

Crisis Reform Without A Crisis:

Queensland's Questionable Disaster Management Reforms



Universiteit
Leiden
Campus Den Haag

Caitlin Woltman

S1792091

MSc Crisis and Security Management

Master Thesis

Supervisor: Dr. Sanneke Kuipers

Second reader: Dr. Lydie Cabane

Date: 07 June 2020

Word count: 19.754

Abstract

In a disaster-prone community like Queensland, the stakes for proper disaster management are high. Queensland has a high degree of institutionalized disaster management framework, which allows for fast, efficient, and appropriate responses to disasters. The immense scale of the 2010-2011 floods in Queensland severely tested its disaster management framework, but was predominantly positively evaluated by academic scholars and reports afterward. The subsequent Queensland state elections in March 2012 saw a sweeping electoral success for a newly-amalgamated political party. This government implemented a set of disaster management reforms that overhauled Queensland's public safety sector. Due to the theoretical notion that reform can only occur through exposed deficiencies, this thesis explains how the disaster management reforms can be explained after a seemingly successful disaster response. To this purpose, the research uses a qualitative single-case study design with a combined method of content analysis and process-tracing. The thesis concludes, that the complex political context preceding the March 2012 state election, combined with a fabricated political perspective that the disaster management system was flawed, created leeway for the reforms to be implemented.

Table of contents

Abbreviations	5
List of Tables and Figures	6
1. Introduction.....	7
1.1 Research question.....	9
1.1.1 Flood specification	10
1.2 Relevance of research.....	12
1.3 Reader’s guide.....	13
2. Conceptual framework.....	14
2.1 Concepts	14
2.1.1 Crisis.....	14
2.1.2 Learning	16
2.1.3 Crisis reform.....	17
2.2 Academic gap.....	19
3. Methodology	21
3.1 Research design.....	21
3.2 Case selection.....	22
3.3 Data collection.....	22
3.4 Methods of analysis.....	25
3.4.1 Content analysis.....	25
3.4.2 Process-tracing.....	27
3.5 Reliability and validity	33
4. Assessment of the 2010-2011 floods response.....	34
4.1 Introduction to the assessment	34
4.1.1 Damages in the 2010-2011 floods	34
4.2 Pre-crisis.....	35
4.2.1 Positive elements	36
4.2.2 Critique	38
4.3 Crisis-event.....	40
4.3.1 Positive elements	40
4.3.2 Critique	42
4.4 Post-crisis phase	43
4.4.1 Positive elements	43
4.4.2 Critique	46
4.5 2010-2011 floods: an unexpected crisis handled well	46

5. The focus and justification of Queensland’s disaster management reforms.....	49
5.1 A new standing authority aimed at technology and innovation.....	50
5.2 An oversight institution for disaster resilience in Queensland.....	52
5.3 A centralization move: local disaster management to the state’s fire service.....	54
5.4 Problematic police services.....	56
5.5 Reflections on the reforms: were they problem-solving?	57
6. The political legitimacy of the reforms	61
6.1 Newman’s entry to Queensland’s state politics	61
6.2 The Keelty review: a controversial instrument	63
6.3 The reforms: lessons learned or political opportunity?.....	67
6.4 Conclusion on the politicized nature of the reforms	71
7. Conclusion	73
7.1 Discussion and avenues for further research.....	76
References.....	78
Appendix A: Coding samples chapter four	86
Appendix B: Coding samples chapter five.....	89

Abbreviations

DCS	Department of Community Safety
DERM	Department of Environment and Resource Management
DET	Department of Education and Training
DJAG	Department of Justice and Attorney-General
DPW	Department of Public Works
EMQ	Emergency Management Queensland
ESU	Emergency service unit
LNP	Liberal National Party
PSBA	Public Safety Business Agency
QFCoI	Queensland Floods Commission of Inquiry
QFES	Queensland Fire and Emergency Service
QFRS	Queensland Fire and Rescue Service
QH	Queensland Health
QPS	Queensland Police Service
QRA	Queensland Reconstruction Authority
SDCC	State Disaster Coordination Centre
SDMG	State Disaster Management Group
SES	State Emergency Services

List of Tables and Figures

Type	Explanation
Figure 1	Total rainfall in southeast Queensland between 9 January and 13 January 2011
Figure 2	The process underlying Queensland's disaster management reforms
Table 1	Overview of relevant weather events in Queensland during the summer of 2010-2011
Table 2	Operationalization of the assessment of the 2010-2011 Queensland disaster response
Table 3	Operationalization of the content of the disaster management reforms in Queensland
Table 4	Operationalization of the justification behind the Public Safety Business Agency Act
Table 5	Operationalization of the causal configuration behind Queensland's disaster management reforms
Table 6	A quick overview of damages due to the 2010-2011 floods
Table 1A	Coding sheet for the first analyzed document for Queensland's disaster response in the 2010-2011 floods
Table 2A	Coding sheet for the second analyzed document for Queensland's disaster response in the 2010-2011 floods
Table 3A	Coding sheet for the third analyzed document for Queensland's disaster response in the 2010-2011 floods
Table 1B	Coding sheet for the first analyzed document on Queensland's disaster management reforms in 2014
Table 2B	Coding sheet for the second analyzed document on Queensland's disaster management reforms in 2014
Table 3B	Coding sheet for the third analyzed document on Queensland's disaster management reforms in 2014

1. Introduction

Natural disasters are a major problem in Queensland, Australia. In the last year alone the state experienced bushfires, monsoons, and floods, all of immense scale (The State of Queensland, n.d.-a). This illustrates the necessity for Queensland to have efficient and well-functioning disaster management in order to minimize the costs and effects of natural disasters. Crises on the scale of a natural disaster often receive criticism and it opens up a political space of learning, blame games, and seeking accountability for the authorities (Boin et al., 2008).

Nonetheless, the 2010-2011 floods in Queensland have received praise in academic articles, particularly for the involvement of spontaneous volunteers (Ahmed & Sinnappan, 2013; Arklay, 2012; Lindquist, 2013). In addition, the World Bank has publicly praised the disaster response of the Queensland Government and established a pro-active partnership with the Queensland Reconstruction Authority (QRA) to share expertise and experience about the 2010-2011 floods (Queensland Government, 2011). However, this positive evaluation of Queensland's natural disaster management was not echoed by the succeeding government after the disaster response.

The 2012 Queensland state elections brought a significant political change, where a recently-amalgamated political party called the Liberal National Party led by Campbell Newman won the state elections for the first time. One of the first actions by the Newman government was to commission Michael Keelty, a former employee of the Australian Federal Police, to write a review on the Department of Police and Community Safety (Queensland Government, 2012). This review was critical of the current state of Queensland's emergency services and was the basis for a complete overhaul of Queensland's public sector, including its natural disaster management (Keelty, 2013).

