# LAKES WATER QUALITY LAKE WEED AND PEST ANIMALS

## Hon Dr Nick Smith

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Nick has previously been the Minister of Conservation. During his time in these two portfolios he has been responsible for establishing two national parks and 17 marine areas. Nick played a very important role in the emissions trading scheme. He is the founder of the Blue Greens, which is a group in the National Party that recognises those who care very deeply about the environment. They meet annually around the country in a synopsis of summit like this. He has won the Nelson seat 10 successive elections in a row.

## **TRANSCRIPT**

## **Chair - Hon Todd McClay**

There are many people in this room who have worked hard behind the scenes, achieving things that seemed large or small at the time, but set us along the path for the Rotorua Lakes to make more progress more easily than any other region around waterways in the country.

In 2011 the Waiora Agreement was signed between the Lake Rotorua Primary Producers Collective, a group of dairy, dry stock farmers and landowners and the LakesWater Quality Society. They agreed to work together to achieve a clean and healthy Lake Rotorua through the reduction of nutrient emissions. For the first time targets were agreed to ensure a sustainable rural sector and a sustainable environment in the Lake Rotorua catchment. Environmentalists and farmers agreed to work together in a common cause. After a few meetings they realised that the environmentalists were business people and the business people understood that the farmers were environmentalists.

In 2013 this led on to the Oturoa Agreement between the Lake Rotorua Producers Collective with Federated Farmers, LakesWater Quality Society and the Bay of Plenty Regional Council. It was an agreement to resolve the appeal before the Environment Court over the Regional Policy Statement (RPS). They agreed to take a non-litigious approach to reach agreement around disputes and concerns in the future. They agreed to work to restore Lake Rotorua over a twenty year period and they agreed to a collaborative approach. They created the Stakeholder Advisory Group, (StAG) where all parties sat around the table, talked about the challenges and sought common understandings and solutions. It was a very important stepping stone towards the significant achievement we see now. There is still much work to do but we are much further along the pathway than any other part of New Zealand.

We had support from Government with Steve Chadwick as our local Member of Parliament at the time. They delivered \$72.1M of Government funding for a total package of \$144M, which included contributions from both the Regional and Local Councils, to focus on five Rotorua Lakes - Rotorua, Rotoiti, Rotoehu, Okareka and Okaro. LakesWater Quality Society and others were instrumental in going to Wellington to make the case and

lobby for why our lakes were such a priority. But flexibility was needed to adapt the funding where necessary. In the case of Lake Rotorua, following those two agreements, it was decided that money would be better moved from in-lake solutions onto land. That was a very important development because it showed the rural community the importance of cleaning up the lakes and keeping sustainable agriculture and job creation in the local economy.

Only five lakes were part of that original plan. Additional funding helped other communities. Some years ago \$4.5M was allocated to Lake Rotoma for a sewerage system and I am pleased that the final hurdle has been overcome to ensure that their water quality not only remains as it is today but also continues to improve. There has also been a recent announcement at Lake Tarawera of \$6.5M contribution from Government to a reticulated sewerage system. It is a large contribution, one that recognises that this must be a partnership if Lake Tarawera is to remain a pristine lake.

#### Hon Dr Nick Smith

It is a pleasure to be invited to be part of this. The debate around fresh water in New Zealand has never been so strong and the delight in coming to Rotorua is that so many parts of New Zealand could learn from the experience here of pulling together a science-based collaborative approach for progress. Just listening to Professor David Hamilton's presentation, reinforcing how complex these fresh water issues are, signals the progress that has been achieved.

I would like to reinforce the Government's take on how we deal with fresh water challenges across our country. Firstly, we need to ensure that our decisions are based on good science. There is a real complexity of fresh water issues around New Zealand including pathogens like *E.coli*, nutrients like nitrogen and phosphorus, sediment and also invasive species. The idea that there is one simple fix-all approach is not sound and the way those different challenges interact together emphasises the importance of underpinning our approach with good science.

