COMMENTS Natural Disaster Funding Arrangements

QMDC's comments on the Natural Disaster Funding Arrangements Productivity Commission Issues Paper May 2014

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Submission to:

Natural Disaster Funding Arrangements
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These comments are presented by the Chief Executive Officer, Geoff Penton, on behalf of the Queensland Murray-Darling Committee Inc. (QMDC). QMDC is a regional natural resource management (NRM) group that supports communities in the Queensland Murray-Darling Basin (QMDB) to sustainably manage their natural resources.

1.0 Background

QMDC has consistently contributed to improving natural disaster policies, strategies and natural disaster programs within Queensland and the QMDB over the last decade.

In 2013, having successfully conducted flood recovery campaigns over two consecutive years (2011 & 2012), QMDC won the Regional Landcare and Environment Award for its 'Dirty Gloves' Flood Recovery program. QMDC's flood recovery program was launched in response to a very significant challenge, not only a major flood event in January 2013 but the cumulative impact of floods over three consecutive years. These recurring flood events either further delayed recovery or actually destroyed recovery works, taking landholder's attention away from addressing issues such as wildlife corridor connectivity, improving water quality, increasing groundcover and other natural resource management issues.

QUEENSLAND MURRAY-DARLING COMMITTEE

QMDC determined the best way to address producer sustainability was to develop a natural disaster recovery program including sourcing volunteers to aid a speedy landholder recovery.

QMDC has developed a range of materials as part of a 'Flood Recovery Policy and Procedures Manual' to ensure the smooth and professional running of a natural disaster recovery program. This includes procedures for running volunteer base camps, setting up Work Health & Safety procedures for working on farms, as well as internal materials and support processes for staff members in direct contact with landholders. All volunteers must have an induction on work, health and safety policies and procedures and they receive free accommodation, food and safety gear to wear and use whilst on the job.

To help people, properties and natural systems recover for the benefit of the Queensland Murray-Darling Basin, the program delivered direct assistance to over 200 landholders, 123 rural properties and 4 escarpment parks and reserves across the Queensland Murray-Darling Basin. This assisted in protecting many hundreds of hectares of sensitive riparian zones through the successful and well-supported recruitment of 120 volunteers over a six-month period.

Since 2011, QMDC has helped to coordinate more than 950 volunteers to work on more than 450 properties across more than 100,000 hectares of the Queensland Murray-Darling Basin. With the support of the corporate, NGO and government sectors, QMDC has provided the logistical support (including mapping, tools, accommodation, catering and coordination) and coordinated hordes of enthusiastic Australian and international volunteers in natural disaster recovery in the region.

2.0 General comments

QMDC supports robust discussion on the current and future arrangements associated with natural disaster funding.

Although QMDC has responded to crises and associated inquiries on natural disaster policies and strategies, community clearly requires QMDC's efforts and programs to address the root causes of on-going rural and regional social, economic and environmental issues and not merely the symptoms. Funding arrangements are needed to implement programs and support e.g. proactive planning measures and should not provide fiscal support that perpetuates, for example, development on floodplains that will not have resilience. QMDC does not agree with merely designing for a flood event without addressing poor land-use planning feeds, frequently the root cause to a natural disaster crisis on a floodplain.

Current farming systems and all the other systems which hang off them are not sustainable especially those situated in flood impact or high fire risk zones.

QMDC urges this Inquiry to examine rural policy, land-use planning and development conditions, in general in order to address the root causes of rural and regional socio-economic failures and how these co-relate to natural disaster impacts.

The report, Public good conservation: Our challenge for the 21st century - inquiry into public good conservation Impact of environmental measures imposed on landholders in September 2001 provides some relevant recommendations which could be useful to this Inquiry and worthy of consideration in spite of its date.

http://www.aph.gov.au/parliamentary_business/committees/house_of_representatives_committees?url=environ/pubgood/report/contents.htm

Funding arrangements and improved natural disaster strategies/ policies must enhance community civil protection and environmental protection efforts. QMDC recognises that climate change, NRM planning and governance, environmental management systems, land condition assessments amongst other matters are very important aspects to disaster preparedness and relief funding.

The key for Australia will be to ensure that funds are apportioned and spent wisely. QMDC therefore supports new guidance on the application of federal, state and local government funding to ensure the most effective civil and environmental protection and adaptation measures are being carried out.

We welcome a thorough assessment of what the appropriate levels of effort and funding would be to meet the current and expected future challenge of extreme weather events and natural disasters.

QMDC recognises that climate science is very complex and uncertainties inevitable. There is however convincing evidence from a wide range of international, national and regional sources that the Commission must consider in relation to the changes in Australia's climate, which are taking place and that can intelligently be explained by taking into account human influence through the emission of greenhouse gases (GHGs).

