Survey attachment - Innovative Process Engineering

240401 Water - Coastal Floodplain Drainage Options - Report

The report addresses the issues arising from poorly developed floodplain projects from the past causing acid and blackwater issues leading to destruction of Marine Environments.

The main causes are identified as poorly designed drainage projects over past years leading to exposure of acid sulphate soils and introduction of plant species which cannot tolerate inundation leading to degradation, oxygen deficiency known as blackwater and death of aquatic species.

The effect of climate change is recognised as extreme flood events and sea rise.

Climate change has significant additional effects which can be mitigated.

Climate change leads to higher atmospheric temperatures and increased water content in the atmosphere and increased energy in the atmosphere. It also leads to longer dry periods between heavier deluges. Fire following dry periods can add to blackwater issues.

The result is greater runoff, lower infiltration and excessive water entering the floodplains.

The result is dry pasture and forest, flooded floodplains, and loss of water to the estuaries and oceans.

Poorer pasture performance due to lower biological content and dryer soils, and poorer estuary performance due to freshwater excesses leading to disease, loss of fish and shellfish.

Drainage options are only one part of the problem and can never solve the problem without water detention and management.

Existing drainage systems must be rebuilt to prevent acid sulphate and blackwater.

New drainage systems must be carefully designed to avoid acid sulphate, blackwater and sea rise, and salt increases.

Detention is a significant part of the potential solution as climate change increases deluges and floods.

Detention capacity of about 20% of rainfall for productive farms followed by slow release over 10-12 weeks can reduce floodplain damage and improve infiltration for soil fertility and carbon sequestration.

After 12-12 weeks detention dams will be ready for the next deluge

Leaky detention dams on forested areas can reduce the effects of deluges on floodplains.

Excessive rainfall over and above the designed detention levels must be diverted to streams and drainage channels which are designed to remove the excess without the current issues of acid and blackwater.

Regulated flows will enable the wetlands and floodplains to function as near to normal as possible reducing the deleterious effects currently being experienced.

Sea level rise is something which cannot be controlled and mitigation by design is the only way to deal with this phenomenon entering fertile lands.

- Director - Innovative Process Engineering



21st April 2024 Coastal Floodplain Drainage Project NSW Department Climate Change Energy Environment and Water Via online submission form

To whom it may concern,

Submission: Coastal Floodplain Drainage Program

The Nature Conservation Council of New South Wales (NCC) is the state's peak environment organisation. We represent over 190 environment groups across NSW. Together we are dedicated to protecting and conserving the wildlife, landscapes and natural resources of NSW.

NCC is pleased to be able to provide comment on the NSW Government's Coastal Floodplain Drainage Program, which is seeking to:

- streamline the regulatory process for modifying drainage infrastructure
- reduce the instances of blackwater and acid sulphite water pollution.

The most effective way to minimise occurrences of blackwater and acid sulphite water pollution is to restore wetlands.

Of the options listed, NCC supports:

- a strengthened version of *Option 4: Implement a risk-based approach for approvals for coastal floodplain drainage works.* This approach should be strengthened so that approvals found to have high and extreme risk of polluting are automatically disallowed.
- Option 5 (ii) Drainage work approvals under the Water Management Act 2000 a drainage work approval could apply to existing and new drainage works across the entire drainage network. This option allows for the identification of non-functioning works which would allow for a pathway for their decommissioning. Public authorities should be required to hold a drainage works approval.
- Option 1 One-stop shop webpage and Option 2 Drainage applications coordinator are sensible improvements to an overly complicated system.



Most coastal wetlands in NSW have been drained and developed, predominantly for agriculture. This has been a significant loss of critical habitat and feeding grounds for wildlife including many threatened and endangered species and migratory birds.

Among the impacts of draining wetlands is the exposure of acid sulphite soils and increased black water events which are serious environmental issues.

Sea level rise due to human induced climate change poses a significant threat to coastal environments around the world. The best defence against rising seas is restoring drained wetlands back into their natural state. Wetlands are big sponges, they soak up large volumes of water, and water dependent vegetation slows water moving across the landscape. This has the added benefit of drawing down significant amounts of carbon from the atmosphere and storing it, thereby slowing down the impacts of climate change.

The sooner we begin restoring low lying wetlands in anticipation for rising sea levels the better.

Regulation

While the coastal drainage program is focused on simplifying the regulatory requirements for maintaining a drained wetland landscape, the process for landholders, councils and agencies to restore wetlands for all the obvious benefits must also be overhauled.

It is critical that the responsibility for mapping coastal vulnerability areas for the SEPP (Resilience and Hazards) be given back to the government from the Councils, and that all efforts be made to accelerate wetland restoration in these areas. Currently there is only one registered coastal vulnerability zone in the state.

Exemptions under local environmental plans for cane growers to avoid the approvals process should be removed, and changes that allow industry to self-assessment and self-regulation of drainage works modification should not be made.

Activities that are determined will increase instances of blackwater pollution and acid sulphite run off should not be approved.

Works that have no approval and are causing environmental harm should be remediated.

The risk-based approach for approvals for drainage works would identify works that would sustain or increase instances of blackwater and acid run off. To obtain the objectives of this program, that is to decrease blackwater and acid sulphite run off, any works approvals with High or Extreme risk should not be granted.

Traditional Owners

Traditional Owner groups should be given free, prior and informed consent to give input into the restoration of important wetlands, as described in the United Nations Declaration on the Rights of Indigenous People. The cultural significance of land and the emotional wellbeing of



Traditional Owners must be valued and considered in the process of acceleration the restoration of wetlands.

Restore Wetlands

The vast extent of coastal wetland drainage and over development has caused such severe environmental degradation in some low-lying areas of drainage networks they will be no longer functioning in ten to fifteen years, and these impacts will be exacerbated by climate change¹.

The govt should establish clear policy about sea level rise and tidal inundation due to climate change.

There is a trend that drained wetlands are being used less and less for agriculture, therefore there are fewer private drainage boards and the responsibility for maintaining drainage infrastructure is falling more to councils. Costs for councils is increasing, and they are increasingly financially unable to maintain drains on public land, leading to neglect and unchecked environmental damage.

Resorting wetlands is the most effective way to reverse the occurrences of blackwater and acid sulphide water pollution.

Thank you for the opportunity to participate in this consultation.

Your key contact point for further questions and correspondence is **a second second second**, available via **a second second** and (02) 9516 1488. We welcome further conversation on this matter.

Yours sincerely,



Jacqui Mumford Chief Executive Officer Nature Conservation Council of NSW

¹ What we heard report

Survey attachment - 2te - drain photo - not allowed to maintain





CLARENCE ENVIRONMENT CENTRE 87-89 Skinner St, South Grafton 2460 Phone / Fax 6643 4611 Email: admin@cec.org.au Website www.cec.org.au

NSW DCCEEW – Water Group Water Policy and Legislation – Coastal Floodplain Drainage Project Locked Bag 5022 Parramatta NSW 2124

By email: water.enquiries@dpie.nsw.gov.au

Dear Sir/Madam

RE: Coastal Floodplain Drainage Project - Options Report

Introduction

The Clarence Environment Centre (CEC) has maintained a proud history of environmental advocacy for more than 30 years. The conservation of our region's natural environment – both terrestrial and aquatic – has always been a priority for our members, and we believe the maintenance of healthy ecosystems and biodiversity is of paramount importance.