Secondly, if New Zealand is going to get on top of this problem we need to step away from the classic Kiwi approach to environmental issues of the good guys and the bad guys which is a very polarising argument. Instead it is about getting people, Iwi, councils, farmers and the broader community working together and involves a mutual respect. People have to get out of their comfort zone. We are all kiwis and aiming for the same thing.

The third part is to ensure that our responses are practical. I am in the middle of thorny detail around requirements on farmers to fence their stock out of streams. I am sorry; parts of New Zealand are tiger country. If we are to come up with a set of rules that improve fresh water quality we do need to recognise that not all farmland and water bodies are the same whether it be sheep, deer, beef or pigs. We need a nuanced approach in which farmers rise to the challenge, they also have to put their hands in their pockets, but we need to ensure that those rules are practical.

The last really tricky balance for us is to strike the level of national direction. How much do we prescribe from Parliament, how much do we do at regional level and how much do we do at community level? In my view, since the RMA came into effect in 1991, Central Government has been insufficient in providing leadership. That is true and why one of the key priorities for our Government has been putting in place the first National Policy

Statement on Freshwater Management. But we need to be careful not to excessively prescribe from the centre. It is about trying to get the right balance on what should be regulated nationally and what should be done locally.

The reality is if New Zealand is serious about improving its fresh water quality, it is going to cost, and that means a sharing of that burden. When we come to working out the costs of these mechanisms, if everybody is equally pissed off, we have probably got it right. If the taxpayer is feeling some pain, the team at council are feeling that the ratepayers are carrying as big a burden as they can and the farming and industry communities are feeling that as well, I am sorry, that is just the way it is. To make progress we all need to put our hands in our pockets.

Can I talk you through last month? Our Government made a batch of changes to the National Policy Statement. Why have we done it? What does it do? The first very clear message we got in 2009 was there were no national rules around fresh water quality. Through the collaborative process of the Land and Water Forum we came up with the first cut which was a substantive step forward. However in debating where the bottom line should be, a number of councils put the case that they had water bodies that would never practically get to a swimmable standard. So the standard was made that the absolute minimum bottom line legally would be a wadeable standard. In rough terms that is 1000 *E. coli* per 100 ml. The community said it was not very inspirational; we want better than wadeable.

Through the Land and Water Forum we decided to raise that standard. Kiwis want to be able to swim in their lakes and rivers and we subscribed to that. But if that is going to be robust and scientific, measurable and accountable we need to come up with a system for grading. So we did. The only other jurisdiction in the world that has done it is Europe. Ours is a bit tougher than the Europeans and all water bodies are graded from excellent to good, to fair, to intermittent and to poor. If we apply that standard over all our water bodies in New Zealand, 72% of them match up to those fair and better categories. The Government has said we want to get from 72% to 90% over the next twenty two years to 2040.

People still say that is not very challenging. Let me tell you how challenging it is, it means that we have to get 1,000 kms of waterways every year up a grade for the next 22 years at a cost of about \$2 billion. But the real key is asking each of the regional councils to set targets for their areas, and it is no good having a target unless regularly reporting it.

Some people have said swimmability is just part of the picture, and they are absolutely right. An equally important issue, especially for lwi, is the ecological health of our waterways. The changes we made last month require councils to measure the ecological health of the waterways, with a bottom line that can be achieved. We have directed regional councils what they must do if those ecological health parameters are not being met.

But the most difficult challenge around fresh water management in New Zealand is the issue of nutrients. Here in the Rotorua Lakes we are at the cutting edge. When I became Minister of the Environment I thought most problems confronted have been faced somewhere else in the world and we should learn from those. I chaired the OECD meeting of Environment Ministers in Paris last year and using my capacity as chair, I specifically asked for a section on nitrates and how they are managed across the world, with the idea of stealing some experiences. The most surprising part of that meeting of 36 different Environment Ministers was that when I suggested we had good research done at

Lake Taupo and the Rotorua Lakes, but were struggling, what were other countries doing? They replied that they were coming to New Zealand to learn from our experience. The view after that meeting was that research and actions in the Rotorua Lakes and Lake Taupo is world leading particularly in cap and trading nutrients. But it is a reminder of how challenging work around nitrates is.