We appreciate that identifying trends in extreme events is difficult, mainly because they are inherently episodic and rare. QMDC has learnt from the most recent scientific and theoretical understanding of the physical processes influencing climate change that more extreme weather events would in general be an expected outcome.

Climate change issues will, for instance, exacerbate risk and impacts of bushfire activity in this region and increase susceptibility through both the impact of more frequent droughts, prolonged heatwave conditions and higher evaporation and more rapid drying of the landscape. These impacts will change existing fire regimes and severity putting at risk life and property in areas that were previously less severely affected. These impacts will also be exacerbated by the increasing presence of high biomass introduced grass species in the regional landscape that are capable of rapidly increasing available fuel loads in some areas and promoting more extreme bushfire behaviour.

More robust proactive measures will be needed in future to limit the potential negative consequences of these changes otherwise natural disaster events will become more prevalent in areas that currently have been managed within the response capacity of state emergency services capacity in southern Queensland.

Modelling of scenarios by CSIRO (Australian Climate Futures Project) where there are further elevated atmospheric greenhouse gas concentrations clearly shows more climate change and more extreme weather events in the future.

QMDC realises that more potential for disasters does not necessarily mean more disasters – the key link is how regions and communities reduce their vulnerability and prepare to cope with impacts. Given the increasing severity of extreme events, further and improved mitigation and adaptation measures are needed, e.g. improved housing designs for houses in risk zones, improved farm forestry practices in fire danger zones, rural residential planning in fire risk zones are modified to account for risk etc.

QMDC is putting these measures, high on our core NRM business agenda.

3.0 Specific comments

3.1 An imperative for reform

What are the costs of natural disasters in Australia? What are the main factors driving the elevation in natural disaster impacts and what is the outlook for these drivers?

Costs related to environmental impacts, and mental health impacts and their run-on impact on productivity are not well quantified.

Impacts on capital (social, financial, human, natural and physical) can be viewed in terms of actual damage, cost of repair and opportunity costs associated with resources being diverted to response and recovery over short, medium and long-term timeframes.

The costs of the resilience of our natural systems, in particular, are without question, poorly quantified on the balance sheet.

Some of the key drivers which elevate natural disaster impacts are the heavy reliance on physical infrastructure (e.g. power-lines, communications, roads and rail) for our communities to function. This infrastructure is going to always be at risk from the impacts of natural disaster and contingency plans for the long term life of this built infrastructure needs to discount more heavily these impacts on the expected life of this infrastructure. Much historical investment in infrastructure hasn't factored in the cost of repairs and maintenance that is often 'replacement' associated with extreme events. There is room to engineer resilience into such infrastructure to account for things such as increasing extremes in temperature and weather, there are however physical limitations to the capacity of technology to completely overcome these challenges and risk appraisals are often not complete nor robustly undertaken or included in final construction. Risk analysis is a simple insurance process to evaluate the vulnerability and consequence from different disaster impacts and our public infrastructure investments should be thorough on this process.

Another key driver elevating the impacts of natural disasters is the ignorance of people regarding the impacts of their management in the context of their landscape. Fire is a key example where we have modified the landscape through agricultural and other practices as well as encouraged urban sprawl without the education of those people the reality of the natural processes. The increasing effort for fire suppression in areas leads only to wildfires and megafires in our landscape and acceptance of our dependence on fire and our landscape's dependence by the broader community is imperative to help keep them safe from this type of natural disaster.

We have become disconnected from environmental processes as a society and find it quite shocking to realise we actually don't control the weather!

What issues arise when attempting to measure the costs of natural disasters? What methodologies exist to measure these costs?

More work is needed figuring out the right methodologies to measure costs.

The challenge is to calculate the impact of natural disasters in reasonable economic terms. Our current financially based evaluation methods have difficulty quantifying the true costs for impacts of natural disasters for ecosystem and natural asset impacts as well as social and community impacts. Any attempt to aggregate costs in just a financial metric will be deficient and a broader base, with more than just an historical sum total which takes into account the medium to longer term recovery should be considered.

Are there reliable projections of future natural disaster incidence and impacts in Australia?

The current Australian Government funded NRM Plan review process will assist decision makers and planners in understanding likely climate future projections and potential natural disaster incidences and impacts. Changes in a region's climate are facilitating the selection of appropriate models/tools to use in impact assessment and adaptation planning. They are currently being designed by university and research institutes (e.g. USQ, CSIRO) and ground-truthed by NRM bodies. Such models/tools need to be fully integrated into natural disaster policy.

The capacity to project future natural disaster incidence varies and no one projection method can really translate to the impacts due to the consideration of whether the events occur in succession (ie the last few years of flood in QMDB) or years of drought, then flood, some wildfires and then some drought will be different to just an isolated flood.

Focusing on predicting the type and frequency of disasters should be less important than building resilience and adaptive capacity and planning preparedness for our communities and landscape. Knowing they are likely to happen doesn't mean you are more prepared for the implications when it does occur.

