



The Opportunities Party Clear Water Action Plan

As part of our Environmental policy, The Opportunities Party (TOP) has five principles that guide our approach to New Zealand's freshwater resource:

- The first principle is to improve the overall quality of water in our waterways, and that the needs of our native ecosystems are respected;
- The second is to ensure that polluters pay for any damage they cause;
- The third is to ensure that our obligations under the Treaty of Waitangi are met;
- The fourth is to ensure that the legitimate needs of households are met; and
- The fifth is that any surplus flow is allocated efficiently, on a fully commercial basis.

Apparently no one owns water – but some private businesses can use it more than others. That's hypocritical, we need to admit that currently permits or consents are use rights – they are *de facto* property rights. In order to move to a sustainable, rational allocation regime for freshwater we need to resolve Treaty claims for freshwater and create tradeable use rights as we did for fisheries. Again, this makes sure we get the best out of a limited resource. If we set this up correctly (which we didn't do for fisheries) this could also generate revenue for local government, but the first step is to clarify rights and establish the conditions for trade.

We think trading of rights can benefit the environment. After all, the commercial users of our freshwater have a vested interest to ensure extractive use is monitored and breaches enforced. Allowing markets to emerge that price commercial water according to its value will free up the supply of water in times of shortage, incentivise water users to be efficient with its use, and ensure we get maximum economic benefit from the water that is used.

Separating environmental obligations from commercial access rights will make it easier to set rules to protect the environment from negative impacts. Our policy recognises the work of the Land and Water Forum on freshwater allocation.

THE CHALLENGE

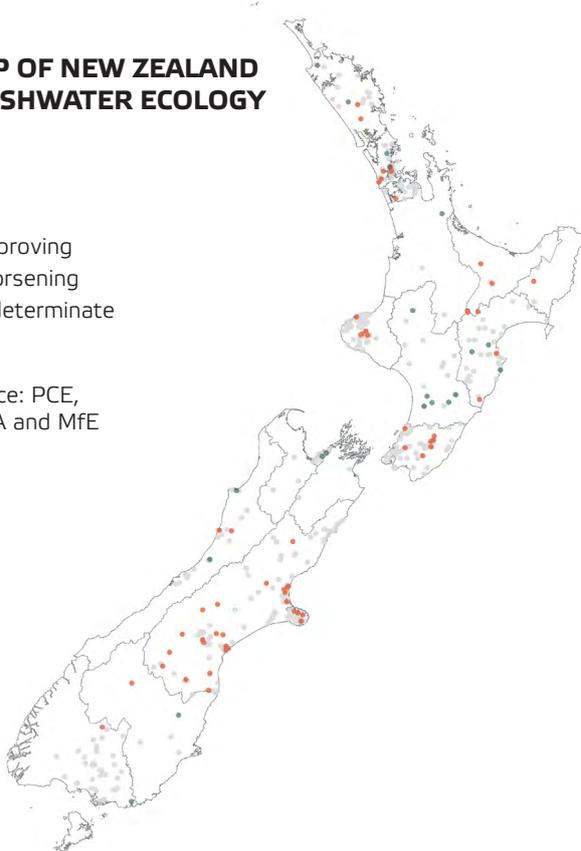
The challenge of freshwater management has been clearly articulated by the work of the Land and Water Forum (LAWF) in their 3rd¹ and 4th² reports. Using their (incomplete) template we conclude that any freshwater management approach must:

- resolve Maori Treaty rights over fresh water (starting at the national level);
- agree environmental limits amongst the community then monitor, model and enforce them;
- look at each catchment on its merits, including all discharges and water takes (lakes, rivers and groundwater), and the role that infrastructure and catchment scale mitigation plays and could play;

MAP OF NEW ZEALAND FRESHWATER ECOLOGY

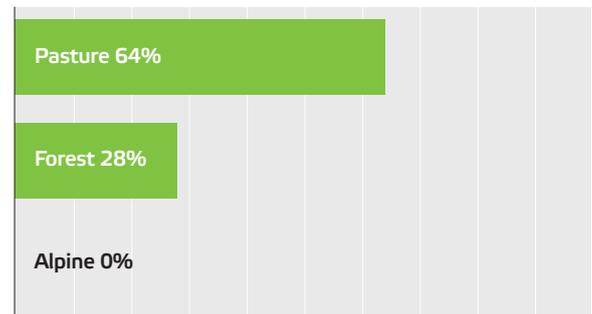
- MCI**
- Improving
 - Worsening
 - Indeterminate

