

## **NDRRA: Independent Assessment of State Insurance Arrangements – Queensland**

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**Queensland Treasury**

**February 2012**

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29 February 2012

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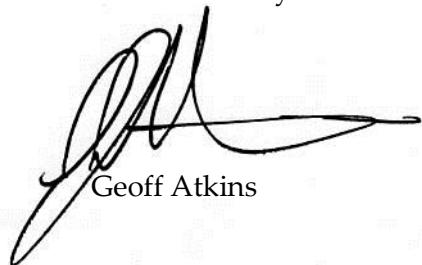
Dear Mr Spencer

**Independent Assessment of State Insurance Arrangements – Queensland**

Please find enclosed our assessment of the Queensland State Insurance Arrangements. We would like to acknowledge the assistance of Queensland Treasury staff and numerous other stakeholders in providing information to enable our report to be prepared.

As agreed, the report concentrates on the new insurance arrangements following changes in 2011 and does not include details on the risks and insurance of Commercial Government Entities. A separate report will be prepared on Local Government insurance arrangements.

Yours sincerely



Geoff Atkins



Steve Curley

# NDRRA: Independent Assessment of State Insurance Arrangements - Queensland

<b>Part I</b>	<b>Executive Summary</b>	i
<b>Part II</b>	<b>Detailed Findings</b>	1
1	Background, Scope and NDRRA Criteria	1
2	Exposure Information	4
3	Insurance and Funding Arrangements	7
4	Claims History	11
5	Independent Assessment of Insurance Arrangements	14
6	Reliances and Limitations	16
<b>Part III</b>	<b>Appendices</b>	
A	Sources of Information	

## Part I     Executive Summary

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The purpose of this report is to provide to Queensland Treasury an independent assessment of Queensland's insurance arrangements for state assets (excluding those of Commercial Government Entities) in accordance with Clause 4.6 of the National Disaster Relief and Recovery Arrangements (NDRRA) Determination 2011 that can be provided to the Commonwealth in compliance with Clause 4.6.

### **Historical Arrangements**

Since 2001 state assets have been covered by a structured self insurance arrangement known as the Queensland Government Insurance Fund (QGIF). Until November 2011, QGIF did not provide cover for damage arising from declared natural disasters. Any losses resulting from declared natural disasters were covered by the relevant agency responsible for the assets (with recourse if necessary to the state budget), with any available reimbursement sought through the NDRRA.

### **Summary of Current Insurance Arrangements**

QGIF is the main vehicle for funding the insurable risks of the State Government. It is an internal fund within Queensland Treasury. QGIF covers all Queensland Government budget dependent agencies. Eligible Statutory Bodies have the option of insuring with QGIF, while Commercial Government Entities are not eligible to insure with QGIF.

For any natural disaster, QGIF provides unlimited cover to member agencies.

External reinsurance was purchased in November 2011 for property losses including natural disasters. The QGIF retention is:

- (a) \$20 million for a single risk loss; or
- (b) \$50 million for an event loss.

The maximum limit of the cover is \$1.43 billion. There are unlimited reinstatements at no additional cost.

The reinsurance includes cover for a terrorism event with a retention of \$50 million and a limit of \$0.75 billion.

The reinsurance also covers state-owned bridges and tunnels. QGIF, however, does not provide cover to the Department of Transport and Main Roads (DTMR) for roads, bridges, etc and DTMR would be responsible for all road losses and any bridge/tunnel loss up to the above mentioned reinsurance retention.

## Information in the Report

The report describes in more detail the assets and exposure to natural disasters (Section 2), the current arrangements for reinsurance and funding (Section 3) and the past claims experience (Section 4).