Our management of our landscapes may make them more vulnerable to different types of disaster, such as wildfires, and support to manage for this should be paramount.

3.2 Natural Disaster Relief and Recovery Arrangements

What are the policy objectives of the NDRRA? Have these changed over time? Are current arrangements consistent with the achievement of these objectives?

Objectives to increase eligibility for financial support for environmental impact and not just human and infrastructure have changed. However more deliberation on what environmental responses and what aspects should be eligible for both prevention planning and disaster response is needed.

Planning and preparedness, in particular supporting adaptive capacity and resilience, is a constant capacity building process as community dynamics and demographics change, not a set and forget approach and investment needs to reflect that need.

How effective are the eligibility criteria for NDRRA reimbursement in facilitating effective and sustainable natural disaster risk management, including mitigation of possible future disasters? How rigorously have these criteria been enforced? What level of oversight is provided?

QMDC is concerned that funding criteria that only resources the replacement of like for like infrastructure and does not resource improved design or drought and floodplain management is ineffective in terms of long term solutions, especially in light of climate future projections and the findings of climate mitigation and adaptation research.

NRM organisations like QMDC, either directly or through local government, need agreed criteria set for an NRM body natural disaster response, especially on environmental matters in rural communities. This could help both recovery actions and mitigate future risks.

Are the thresholds for NDRRA reimbursement set at an appropriate level?

Is the approach of providing assistance under four categories the most appropriate way of administering Australian Government grants? Is the way the categories are defined sensible? Is the assistance provided under each of the four NDRRA categories set at an appropriate level?

No. Environmental assistance is only triggered with Category D. There are some elements of environmental damage that we believe should kick in at a Category C level.

Assistance arrangements focus on supporting property owners who derive the majority of their income from primary production ("primary producers"). This excludes a large proportion of property owners who for varying reasons (low market prices, drought, too small property size to be viable etc.) are forced to access off farm income to survive.

Also smaller property owners (often referred to as hobby farmers) play a crucial role in managing natural resources and are often those who are implementing higher levels of NRM protection and voluntary nature conservation are excluded due to their lack of "Primary Producer" status. These valuable landowners receive little or no assistance to deal with damage caused by natural disasters and are often not in a position to wholly fund repair works themselves. Eligibility criteria need to be reviewed to be inclusive of ALL landowners/land managers.

Are the 'betterment' provisions in the NDRRA effective in encouraging recovery that develops resilience and reduces the costs of future disasters?

QMDC asserts regions should always rebuild utilising up to date climate science and improved design particularly with regards to infrastructure that is likely to wash away again. Culverts and bridges should be rebuilt to that they enable fish passage.

Supporting communities to reflect on the disaster and include learnings into future planning also needs to be accommodated to reduce future need for such funding support.

Are the payments to farmers and small businesses through NDRRA categories B and C justified? Are they set at appropriate levels?

Small businesses in agriculturally based communities may not always be eligible, forcing them out of a region to look for work elsewhere. This is particularly true for rural contractors. This reduces access to skilled workforces in the times of disaster and stifles recovery as they are not well recognised as being directly impacted by the disaster as they may not be tied to the real estate which is foundation for agricultural productivity. This loss is slow and subtle and reduces productivity of areas when in the recovery stage and beyond.

How frequently has Category D ('exceptional circumstances') assistance been used? What is this assistance used for and how have decisions been made?

Is the treatment of NDRRA expenditure in the Australian Government budget appropriate? Does it lead to effective risk management and efficient allocation of resources?

Overall in some cases there would be an argument for investing in prevention and making a tough call that this level of investment will limit the resources available for recovery assistance. This shift of resourcing requires significantly better planning and community engagement particularly around drought, fire and flood prone infrastructure and natural assets.

Approaches to drought relief and drought recovery, for example, should be able to access resources from State and Commonwealth programs for agriculture, environment and natural resource management.

QMDC recognise the scope for improved long term outcomes if Drought Management Plans were required in order to access some existing relief and also trigger extra support from environment and NRM programs where these plans are able to demonstrate drought and recovery measures that contribute to not only mitigation of damage and promotion of recovery of the pasture and soil assets but also to ongoing viability of the business.

Early in 2012 markets were poor when the BOM outlook was reasonable. Consequently many graziers held on to stock including many doing so as a result of an adapted interpretation of CRPs/BMPs/reef friendly practices.

Since then rainfall has been limited in most Queensland's grazing lands. Pasture, soil and stock condition is suffering.

Efforts to maintain stock numbers (Queensland breeding herd plus unmarketable stock) are perpetuating the degradation of pastures and soils, which are agricultural and environmental assets.

