Submission of The Ecology Justice and Peace Commission of the Catholic Archdiocese of Wellington on proposed changes to the National Direction in Freshwater Management (Package 3) Discussion Document.

- 1. The Wellington Catholic Archdiocese Commission for Ecology, Justice and Peace is established to contribute to and participate in work for justice and peace inspired and informed by Catholic Social Teaching. The Commission's key responsibilities are:
- Supporting the communities of the Archdiocese and wider community to hear and actively respond to the cry of the earth and the cry of the poor;
- Scrutinising all issues and institutions in society and in the Archdiocese in the light of Catholic Social Teaching.
- 2. The Commission acknowledges that certain regulations that are to be overhauled as part of changes in National Direction of Freshwater Management will have significant impacts on the Common Good (He Painga mā te Katoa), Participation (Nāu te rourou, nāku te rourou) and decision-making processes (Subsidiarity, Mana Whakahaere) of all communities and representations in Aotearoa New Zealand. The discussion document also deals with aspects of Stewardship (Kaitiakitanga) that ensures all New Zealanders benefit from freshwater resources.
- 3. Primarily concerning is the overhaul of the three-tiered system known as "Te Mana o Te Wai". It prioritises objectives, ensuring that the conditions of the first objective is met before consideration is given to the second or third. The amended 2024 version of the National Policy Statement for Freshwater Management 2020 (NPS-FM) already state six core principles for the use and management of freshwater (Mana whakahare, Kaitiakitanga, Manaakitanga, Governance, Stewardship and Care and Respect). While many of these objectives overlap, these objectives are balanced to reflect the three-tiered system of firstly, caring for the health and wellbeing of freshwater bodies and ecosystems, then the health needs of the people, before setting the scene for communities to provide for social, cultural and economic wellbeing that has a view not only for now but for future generations. At the heart of this hierarchy is Te Tiriti o Waitangi how can all New Zealanders (Tangata Whenua and Tangata Tiriti) flourish in partnership with the gift of the natural aquatic environment and the resources it offers?
- 4. To allow councils to firstly provide for "social, cultural and economic wellbeing" as equally as important as "caring for the health and wellbeing of freshwater bodies and ecosystems" is to bite the hand of one that feeds. We must remember that if we do not have healthy and vibrant freshwater bodies and ecosystems, then the health needs, or the social, cultural and economic wellbeing of the people cannot be sustained or maintained. The incoherent tendency of the view that all of the three concepts can be atomised and regarded as separate from one another is a red herring.

Question 1: Whether it is a change now or later, is it a change that will ensure well-being for both all people and the land? If the intention is for the Resource Management Act (RMA) to be phased out, and new legislation has not yet been implemented, how could elements within this Freshwater package hold a clear mandate and be enforceable in the long term, when changes remain to be considered?

Question 2: We do not think changing the hierarchy will allow more 'flexibility' for councils to provide for community outcomes. The flexibility will instead be confusion about which micro-

regulation should come before another in deliberating on whether certain freshwater management initiatives should go ahead. Safeguarding the life supporting capacity of freshwater and human health logically takes precedence over productive economic opportunities. The management objectives should continue to operate within the existing priority hierarchical framework. A freshwater system logically needs to be in a healthy state before it can even be considered to be used for human purposes. To diminish the existing priority objectives to a level playing field could potentially result in economic and community interests compromising management measures to protect and preserve our freshwater systems. By describing freshwater management as a "rebalance" implies the potential for a level of degradation from economic interests. The rebalancing of priorities could mean that councils would have the "flexibility" to choose what suits the council and economic community over the health of freshwater systems. It is within our own interests to ensure that healthy freshwater ecosystems are prioritized first and foremost with an eye for future generational use. We presume that it is the role of Government to ensure the protection of our freshwater systems for the public of Aotearoa New Zealand.