The Queensland Parliament proceeded to pass the legislative bill that embodied the reforms called the *Public Safety Agency Bill*. The passing of this bill allowed for the institutional creation of the *Public Safety Business Agency (PSBA) (Public Safety Business Agency Bill 2014, 2014)*. The review was “concerned with issues that prevent efficiencies, effectiveness, and interoperability across the portfolio of Police and Community Safety” (Keelty, 2013, p. 9) and the aim was to solve those issues through the *Public Safety Business Agency Act*. The question rises what the given justifications were for commissioning this critical review and implementing its proposed recommendations, considering the recent praised disaster response.

Normally, crises open an opportunity window for reforms, as they showcase deficiencies in a policy or policy sector. These weaknesses force governments to *learn* from these crises, leading to reforms to overcome these deficiencies in a policy (sector). Nonetheless, the efficiency of these reforms must not be assumed and depends upon the lessons learned and whether the reforms are appropriately implemented (Boin et al., 2016). Scholars take the assumption that reforms often only occur after the crisis exposed structural weaknesses in the sector (Ansell et al., 2016; Boin et al., 2016).

At the point in time when the Keelty review was commissioned, there was no clear reason to write the review, especially since the last Queensland flood response and its inquiry did not showcase major deficiencies (Arklay, 2012). According to Arklay (2015), one of the few scholars that has analyzed the Keelty review, the review often contradicted the conclusions of the Queensland Floods Commission of Inquiry (QFCoI) on the 2010-2011 floods (Arklay, 2015). The QFCoI was an official inquiry by the 2011 Queensland government, conducted before Newman took office, that assessed the disaster response of the 2010-2011 floods prior to Keelty’s assessment of Queensland’s public safety sector. Statements such as those made by Arklay (2015) raise an important question on the rationale and reason behind the disaster

management reforms after experiencing a seemingly successful disaster response in the 2010-2011 floods in Queensland.

1.1 Research question

Building on the unclarity of the reasons for Queensland's reforms and the lack of theoretical justification for crisis reform after a successful disaster response, the research question is as follows:

How can the disaster management reforms that followed the seemingly successful disaster response of the 2010-11 floods in Queensland, Australia be explained?

As this research question makes multiple assumptions, the research has three sub-questions, that all must be answered in order to be able to answer this research question. The sub-questions are as follows:

1. How effective was the 2010-2011 floods response in Queensland?
2. What did the natural disaster reforms in Queensland entail and how were they justified by relevant actors?
3. How is the political legitimacy of the reforms challenged?

The first two sub-questions utilize content analysis as the method to answer the questions, while the third sub-question uses process-tracing. All three of these sub-questions are answered in the conclusion through which their answers are synthesized and analyzed to answer the overarching research question.

1.1.1 Flood specification

For the sake of clarity, it is crucial to delineate which events compose the 2010-2011 floods. The 2010-2011 floods are composed of multiple events, stretching over a longer period. From September 2010 throughout the Australian summer months, Queensland experienced extremely heavy rainfall (Bureau of Meteorology, 2011). The monsoon season came earlier than expected and the flooding of rivers and rising sea levels occurred throughout the state (Bureau of Meteorology, 2012).

The consistent above-average rainfall in December 2010 already made it a very wet month, but a Category 1 Cyclone Tasha hit Queensland on Christmas Eve and worsened the situation. The north-western part of Queensland's coast experienced more than 300mm rainfall at the end of December (NASA, n.d.). The bad weather persisted in January, certain locations experiencing record-high levels of rainfall. In January, Brisbane and its surrounding areas flooded due to the prolonged rainfall that led to the flooding of main rivers in Queensland. The immense size and extent of these floods in January 2011 are visualized in *Figure 1*, illustrating that some areas experienced almost 10metres of rainfall over a short period.

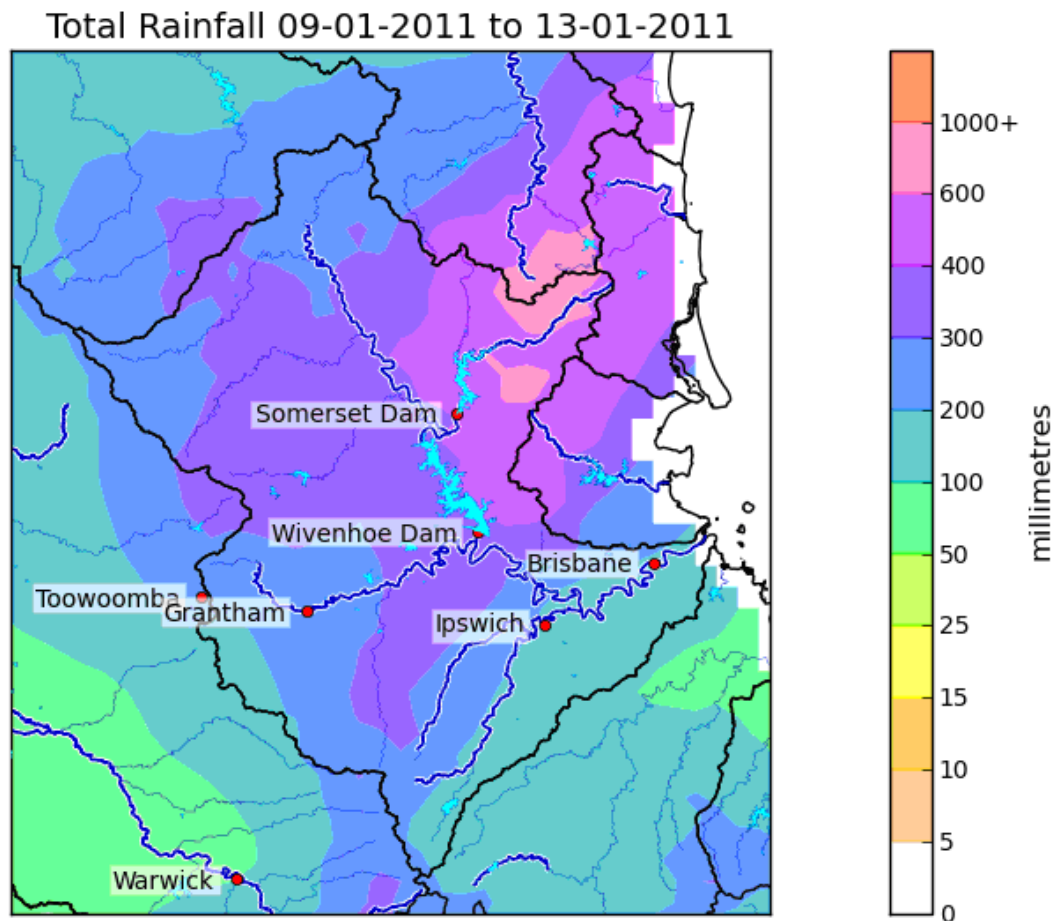
Tropical Cyclone Anthony occurred at the end of January, which increased rainfall in the southwest of Queensland, also through the first days of February. Tropical Cyclone Anthony was not very severe as compared to the previous events, but added to the already existing problems in Queensland (Bureau of Meteorology, 2011). Simultaneously, a much bigger and devastating cyclone was brewing, namely Severe Tropical Cyclone Yasi.