## Assessment against Commonwealth Principles

Our independent assessment, referring to the principles set out by the Commonwealth (see section 1.6 of the report) is as follows:

- *States have a responsibility to put in place insurance arrangements which are cost effective for both the State and the Commonwealth*
  - ▶ Insurance arrangements are in place for civic assets, bridges and tunnels above \$50 million per event. We are not able to judge whether these arrangements are 'cost effective' to the state. These arrangements could potentially reduce the claims on NDRRA at no cost to the Commonwealth.
  - ▶ The insurance arrangements do not cover roads or community assistance which have given rise to most of the cost in the past, which we understand is generally consistent with other jurisdictions in Australia.
- *The financial exposure borne by taxpayers (Commonwealth and State) should be minimised*
  - ▶ The financial exposure in respect of the insured assets is limited to \$50 million, following placement of the reinsurance program in November 2011
  - ▶ This limitation on financial exposure is modest in the context of the overall NDRRA exposure
- *States are to explore a range of insurance options in the marketplace and assess options on a cost benefit basis:*
  - ▶ During 2011 a detailed project to explore insurance options was undertaken
  - ▶ Queensland Treasury took up the option recommended by its reinsurance advisor
  - ▶ The cost benefit considerations included a considerable amount of judgement and are not amenable to definitive analysis.

Overall we would regard the current insurance arrangements for the assets considered (i.e. excluding Commercial Government Entities and Local Government) as consistent with current market practice.

## Part II     Detailed Findings

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### 1     Background, Scope and NDRRA Criteria

#### 1.1    Introduction

The Commonwealth established the Natural Disaster Relief and Recovery Arrangements (NDRRA) primarily to provide assistance to the States following a natural disaster. This assistance is in the form of partial reimbursement to cover disaster relief and recovery payments, and infrastructure restoration or replacement. Following the extraordinary number and extent of natural disasters in late 2010 and early 2011, the NDRRA were amended by Determination 2011 Version 1. This determination provides an updated framework for the NDRRA which details the types of natural disasters that are covered, the assistance the Commonwealth provides and the conditions for assistance.

A key new requirement under Determination 2011 is, in order for States to obtain Commonwealth Assistance under the NDRRA, they needed to submit an independent assessment of State insurance arrangements. This assessment is to also include the insurance arrangements of Local Government within the State.

Finity Consulting Pty Limited (Finity) has been engaged by the Queensland Treasury to undertake an independent assessment of the insurance arrangements for Queensland. The independent assessment is undertaken in two parts:

- State owned assets of budget dependent agencies (eligible for cover by Queensland Government Insurance Fund (QGIF))
- Local council insurance arrangements.

Each assessment will have a separate report, with this report covering the insurance arrangements of state owned assets covered by QGIF.

Note that this report does not cover the insurance arrangements of Commercial Government Entities, which are responsible for much of the state's essential public infrastructure, but which the Queensland Treasury regards as not being eligible for NDRRA.

#### 1.2    Purpose

The purpose of this report is to provide to Queensland Treasury an independent assessment of Queensland's insurance arrangements for state assets (excluding those of Commercial Government Entities) in accordance with Clause 4.6 of NDRRA Determination 2011 that can be provided to the Commonwealth in compliance with Clause 4.6.

The state must publish this assessment taking into account the need to protect commercial in confidence material and provide the outcome to the Secretary of the Australian Attorney-General's Department by 29 February 2012.

### **1.3 Scope**

The scope of the report is limited to insurance or other arrangements for the restoration or replacement of essential public assets damaged as a result of natural disasters (as defined in the NDRRA) for State Government infrastructure. An essential public asset is defined in the NDRRA as:

- One that is an integral part of the state's infrastructure and if lost or destroyed would severely disrupt the normal functioning of the community and if lost or damaged would need to be restored or replaced as a matter of urgency, and
- Provides services free of charge or at a nominal cost.

A significant part of the essential public infrastructure is owned by Commercial Government Entities, which are responsible for their own insurance arrangements. Assets owned by these entities are excluded from our review, as these corporations are not eligible agencies under dot point 2 above for assistance through NDRRA.

### **1.4 Structure of the Report**

We have presented our independent assessment in the following steps:

- Section 2 – Exposure Information – what are the public assets and what natural perils are they exposed to?
- Section 3 – Insurance and Funding Arrangements – an outline of the arrangements currently in place for each sector and group of assets
- Section 4 – Claims History – any available historical information that can help understand the exposure and the effectiveness of existing insurance or funding arrangements
- Section 5 – Independent Assessment – drawing the information together and providing our independent assessment.