Source: PCE, NIWA and MfE



- encourage the uptake of good management practice via audited self management;
- start a national roll out by targeting the catchments most at risk and of significant ecological value; but aim for national coverage so that appropriate pricing encourages water users to locate near the cheapest water sources available;
- establish good quality rights once a catchment faces water scarcity. Good quality rights are essential for fostering investment certainty, in assets like pipes or efficient irrigation technology. (Research tells us good quality rights have a high degree of durability³ and transferability and have quality of title.⁴);
- provide flexibility via good quality rights to allow water to move to its highest value use over time (through trading of extraction rights and land use change);

% POLLUTED LAKES BY LAND USE (EUTROPHIC OR WORSE)



Source: NIWA

- ensure overall water take from commercial users is within the limit in the case of overallocation (this might include, for example, testing or benchmarking to ensure irrigation machinery is efficient, or catchment-based use reduction plans);
- implement individual discharge allocations for water quality (particularly nitrogen and to a lesser extent phosphorus) that can be traded if appropriate; we have covered this in our ‘polluter pays’ policy for internalizing costs of pollution to those who discharge the pollutant;
- pursue water sensitive design in urban areas, better integration of three waters⁵ infrastructure planning, reporting on wastewater overflows and a review of trade-waste bylaws;
- recognise the role that reliability of water supply has as a key determinant of productive value; and
- be able to change the system as information improves. It cannot lock in prices and contracts in perpetuity – that would be an abuse of the Commons.



Cows grazing in the Mangaoporo River, Gisborne.

A: Freshwater Protection

TOP's philosophy is that generations should leave the environment in a better state than we found it in. To achieve this we recommend ensuring that sustainable limits are set, monitored and enforced, and making polluters pay.

There has already been a lot of work in local and national government to ensure minimum flow-levels and allocation limits for our rivers are set sustainably. Minimum flows ensure that economic use of water continues while enough water remains in our lakes and rivers to maintain their aquatic ecosystems and natural character. Allocation limits are set to avoid over-allocation and enable reasonable surety of supply for water takers.

Setting minimum flow levels and allocation limits is no easy task and a lot of regions are still struggling with this. One particular challenge has been the resourcing of councils and regional communities to tackle the limit setting task set under the National Policy Statement for Freshwater Management. Resourcing for monitoring and enforcement of takes and discharges has also been recognised as an issue.⁶ We would ensure that this work is funded adequately, recognising its local and national importance.

We advocate making polluters pay. In terms of fresh water it make sense to look at how this might work for each of the main contaminants affecting our waterways.

SEDIMENT AND BACTERIA

Both of these contaminants can be well managed through good farming practices, making regulation appropriate. The Government has already started to act on bacteria, creating regulations to fence most large waterways on farms with different deadlines depending on land and farm type. This process could and should be sped up.

Fencing is not enough to deal with the problem of sedimentation in our rivers. We need to urgently plant our 1.1m hectares of erosion prone land, which TOP will encourage through a higher price on carbon and expansion of the Afforestation Grant Scheme. The government also needs to provide greater guidance around the creation of riparian planting buffers (as LAWF has recommended), which can help filter soil and bacteria before they end up in our rivers.

The Government's National Policy Statement on forestry will soon prevent harvesting trees on erosion-prone land. This approach should be extended to other uses that can cause erosion, such as livestock farming.

NITROGEN

Nitrogen leaching is a natural outcome of some farming methods and because it is soluble in water it is very difficult to stop entirely. This makes it more appropriate to manage through a price system. The Opportunities Party (TOP) approach is very simple:

1. Each catchment will set a cap for nitrogen leaching per hectare for that year, bearing in mind the land types;
2. This cap will reduce over time until the catchment reaches its goals, including making the river swimmable;
3. Those farmers leaching below this limit in that year will offer the rights that are excess to their requirements to other farmers in the catchment;
4. Those farmers leaching above this limit will bid for the rights to use those permits, setting a price;
5. Those farmers leaching below the limit will receive a payment for their rights (minus administration costs); and
6. All money will stay within the catchment, and within the farming sector.

B: Treaty Policy

Our Treaty policy can be found [here](#). TOP will only endorse freshwater policies that ensure Maori have their Treaty rights over freshwater resolved.

C: Freshwater Allocation Policy

The third component of our *Clear Water Action Plan* policy is to recognise that while fresh water is a replenishable resource it is still finite and valuable. Water above the minimum flow limit, the needs of communities to sustain human life and the customary rights of Maori is available for commercial use. A price mechanism (i.e. markets) is the best way to ensure that this water is allocated to its most productive uses and is allocated in a way that allows flexibility for different users to manage the water demands of annual crops and permanent plantings.