The Government has set down an objective across New Zealand that councils need to limit nitrates. Some would say that all we need to do is cap the numbers of dairy cows but in the Government's view that is too simplistic. Science tells us that some soils in New Zealand have negligible nitrate leakage, despite intensive dairy farming. Soils do vary significantly. When we came to Government there was not a single area of New Zealand that had limits on nitrates. We now have 25% of catchments with limits in place. There are many difficult arguments in communities around New Zealand on how to put those nitrate limits in place. Where there are limits, it is even tougher for communities to know how to allocate those existing rights? That requires the Wisdom of Solomon.

The last change that we made to the national policy requirements for water is the inclusion of Te Mana o Te Wai<sup>1</sup> as a core legal principle that applies across all our waterways in New Zealand. I must credit the work of the lwi Leaders Group and believe it is a substantive step forward.

Can I conclude by suggesting the next logical steps to improve fresh water if we were privileged to continue in Government after 23 September. The first one is developing good management practice for dairy, beef and cattle, deer and arable farmers, for land subdividers, for hydro and other water users, and that work has already begun. While we can have different regulatory rules we need to lift the practical management in all those areas and that would be a key priority for us.

The second is we need to finalise national rules on stock exclusion. At the moment two or three of 16 regional councils have tried it. We have some quite specific proposals and timetables through the Land and Water Forum. We now need to get right down to the nitty gritty and complete that work.

The third really tough issue is to set up a technical advisory group with Iwi leaders around the issue of allocation. Whenever there is a debate about allocation of freshwater most New Zealanders simplistically jump to the argument that this is about who takes the water, whether it be for irrigation, town supply or the teeny-weeny fraction used in bottling water. But that is not the tough part. New Zealand uses about 2% of its fresh water resource. The far tougher issue is the allocation of nutrient rights whether it be Rotorua, Southland, or my own community of Nelson. The current law for allocation is first in first served. There is a broad consensus that first in first served is not necessarily what is best for the community. The hard part to move forward is how might you do that and that is why we have that technical group.

extracted to satisfy external requirements. This is something everybody in Aotearoa can identify with – it is not an exclusively Māori aspiration. Te Rūnanga o Ngāi Tahu, Te Karaka, 16.09.2016

<sup>&</sup>lt;sup>1 1</sup> Described as "an overarching korowai for environmental management", this set of principles provides iwi and councils with increased visibility of the value and role of mātauranga in providing a more complete picture of the state of our takiwā and the adoption of the National Objectives Framework. Te Mana o te Wai speaks to the aspirations of many Kiwis who want clean, bountiful rivers and lakes for the generations to come. It recognises that the mauri, mana, and health of each body of water should be the primary consideration before looking at using it for other purposes. That means setting minimum limits that ensure that there is enough water in the river to sustain the ecosystems that rely on it, only then allowing water to be

The very last message is about a major piece of work on how we fund both the upgrade and future infrastructure for urban communities. In the debate raging at the moment around fresh water there is a view that this is about the farmers. The average *E.coli* level in urban waterways across New Zealand is 440 per 100ml. The average level in farming communities is 180. In our natural forests it is down at about 20. Urban New Zealanders have to do their share of the heavy lifting.

There is a huge challenge not just for your Council, who recently asked for Government support for Lake Tarawera's sewerage scheme with \$6.5M, but for councils across New Zealand that require billions of dollars of investment for our wastewater and stormwater systems if urban New Zealanders are going to share in this challenge. As a country we have to do a much better job of managing our fresh water.

Can I conclude where I started? This community should be enormously proud of the constructive way in which it has engaged and made so much progress on this issue. I particularly want to pay tribute to the LakesWater Quality Society. It has been such a constructive player as this community has moved forward. May you maintain this resilience, this vision, this drive to improve water quality. You are inspiring other communities around New Zealand. In my other portfolio I have a meeting today with the local MP and Mayor around building issues. What is so challenging around an issue like water quality and environment is that a new building, or library or something, can be done in a couple of years. But water quality is a multi-generational issue and we need the strength of this society and its partners to see the distance and ensure that your children and grandchildren can look back on the vision and improvement that has occurred in the management and quality of these gorgeous lakes in the centre of our North Island.