The reliances and limitations in Section 6 should be read to understand the context of the report.

### **1.5 NDRRA Thresholds**

The extent of financial assistance a State can receive under the NDRRA is based around a series of financial thresholds. Broadly speaking, assistance is provided when either an individual minimum event threshold is reached, or the financial cost of events in a financial year, when aggregated exceed the first threshold noted below. An event is defined as a declared natural disaster that exceeds the minimum threshold (\$240,000).

The first threshold for NDRRA assistance is 0.225% of State revenue measured two years earlier. Based on 2008/09 State revenue of \$37.0 billion, the first threshold for Queensland in 2010/11 is aggregate losses in a year in excess of \$83 million for both State and Local Government losses. The second threshold is \$146 million, 1.75 times the first threshold.

The Commonwealth reimburses the State for the higher of:

- 50% of Category A (assistance to individuals) and Category C (various grants that are activated in times of major disasters) assistance which does not include restoration or replacement of essential public assets or
- 50% of State expenditures on all eligible expenditures (including restoration and replacement of essential public assets) in excess of the 1st threshold up to the 2nd threshold plus 75% of expenditures above the 2nd threshold.

Reimbursement calculations are performed on an aggregate financial year expenditure basis, including both State and Local Government expenditure.

## 1.6 Commonwealth Assessment Principles

The Commonwealth has stated that it will review this independent assessment in conjunction with the state, guided by the following principles:

- States have a responsibility to put in place insurance arrangements which are cost effective for both the State and the Commonwealth
- The financial exposure borne by taxpayers (Commonwealth and State) should be minimised
- States are to explore a range of insurance options in the marketplace and assess options on a cost benefit basis.

## 2 Exposure Information

### 2.1 Overview of Public Assets

As described in Section 1.3, this report assesses the insurance arrangements for assets owned by budget dependent agencies of the Queensland Government. It excludes those assets owned by Local Government and Commercial Government Entities.

We will provide a separate report that covers Local Government insurance arrangements. Commercial Government Entities and private companies are excluded from both our reviews, as per Section 1.3.

In this report no attempt has been made to determine whether a state asset is ‘essential’ in accordance with the NDRRA definitions. The intention has been to include available information for all state assets without making a judgement about whether they are ‘essential’.

The main types of property assets that are the subject of this report are shown in Table 2.1.

**Table 2.1: Significant Public Assets Owned by State Agencies**

Type of Assets
Hospitals
Schools
State Roads/Bridges
Housing
Corrective Services
Other Govt Buildings

More detail on the identification and values of these assets is included later in this section. Greater detail is provided in Queensland Treasury’s submission to the Commonwealth, including commercial in confidence information.

### 2.2 Exposure to Natural Disaster Perils

The natural disaster perils that Queensland assets are exposed to can be identified as follows.

**Table 2.2: Queensland Exposure to Natural Perils**

Peril	Commentary
Bushfire	Moderate exposure
Cyclone/Windstorm	High exposure
Flood	High to extreme exposure in particular areas
Landslip	Low localised exposure
Earthquake	Low exposure
Tsunami	Potential exposure
Terrorism	Low exposure

The commentary is a qualitative assessment by Finity, and is relative to the typical level of exposure in Australian jurisdictions.

## 2.3 Valuation of State Government Assets

QGIF maintains a register of state government assets that are covered by its fund. Table 2.3 provides a high level summary of the nature and recorded values of these assets.

**Table 2.3: QGIF Declared Assets (\$ million)**

Type of asset	Recorded Value (\$m)
Buildings	38,967
Contents	6,661
<b>Total</b>	<b>45,628</b>

Total state government owned assets covered by QGIF amount to \$45.6 billion, with approximately 85% related to buildings and the remainder contents. This table does not include roads, bridges or culverts owned by the State Government. These assets are described in Section 2.4.

Table 2.4 lists the largest declared assets covered by QGIF.