Cyclone Yasi was one of Queensland's most destructive cyclones in history, with similar cyclones only occurring in 1899 and 1918 (Bureau of Meteorology, n.d.-b). Cyclone Yasi came to the northwestern coast as a category 5 cyclone with winds as severe as 285 km/h. Approximately 10,000 Queenslanders needed to be evacuated and at least 1,000 homes were

reportedly severely damaged (Australian Disaster Resilience Knowledge Hub, n.d.-a). The combination of these events has resulted in one of Queensland's worst wet seasons in history, one that led to the declaration of a disaster zone in **78% of the state** of Queensland, affecting an estimated **2.5 million people** (Queensland Floods Commission of Inquiry, 2012). For reasons of clarity, *Table 1* provides a concise summary of the weather events.

Figure 1

Total rainfall in southeast Queensland between 9 January and 13 January 2011



Note. This figure shows extreme levels of rainfall that have caused flash flooding in e.g. Toowoomba, as well as river flooding in the Brisbane and Bremer river. This figure is from the Bureau of Meteorology of the Australian Government (Bureau of Meteorology, n.d.-a).

Table 1

Overview of relevant weather events in Queensland during the summer of 2010-2011

Period	Weather event	Location
September 2010 – February 2011	Persistent period of heavy rainfall	Whole Queensland
24 December – 25 December 2010	Cyclone Tasha (Category 1)	Northwestern Qld
10 January 2011 – 14 January 2011	Flooding of Brisbane and areas	Brisbane and areas
30 January 2011 – 2 February 2011	Tropical Cyclone Anthony	Southwestern Qld
29 January 2011 – 3 February 2011	Severe Tropical Cyclone Yasi	Northwestern Qld

Note. This table uses data from the Bureau of Meteorology of the Australian Government (2011, 2012).

1.2 Relevance of research

As touched upon earlier, the concept of *crisis reform* lacks a discussion on reform after a successful response. Rather, there is a consensus amongst scholars that crisis reform only occurs after a disastrous response. This thesis aims to nuance the theoretical concept of *crisis reform* and thereby add to the general discussion on *learning* related to *crisis reform*. The goal of this research is to broaden the theoretical concept and open up a new opportunity space for scholars to research a new hypothesis. Since this thesis has a theory-building goal, the single-case study design allows us to gain an in-depth understanding of a crisis reform process in Queensland. Using a single case study makes it possible to consider a wide variety of causal factors when analyzing the outcome; in this research the disaster management reforms. Through in-depth single case knowledge, it is possible to dedicate due time to analyzing relationships between observations and theoretical concepts (Blatter & Haverland, 2012).

Environmental issues are of high-peak interest to Australians due to their degree of devastating natural disasters (Whiteman, 2019), which amplifies the importance of well-functioning disaster management. It is crucial to the safety of Queenslanders that effective

disaster responses are safeguarded and that reforms are pushed through for the right reasons. Due to the often devastating nature of natural disasters in Queensland, well-functioning disaster frameworks can make a world of difference for Queenslanders. However, the relevance goes further than the community of Queensland, as similar dynamics in the case of Queensland might be evident elsewhere. The research is relevant for other disaster-prone western communities, as crisis reform needs to be established to improve the frameworks and not for any other reason. The goal must always be to improve public service and ensure that political accountability is at its highest in a crisis. These values are endangered if crisis reform is pushed through despite a successful disaster response, hence underlining the importance of this research for affected communities.

1.3 Reader's guide

The subsequent chapter two provides the theoretical basis of this thesis, through outlining and discussing multiple concepts. Chapter three focuses on the methodology of this thesis, outlining the research design and how data is collected and analyzed. The analysis consists of three chapters. Chapter four portrays an objective picture of the 2010-2011 Queensland floods disaster response. This part includes what the key takeaways of the disaster response were that needed improvement. Chapter five discusses the content and justification behind the reforms to establish what the reforms entailed and why the Newman government found these appropriate. For this, the justifications of Keelty and Newman's Government are used to identify which problems the reforms were aiming to solve. Chapter six traces the process of reform installment back to explain how these reforms were created and how the political legitimacy of these reforms is challenged. This approach allows us to find an explanation for the disaster management reforms and consider many possible factors. Chapter seven includes the conclusions part that answers the research question and sub-questions, as well as reflections and discussion points of the research.

2. Conceptual framework

The conceptual framework of the thesis consists of three concepts that build onto each other. The first concept, *crisis*, is elaborated on to have a theoretical consensus for this thesis on what a crisis entails. The second and third concepts are more analytical and can help explain the outcomes of the research, namely *learning* and *crisis reform*. From the literature review on these concepts, the research question of the thesis logically follows.

2.1 Concepts

2.1.1 Crisis

First and foremost it needs to be acknowledged that *crisis* does not have an agreed upon definition. Lagadec (1993) elaborates on the notion that a crisis is an ambiguous concept, hence both policy-makers and scholars have difficulty handling the concept. In recent years, crises have been changing, due to an increased variety of crises occurring in different forms. These developments, enabled by globalization, illustrate once again the inherently dynamic nature of a crisis. The notion of a crisis defies routine, hence amplifying that what a crisis entails is dynamic and fluctuates over-time (Lagadec & Boin, 2000, p. 185).

It is important to realize that crisis is often used as an umbrella term for any event that is irregular and creates disruption (Boin, 2005). Due to theoretical difficulty with the concepts of *crisis* and *disaster*, Boin (2005) reorganizes the typologies. He explains that crisis as an overlapping term can include a disaster, but not vice versa. By putting a disaster as a sub-category under a crisis, Boin (2005) allows for a wider inclusion of possible crises to be researched that do not necessarily have a negative impact. Boin (2005) argues that the classic definition of disaster did not fit the modern-day crises of a different kind than natural disasters. Therefore, he defines a crisis as just any disruption of normal life, being a highly subjective

process that can lead to an extensive variety of events classified as a crisis, depending on the person's perspective (Boin, 2005). Boin (2005) acknowledges this subjectivity and states that "a disaster is a crisis with a bad ending", meaning that a disaster needs to be a collective agreement of a negative disruption (Boin, 2005, p. 163). Many of the theoretical and practical issues related to what a crisis means originates in the contemporary need to include different types of disasters (Boin, 2005). This research overcomes many of these theoretical issues by adhering to a traditional type of disaster, namely a natural disaster.

The characteristics of a crisis are often dependent upon the sector, since there are differences between for example a medical and financial crisis. Lagadec (1993) emphasizes the importance of practical input when discussing crises rather than theoretical analysis, leading him to conclude that a crisis can be broken down in a 'three-fold challenge', namely the tidal wave, disruption, and the breakdown. These three processes conclude that it illustrates the necessity for proper crisis prevention, as most of the issues in these processes can be (partly) remedied through preventive measures (Lagadec, 1993).

