# Northern Territory Government Submission

Productivity Commission Inquiry into natural disaster funding

6/16/2014

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## Overview

The Australian Government with agreement from the Council of Australian Governments asked the Productivity Commission to undertake a public inquiry into the efficacy of current national natural disaster funding arrangements, taking into account the priority of effective natural disaster mitigation and the reduction in the impact of disasters on communities.

The Commission has been asked to specifically report and make findings on:

- The effectiveness and sustainability of current arrangements for funding natural disaster mitigation, resilience and recovery initiatives
- risk management measures available to and being taken by asset owners including the purchase of insurance as well as self-insurance options
- the interaction between Commonwealth natural disaster funding arrangements and relevant Commonwealth/State financial arrangements
- options to achieve an effective and sustainable balance of natural disaster recovery and mitigation to build the resilience of communities
- projected medium and long term impacts of identified options on the Australian economy and costs for governments.

This Northern Territory Government submission provides answers to over 50 specific questions raised by the Productivity Commission Issues Paper on Natural Disaster Funding Arrangements.

The submission has been developed with input from the following Northern Territory Government departments: Department of the Chief Minister; Department of Treasury and Finance; Department of Health; NT Police, Fire and Emergency Services; Department of Transport; Department of Children and Families; Department of Lands, Planning and the Environment; Department of Infrastructure; Department of Local Government and Regions; and Department of Land Resource Management.

#### **Northern Territory Context**

The Northern Territory represents about one-sixth of the Australian land mass with a population of approximately 235,000 people of which over 50% live in the greater Darwin area. Alice Springs is the largest regional population outside the Darwin area and provides key services to Central Australia and the Barkly region. The population of 235,000 represents a small tax base considering the range of activities and infrastructure necessary to service one-sixth of Australia's land mass.

The Australian Bureau of Statistics estimates that approximately 30% of the population identify as being Indigenous, of which more than 40,000 live in discrete Indigenous communities in remote regions of the Northern Territory, ranging in population size from 20 to a few thousand.

The Northern Territory has some unique challenges with regard to disaster management and balancing the need to allocate resources to mitigate natural hazards while continuing to develop the Northern Territory. The Northern Territory All Hazards Emergency Management Arrangements list 30 hazards that may cause harm to the Northern Territory community. The natural hazards which represent the greatest potential risk to the Northern Territory have been assessed as:

- Bushfire;
- Cyclone;
- Flood:
- Earthquake;
- Severe storm; and,
- Storm surge.

The Northern Territory Government has introduced a number of measures to reduce the impact on individuals and the community against the effects of these hazards such as:

- strong building and planning legislation;
- increasing public awareness and education; and
- contemporary emergency management legislation underpinning robust local, regional and Territory level emergency planning arrangements.

# **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?

The Territory's current policy arrangements are consistent with that of the Natural Disaster Relief and Recovery Arrangements (NDRRA) Determination and include:

- recovery and repairs to essential public assets, including local government assets eligible under NDRRA;
- to provide assistance to individuals, small business, primary producers and not-forprofit organisations as required; and,
- to seek financial reimbursement from the Commonwealth should expenditure exceed the Territory's thresholds as determined by the Commonwealth.

The Northern Territory Government does not budget for reimbursements unless a claim is likely to be submitted to the Commonwealth. The aim of the NDRRA is to assist jurisdictions with the burden of large scale expenditure caused by a disaster event. It does not cover the full costs incurred by the Northern Territory and is not intended, nor is it utilised to replace insurance and disaster mitigation planning and implementation.

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?

Currently NDRRA reimbursement is targeted at response and recovery following an eligible event. There is minimal focus on mitigation and the process of applying for betterment grants is unworkable; proven by the fact that only a couple of grants Australia wide have been granted during the life of the program.

NDRRA has not been an effective tool in driving disaster risk management or mitigation in the Northern Territory as the imperative is to restore a public asset as soon as possible in response to an event, rather than applying for betterment funding that might prevent it from being impacted by a future event. Although betterment options might be both logical and worthwhile (because of recurrent damage over time), the NDRRA betterment application process is lengthy and may result in nothing. To apply means to leave a public asset or piece of public infrastructure in a state of disrepair for many months which will have flow on impacts to individuals, communities, businesses and the broader local, Territory or national economy.

For an NDRRA mitigation/betterment program to work, it would require a specified annual budget. Mitigation/betterment works would need to occur prior to events occurring rather than in response to an event. This would enable the betterment works to the asset/infrastructure to be managed in such a way that limits the flow on impact of that work.

All claims made by the Northern Territory are independently audited to ensure they are compliant with the NDRRA Determination. Should the Territory meet the fiscal thresholds to be eligible to make a claim, it undertakes the audit (as required by the Determination) and any identified ineligible expenditure removed.

In relation to monitoring and NDRRA claims, Northern Territory Government departments submit monthly actual and expected expenditure reports to Treasury, who undertake an assessment of the information and liaise with departments to ensure claims are valid. If there is uncertainty about eligible expenditure; Treasury liaises directly with Emergency Management Australia for clarification prior to submission. The criteria are rigorously enforced through Treasury financial administration, monitoring and audit activities.

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

The Northern Territory Government considers that the threshold for NDRRA reimbursement for response and recovery is set at an appropriate level, but not where the focus is on mitigation and resilience as there are limited provisions under the NDRRA Determination for these criteria.

The thresholds are based on a percentage of the Northern Territory's total general government sector revenue and grants in the financial year two years prior to the relevant financial year. Should the thresholds be changed to another method of calculation, it could disadvantage the Territory particularly if it is higher. The thresholds need to be consistent to keep pace with the continually rising cost of infrastructure recovery, which in the Territory relate predominately to roads in regional and remote areas.

Based on historical natural disaster expenditure, the Commonwealth's assistance to the Territory following natural disasters accounts for 40% of total costs between 1997 and 2011.

There was no claim for reimbursement in 2012-13 as the first threshold was not met and it is unlikely the Territory will meet the first threshold (\$11.034 million) for 2013-14. See Appendix D for further details.

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?

The four categories of NDRRA are as follows:

- Category A emergency assistance to individuals
- Category B restoration of essential public assets; financial assistance to small businesses, primary producers, voluntary non-profit bodies and individuals; and 'counter disaster operations' for public health and safety.
- Category C community recovery packages and recovery grants to small businesses and primary producers.
- Category D acts of relief or recovery carried out in circumstances deemed to be exceptional by the relevant Commonwealth Minister.

The segmentation into the four categories covers the wider community, extraordinary events and assistance required, and helps identify, analyse and report on each segment affected by a natural disaster. For example, recent monsoonal troughs in the Top End in January – February 2014 identified the possibility of flooding in some communities and evacuation plans were initiated to mitigate against the potential effects (Category A) however, the majority of the expenditure from the troughs related to damage to major roads (Category B). As it is anticipated that the first threshold will not be met it is unlikely that NDDRA reimbursement from the Australian Government will be provided to the Northern Territory Government under this Category.

The current approach allows for analysis and future planning for betterment and resilience measures however; the resources required to apply for betterment are a limiting factor.

The first Northern Territory Government threshold for 2013-14 is set at \$11m and the second at \$19 million with the first threshold being reimbursed at 50% for A and C measures.

The reimbursement of NDRRA from the Commonwealth Government to the Northern Territory Government is not provided in the form of a grant but is a recovery of percentage of the costs incurred by the Territory for a recognised event based on the NDRRA formula. From a response and recovery perspective the reimbursement is workable but not from a resilience or mitigation perspective. For Category C where grants are provided to small businesses and primary producers the costs are shared between the jurisdiction and Commonwealth. This appears to be an effective way to administer the grants on behalf of government to those businesses in most need.

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

The principles of the 'betterment' provisions are reasonable however in reality for the Northern Territory the resources required to plan and cost betterment proposals in preparation for potential future events is inhibiting. It is acknowledged that although the costs for betterment applications is restricted by resources, the planning and implementation of betterment proposals will ultimately reduce the cost of recovery of essential public assets to pre-disaster condition over a period of time. The current framework for betterment does not encourage resilience or reduce the cost of future disasters due to the level of difficulty to meet the betterment criteria.

The vastness of the Territory, as well as the remoteness of some communities and the willingness of those communities to undertake or participate in betterment planning is a challenging factor. Many Regional Councils do not have their own source revenue and are reliant on the Northern Territory Government for assistance.

There is also the issue that many roads damaged are regional and remote, and the cost implications are not consistent with economies of scale however the reality remains that these are critical access roads for the region or communities. While the betterment cost/benefit analysis focuses on the tangibles like income generation where a mining road or road to a major agricultural area is in a state of disrepair; the major cost/benefit in the NT's case is often a social benefit of reconnecting small communities and outstations

Local government claims relate primarily to roads and tree damage, there are rarely other assets included in claims.

Road works are restored to the current engineering standards in accordance with current Austroads guidelines and Northern Territory Government design standards and specifications. This may result in roads being built and restored to a higher standard that the pre-disaster standard, unlike other essential public assets which are mainly restored to pre-disaster standards. The extra cost to build the roads to a higher standard is generally funded by the Northern Territory Government to try and increase the assets resilience.

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

The Northern Territory agrees that the payments to farmers and small business through NDRRA are justified and set at an appropriate level. However it should be noted that the Northern Territory has rarely activated assistance to small business, primary producers and not-for-profit organisations. Recovery grants for Cyclone Carlos in 2011, was the first time Category C was activated. Concessional interest rate loans under Category B, was last activated in 2005-06.

Many of the organisations that were affected by the event were eligible for the assistance are fairly resilient and have insurance coverage. However the grants are useful to assist where insurance does not cover all damage as a result of an event, and to get a business back up and running in the interim where insurance is still being assessed and processed through the insurers allowing the community to recover back to a somewhat normal situation and employee jobs to be maintained.

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

Category D has not been used in the Northern Territory.

# National Partnership Agreement on Natural Disaster Resilience (NPANDR)

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?

The Northern Territory NPANDR has 3 different funding Programs that are strategically linked to the NSDR, these are:

- 1. **Disaster Resilience Emergency Volunteer Fund** targeting emergency management volunteer organisations to assist with the attraction, retention, training and resourcing capacity initiatives and improve their response to natural disasters;
- Disaster Resilience Fund targets organisations and local agencies in natural disaster resilience works, measures and related activities that will contribute to safer, sustainable and resilient communities that will be better able to withstand the effects of natural disasters; and
- 3. **Territory Risk Priority Project Fund** targets projects that address key natural disaster risk knowledge gaps, trial or enhance programs delivering natural disaster resilience or enhance emergency management capability throughout the Northern Territory.

#### **Effectiveness:**

Project applications must meet certain resilience criteria and outline performance and evaluation measures. The nature of the grant program means that not all projects have a public element and may suitably meet resilience/mitigation requirements through identifying risks or retaining volunteers etc. Some examples of projects that have had a more public focus and promote community resilience include:

- 2009-10: NT Emergency Service Indigenous Community Service and Emergency Announcements Program
- 2010-11: Australian Red Cross NT Engaging Communities through Volunteer Trainers and Facilitators
- 2011-12: Milne Volunteer Bushfire Brigade Meeting and Training Room Facility
- 2011-12: Development of the SecureNT as the central online point of information for the public and media to receive all NTG information during an event and is supported by facebook and twitter <a href="www.securent.nt.gov.au">www.securent.nt.gov.au</a>. The site contains information about preparing for and recovering from a range of hazardous events.
- 2012-13: Volunteering SA and NT Harnessing Spontaneous Volunteers

The Northern Territory has the highest net population turnover in Australia, with the equivalent of 7% of the population moving interstate each year<sup>1</sup>, consequently the promotion and further development of resilience projects to natural hazard events need to continue on an ongoing basis.

#### Appropriateness of focus:

The resilience and mitigation focus is appropriate; the program is able to target priorities and projects at the local, regional and Northern Territory level. The funding program is open to volunteer, local and government agencies and encourages the community to be proactive in terms developing initiatives that will minimise potential and costly damages in the event of a disaster. The issue is however there is not enough funding in this program to undertake larger capital mitigation projects and support other priority projects.

#### **Evaluations:**

All grant recipients are required to submit a Final Project Report that includes evaluations against the project objectives and outcomes. Depending on the nature of the project, some measurable evaluations may not be achievable prior to an actual disaster.

There is no funding allocated to undertake formal evaluations of the projects to measure how effective they have been in increasing resilience. If funding was allocated out of these funds it would drastically reduce the already small amount of money available for projects.

