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## *7 Steps Government Can Take Immediately To Save New Zealand's Waterways*

### **1. PROTECT THE HEALTH OF PEOPLE AND THEIR WATERWAYS BY SETTING STRICT AND ENFORCEABLE WATER QUALITY STANDARDS, BASED ON HUMAN AND ECOSYSTEM HEALTH LIMITS.**

Strict and enforceable water quality standards that protect the health of people and waterways mean a definition where levels of E. coli (measuring faecal contamination) nitrate, phosphorus, fine deposited sediment and Habitat Quality Index are set at levels that ensure ecosystem health.

Scientists have already identified these limits. The Ministry of Health's 'Microbiological water quality guidelines for marine and freshwater recreational areas' show an acceptable rivers has 260 E.coli per 100mL of water. Work has been carried to develop scientifically robust standards for nitrate, phosphorous and Habitat Quality.

The Government's current policy has limits to these major pollutants that are either so weak that they offer little protection or they have been left out entirely. Healthy rivers, lakes and fresh water that is safe for people and wildlife can be achieved with meaningful regulation supported by science and puts the health of people and the environment as its first priority.

## 2. WITHDRAW ALL PUBLIC SUBSIDIES OF IRRIGATION SCHEMES, AS THEY INCREASE PRESSURE ON WATERWAYS.

With rivers, lakes and groundwater already under serious pressure, we cannot continue to increase the amount of pollution we create. Large irrigation schemes, like the Ruataniwha Dam in Hawke's Bay and Central Plains Water scheme in Canterbury, allow for the continued expansion of intensive models of agriculture, creating more pollution that contaminates rivers, lakes and groundwater. Yet, there is currently \$480 million of public money allocated to subsidising these large irrigation schemes.

Large irrigation schemes undermine good work individual farmers are doing to reduce pollution coming from their farms. These important efforts will be cancelled out by new irrigation schemes that expand intensive agriculture and increase pollution.

Pollution comes in the form of faecal contamination carrying pathogens that can make people sick as well as nitrogen and phosphorous that trigger algal blooms, deplete oxygen in water & threaten fish survival, and can lead to toxic effects in the groundwater many of us drink from.

The Canterbury District Health Board found in its 2014 report, 'Public Health Implications of Land Use Change and Agricultural Intensification with respect to the Canterbury Plains' that, "irrigation is a direct pre-cursor to more intensive agricultural systems and there is a direct link between irrigation and increased adverse effects on water bodies."

It wrote, "The impact of irrigation on natural ecosystems is multi-dimensional:

- Enables increased land area to be used for agriculture, especially intensive agriculture
- Increased application of contaminants – more fertilisers and pesticides are required to make use of the increased water supply and more effluent is generated with increased stocking rates
- Greater runoff and leaching of contaminants – saturated soil promotes runoff of contaminants to surface waterways and leaching of contaminants to groundwater
- Reduced river flows and groundwater levels – abstraction reduces the remaining environmental water. Reduced river flows can change freshwater ecosystems by reducing the frequency of flushing flows or increasing the length and frequency of very low flow periods. Reduced river flows and groundwater levels can result in less dilution of contaminants that enter these waterways, thereby increasing contaminant concentrations
- Replacement of natural vegetation by pasture or crops can increase surface runoff and decrease replenishment of groundwater aquifers"

The Canterbury DHB went on to note, "the health impact assessment of the Central Plains Water Scheme found that the potential risks to the health of Cantabrians outweighed the probable financial benefits to a few people."

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Taxpayer money must not be spent on subsidising irrigation schemes which will make

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**3. INVEST IN AN  
AGRICULTURAL  
TRANSITION FUND, TO  
SUPPORT THE  
COUNTRY'S SHIFT  
TOWARDS  
ENVIRONMENTALLY-SOUND  
PRIMARY INDUSTRIES BY  
REDIRECTING \$480  
MILLION OF PUBLIC  
MONEY EARMARKED FOR  
IRRIGATION.**

Science-based, environmentally-sound methods of agriculture are available. Farmers and primary producers need to be supported to transition towards these methods. Nationally, primary industries need research and development to move the country beyond simply more intensive dairying. For example, this could mean funding for demonstration farms that show methods and promote the diversification that would allow clean, healthy rivers.

New Zealand is ready to move towards clean, resilient agriculture and the Government can invest in this transition.

Once withdrawn from subsidising more pollution, the \$480 million of public money can be redirected to a new Agricultural Transition Fund.

It is widely acknowledged that the way we are intensively farming in New Zealand is harmful and impacting human and ecosystem health. It has also created significant economic problems as described by the OECD's 2017 Environmental Performance Review of New Zealand. This does not have to be the case. With Government support, we can lead the world in clean, resilient agriculture.