The CEC notes that the Options Report states the Coastal Floodplain Drainage Project aims to address the complexity, time and costs associated with the approvals process for drainage works on coastal floodplains. Its aims also include reducing the impacts of these floodplain drainage works and activities on downstream water quality (specifically relating to acidity and low dissolved oxygen), aquatic ecosystems, communities and industries. The report identifies 6 potential options to 'improve' the regulatory framework for coastal agricultural drainage works and activities.

The CEC agrees that the regulatory framework for floodplain drainage needs to improve but questions whether it is appropriate for such improvements to streamline the approval process, given the lengthy history of drainage works damaging our floodplain and estuarine ecosystems and, hence, our important fisheries. We also consider it inappropriate to streamline any process that expands the drainage capacity of these works given the pressing need to commence the planned retreat of agricultural industries off our floodplains in the face of sea level rise.

The problem with floodplain drainage

Over the course of the 20th century, flood mitigation works were carried out across most of the coastal floodplains to facilitate the development of urban areas, agriculture and other industries on flood-prone lands. As part of these works, the meandering channels and backswamps of coastal floodplains – which were characterised by low hydraulic gradients and limited outlets – were replaced by extensive networks of drainage channels. These

breached the natural separation between an estuary and the floodplain's wetlands and swamps, and also exposed acid sulphate soils. Their floodgates blocked fish movement to upstream habitat areas.

During floods, the concentration of dissolved organic carbon in floodwaters starts to increase and the process of its decay rapidly reduces the concentration of dissolved oxygen. At the same time, acid is leached from the iron-sulphides in acid sulphate soils and acidity levels in the waters increase, mobilising metals. Before drainage works, these waters were predominately retained within swamps and wetlands, allowing the carbon cycle to complete and the water column to become re-aerated and pH levels return to normal through subsequent rainfall.

However, due to a desire to shorten the periods of waterlogging on crops and grazing land, hypoxic and acidic waters are now discharged swiftly into estuaries via the drains, leading to major fish kills and associated closure of fisheries (e.g. in 2001, blackwater events closed fisheries in the Macleay and Richmond rivers for periods of 3 and 4.5 months respectively; an event in 2008 wiped out fish populations in major parts of the Richmond River).

Major fish kills have massive flow-on economic impacts on fishing, tourism and community health.

While the creation of blackwater is part of a natural process, the magnitude and frequency of blackwater events and the damage they cause in our estuaries and aquatic ecosystems are very unnatural. It's a huge issue that receives very little recognition, presumably due to the lobbying efforts of canefarmers and other interest groups.

We note that, as many of the drainage systems were constructed well before the introduction of the *Environmental Planning and Assessment Act 1979*, or protection (or even recognition) of threatened ecological communities on our floodplains, there are no controls on their operation in the absence of new development and presumably no penalties on landowners if their drains contribute to blackwater or acid water events.

As floods become more frequent due to more extreme storm events associated with climate change, these events appear to be becoming more common. As sea levels rise, also due to climate change, it is time to critically evaluate the sustainability of floodplain agriculture and urban development, and seriously consider whether wetland restoration is a better use of low-lying lands on our floodplains. We point to the current restoration program that in underway in the Yarrahapinni/Clybucca wetlands in the Macleay and are concerned at the delay in implementing a similar project in the Everlasting Swamp.

Comments on the Coastal Floodplain Drainage Project

The Options Report acknowledges the above problems and includes the statement:

Blackwater and acid sulfate drainage have become a common threat to the marine estate in most coastal rivers in NSW where floodplain drainage schemes exist and continue to impact on water quality and aquatic ecosystems.

The CEC is therefore highly disappointed that the Coastal Floodplain Drainage Project regards maintenance of destructive floodplain drainage as a 'business as usual' exercise that should be allowed to continue (with potentially less oversight than currently exists!), rather than an opportunity to start a planned retreat of agriculture off our floodplains. We note with concern that 'viability of coastal floodplain agriculture due to sea level rise' has been deemed to be one of the out-of-scope issues.

Further, the CEC is disappointed that lack of resource for local councils to undertake compliance action on private drainage works is deemed to be out of scope of the project. A clear commitment for compliance action is a critical part of any effective regulatory framework. It requires adequate resourcing. In our experience, the lack of compliance essentially negates any regulation that may exist.

Of the options presented, Options 1–3 pose the least risk to the environment, as long as the approvals by the various NSW Government agencies adequately consider the potential environmental impacts of the proposed drainage works. Our feedback on each of the elements is as follows:

Option 1 – The creation of a 'one-stop shop' webpage to be a single source of information on the various approvals that may be required by government agencies for coastal floodplain drainage works is supported but we foresee two major risks:

- Governing legislation will change (and, in the case of environmental planning instruments, on a very regular basis) and so there is a high risk of this webpage becoming out-of-date.
- The webpage needs to be comprehensive and identify all relevant legislation that may apply on each section of drain. The Attachment to the Options Report fails to achieve this, as it does not mention all relevant legislation, such as:
 - the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*, which becomes relevant if drainage works are likely to or may have significant direct or indirect impacts on matters of national environmental significance (such as migratory bird habitat, threatened ecological communities or Ramsar wetlands);
 - NSW *Biodiversity Conservation Act 2016*, which is relevant if clearing is proposed in areas in the Biodiversity Values Map (which automatically includes all areas mapped as coastal wetlands) or if there are significant direct or indirect impacts on threatened ecological communities listed under that Act;
 - NSW National Parks and Wildlife Act 1974, which becomes relevant should Aboriginal object be moved or otherwise harmed during drainage works or if works are proposed on those drains that still exist in national parks or nature reserves (e.g. Yaegl Nature Reserve and Everlasting Swamp National Park)

Option 2 – The appointment of a 'drainage applications coordinator' to guide an applicant through the approvals processes and answer questions about their proposed works is a position that seems a good idea. In fact, a caseworker should exist for all NSW Government application processes. However, it is unclear what funding will be available to fund the position and if it will be funded under a user-pays system.

Option 3 – Concurrent assessment of applications by relevant government agencies would seem to be rational, and similar to the process under the NSW *Environmental Planning and Assessment Act 1979* for Integrated Development. This is supported.

Option 4 – Adopting a risk management approach is not supported as there appears to be an absence of good-quality vegetation and soil information across much private land in NSW, including on floodplains. We understand there is even a lack of spatial data of constructed drains on all the floodplains in NSW.