Question 3: This consultation document admits that "long time-frames for improving water quality can be appropriate, and in some cases, unavoidable". Therefore, there is no need to 'clarify' what an 'appropriate' time-frame is in achieving freshwater outcomes to ensure freshwater and ecosystem sustainability and the support for communities through freshwater management. In fact, the investments placed on the care and respect for the well-being of freshwater ecosystems is often not observable overnight. Pollutants and contaminants often have chronic effects on animals and biology in an ecosystem, that the lack of acute (immediate) changes to their way of life, reproduction, etc., does not mean that monetary resources should not be spent in addressing long-term issues.

Question 4: The emphasis on costs should always be attentive to the care of the ecosystem of waterways. A costly but necessary spend to ensure that ecosystems are flourishing is more important than cost-savings that rid councils of the data and resources that is important for making management decisions in the future. When vital data (such as mapping wetlands, see below) about the state of the ecosystem is 'sacrificed' to a cost-saving, as it is not necessarily seen to be immediately important, this prevents participation of future generations in freshwater management and making informed decisions about freshwater management and ecosystems. Subsidiarity extends not only to the present population in Aotearoa NZ but to decisions that pertain to the well-being of future generations. In fact, if the intended purpose to fragment Te Mana o Te Wai was to be implemented, councils could face extra legal costs justifying their decisions over the 'multiple objectives' which have turned into a myriad of abstract first principles. Costs should not necessarily be given high priority, especially if costs compromise the integrity and health of a freshwater system. Costs should therefore be considered in terms of what the maximum level of protection councils can provide with their allocated budget. This may include sharing the costs of management with industry or farms that knowingly adversely impact freshwater sources and systems. Simple low level management tools like legislating for fencing and planting of riparian strips within farms and lifestyle blocks could go some way towards achieving the shared goal of healthy surface water sources.

Questions 5 and 6: If any changes are made to Te Mana o Te Wai, Option 2 would be least detrimental – however, the changes would mean that Tangata Whenua will not necessarily be involved right from the beginning of the consultation process through the hierarchy of Te Mana o Te Wai, and consultation with iwi/hapū will only be seen as an objective or goal rather than

something that is a priority. Therefore, Te Mana o Te Wai should sit firmly within the NPS-FM's objectives and we advocate that the status quo remains.

Question 7: We do not believe it will allow consistent interpretation – simply because there will be too many 'first principles' for councils to navigate through. While we concede that implementation and interpretation under the broad values of the hierarchy of Te Mana o Te Wai may cast doubt on whether certain practical implementations are feasible, it is important to make the distinction between vision and utility/implementation. Just because practical implementations are not necessarily feasible in the current way the vision is interpreted does not mean that there is a problem with the vision.

Question 8: The current compulsory values of Ecosystem Health, Human Contact, Mahinga Kai and Threatened Species rightfully deserve to remain important values to freshwater management. If these values were diminished over other values currently considered to be subsidiary at this time (i.e. irrigation, cultivation and food and beverage production) then we might be confusing the difference between a human need and a want in relationship to freshwater. A hypothetical ruling to freshwater management in the future under these considerations may put the value of irrigating crops over the need for a healthy ecosystem, or the ability to gather aquatic species for food. Crops are then subsequently irrigated from freshwater drawn from a river which dries up and affects all livelihoods that depend on the abundance that previously existed in the river. This is not a way to improve growth and sustainability in all areas of the freshwater ecosystem — or ensure that the common good of all is met. The changes to these values to an inconsistent plethora of other initiatives that are considered just as important means that we cannot truly protect the values that ultimately sustain life. Indeed, on what basis or philosophy can one segregate the nine optional values from the compulsory values? Many of the nine values fall under the umbrella of the compulsory values.

Further to a discussion about the cost of living and food (see below), and for the sustainability of natural resources, it is not our place to override values which sustain life with initiatives which may offer short-term gains to a few. If "commercial and industrial use" is a 'value' that can trump "ecosystem health", one remains suspicious as to whether we can remain truly connected to our wider environment. Indeed we run the risk described in the encyclical *Laudato Si'* by Pope Francis-"If we approach nature and the environment without this openness to awe and wonder, if we no longer speak the language of fraternity and beauty in our relationship with the world, our attitude will be that of masters, consumers, ruthless exploiters, unable to set limits on their immediate needs". (*Laudato Si'* paragraph 11).