<sup>&</sup>lt;sup>1</sup> Australian Bureau of Statistics, 2011. Retrieved from <u>www.abs.gov.au/ausstats/abs@.nsf/mediareleasesbytitle/D0D05F9C6D7881A0CA2574D500181708?OpenDocument</u>

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)?

The following tables describe the limits set against the Northern Territory NPANDR program:

Year	Limit
2009 – 2010	Funds restricted in this year to high priority projects approved by the Counter Disaster Council & appointment of NT Natural Disaster Resilience Program (NDRP) Manager. Funding ranged from \$20K-\$340K.
2010 – 2011	Disaster Resilience Emergency Volunteer Fund (DREVF) –100% of the project value up to \$50K Disaster Resilience Fund (DRF) – 50% of the project value up to \$75K Territory Resilience Priority Project Fund (TRPPF) – no limit set
2011 – 2012	DREVF -100% of the project value up to \$50K DRF - 50% of the project value up to \$75K TRPPF - 100% of the project value up to \$250K
2012 – 2013	DREVF -100% of the project value up to \$75K DRF - 50% of the project value up to \$100K TRPPF - 100% of the project value up to \$250K
2013 – 2014*	DREVF -100% of the project value up to \$75K DRF - 50% of the project value up to \$100K TRPPF - 100% of the project value up to \$250K
2014 – 2015*	DREVF -100% of the project value up to \$75K DRF - 50% of the project value up to \$100K TRPPF - 100% of the project value up to \$250K

<sup>\*</sup>Please Note: Limits for 2013-14 and 2014-15 will be proposed in the NT's Implementation Plan which has yet to be formally accepted by the Australian Government.

#### Rationale:

The Northern Territory Government received 5% of the national allocation of NPANDR funds, funding for large projects would restrict the number of projects that could be achieved.

DREVF: A funding cap is implemented to ensure that a range of worthwhile initiatives receive funding. However, the cap should not preclude applicants from seeking funding for higher value or larger scale projects where the benefit to the volunteer agency and the community it supports warrants higher expenditure. Proposed initiatives that exceed the cap may be supported where the project is deemed to be cost effective with measurable high value returns to the volunteer organisation and the community.

DRF & TRPPF: Projects of a higher value will be considered although agencies are encouraged to leverage further co-contributors to projects.

### Consequences:

Various DREVF and DRF projects have been funded above the established funding limitation.

Maintaining a funding cap enables a larger number of applicants to secure funding. On the whole, the program has remained flexible and provided a range of support across the Territory however the program guidelines do not allow for an ability to fund projects past the life of the agreement.

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

The distribution of funding under this National Partnership Agreement is based on population, cost of disasters and relative disadvantage. The NPANDR allows the Territory to deliver the NDRP in the manner which best suits the Northern Territory context.

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?

Current funding is insufficient to effectively mitigate against risks or build resilience. The Northern Territory local road network currently totals approximately 13 000 kilometres of which the majority is in rural and remote areas. This road network is generally sub-standard and easily degraded in cyclonic and/or monsoonal rainfall conditions. Given the relative isolation of this network reinstatement costs are high and therefore place a significant burden on both local and Northern Territory Governments. As the largest costs are related to infrastructure and the restoration of the road network, what is currently receives in NPANDR funding is not adequate to effectively build resilience in this area. Having said that, the existing program funding is well received by volunteering, local government and emergency management organisations.

The Australian Government does not invest in mitigation and resilience activities to any great extent, traditionally the Australian Government provides billions of dollars nationally to repair and replace damaged infrastructure following events as opposed to, in the Territory's case, \$1.5 million annually on disaster resilience projects.

The length of time that the NPA is offered (most recently 2013-2015) further impacts on the ability to fund larger mitigation projects that may span several years and therefore multiple reporting periods.

The Australian Government could consider identified risks and the resources available (within jurisdictions) using territory-wide risk assessments when determining actions and contributions 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?

The Northern Territory Government does not consider that the current balance is appropriate as the ability to utilise or apply for betterment is so onerous as to prevent jurisdictions from undertaking the process. By its nature, NDRRA is a reactive funding program with no real substantial investment in mitigation programs.

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

The Northern Territory Government considers the National Emergency Management Projects program is an effective program in building national resilience to natural disaster events. Having the Australian New Zealand Emergency Management Committee (ANZEMC) as part of the governance process ensures that projects and activities funded through this program directly support the national strategy for disaster resilience, has the support of individual jurisdictions and builds on Australia's disaster resilience.

As the majority of the Australian Government's financial exposure following a natural disaster event is in recovery and restoration costs this program may not be the best conduit to reduce this risk unless funding is substantially increased.

#### Australian Government assistance to individuals

What is the objective of the Australian Government Recovery Payment (AGDRP)? Does the scheme in its current form achieve those objectives?

The AGDRP provides direct financial assistance from the Australian Government to individuals following a severe event. Activation of the scheme reflects the Australian Government's policy position to provide assistance at their discretion or assessment. It is not clear to the Northern Territory Government what the objective of providing the payment is, other than providing a one-off, non means tested payment for eligible persons. The AGDRP is in addition to the Personal Hardship and Distress (PHD) payments provided to affected persons by states and territories.

The only time an AGDRP type payment was provided in the Northern Territory was following the 1998 Katherine Floods. At this time the eligibility criteria was for persons living or staying in the affected area at the time of the floods regardless of whether their homes were destroyed or flooded.

AGDRP though classified as a recovery payment appears to be used as an 'immediate' relief payment and provides an injection of a large amount of cash into a disaster affected community in a short time frame. If the recipients spend the money in the affected community it provides a welcome boost to local businesses.

#### Are there any unintended consequences from the AGDRP?

When an event occurs, there are members of the community who have an expectation that the payment of AGDRP will be provided to them regardless of whether the individual is severely impacted or not. Due to the level of discretionary involvement from Australian Government Ministers, the triggers used to declare an event severe enough to activate AGDRP are not clear.

From a Northern Territory perspective the AGDRP did not promote resilience and more often appeared to create an expectation that if a community is affected by a disaster event residents will receive money as a form of entitlement.

The Northern Territory Government has during previous flood events, on occasion had to explain to affected residents in the Northern Territory why the Australian Government was not providing AGDRP when other jurisdictions that were experiencing similar type events received the payment.

The AGDRP is additional financial assistance for individuals during a significant disaster event and is paid at a higher rate than the Northern Territory Government currently provides as personal hardship assistance. It does appear to overlap with the current PHD arrangements administered by the Northern Territory Government.

While a decision to scrap or reduce the AGDRP would reduce the financial exposure to the Australian Government, it would obviously incur political costs should a major disaster impact a community.

# 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?

The Northern Territory Government has responsibility for emergency management which includes the planning, preparation, response and recovery of an event. Municipal and Regional Councils participate and have key functions in emergency management particularly at the regional and local level. However unlike other states and territories, local government does not have the legislative responsibility to manage or control an emergency event. Responsibility for preparedness and response rests initially at the local level through the local emergency management committee, chaired by the officer in charge of the local police station.

The Northern Territory <u>Emergency Management Act 2013</u> (the Act) reflects an all hazards approach to all emergencies and disasters, natural or otherwise and provides authority for all four phases of emergency management (prevention, preparedness, response and recovery).

The Act provides for the adoption of measures necessary for the protection of life and property from the effects of disasters and emergencies and forms the legislative authority basis for emergency management activities including recovery within all levels of government.

The Act defines the Northern Territory's emergency management structure and assigns roles and responsibilities. The Act's objective is 'to provide for matters relating to emergency management' and defines an event to include threats or impacts to people and property.

The Minister for Police, Fire and Emergency Services (PFES) is the responsible minister for the *Emergency Management Act 2013.* Under this *Act* recovery coordination is the responsibility of the Chief Minister who at this time is also the Minister for Police. From an administrative perspective the transfer of control of response to coordination of recovery activities occurs after agreement between the Territory Controller (Commissioner of Police) and the Territory Recovery Coordinator (Chief Executive Officer of the Department of the Chief Minister).

The Territory Emergency Management Council (TEMC) is established under Section 36 of the *Emergency Management Act 2013* (NT). It is responsible to the Minister for Police, Fire and Emergency Services for the administration of the Act.

Membership of the TEMC includes the Territory Controller (Co-Chairperson), the Territory Recovery Coordinator (Co-Chairperson), the Director of the Northern Territory Emergency Service (NTES) who is the Executive Officer of the Council and Chief Executives of various key Government Departments.

The functions and powers of the TEMC are detailed in Section 36-43 of the *Emergency Management Act 2013* (NT). In summary, the TEMC is to

- a) direct resources for emergency operations and recovery operations in the Territory;
- b) advise the Minister in relation to emergency planning, emergency operations and recovery operations in the Territory;
- c) consider emergency plans for the Territory for approval;
- d) advise, assist and, if necessary, direct the Territory Controller, the Territory Recovery Coordinator and the Director (NTES) in the exercise of their powers and the performance of their functions

The Northern Territory All Hazards Emergency Management Arrangements (NT AHEMA) (currently under review to be replaced by the Territory Emergency Management Plan) describes the Northern Territory emergency management framework, policies and roles of organisations within the Territory emergency management framework.

Emergency management in the Northern Territory is based upon a hierarchal system. It originates with the NT AHEMA which provides the basis for subsequent regional, local and specific emergency management plans relating to specific threats. The regional emergency management organisation is based upon three gazetted Police Regions; Greater Darwin; Katherine and Central Australia regions.

The Northern Territory Government also has the responsibility for the administration of all land use planning and decision making and has in place arrangements to consider natural disaster mitigation measures; which include building and planning regulations.

An issue for the Northern Territory Government is balancing the legacy of aging and poorly constructed infrastructure in remote communities that have been built in locations that are prone to disaster events. The birth rate and population growth in remote communities is increasing which adds further pressure on the Northern Territory Government in an effort to balance the increasing demand for services including housing, health and education and maintain or repair substandard infrastructure.

Essential public assets such as roads and bridges are damaged from severe weather events every wet season. However the vast road network, dispersed population, high frequency and unpredictability of severe weather events makes planning for disaster mitigation challenging.

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?

As stated previously, land use planning is a Northern Territory Government responsibility, this is legislated for under the <u>Northern Territory Planning Act</u> (2014). The <u>Planning Act</u> provides for appropriate planning and control of the use and development of land. The objectives of the <u>Planning Act</u> are to plan for, and provide a framework of controls for, the orderly use and development of land.

This is achieved through the:

- (a) strategic planning of land use and development and for the sustainable use of resources;
- (b) strategic planning of transport corridors and other public infrastructure;
- (c) effective controls and guidelines for the appropriate use of land, having regard to its capabilities and limitations;
- (d) control of development to provide protection of the natural environment, including by sustainable use of land and water resources;
- (e) minimising adverse impacts of development on existing amenity and, wherever possible, ensuring that amenity is enhanced as a result of development;
- (f) ensuring, as far as possible, that planning reflects the wishes and needs of the community through appropriate public consultation and input in both the formulation and implementation of planning schemes; and
- (g) fair and open decision making and appeals processes.

The Northern Territory Government also has primary responsibility for land-use planning and development control. This differs from most other Australian jurisdictions where these functions are performed by local government. The NT Planning Scheme includes specific policies to mitigate natural disaster risks from flooding and storm surge hazards.

The development approval process under the *Planning Act* includes statutory requirements for public notification and comment on development proposals. As part of this process, comment is routinely sought from subject matter experts in Northern Territory Government agencies and service authorities in regard to relevant natural disaster risks (including flooding, storm surge, cyclone and bushfire hazards). This process also applies to planning scheme amendments and rezonings.

The *Building Act* also contains specific provisions dealing with cyclone hazards.

While local government in the Northern Territory may not have responsibility for land-use planning and development control, the *Local Government Act* establishes the responsibility for local councils to carry out measures to protect their area from natural and other hazards and to mitigate the effects of such hazards.

With the assistance of the Local Government Association of the Northern Territory (LGANT), local government authorities in the Northern Territory have developed emergency management plans, including arrangements for mitigation, resilience and recovery. This was undertaken through funding provided by the NPANDR.

Inter-agency working groups, such as the NT Floodplain Management Committee, and statutory bodies, such as the NT Bushfires Council and TEMC, also have a key role in processes to manage natural disaster risks in government activities.

The Department of the Chief Minister (DCM) has the legislative responsibility for the coordination of recovery activities following a natural disaster event.

TEMC is the strategic statutory body for emergency management is co-chaired by the Commissioner of Police as the Territory Controller and the Chief Executive Officer, DCM as the Territory Recovery Coordinator. Remaining members of the TEMC consist of the Director of Northern Territory Emergency Services (NTES) and Chief Executive Officers from agencies with emergency management responsibilities.