**Table 2.4: QGIF's Largest Individual Declared Assets**

Asset	Declared Value (\$mil)
Royal Brisbane Hospital	1,351
State Archives	1,088
Princess Alexandra Hospital	867
Arthur Gorrie Correctional Centre	608
Queensland Museum South Bank	440
Townsville Correctional Centre	408
Queensland Performing Arts Centre	401
Woodford Correctional Centre	384
Prince Charles Hospital	368
Queensland Art Gallery	327

Declared values in this table are on a ‘per location’ basis, with buildings at the same location aggregated. The majority of the asset values above (with the exception of State Archives) relate to building values and include Hospitals, Correctional Facilities and Art Centres. The State Archives declared value of \$1.1 billion relates mostly to estimated contents values.

## 2.4 Civil Assets – Roads & Bridges, Water & Sewerage

### Roads and Bridges

These assets are vulnerable to some forms of natural disaster, especially floods and earthquakes. Table 2.6 summarises the state owned roads and bridges, which are the responsibility of the Department of Transport and Main Roads (DTMR).

**Table 2.6 – State Owned Roads, Bridges and Culverts**

<b>State Owned</b>		
	<b>Distance (km)</b>	<b>Recorded Value (\$m)</b>
<b>Roads</b>	33,558	40,106
<b>Bridges</b>		8,298
<b>Culverts</b>		2,175
<b>Total</b>		50,579

The state government is responsible for around 34,000 km of roads, and the valuation is based on an average replacement cost of around \$1.2 million per km. Along with these roads, the state government owns bridges and culverts bringing the total value to \$50.6 billion. Note that the majority (by distance) of public roads are owned and managed by local councils.

None of these civil assets are covered by QGIF (although bridges are covered by the external reinsurance). Any losses are funded by the DTMR.

### Water and Sewerage

The management structure of water and sewerage assets can be split into two distinct areas:

1. South East Queensland: In 2008, The State assumed control of most bulk water assets, and through significant capital investment established the water grid. An entity ‘Seqwater’ is responsible for bulk water supplies, ‘Linkwater’ owns all the major pipelines. Three Local Government-owned retailer-distributors, ‘Allconnex Water’, ‘Queensland Urban Utilities’ and ‘Unity Water’ manage water reticulation, sewage collection, distribution and treatment in different areas of south-east Queensland. The three distribution-retail entities were established as statutory bodies owned by local government.
2. Outside South East Queensland: Almost all urban water service providers are local governments or local government controlled entities.

Our understanding is that these water and sewerage assets are owned either by Commercial Government Entities or Local Government. The Commercial Government Entity assets are not included in the scope of this report and the assets owned by Local Government will be addressed in our separate report on Local Government Insurance Arrangements.

## **3 Insurance and Funding Arrangements**

### **3.1 Insurance Arrangements – Pre November 2011**

Up until November 2011, QGIF did not cover its entities for damage arising from declared natural disasters. Any losses resulting from declared natural disasters were covered by the relevant agency responsible for the assets (with recourse if necessary to the state budget), with any available reimbursement sought through the NDRRA.

In 2004, the Queensland Government sought a quote from the international reinsurance market to insure State assets. This exercise was conducted by Queensland Treasury through its reinsurance advisors. We were advised that the reinsurance cover was not purchased as it was not considered value for money at that time.

Following the recent natural disasters in 2011, QGIF again approached the reinsurance market through its reinsurance advisor following analysis of its exposures and losses. The results are outlined in Section 3.3.

### **3.2 Operational and Risk Management Framework**

The operational and risk management framework is owned within each agency, with accountability and responsibility assigned to each entity. The risk management framework is based on the *Financial Accountability Act 2009* which requires accountable officers and statutory bodies “to establish and maintain appropriate systems of internal control and risk management” (s.61). Agencies are required to embed a risk management strategy tailored to their own requirements and review this strategy at least annually.

The Maintenance Management Framework is one of the guides which comprise the Strategic Asset Management Framework. The main objectives of the framework are to ensure “continuous improvement in asset planning, maintenance procedures and risk management (including the mitigation of the impacts of a natural disaster)”.