Lagadec (1993) fixates on the preventive side of the spectrum, whereas Coombs (2008), a predominantly business crisis communication researcher, takes a different approach. He justifies the importance of establishing a crisis as a three-fold event that takes the pre-crisis, post-crisis, and crisis-event into consideration. Even though Coombs's research is primarily focused on crisis communication and not necessarily crisis management, his three-fold division is still relevant and accurate in assessing which components belong to a crisis. According to him, the crisis does not solely consist of the evident part, namely the crisis response, but also includes the pre-crisis and post-crisis phases (Coombs, 2008). Coombs (2008) states that the pre-crisis phase includes two components, prevention, and preparation. Crisis prevention focuses on reducing the risk of occurrence of a disaster, in which it is quintessential to be able to assess the risk and consider the warnings. Crisis preparation is trickier in the sense that

organizations or individuals can never be fully prepared to handle a crisis, otherwise the destabilizing event would not have such a devastating impact. Nonetheless, a prior established chain of command or organizational structure can assist in making the response more effective, by pre-establishing tasks and positions (Coombs, 2008, pp. 99–104).

The second phase, crisis response, entails the actions executed by the organization(s) to handle the crisis and also to ensure an as soon as possible return to a normal state. The third phase, post-crisis response, is sometimes difficult to distinguish from the actual crisis. In this phase, the initial crisis has passed, but the effects are still visible and having an impact. Even though some processes might have returned to normal, there is still a high necessity to provide support in the aftermath of a crisis, as well as ensuring that relevant actors learn from the crisis response (Coombs, 2008). This three-fold division by Coombs (2008) is also used to structure the findings in this thesis on the disaster response analysis, because the division implies that the quality of crisis management is dependent on actions taken in all three phases. This structure assists in ensuring that all relevant components of the disaster response are taken into account.

2.1.2 Learning

As shortly pointed out by Coombs (2008), the post-crisis phase includes a process of *learning* for the relevant organization or authority. Learning as a concept is a part of a much larger post-crisis political space, that also involves accountability seeking for authorities. Crises expose political and societal deficiencies, which leads to the attitude that lessons must be learned to avoid repetition of the crisis. It is often difficult for organizations to formulate and implement lessons, which obstructs the organizations from learning (Boin et al., 2008). Learning can be synthesized as involving the “purposeful efforts to (re)examine, (re)assess, and (re)calibrate existing and proposed beliefs, policies, and institutional arrangements” (Boin et al., 2016, p. 128). Nonetheless, despite the general agreement that learning is crucial in the

aftermath of a crisis, there is a rather pessimistic perception that both organizational and individual learning rarely occurs after a crisis (Ansell et al., 2016; Boin et al., 2008, 2016). One of the main issues with learning from a crisis is the stagnant nature of reform (Boin et al., 2016). Therefore, the following discussion focuses specifically on the challenges of crisis reform.

2.1.3 Crisis reform

Crisis reform is often not an outcome of effective learning, but rather a political opportunity. There is a consensus amongst scholars that public policy reform is almost impossible in a regular context, meaning that crises are necessary to push those reforms through (Ansell et al., 2016; Boin et al., 2016). Crises can lead to institutional change, since the institutions become viewed as part of the problem instead of the solution. This leads to drastic policy proposals that are in a normal situation not feasible or logical, but during this institutional crisis are deemed as the only solution to move forward. It seems like an indisputable connection that crises, therefore, lead to crisis reform, but practical examples illustrate that this is not the case. In reality, these drastic policy proposals are often not executed. Therefore, most crisis responses facilitate a state of restoration instead of reform (Boin et al., 2016).

In situations where crisis reform does happen, an institutional crisis is necessary to showcase deficiencies of such a magnitude that the policy sector is to blame. The importance of institutional crisis in regard to policy-making was discussed by Ansell, Boin, and Kuipers (2016), which set out a few characteristics of an institutional crisis. Those characteristics boiled down to organizational issues in the structure and workings of the institution that lead to a legitimacy crisis. The relevant institution does not hold its legitimacy anymore and loses the public's trust, thereby leading to policy proposals aimed at reforming the institutions. An

institutional crisis does not come out of the blue; rather, it is a timely build-up of institutional erosion that leads to a decreasing trust of the stakeholders in the institution (Ansell et al., 2016).

It is normal that not all policies are successful and that some might need adaptation. This is referred to as the “performance deficit” by Ansell et al (2016, p. 419). However, if the public, media, and the stakeholders hold the perception that this deficit is too large and the institution is malfunctioning, they will blame the institution for the failure. It is crucial to understand that whether an institutional crisis occurs is dependent upon the perception of the stakeholders on the institution. Therefore, the question of the institution’s actual functioning is not at stake, solely the stakeholders’ perception of the institution (Ansell et al., 2016). Nonetheless, the literature holds that crisis reform is not a given, neither after an institutional crisis, illustrating the difficulties of crisis reform.

Whilst crisis reform studies have been developing in recent years by contributions such as Boin (2016) and Ansell et al. (2016), the crisis reform research is limited in its ability to supply possible alternative roads to crisis reform. Resodihardjo (2009), a public administration researcher specialized in political blame after crisis, elaborates on the importance of the political context surrounding crisis reform. The classic crisis reform thesis explains that a crisis leads to lower constraints for policymakers to push through reforms. Resodihardjo (2009) broadens this thesis by stating that the political context, such as upcoming elections or government reshuffles, can also positively impact the chances of crisis reform. While she emphasizes the possible impact of the political context on crisis reform, Resodihardjo (2009) also adheres to the prerequisite of an institutional crisis. Therefore, her contribution still does not allow for an explanation of how crisis reform is possible after a seemingly successful disaster response.

The literature illustrates that crisis reform is inherently political, albeit as a political opportunity itself or as an institutional crisis with a specific political context (Ansell et al., 2016; Boin et al., 2016; Resodihardjo, 2009). Being as crisis reform is a political construct, some clarity can be provided by research on policy success and failure. Whether a policy is perceived as a success or a failure depends largely on what perspective you are taking and what characteristics that perspective takes as successful or disastrous (Bovens & 't Hart, 2011). Bovens & 't Hart (2012) elaborate on the inherently subjective and biased nature of policy assessment by establishing a typology for six different kinds of present bias in policy assessment. This typology showcases a wide variety of biases, such as temporal and spatial, which implies that all policy assessment is challenged by a myriad of possible bias.

Bovens, 't Hart, and Kuipers (2008), build onto the political character of policy evaluation. Since (negative) policy evaluations often have strong effects on the relevant politics, public officials will participate in activities to avoid blame or pinpoint blame on others. It results in a frames contest between those actors most at the forefront that want to avoid being labeled as guilty of this policy disaster. As pointed out, even more institutionalized policy evaluations are intrinsically political, since accountability is always at stake in these policy evaluations (Bovens et al., 2008).