We oppose the statement (on p.31) that low risk activities may include 'removing sediment and marine vegetation from approximately 1m³ in front of a floodgate outlet and clearing vegetation from constructed drains on private land using suitable machinery or hand tools'. Given the state of some drains, such vegetation may be quite mature, and its clearing would likely disturb sediments and acid sulphate soils. Further, such vegetation may be threatened species or be habitat for threatened species.

We note the comment of the

that

Option 4 may increase regulatory complexity and process, specifically in mapped coastal wetlands, but do not support their understanding of this situation.

Option 5 – It is claimed that activation of provisions under the *Water Management Act 2000* for landholders, drainage boards or councils to hold drainage work approvals could lead to improvements in water quality. Sub-option (i) for site-by-site approvals when drainage works are proposed would presumably impose conditions on those works to secure those improvements. It is unclear from the report how sub-option (ii) when applied to existing drainage works could secure any improvement in water quality. As currently no enabling regulations exist, this option appears to be the hardest to implement in the immediate future.

Option 6 – The CEC is completely opposed to further streamlining of approvals, even under the regime of drainage works approvals. Existing exemptions are wide-ranging and subject to abuse. For example, as identified in Attachment C for Scenario 1 (private landholder growing sugar cane doing maintenance work on a drain), current streamlining may potentially lead to unregulated actions in high risk (Class 2) acid sulfate soil mapped areas – as long as they follow 'plans of management and best practice, administered by the Sugar Milling Cooperative'. We call for the removal of this exemption.

In closing, the CEC requests DCCEEW to review the underlying assumptions in the Options Report (and, presumably, the project) that improving management practices of existing drains can prevent blackwater and acid water events. We agree with the following statement by the

All options are based on the underlying premise that if best management practices are followed for drain maintenance that levels of acidity or deoxygenated water discharged from drainage systems will improve. This assumption is technically incorrect and as a result the report won't deliver its stated water quality outcomes. Acidity and deoxygenated water within drainage systems are a function of the location of the drain in the landscape, the drains' depth and the characteristics of surrounding soil and vegetation – none of which are altered by maintenance practices.

We therefore request a detailed review of the entire drainage network to identify priorities for drain filling and floodgate removal to prevent future major fish kills.

Yours sincerely

Phil Redpath Vice President 21/4/24



Clarence Valley Conservation Coalition inc

PO Box 1015 Grafton NSW 2460 clarencevcc@gmail.com www.clarencevalleycc.blogspot.com.au

NSW Department of Climate Change, Energy, the Environment and Water Water Group – Coastal Floodplain Drainage Project

Dear Sir/Madam

Options Report: Coastal Floodplain Drainage Project

The Clarence Valley Conservation Coalition (CVCC) is a community group based in the Clarence Valley in the NSW Northern Rivers. Formed in 1988, the CVCC has been involved with environmental issues – both locally and beyond – since that time. It has had a long-term interest in the conservation of biodiversity, climate change, waste management, the water cycle and protecting the environment of our local area and further afield.

The Clarence River is the largest of all NSW coastal rivers, both in terms of its catchment area and river discharge. The Clarence Estuary features an enormous tidal pool, which starts more than 100 kilometres from the coast. It has a wealth of aquatic habitats (including the second largest area of seagrass in NSW) that support many species of fish (e.g. mullet, flathead and bream) and the most productive estuarine wild catch fishery in the State. The estuary also has large areas of mangrove and saltmarsh that provide significant habitats for waterbirds, many of which are threatened.

Many of these habitats have experienced decline in recent years, with seagrass declining by 80% between 1940 and 1986 and by a further 50% by 2007 (OceanWatch Australia 2008, <u>Our</u> <u>Valuable Estuaries, Coast and Marine Environs – Making Connections – Case Study 1</u>). This has serious consequences for marine biodiversity, the viability of the fishing industry and for the community in terms of reduced availability of fresh local wild caught seafood in the region. This reduction has largely been caused by agricultural and urban development through land clearing (particularly removal of vegetation from riverbanks), nutrient and sediment rich runoff, land reclamation and flood mitigation works, including levees, drains and floodgates.

The Clarence River's floodplain occupies 1500 square kilometres of low lying, flat alluvial plains with an extensive network of flood mitigation works. According to the <u>Clarence River Estuary</u> <u>Coastal Management Program Scoping Study</u>, Clarence Valley Council is responsible for operating and maintaining approximately 280 sections of levee (total length 110 km), more than 500 floodgates, over 290 km of drainage channels and 18 flood pumps, mainly to protect agricultural land. There are also many other private floodplain management structures, some managed by drainage unions.

The CVCC understands that the aims of the Coastal Floodplain Drainage Project are to:

• address the complexity, time and costs associated with the approvals process for drainage works on coastal floodplains

• reduce the impacts of these floodplain drainage works and activities on downstream water quality, aquatic ecosystems, communities and industries.

The CVCC believes that no option can deliver on both aims. A clear process of introducing better oversight and regulatory control of these historic drainage and flood mitigation structures is required. This would undoubtedly expand on the need for approvals, not reduce them.

Members of the CVCC have reviewed the Options Report and its attachments for the Coastal Floodplain Drainage Project. They are disappointed that, while the Options Report recognises the considerable impacts caused by floodplain drainage on estuarine ecosystems, it seems to assume that management of the existing drainage network will continue to occur without any requirement for substantial changes to that network.

Much of the network was constructed before the 1970s, i.e. before the need for environmental impact assessment was introduced or recognition of the importance of coastal wetlands and biodiversity. Unfortunately, as 'existing interests' or 'existing uses' under environmental planning framework, the CVCC understands there is little capacity for their operation and use to be brought under some regulatory control without legislative reform.

We now have a thorough understanding of the mechanisms that contribute to the formation and persistence of blackwater and acid water events – effective mitigation of these mechanisms is required, not just a tinkering with and potentially streamlining approval processes.

Under all options presented in the Options Report, we will still be left with frequent blackwater and acid water events leading to large-scale fish kills and ecological degradation. Legislative reform <u>must</u> be introduced to allow for a systematic review of all drains and floodgates, with removal of those with the greatest negative impacts.

Of the options presented:

- Options 1–3 pose the least risk to the environment
- Both suboptions in Option 5 have potential to achieve some long overdue reversal of some of the worst drainage infrastructure but only if the drainage approvals include capacity to impose extra controls on existing drains.
- The CVCC rejects Options 4 and 6.

In addition, the CVCC requests the exemptions that currently apply to drains on sugar cane land be removed.

In closing, we urge the NSW Government to reconsider the future sustainability of the floodplain settlements and agricultural industries the drainage was constructed to protect with the reality of sea level rise.