The TEMC consider lessons learnt from local disaster events, major interstate reviews and inquiries and incorporate relevant strategies and actions into the TEMC Strategic Plan. The progress of these actions, including updates of NEMP projects are provided to the TEMC for their consideration. The TEMC is the body that approves or endorses Territory wide emergency management policy and arrangements.

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

The Northern Territory Government has used the NSDR to guide thinking into the NT Planning Scheme. There has been an increase in funding towards disaster mitigation and resilience activities in response to priorities established under the NPANDR and lead funding provided by the Commonwealth under the associated implementation plan.

Since the NPANDR program has been managed at the jurisdictional level the Northern Territory has been able to direct increased funding into risk management type activities such as flood mapping studies and regional risk assessments. These studies have influenced longer term planning and development applications and approvals ensuring that future developments are cognisant of, and incorporate the natural risks at the planning and design stage.

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

Mitigation work is undertaken as part of core business risk analysis for agencies and where possible they continuously upgrade assets to mitigate against future events and improve their resilience. From a Northern Territory Government perspective it is not possible in the amount of time available to provide a detailed breakdown of expenditure regarding capital upgrades that has contributed to increasing resilience against natural disaster risks.

The Department of Transport provided several examples of assets that were damaged by an NDRRA eligible event several years ago and were upgraded to an improved standard to increase resilience. The improvements included installing additional and larger capacity culverts whilst repairing the Larapinta Drive Finke River crossing and sections of single lane sealed road were upgraded to a two-lane seal on the Buntine Highway. In both of these examples the estimated cost of restoring the asset to its pre-disaster standard was claimed against NDRRA with the estimated additional costs to upgrade being covered under the Northern Territory funded Capital Works programs.

The improvements could have been covered under the betterment program, but as discussed previously this program's eligibility criteria is so onerous that the imperative to restore the essential assets as soon as possible takes precedent. Frequently these assets are located in remote locations, are a critical asset and there is only a small window of opportunity to undertake works prior to the onset of the next wet season.

Following a flooding event in the remote community of Nauiyu (Daly River) the local emergency management committee and Power and Water Corporation (PWC) representative identified that the community had to switch off power once the flood waters rose to a certain level. The river level was not high enough to warrant an evacuation of the community, but did require residents to use dinghy's to get from one side of the community to the other side, coming very close to power lines. It is not uncommon for the Daly River to peak to these levels and stay at these heights for weeks at a time. PWC undertook to increase the height of the power lines during the following dry season and thus increasing the resilience of the community and its assets. The local emergency management committee was able to subsequently recommend that trigger points relating to flood response action in the local emergency management plan be reviewed. Mitigation measures improved the resilience of the Nauiyu community to flooding and ultimately reduced the costs and time the community would require accommodation in an evacuation centre.

Essential public assets such as roads and bridges are damaged from severe weather events every wet season. However the vast road network, dispersed population, high frequency and unpredictability of severe weather events and narrow windows of opportunity to conduct works makes planning for disaster mitigation difficult.

In relation to local government there are in effect two classes of councils in the Northern Territory, those that can through their own source revenue effect restoration and mitigation measures (until NDRRA funds are approved) and those that can do neither. In 2014-15, of the 17 councils in the Northern Territory, 12 will have severely limited capacity to undertake restoration work in advance of any funding being provided from Government.

All applications for funding under the NPANDR are assessed and prioritised by an advisory group consisting of representation from NTES, DCM, Bushfires NT and NT Fire and Rescue Service. The final selection process is undertaken by a committee consisting of senior representatives from NT Treasury and Finance, DCM and NTES. The applications are assessed against resilience and mitigation criteria and their key agency emergency management strategic priorities.

In relation to recovery, the decision making and analysis is event driven, multi-tiered and includes processes of local government, local and regional recovery committees, TEMC and Cabinet. During the immediate recovery phase of a disaster event, priorities are identified through the local Emergency Management Committee (who also has a dual role participating in local recovery coordination) with the Northern Territory Recovery coordination committee who reports to the TEMC and the Recovery Coordinator.

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

The NSDR has helped to promote a greater understanding of the need to improve disaster resilience and the importance of a shift towards an increased sharing responsibility for disaster mitigation across all sectors of government and the community. However, state and territory governments have a limited capacity to fund additional natural disaster risk management in areas where this has not traditionally been regarded as core business and agencies are required to compete with other government priorities to secure funding to fund natural disaster management.

As resilience of assets is the responsibility of relevant Departments, it is generally these departments that have the responsibility to lead the sourcing of funds to increase the assets resilience.

For example the Department of Health have the responsibility to provide 24 hours a day health services across the Territory. The remoteness and lack of resources coupled with the limited gross population provides a significant additional layer of costs in providing services, especially in times of adversity. Distances, lack of infrastructure (airstrips instead of airports) number, size and capability of airframes, and weather all have a significant impact on the costs of service delivery. There is a need to and desire to develop redundancy and capacity at the community level however this comes at significant cost.

All Northern Territory hospitals have different categories of risk. Darwin and Nhulunbuy's greatest risk is cyclone, Katherine is flooding and Tennant Creek and Alice Springs are fire and flooding. All have mass casualty incidents ranked at a very high risk due to the growth of tourism in the region.

To increase the resilience to natural disasters the Royal Darwin Hospital (RDH) recently upgraded its backup power capacity at a cost of \$35 million. This was jointly funded by the Northern Territory and Commonwealth Governments. The upgrade ensures full power to the RDH campus and incudes 5 days or 120,000L of fuel (1000L of fuel is used to power the campus per hour).

All Northern Territory hospitals require a back-up water supply; RDH has 5 million litres of water which would provide water supplies for 3-5 days. This capacity is a long way above what other states and territories would need to provide. The requirement for RDH to remain operative in emergencies cannot be over stated as the hospital provides a tertiary capacity from as far as the Timor Sea in the north, to the community of Elliott 1000km to the south and to the Western Australia border in the west across to the Queensland border in the east. There is over 1500km separating the only two intensive care units in the Northern Territory.

Northern Territory medical facilities also require a heightened level of redundancy and self-reliance at operational level. Overnight delivery of parts and equipment can take two days. There are very limited specialist repair services in the Northern Territory with most complex medical systems and equipment requiring maintenance sourced from interstate. Significantly in emergencies, repairs and maintenance where possible need to be done on site by locals. Northern Territory facilities are required to hold more consumables, parts and generalist repairers which create an additional cost to service delivery.

Northern Territory infrastructure in remote communities is often poorly constructed and ageing resulting in the cost of maintenance or ability to upgrade being exorbitant. Any increase from the Northern Territory budget towards risk management comes at a cost to other areas of identified need.

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?

The current Australian Government disaster funding (NPANDR \$1.5 million per annum for the Territory) has very limited impact on capital infrastructure projects. There have been some projects that have focussed on road access improvements and extra drainage for a remote airstrip to increase the resilience of the infrastructure under the NPANDR (refer to Appendix A).

NDRRA financing to date covers recovery of essential public assets on a needs basis.

NDRRA and NPANDR rarely has any major effect on projects funded through other means, however there are examples of investigative and mapping projects providing analysis that informs decision making for large infrastructure projects and future community subdivisions.

The high dependence of regional councils on 'tied' Commonwealth funding for agency programs continues to diminish the resilience of the remote local government sector in responding to disaster management. The fact that Commonwealth agencies have for many decades funded capital programs for infrastructure development in remote Aboriginal communities without providing any funds for maintenance has further limited the capacity of local councils to successfully manage and maintain critical community infrastructure. This leads to greater dependence on the NTG to support infrastructure restoration.

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?

The incentive to manage natural disaster risk is driven by the needs of the community, public safety, public welfare, the real or perceived liability of government (both social and financial); lessons learned from previous disaster events, locally, nationally and internationally.

Managing natural disaster risk is the core business of all tiers of government; however in the absence of federal funds coupled with Commonwealth Grants Commission equalisation payments, the Northern Territory would be unable to effectively manage natural disaster risk although the aforementioned incentives would still exist.

# The Commission's information request for state and territory governments

The Commission requested the following information from state and territory governments for the period 2002-03 to 2012-13 (on a financial year cash basis), and budget forward estimates where available. All expenditure on natural disaster mitigation and resilience (covering both structural and non-structural measures), including:

Expenditure funded through the National Partnership Agreement on Natural Disaster Resilience, including where possible a list of projects indicating the type of project and amount of funding provided

A list of expenditure and projects funded under the NPANDR is located in Attachment A.

Expenditure funded through other state/territory schemes or grant programs (such as general infrastructure budgets)

From a Northern Territory Government perspective it is not possible in the amount of time available to provide a detailed breakdown of all expenditure regarding capital upgrades that contributed to increasing resilience. This is especially difficult as historically Northern Territory infrastructure was constructed at a low standard so nearly all new work undertaken includes a mitigation or resilience element. Some key examples of this type of expenditure are detailed below:

# Cyclone shelter program see Attachment C.

The Northern Territory Government instigated a four year rolling program which commenced in 2007-08 and consisted of \$2 million annually for capital infrastructure and \$1 million towards grants on non-Northern Territory Government assets. The Program operated by upgrading suitable existing buildings to a Northern Territory cyclone shelter standard or paying the additional cost required to upgrade the construction of new buildings funded from other sources, such as the gymnasiums constructed under the Building Education Revolution.

**Upgrading of airstrips:** For information on the Northern Territory Government program to upgrade airstrips and improve safety at selected railway crossings see <u>Attachment E</u>.

**Backup power generation:** Backup power upgrade for Royal Darwin Hospital at a cost of \$35 million. This was jointly funded by the Northern Territory and Australian Government.

Other expenditure that contributes to natural disaster mitigation and resilience (for example flood mapping or early warning systems)

**Flood mapping:** For information on Flood mapping program and funding sources refer to Attachment B.

**Bushfire mitigation:** For information on bushfire mitigation programs and funding sources refer to Attachment F.

**Register, Find, Reunite:** NT Police and Emergency Services (PFES) funds Australian Red Cross to administer the National Information and Registration Enquiry System now known as Register, Find and Reunite the following amounts:

 From 2002 to 2011 \$47,500 annually (10 years) which increased to \$53,000 per year from 2012 with the agreement continuing until 2015. **Emergency Alert System:** PFES contributes an annual management contract fee to use the Emergency Alert System of \$3,090.

In addition to this annual management contract fee, a subscription fee to utilise the service is tabled below.

2010/11	2011/12	2012/13	2013/14
\$37,460.98	\$46,601.32	\$40,560.07	\$39,651.53

Data on the cost of damage to the state/territory from natural disasters over the past 10 years (or longer if available), categorised by type of disaster event.

The Northern Territory Government has provided a breakdown on the cost of damage and response to natural disaster events, see Attachment D.

The total value of state/territory and local government assets that are insured and uninsured, categorised by road and non-road assets.

For all insurance related questions please refer to the Northern Territory Treasury 'Review of the Northern Territory Assets and Insurable Risk Report' dated 3<sup>rd</sup> of July 2013. This report was provided to the Australian Government as part of a previous NDRRA review.

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?

Over the past decade the impacts of natural disaster events largely affected essential assets rather than individuals and businesses. The result being the Northern Territory has rarely activated assistance to small business, primary producers and not-for-profit organisations.

Recovery grants for Cyclone Carlos in 2011, was the first time Category C was activated and concessional interest rate loans under Category B were last activated in 2005-06. Many of the organisations eligible for this assistance are resilient and have adequate insurance. Despite this, the option to provide assistance is essential to ensure the regional and remote organisations can rebuild and continue operating within a reasonable period of time following an event.

Category A is activated in relation to Personal Hardship and Distress (PHD) following an assessment by the Department of Children and Families. It is this assessment that determines the level of need. The Department provides advice on the best way to administer and target the assistance to ensure the more vulnerable members of the community receive the necessary aid.

PHD assistance has been delivered in a number of ways and not always as a cash payment. PHD has been tailored or adjusted depending on the event, location and impact on the community. As many Northern Territory communities are remote and reliant on local community stores during the wet season, PHD assistance has at times been provided in the form of a voucher rather than cash. In recent years the vouchers were modelled on the same criteria as the Centrelink Basics Card. This ensured that the more vulnerable members of the community received necessary assistance and the benefit remained in the community.

For one event the provision of PHD was purposely delayed until evacuees were able to be relocated back to their community and could purchase goods in their local community. This delay provided time for the local shop to have adequate stock in place before residents returned. The delay also took into account evacuees were being relocated back to the community by bus and there was limited space to transport additional household goods and groceries.