Question 9: As noted above, the practical effect of removing national values will make management of freshwater resources much harder and less consistent within the overall framework of our relationship with freshwater.

Question 10 and 11: All of the 10 listed attributes pertaining to ecosystem health and the health of human contact on the aquatic ecosystem (Phytoplankton, Periphyton, Total Nitrogen, Total Phosphorus, Ammonia Toxicity, Nitrate Toxicity, Dissolved Oxygen, Sediment Measures (Turbidity), E. Coli and Cyanobacteria) are important measures and should have national bottom lines. The current attributes are key indicators which merely act as an alert system, raising flags on potentially more critical and/or complex pollution issues or events. To remove any of these attributes/indicators is to dilute what few mechanisms there are available to identify and manage

pollution events or chronic pollution/contamination issues over time. While our knowledge in ecosystem health may progress over time, our understanding of attributes measured in water quality does not differ between a sample of water from Kaitaia vs Bluff. Liquid water is chemically the same irrespective of geographical location, and in the way it interacts with other natural or induced features in the environment. While bottom lines can be tailored to the water source in question, deviating from national bottom lines as a guide, key indicators for a healthy water source must be retained, especially with regard to drinking water sources. It is premature to suggest that one measure is more important that another, as the data collected from each of these attributes are correlated together for any overall assessment of properly upholding the values of ecosystem health and human contact.

Even with the focus on one particular attribute, there are various methodologies, measurements and tests within each attribute category which can be applied that a particular council or authority can choose to implement. In addition, testing methodologies have often been standardised to ensure that the methodology is appropriate to the actual environmental situations. For example, the measurement of water samples is carried out at pH = 8 because this is the closest pH between a range of 6.5 – 8.5 that aquatic organisms thrive, and at 20 degrees C, because apart from variations, this is a general ambient temperature of the environment. The current NPS-FM does not set onerous or unachievable methodologies for the testing of these attributes, leaving it up to councils and local authorities already to determine the methodologies for which the baseline measurements are to be achieved. It does not insist, for example, that nitrate levels/concentrations in water samples need to be determined with the standardized ISO 23696-1:2023 methodology. If there are no better or cost-effective strategies other than existing methodologies to determine a necessary attribute, in maintaining ecosystem health, then scientific evidence suggests that the status quo should be maintained.

Question 12: Action plans should be relied upon as far as necessary to be corrective of negative impacts identified with attribute measurements. One wonders why objective attribute data drawn from sample measurements can be ignored if it is deemed on an ad hoc basis that no practicable measure can be made to achieve environmental targets.

Question 13: There is no good reason for councils to deviate from "bottom lines" for attributes pertaining to freshwater quality, which are objective measurements after scientific analyses that indicate whether there is a real or potential problem about the health of the ecosystem. These indicate the bare maximum concentrations of pollutants that are allowable before significant negative impacts are objectively observed above such levels. While councils may deviate in taking into account new and improved scientific methodologies to ensure that the accuracy and precision of the levels of pollutants measured are carried out in the most realistic and cost-effective manner affordable by the council/authority in question (i.e. the lack of access to high performance liquid chromatography or ion chromatography instrumentation may limit how accurate within margins of error a level or concentration of a pollutant can be detected vs a cheaper UV spectrophotometric laboratory method), it is fallacious to conclude that there should be no bottom lines concerning freshwater attributes at all. Councils may consider to adopt and invest in 'portable' nitrate testing devices to easily monitor nitrate levels (see Rogers et al. (2025), Chemosphere 381, 144472). Indeed, ecotoxicology is also an emerging field, whereby results pertaining to one organism may not be valid for another – thus the need to quantify on a broad range of organisms what a typical level or concentration in the form of LC50 or EC50 measurements (50% of a particular organism experiences death (LC50), or deleterious effects through another endpoint (EC50), such as organism reproduction). These results further determine how bottom lines can be set. To eliminate bottom lines mean that councils can choose to adopt to the principle of 'doing what individuals like or want to achieve' as objective scientific measures are discarded. Giving councils the "flexibility" to deviate from thresholds sounds akin to an excuse for allowing councils to accept a level of noncompliance/pollution in areas that are convenient, especially with regard to large business interests operating within sensitive environments.