Yours faithfully

Leonie Blain Hon Secretary 21 April 2024



and a

Our Ref: CC/VG D24/7452

12 April 2024

NSW Department of Planning and Environment MEMS coastal floodplain drainage interagency working group Via email: <u>water.enquiries@dpie.nsw.gov.au</u>

Dear Sir/Madam

Alternative options to reduce regulatory complexity surrounding maintenance of floodplain drainage infrastructure

The options identified within the <u>Marine Estate Management Strategy (MEMS) Coastal Floodplain</u> <u>Drainage Project – Options Report</u> (December 2023) have been rejected by the

consortium of industry stakeholders from the Richmond River representing the cane industry, the commercial and recreational fishing industry and oyster growing, as they will not reduce regulatory complexity nor improve water quality. These stakeholders have been united in their request that the <u>Northern Rivers Agricultural Drainage Review</u> (report prepared for the Department of Regional NSW, dated 23 December 2022 and 20 December 2023) be the document that informs and guides any future changes to floodplain drainage.

This submission identifies alternatives to the options identified within the MEMS Coastal Floodplain Drainage Options Report, which support and implement the findings and recommendations within the Northern Rivers Agricultural Drainage Review. These options both reduce the regulatory complexity associated with maintaining floodplain drainage systems *and* meet the needs of Local Government. However, implementing these options is contingent on the support of the relevant agencies to reduce their regulatory influence over these activities.

Submission summary

- Following stakeholder rejection of the options identified in the MEMS Coastal Floodplain Drainage Options Report, Rous is putting forward alternative options for consideration that meet the objectives of the MEMS investigation, implement the findings and recommendations of the Northern Rivers Agricultural Drainage Review (the Culleton Report) and which meet the needs of Local Government.
- 2. Rous is suggesting that Local Government be exempt from obtaining regulatory approval from DPI Fisheries under the *Fisheries Management Act 1994* for the maintenance of public infrastructure, as:
 - Maintenance activities are already regulated through the *Environmental Planning and Assessment Act 1979,*
 - Maintenance of public infrastructure must be prioritised given the level of service they provide the community and
 - The environmental impact of maintenance work is small and can be easily managed.

- 3. Rous is suggesting that an amendment to the *Local Government Act 1993* would mean approvals would not be required to undertake maintenance of floodplain drainage infrastructure on Crown Lands.
- 4. In 2023 the NSW Government released a series of Coastal Floodplain Prioritisation Studies which identify the key sources of acid and deoxygenated water as well as the changes that are required in these locations to make meaningful improvements to water quality. A strategic long-term direction is required for parts of the floodplain that contribute the majority of acidic and deoxygenated water into estuaries and a decision required on whether historic decisions on land use and land management practices (that create these water quality issues) continue in these priority locations.

1. Streamline regulatory requirements for maintenance of existing public infrastructure

1.1 Regulatory approvals required under Fisheries Management Act 1994

We recognise and value the role of the *Fisheries Management Act 1994* in protecting key fish habitat. However, whether the routine maintenance of public infrastructure by a public authority requires the same regulatory oversight as a new development, is in question. The disproportionate oversight of DPI Fisheries on maintenance activities and increasing regulatory conditions, has generated concerns amongst stakeholders of regulatory overreach, which was documented within the Northern Rivers Agricultural Drainage Review.

We note that the level of oversight that DPI - Fisheries has over Local Government maintenance of existing public infrastructure (that harms marine vegetation or includes dredging or reclamation in key fish habitats) is far greater than what occurs for other potential environmental impacts. For example, Local Government requires no agency oversight to undertake maintenance works that involve:

- the large-scale disturbance of acid sulfate soils,
- works that could significantly impact on water quality and
- works that occur within 40m of a waterway.

For these issues:

- Local Government is deemed competent to identify and mitigate any associated risks, and
- the *Environmental Planning and Assessment Act* 1979 is considered adequate to regulate any environmental impacts.

Option

Implement the following exemption:

If a public authority (including local government) is undertaking 'maintenance or repair' of an 'existing public asset' these works do not need to be referred to Department of Primary Industries (DPI)-Fisheries nor their consent obtained.

Maintenance or repair = any works that are determined to be required by the public authority for the asset to maintain its function and required level of service, including capital renewal. These works will not be defined by agencies, but by the infrastructure managers with responsibility for the assets and the technical understanding of the work required.

Existing public asset = any asset that is the responsibility of a public authority. In a coastal floodplain drainage setting, this includes but is not limited to floodgates, floodgate and drain outlets, drainage systems including those that were former watercourses, levees, culverts, and pipes.

Exclusions = any works that go beyond maintenance, repair or capital renewal i.e. increasing the dimensions of a drain, increasing the size of pipes, culverts or floodgates, constructing new drains

Justification

- 1. Maintenance or repair of existing public assets by Local Government is adequately regulated through the *Environmental Planning and Assessment Act 1979* and Transport and Infrastructure SEPP.
- 2. The maintenance of existing public assets and infrastructure must be prioritised given the service they provide to the community. The impact of not maintaining existing public floodplain drainage infrastructure includes flood damage to private property, public infrastructure such as roads, telecommunication, and electricity infrastructure. It is documented within the Northern Rivers Agricultural Drainage Review that current regulations are a barrier to maintenance occurring.
- 3. If there are no improvements to the current system, it will become increasingly difficult for Councils to undertake maintenance works, and the refusal to issue permits or licenses, or for those permits or licenses to be granted on conditions that are overly onerous or cannot be met may have the result of the works not being undertaken. This may jeopardise the Council's exemptions provided for under the *Local Government Act 1993*, the result of which may expose Councils and in turn the State Government to liability.
- 4. Impacts to key fish habitat through dredging and reclamation, along with harming marine vegetation do not require a higher level of State Agency assessment or regulatory control than other environmental issues such as water quality and the disturbance of acid sulfate soils. Any impacts to key fish habitat through maintenance can be adequately assessed and mitigated through the *Environmental Planning and Assessment Act 1979*.
- 5. The environments in which existing public assets are located have previously been disturbed when the infrastructure was constructed and from historical maintenance practices since that time.
 - a. These areas represent a very small percentage of the floodplain and estuary.
 - b. These areas represent very little key fish habitat or coastal wetlands.
 - c. Given their disturbed nature and purpose, they contribute very few quality ecosystem functions associated with key fish habitat and coastal wetlands.
- 6. The continuation of maintenance of these assets poses very little risk to the overall health of the estuary or fish habitat if best management practices are followed e.g. Qld Acid Sulfate Soil Technical Manual, Soil Management Guidelines V5 and Managing Urban Stormwater: Soils and Construction Vol1 'the blue book'.
- 7. The frequency at which maintenance of existing public assets occurs limits its impact (i.e. not happening daily or weekly), however maintenance does occur regularly enough that overregulation causes expenses and delays.

1.2 Approvals under the Crown Lands Management Act 2016

Local Government usually requires approvals in the form of a license to access existing public drainage infrastructure located on Crown Land to undertake maintenance. This regulatory requirement adds bureaucratic process, delay and cost with no or little value.

An option to streamline this approval process not considered by the MEMS Coastal Floodplain Drainage Options Report, is amending a current definition within the *Local Government Act 1993* relating to Section 191. Under section 191 of the *Local Government Act*, a council can access Crown Lands to undertake works for water supply, sewerage and stormwater drainage without authorisation under the *Crown Land Management Act*. If that definition was amended to include all forms of drainage (by deleting the word stormwater), that would negate the need to seek approval to maintain existing public infrastructure.