Thank you for the invitation.

## Hon Todd McClay

Nick, thank you very much for that and also for your commitment and help over many years to enhance the Rotorua Lakes restoration projects to move ahead. Nick has given a huge amount of support around the cabinet table to ensure that the funding that we have had has remained and been used well.

## **QUESTIONS**

John Green, ex-Chair, LWQS: Thank you very much for coming. We have all been through the various stories you talk about. It is wonderful for Todd and Nick to stand up before us and summarise what has happened over the last 20 years and see that the politicians really understand the issues.

From my work as a finance director of many companies, I know that accounting standards can drive the behaviour of a company and can also drive very bad behaviour. But here in New Zealand we do not have accounting standards for environmental behaviour and to me that is something we need to invest in. The Accounting Society is not sure how to measure these standards nor who is accountable and who has to report. You previously stated at one of our symposia that you would like to see accounting standards and I know how difficult it would be to get them going but I would be interested in your comments.

Hon Dr Nick Smith: I am very proud that two years ago we passed through Parliament the Environment Reporting Act. It requires the Department of Statistics and Ministry for the Environment to produce once every five years a full state of the environment report, every six months a report on the state of our fresh water, our marine environment, our air, our climate and our land reports. In my view they are an important step to better accountability because you manage what you measure. But are we able to say we are getting better or not? The honest answer is that our database and reporting systems are all over the place.

For example, in the debate about what proportion of New Zealand waterways are swimmable or not, the problem is that every regional council measures it differently. Some only measure water quality for swimmability in places where it is trouble. Surprise, surprise if you only monitor in places where it is in difficulty your figures are pretty ugly. Others are quite cunning and only measure where it is pristine and their numbers look very good. Others do it randomly. How do you make some comparison? The new National Policy Statement introduced last month sets the standard on testing. In future I can have some rivalry with Steve Chadwick and Todd McClay, looking at my honest measure of water quality and say my fresh water is cleaner than yours, tidy your act up, or vice versa. But it can only be done if we have standards.

I am cautious of Treasury who tried to put a monetary value on our conservation and environmental assets. Like you all here I am very passionate about our Abel Tasman National Park down in my part of the world. Treasury spent \$800,000 on all these accountants and treasury types to work out the value of the Abel Tasman to put on the Crown books. In my view it was a bit academic and stupid. There are some things that we cannot put a dollar value on and certainly I do not believe it can be the Abel Tasman. The Government has no intention of selling it.

However there is some really smart stuff. In Nelson the biggest industry is fishing. When I started as a politician the fisherman said their most important asset was their fishing boat and they did not like to be stopped from catching fish. When we moved to the quota management system suddenly the fisherman owns a \$300,000 fishing boat but has \$2M of quota. It was extraordinary for me as a Member of Parliament to receive a delegation of fishermen who said the stupid people in the Ministry for Primary Industries had set the quota too high and the banks have written a report which said if they carried on fishing like this that \$2M of quota would soon only be worth \$1.5M. I needed to sort them out. They need to conserve it better.

In other words you can use smart financial instruments to change behaviours. The whole notion of capping nitrogen and trading is part of that story but it is complicated, detailed and needs to be done very carefully. So yes there are opportunities and the Environment Reporting Act is a big step. It is in the detail where we need to be very careful because we are passionate about the environment but we also need to be practical.

Kevin Winters, BOP Regional Councillor: I wanted to tell you that it is a good news story here in the Bay of Plenty. We have redone all our fresh water streams through your swimmability targets and as of this week we are 93% compliant, which is the highest in the North Island. We are the best in the North Island.

Hon Dr Nick Smith: We look forward to check those numbers and make sure it all stacks up and will be delighted to know it is true.

