Fisheries panel Meeting (BOPRC Office Rotorua

12pm-5 pm 30 October 2014

Present Richard Barker (Otago University), Michel Dedual (DOC), Ian Kusabs (Fisheries Consultant), Matt Osborne (ERFG), Andy Garrick (ERFG), Dave Rowe (NIWA), Brendan Hicks (UoW), and Gloria Zamora

Chair Andy Bruere (BOPRC)
Secretary Andy Woolhouse (BOPRC Contractor)
Apologies Rob Pitkethley

Refer also to handouts/support report documents.

Item 1: Confirmation of meeting notes 2013 and Matters arising

a. Previous minutes (21 November 2013) Brendan Hicks name is spelled inconsistently within document. Correct spelling should be 'Brendan' not 'Brendon'.
    a. All other matters in minutes were accepted.
b. Action Items update from previous minutes recap.
    a. Water Flow Modelling – Andy Bruere to report back.
    b. Monitoring Programme - Panel recommended to continue monitoring at current level.
    c. Otolith Study- During this report it was discussed that there was difficulty for smelt getting up the centre parts of the weir. Idea was to put a concrete fish ramp in there to help the smelt. This has been in place since the 1990s. Weir is causing a congregation of smelt. There is a conflict with the Resource Consent which states the fish pass must be maintained.
        i. At present time BOPRC is just maintaining the weir and it will remain as is.
        ii. It does not affect the Te Arawa fisheries as the Ōhau Channel falls under river category.

Item 2: 2014 NIWA Smelt Report- David Rowe

a. Currently there are 2 sites being sampled (previously 4) and these are close to the weir. Sampling every 3-4 weeks when smelt are running. Traps are lifted every few hours.
    a. Water temp, flow, water velocity, shag numbers, water clarity also recorded.
b. Sampling begins in September to May
c. Black disc visibility is improving as lake water quality improves
d. Juveniles come through in summer, adults throughout the year.
e. Smelt Runs-
    a. What is threshold or is it a run?
        i. More than 2 fish per minute is considered a run.
    b. Trap data obtained in October 2013 indicated that smelt runs were larger than usual, but runs of juveniles in summer 2014 were lower than usual.
f. Bully numbers declined up to last year but have increased this year
f. We haven't seen any collapse of the smelt in the lake with the wall being put in.
g. . Larval smelt rates were higher in the 90's. As lake gets clearer we expecting those numbers to increase as there is a relationship between clarity and density of smelt.
h. No pre-wall data available, just looking at cues that initiate the runs. Appears factors initiating cues are a bit more complicated.
i. Wall consent expires October 2017. Plan to start consent process early next year. Intent to continue monitoring till 2017.

Rotorua and Rotoiti have been at TLI for 3 and 2 years respectively but alum dosing has been a big contributor to this and both alum consents as are due for renewal soon, so it's likely that the wall will remain in place for at least one more consent term (35 years with review clauses) which will be helpful if alum doing limits are reduced or may allow reduction by choice.

Item 3: Electric Fishing: Brendan Hicks

a. This is the 7th iteration of this report, since 2007.
b. 2013 Results- ERI report 47
    a. Eel are currently being caught and are abundant 20-30 located in channel (2 large long finned eels, 1 @ 3.6kgs).
    b. Numbers are similar to what NIWA is getting. RESULTS ON PRESENTATION
    c. Goldfish numbers increasing but not preying on same food source as smelt).
    d. Put up sites from presentation- 9 &10 not using any longer
    e. Common bully increasing –
c. Three times more smelt caught than in 2012 and most smelt in the upper and middle channel
d. Most goldfish in lower channel
e. Bully throughout whereas in previous years numbers were declining
f. 2013 Highest water temperature fished in..
g. 9th & 10th of December fishing-
    a. Need to get iwi more involved.
b. h. ERI Report 47 going through final review and will be filed on website when review completed

Item 4: Trout Fishery Data

a. Surveys started 2005/6 and 2007/8 (pre wall). Six surveys have been completed post wall construction
b. Lake Rotoiti Creel
    i. 2010 put out marked fish and recorded numbers returned.
        1. TAG fish liberated in winter months returned in low numbers
    ii. 10500 fish were released in September 2014
    iii. Catch rates are up (Tarawera liberation strategies)
        1. Catch rates would have dropped if there was no liberation.