1.3 Links with Native Title on Crown Land

We understand that the requirements of Fisheries and Crown Lands could relate to assessments of Native Title and the use and occupation of Crown Land. Given that the works being undertaken are all maintaining prior public works and established infrastructure, we believe that each agency conducting works could arrange for one Native Title Assessment for all works in their area of responsibility, and applying for one overarching Crown License (where required) for each agency conducting works, would adequately address any concerns in these areas.

1.4 Links to findings and recommendations in Northern Rivers Agricultural Drainage Review

Removing the need for public authorities (including local government) to refer maintenance or repair work to existing public assets to DPI Fisheries or Crown Land for their consideration or consent, supports the findings and recommendations from the Northern Rivers Agricultural Drainage Review. Specifically, this option addresses:

- Finding and recommendation no. 2
- Finding and recommendation no. 5
- Finding and recommendation no. 6 and 6b

2. Decreasing acidity and deoxygenated water discharged from floodplain drainage systems

We note that the MEMS Coastal Floodplain Drainage Options Report aimed to both reduce regulatory complexity associated with maintaining floodplain drainage systems and to improve water quality discharging from these systems. Combining these two aims has significantly limited the scope of options considered and is based on a technically incorrect assumption that if best management practices are followed for drain maintenance, that levels of acidity or deoxygenated water discharged from drainage systems will improve. Acidity and deoxygenated water within drainage systems are a function of the location of the drain in the landscape, the drain's depth and the characteristics of surrounding soil and vegetation – none of which are altered by maintenance practices. The approach of linking acidity and deoxygenated water to the routine maintenance of drainage systems or the setting of water quality conditions for every drainage system across the floodplain also creates unnecessary regulatory burden.

Options for reducing acidity and deoxygenated water discharged from floodplain drainage system are well known and documented within a series of <u>Coastal Floodplain Prioritisation Studies</u> commissioned by the NSW Government and released in 2023. These reports identify the primary sources of both acidity and deoxygenated water into estuaries, and identify that in some high priority areas decommissioning drainage systems and transitioning out of drainage dependent agriculture to restore floodplain wetlands is required to make meaningful improvements to acidity and blackwater.

Our recommendation is that the NSW Government undertakes a review of current floodplain land uses, particularly those relating to the lowest lying land (i.e. less than 1m above mean sea level) which are primary sources of both acidity and deoxygenated water, and develops a long-term strategic direction on how different areas of the floodplain will be used, acknowledging all stakeholders including First Nations. This is a key action required to review historic land use and land management decisions in light of scientific understanding that these decisions have led to acidity and deoxygenated water discharging into estuaries, as well as the latest advice on the impact of sea level rise. A confirmed long-term strategic direction on floodplain land uses will benefit all stakeholders and provide confidence in making future decisions.

2.1 Links to findings and recommendations in Northern Rivers Agricultural Drainage Review

This proposal addresses issues raised within Section 7 of the Northern Rivers Agricultural Drainage Review that is summarised by:

"most of the key stakeholders are looking to the NSW Government to move beyond general discussion about possible land use changes in the region - they seek a declared position from the NSW Government and visibility of the detail that will underpin any associated changes (i.e., detail around buybacks, incentives, blue carbon initiatives etc) so that they can make informed decisions about the future."

For the past 10-15 years the regulation of floodplain drainage system maintenance has been a source of frustration and often conflict between stakeholders. Considerable time and energy has been spent by stakeholders in raising concerns, discussing issues and defending positions. This is while concerns such as the declining health of local estuaries or the pending impact of sea level rise on the effectiveness of drainage systems go unaddressed.

The MEMS Coastal Floodplain Drainage Options Report has been successful in asking stakeholders to consider options that could reduce regulatory complexity. Options do exist that could both reduce regulatory burden and improve water quality, however they will require support to reduce some Agency's regulatory control over maintenance and a genuine desire to tackle complex issues that have been left unaddressed for many years.

Yours faithfully





Phillip Rudd General Manager

cc: Adjunct Professor Tamara Smith, MP Ms Janelle Saffin, MP Mr Richie Williamson, MP

Survey attachment - Anonymous

Coastal Floodplain Drainage Project - Options Report

Supplementary Input

The Options Report says the following:

Ongoing sea level rise will reduce the amount of time for drainage during each low tide. It is expected that low-lying land will no longer effectively drain regular rainfall or larger flooding events. Larger, deeper drains will not improve this situation because of the higher low tide level. More drains and drainage infrastructure will become vulnerable as sea level rise continues. This poses a significant risk to the viability of current floodplain land uses in low lying areas, including agriculture. Climate change adaptation and land remediation initiatives, such as blue carbon, are being developed by State and Commonwealth Government agencies (see Attachment E). Some of these initiatives will assist landholders to transition vulnerable land to other uses before sea level rise and drainage inefficiencies render the land non-viable for current agricultural production.

This seems to be offered as a justification for not supporting the coastal drainage network system, and instead consciously allowing it to 'wither on the vine'.

More explicitly, the deliberate inertia from the working group agencies for this Project is contributing greatly to some of the issues being seen on the ground. For example: it is understood that *"Larger, deeper drains will not improve this situation"*, but the agencies concerned are <u>causing</u> drains to become increasingly shallow by obstructing their maintenance and not funding local councils to undertake maintenance works. Eg: in our local system, we had a scientific charting of the main drain carried out and it revealed that the drain's original 150cm depth had been allowed to silt in some locations to a now negative depth (ie there were places where the silt was <u>above</u> the water line in the drain).

Going back to the above extract: if there were to be agriculture areas chosen for surrender to sea level rises, and prime agricultural land allowed to be inundated, as suggested in the above extract, then the NSW Government needs to proactively reach out and support farmer involvement in the Report's stated *"climate change adaptation and land remediation initiatives"*. The Government cannot sit back and wait for impacted communities to look up websites, read reports, press for practical application details and then still find its own means to replace farming income & produce with Government's theoretical ideas.

We should all keep this in mind - not everyone in this country can live, work and be fed from the hilltops. Surely if the Dutch Government can manage its sea level issues over a period of centuries, then we are not incapable of similar successes.

FW: REFERRAL: Coastal Floodplain Drainage Project - on Richmond River. -> REFERRAL_ Coastal Floodplain Drainage Project.msg-> Industry Stakeholders -

Richmond River.pdf

The Hon. Chris Minns MP Premier of NSW www.nsw.gov.au

22 February 2024

Dear Premier Minns,

We the undersigned stakeholders who together represent the:

- commercial fishing,
- recreational fishing,
- commercial oyster growing and
- sugar cane industry

Who have a vested interest in the health of the Richmond River estuary have come together to jointly respond to the recently released Marine Estate Management Strategy (MEMS) Coastal Floodplain Drainage Project – Options Report (Dec 2023). The report represents almost three years of effort from the State Government.