The risk management framework is based on, and expands upon, the Australian/New Zealand Standard ISO 31000:2009 *Risk management – Principles and guidelines*.

### **3.3 Insurance and Funding Framework**

QGIF is the main vehicle for funding the insurable risks of the State Government. It is an internal fund within Queensland Treasury. Established in 2001, QGIF covers all Queensland Government budget dependent agencies and Eligible Statutory Bodies have the option of insuring with QGIF.

Each entity is covered for its insurable assets and liabilities, including (from November 2011) property losses arising from natural disasters. Other risks insured include Health Litigation and Liability. Contributions (premiums) are set annually on a prospective basis. Accounts are prepared annually that include provision for outstanding claims.

This framework is designed to financially reward agencies that manage risk and to penalise those that do not. A key lever for such a process is the annual premium setting process, whereby premiums are adjusted according to claim history for each entity, in an attempt to ensure equitable pricing of risk.

QGIF's objective is stated as follows:

"The objective of the fund is to enhance the Government's commitment to the Fiscal Principle of managing financial risk through identifying, providing for and funding the State's insurable liabilities. A Government self-insurance fund is considered the most effective way to achieve this objective. The fund is identified as the Queensland Government Insurance Fund (QGIF)." (QGIF website)

The QGIF website also notes that "the benefits of the establishment of QGIF includes the provision to assist departments to manage their property and liability risks more effectively, enables Treasury to identify and manage catastrophic risks at the Whole-of-Government level and identifies liabilities so that provisions can be set aside as events occur and funding provided as claims payments are made"

When QGIF approached the reinsurance market in 2011, a number of different options (varying by policy terms, coverage and price) were provided by the market. The review of the market responses was conducted by the reinsurance advisor and recommendations were provided to QGIF based on the cover which provided the optimum level of capacity for QGIF's exposures, whilst still delivering value for money. In addition, the reinsurance advisor benchmarked against other government entities, with allowance for factors such as QGIF's size, nature of assets and geographic location. Further comments on the reinsurance purchasing decision are detailed below. Following this assessment, reinsurance protection was purchased in November 2011. The reinsurance arrangements are detailed below.

### *Which Assets and Perils are Covered by QGIF?*

The cover provided by QGIF now includes all natural disaster perils that are relevant to NDRRA, including terrorism. There are no exclusions related to individual perils. In particular QGIF covers damage caused by flood without distinction from other causes.

As a general rule, QGIF covers all physical assets owned by a covered entity or for which the entity is responsible. The exceptions are:

- Roads owned by the DTMR or other QGIF member agencies are not covered by QGIF or external reinsurance
- Bridges and tunnels owned by the DTMR are not covered by QGIF, but are covered under its reinsurance policy (with sub-limits).

### *Funding and Capital Structure of QGIF*

QGIF premiums charged to agencies are set to collect sufficient contributions to fund the following year's expected claims (net of any reinsurance recoveries), reinsurance costs and other administrative expenses. Since inception (2001), the QGIF has been able to maintain an overall surplus.

In 2010-2011, the contributions to the Fund were \$114 million and the balance of the Fund at 30 June 2011 was \$885 million, with provision for future liabilities of \$772 million. We note that these contributions and asset balances relate to the entire fund, including Health Litigation and Liability exposures. The premiums for property cover are about 20% of the fund (about \$25 million in 2011-12).

As premiums are based on the following year's expected costs, the cost of the reinsurance cover and the retained natural disaster costs were not reflected in the 2011-2012 year. These additional costs will significantly increase agency premiums for the 2012-2013 year.

### *Purchase of Reinsurance in Excess of the Retention*

Following the approach to the reinsurance markets in 2011, external reinsurance was purchased for all property losses. The amount retained by QGIF is:

- (a) \$20 million for a single risk loss; or
- (b) \$50 million for an event (multiple risk) loss

The cover provides for unlimited reinstatements at no additional cost. The retention is \$50 million for a terrorism event.