Kevin Winters, BOP Regional Councillor: I have checked them too. We have two problems in the Bay of Plenty. The ones that pull us down are Lake Rotoehu and Lake

Okaro. They are our infants that we still have not got a handle on, for the rest, the progress has been fabulous. Remember, 93%, you heard it here first.

I also want to put a question to David Hamilton. Was I hearing you correctly in your alum dosing? We know it locks up P but did you say today that it is also affects nitrogen in the lakes. There was a downward trend and you said it was nitrogen.

Nick Smith: I saw the same graph and was equally interested.

*Prof David Hamilton, Australian Rivers Institute*: It is scientific detail but when alum binds with phosphorus it does not just bind with phosphorus, it binds with a lot of other particles as well. Some of those particles can also contain nitrogen. The nitrogen then washes out. But essentially alum's primary objective is phosphorus, and secondarily nitrogen.

Kevin Winters: That is really interesting to hear. I am on the Bay of Plenty Regional Council and the Lake Rotorua Incentive Committee which is buying nitrogen out of the catchment and it is really good news that alum binds nitrogen as well. Thank you for that.

Geoff Rice, LWQS: Kia ora koutou. David, I want to touch on the fact that Te Maru o Kaituna is an entity now and at the bottom half of this catchment which I consider to be a single body of water. There are lessons down there to be learnt from what has happened up here. What affect is the implementation of the diversion wall having on the Kaituna from Okere down to Maketu?

Prof David Hamilton: Originally when we did the projections we thought it would be neutral or possibly even negative on the Kaituna but we did not anticipate the huge improvements in water quality of Rotorua and Rotoiti. The blend of water was formerly 50/50 or even weighted more towards Rotoiti water but now it is 75% to almost all Rotorua water. So the improvement in Rotorua has underpinned the changes that have occurred in the Kaituna particularly if you think back to 2005 when it was not good.

Mayor Steve Chadwick, Rotorua: Welcome Minister, I hope you see the enthusiasm in the room for how we work together. We are looking at innovation, trying to move away from the only tools we know in the toolbox of rules and regulations. What is your view on natural capital? We would love to work on a catchment wide approach with the regional council and Iwi to find the best way to use our land within our catchment?

Hon Dr Nick Smith: Firstly, Steve, I want to reinforce the constructiveness of the LakesWater Quality Society. I have been to these symposia a number of times and what is most unique is that so many people are passionate about the lake and engaged with the science. I have difficult fresh water meetings all over the country, but what is so fantastic here is you being present and people being able to engage in the scientific detail.

On natural capital and new tools, I think the tools need to be at a regional level partly because the specific issues are quite unique. Looking at the lakes down in Wanaka, their particular issue is with lake snow which has a quite different set of parameters to the challenges here. With the rivers in my own area, it is *E.coli* which we really need to give a nudge. In other river systems the key issue is nutrients. So if we are going to develop new sophisticated tools it needs to be at the regional level. The Lake Taupo cap and trades scheme is right up there in innovation and financial incentives for change. If councils like Rotorua have ideas for new policy tools for natural capital, but do not have the legislative tools from Parliament to give them a go, they need to engage with Parliament about how it can be done. I believe that going forward Parliament will give a smorgasbord of tools to

councils who must then find the ones appropriate to their challenges and apply them in their communities.

# **Hon Todd McClay**

Ladies and Gentlemen it has been a privilege to chair the first session this morning. I would like to recognise those here who are from the rural sector. Over the last 4 or 5 years the way that all groups and communities have come together constructively to find a way forward is not only encouraging, it deserves recognition. I very strongly believe that the overwhelming feeling among the Rotorua catchment and more widely is that the rural community are part of the solution to a clean and healthy lake and having sustainable agriculture.

I commend everybody in the room for the work that they do and we must keep that in our foresight because the economy of Rotorua is doing extremely well. It is very carefully balanced but we need jobs and investment, we need the drive that comes from the rural community that props up so many businesses, not just out on the land but in our cities and towns.