**4. IMPLEMENT  
STRATEGIES TO  
DECREASE COW  
NUMBERS IMMEDIATELY.**

There are simply too many cows in New Zealand for our waterways to cope. The increase in livestock numbers has led to more faecal matter and more nutrients, particularly nitrogen, reaching waterways. The Ministry for the Environment stated that, "between 1990 and 2012, the estimated amount of nitrogen that leached into soil from agriculture increased 29 percent. This increase was mainly due to increases in dairy cattle numbers (and therefore urine which contains nitrogen) and nitrogen fertiliser use".

Since 2012, cow numbers have risen at an alarming rate that the environment cannot sustain. To protect and restore New Zealand's rivers and lakes, and to stop ongoing contamination of groundwater, the Government must implement strategies to decrease cow numbers immediately.

A reduction in stock numbers up to 35% has been suggested by a recent economic report discussing the future of New Zealand's primary industries.

Expanding the national dairy herd would not only clog New Zealand's rivers and

The #FreshWaterRescuePlan presents 7 steps the Govt can take to protect...  
lakes but it also undermines the work being carried out by existing farmers to reduce their impact. While individual farmers make progress in reducing their impact on waterways, their work is being undercut by new intensive dairy conversions.

<https://www.freshwaterrescueplan.org/the-plan>

The Government must build a strategy that supports farmers yet decreases cow numbers in order to prioritise human and ecosystem health.

## **5. REDUCE FRESHWATER CONTAMINATION BY INSTIGATING POLLUTER PAYS SYSTEMS NATIONALLY.**

The cost of pollution in our waterways is currently being paid by our people, our wildlife and our environment. It is paid in the form of taxes and rates that go towards cleaning up. It is paid in the form of people's health currently suffering from the effects of contaminated drinking water and polluted rivers where we swim and gather food. This is known to economists as an externalised cost. When the polluter is not responsible for the full cost of pollution, then the cost is incurred by others to clean up the environment or provide care for human and ecosystem health.

In order to reduce pollution and address the cost incurred by society, these external costs must be paid by those responsible for producing the pollution. A polluter pays system, as the OECD explains, will internalise costs of "diffuse pollution from rural and urban sources, and promote innovation in pollution control."

There is a large cost associated with cleaning our waterways and providing medical assistance. This cost must be paid by the polluters at the time of pollution. Currently these costs are being passed on to future generations. Mechanisms must be put in place to alleviate the intergenerational cost that is resulting from free pollution.

## **6. ADDRESS THE PERFORMANCE OF REGIONAL COUNCILS ON IMPROVING WATER QUALITY THROUGH QUARTERLY REPORTS FROM THE MINISTRY FOR THE ENVIRONMENT ON ENFORCEMENT, BREACHES AND MONITORING.**

For policy to be effective, it must be enacted and enforced. Regional councils have an large and important role in the frontline protection and management of fresh waterways. Currently, breaches in freshwater regulation are going unmonitored and unreported. Regional and district councils are largely letting the public down by failing to enforce freshwater regulation.

Quarterly reporting from the Ministry for the Environment on councils' enforcement proceedings, monitoring and where consent breaches have occurred would bring to light the work of local government on fresh water and provide valuable information on where and how improvements can be made.

This way the Government can identify where and how regional councils can be supported to improve their performance as well as ensuring the public interest of clean, safe fresh

**7. ADOPT OECD  
RECOMMENDATION TO  
ESTABLISH A "WHOLE-  
OF-GOVERNMENT,  
MULTI-STAKEHOLDER  
PROCESS TO DEVELOP  
A LONG-TERM VISION  
FOR THE TRANSITION OF  
NEW ZEALAND TO A  
LOW-CARBON, GREENER  
ECONOMY".**

The OECD's 2017 Environmental Performance Review of New Zealand identified what the public has known for some time, that the country is reaching its environmental limits. The OECD warned that as we continue to exploit natural resources for economic growth, freshwater pollution, particularly diffuse pollution, will be as it states a "growing environmental and public health concern"

New Zealand needs a whole-of-government process "to develop a long-term vision for the transition of New Zealand to a low-carbon, greener economy".

Currently, there is a lack of coherence between policies for water, climate and primary industry. This threatens any efforts to protect people, their waterways and the environment.

By developing this vision, the Government makes clear to all ministries their role in progressing New Zealand towards an economy that operates within environmental limits, so that a coherence of policies and ministries supports the health and well-being of the country and its future generations, which it currently is not.

The OECD continued in its review, that a "whole-of-government long-term strategy to increase the added value of export products within climate and freshwater quality and quantity objectives" is needed. For this reason, the Freshwater Rescue Plan strongly recommends the Government adopts a whole-of-government approach in which goals and interests across ministries correspond rather than compete.

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