As the literature on the crisis reform is limited in explaining a possibility for crisis reform without a preceding disaster, the possible theoretical explanation can be found in the inherently subjective nature of determining whether a policy (sector), in this research the disaster management system, was successful or not.

2.2 Academic gap

Following from these concepts, it becomes clear that Queensland's natural disaster management reforms provide an incentive for research. The literature suggests that crisis

reform is often a political opportunity to push through certain reforms. However, since there was no clear (institutional) crisis that depicted major deficiencies, the 2010-2011 floods and the reforms that followed make an interesting case to analyze from the perspective of the theoretical concept of crisis reform. Due to the academic consensus that severe deficiencies are a pre-requisite for crisis reform, the employed research question will add to the academic debate of whether crisis reform can also occur when there was a successful response and if so, how this process occurred. A possible explanation can be found in the notion by Bovens & 't Hart (2012) that policy evaluation is inherently subjective and political, thereby explaining how a disaster management system can be evaluated positively by one government and problematic by another.

3. Methodology

3.1 Research design

This research employs a single-case study design that both uses content analysis and process-tracing as methods. Conducting extensive single-case analysis allows for a better understanding of the dynamics of the case. The goal is to broaden the theoretical perspectives on crisis reform, therefore it is crucial to initially conduct extensive within-case analysis to form new hypotheses (Blatter & Haverland, 2012, p. 80). Follow-up research would preferably include cross-case analysis, but due to time and resource constraints for this thesis, it is relevant to first delineate possible new theoretical hypotheses on crisis reform literature.

The research is Y-oriented, meaning that the research aims to explain an outcome (Y), rather than taking the focus point of a causal factor (X) and researching its impact on the outcome. For this research, the outcome is known and the interest lies in finding an explanation for this outcome. The outcome that is analyzed refers to the reforms of Queensland's disaster management framework which occurred after a seemingly successful disaster response. The goal is to disentangle a myriad of factors that have led to this outcome, therefore justifying the choice of causal-process tracing (Blatter & Haverland, 2012, pp. 79–84).

With complex political processes such as crisis reform, a high-variety of factors is probably at play. The research also includes the use of content analysis as a way to extract textual data on disaster response and reforms. The causal-process tracing technique allows for the inclusion of multiple factors, making it appropriate to employ this technique for the thesis. Due to the two assumptions that the research question holds, as explained in section 1.1, it is logical and appropriate to also use content analysis to analyze the 2010-2011 disaster response and the disaster reforms.

3.2 Case selection

The selected case study for this research is the disaster management reforms that occurred in 2014 in Queensland. The initial interest lies in finding an explanation for how this outcome transpired. To grapple the results of this study, some background knowledge of the institutional framework in Queensland is necessary, both on the disaster framework and the arrangement of emergency services. Queensland has a highly institutionalized disaster management framework with a legal framework to support it. The Queensland parliament, headed by the Premier of Queensland, divides the responsibility for the ministerial portfolios. Connected to these portfolios are departments that need to execute the policies (The State of Queensland, n.d.-b). This means that the portfolios can differ per Ministry and task responsibilities can shift every few years. The *Disaster Management Act 2003* forms the legal underpinning of Queensland's disaster management. The state's longstanding experience with disaster management is the reason why it is interesting to analyze how this matured system was suddenly overhauled and for what reasons this was done.

While for most types of research it is not acceptable to select cases on their outcome, for the utilized process-tracing technique it is common to do so. This is because the focus is on the outcome, the rare event, which needs to be explained. In this research, the focus lies on extricating the process behind Queensland's disaster management reforms under the *Public Safety Business Agency Act 2014*. The case study was selected on the observation of a puzzle that could not be explained by existing literature on *crisis reform*, hereby justifying the reason for this case study.

3.3 Data collection

For this research, only document analysis is executed. This means that all data collected comes from documents, both primary and secondary sources. For primary sources, data related

to the Queensland Government and affiliated disaster management institutions are the main focus due to the research's goal of analyzing government reforms. The research has a three-fold analysis, of which each part has different documents that are necessary to answer the sub-questions. These different analytical components require different data collection. Especially in regards to the process tracing technique, the use of a wide variety of information is necessary to conduct the research (Mukherjee & Jensen, 2020). Below, the collected data sources are outlined per chapter.

Documents Used

Chapter four: Assessment of the 2010-2011 floods response

1. Queensland Floods Commission of Inquiry Final Report (Queensland Floods Commission of Inquiry, 2012)
2. Queensland Recovery and Reconstruction in the Aftermath of the 2010/2011 floods (The World Bank & Queensland Reconstruction Authority, 2011)
3. 2010-2011 Annual Report (State Disaster Management Group, 2013)

These three documents are all from different organizations. The official inquiry is a very fruitful document due to its extensiveness, but inquiries are always part of a bigger political game that can impact the quality of the information (Boin et al., 2009). Therefore, it is necessary to incorporate other sources in the analysis. The second document is created through a cooperation between the Queensland Reconstruction Authority (QRA) and the World Bank, where the World Bank as an external organization non-related to Queensland's government fosters a variety of lessons learned. Their report's focus is also pre-dominantly on the post-crisis phase of the disaster response. Last, the State Disaster Management Group (SDMG) is a governmental institution in Queensland specifically constructed for the

management of disasters. Therefore, it sheds more light on the organizational workings on a governmental level before and during the natural disaster. With these documents, the aim is to have a variety of arguments and topics discussed that portray an as objective as possible disaster response in the 2010-2011 floods.

Chapter five: the focus and justification of the reforms

1. Public Safety Business Agency Act (*Public Safety Business Agency Act*, 2014)
2. Public Safety Business Agency Bill explanatory note (Public Safety Business Agency Bill 2014 Explanatory Note, n.d.)
3. Sustaining the Unsustainable (Keelty, 2013)

First, the *Public Safety Business Agency Act* is the legal underpinning of the reforms, making it necessary to analyze the contents of this backbone of the reforms. Second, since legal documents can be limited in regard to their explanatory language, Minister Dempsey provided the Queensland Parliament with an explanatory note when proposing the bill. This is a helpful document for the analysis, since it was a supplementary document to the reforms. Last, these reforms are predominantly based on the results from a critical review on the Department of Police and Community Safety, written by Keelty (2013). This document provides extensive problem statements, justification, and explanation for why the proposed reforms should be implemented.