Question 14: Making vegetable growing a 'permitted activity' (i.e. an activity without the need for a resource consent) could make vegetables more locally available - reducing the costs of transportation (and therefore, the use of fossil fuels to transport the fresh produce, which delays the produce from being sold on the market, leading to a reduction in nutrition and quality). However, it is premature to suggest that growing vegetables should be allowable at all costs, without assessing the impact that 'widening the field' has on the entire ecosystem and water catchment areas. There are some areas in Aotearoa NZ where certain crops/vegetables would not grow. Pukekohe, for example, is suitable because of the nutrient-rich volcanic soil that allows an array of fresh produce to grow. This may not be the case for other areas – whereby modification/destruction of an ecosystem and habitat to allow such produce to grow may be a potential risk. So without a risk-benefit analyses of which specific vegetables/crops are to be grown and in the particular geographical areas, we are not supportive of a free license to harness the land according to the demands of just the free market. Indeed, St Francis of Assisi subscribed to the concept that "part of the friary garden always be left untouched, so that wild flowers and herbs could grow there, and those who saw them could raise their minds to God, the Creator of such beauty" (Laudato Si', paragraph 12).

Question 15: Rules and regulations pertaining to crop rotation should be designed to reflect all of the objective sources of knowledge (Matauranga) and agricultural science we hold and understand about our relationship with harvesting food from the land. For example, if there is a real risk for a particular region that nitrogen is stripped from the land and requires replacement, there could be crop rotation schemes to ensure that legumes and other nitrogen-fixing species (such as peanuts, soybeans etc.) are incorporated into the planting cycle, so that less nitrogen fertiliser is needed to fortify soil health. Much knowledge to do with growing cycles can be adopted from the Maramataka – planting and harvesting patterns can be optimised to ensure both maximum yields of produce for the resources expended for growing them, and therefore, increase the capability and opportunity of the soil and the land to sustain life. Acknowledging that the natural existence for humans is to connect to the mechanics of nature prevents environmental degradation and exploitation of resources.

Question 16: If conditions are to be placed on vegetable growing, available technologies to empower farmers, agriculturalists and horticulturalists to monitor their soil and land for nitrogen, phosphorus, sulphur and other necessary trace minerals, such as calcium and selenium, would be beneficial investments. These in turn will contribute to awareness about whether fortification with nitrates and other fertilisers are really needed on their land. Councils and authorities could invest in nitrate- and phosphate-testing stations which will advise on any steps needed to ensure that soil is not unnecessarily over-nitrated or phosphorylated with fertiliser.

Questions 17: Rules for the storage of water should be set nationally. There are objective measures that assess the feasibility and quality of water storage. The measures (such as site selection, assessing potential impacts of other water bodies, administrative compliance, effects on taonga and culturally-important sites) are all important to ensuring that the water storage is safe and resilient. There should be consistent monitoring of contamination and pollution — as water storage

facilities are defined as 'off grid' reservoirs not connected to the current lakes and rivers of Aotearoa NZ, additional monitoring of freshwater attributes (particularly E. Coli, Cyanobacteria and other microorganisms, periphyton and algal growth) should be regularly ensured, for public health and safety.

Question 18: Water storage facilities, such as storage ponds on farms, if they become a 'permitted activity' without a resource consent needed, should still be monitored for attributes ensuring quality and public health safety. They are stagnant pools of water that run the risk for contamination, without encountering any form of mixing zone as in natural flowing water systems such as lakes, rivers or streams. Water quality attributes should be monitored consistently and at regular intervals. Unmonitored storage facilities pose a huge risk for public and environmental health. For example, if the construction of the storage facility was not resilient against unmitigated and severe storms, as a result of climatic changes, there is the risk for leakage, flooding, further run-off associated with fertiliser and nutrients fortifying the field, etc.