Given the events of the past decade have been relatively isolated and not impacted on the larger populated areas of the Territory it is difficult to determine how effective the measures will be in a major event and whether the arrangements are targeted sufficiently to those in the greatest need.

The Northern Territory Government have linked elements of the NDRRA that require means testing on a similar basis to Centrelink's assessment. For example if an individual or family is eligible to receive a Centrelink payment then they would meet the Northern Territory eligibility criteria. The Northern Territory Government have an agreement with the Commonwealth Department of Human Services to pay NDRRA payments on the Territory's behalf using Centrelink systems if requested.

This is especially useful in remote aboriginal communities where a majority of the residents are Centrelink clients and their identity and place of residence can be easily verified as they are already in the Centrelink system. This means that both the Australian and Northern Territory Governments can provide and coordinate disaster payments benefits efficiently and effectively to those most in need.

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?

Although there have been no major inquiries in the past decade in the Northern Territory the TEMC consider recommendations of other jurisdictional inquiries and how they might impact on the Northern Territory context. An example of this came about from the analysis of multiple inquiries and reviews held in other jurisdictions which all found a need to better integrate recovery into emergency management arrangements. In the Territory this resulted in the review and repeal of the *Disasters Act* in favour of the *Emergency Management Act 2013*.

Following each emergency activation and disaster event a review is led by the hazard authority and recommendations for improvements provided to the TEMC. The progress and status of these recommendations and resulting actions are regularly reported to TEMC.

There are currently no recommendations relating specifically to NDRRA funding, however the TEMC have identified strategic priorities and actions that have been undertaken using NPANDR funding.

### 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?

Regional Councils servicing all remote communities in the Northern Territory have a severe limitation on rate revenue due to the very high percentage of welfare dependant residents. This makes the Northern Territory Government the majority rate payer due to the high percentages of public housing stock and very low private home ownership. This is further exacerbated by a serious contradiction in the methodology adopted by the Commonwealth Grants Commission which further limits council revenues and their ability to plan for and fund disaster mitigation and response.

A review of the CGC's Financial Assistance Grants commissioned by the previous government and completed in November 2013 (outcomes of the review are believed to be with the Minister for Local Government) raises an opportunity to address one of many inequities faced by residents of remote communities (and their Regional Councils). The FAGS principle of horizontal fiscal equalisation in the methodology contradicts the overriding "minimum grant" principle i.e. that each council should receive no less than 30% of the average grant. The different methodologies adopted by the State and Territory Grants Commissions result in quite different financial outcomes for similarly classified councils between the States and Territories. The *Local Government National Report 2008-09* confirmed this fact in its comparison of grants to councils across jurisdictions.

In the Northern Territory, the result is that around \$4 million is redirected from remote and regional councils to relatively well resourced municipal councils. Although Darwin City and four other councils receive the minimum per capita general purpose grant, the amount redistributed is minute compared to the amounts in other states where a substantial proportion of the population live in larger cities. As an example, the CGC 2008-09 Local Government report noted that Murchison Shire in Western Australia received \$12,728 per capita and Diamantina Shire in Queensland received \$11,196 per capita, while the highest per capita grant in the Northern Territory, for East Arnhem Shire, was \$223.

While local governments generate around 80% of their own revenue nationally, in many remote parts of the Territory, where there is extremely high unemployment, very low rate revenue, low average household income, and almost no home ownership, the 'own-source revenues' of regional councils is below 20%. Local government is therefore unable to sustain its own core functions without considerable income from the delivery of agency services for other governments. Funding from the Commonwealth Government remains a critical source of revenue for councils, particularly for programs and services for Aboriginal people residing in regional and remote communities.

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

Under the current horizontal fiscal equalisation (HFE) arrangements, states' assessed GST needs for natural disaster relief are based on what they actually spend, net of NDRRA funding from the Commonwealth. This Actual Per Capita (APC) treatment means that states that spend above the national average per capita amount on natural disaster relief are assessed as requiring more than the average per capita amount of GST revenue for that function, and vice versa.

While the Territory's view is that states' decisions regarding whether or not to purchase natural disaster insurance are not based on the expected impact on the GST distribution, the Territory notes that states' natural disaster insurance expenditure decisions interact with the HFE system in two ways.

Firstly, it could be argued that there is an incentive for a state to over-insure in order to increase its share of GST revenue, because states' GST revenue needs for natural disaster relief are based on actual expenditure. However, an incentive also exists for the state not to purchase natural disaster insurance, because in the event of a natural disaster, the costs to the state (net of NDRRA funding from the Commonwealth) will be partially recouped through an increase in its assessed GST needs. This means that the costs of the disaster are partially shared by all states.

The Territory's view is that it is unlikely that states would over or under-insure against the risk of natural disasters based on HFE outcomes. States' decisions to purchase natural disaster insurance are a reflection of the risk of natural disaster events in the state, and state governments' fiscal priorities.

There are three broad funding models for states disaster relief expenditure:

- 1. The state which incurs the disaster bears all costs. i.e. no HFE
- 2. All states bear the costs of all states aggregate disaster expenditure. i.e. HFE without Commonwealth support
- 3. All states and the Commonwealth bear the costs of the states' aggregate disaster expenditure. i.e. HFE with Commonwealth support.

The third model offers the greatest opportunity for the cost-effective funding of relief expenditure.

At a national level this approach of pooling the state's asset risks between the states and the Commonwealth should provide for the optimal cost outcome through the benefits of aggregation and diversification. It would also reduce the requirement of states to purchase external reinsurance, at a higher cost, to smooth their individual risks over time. Such a model would be akin to common arrangements for captives for large insurance companies.

Notwithstanding the reduction in the volatility of losses that reinsurance provides, commercial reinsurance arrangements would generate higher costs for all taxpayers over the long term than comparable self-insurance due to Government's ability to access capital more cost-effectively. Reinsurance should be considered where the magnitude of the loss from an event is not acceptable to the insured parties.

In this respect, the capacity of the Commonwealth to absorb the initial financial shock associated with large natural disasters, due to its broader revenue base, along with the sharing of costs through HFE, can effectively mitigate the exposure and reduce the volatility of costs over time.

While the current state/Commonwealth funding arrangements fall under the third model, they appear to provide contradictory incentives to under-insure (under NDRRA) or over-insure (via HFE).

The Productivity Commissions issues paper states that "The NDRRA effectively provide a form of default insurance at low cost to state and territory governments for damage to some assets. These provisions significantly reduce or eliminate the net benefits to state and territory governments of taking out insurance."

As noted previously, the current structure is inefficient as it encourages each jurisdiction to individually source insurance for its own risks. The aggregate cost of this insurance (and any residual losses) is then allocated across the states. Such an approach results in the loss of aggregation benefits that states could otherwise receive by combining their natural disaster risks.

#### Assessing the current arrangements

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

The Northern Territory Government support the current NDRRA objective to assist jurisdictions to recover following a natural disaster event by providing funding in excess of the jurisdictions financial capability. This could be further enhanced by investing in strategic capital disaster mitigation projects to reduce costs of future damage from disasters.

### Roles and responsibilities for risk management

The NDRRA Determination states that the general principles of the Arrangements are that:

... its assistance is not to supplant, or operate as a disincentive for, self-help by way
of either access to capital or appropriate strategies of disaster mitigation; and as far
as practicable, its assistance is to be designed to achieve an efficient allocation of
resources. (Attorney-General's Department 2012)

These conditions attempt to replicate, through prescription, incentives for state and territory governments to behave in a way that is consistent with roles and responsibilities for risk management being allocated to the owners of assets.

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

From a risk management perspective it is the owner or responsible agency that is allocated responsibility. In respect to Government Owned Corporations (GoC) or Government Business Divisions (GBD) assets are insured if it has been assessed as the most cost effective method to repair or replace.

In the Northern Territory local governments are required to insure all public assets. This is reinforced through Section 101 of the *Local Government Act* (and through the Accounting Regulations and Accounting Standards). However in reality there are assets that are uninsurable such as the local (internal community) road network. Over the last few years when an eligible disaster event is declared the greater proportion of claims from local government to the Northern Territory Government relate to reinstatement of the road network, tree removal in public areas and repair of damage created by fallen trees.

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

The Australian Government has a role that assists with the gap between the state and territory's ability to respond and recover from a disaster. NDRRA provides the methodology to provide this assistance, what it doesn't do is assist jurisdictions to mitigate against natural hazardous events in any significant way.

The betterment provision was developed to increase an asset's resilience to events and reduce the cost of repeat damage following disasters. However as there has only been two cases of betterment provisions being provided nationally clearly this framework is not workable for jurisdictions or local governments.

Betterment and mitigation should be removed from NDRRA with separate arrangements made, possibly in the NPANDR, and funded adequately to incorporate jurisdictional priorities against state-wide risk assessments.

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

Where betterment and mitigation is concerned the prescriptive arrangements are ineffective and carry an unjustified compliance burden. The basic principles of NDRRA that refers to replacing 'like for like' are sound.

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?

There are provisions under the NDRRA Determination that allow the Commonwealth to adjust reimbursements of eligible expenditure but they have not been widely applied.

From the Territory's perspective, the provisions are adequately enforced. The Commonwealth has the option under the Determination, not to fund jurisdictions if provisions are not met. Under the current arrangements, the Commonwealth has the onus of ensuring compliance and one method is the option to conduct its own audit on any claims from jurisdictions.

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?

Under NDRRA arrangements, the majority of costs are borne by the states/territories in which the natural disaster occurs, with the Commonwealth providing the safety net through the threshold arrangements.

Under HFE, states/territories are provided with funds on the basis that each would have the fiscal capacity to provide services and the associated infrastructure at the same standard. This is achieved by adjusting GST payments to states for unavoidable differences in their costs of delivering services, and capacities to raise revenues. As such, higher than average costs, such as those associated with asset and liability management activities, are shared (not shifted) between states as they emerge over time in response to natural disaster events.

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

The assistance provided by the Northern Territory Government to individuals and businesses is way below the actual replacement costs for all damage or lost goods; rather it provides minimal assistance to enable these groups to commence the recovery process.

The majority of the Territory's indigenous homelands/communities do not have own source revenue and are reliant on Commonwealth/Territory government grants to assist in the event of a natural disaster. These communities are introducing basic prevention strategies such as elevating household goods when a flood threat is imminent (Daly River 2014) and moving to evacuation centres or other shelters where appropriate however, the majority of the cost is borne by government.

From a Northern Territory Government perspective the decision to insure or not insure assets is based on whether it is cost effective to insure or replace an asset if it is damaged or lost. For most of the Northern Territory Government asset's it is generally more cost effective to meet claims on an emerging cost basis. This reflects the Government's financial capacity to meet claims from within existing resources while avoiding insurance premium costs.

Since 1997 and 2011 in relation to the Australian Government assistance to the Northern Territory Government through NDRRA reimbursements for natural disaster events was around 40% of the total disaster costs, with no claim for reimbursement in 2012-13 and is unlikely in 2013-14. Consequently the current arrangements are the most cost effective way for the Northern Territory Government to manage the natural disaster risk.

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?

The Territory has borne 70% of the full costs of natural disaster reconstruction in the past decade due to threshold arrangements applicable under the NDRRA. As stated previously the majority of costs can be attributed to the Northern Territory road network and where ever possible (funding dependant and therefore infrequently), mitigation work is included in repairs.

The Northern Territory land mass is one seventh of Australia over which the majority of the road network is not paved and it is not cost effective to insure these assts.

To what extent is moral hazard a significant problem at the household and business level in Australia?

The Northern Territory Government do not consider this to be a significant problem in the Northern Territory at this time. This is possibly more of an issue for other jurisdictions where government payments following an event are seen as a right. Having said that, Territorians are becoming increasingly aware of the availability of those payments and their expectations are growing accordingly.

The Northern Territory Government is not aware of any evidence that would indicate local businesses are, or are not insuring due to NDRRA arrangements.

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

The Northern Territory currently operates a self-insurance arrangement for general government sector insurable risks. For catastrophic natural disasters, this is complimented by NDRRA assistance. Territory Government agencies are required to meet claims on an emerging cost basis. Premium contributions are not paid by agencies for the self-insurance arrangement.

A notional budget allowance of \$10 million is provided annually within the Treasurer's Advance mechanism for use at the whole-of-government level. Payments are made to agencies as needed in the context of overall budget requirements. Agencies are required to demonstrate they cannot meet claims from existing budget appropriation before they can access Treasurer's Advance. Yearly surpluses and deficits from the allowance are not carried forward into future years.

As such, the Territory's current risk management strategy entails the Territory bearing the majority of risk for historically minor disaster events on an emerging cost basis from within normal budgetary resources, with the remainder of disaster expenditure being funded through NDRRA assistance from the Commonwealth.