Chapter six: political legitimacy of the reforms

Data collection from chapters four and five, respectively the disaster response and the disaster management reforms, are also used to identify parts of the causal chain in the process-tracing technique. In addition, the following sources are used:

1. Official Queensland Government statements on the PSBA

2. Newspaper articles from the Brisbane Times and the Guardian Australia
3. Record of Proceedings on the PSBA (Hansard, 2014a, 2014b)

As chapter six employs a process-tracing technique, a variety of sources is necessary to prove the specific components of the causal chain. While some parts of the causal chain are already analyzed through chapters four and five, most of the components of the chain are researched in chapter six. A variety of sources is used in the last analysis chapter, for example, official statements from the Queensland Government, newspaper articles to gather public opinion on Newman's reforms, and parliamentary hearings in the Queensland parliament. Only newspaper articles from the Guardian and the Brisbane Times are analyzed, due to their high online accessibility and solid digital archive. Due to accessibility, it is appropriate to utilize their articles for this thesis. The *Public Safety Business Agency Bill 2014* has been a topic on the parliamentary agenda twice in 2014, namely on 6 March and 6 May. Those Record of Proceedings are analyzed to understand the arguments used pro and contra for the PSBA in the political space.

3.4 Methods of analysis

For this qualitative single-case study design, two methods of analysis are chosen to analyze the collected data. Since each sub-question of the research has different research goals, it was a necessity to use a combination of methods. The following two sections explain the justification behind these methods and also include the operationalization.

3.4.1 Content analysis

For the first two parts of the research, the documents mentioned under data collection are analyzed through content analysis. Content analysis is defined as “a research technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts

of their use” (Krippendorff, 2003, p. 18). In content analysis, the documents that are used in the context of this research and have not been created with this goal in mind, meaning that the extracted textual data is always to a certain extent subjective. This inherent limitation of using documents that were not created for this specific research only amplifies the necessity to have a concrete coding scheme. Content analysis is an appropriate method for these two parts because the goal is to extract textual data from a variety of documents.

For the first part of the content analysis in chapter four, three categories of pre-crisis, crisis-event, and post-crisis are used. As explained in the conceptual framework, a crisis does not depend on one unlucky event. Rather, it is a build-up, making it necessary to include those three phases as categories in the first part of the content analysis. The different phases are operationalized with specific indicators in *Table 2*. These indicators categorize the measures and actions related to the disaster in the correct disaster phases. The indicators are partly composed through logical reasoning and initial research on disaster management and others are more specifically collected through analyzing documents from the *Disaster Research Center (Disaster Research Center, n.d.)*.

The second part of the content analysis in chapter five is divided into two categories and its indicators are visualized in *Tables 3 and 4*. This chapter focuses on the two-fold sub-question 2, which refers to the content of the reforms and the justification given for these reforms through the Keelty review and Newman’s government. The indicators are composed through logical reasoning based on the goals of this analysis, which are to understand what the reforms entailed content-wise and to understand what the reasons given by relevant actors for the installment of these reforms were.

3.4.2 Process-tracing

Process-tracing as a research technique is especially valuable in theory development, which is why it is useful to use this technique for the research aims of this thesis. The method allows for a variety of explanations for the given outcome, therefore making it possible to include multiple factors. It also forces us to consider a possible alternative explanation to avoid a tunnel-vision (George & Bennett, 2005). For this research, the interest lies in explaining a specific outcome, which is why the process-tracing technique is appropriate and relevant to use in this research.

The process-tracing analysis conducted in this thesis uses a causal chain that illustrates a sequence of events that occurred over-time. This chain of events has led to the outcome (Y) that is being researched, namely the disaster reforms after a seemingly successful disaster response. The sequence of events that will be analyzed in this thesis are visualized in *Figure 2*. The accompanying operationalization is placed in *Table 5*, which explains how each part of the causal configuration is operationalized. After collecting evidence for each causal inference, the strength of this evidence is assessed. This is to ensure the quality of the collected data and the subsequent conclusions of the thesis.

Table 2*Operationalization of the assessment of the 2010-2011 disaster response in Queensland*

Disaster response in the 2010-2011 floods in Queensland	
Category 1: Pre-crisis	
1.	An institutional framework that allows for variation in strategy to ensure the disaster management strategies match local needs (Quarantelli, 1993)
2.	Efforts to train emergency services and other relevant disaster organizations to be prepared for unexpected disaster scenarios, e.g. through simulations (Quarantelli, 1993)
3.	Efforts to educate communities on how to respond to and prepare for a flood
4.	Institutional arrangements on the disaster management framework that instruct clearly how the disaster response needs to be coordinated, on an organizational, political, social, and economic level, which constrains role conflict during the disaster (Quarantelli & Dynes, 1986)
5.	A clear strategy on task and power division between federal state, state, and local institutions to ensure that there is no confusion about responsibility between different governmental levels (Quarantelli, 1993)
6.	The existence of communication systems that allow for communication between all emergency services
7.	Up-to-date and appropriate floodplain management is in place that ensures local approaches
8.	Local governments adhere to state-level planning to ensure a coherent and effective disaster response
9.	Efforts to have enough material resources (e.g. shelters, bed resources, medicine) to enhance local capabilities (Dynes & Drabek, 1994)
Category 2: Crisis-event	
1.	Well-functioning disaster communication between different emergency services and relevant organizations during the disaster response
2.	Proper application of dam strategies in Queensland
3.	Effective allocation of material resources such as food, water, and medicine
4.	Effective allocation of human resources, such as specialized workers and spontaneous volunteers
5.	The task and power division between the state and local level illustrated the usage of the right tactics to handle the disaster response (Quarantelli, 1993)
6.	A well-functioning communication network that shares flood information and warnings to the public to minimize death and damage during the crisis-event
7.	The extent of damage to essential services such as infrastructure, electricity, and the sewage
8.	Existence of sufficient and adequate emergency accommodation for affected communities
9.	Wide range of cooperation between organizations and institutions on how to assist severely affected communities and decrease their risks

Table 2 continued

Category 3: Post-crisis

1. State recovery and resilience-enhancing actions for essential services and infrastructure such as electricity, the sewage, roads, the rail network, government institutions, and education (Quarantelli & Dynes, 1985)
2. Sufficient and accountable mobilization of funds to rebuild and support individuals, families, and businesses
3. Clear communication regarding financial, material, and mental support during the recovery process to minimize stress and increase public morale (Quarantelli & Dynes, 1985)
4. Organized economic support for critical sectors in Queensland, such as tourism and mining
5. Cooperation between different levels of government and different organizations that improves the effectiveness and efficiency of recovery actions
6. State recovery actions for the environment, such as for wildlife, protected areas, and coastal areas
7. Specialized assistance in rebuilding and enhancing community resilience to ensure a future-oriented perspective, both on cultural/mental levels as well as physical ones (e.g. building quality) (Quarantelli, 1993)

Note. These indicators serve to identify the disaster management components that belong to a specific disaster phase in the analyzed documents.