2. No liberation in Green Lake and only catch was first weekend of opening day.
3. No liberation in Tikitapu, natural spawning only. Stopped around 2006/7

iv. Effect of wall on smelt fishery. The drop on opening day has now has come up.

v. Summer Creel Survey
    1. Improved catch rates
    2. Lower percentage of wild fish
    3. Fish size/quality improving- in Lake Rotorua
    4. Fish size/quality dipping in Tarawera, Okataina

vi. Ōhau Creel Survey
    1. Second most no shows ever recorded.
    2. Good year fishing in channel- best month was October
    3. Fish stats: longer, heavier, and better condition. They tend to mirror what's happening in Lake Rotorua, not Rotoiti.
    4. Perceptions-
        a. Vast improvement over 2012-2013.
        b. 69% of anglers satisfaction
    5. Detractions slide
        a. # of interviews
    6. Anglers perception 'have heard wall has had an effect but fishing seems good'

vii. 2014-2015 Season Ohau Opening
    1. Much lower than last year
    2. Smelt wasn't there and about 20 trout caught for day.
    3. High catch rates tend to correlate with high smelt rates.

Item 5: Koura and Kakahi Update- Ian Kusabs

a. Koura
    i. There is a significant decline at Okere and Te Akau but not at the hot pools.
        4. Biggest Koura always at Te Akau, followed by hot pools.
        5. Largest koura caught this year was 54 mm.
    ii. Currently a 50/50 female to male ratio.
    iii. Egg bearing time
        6. Numbers were low January to March
        7. Older Koura are moulting once a year but estimated they can live for up to 20 years
        8. Hard to tag them because they are moulting.
    iv. Numbers are declining while water clarity improving. Better clarity will mean more weed. Hornwort smothering restricts koura access to whakaweku and also leads to rapid decay of the fern
b. Kakahi
    i. Inside Ōhau wall numbers are increasing except for 'the ditch' area
    ii. Rest area numbers are increasing
    iii. In lake numbers are increasing
    iv. In the ditch there has been a 17 fold increase in fine sediment which kakahi don't like, but it is a dynamic environment and is now being colonized by little plants that are stabilizing the silt and the habitat may become more suitable for kakahi.
    v. There has been a large increase in hornwort
c. Summary- There has been a significant decline in koura abundance and biomass at Okere and in koura abundance at Te Akau. The reasons for these declines are unknown but could be due to improvements in water quality and clarity which may have resulted in a decrease in food supply and increase in hornwort production. Kakahi remain abundant.

Item 6: Discussion

a. Have parameters been studied (ex. bed morphology, weed migration etc.) around the wall going in?
    i. No not weed migration but Andy will be asking Rob Donald if study should be undertaken
b. Were there predictions prior to wall going in (Andy Garrick)?
    i. We have pre-wall lake bed monitoring and annual monitoring at the control sites. Weed dynamics are impacted by a number of other factors that are not specifically related to the wall. There has been no net impact on measured parameters, but there are no obvious issues. Initially we did with trout numbers on only collateral things.
c. Are there any more avenues you would like to change? Or additionally study?
    i. There is an issue in monitoring around lakes, you often don't know what you should be monitoring until it's too late.
    ii. Objective of group is to look at gross effects of fisheries around the wall. In regards to additional monitoring, the problems of today are different from the problems of tomorrow.
d. Dave R - Has there been cross linkage between the Fisheries Panel WQTAG and LandTAG?
   No -currently there is not much interaction.

Weir Discussion

AB - Report in 1996 commented on the Ohau Channel Weir and difficulties of smelt movement. Recommended true right bank ramp - which is still there. Weir congregates smelt which is good for fishing at that point. Some are requesting a fish pass. This isn't within the scope of this Fisheries Panel. DR Commented if fish pass is put in place it would compromise previous monitoring, therefore agreed to leave the structure as is. Engineers are required to maintain not change the structure.

Overall Recommendations

ACTION:

- Monitoring Programme to continue as per last year. Nothing presented at this meeting has changed recommendations from last year
- Brendan to send Electric Fishing Report 47 to Gloria when internal review completed for placement on website
- Get more Iwi involved with Electric Fishing. Next schedule event 9-10 December. Ian to arrange invites including Leilani Ngawhika
- Rob Donald send slide show to Michel Dedual
- More comms requested around trout fishery
- Matt Osborne to write Press Release on channel trout fishery and send around then it will be placed on F&G Website.
- Matt Osborne- check if any anglers have any diary of records
- Ian Kusabs: email Ngaire Phillips report on crayfish and put Scandinavian Study information on website
- Andy Bruere: To ask Rob Donald what parameters have been studied bed morphology, weed migration etc around the wall going in
- Andy Bruere: Make sure to distribute Fish Panel notes and reports to WQTAG and consider information requirements for the wall resource consent renewal.
- Andy Bruere: to have WQTAG, Fish Panel, and LandTAG collaborate more.
- Next Fisheries Panel Meeting Friday 6th November 2015