Currently QGIF purchase \$1.43 billion of property catastrophe cover, and \$0.75 billion in the event of terrorism. The property limit is based on the expected total loss of the single biggest risk (Royal Brisbane Hospital).

The retentions and limits selected were based on advice from the reinsurance advisor, which in turn was based on modelling of the QGIF portfolio, peer comparisons, and the advisor's experience of the reinsurance market's expectations. Modelling approaches included 3rd party natural hazard vendor models and statistical based loss models using historical claims experience. Catastrophe modelling indicated that the limit of cover purchased by QGIF is in excess of the estimated '1 in 250 year' event loss.

### **3.4 Reinsurance Market Testing for Roads**

Queensland Treasury, in conjunction with its reinsurance advisor, approached extensive overseas markets for roads coverage (together with the non-roads assets). However, no prices for roads were quoted by reinsurers, indicating there was little appetite in the market to cover roads and the exercise came to a halt. The absence of appetite for insuring roads is consistent with our understanding of the market.

In a Queensland Treasury's presentation to Commonwealth dated December 2011, it was noted that a traditional reinsurance solution was unachievable because:

- Significant adverse claims experience and data limitations
- Potential ambiguity and contention around the definition of a peril for a loss/event
- Indemnity valuation issues – determining repair costs post event may be complex and uncertain
- Delays in loss adjustment process.

In response, non-conventional approaches to traditional reinsurance were explored in order to obtain some level of roads cover. However, these options were found to introduce further risk, likely to be overly expensive (although pricing was unable to be determined), require additional data and still had limited capacity in the market.

The above market testing indicates that the State undertook best endeavours to test the market for insurance coverage for its roads.

The market testing did identify some availability of cover for bridges and tunnels. The final outcome was that the reinsurance cover was arranged to include bridges and tunnels owned by DTMR in conjunction with the property assets covered by QGIF.

### **3.5**

### **Funding for Damage to Roads**

When a natural disaster occurs, opportunities to reprioritize existing funding are examined. For example, some roads which were subject to damage in the natural disaster may have been programmed for capital upgrade or maintenance. In these circumstances, the funding is transferred to the reconstruction task.

If there is damage to roads (from a natural disaster such as a flood), repair or replacement is generally funded from the budget of the relevant agency (being DTMR). To put this into context, the State's annual road capital budget is around \$3.0 billion with around a further \$0.5 billion for road maintenance. Reprioritisation is limited, however, with a significant proportion of the expenditure committed to projects which are underway or subject to contractual commitments.

Following the 2011 disasters reallocations did occur. For example, as noted in the 2010-11 Mid Year Fiscal and Economic Review (page 4), a major review of the State's spending priorities was to be undertaken in response to the flooding. The 2011-12 Budget (Budget Paper No. 2, page 68) advises the "recent disasters have necessitated a re-cashflow of the capital program including the rescheduling of some major projects".

## 4 Claims History

In Section 2.2 we identified that Queensland is exposed to several natural disaster perils, with particularly high exposures to flooding and cyclone/windstorm. This observation is reflected in the available claims history from recent events, which the reinsurance advisor compiled from source data from Queensland's NDRRA reimbursement requests to the Commonwealth.

### 4.1 Queensland Natural Disaster Records

The claims information provided to us was that compiled from the NDRRA claims reports, described in the next section. These reports outlined expenditure to date and estimated future expenditure to date for declared NDRRA natural disasters.

Since 2004, Queensland have claimed against 44 separate NDRRA declared natural disasters; an average of approximately 6 per year. We note that the majority of the natural disasters relate to flood, storms and cyclones, with only 2 identified bushfire events. We noted that each declared natural disaster can relate to multiple traditional insurance events over an extended time period which makes the data difficult to analyse with an insurance event perspective.

### 4.2 Past NDRRA Claims

Table 4.1 lists Queensland's natural disaster expenditures and recoveries under the NDRRA each year since 1997. Recoveries received from the Commonwealth are calculated based on combined State and Local Government expenditure in a particular year (noting that the expenditure may take place in the years after the event). As a result, the figures in the table include both State and Local Government expenditures. The figures also include all claim Category types and therefore the total is much higher than the cost to replace state essential public assets. This information (including estimates of costs in 2012 and 2013) has been provided by Queensland Treasury.