Table 3

Operationalization of the content of the disaster management reforms in Queensland

The content of the disaster management reforms	
Category 1: Organizational structure	
1.	Information on the organizational structure of the reforms, such as who is the head of the institution and which Department(s) are responsible
2.	Changed task and responsibility division for pre-existing authorities, namely the QPS, QFRS, and EMQ
3.	Task division and responsibility for newly created institutions, namely the PSBA and the IGEM
Category 2: Changes in Queensland’s legal framework	
1.	The legislative amendments to the <i>Disaster Management Act</i>
2.	The legislative creation of the <i>Public Safety Business Agency Act</i>
3.	The general legislative role and power of the <i>Public Safety Business Agency Act</i>

Note. Indicators per category that serve to identify which parts of the analyzed documents are relevant to determine the content of the disaster management reforms.

Table 4

Operationalization of the justification behind the Public Safety Business Agency Act

The justification and reasoning behind the PSBA reforms
Category 1: Increased efficiency
1. Explanation of how the Agency will increase efficiency in Queensland’s disaster management framework
2. Elaborate explanation on how the proposed solutions will improve efficiency, e.g. time- and money-wise, in disaster management
3. Elaborate explanation on how the proposed solutions will improve effectiveness through increased quality of the disaster operations
Category 2: Problem statements previous disaster management framework
1. Problem statements on pre-existing standing authorities, namely the QPS, QFRS, and EMQ
2. Elaborate explanation on how the proposed solutions will improve efficiency, e.g. time- and money-wise, in disaster management
3. Elaborate explanation on how the proposed solutions will improve effectiveness through increased quality of the disaster operations

Note. Indicators that serve to identify which parts of the analyzed documents are relevant to determine the justification by Newman’s government and the Keelty review for the reforms.

Table 5

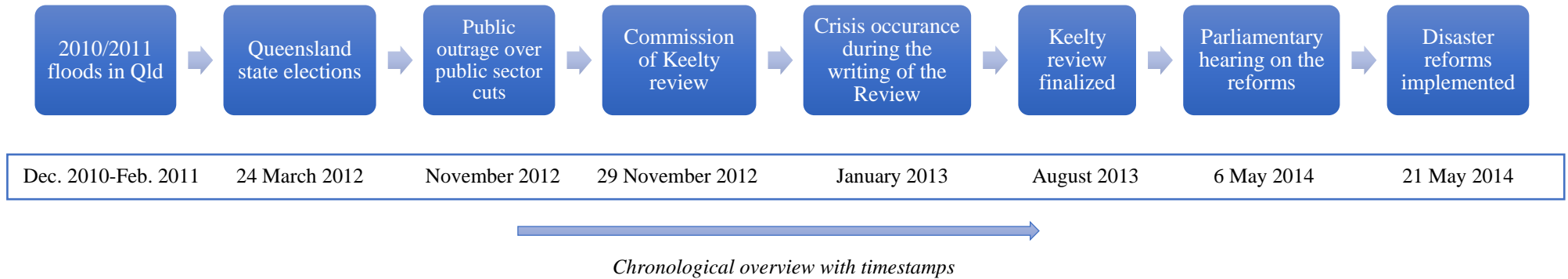
Operationalization of the causal configuration behind Queensland's disaster management reforms

Part of the causal configuration (fig. 1)	Expected observation (indicators)	Type of mechanistic evidence used to measure the expected observation according to Beach & Pederson's typology (2013)
<u>2010-2011 floods in Queensland</u> Disaster response of a multiplicity of weather events underlined in section 1.1.1.	The disaster response illustrates both positive and negative elements from the collected data under section 3.3	Account evidence from reports from the Queensland Floods Commission of Inquiry, State Disaster Management Group, the World Bank & Queensland Reconstruction Authority (2012; 2013; 2011)
<u>Queensland state elections</u> Electoral state results of the March 2012 elections in Queensland.	The elections show a sweeping win for Newman and his Liberal National Party (LNP).	Trace evidence from newspaper articles from the Brisbane Times and The Guardian, and official electoral commission results.
<u>Public outrage over public sector cuts</u> Public sector cuts referring to Newman's proposed public sector reforms in November 2012.	Public rage over public sector cuts, since Newman's plans do not fit his pre-electoral promises.	Account evidence from newspaper articles from the Brisbane Times and The Guardian that show dissatisfaction with public sector cuts.
<u>Commission of Keelty review</u>	The Newman government commissions Keelty to conduct a review into the Department of Police and Community Safety.	Trace evidence from official media statements from the Queensland Government.
<u>Crisis occurrence during the writing of the review</u>	A series of floods occurred in January 2013, which were used as a reference in the review.	Account evidence from the Keelty review and the Bureau of Meteorology.
<u>Keelty review finalized</u>	Release of the Keelty review.	Trace evidence from official statements from the Queensland government and the release of the report.
<u>Parliamentary hearings on the proposed reforms</u> Discussions in the Queensland parliament.	Criticism of the proposed reforms by the political opposition.	Trace evidence from the Record of Proceedings; the parliamentary hearings in the Queensland parliament.
<u>Disaster reforms implemented</u> Referring to the <i>Public Safety Business Agency Act 2014</i> ,	The Bill is accepted by the Queensland Parliament.	Trace evidence from the implemented legal documents, i.e. <i>Public Safety Business Agency Act 2014</i> .

Note. The expected observations are indicators of the different parts of the causal chain. The table shows how and what type of evidence is used to measure these observations. Where necessary, some additional explanation is added in the left column per causal configuration element.

Figure 2

The process underlying Queensland's disaster management reforms



Note. Visualization of the causal chain of events made by the author.

3.5 Reliability and validity

The research has a single-case research design that employs a causal-process tracing technique, while also analyzing data through content analysis. This combination leads to a very high degree of knowledge on this case, hence having a high internal validity (as is common with causal-process tracing). Generalization for causal-process tracing research has very different goals than covariational and correlational research, which leads to a different type of generalization. This type of research can broaden the variety of causal configurations that lead to a certain outcome, thereby creating a pathway for further research that can be covariational or correlational in nature (Blatter & Haverland, 2012, pp. 134–137). More specifically, this research aims to add to the causal configurations of the theoretical concept of *crisis reform* by illustrating that crisis reform can also exist after a successful disaster response.

Regarding the reliability of the results, the method of content analysis aims to be as objective as possible without interpreting the textual data. Nonetheless, a certain degree of subjectivity is always present, as the used sources were not created for this specific research. The textual data is constructed in the context of my research, which lowers the reliability. However, to ensure that the research process is adequate and can be duplicated by someone else, the appendices include the coding schemes of the research. All sources that are used are static documents, making the research possible to duplicate with similar results.

4. Assessment of the 2010-2011 floods response

4.1 Introduction to the assessment

As the conceptual framework elaborated, there is a consensus in the literature that a portrayal of deficiencies through a crisis is a prerequisite for having reforms. Following this logic, the first part of the analysis focuses on the sub-question “*How effective was the 2010-2011 floods response in Queensland?*”. The results follow the same three-fold structure of a crisis that was explained in the conceptual framework, thus the results are divided per pre-crisis, crisis-event, and post-crisis phase. The sub-sections entail an explanation of how these positive and negative components were visible in the 2010-2011 floods response. Taking these results into mind, it must be acknowledged that policy assessment research is inherently biased and always projects some subjectivity (Bovens & 't Hart, 2012). To overcome this, a variety of documents is analyzed to avoid a one-sided vision of the crisis management during the 2010-2011 floods.