Disappointingly, the options identified within the report:

- will not improve water quality in the Richmond River estuary for fishers or oyster growers,
- will not reduce regulatory complexity of drain maintenance for those on the land and
- doesn't consider the findings and recommendations made within the Northern Rivers Agricultural Drainage Review (report prepared for the Department of Regional NSW, December 2022).

As such, we request that stakeholder consultation not proceed on the MEMS Coastal Floodplain Drainage Project – Options Report as it offers little or no value.

In its place, we request that consultation occurs on the Northern Rivers Agricultural Drainage Review and the options it has identified. We request the Premier's Department oversee the implementation of the review. The Northern Rivers Agricultural Drainage Review provides an accurate overview of the interlinked issues and options that offer value and benefit to all interested parties.

Yours sincerely

Our Ref.

29 February 2024

NSW Department of Planning and Environment MEMS coastal floodplain drainage interagency working group water.enquiries@dpie.nsw.gov.au

Dear members of the MEMS coastal floodplain drainage interagency working group

Local Government response to the MEMS Coastal Floodplain Drainage Project – Options Report

are jointly responding to the Marine Estate Management Strategy (MEMS) Coastal Floodplain Drainage Project – Options Report (December 2023), which is the result of a three-year investigation undertaken by NSW State Government agencies. The investigation attempted to identify ways that regulatory complexity surrounding maintenance of coastal floodplain drainage systems could be reduced, while also improving water quality within these systems. Across the Tweed, Richmond and Clarence floodplains, Local Government is responsible for the maintenance and operation of an estimated network of 1,300km of drains, 1,200 floodgates and 2,700 outlets.

Disappointingly the MEMS Options Report is based on limited input from those most impacted by complex drainage regulation. Northern Rivers Local Government staff last met with the project team in September and October 2020. The issues identified at that time were collated in a document called "What we heard" released by the Department of Planning and Environment in April 2022. There has been no further consultation since, and Local Government staff have had no input on the options identified within the report.

believe that the options identified in the MEMS Options Report:

- pose little value to Local Government (Options 1-3), or
- add additional complexity to regulatory processes (Options 4-6).

This was not the aim of the investigation, and, in this regard, the Report fails to meet its objectives.

In a major oversight, the MEMS Options Report does not consider the findings and recommendations made in the recently released Northern Rivers Agricultural Drainage Review (report prepared for the Department of Regional NSW, dated 23 December 2022 but only publicly released 12 months later 20 December 2023). As the Northern Rivers Agricultural Drainage Review was available to NSW Government agencies 12 months before





the MEMS Option Report (which is dated December 2023) was issued, we cannot understand why the MEMS Options Report has not considered it. We note the NSW Department of Primary Industries website states "the NSW Government will consider this report as part of a broader Coastal Floodplain Drainage Options Report."

By comparison, the Northern Rivers Agricultural Drainage Review:

- · was developed in a collaborative manner with many diverse stakeholders,
- highlights the impact of agency staff adopting default positions that drainage shouldn't occur in parts of the landscape,
- identifies options that would provide value, and which could simplify current regulations,
- includes options that offer the opportunity for a staged approach and immediate relief, and
- doesn't examine issues in isolation and has a broad focus. This approach has
 provided an accurate overview of the interlinked issues including the lack of funding
 for Local Government to undertake drain maintenance activities and uncertainly over
 long-term responsibility.

Since the release of the MEMS Options Report, industry groups with an interest in coastal floodplain drainage have raised significant concerns with the options it identifies. We acknowledge their strong response and lack of support for the Report.

Specific concerns regarding the options identified within the MEMS Options Report include:

- Options 1, 2 and 3 are all approaches that do not alter the current regulatory process and offer little benefit to Local Government. They may however benefit private landowners attempting to navigate regulations with simple, straight forward situations

 which represents the minority of cases in the Northern Rivers.
- Option 4, the risk-based approach, in some situations would <u>increase</u> regulatory complexity and process in the geographic areas where drain maintenance is required most (i.e. low lying land and mangrove SEPP coastal wetlands) and may result in necessary work not being approved.
- Option 5 and 6, switching on drainage work approvals under the Water Management Act, introduces <u>new and further regulations and an additional regulator</u>. We note that it is the intention to address water quality impacts through this option which is likely to introduce new conditions on drainage activities. Considering the significant change that this option would create, there is insufficient detail on the implications for Local Government and private landowners or the timeline and resources involved with implementing this option.

Despite the current complexity, Councils are currently equipped to operate under well understood legislative frameworks provided by the Local Government Act, Environmental Planning and Assessment Act, and related SEPPs. Operation under the Water Management Act is not well understood, and Councils may require legal advice.





 All options are based on the underlying premise that if best management practices are followed for drain maintenance that levels of acidity or deoxygenated water discharged from drainage systems will improve. This assumption is technically incorrect and as a result the report won't deliver its stated water quality outcomes. Acidity and deoxygenated water within drainage systems are a function of the location of the drain in the landscape, the drains depth and the characteristics of surrounding soil and vegetation – none of which are altered by maintenance practices.

With the MEMS Option Report's limitations, and the significant concerns held by key stakeholders regarding the options identified, the state of the request that consultation not proceed on this document. We request that in its place, consultation occurs on the Northern Rivers Agricultural Drainage Review and the options it has identified.

Yours sincerely



CC:	Mr Geoff Provest, MP
	Adjunct Professor Tamara Smith, MP
	Ms Janelle Saffin, MP
	Mr Richie Williamson, MP
	The Hon. Rose Jackson, MLC
	The Hon. Penny Sharpe, MLC
	The Hon. Tara Moriarty, MLC





15 April 2024

Department of Climate Change, Energy, the Environment and Water Attention: Manager Water Policy & Legislation By Email: water.enquiries@dpie.nsw.gov.au

Dear

Re: Coastal Floodplain Drainage Project

Thank you for the opportunity for Clarence Valley Council (CVC) to provide feedback to the Coastal Floodplain Drainage Options Report.

Council's advisory Coast & Estuary Management Committee and Floodplain Risk Management Committee both considered the Coastal Floodplain Drainage Options Report ("MEMS report"), and raised concerns that that no reference was made to the Northern Rivers Agricultural Drainage review ("Culleton report"). The Culleton report, which was prepared following extensive consultation with stakeholders is dated 23 December 2022. As the Culleton report had not been publicly released after eight months, at its meeting of 22 August 2023 Council resolved (Resolution 07.23.149) to:

Make representation to the Minister for Agriculture, the Hon. Tara Moriarty MP, seeking confirmation for the timing of the implementation of the recommendations of the floodplain agricultural drainage review that informs the drainage reset program.

The Culleton report was finally released to the public on 20 December 2023 and the Culleton report's website page (<u>https://www.dpi.nsw.gov.au/agriculture/water/irrigation/northern-rivers-drainage-report</u>) states "the NSW Government will consider this report as part of a broader Coastal Floodplain Drainage Option Report". Notwithstanding this statement that the Culleton Report will be considered as part of the MEMS report, the MEMS report makes no reference to the recommendations of the Culleton report, and NSW Government agencies are only undertaking consultation on the MEMS report.