An effective and efficient approach to supporting graziers is needed that:

- Ensures people's physical and mental well-being are being addressed with income support measures and other welfare type support.
- Maintains the state breeding herd and in the process breeding herds of individual enterprises. This is partly addressed with freight subsidies for feed and grants for water infrastructure etc but these subsidies can also exacerbate risks (thus providing "dis-incentives")
- Protects (triple P) pastures and soils (from erosion and nutrient decline) for remaining dry period and for the following drought recovery.

QMDC recommends the following as a guide on what activities, management actions to fund as part as a future program for the current drought.

Focus is to manage water and pasture access for optimising total grazing pressure management. This may include:

Option One where there is pending rain and signs of pasture recovery:

- Fencing and water infrastructure to exclude grazing pressure from riparian zones or other areas which are vulnerable to degradation and/or are of high ecological value,
- Assembly of stock in a "sacrifice paddock" for lands in a particular category (indicates a number of key assets e.g. soil, pasture are in a bad condition and need intense management and recovery action) such as current stocktaking standard conditions known as "C" or "D" condition, and, outside this area, exclusion of all grazing species' access to watering points other than natural waters e.g. ensuring troughs are not refilled and total grazing exclusion from farm dams.
- Where stock are grazing, stocking rates and supplementary feed budgeting uses productive, perennial and palatable (3P) grasses only in feeding dry mass estimates.

Option Two after rain:

- Fencing and water infrastructure to manage grazing pressure according to land type and associated carrying capacity, e.g. fencing to land type, fencing off riparian zones, off-stream water points.
- Grazing feed budgeting is based on 3P pastures only for lands in “C” or “D” condition.
- Frequent spelling of pastures in “C” or “D” condition during growing and dormant periods.

Additional features of the program include:

- Guidelines being applied for any fodder harvesting of Mulga.
- Plans including soil health considerations are developed for any pasture planting works.
- A weed and pest management plan is established and enacted during recovery including liaison with neighbouring properties.
- Participation in training and field days as required in order to manage land and business enterprise according to emerging best practices.

3.3 National Partnership Agreement on Natural Disaster Resilience

How effective have NPANDR funded projects been at promoting resilient communities and reducing the impacts and costs of natural disasters? Is the focus appropriate? Have evaluations been undertaken of these projects and are these publicly available?

What limits have been placed on grant amounts by individual state or territory governments? What is the rationale for setting individual grant limits? What have been their consequences (e.g. have projects with large net benefits not received funding)?

What is the most efficient way of allocating funding — between states and within states — under this national partnership?

Is the amount of funding under the NPANDR adequate? How should the Australian Government determine how much it contributes to disaster mitigation and resilience activities?

Is the balance of Australian Government funding on mitigation and resilience activities relative to recovery activities appropriate? How should this assessment be made?

How effectively does the National Emergency Management Projects program contribute to sustainable natural disaster mitigation and resilience?

3.4 Australian Government assistance to individuals

What is the objective of the AGDRP? Does the scheme in its current form achieve those objectives? If not, what changes do you consider are needed?

Are there any unintended consequences from the AGDRP?

Does the AGDRP overlap with state and territory government assistance to individuals?

What expenditure was made under the Disaster Income Recovery Subsidy over the past decade?

3.5 State, territory and local governments

What are the governance and institutional arrangements relating to natural disaster mitigation, resilience and recovery in each state and territory? What are your views on how these arrangements could be improved?

Arrangements could be improved by including one or two NRM representatives, especially in the rollout of Categories C and D. During the last flood in the QMDB it took 9 months for environmental money to start flowing.

The State did not provide much needed assurance to NRM bodies that we would be adequately reimbursed if we started working straight away addressing the immediate problems, we therefore lacked the confidence to begin on ground works when the need was most urgent and were only able to provide assistance nearly a year after the flood events.

The engagement of key state and local government agencies in things such as fire planning is ad hoc at best in Queensland with different levels of capacity for engagement and delivery in community linked landscape planning and response processes. For example, road and rail easements burning regimes may be non-existent or poorly planned in the context of a landscape, leading to wildfire risks as responsibility on the management of these areas in conjunction with neighbouring landholders is absent.

Community engagement and contribution to the planning and implementation is sometimes viewed poorly or beyond their resource capacity by these agencies and disregard for local planning approaches and networks can severely stifle mitigation, recovery and resilience from a social and environmental perspective.

Which state, territory and local government policies cover natural disaster mitigation, resilience and recovery? What processes are used to manage natural disaster risks in government activities?

Have states and territories made any changes to the ways in which they fund natural disaster mitigation, resilience and recovery activities?

How do respective states and territories undertake analysis and decision making when allocating funding across mitigation, resilience and recovery of natural disaster risks?

QMDC experienced poor administrative process by the State during which the organisation was required to rewrite our application for funding 4 times.

Do state and territory governments have the capacity to fund natural disaster risk management?

Yes.