Question 19: As above, the water storage standards included in the document are a fair assessment to ensure public and environmental safety of the water supply. As with freshwater in naturally flowing catchments, it would be applicable to establish and use methods of analysis that reduce the possibility of the water quality in the storage being impaired. Storage standards could consider having protocols for water to undergo certain forms of physical or chemical treatment that are cost-effective (such as the use of UV-irradiation for the treatment of sewage water) and result in little loss to the quality of the water as intended for use. Also, standards should include monitoring of water bodies/land structures adjacent to the water storage facility to ensure there is no risk associated with ground/land deformation/collapse or structural instability from an engineering point of view.

Question 20: Both small and large scale water storage facilities could potentially be enabled through standards that are applicable to both. Climate change is a reality and therefore, developing a resilient freshwater supply for all New Zealanders is a priority that can be considered, but not at the expense of a 'divide and conquer' assault without consideration of all of the other aspects of caring for the environment.

Question 21: Those in the agricultural business should not be led into thinking that an activity such as irrigation can be a 'permitted activity' simply because it is perceived that environmental risk is minimal. However, the premise is, what is one using to irrigate fields with? Educational opportunities to allow farmers to understand that irrigation as an activity can change the overall chemical makeup and composition of the soil. The use of treated sewage water to irrigate crops can introduce pollutants (such as pharmaceuticals and personal care product residues) into the soil, which then has the potential to run-off onto groundwater and other natural aquatic systems. Therefore, farmers and agriculturalists should have some ability to verify, through government or council support, any negative impacts that allow them to attain best practices (through monitoring of soil/groundwater/sampling). This could be achieved through a consenting pathway instead. Simply because a farm (which could, out of the control of no-one but nature, contain a significant wetland) is 'private land' does not mean that license is granted for being rent asunder, according to the whims of an individual, if the impacts affect all people in society.

Question 22: Any considered 'farming activities pathway' should ensure that wetlands be protected and monitored from discharge and farming run-off. Run-off and waste products from animals cannot necessarily be contained by fencing, as many water-soluble contaminants will

inevitably seep into the surrounding wetlands, if farming was allowed around wetlands. While there has been discussion as to the overall definition of what a 'wetland' is, as there are former wetlands that have already deteriorated can be beneficially 'restored', as well as 'wetlands' that have come into existence through artificial means (i.e. broken drains), to completely enable activities around all types of wetlands without further definition or distinction poses a substantial degradation risk to many natural wetlands significant for native wildlife habitat. One then has to also question how appropriate it is to define what a 'wetland construction' is. One can argue former wetlands no longer exist as such. Former wetlands restored as wetlands have in some ways been 'reconstructed' to allow conservation efforts to thrive. Some constructed wetlands may therefore be just as important as 'natural wetlands' in upholding the diversity of native NZ flora and fauna. While a farming activities pathway can be clarified, it cannot be prioritised without consideration of ecosystem and wetland health.

Question 23: The impact of removing the requirement to map wetlands by 2030 will be a huge flawed misstep in the loss of data that can truly inform best ecological practices for future generations. Councils should know what is in their district, as wetlands will inevitably be interconnected with other freshwater systems and natural areas. Being able to locate wetlands could prove invaluable in the management of a pollution event. Again, this proposed question addresses the need for short-term gains and perhaps, cost-savings, to prevent what can be a credible and important long-term exercise for the Stewardship (Kaitiakitanga) of other human beings and the wider connections of our environment. Some estimate that over 90% of Aotearoa NZ's natural wetlands have been degraded. This in turn threatens native species which suffer from habitat loss. Knowing and being familiar with the biodiversity, of both fauna and flora within wetland systems, is a method of monitoring biodiversity levels that can act as invaluable key indicators of negative environmental impacts. Mapping wetlands will therefore be crucial in ensuring that what wetlands remain are conserved, and that efforts are maintained to protect threatened or endangered native species.