Following the concerns raised by the advisory committees, at its meeting of 26 March 2024 Council resolved (Resolution 07.24.044) to:

express disappointment that the findings and recommendations of the Northern Rivers Agricultural Drainage Review have not been considered in the Options Report, and

request that in accordance with previous Council resolution 07.23.149 of 22 August 2023, the recommendations of the Northern Rivers Agricultural Drainage Review be implemented.



We look forward to the MEMS report being reviewed to incorporate the recommendations of the Culleton report rather than the current six listed options.

Thank you again for the opportunity to provide feedback to the Coastal Floodplain Drainage Options Report. If you have any questions regarding this submission, please contact Council's Manager Technical Services,

Yours faithfully



Laura Black General Manager





21 April 2024

NSW Department of Planning and Environment 320 Pitt Street, Sydney New South Wales 2000

RE: Coastal Floodplain Drainage Project - Options Report

The **project** - Options Report (hereafter known as 'the report'), which aims to enhance the regulatory framework governing coastal agricultural drainage activities, with a focus on mitigating their impact on downstream water quality. Preserving high water quality in coastal floodplain drainage systems is critical for the NSW oyster industry, given the sensitivity of oysters to poor water conditions such as acidic water and blackwater.¹

advocates for the adoption of options 1, 2 and 3 which focus on enhancing information accessibility for landowners. Fragmented information across multiple platforms can lead to confusion, resulting in landowners proceeding with development works without necessary approvals. Centralising information through a dedicated website, offering access to a drainage applications coordinator, and enabling assessments to run concurrently would serve as a relatively low-cost solution to reduce the risk of unauthorised works. Access to a drainage applications coordinator may serve as a particularly valuable resource to oyster producers as they can obtain tailored information relevant to their location and operation.

Additionally, strongly supports option 5(ii) within the report, which investigates a holistic approach to the management of floodplain drainage networks, promising significant water quality benefits. The oyster industry is vulnerable to both point and diffuse water pollution issues, highlighting the importance of planning and management strategy that focuses on larger catchments and sub-catchments. Assessing catchments as a whole is the only way to effectively assess what may be considered as a low-risk development activity (5(ii)b) as the compounding impacts of developments must be considered cumulatively.

¹ Fujii, M., Hamanoue, R., Bernardo, L. P. C., Ono, T., Dazai, A., Oomoto, S., Wakita, M., & Tanaka, T. (2023). Assessing impacts of coastal warming, acidification, and deoxygenation on Pacific oyster (Crassostrea gigas) farming: a case study in the Hinase area, Okayama Prefecture, and Shizugawa Bay, Miyagi Prefecture, Japan. *Biogeosciences*, *20*(22), 4527–4549. https://doi.org/10.5194/bg-20-4527-2023

when developing drainage work approvals so harvest locations and seasonal conditions that impact oyster farming activities may be sufficiently understood and accounted for in the approvals process.

It is essential that a single government department, adequately trained and funded should be responsible for coordinating catchment and sub-catchment assessments to ensure consistent standards for approvals, consent conditions, and risk assessments.

Streamlining the drainage works approval process by offering initial free and straightforward applications, a 28-day approval timeline in alignment with council development applications, and simplified modification procedures would encourage compliance and timely maintenance. Conditions should also include clear penalties for non-compliance, and publicising application and approval information so it is easily accessible to the public. Oyster producers in the region should additionally be directly contacted upon the lodgement of a development application or development approval.

However, significant concern lies in the proposed condition that public authorities, such as local councils, would be exempt from being required to hold a controlled activity approval or flood work approval. When dealing with matters of environmental stewardship, it is essential that all involved are held liable to the same standards.

also supports the implementation of best practice agreements developed between NSW government agencies and landholders. The development of an agreement would establish knowledge of potential downstream impacts of poor drainage works management. An agreement could also stipulate proactive measures for the early detecting of environmental concerns, mitigating the occurrence of acidic and blackwater events. These proactive measures could include incremental water quality testing, tracking fish kills and vegetation die-off.

While Option 5(ii) shows promise in elevating water quality standards, challenges like diverse land ownership structures require nuanced implementation. Periodic review mechanisms for approvals and monitoring landowner compliance are crucial for adaptive management of catchments and sub-catchment.

If further information is required, please contact



From: Rupert G H Milne Home
Sent: Tuesday, 16 April 2024 9:45 PM
To: DPIE Water Enquiries Mailbox <water.enquiries@dpie.nsw.gov.au>

Subject: Re: 'Have Your Say' submission on the proposed 'Coastal Floodplain Drainage Project; Options Report'

Attention: The relevant person(s) in DPIE Water (DCCEEW)

Dear Sir/Madam,

Thank you for the opportunity to 'Have Our Say' on the proposed DPIE (as was, now DCCEEW & DPHI) 'Coastal Floodplain Drainage Project; Options Report' of Dec 2023. I have read and reviewed the Report and Attachments. Link: <u>https://water.dpie.nsw.gov.au/our-work/floodplain-management/coastal-floodplain-drainage-project?fbclid=IwAR2ETBn76APKr0APeY2MS-RIzkEVrwfXYaGWwg-6nItwJ8rsGxGcNxiCvEU aem AYrwhj73-zmxW_3ol4jtDvIvLttcQ0RpNzuY3PRMmOIe6yPJXX_fmFuewZwjBKa3AxDQnOTEkg8z7hvPneGaBdla</u>

I make this submission to your 'Have Your Say' as: Secretary of Save Our Macleay River Inc.; as well as Community member of the Kempsey Shire 'Flood Risk Assessment Group; past President of Yarrahapinni Wetlands Reserve Trust; and as a Mid North Coast Landscape Architect, also involved with land-use and planning for over 40 years.

This submission includes the below comments for your and the Department's consideration:

- 1. The report proposes assisting and permitting further drainage works; not the restoration of existing problem drainage works in the floodplain areas! The opposite to what should be done!
- 2. The Background section of the report and accompanying Appendix's photos, very well and clearly acknowledges, states and demonstrates the problems with floodplain drainage. Then, the proposals promote and make easier, for drainage 'works' that are causing the problems in the first place!!
- **3.** The 'Options' are not options; they are at best 'Recommendations', to be adopted holistically or; perhaps with some not adopted? Without saying to or by whom.
- 4. The Agriculture and Farming industries have clearly been the majority of 'stakeholders' and likely 'drivers' of this proposal: While ensuring rational land management and environmental stakeholders have been excluded from the consultation/input for the options report's development.
- A short-cut to promote ready Approvals by 'centralised' State Govt. is promoting politicising of approvals Especially when Part 5 of the EP&A Act can be selected by the State Govt for an Assessment/Approval route.
 As yet, no mention of 'Critical' SSD, but it is not excluded.
- 6. It is strongly suggested that The Coast and Estuaries Officers, be much more appropriate assessors of any works in their areas, with much better local knowledge of site scenarios, than any 'centralised' or 'standardised' department assessment & determination, as proposed in the report.
- 7. The Floodplain Project proposals will allow more economically and environmentally damaging works to be more easily done in floodplain/estuarine areas.
- 8. There is no 'historic' or 'natural system' restoration considerations to restore areas already polluting the marine environments, such as Flood Mitigation measures of Clybucca, Belmore, etc. For which it is suggested, should simply have a 'Review of Environmental Factors' (REF) for restoration and be implemented with monitoring for impact/best success; like Yarrahapinni Wetlands' restoration. This was missing from SEPP 14, its later iteration(s) of the legislation and this options report's proposals.
- **9.** This document and proposals should be assessed reviewed and commented on by the KSC Flood Risk Assessment Group for The Macleay, and other FRA Groups in other areas. Which it has not yet been.