What influence does Australian Government funding (such as through the NDRRA and NPANDR) have on state, territory and local government prioritisation and funding of infrastructure projects? How does this funding affect the mix of projects funded through other means?

Do the collective requirements of the Australian Government under the NDRRA and the NPANDR provide incentives to the states and territories to effectively manage natural disaster risk that would exist in the absence of federal funding coupled with Commonwealth Grants Commission equalisation payments?

How effective are each state and territory's natural disaster relief and recovery measures relating to individuals, businesses, primary producers and voluntary organisations (including those part-funded by the NDRRA)? Are these arrangements targeted sufficiently closely to those in the greatest need?

On a couple of occasions QMDC was the only organisation assisting rural landholders apart from SES and emergency actions at the first instance.

The next immediate phase e.g. debris clean up, burying stock, food assistance etc left QMDC often on its own trying to meet those needs, providing invaluable rural assistance to enable landholders to get back into production. We have found there are many organisations in urban areas ready to respond but not as many ready available in rural communities. QMDC is not only ready but willing and able to play that role, however we need certainty around some level of funding to be able to act quickly e.g. NSW local land services are enabled by and funded through the *Local Land Services Act* 2013 "*to provide and facilitate education and training in connection with agricultural production, biosecurity, natural resource management and emergency management.*"

During one flood event it took QMDC only 2 days to launch a rural flood recovery program for the Roma area and a month for the 2013 flood events. This meant that within those timeframes we had staff coordinating relief including sending out fully equipped volunteer teams onto rural properties to assist recovery.

How well are natural disaster mitigation and recovery coordinated across governments and agencies at the Commonwealth, state/territory and local levels? Is there evidence of duplication or overlaps?

It took 4 floods in 3 years for coordination to improve. Experience has been built on to help this to get better.

Strategic fire management planning in regional Queensland requires a completely different approach to urban fire management and experiences of inappropriate disaster response and lack of support for facilitating fire planning leaves landscapes and rural businesses and communities vulnerable to megafire. Overlap is not an issue, inappropriate response for the landscape, is a bigger issue, and lack of support for local facilitation of community landscape planning and preparedness, including mitigation responses.

There is an absence in investment in people with the appropriate skills to support adaptation and resilience planning for natural disasters and no level of government is taking a lead on this, leaving communities vulnerable and unprepared, increasing the likely costs of the impacts of natural disasters when they occur.

What progress have state and territory governments made in implementing the recommendations of past inquiries relating to natural disasters? Do any of the recommendations relate to funding arrangements? Are there major recommendations that remain to be implemented?

3.6 Interactions with broader Commonwealth–state financial arrangements

How do Australian, state and territory government expenditures on natural disaster mitigation, resilience and recovery spending interact with other Commonwealth–state financial arrangements?

Do current horizontal fiscal equalisation arrangements have implications for incentives for natural disaster risk management by state and territory governments?

Do all states adhere to the same policy on natural disaster risk management?

3.7 Assessing the current arrangements

What should be the objectives of the natural disaster funding arrangements?

High priority life and limb, long term ecological and economic impacts caused by environment damage should be a priority to repair immediately if that damage will have a long term impact.

Investing in preventative activities, no go zones, improved design, climate change research, drought preparedness, mitigation and adaption action plans should also be the main objectives of funding arrangements. Building landscape community planning processes which facilitate resilience for communities for disaster preparedness eg landscape fire planning.

What do 'coherent', 'effective' and 'sustainable' mean in the context of natural disaster funding arrangements?

Coherent should mean that they are well understood and community engagement is paramount to their success. Support for the facilitation of community understanding is critical, just relying on a website page with some information is negligent.

To be sustainable, they must explore avenues for a legacy of capacity building for a community. The investment shouldn't be about having to rebuild the wheel for every disaster but have key people in the community who can draw on historically relevant information and resources to enable better preparedness and response for subsequent disasters. The information however, will often need to be regionally and locally relevant to be effective.

The overarching objective of effective funding for a drought preparedness program, for example, should be to encourage landholders to value and apply land management practices within the context of land and natural resource capability.

A Drought Recovery Program should focus on climate risk management strategies in the context of land and natural resource capability.

Different land types respond differently under drought conditions, funding for such programs should help to develop regionally relevant baseline data of land condition for non-drought and drought years which can be integrated into assessment criteria. The inclusion of Land Condition assessment criteria will improve the transparency of the assessment process when declaration of drought is sought. It will also form a comparative basis for recognizing difference in land management practices and inform the development of incentive or reward based programs for sustainable land practices.

Funding needs to promote innovation for industries and communities to develop self-reliance by encouraging appropriate land management responses for regional based landscapes.

In summary funding should:

- Provide an initial drought response including volunteer labour force, property planning services & moral support
- Develop sustainable agriculture practices
- Build community resilience

3.8 Roles and responsibilities for risk management

Under current institutional arrangements, are roles and responsibilities for natural disaster risk management allocated appropriately?