**Table 4.1: Natural Disaster Expenditures and NDRRA Claims to Date**

June Year	Total Natural Disaster Expenditure (\$mil)					Recoveries	
	Cat A	Cat B	Cat C	Cat D	Total	Amount (\$mil)	%
<b>1997</b>		N/A			72		N/A
<b>1998</b>		N/A			87		N/A
<b>1999</b>		N/A			80		N/A
<b>2000</b>		N/A			102	48	47%
<b>2001</b>		N/A			123	69	56%
<b>2002</b>		N/A			88	29	33%
<b>2003</b>		N/A			48	4	7%
<b>2004</b>		N/A			52	5	9%
<b>2005</b>		N/A			87	23	26%
<b>2006</b>		N/A			134	47	35%
<b>2007</b>	12	251	23	16	302	158	52%
<b>2008</b>	12	179	26	1	217	99	46%
<b>2009</b>	24	272	20	1	317	170	54%
<b>2010</b>	8	542	10	0	561	354	63%
<b>2011</b>	76	1,642	94	11	1,822	1,289	71%
<b>2012</b>		N/A			5,212		
<b>2013</b>		N/A			2,146		
<b>Total</b>					<b>11,450</b>		<b>60%</b>

\* 2012 and 2013 are estimated expenditures

\* Figures combine both State and Local Government costs

The yearly expenditure and subsequent recoveries have increased in dollar value over time. Category B expenditure relates to restoring essential public assets and providing loans/subsidies/grants to businesses and producers affected by natural disasters. We note that Category B contributes the majority of the total NDRRA related expenditure.

The cost amounts in 2012 and 2013 (relating to events in 2010 and 2011) are Queensland Treasury estimates and the final outcome may develop to be materially different.

### *Roads versus Property*

As noted above it is not possible from the data available to provide a complete breakdown of the cost of past individual insurance events because of the aggregation of insurance events into declared natural disaster events. In respect of state assets only (not local government) and in respect of property damage only, there was some information available to split the cost between roads and other property assets. Table 4.2 shows this split.

**Table 4.2: Split of Expenditure on Restoring Essential State Government Public Assets**

June Year	State Expenditure (\$mil) on Restoring:			% Roads cost
	Roads	Non Roads	Total Expenditure	
2000	28	10	38	73%
2001	25	9	34	74%
2002	25	6	32	81%
2003	15	5	20	75%
2004	12	9	21	58%
2005	28	2	30	92%
2006	32	6	38	83%
2007	49	13	62	79%
2008	51	10	61	84%
2009	50	14	64	79%
2010	251	8	259	97%
2011	N/A	N/A	667	N/A
<b>Total to 2010</b>	<b>565</b>	<b>92</b>	<b>657</b>	<b>86%</b>

Of the expenditure on restoring essential public assets owned by the state, a large proportion relates to expenditure on roads (86% to 2010). Floods usually cause extensive road damage, a peril to which Queensland is heavily exposed.

#### 4.3

#### State Government Insurance Claims Data

Prior to November 2011, QGIF did not cover losses resulting from declared natural disasters on state assets. As a result, the property claims history of QGIF does not include losses from declared natural disasters. There has been a total of \$127 million in property claims (excludes declared natural disaster losses) paid since inception of QGIF in 2001, mostly relating to fire claims (non bushfire) and small, localised storm damage claims.

#### 4.4

#### Conclusions from Claims History

There have been many natural disasters impacting Queensland resulting in significant restoration costs incurred by the state government with significant support provided by the NDRRA.

The level of detail available from this claims history is limited, but the conclusions that can be drawn include:

- Property damage to state assets (including roads) is not the majority of the NDRRA costs – community assistance and local government costs are also very material
- Of the state assets damaged, roads make up about 85% of the cost.

