial.

Action: Mark to work with Matt to recommend that the Taharoa Domain Governance Committee write to the Department of Conservation inviting them to further assist with the recovery of DLG within the Taharoa Domain.

It was noted that DOC may also be able to get funding to attempt to control Gambusia.

It was requested that all information relevant to the DLG be made available to all Working Group members. It was suggested that KDC should coordinate this.

Action: KDC to investigate making historic research available on its website and sharing the link with Working Group members.

Meeting closure

Jason invited Francis to close the meeting with a karakia at 1:56pm.