NRM bodies should be given a role in community landscape resilience and adaptation planning and disaster recovery with clear funding allocated by state governments.

As illustrated in the Background section of this submission QMDC has previously proven its ability to leverage funding received with volunteer labour and wide community support for disaster recovery.

This leverage is worth considering in terms of the value we add, including landholder co-investment in landscape and property planning, actions, practices and infrastructure that improves both, farming productivity, and natural disaster risk management, adaptation and landscape resilience.

Listed below are a range of NRM actions relevant to flood recovery that NRM bodies can deliver and coordinate in the short to long term:

Short term:

- Planning and realignment of fencing and watering systems destroyed in floods to deliver environmental outcomes and reduce risk of future flood damage, e.g. offer solar pumps instead of diesel, fencing support for whole riparian corridor
- Improved farm layout to deliver environmental outcomes and reduce risk of future flood damage, recommend financial assistance for river fencing be on the basis of best prac guidelines e.g. minimum widths
- Reconstruction and soil conservation design of roads destroyed in this flood improved to reduce soil loss, maintain fish passage, improve pre and post flood accessibility and reduce risk of future flood damage
- Flood-proofing of chemical/ fuel storage areas unexpectedly inundated in flood
- Flood waste/ rubbish clean-up be delivered to recycling/ waste recovery centers where possible
- Planning for realignment of paddock and fields destroyed by a flood to maximise ground cover, thereby reducing sediment loss and improving productivity
- Reseeding/rejuvenation of pastures destroyed in this flood to mitigate short and long term erosion with recommended sets of species for each region
- Directing / support voluntary community efforts through local landcare and regional NRM groups for revegetation/ rehabilitation works
- Ensuring infrastructure repair effort maintains or enhances environmental condition – eg. no further clearing, minimum road heights and culvert frequency on the floodplains

Medium term:

- Weed control to promote recovery of pastures destroyed by this flood
- Weed control to maintain river systems free of aquatic weeds e.g. Hymenachne, water Lettuce, water Hyacinth and Salvinia
- Assessment of coastal ecosystems (sand dunes and the like) for potential re-vegetation following flooding rains
- Working with the mining industry and EHP to ensure water discharges are within acceptable limits
- Assistance with soil conservation design
- Flood inundation mapping for improved responses in the future – better property plan and infrastructure and development assessment

Longer term:

- Property and district/ sub catchment planning for include fire, flood and drought preparation plan e.g. location of infrastructure as cattle yards/ laneways, landscape links with neighbours
- Improved landscape resilience – more cover, wider riparian zones, more vegetation and appropriate fire management practices for protection, biodiversity and production outcomes.

What should be the role of the Australian Government in natural disaster risk management?

How can individuals, businesses, the community and different levels of government most effectively fund natural disaster risk management?

Australia's National Framework for environmental management systems (EMS) in Agriculture (the Framework), was developed to provide a national context within which existing industry programs and growing interest in EMS could be "harnessed to best advantage to improve management and contribute to both market and environmental outcomes across industries and regions".

The adoption of the EMS initiative has been identified in the Regional Natural Resource Management Plan as a key implementation mechanism for the achievement of sustainable natural resource management across the QMDB. This approach if implemented well can be an effective means of developing actions to manage landscapes, including natural disaster risks and impacts.

QMDC asserts that by taking the Framework into account effective funding arrangements will be able to support individual landholders who wish to make a significant contribution to improving the sustainability of agricultural production through EMS at whatever level and pace is practical and appropriate for them. In this way, strategic funding will help meet NRM and community expectations of environmental, social and economic outcomes and provide a systematic approach to identifying and managing environmental, legal and commercial risk within the industry.

The principles for ESD developed for Australia also apply to EMS. Strategic natural disaster funding could collectively help Australia to deliver on these ESD principles.

The intended collective outcome should be an agricultural industry in which all parties are confident that they are managing agricultural resources in a collaborative way that conducts business well and avoids unnecessary natural disaster impacts.

Comprehensive land and water condition assessments needed to protect public investment.

Crucial to natural disaster funding objectives is the need to attach "strings" to future public investment when providing suitably tailored funds and capital arrangements that enable the sustainability and development of at-risk Australian agriculture and its associated industries and infrastructures.

QMDC assert that comprehensive land condition assessments are required for the purpose of establishing a prioritised list of actions, options and associated costs to address any potential public liability issues and bring the asset up to an acceptable standard to facilitate its future redevelopment, including:

- Identifying any immediate liability or legal issues and make recommendations as to any urgent action that should be undertaken;
- Survey, analyses and provide a register of environmental, economic and social risks and provide a community linked development plan for their management;
- Detail and address any issues where further risks to the property or landholder or deterioration of the property will result in a significant increase in sustainable development costs and be detrimental to public investment;
- Prioritise further works which will minimise financial risk to potential redevelopment proponents and encourage better development outcomes; and
- Optimise the development return on the overall investment which includes the purchase price and the capital costs of undertaking actions identified above.