## 5 Independent Assessment of Insurance Arrangements

Prior to November 2011 Queensland had no structured self insurance or external reinsurance arrangements for natural disasters.

Since November 2011 both structured self insurance and external reinsurance are in place, as per the following table.

**Table 5.1: Summary of Insurance Arrangements**

	Insurance Cover
<b>Civic Assets</b>	First \$20mil (single risk loss) or \$50mil (event loss) retained by QGIF Over \$20mil/\$50mil reinsured in market
<b>Civil Assets</b>	Roads not insured Bridges and tunnels covered by reinsurance above the retention

### 5.1 Assessment against Commonwealth Principles

Our independent assessment, referring to the principles (see section 1.6 of the report) is as follows:

- *States have a responsibility to put in place insurance arrangements which are cost effective for both the State and the Commonwealth*
  - ▶ Insurance arrangements are in place for civic assets, bridges and tunnels above \$50 million per event. We are not able to judge whether these arrangements are ‘cost effective’ to the state. These arrangements could potentially reduce the claims on NDRRA at no cost to the Commonwealth.
  - ▶ The insurance arrangements do not cover roads or community assistance which have given rise to most of the cost in the past, which we understand is generally consistent with other jurisdictions in Australia.
- *The financial exposure borne by taxpayers (Commonwealth and State) should be minimised*
  - ▶ The financial exposure in respect of the insured assets is limited to \$50 million
  - ▶ This limitation on financial exposure is modest in the context of the overall NDRRA exposure
- *States are to explore a range of insurance options in the marketplace and assess options on a cost benefit basis:*
  - ▶ During 2011 a detailed project to explore insurance options was undertaken

- ▶ Queensland Treasury took up the option recommended by its reinsurance advisor
- ▶ The cost benefit considerations included a considerable amount of judgement and are not amenable to definitive analysis.

Overall we would regard the current insurance arrangements for the assets considered (i.e. excluding Commercial Government Entities and Local Government) as consistent with current market practice.

## 6 Reliances and Limitations

This report is being provided for the sole use of the Queensland Treasury for the purposes stated in Section 1 of this report. It is not intended, nor necessarily suitable, for any other purpose. This report should only be relied on by the Department for the purpose for which it is intended.

We understand that this report will be published on the Department's website and provided to the Commonwealth Attorney-General's department as required by the NDRRA. No other distribution of, use of or reference to this report (or any part thereof) is permitted without our prior written consent. Third parties, whether authorised or not to receive this report, should recognise that the furnishing of this report is not a substitute for their own due diligence and should place no reliance on this report or the data contained herein which would result in the creation of any duty or liability by Finity to the third party.

In commenting on the presence or adequacy of insurance arrangements, our assessment is relative to normal industry practice. Insurance arrangements may be ineffective for a number of reasons including oversight, clerical error, contractual failure, breach of policy conditions, fraud, insurer failure or the like. Our review is not intended to, and cannot be expected to, identify risks of this kind.

Finity has performed the work assigned and has prepared this report in conformity with its intended utilisation by a person technically competent in the areas addressed and for the stated purposes only. Judgements about the conclusions drawn in this report should be made only after considering the report in its entirety, as the conclusions reached by a review of a section or sections on an isolated basis may be incorrect.

The report should be considered as a whole. Members of Finity staff are available to answer any queries, and the reader should seek that advice before drawing conclusions on any issue in doubt.

We have relied on the accuracy and completeness of all data and other information (qualitative, quantitative, written and verbal) provided to us for the purpose of this report. We have not independently verified or audited the data but we have reviewed it for general reasonableness and consistency. It should be noted that if any data or other information is inaccurate or incomplete, we should be advised so that our advice can be revised, if warranted.

## Part III Appendices

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### A Sources of Information

Source	Information Received
AON Benfield	Asset listing, loss history and insurance arrangements for QGIF State roads values and distance
Queensland Treasury	NDRRA related expenditure and recoveries Risk Management documentation Information on previous approaches to the insurance market Information relating to capital expenditure of DTMR
Local Government Association of Queensland	Information on Queensland water assets