For major disaster events the Commonwealth, through the NDRRA, effectively provides quota share reinsurance for the Territory for disasters in excess of applicable thresholds.

In this respect, due to the tiered approach for Commonwealth support, the Territory typically bears the majority of costs for essential public assets (mainly roads) where mitigation and betterment could be cost-effective and considered.

Government business divisions and government-owned corporations that own essential public assets, including the PWC and Darwin Port Corporation (DPC), are required to operate on a commercial basis, including the procurement of insurance arrangements.

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

State and territory governments have varying approaches to risk management more generally. This reflects the differing circumstances of each jurisdiction, where aspects such as scale and broader policy settings, such as state involvement in insurance markets, can play an important role in the cost-effectiveness of different risk management models.

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

The current arrangements need to be considered in full, including the interaction of the NDRRA and HFE. As noted above, these provide conflicting incentives for state and territory governments with regard to purchasing insurance.

For the Territory, its insurance arrangements for essential public assets are consistent with broader government policy to self-insure risks of an insurable nature to the greatest extent possible, as it is generally more cost effective to meet claims on an emerging cost basis. This reflects the Government's financial capacity to meet claims from within existing resources while avoiding insurance premium costs.

Nevertheless, if the state/Commonwealth arrangements for natural disaster risks were varied, The Territory's current approach would need to be reconsidered.

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

While there is assistance provided under NDRRA, it does not generally cover the replacement costs of property to households and businesses so there is a strong incentive for insurance. From a household perspective the NDRRA acts more as a social welfare safety net and provides assistance to those who may find it difficult to initially access money due to the disaster event.

# 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?

A number of research papers have recently been compiled which look at the cost benefit analysis of how mitigation expenditure reduces recovery expenditure. One tool the Commission could utilise to contribute to the overall assessment is the nationally endorsed National Emergency Risk Assessment Guidelines (NERAG). Jurisdictions have recently or are in the process of finalising territory/state-wide hazard risk assessments using the NERAG.

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?

No, the greater amount of funding is going into recovery and restoration and the same assets are often damaged from separate natural disaster events occurring at different times. The Territory does fund mitigation activities when funding allows however this is isolated due to the large investment required to have a significant impact.

The Northern Territory Government agree that there is a strong case to change the level and balance for disaster mitigation and resilience expenditure.

# 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?

In 2012 the Australian and New Zealand Emergency Management Council (ANZEMC) oversaw the *Enhancing Disaster Resilience in the Built Environment* project. This project was implemented by all jurisdictions and involved a current state review of existing land-use planning and building and emergency management legislation, a gap analysis of current arrangements and the production of a roadmap document identifying priorities for future improvement.

The Enhancing Disaster Resilience in the Built Environment Roadmap was endorsed by the Standing Council for Police and Emergency Management (SCPEM) in November 2012. The Roadmap provides a framework for all states and territories to prioritise natural disaster mitigation options in relation to the built environment. All jurisdictions have since agreed to the development of a Capability and Investment Plan for Enhancing Disaster Resilience in the Built Environment, which will provide a key future mechanism for prioritising natural disaster mitigation options in regard to the built environment.

An important priority for the Northern Territory, which is recognised in the *Enhancing Disaster Resilience in the Built Environment Roadmap*, *NT Capability and Investment Plan* (currently in development) and *NT Risk Assessment and Risk Register*, is the need to provide improved natural disaster hazard data and mapping to support the implementation of mitigation options in land-use planning, building control and emergency management processes.

The Northern Territory has recently invested significant effort and resources to address this priority, including the development of new flood hazard mapping for the Rapid Creek catchment and updated storm tide inundation mapping for the Darwin Region.

The Northern Territory Government undertakes flood studies and flood mapping on behalf of city, town councils and communities, to understand the flood risk and manage land use planning and emergency response. All cities, towns and communities in the Northern Territory that are vulnerable to either riverine flooding, storm surge inundation or both have been identified. Not all identified vulnerable areas have been subject to a proper flood study and flood mapping.

The Northern Territory Government adopted a floodplain management policy in 1980 with the establishment of NT Floodplain Management Committee (NTFMC). As a majority of Territory communities are remotely located and have no previous flood mapping done the Northern Territory Government utilise the NTFMC to review and prioritise future flood and storm tide mapping. A "fit for purpose" approach is adopted to understand the flood risk. Most communities do not have the basic information for a basic flood study. In these cases, flood intelligence (if available) and anecdotal flood evidence is used to understand the flood risk. See Attachment F for the NTFMC Terms of Reference.

The NPANDR has provided funds to assist with the cost to undertake flood mapping of some vulnerable communities using the prioritisation of the NTFMC.

The Northern Territory Government utilise the nationally endorsed National Emergency Risk Assessment Guidelines to assess the most likely natural hazards to affect the Northern Territory and their potential impact on communities. These assessments provide guidance to the NPANDR approval process for potential funded projects.

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

The majority of the Territory's Local Government bodies rely primarily on grants/funding from the Northern Territory Government. Only the major municipal councils would have some capacity to participate in these activities.

The majority of local governments in the Northern Territory would not at this time have the capability to undertake cost-benefit analysis on mitigation activities unless they were resourced to do so.

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

Policies regarding land-use planning and infrastructure play a key role in driving improvements in natural disaster risk management at the state and local government levels. The policy framework provided by the NSDR has been particularly important in promoting the development of effective risk-based land-use planning arrangements and other mitigation activities.

The NSDR contains a number of priorities that have provided an important focus for actions to improve disaster resilience in relation to land-use planning and infrastructure in the Northern Territory, including objectives for:

- Understanding risks
- Communicating with and educating people about risks
- Empowering individuals and communities to exercise choice and take responsibility
- Reducing risks in the built environment
- Supporting capabilities for disaster resilience

The implementation of programs and initiatives to support these objectives has resulted in a range of practical outcomes that have contributed to improved natural disaster risk management, including:

- The secureNT natural disaster resilience campaign encouraging Territorians to be prepared for cyclones, bushfires, floods and other natural disasters.
- Publicly available storm surge hazard mapping for the Darwin Region, Palmerston, Cox Peninsula, Dundee and Weddell.
- New publicly available flood hazard mapping for priority areas including Alice Springs, Borroloola, Katherine and the Darwin suburb of Rapid Creek.
- Provision of site-specific survey information on flood hazard and mitigation options to affected landowners in the Rapid Creek catchment.
- New regional land-use plans for Katherine and Darwin, including information on priority natural hazards.
- New area plans for major remote towns across the Territory, including information on flood risk and storm surge hazards.
- Development of a NT Disaster Risk Assessment and Risk Register.
- Preparation of a NT Capability and Investment Plan for Enhancing Disaster Resilience in the Built Environment (not yet complete).

The NPANDR provides funding for initiatives that align with the NSDR and has been instrumental in facilitating activities to improve natural disaster risk management in the Northern Territory. The ongoing support of the Australian Government through arrangements such as the NPANDR will be important to ensure the continued implementation of programs to improve natural disaster mitigation at the state and local government levels.

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

Greater information provision and disclosure are important requirements for supporting the consideration of natural disaster risks in planning decisions of government and development proposals by owners. These objectives are central to achieving priority outcomes under the NSDR to empower individuals and communities to better understand and take responsibility for managing natural disaster risks.

A number of measures have recently been implemented in the Northern Territory consistent with these objectives, including:

- Production and release of new publicly available flood hazard mapping for the Rapid Creek catchment, and consequential amendments to the NT Planning Scheme, responding to a changed risk profile;
- Amendments to the NT Planning Scheme requiring the disclosure of detailed flood hazard information in development applications for all subdivisions of rural and unzoned land;
- An ongoing program of modelling and mapping storm surge hazards for population centres along the NT coastline; and
- Soon to be released Northern Territory Risk Assessment summary.

Ensuring technically robust data about natural disaster risks is an important component in providing for greater information provision and disclosure in planning decisions. For a jurisdiction such as the Northern Territory, with a relatively small population and extensive land area, resourcing the production of natural hazard data and mapping is an ongoing challenge. The continued provision of funding by the Australian Government through arrangements such as the NPANDR will be important to maintain progress in this area.

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 reform options are available?

The current natural disaster funding arrangements under the NPANDR and NDRRA are important in establishing priorities for land-use planning, risk reflective asset pricing and infrastructure at the state and local levels.

The objectives of the NPANDR are closely aligned with the NSDR, while the NDRRA *Determination* includes criteria requiring that the States and Territories develop 'appropriate strategies for disaster mitigation'. However the majority of NDRRA funding is heavily weighted towards the cost of restoration and repair rather than that of mitigation or resilience.

As described above, these features of the current funding arrangements have helped drive the implementation of a number of programs and initiatives to improve disaster risk management in the Northern Territory and promoted the development of natural disaster mitigation strategies, such as the NT Disaster Risk Assessment and Risk Register and the NT Capability and Investment Plan for Enhancing Disaster Resilience in the Built Environment.

The recently-released report of the National Commission of Audit recommended substantial change to the natural disaster funding arrangements, and proposed an alternative option of retaining the NDRRA, but changing some aspects of the arrangements. It recommended that changes to mitigation funding should be considered following the Productivity Commission Inquiry.

### Modifications to the 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?

As the Northern Territory Government funds local government bodies, this would add another layer of compliance and reporting.

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)?

The options put forward by the Commission of Audit would effectively shift a greater proportion of the cost of natural disasters to the HFE process, and further promote the purchase of a greater level of insurance cover by states (as identified above). It is not clear how this would provide an overall net benefit at the national level.

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

Depending on the level of reform to the threshold and contribution levels this could reduce the funding burden on the Australian Government but stretch the financial capability of jurisdictions which could have a major impact on the Northern Territory.

#### Implementing reforms

The Commission is seeking comment on the impact and timing of reforms and on transitional arrangements.

Who should be responsible for implementing the reforms?

The Australian New Zealand Emergency Management Committee and its subordinate committees in conjunction with jurisdictional Treasury representatives would be best to lead the direction and implementation of reforms at the national level. Each jurisdiction would need to nominate a central coordinator to direct the reforms under each subject (resilience, mitigation, betterment, etc.) across agencies.

Are transitional financial arrangements required?

It is quite possible as it will depend on what is included in the reform and if a jurisdiction is in the process of applying for NDRRA at the time. Any reform to NDRRA will create a flow on effect to jurisdictions that will need to review their process for providing support to individuals, businesses and local government.

When should the reforms be reviewed and evaluated?

Again this would depend on the reforms and transitional arrangements. Changes to the NDRRA Determination as a result of the review following the significant and severity of natural disasters throughout Australia in 2011, were proposed for the next natural disaster season. This review was extended as some of the nominated changes were highlighted by jurisdictions as being not workable. The Territory was not an active participant in this review as it was not affected by natural disaster events as severely in 2012-13 or this Wet season.