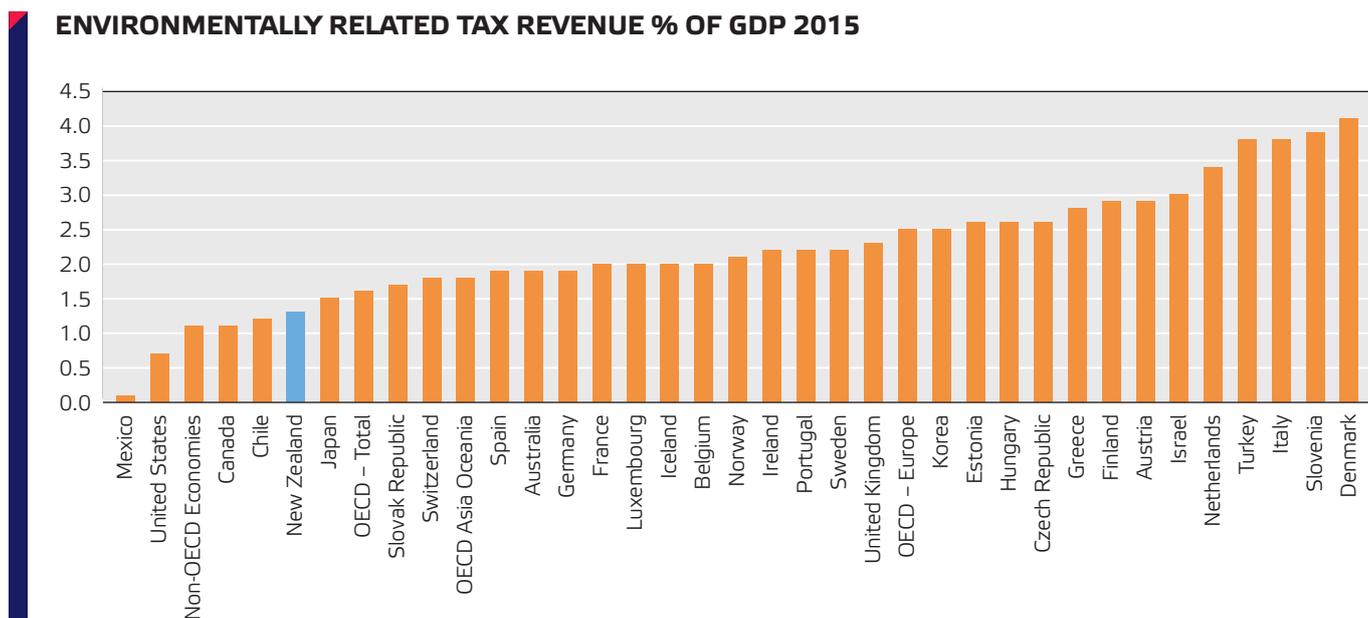
THE CURRENT ALLOCATION REGIME

Currently water is allocated on a first come, first served basis using resource consents. In catchments where water has a lot of demand (say, from irrigation), most of the available water for allocation has already been allocated. As water is allocated using resource consents, extraction and use rights are bundled with environmental permissions and restrictions. As long as the water take doesn't unduly impact the environment (e.g. by taking the river below minimum flow) the Council is expected to issue the consent. Consents are issued for varying lengths of time but in practice most are for 35 years. Small fees are charged to cover the cost of administration. Once the consent runs out, the expectation is that the Council will renew it, unless they have a reason not to.

As a result of this approach in fully allocated catchments, existing consent holders (or legacy users) are crowding-out potential new holders who may be able to use the water in a more profitable way.

Furthermore, what these legacy users currently pay for water each year bears no relation to any market value. Granted, some users do use a secondary market to get entitlements - for example, in Canterbury - but in the absence of full market driven annual usage charges the regime is ad hoc and bears next to no relationship to the value of this natural resource.

If we could resolve this it would be an opportunity for New Zealand to align economic activity with protection and enhancement of the freshwater resource, which is one of our greatest assets.



We do not expect this to be easy. For example, it is likely that there will need to be a new Act that overrides the Resource Management Act in the case of fresh water. Such an Act would need to, for example:

- a. set an environmental bottom line wherein all waterways have their fundamental qualities (e.g. minimum flow) protected. This is in accord with our intention to make protection of endemic ecosystems an article of the Constitution;
- b. ensure all New Zealanders have the right to sufficient freshwater to sustain life, regardless of population increases;
- c. include a mechanism to ensure Maori have their kaitiaki responsibilities respected, and their Treaty rights over the commercial allocation of freshwater resolved through either allocation of freshwater resource in under-allocated catchments, or a percentage of the revenue in over-allocated catchments;
- d. establish rights over the commercially available flow of water and allow for trading of rights with low transactions costs (e.g. clear monitoring and dispute resolution);
- e. honour current consents for the use of freshwater, allowing for a transition to a regime in which use under that consent at any time will be subject to paying the prevailing market price, with any revenue from this going to Nature Investment Funds.