QMDC submit that it is in the public interest that agricultural assets (land, businesses, infrastructure) including the natural resources they depend upon must be sustained beyond the lifetime of the landholder in order to secure the long term productivity capabilities and the integrity of the resources relied upon or invested in to.

QMDC supports a scrutiny of existing financial arrangements and the creation of new financial products and structures which are based on land condition assessments and which are more closely fitted to the current urgent needs of the rural sector as well as meeting future needs.

What is the best way to ensure effective risk management when risk funding and financing are not fully aligned (due to vertical or horizontal fiscal inequity)?

Are the prescriptive arrangements in the NDRRA Determination consistent with effective risk management? Do they impose a justified compliance burden on states and territories?

Are the provisions in the NDRRA Determination adequately enforced? Are there material consequences for governments that do not behave in a manner that is consistent with the provisions?

Do state and territory governments shift the costs of their own core asset and liability management activities to the Australian Government and other state and territory governments through the natural disaster funding arrangements coupled with HFE arrangements?

3.9 Providing incentives for effective risk management

Do governments provide the right framework for effective risk management by private individuals and businesses? What could governments do differently?

Climate change modelling would suggest all risk factors are not being taken into account.

Is there evidence that natural disaster funding arrangements induce 'moral hazard' behaviour by governments, households and businesses?

Does the fact that the states and territories do not bear the full costs of natural disaster reconstruction diminish their incentives for investment in risk management, including mitigation and insurance?

To what extent is moral hazard a significant problem at the household and business level in Australia? Does it result in inefficient and ineffective natural disaster risk management?

3.10 Providing incentives to use insurance

What are the current arrangements for insurance of essential public assets owned or managed by state and territory governments?

What explains the disparities in natural disaster insurance coverage by state and territory governments?

What impacts do the structure and design of the NDRRA have on the incentives of state and territory governments to insure essential public assets?

What impacts do the structure and design of the NDRRA have on the incentives of households and business to insure their property?

Do problems exist in insurance markets that prevent households and businesses from taking out insurance for natural disaster risks? What are the causes and consequences of these problems? What possible solutions might be available?

For agricultural production, there are very few insurance products which cover drought scenarios. There is not an appetite in the insurance sector to develop these products affordably leaving the primary producer to have to bear the full risk of drought. Other crop based products are complex and not always applicable for the relevant crop at affordable prices. For the livestock sector there is also limited herd level cover available and most livestock insurance products are for stud or 'recreational' pursuits (i.e. horse insurance) and not cost effective across a commercial herd basis.

Is non-insurance and underinsurance by households and businesses against natural disaster risks a significant problem?

Are high insurance premiums for households in some areas reflective of the risk in those areas, or are they reflective of information asymmetries or other problems in the insurance market?

What impact is mitigation activity likely to have on insurance premiums? What evidence is available to assess this?

3.11 Allocating resources to natural disaster risk management

Are current natural disaster funding arrangements consistent with effective and sustainable allocation of resources to natural disaster mitigation, resilience and recovery?

Preventative planning is not allocated enough funding, in particular, investment in a legacy of local capacity building and planning personnel and processes.

What are the effects on risk management and resource allocation of treating natural disaster recovery as a contingent liability? Should the budget treatment of natural disaster funding be changed?

What information and skill sets are required for more effective budget management of natural disaster risk, at both the Commonwealth and state level?

Do current funding arrangements exacerbate the political economy incentive for governments to under-invest in natural disaster mitigation and/or over-invest in natural disaster recovery?

3.12 Getting the balance right between mitigation, resilience and recovery

How should the Commission assess the appropriateness of the level of mitigation, resilience and recovery expenditure?

QMDC believe the upfront versus recover expenditure is not balanced and suggest reviewing the Western Australian drought management trial for potential solutions.

http://www.daff.gov.au/__data/assets/pdf_file/0003/2005788/drought-pilot.pdf

Is there evidence on the cost-effectiveness of mitigation expenditure (in terms of reducing future disaster costs)?

Are the current governance and institutional arrangements capable of achieving an effective and sustainable balance of mitigation, resilience and recovery expenditure?

Are the level and balance of natural disaster mitigation, resilience and recovery activities appropriate? Is there a case for changing them, either in absolute or relative terms?

In the absence of an alignment of asset ownership, risk incidence and risk funding, is it possible for parties to move towards optimal risk management?

Yes it is possible, all parties if they collaborate and appreciate each other's roles and functions have the capability of contributing to better up front planning, land condition assessment, floodplain mapping and assessment, and implement key mitigation and adaptation strategies and actions. NRM bodies assisted by their revised regional NRM plans offer a range of tools essential to optimise risk management through better policy and planning, volunteer coordination to aid disaster recovery programs and on-ground works with environmental and economic outcomes.