Question 24: Permitted activities relating to farming can certainly be simplified. Most of the confusion comes from the application of the definition of 'wetlands' and there are certainly grounds to explore how certain 'constructed' wetlands containing exotic species are considered in a different league than the protection of true native wetlands that would be deleterious to the wider environment or habitat if drained or tampered with.

Question 25: There are grounds for moving the regulations pertaining to structure type (whether a ford, a culvert, etc.) into a single section of the regulations, thereby simplifying what is required for compliance with a structure that can be erected as a permitted activity. However, while the conditions in common can be generally reviewed, it is important not to dismiss conditions which may be apparently irrelevant to fish passage, but in fact may be significant. This is where before any changes are made, it would be pertinent to consult with structural engineers and hydrologists in what way certain removed parameters may affect fish passage. For example, it is incorrect to assume that the material composition of a culvert or a ford will not directly affect fish passage. Smooth concrete or metal may increase the flow of water compared to a natural streambed, affecting the way in which fish may swim against the current. Before simplifying fish passage regulations, conditions will need to be validated and assessed without premature assumptions.

Question 26: There can definitely be grounds for some distinction between temporary and permanent structures. Water velocity can definitely not be removed from the conditions, however,

as this affects fish passage, if the construction of a culvert or other structure infringes on the overall makeup of the aquatic ecosystem catchment.

Question 27: If temporary are held to less scrutiny than permanent structures, prolonged exposure of a river to such structures may mean that fish passage is unnecessarily impeded or modified. However, clarity will need to ensue that temporary structures are truly removed from a site in a timely manner.

Question 28: No we have not, in our experience. We are not sure how conditions imposed on river reclamation (another type of obstructive activity that completely stops the flow of water in a natural waterway) would also be valid in the construction of structures like culverts and fords that allow the passage of fish through a waterway.

Question 29: The reporting of fertiliser use can certainly be done at a time of year they report on other matters, as long as the reporting reflects the seasonal variations and trends that are recorded throughout the year.

Question 30: No, reporting of fertiliser use has not already served its purpose. The limit of 190 kg/ha/yr limit on synthetic nitrogen fertiliser application is a cap to ensure that there will not be excessive run-off into the environment. As with speed limits on the road, hitting the speed limit is not a target. Consistent monitoring and stewardship of pastoral areas requires that nitrogen fertilisers are applied judiciously when required rather than for their own sake. Speed limits on the road stay as they are even if there is an improvement on the road toll (or lack of deaths). This might be the result of such measures in fact. In turn, an 'improving trend' in reporting compliance does not mean that the reporting and limits should be let go, because they could be associated with the increased compliance.

Question 31: Yes, councils should be required to map drinking water sources. Data is vital for informed-decisions relating to freshwater management. This would remove the need for consent applicants to languish in costly processes involving the analyses and collection of such data to inform their application for a particular activity.

Question 32: The study of all three SWMAs will be good. For public health, the wider implications of a source and the ecological health of a catchment area, which influences the water collected, needs to be assessed for assurance that safe potable drinking water is delivered to all who benefit from the resource.

Question 33: A lower threshold would allow the benefit of data collection and information that might well be relevant in the future. The population of Aotearoa New Zealand is growing, with a projected increase to 6 million by 2040. It is possible that smaller communities will inevitably grow into larger ones in the future, assuming that population growth is equal amongst all regions of Aotearoa New Zealand. Thus mapping drinking water sources at a lower level of 100 will only anticipate the capabilities and resources needed for decisions to be made about resilient, future-proofed provisions for drinking water sources.

5. Summary – While there are worthy considerations mentioned in the current Freshwater consultation document, some major aspects, particularly the relaxation of Te Mana o Te Wai, the re-ordering of certain values that ensure ecosystem health and human wellbeing are looked after, potentially trumped instead by values of unregulated commercial and industrial growth, and the

consideration that certain bottom line attributes pertaining to pollutants and ecotoxicity can be relaxed safely, including the relaxing of regulation around wetlands, seem to indicate that convenience and costs are favoured over carrying out what is important, to ensure that the ecosystem is being properly looked after and cared for.