# **Expenditure funded through the NPANDR**

# 2009-2010

Funding Recipient	Project Description	NTNDRP Funding Provided (\$)
Northern Territory Police, Fire and Emergency Services	Project Name: Incident Control Management Program  Description: Provides Emergency Operation Centres with appropriate software and training required to provide an integrated management system for emergency management throughout the NT.	279,956
Local Government Association of the Northern Territory	Project Name: Shires and Councils Emergency Management Planning Workshop program  Description: Provide 11 shire councils and 5 municipal councils throughout the NT with the ability to conduct emergency planning workshops for their key staff	151,235
Department of the Chief Minister	Project Name: Disaster Risk Assessment  Description: Territory-wide prioritised natural disaster risk assessment developed in accordance with relevant Australian Standards.	131,781
Northern Territory Emergency Service	Project Name: Indigenous Community Service and Emergency Announcements Program  Description: Provide indigenous communities throughout the NT with Community Service Announcements and Emergency Messages for natural disasters in their own languages.	18,123
Total 2009-2010		581,095

# 2010-2011

Funding Recipient	Project Description	NTNDRP Funding Provided (\$)
Livingstone Volunteer Bushfire Brigade	Project Name: Building Improvements to LVBB Headquarters  Description: The objective of this project is to improve the utility of the building to conduct training for Volunteer Brigades.	42,000
Humpty Doo Volunteer Fire Brigade	Project Name: Training and Meeting Facility  Description: The objective of this project is to acquire and install a demountable that is suitable for conducting fire and other emergency operations including training and Brigade meetings. The facility will also be required to store equipment and provide office, bathroom, laundry and kitchen facilities.	50,000
Koolpinyah Volunteer Fire Brigade	Project Name: Building Extension for Training and Meeting Room  Description: The objective of this project is to construct a training/meeting room to allow training sessions and meetings to be conducted indoors without disruption by the weather and plagues of insects.	50,000
Gove Peninsula Surf Life Saving Club	Project Name: Training Room Fit Out  Description: The objective of this project is to purchase audio visual equipment for the club training room for the provision of volunteer training and community education programs.	9,885
Surf Life Saving Northern Territory	Project Name: Equipment for Volunteer Aquatic Offshore Rescue Boat Service  Description: The objective of this project is to purchase safety, navigation and communications equipment for the new Darwin Volunteer aquatic offshore rescue boat service.	11,300
Northern Territory Emergency Service Darwin Volunteer Unit	Project Name: Small Craft  Description: The objective of this project is to assist members to maintain their currency in small craft handling.	30,475

Northern Territory Emergency Service Darwin Volunteer Unit	Project Name: Ice Machine  Description: The objective of this project is to provide ice for Unit Training, Community Events for recruitment of Volunteers, relieving heat stress and providing cool water or ice for beverages/food storage during operational responses or public events.	2,795
Northern Territory Emergency Service Tennant Creek Volunteer Unit	Project Name: Flood Operations and Training Capability Upgrade  Description: The objective of this project is to improve the Tennant Creek Volunteer Unit's operational response capability, increase community resilience for inland flooding events and inland water search and rescue operations in the Tennant Creek and Barkly Region. This project will also enhance the unit's recruitment and retention of new volunteer members, and will improve the resource capability of the Southern Region area during times of severe flooding.	15,245
Northern Territory Emergency Service Palmerston Volunteer Unit	Project Name: PVU Upgrade 2010  Description: The objective of this project is to upgrade IT hardware with enhanced mapping software to upgrade navigation and land search training and land/marine search and rescue capability.	11,478
Australian Red Cross Society	Project Name: Engaging Communities through Volunteer Trainers and Facilitators  Description: The objective of this project is to recruit and train the community members and Red Cross volunteers as trainers and/or facilitators across the NT. This will allow for provision of training and other workshops to Red Cross people, the general community and partner agencies in Red Cross Emergency Services roles, and emergency awareness and preparedness. Courses may include Personal Support, Evacuation Centre Management, Team Leadership, NRIS, Spontaneous Volunteer Management, AIIMS, Diversity Awareness, and REDiPlan Community Speaker. Specific courses/workshops to be delivered will depend upon specific communities' needs.	49,165
Northern Territory Emergency Service	Project Name: Indigenous Community Self Resilience, Pre-Disaster  Description: The objective of this project is to improve community education and awareness by producing brochures and talking posters at a community level outlining the need for resilience pre-disaster.	14,230

St John Ambulance Australia NT Inc	Project Name: First Aid Volunteer Response Equipment Storage Facilities  Description: The objective of this project is to provide secure and well stocked storage facilities for Volunteer equipment.  Project Name: Roper Gulf's Communication	68,182 55,455
Roper Gulf Shire Council	Resilience for Disasters  Description: The objective of this project is to ensure continuity of communications throughout the Roper Gulf Shire before, during and after a natural event.	66,466
Northern Territory Police, Fire and Emergency Services	Project Name: Upgrade to Counter Disaster Council Incident Room  Description: The objective of this project is to develop a purpose built Incident Room for the Northern Territory Counter Disaster Council and the Territory Controller to monitor and assist all emergencies at Territory and National level.	374,397
Northern Territory Police, Fire and Emergency Services	Project Name: All Agency Incident Management System (WebEOC Development)  Description: The objective of this project is to create a whole of government incident management system through incorporating purpose built boards within WebEOC to replicate existing information templates currently being used by government departments.	79,969
Northern Territory Police, Fire and Emergency Services	Project Name: Emergency Manager Online Training Description: The objective of this project is to develop eLearning Packages for Local Controllers and Local Counter Disaster Planning Committee (LCDPC) members in remote Northern Territory communities advising them of their roles and responsibilities.	12,931
Northern Territory Police, Fire and Emergency Services	Project Name: All Agency WebEOC to GIS Integration (WebEOC Development)  Description: The objective of this project is to create spatially enabled boards within the WebEOC and enable these to link incident information directly into the NT Government GIS system, NT Visualiser.	57,086
Roper Gulf Shire Council	Project Name: RGSC Recovery Plan and Evacuation Centre Standard Operating Procedures  Description: The objective of this project is to develop a Shire Recovery Plan specifically for the Roper Gulf Shire Council and make the plan available as a preferred model for all remote area Shires within the Northern Territory.	50,000 984,593
10(01 2010-2011		, -

Funding Recipient	Project Description	NTNDRP Funding Provided (\$)
Darwin Volunteer Unit (NTES) Association	Project Name: Upgrade Darwin Volunteer Unit Equipment  Description: To improve capability through acquisition of new equipment including GPS units, shelters, USAR lighting system.	16,355
Virginia Volunteer Fire Brigade Inc.	Project Name: Training and Meeting Facility  Description: To install a shed for conducting fire and other emergency operations including recruitment, training and Brigade meetings.	45,455
Tennant Creek Volunteer Association Inc. (NTES)	Project Name: Lighting Operations and Training Capability Upgrade  Description: To acquire additional lighting capabilities for timely and effective operational responses in Tennant Creek and the wider Barkley Region.	5,818
Darwin Volunteer Unit (NTES) Association	Project Name: Lightweight Shirts  Description: To purchase and distribute lightweight shirts to all Northern Territory Emergency Service Volunteers across the Territory to perform community events.	13,636
Harts Range NTES Volunteer Unit	Project Name: Lighting for Rescue Trailer  Description: To provide efficient and flexible battery operated powered lighting on the Harts Range Volunteer Units rescue trailer to enable quick, silent and reliable illumination in a rescue task or support role.	5,455
Howard Springs Volunteer Fire Brigade	Project Name: Training Room Amenities  Description: To provide amenities (male and female toilets and showers, kitchen and storage area) to members, their families and visitors to the station who are undertaking in training, attending weekly meetings or equipment maintenance.	49,172
Koolpinyah Volunteer Fire Brigade Inc.	Project Name: Creation of Outdoor Training, Drill and Leisure Area  Description: To establish an outdoor training, drill and leisure area by filling, reshaping, draining and landscaping an area that is seasonably subjected to annual flooding and in its current state unusable.	19,000

Milne Volunteer Bush Fire Brigade Inc.	Project Name: Meeting and Training Room Facility that can also Serve as an Emergency Cyclone Shelter  Description: To purchase a purpose built room to facilitate training courses and provide a secure and suitable location for audio visual training equipment. The facility will be built to cyclonic code requirements by the supplier and attached to the required footings onsite. An additional roof structure will also be erected. In the absence of a suitable cyclone shelter in the community this facility can also serve as a cyclone shelter for residents whose homes are not suitable to shelter in.	45,455
Surf Life Saving Northern Territory Inc.	Project Name: Emergency Search and Rescue Training for Offshore Rescue Boat Service  Description: To fund volunteer SAR training, marine qualifications and essential training equipment for the new Darwin Volunteer Offshore Rescue Boat Service. The project also incorporates communication capabilities with the installation of a VHF Repeater Booster at Casuarina Beach.	18,036
Surf Life Saving Northern Territory Inc.	Project Name: Provision of Equipment for Community Emergency and Volunteer Training  Description: To purchase two Inflatable Rescue Boat (IRB) hulls for use in training and by life savers during aquatic emergency rescues and surveillance operations.	21,818
Alice Springs Volunteer Unit NTES	Project Name: Alice Springs Volunteer Unit Equipment Upgrade  Description: To upgrade emergency response lighting capabilities for the Alice Springs NTES Volunteer Unit through the purchase of all-weather lunar lighting. Improve training in areas such as vertical rescue, general rescue, land search, stretcher and first aid training through purchase of new rescue dummy.	34,074
Cox Peninsula NTES Volunteer Unit	Project Name: Training Room Facilities  Description: To improve the Cox Peninsula training room facilities through the installation of shelving for storage space, overhead fans to reduce heat within shed and an ice machine to improve the OH&S standards of volunteer members during training and operations.	9,004

MacDonnell Shire Council	Project Name: Titjikala Floodway  Description: To upgrade and extend existing floodway including the construction of table drains and installation of flood markers. This will reduce the amount of time that the community spends divided in two due to flooding events and improve the continuity if health and education services during rain periods.	68,182
Katherine Town Council	Project Name: Feasibility Study of Levee Bank Construction  Description: The project will determine the cost and feasibility of constructing three levee banks for a 1:20 year flood occurrence event in the Katherine township. One of the proposed levees is located around the Katherine Hospital which has been severely impacted by flood events in the past.	20,756
Darwin City Council	Project Name: Darwin City Council All Hazards Emergency Management Plan  Description: The project will build community resilience in Darwin by strengthening emergency recovery plans. The project will include:  1. Darwin City Council all Hazards Emergency Management Plan – including Emergency Management , Business Continuity and Community Resilience / Recovery,  2. Communications Plan to raise community awareness of the all Hazards Emergency Management Plan, and  3. Dedicated Business continuity Management software that uses an all hazards approach.	36,364
Northern Territory Police Fire and Emergency Services	Project Name: Regional Training Facility  Description: The installation of, including all services, a demountable building for use as a regional Police fire and Emergency Service training centre for the Southern Region.	75,000
Marthakal Homeland Resource Centre	Project Name: Mapuru Airstrip Drainage Upgrade  Description: To allow for the provision of emergency services access and the transportation of food, fuel and medical supplies to the Marthakal Homeland outstations and the Mapuru Homeland during the wet season. The airstrip is currently unusable during peak rain periods due to poor drainage, this funding covers Stage 1 of the drainage project.	34,455

St John Ambulance Australia (NT) Inc	Project Name: Making First aid a part of life for every Territorian – Targeting Youth and Families  Description: The project will deliver two different initiatives over 12 months that will deliver the same message to two different audiences – Youth and Families. Targeting Youth is "First@Scene" with the aim of delivering first aid course material to more than 2000 students and school leavers and the development of an online course. Targeting Families in "Everything Else Can Wait" campaign utilising emergency management personnel as ambassadors and featuring Territorians who have been saved by their first aid. Aim is to have one person in every 44,000 households with dependants in the Territory trained in first aid.	64,489
City of Palmerston	Project Name: City of Palmerston All Hazards Emergency Management Plan  Description: To engage a consultant to assist in the development and implantation of an All Hazards Emergency Management for the City of Palmerston ensuring that the emergency management arrangements are in line with the Greater Darwin All Hazards emergency Management Plan.	15,000
Litchfield Council	Project Name: Standby Generator at Litchfield Council Office  Description: The purchase and installation of a standby generator for Litchfield Shire Council Office which is the Emergency Operation Centre for the Litchfield Shire.	19,991
Alice Town Council	Project Name: New Boom Gates to Improve Safety at River  Description: To upgrade and install boom gates at the five Alice Springs crossing including the provision of flashing lights, clear redirection signage (bi-lingual) and vehicle and pedestrian barriers. In 2010 there was one death and one major incident due to people bypassing current barriers and ignoring signage.	67,273
Katherine Counter Disaster Committee	Project Name: Katherine Flood Brochure and Katherine Flood Recovery Brochure  Description: The design, printing and distribution of 30,000 Flood Brochures and 10,000 Recovery Brochures to augment the Floodsafe activities run by the Katherine Counter Disaster Planning Committee each year. The purchase of one page in Katherine Community Directory for Flood information. The information will incorporate updated flood modelling maps.	19,091

T	B	34,091
Tiwi Island Shire Council	Project Name: Wurankuwu Road Washouts  Description: To re-establish the Wurankuwu Road between Nguiu and Ranku communities and the refuse tip. The road suffered severe erosion as a result of Cyclone Carlos. The works will provide and increased capacity for the road to deal with future flooding and cyclone activity through the provision of deeper and more extended side drains and the installation of underground pipes to effectively disperse water from road.	34,091
Tiwi Island Shire Council	Project Name: Paru Bridge Creek Realignment  Description: The Paru Bridge is located on the road that links Nguiu to Milikapiti and Pirlangimpi communities as well as other remote outstations on Melville Island. The project is to mitigate the effects of flood water overtopping the bridge and scouring the edges of embankments adjacent to the structure. The project involves realigning the upstream approach to the bridge and laying scour protection mats on the banks.	45,455
Marngarr Resource Centre Aboriginal Corporation	Project Name: Birany Birany Airstrip Upgrade and Flood Measures  Description: To allow for the provision of emergency services access and the transportation of food, fuel and medical supplies to the remote community of Birany Birany. The airstrip is currently unusable during peak rain periods due to poor surface condition and drainage.	18,152
Tiwi Island Shire Council	Project Name: Replacement of Culverts at Nguiu  Description: To mitigate stormwater inundation of the culvert at Malawu Street causing widespread flooding of road network and isolating approximately 450 people located in Forestry. The flood water is also affecting the sewer power pump station. The project will involve removing existing three culverts and replacing with four larger box culverts.	18,549
Northern Territory Police Fire and Emergency Service	Project Name: Counter Disaster Council Training  Description: To facilitate the visitation of Mr Mark Scoggins, a solicitor advocate who specialises in the defence of organisations and individuals in regulatory cases including those arising from the management of emergencies. Mr Scoggins will provide a lecture free of charge to approximately 200 emergency managers from across the Territory with the aim of creating more informed and considered decision making from senior emergency managers.	20,000