3.13 Allocating resources to the right mitigation, resilience and recovery options

What mechanisms and models are governments using to evaluate and prioritise natural disaster mitigation options? What mechanisms are used in other federations, such as the United States and Canada?

Crop insurance schemes are used in USA, which seem to underpin the profitability and sustainability of rural communities very well.

http://www.rma.usda.gov/policies/

What other approaches could be used to prioritise mitigation options?

Floodplain removal of infrastructure, land condition reports to determine whether land condition has gone beyond a point where no assistance should be provided or limited until certain best practices are put in place. Need to consider prioritising actions that need to be taken upfront to help people prepare for changes in climate that are likely to have impacts and better account for risks.

Do local governments in particular have appropriate capabilities to undertake cost–benefit analysis of mitigation activities?

Do the current arrangements provide an incentive for excessive rebuilding?

Does the requirement for governments to show that 'betterment' options are 'cost-effective' reduce the likelihood of betterment projects being implemented?

What mechanisms are available for businesses and communities to contribute to the costs of mitigation and recovery, where appropriate (for example, through the use of property-specific charges to fund some mitigation works)?

3.14 Are land-use planning and infrastructure policies consistent with effective natural disaster risk management?

What impacts do policies regarding land-use planning and infrastructure have for natural disaster risk management at the state and local government levels?

Regional interests in appropriate and sound planning requires serious investment in regional NRM bodies, like QMDC and the regional planning mechanisms currently available and being updated to include climate change mitigation and adaptation targeted actions.

A considerable portion of the Darling Downs Statutory Plan area, for example, is considered floodplain – 1% slope or less. The region's floodplains are both highly productive and vulnerable particularly to erosion and damage to public and private infrastructure. The Darling Downs Region has a history of significant flood events. Almost any structure on the floodplains diverts flood flows and causes damage to infrastructure, causes severe erosion, and often makes flooding worse. Technical expertise to assess, plan and approve floodplain structures is costly, specialised and not easily accessible for local government, with the possible exception of Goondiwindi Regional Council.

In our opinion land-use planning should:

- Require that State and Local Government develop a consistent floodplain management planning and regulatory approach to floodplains
- Severely limit structures that have the potential to divert flood flows
- Develop a set of floodplain design standards and adopt with the objectives of improving floodplain management coordination, develop standards for new infrastructure to eliminate or minimise flow diversions that put infrastructure at risk and design parameters that minimise soil erosion
- Clearly identify areas that are defined as floodplain

Landscape fire planning is an area of complete deficit in terms of Qld state and local government investment. It is neglected or viewed in a fire suppression paradigm which is contradictory to or detrimental to our Australian landscape, encouraging wildfire which can completely change the ecology of a landscape permanently, unable to be recovered.

It is poorly invested in for regional and rural landscapes with limited capacity in existence with appropriate community engagement practices for supporting practice adoption by rural landholders that build resilience to this particular type of natural disaster.

Is there a need for greater information provision and disclosure in planning decisions?

Yes.

What impact do the current natural disaster funding arrangements have on land-use planning, risk reflective asset pricing and infrastructure investment decisions at the state and local levels?

What reforms to land-use planning and infrastructure investment would best support cost-effective risk management and understanding of the changes to the risk profile?

3.15 Substantial changes to the system

Do you have proposals for substantial reform options to natural disaster funding arrangements for the Australian and state and territory governments?

For fire management in Queensland, investment through NRM organisations to facilitate strategic landscape fire planning as a first step of introduction to natural disaster planning. The process can support building community relationships across a large local area, supporting adaptation and resilience in the face of natural disasters due to foundations enabled during the community owned process.

What impact would each option have on the incentives of each level of government to make good risk management decisions?

What impact would each option have on the costs and incentives of individuals, businesses and non-government organisations to manage natural disaster risks?

How would they impact on the Australian economy and each level of government, relative to current arrangements?

Should conditions be attached to Australian Government financial assistance to other levels of government? Should funding be linked to particular reforms by state or territory governments?

What would be the advantages and disadvantages of making substantial changes to the natural disaster recovery funding arrangements (such as recommended by the National Commission of Audit)?

What would be the advantages and disadvantages of retaining the current NDRRA, but with reforms to the thresholds and contribution levels?

What lessons have been learnt in other countries that may be applicable for Australia? Are there natural disaster funding or governance models used elsewhere that may be suitable for Australia?

3.16 Implementing reforms

What transitional arrangements should be considered to assist with the implementation of reforms?

Over what timeframe should reforms be implemented?

How should reforms be sequenced?

Who should be responsible for implementing the reforms?

Are transitional financial arrangements required?

When should the reforms be reviewed and evaluated?

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