Thank you for the opportunity to provide these comments as a submission to your 'Have Your Say' on the Project proposals/recommendations; and should you have any queries re the above, please contact me at any time. I would be grateful if you would keep me informed as to your considerations of this submission's comments above.

Best Regards

Cc:

Rupert G H Milne Home, Save Our Macleay River Inc. Secretary

w: http://saveourmacleayriver.com/

Thungutti Country.

If you drink the water, fish, canoe, swim or water your stock or garden from our river, you are invited to be informed and active!



18 April 2024



NSW Department of Planning and Environment MEMS Coastal Floodplain Drainage Interagency Working Group water.enquiries@dpie.nsw.gov.au

Re: Options to reduce complexity for maintenance of floodplain drainage infrastructure

The options identified with the Marine Estate Management Strategy (MEMS) Coastal Floodplain Drainage Project - Options Report (December 2023) have been rejected by the

and a consortium of industry stakeholders from the Richmond River representing the cane industry, the commercial and recreational fishing industry and oyster growing as they will not reduce regulatory complexity nor improve water quality.

These stake holders are united in their request that the Northern Rivers Agricultural Drainage Review (report prepared for the Department of Regional NSW) should be the document that informs any future changes to floodplain drainage.

This submission outlines a few alternative options to be considered as part of the review and recommendation process following the MEMS Coastal Floodplain Drainage Project - Options Report consultation period.

The recommended options will reduce the regulatory complexity associated with maintaining existing floodplain drainage systems, in accordance with best management practices, to protect the environment while meeting the needs of Local Government.

Streamline regulatory requirements

Regulatory approvals required under Fisheries Management Act 1994

The level of oversight that the Department of Primary Industries (DPI) – Fisheries has over council maintenance of existing public infrastructure (for activities that harm aquatic vegetation or involves the dredging or reclamation in key fish habitats) is far greater that what occurs for other potential environmental impacts.

For example, councils require no agency oversight to undertake maintenance works that involves:

- large scale disturbance of acid sulfate soils
- works that could significantly impact on water quality and
- works that occur within 40m of a waterway

For these issues:

- · councils are deemed competent to identify and mitigate any associated risks, and
- The Environmental Planning and Assessment Act 1979 is adequate to regulate any environmental impacts.

One Solution

We recommend implementing the following exemption:

If a public authority (including local government) is undertaking 'maintenance or repair' of an 'existing public asset' these works do not need to be referred to Department of Primary Industries (DPI) – Fisheries nor their consent obtained.

Maintenance or repair = any works that are determined to be required by the public authority for the asset to maintain its function and required level of service. These works will not be defined by agencies, but by the infrastructure managers with responsibility for the assets and the technical understanding of the work required.

Existing public asset = any asset that is the responsibility of a public authority, in a coastal floodplain drainage context this includes but is not limited to: floodgates, floodgate and drain outlets, drainage systems including those that were former watercourses, levees, culverts, and pipes.

Exclusions = any works that go beyond maintenance and repair i.e. increasing the dimensions of a drain, increasing the size of pipes, culverts or floodgates, constructing new drains

Justification

- 1. Maintenance or repair of existing public assets by councils is adequately regulated through the Environmental Planning and Assessment Act 1979 and the Transport and Infrastructure SEPP.
- 2. The maintenance of existing public assets and infrastructure must be prioritised given the service they provide to the community. The impact of not maintaining existing public floodplain drainage infrastructure includes flood damage to private property, public infrastructure such as roads, telecommunication, and electricity infrastructure. It is documented within the Northern Rivers Agricultural Drainage Review that current regulations are a barrier to maintenance.
- 3. Impacts to key fish habitat through dredging and reclamation, along with harming marine vegetation, do not require a higher level of State Agency assessment or regulatory control than other environmental issues such as water quality and the disturbance of acid sulfate soils. Any impacts to key fish habitat can be adequately assessed and mitigated through the Environmental Planning and Assessment Act 1979.
- 4. The environments in which existing public assets are located have previously been disturbed when the infrastructure was constructed and from historical maintenance practices.
 - These areas represent a very small percentage of the floodplain and estuary.
 - These areas represent very little key fish habitat or coastal wetlands.
 - Given their disturbed nature, they contribute very few quality ecosystem functions associated with key fish habitat and coastal wetlands.
- 5. The continuation of maintenance of these assets poses very little risk to the overall health of the estuary or fish habitat if best management practices are followed e.g. Queensland Acid Sulfate Soil Technical Manual, Soil Management Guidelines V5 and Managing Urban Stormwater: Soils and Construction Vol 1 'the blue book'.
- 6. The frequency at which maintenance of existing public assets occurs, limits its impact (i.e. not happening daily or weekly), however maintenance does occur regularly enough that overregulation causes expenses and delays.

Approvals under the Crown Lands Management Act 2016

Currently councils usually require approval in the form of a licence to access existing public drainage infrastructure located on Crown Land to undertake maintenance. This regulatory requirement adds bureaucratic process, delay and cost with no or little value.

Proposed solution

An option to streamline this approval process, that was not considered by the MEMS Coastal Floodplain Drainage Options Report, is to amend the definition of Section 191 of the Local Government Act 1993.

Under section 191 of the Local Government Act, a local council can access Crown Lands to undertake works for water supply, sewerage and stormwater drainage without authorisation under the Crown Land Management Act.

Deleting the word "stormwater" from the section 191 definition (to include all forms of drainage) would negate the need to seek approval to maintain existing public infrastructure.

The regulation of floodplain drainage system maintenance is a complex issue that has been unresolved for many years and this is actually resulting in poorer outcomes for infrastructure and the environment due to this lack of maintenance.

Considerable time and energy has been spent by stakeholders in raising concerns, discussing issues and defending positions.

This is while matters such as the declining health of local estuaries, or the impending impact of sea level rise on the effectiveness of drainage systems, go unaddressed.

The MEMS Coastal Floodplain Drainage Options Report has provided an opportunity for stakeholders to investigate realistic and meaningful solutions to reduce regulatory burden, improve water quality, and maintain drainage function.

I look forward to a considered review of this correspondence.

Yours faithfully

Paul Hickey General Manager