Northern Territory Police Fire and Emergency Service	Project Name: Managing emergencies in the Bush — Quick Guide for Remote Residents  Description: A Community awareness / education initiative designed to provide workplaces and households of key community workers in areas such as health, education, local business and government with a quick step guide / aide memoir on how to prepare the community for emergencies and what actions to take in the event of an emergency situation. The product will be a 6 leaf magnetic booklet distributed to at least 50 of the higher risk major and minor NT aboriginal communities as well as most remote towns.	12,896
Department of the Chief Minister	Project Name: Northern Territory Emergency Accommodation and Cyclone Recovery Plan  Description: Project is to facilitate better planning across the NT for the provision of welfare and emergency accommodation services in response to the impact of a cyclone, flood etc. The project will fund a position for a period of 12 months with the Department of the Chief Minister Security and Emergency Recovery Section. The employee with develop 6 Temporary Accommodation Centre Plans (2 for each region), A Temporary Emergency Accommodation Centre Guide (including funding and reimbursement arrangements), and a Darwin Post Cyclone Welfare Arrangements / Recovery Plan.	157,421
Local Government Association of the Northern Territory	Project Name: Enhancing Local Government and Community Capacity to Recover from Disasters  Description: The project will cover a number of aspects to assist Local Governments across the Territory in developing their emergency management and recovery capabilities. A project Officer will be employed by LGANT to facilitate training and provide support to councils, LGANT will engage with EMAI to develop training for NT Shires and this will be delivered in Darwin and Alice Springs, participants will take training back to their councils and communities and further develop their community capabilities and conduct community scenario planning/training. The Project Officer will also work with councils to assist in the development of emergency Management Recovery Plans.	189,500

No who area To well area	District Names All Assess Incident Management	96,950
Northern Territory Police Fire and	Project Name: All Agency Incident Management System (WebEOC) Development	00,000
Emergency Service	Description: To expand the All Agency Incident Management System to apply risk management processes, identify gaps and vulnerabilities and facilitate evidence based risk treatments. The project will involve the planning, design and development of within purpose built prevention and preparedness boards within the WebEOC that allow Government Agencies to enter their own arrangements, contacts, systems, dependencies, asset and resource locations within purpose built prevention and preparedness boards. Once entered this information can be shared among key stakeholders with aligned roles and responsibilities facilitating essential information sharing within one system regardless of the agency.	
Northern Territory Police Fire and Emergency	Project Name: All Agency Geo-Coding Capability linked to WebEOC and GIS Integration (WebEOC Development)	90,500
Service	<b>Description:</b> To add geo-coding capabilities to the existing NT Government spatial data infrastructure, augmented with appropriate search and discover functionality. This capability will improve situational awareness, reduce timeframes for critical decision making, enable greater efficiencies with allocation of resources, and improve planning and modelling arrangements.	
Department of the Chief Minister	<b>Project Name:</b> SecureNT Community Awareness Campaign	92,500
	<b>Description:</b> To develop and deliver a whole of Northern Territory strategic community awareness and education campaign to inform residents of where to access timely, accurate information during an emergency.	
Northern Territory Police Fire and	<b>Project Name:</b> Remote EOC Upgrades – Katherine, Tennant Creek and Nhulunbuy	63,943
Emergency Service	<b>Description:</b> To establish EOC commonality throughout the Northern Territory and optimise use of WebEOC as the primary management tool for emergency operations.	
Department of the Chief Minister	Project Name: Recovery Coordinator's Transportable Emergency Recovery Office and Accommodation Unit Description: To enable the placement of a local Recovery Coordinator and Support Officer at the disaster affected community for weeks at a time allowing locally based recovery coordination and access to the Recovery Coordinator at the community level.	50,275

Northern Territory Emergency Service	<b>Project Name:</b> Remote EOC Upgrade – Alice Springs <b>Description:</b> To upgrade the Alice Springs EOC and establish commonality with other EOC's throughout the Northern Territory and optimise the use of WebEOC as the primary management tool for emergency operations.	100,000
Total 2011-2012		1,694,111

Funding Recipient	Project Description	NTNDRP Funding Provided (\$)
Milne Volunteer Bush Fire Brigade Inc	Project Name: Milne Volunteer Bushfire Brigade Training Room Expansion and Fit-Out Description: To improve existing training and	16,355
	meeting facilities for the Milne Volunteer Bush Fire Brigade.	
Northern Territory Emergency Services Palmerston Volunteer Unit Association	Project Name: PVU Equipment Upgrade 2012/13  Description: To improve the lighting capability of the Northern Territory Emergency Service – Palmerston Volunteer Unit through the acquisition of new equipment.	6,781
Acacia Hills Volunteer Bush Fire Brigade	Project Name: Community Involvement and Fire Protection  Description: To facilitate increased community involvement in fire abatement through the acquisition of slip on water tanks for the Acacia Hills Volunteer Bush Fire Brigade	6,364
Darwin Volunteer Unit (NTES) Association Incorporation	Project Name: Unit Capability  Description: To improve the capability of the Northern Territory Emergency Service - Darwin Volunteer Unit through the acquisition of new equipment.	42,390
Northern Territory Emergency Service - Maningrida Emergency Response Group	Project Name: MERG Unit Capabilities/Resources  Description: To improve the capability of the Northern Territory Emergency Service - Maningrida Emergency Response Group through the acquisition of new equipment.	12,545
Surf Lifesaving Northern Territory Incorporated	Project Name: Emergency Search & Rescue (SAR) Training and Equipment for Offshore Rescue Boat Service (ORBS)  Description: To enhance the capabilities of the Surf Life Saving Northern Territory – Darwin Volunteer Offshore Rescue Boat Service through the provision of additional training and equipment.	15,991
Gove Peninsula Surf Life Saving Club Incorporated	Project Name: Re-Equipping GPSLSC with Rescue and Training Equipment  Description: To purchase and repair insurance-exempt training and rescue equipment that was destroyed in fire that is necessary to enable Surf Life Saving Northern Territory – Gove Peninsula Surf Life Saving Club to become an active volunteer unit.	67,834

Northern Territory Fire and Rescue Service - Elliott Fire and Emergency Response Group	Project Name: Elliott FERG Completion of Training and Meeting Facility  Description: To fit out the existing demountable and grounds so as to improve training and meeting facilities for the Northern Territory Fire and Rescue Service – Elliott Fire and Emergency Response Group.	45,455
Humpty Doo Volunteer Fire Brigade Inc	Project Name: Humpty Doo Volunteer Fire Brigade Emergency Equipment  Description: To improve operational capacity of the Northern Territory Fire and Rescue Service – Humpty Doo Volunteer Fire Brigade through the acquisition of new equipment.	17,760
Northern Territory Fire and Rescue Service – Borroloola Fire and Emergency Response Group	Project Name: Borroloola FERG Bathroom Facilities  Description: To install bathroom facilities for the Northern Territory Fire and Rescue Service — Borroloola Fire and Emergency Response Group so as to enable volunteers to have consistent and unhindered access to a bathroom.	20,284
Northern Territory Emergency Service – Katherine Volunteer Unit	Project Name: Update Katherine Equipment  Description: To improve the capability of the  Northern Territory Emergency Service – Katherine  Volunteer Unit through the acquisition of new equipment.	51,334
Bushfires NT Volunteer Training Brigade Inc	Project Name: Bushfires NT VTB Purchase Container and Storage Equipment  Description: To provide a centralised storage facility for Bushfires NT Volunteer Training Brigade.	12,932
Tennant Creek Volunteer Association Incorporated	Project Name: Counter Disaster Radio Communication Systems Upgrade  Description: To upgrade and improve radio communications capability on a mobile platform, train Tennant Creek Northern Territory Emergency Service volunteers in the use of mobile platform radio communications equipment and provide a communications capability that can be used during multi agency incidents and counter disaster operations in the southern region of the Northern Territory.	19,550
Alice Springs Volunteer Unit Northern Territory Emergency Services	Project Name: Alice Springs Volunteer Unit Equipment and Training Drive 2012-13  Description: To acquire operational equipment that will increase the Northern Territory Emergency Service – Alice Springs Volunteer Unit in responding to community emergency situations.	52,542

Volunteering of SA and NT Incorporated	<b>Project Name:</b> Harnessing Spontaneous Volunteers <b>Description:</b> To develop a program to harness spontaneous volunteers for emergency events and disasters in the Northern Territory.	20,136
Alice Springs Volunteer Bushfire Brigade Inc	Project Name: ASVBFB Equipment Upgrade  Description: To acquire equipment to upgrade vehicles and communications within the Alice Springs Volunteer Bushfire Brigade to allow for faster response, readiness and safety.	57,251.75
Northern Territory Fire and Rescue Service - Training and Development	Project Name: Produce a Leadership Development Program for NTFRS Volunteers in Remote Areas  Description: To provide Northern Territory Fire and Rescue Service volunteer leaders in remote areas with the training resources to enhance their current skills and knowledge in leadership.	27,737
Northern Territory Fire and Rescue Service - Volunteers and Regional Stations North	Project Name: Volunteer Multi Media Training Program  Description: To develop a multimedia training program utilising DVDs and online material for Northern Territory Fire and Rescue Service volunteers.	28,872
Alice Springs Town Council	Project Name: Removal of Excess Sand in the Todd River Blocking Flow at Heavitree Gap  Description: To rechannel the Todd River between Schwartz Crescent in the north and Palm Circuit to the south of Alice Springs and remove debris that impede river flow and cause blockages.	100,000
St John Ambulance Australia NT Inc	Project Name: First Aid in Schools – Skills for Life for all Territory Children  Description: To develop the existing St John Ambulance First Aid in Schools program by increasing current resources so as to reach more students in more locations.	73,363
Department of the Chief Minister - Security and Emergency Recovery	Project Name: Emergency Management Training and Risk Register, Part 1  Description: To undertake a training analysis for the Northern Territory Emergency Management leadership and functional roles for all agencies involved in counter disaster operations, identifying what is currently provided and other potential operations for training. The analysis will incorporate both emergency and recovery training needs working in concert with Northern Territory Emergency Service to ensure the training framework and project outputs suit the all hazard arrangements.	175,000

	To review the existing Northern Territory Resilience Assessment and develop Northern Territory Risk Registers for each of the three counter disaster regions in accordance with National Emergency Management Committee recommendations (National Emergency Risk Assessment Guidelines) and develop a version of the Northern Territory Risk Register in a format suitable for public release.	
Local Government Association of the Northern Territory	Project Name: Enhance Local Government Emergency Recovery Plans and Community Engagement in Building Community Resilience  Description: To continue funding of a local government Emergency Management Project Officer whose role is to further develop local government recovery/resilience plans in the NT.  To facilitate and coordinate professional development workshops with Emergency Management Australia providing delivery in Darwin and Alice Springs.	193,500
Department of the Chief Minister - Strategic Communications	Project Name: A Resilient Territory Community – Awareness Campaign  Description: To develop a fully integrated community education campaign to reinforce messages about the importance of being prepared for a natural disaster by focusing on individual responsibility and highlighting the importance of being three days self-sufficient.	96,000
Northern Territory Fire and Rescue Service – Special Operations	Project Name: Disaster Response Training  Description: To provide training on managing operational response and recovery to a major emergency event in a central business district and how lessons learnt from Christchurch can be translated into improving Northern Territory's response to disaster.	4,269
Department of Land Resource Management	Project Name: Rapid Creek Flood Study – Channel Survey & Remodelling Study  Description: The project will determine the extent, severity and risk of flooding in the Rapid Creek Environs and determine potential engineering options to mitigate residential flooding within the Rapid Creek catchment. This project is a further extension of the 2011-12 study and will inform and enable floodplain management strategies and land use planning and development within the Rapid Creek catchment.	32,505
Total 2012-2013		1,196,751