DESIGNING THE COMMERCIAL WATER MARKET

Markets work best in fully-allocated or over-allocated catchments, so that water can be allocated to its highest value uses and the right incentives exist to use water efficiently. TOP’s *Clear Water Action Plan* will create the necessary rights and instruments to allow for markets to emerge when full allocation is reached. In the mean time in under-allocated catchments the market price per litre will effectively remain at zero – although of course the market price for buying the right to extract may not be, depending on what expectations are for the future demand for water from that source.

Water markets are based on a ‘cap and trade’ system where the cap represents the total pool of water available for consumptive use, after minimum flows and the other two priority uses (human consumption plus customary rights) are set. There would be two types of trades in the catchment - entitlements and litres allocated:

- Water access entitlements are rights to an ongoing share of the total amount of water available in a system. These are sold for varying periods (similar to current consents that can be up to 35 years). Once purchased these entitlements are tradeable in part or as a whole on a secondary market.
- Water in a particular catchment is then paid for per litre at a price that pertains for a given timeframe (year, month, week, day depending on the volatility and reliability of commercial water supply). That per litre price is determined by tender with the tender being open to both priority users (entitlements holders) and others. At the tender the market clearing price is determined. The entitlement holders get their share met first so long as they are prepared to pay the per litre price, and any they don't wish to purchase is available to the non-priority tenderers.

Users of water (e.g. irrigators) determine whether they need to buy or sell their water at a particular time. The price of water is a reflection of these demand and supply factors. The price of water differs across regions, type of water rights and time. For instance if there is a drought and an urgent need for irrigation water arises, then the value of a litre of water will rise, even though the entitlement value (which is a long term asset) might not.

Under our proposal hydro generators will need to purchase an entitlement to store and use water. They would not need to pay for water used for non extractive purposes. However, the act of storing water does mean some water is lost due to evaporation. Hydro generators would need to pay for what is in that case effectively an extractive use.

In other countries, the presence of water markets has generated revenue which can be put toward reductions in taxpayer and ratepayer funding of waterways protection.

DESIGNING THE TRANSITION

Moving from a legacy system where some commercial concerns have been "given" a right to freshwater, to one where commercial access is to be distributed to those uses of most economic benefit, clearly requires a transition. There is a need to equitably address the needs of legacy consent holders with the needs of others who wish to enter the market.

In Australia this was achieved in part by the taxpayer spending \$10bn on buying some of the water entitlements back from existing users and then releasing that on to a tradeable market for entitlements.

The taxpayer however didn't buy it all, so legacy owners still have entitlement and can sell that if and when they wish. That process conferred a windfall profit to existing users that many found unfair because it acted as a deadweight loss for all new users, as they had to pay this entry price to acquire entitlements from those who were given it.

Our approach is instead to start by recognising that legacy consent holders have the entitlement for a period equal to the remainder of their consent term. New entitlements will be issued and sold to commercial operators as the water authority has capacity available. But legacy consent holders, just like new entitlement owners and like non-entitlement users will still all have to pay the per litre, market-determined per litre price for water – as per the regime described above.

This entitlement/use model would separately determine the value of an entitlement (issued for long or short terms, but tradeable so all with fixed renewal dates) and the value of water consumed (market pricing set for short periods relative to the consent period). The revenue from both the entitlement issuance and volume used would accrue to the Nature Investment Fund (NIF) charged with guardianship of the asset.

This regime delivers an equitable and economically efficient outcome and avoids conferring upon legacy owners of entitlements the windfall from overnight commercialisation of value of a natural resource (that was the big mistake when the fishing quota regime was introduced). While the legacy owners will enjoy a windfall gain from inheriting their entitlements that now have value in the commercialised world, those licenses are not perpetual, and the holders will still need to pay the spot market price for water, and, of course, the entitlements are for a proportion of the total allowable draw – they do not ensure a certain number of litres.

¹ Land and Water Forum, 2012. Third Report of the Land and Water Forum: Managing Water Quality and Allocating Water

² Land and Water Forum, 2015. The Fourth Report of the Land and Water Forum

³ Where the underlying property covered by a right is depletable, or where investment can increase the value of property, like freshwater, then how long the right lasts or the arrangements for its renewal if duration is not permanent, are crucial to investment incentives and behaviour.

⁴ Quality of title can be a vague term but includes whether the right is absolute or proportional, compensability for changes in the terms of the right, and the existence and nature of institutions to enforce the right. It is therefore crucial to the operation of markets and for investment certainty.

⁵ The three waters are wastewater, (treated) freshwater and stormwater

⁶ <http://www.eds.org.nz/our-work/publications/books/last-line-of-defence/>