Flood Mapping Studies
Natural Disaster Funding 2002/2003 – 2012/2013

WATER RESOURCES

Flood Study	Date	Commonwealth Funding & Program Source	NTG Funding Excl GST	Other Funding Excl GST
Rapid Creek Flood Mitigation Study	July 2012		\$42,000	
Rapid Creek Flood Study	October 2012	\$80,000 NTDRF	\$70,000	\$15,000 City of Darwin \$10,000 Darwin International Airport
Borroloola Flood Study	November 2011		\$59,740	
Alice Springs Flood Study	October 2011		\$153,981	
Alice Springs Farms Area Flood Study	December 2006		?	
Blackmore / Elizabeth River Flood Study	April 2014		\$59,500	
Bullock Creek Study	June 2007		\$30,600	
Katherine Flood Levee Study	May 2007		\$34,090	
Flood Mitigation Levees in the Nauiyu (Daly River) Community	April 2002	\$19,940 National Disaster Risk Management Studies Program (NDRMSP)	\$40,000	
Upper Adelaide River Flood Forecasting and Warning System	October 2003	\$24,475 Regional Flood Mitigation Program (RFMP)	\$24,500	
Beswick Flood Study & Upper Roper River flood Forecasting and Warning System	May 2003	\$58,000 RFMP	\$58,000	
Flood Warning System Upgrade for the Katherine/Daly Rivers Catchment	2002	\$101,835 Natural Heritage Trust (NHT)	\$105,165	

#### Projects funded under the Cyclone Shelter Program

Projects each Financial Year	Total Expenditure \$ (GST excl)	Number of additional spaces	Works undertaken
		created	
Totals	12,110,600	6,164	
2007-08	2,700,000	2,000	
Taminmin College	1,064,000	1,000	Strengthening roof of existing shelter at the college
Nightcliff Middle School	561,000	500	Upgrade to school gymnasium to cyclone shelter standard
Casuarina Senior College	1,075,000	500	Upgrade to school gymnasium to cyclone shelter standard
2008-09	2,310,000	2,000	
Casuarina Senior College	261,100	Unchanged	Upgrade to school gymnasium to cyclone shelter standard
Marrara Sports Complex	1,058,900	1,500	Strengthen existing building to make it a designated cyclone shelter
Mamaruni Minjilang (Crocker Island)	680,000	300	Upgrade works to cyclone shelter standard
Laynhapuy Homelands Yirrkala	310,000	200	Upgrade works to strengthen building – Grants program
2009-10	3,099,800	1,500	
Maningrida School	600,000	370	Upgrade works to cyclone shelter standard
Shephardson College, Elcho Is & Galiwinku	600,000	440	Upgrade works to cyclone shelter standard
Berry Springs School	500,000	440	Upgrade the school gymnasium to establish a new cyclone shelter
Nhulunbuy - Gove Hospital	271,300	Unchanged	Upgrade to cyclone shelter standard
Nightcliff Middle School	4,500	Unchanged	Upgrade to school gymnasium to cyclone shelter standard
Marrara Sports Complex	24,000	Unchanged	Upgrade to existing building to cyclone shelter standard
Milingimbi	1,100,000	250	New cyclone shelter constructed – Grants program
2010-11	1,297,800	300	
Maningrida & Shepardson	229,200	Unchanged	Upgrade works to cyclone shelter standard
Berry Springs & Galiwinku	106,600	Unchanged	Upgrade works to cyclone shelter standard
Mamaruni Minjilang (Croker Island )	924,000	300	Upgrade works to cyclone shelter standard
Marrara Sports Complex	38,000	Unchanged	Upgrade works to cyclone shelter standard
2012-13	2,703,000	364	
Angurugu Trade Training Centre	1,351,500	182	New cyclone shelter facility - revoted funds
Umbakumba Trade Training Centre	1,351,500	182	New cyclone shelter facility – revoted funds

Note: Northern Territory Police, Fire and Emergency Services facilitate the Cyclone Shelter Grants Program which allocated \$0.715m to construct a new cyclone shelter at Milyakburra to create 150 spaces. are not included (the shelter was completed in 2014).

## **NDRRA Claims Summary 1996-97 to 2010-11**

	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
Total Territory Expenditure	5,316,151	41,224,736	12,605,635	10,007,131	17,390,000	11,492,611	2,124,137	5,704,624	5,667,666	11,494,613	17,291,910	19,206,864	14,852,835	13,566,048	22,332,534
Category A	0	9,267,500	1,821,000	495,000	1,210,000	95,959	21,936	4,791	447,607	2,600,034	1,539,829	3,925,493	0	116,348	1,222,952
Category B	5,316,151	31,957,236	10,784,635	9,512,131	16,180,000	11,396,652	2,102,201	5,699,833	5,220,059	8,894,579	15,752,081	15,281,371	14,852,835	13,449,700	21,109,582
Roads	1,914,500			4,470,000	7,173,000	8,236,416	622,013	5,296,313	3,417,802	4,591,198	12,532,695	13,989,603	13,013,740	11,388,210	17,209,226
All other expenditure	3,401,651	31,957,236	10,784,635	5,042,131	9,007,000	3,160,236	1,480,188	403,520	1,802,257	4,303,381	3,219,386	1,291,768	1,839,095	2,061,490	3,900,356
Local Government Reimbursements															
Category C (first time in Carlos 2011)															
Commonwealth Assistance	932,076	26,005,302	5,506,414	6,149,131	8,472,188	4,442,896	10,968	277,187	223,803	3,083,139	7,239,870	8,072,804	4,201,892	2,430,399	7,917,447
Net Territory Expense	4,384,075	15,219,434	7,099,221	3,858,000	8,917,812	7,049,715	2,113,169	5,427,437	5,443,863	8,411,474	10,052,040	11,134,060	10,650,943	11,135,649	14,415,087
							only 50% of Cat A								
NT percent of total Expenditure	82.47%	36.92%	56.32%	38.55%	51.28%	61.34%	99.48%	95.14%	96.05%	73.18%	58.13%	57.97%	71.71%	82.08%	64.55%
Commonwealth percent of total expenditure	17.53%	63.08%	43.68%	61.45%	48.72%	38.66%	0.52%	4.86%	3.95%	26.82%	41.87%	42.03%	28.29%	17.92%	35.45%
	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Roads % of total expenditure	36%	0%	0%	45%	41%	72%	29%	93%	60%	40%	72%	73%	88%	84%	77%

## All other expenditure includes

- Public buildings
- Removal of debris (debris removal and drainage are high cost items after roads)
- Drainage
- Welfare Housing
- Irrigation
- Stream banks
- Recreational facilities and equipment
- Other essential public assets

## Territory Government investment in air and rail links

		Total expenditure	Year
Project	Description	(\$)	completed
Aerodromes and airstrips Gapuwiyak - resheet and	Gapuwiyak - resheet and seal airstrip	1 067 291	2004-05
seal airstrip			
Kintore - upgrade airstrip	Kintore - regrade the existing gravel airstrip, seal the central 18 metres and upgrade drainage	758 814	2004-05
Bulman airstrip upgrade	Bulman Aerodrome - upgrade aerodrome to an all- weather operation by extending and sealing the existing 0.9 kilometre runway including providing flood protection. Completed work will be to Civil Aviation Safety Authority standards	45 008	2005-06
Minyerri airstrip upgrade	Minyerri - upgrade the airstrip to an all weather operation by extending and sealing the runway. Completed work will be to Civil Aviation Safety Authority standards	732 390	2005-06
Pularumpi airstrip upgrade and seal runway	Pularumpi - upgrade and seal the runway and provide ducting to accommodate a future lighting system	1 087 294	2005-06
Ramingining airstrip upgrade	Ramingining - upgrade the airstrip to an all-weather operation by sealing the existing 1.38 kilometres of runway to a width of 18 metres. Completed work will be to Civil Aviation Safety Authority standards	1 250 001	2005-06
Alpurrurulam airstrip (Lake Nash)	Alpurrurulam aerodrome - construct all-weather aerodrome, extend and widen runway, upgrade lighting system and signal area, and provide shade structure and ablutions. Completed work will be to Civil Aviation Safety Authority standards	1 248 232	2006-07
Warruwi airstrip upgrade (Goulburn Island)	Warruwi aerodrome - resheeting and sealing of existing runway	1 500 000	2008-09
Minjilang (Croker Island) aerodrome upgrade	Minjilang (Croker Island) aerodrome - upgrade to provide all weather capability	607 509	2010-11
Pigeon Hole aerodrome	Pigeon Hole aerodrome - relocate and upgrade aerodrome to provide an all-weather operation and upgrade emergency runway lighting system and signal area, and provide shade structure	806 873	2010-11
Kaltukatjara airstrip upgrade	Upgrade and seal existing airstrip at Kaltukatjara	1 559 000	Current project
Lajamanu airstrip upgrade	Lajamanu airstrip upgrade	363 336	Current project
	Subtotal aerodromes and airstrips	10 068 307	
Rail crossings			
Level crossing upgrades to improve safety at selected rail crossings	Level crossing upgrades to improve safety at selected rail crossings	4 545 541	2012-13
Level crossing upgrades to improve safety at selected rail crossings	Level crossing upgrades to improve safety at selected rail crossings	1 867 797	Current project
· ·	Subtotal rail crossings	6 413 338	
	Total	16 481 645	

# **Bushfire mitigation programs**

Program	NTG funding	Landholder funding	Risks addressed by program
Bushfires NT aerial	\$108K pa	Est. \$300K	Strategic aerial prescribed burning program addresses seasonal fuel
prescribed burning			hazards by early season mosaic burning in areas of potential high risk.
program			The NTG funded component is coordinated with, and complements
			landowner operations.
Bushfires NT	\$116K pa	Est \$350K	Maintenance of strategic fire breaks that form part of regional fire-break
regional strategic			networks. This program uses NTG funds to complement the work of
firebreak program			landowners in regional mitigation efforts (as opposed to property level).
Western Arnhemland	nil	\$1.2m	Extensive early season fuel reduction in west Arnhemland –
Fire Management			combination of ground ops and aerial incendiary burning. Entire budget
Agreement			funded by carbon credit revenue generated by project.
DLRM Weed	\$100K pa herbicide	In kind – planning	Program provides herbicide to landholders to combat gamba grass
Management Branch	\$15K pa eqpmt r&m	and conducting	infestation. Landholders must provide a property plan with details of
Gamba grass	\$70K salaries	spraying	their spraying program.
management	(0.7FTE)		
program			
NTG Vacant Crown	Operations \$300K	-	Program designed to reduce risk of fire on crown land spreading to
Land fire	Salaries \$80K		neighbouring properties. Includes use of contractors to install fire
management	(0.8FTE)		breaks, and volunteer brigades and some aerial incendiary burning to
program	0 " 0.0016		reduce fuel hazards.
NTG road verge fire	Operations \$100K	-	Program funds contractors and local brigades to conduct early season
management	Salaries \$20K		hazard reduction burning on arterial road verges in high fuel areas.
program	(0.2FTE)		
Bushfires NT	\$24K operations	-	This program inspects fire break compliance on up to 9,000 blocks
firebreak compliance	\$100K salaries		each year.
and enforcement	(1.0FTE)		
program	Φ450Κ Ι	F-+ #000K	Web with an Indianala an anational and the control of the control
Bushfires NT support	\$450K brigade	Est \$200K	Volunteer brigade operations split approximately 40:60 between
for volunteer bushfire	funding		mitigation and wildfire response. The early season is devoted to fuel
brigades' mitigation			reduction burning and other hazard abatement activities in brigade
activities			areas. Brigades cover a part of the cost of this work through
Total	Ф1 400m		contributions from assisted landowners.
Total	\$1.483m		

#### **Northern Territory Floodplain Management Committee**

#### **Terms of Reference:**

In January 1980, the Northern Territory Floodplain Management Committee (NTFMC) was established to develop, co-ordinate, oversight and implement a detailed floodplain management policy having regard to,

- 1. further investigation and detailed development of guidelines, administrative arrangements, and necessary legislative changes;
- 2. further development of flood forecasting and warning systems;
- 3. acceleration of floodplains mapping programs;
- 4. Implementation of a program of public awareness and education.
- 5. review and refinement of emergency preparedness and post flood recovery planning;
- 6. in consultation with local authorities, develop relevant land use strategies.

The NTFMC reconvened in February 2011 and agreed to include the following items in the ToR.

- 7. Development of coastal inundation maps due to Tsunami, Storm Surge and sea level rise
- 8. Identify and develop Climate Change Adaptation Action plan for impacts on floods.
- 9. The definition of flood here refers to riverine flooding.

The following agencies were invited to provide assistance to the committee – Local Government Association and the Bureau of Meteorology.