4.1.1 Damages in the 2010-2011 floods




The 2010-2011 Queensland floods were composed of multiple disastrous weather events, as explained in chapter 1.1.1. The extremity of these events was visible in the immense damage that was caused. To better understand the scale of the disaster, a damage estimate provides relevant background. The total cost according to the Insurance Council of Australia would be 2.38 billion AUD (Australian Disaster Resilience Knowledge Hub, n.d.-b). Nonetheless, this does not include damages that need to be paid from government funds, as the Queensland Reconstruction Authority estimated the total cost to be at 5 billion AUD¹

¹ This translates to roughly 3.1 billion euros, using the European Central Bank's exchange rate from AUD to EUR on 3 June 2020.

(Queensland Floods Commission of Inquiry, 2012). *Table 6* includes a short overview of the damages and devastating impact this disaster had on Queensland.

Table 6

A quick overview of damages due to the 2010-2011 floods

	Personal damage <ul style="list-style-type: none">•33 deceased•3600 houses destroyed, 28000 houses for repair
	Economy <ul style="list-style-type: none">•3572 businesses destroyed•\$4 billion dollar damage in essential sectors
	Infrastructure <ul style="list-style-type: none">•3 ports destroyed•19000 km road destroyed•28% of Qld's rail network damaged

Note. This table uses data from the Australian Disaster Resilience Knowledge Hub (Australian Disaster Resilience Knowledge Hub, n.d.-b).

4.2 Pre-crisis

The pre-crisis phase includes both prevention and preparation components. Prevention relates to measures that try to avoid the crisis from occurring altogether, while preparation refers to increasing capabilities that allow for an appropriate response when the crisis is happening (Coombs, 2008). Whereas it is not possible to stop weather events from happening, it is possible to lower the possible impact of these events by mitigation efforts. Preparation focuses on the basis that a crisis will occur someday and there need to be appropriate measures in place to ensure that both the public and relevant actors in disaster management are aware of how they can effectively respond.

4.2.1 Positive elements

Institutional framework. The institutional framework in Queensland is praised for its clear task and responsibility division within disaster management, which allows for an efficient and fast response. According to the State Disaster Management Group (SDMG), the formalized relationships were efficient in preparing coherent and consistent awareness for both the general audience and special needs groups (2013). These formalized relationships are embedded in Queensland’s legislation, predominantly the *Disaster Management Act (Disaster Management Act, 2018)*. Queensland is also praised by the World Bank and the Queensland Reconstruction Authority (QRA) for its “multi-tier institutional arrangements, legislation, and formal coordination” (The World Bank & Queensland Reconstruction Authority, 2011, p. 11). This institutional framework prescribes how ad-hoc and standing authorities need to coordinate on a State, district, and local level, which ensures efficient disaster management (State Disaster Management Group, 2013).

The institutional framework also outlines directives for quick (financial) resource allocation, ensuring a swift response to civilians’ needs (The World Bank & Queensland Reconstruction Authority, 2011). The main example of this is Queensland’s pre-agreed financial relief system by the Natural Disaster Relief and Recovery Arrangements (NDRRA), which underlines Queensland’s “ex-ante disaster response strategy” (The World Bank & Queensland Reconstruction Authority, 2011, p. 11). This system includes the possible financial packages that affected people can receive depending on their situation. This also includes a structure on how much of the disaster expenditure lands on the Commonwealth Government and the State Government, which allows for transparency and quick mobilization of funds (The World Bank & Queensland Reconstruction Authority, 2011). The positive effect of these financial elements, which are embedded in Queensland’s institutional framework, are discussed in detail in chapter 4.2.3.

Communal educational efforts. During 2010, in preparation for the upcoming wet season, there were multiple educational efforts for different communities, such as households, individuals, and people with special needs. Emergency Management Queensland (EMQ) created a booklet for the general public called the “SES Get Ready Guide” and contained key information on how to prepare for a flood, as well as how to stay updated with governmental warnings (State Disaster Management Group, 2013). In addition, the SMDG devotes specific praise to the educational efforts by the Australian Red Cross in cooperation with EMQ for people with disabilities and their caretakers. These organizations created a specific disaster plan called “Emergency REDiPlan”, which included specialized information for people with vulnerabilities on how to increase their disaster preparedness (State Disaster Management Group, 2013). This illustrates the acknowledgment by the SDMG of different needs for disaster preparedness for different groups within society.

The SDMG also mentioned the work of the Department of Education and Training (DET), which decided in 2010 to give training to school principals. The goal was to better prepare for school closure during a disaster and ensure that communication between affected schools and the relevant department was functional (State Disaster Management Group, 2013). To better assist the goals of the DET, the Emergency Response Taskforce was created as the main institution to provide support, information, and coordination for the education and training sector surrounding a disaster response (State Disaster Management Group, 2013). These extensive educational efforts acknowledge the importance of specified disaster plans to enhance preparedness amongst all layers of society.

Material resources to enhance local capabilities. In December 2010, the Department of Public Works (DPW) and Queensland Health (QH) created a new protocol called the Bedding Resources Protocol. The aim is to efficiently allocate material resources between local evacuation centers. Through this protocol, local communities could reach out when they had a

material deficit in order to minimize the negative effects of these deficits (State Disaster Management Group, 2013).

4.2.2 Critique

Preparedness. As stated in the preface of the Queensland Floods Commission of Inquiry (QFCoI), the mere scale and extent of the floods was not considered possible by the Queensland government. In addition, much flooding occurred simultaneously, pressuring the resources of Queensland's public safety sector. The 2010-2011 floods overwhelmed the government and civilians, which led to many reconsiderations in the post-disaster phase regarding the need to increase resilience. However, most of these reconsiderations did not originate in a malfunctioning of the organization or institution. Rather, they evolved from a growing consensus that Queensland should be prepared for *any* flood and not just floods of limited size (Queensland Floods Commission of Inquiry, 2012). This does not take away from the importance of considering what were successful and less successful elements of the disaster response. Nonetheless, it provides some necessary nuance on the general disaster preparedness attitude of the Queensland authorities preceding the floods.

Floodplain management. Despite the existence of a Queensland State Planning Policy since 2003 with the aim to prepare state planning that considers natural disasters, this disaster showcased that some local councils do not take these planning strategies as seriously as they should. The World Bank and QRA noted that some of the local councils were actively working around these implementation benchmarks, which decreases the resilience of communities (The World Bank & Queensland Reconstruction Authority, 2011). This weakness in floodplain management was also one of the key topics in the QFCoI, which stated that the Queensland State Policy used imprecise structure and language that do not have strict enough controls. In

addition, due to the diversity within Queensland, local approaches are necessary to effectively tackle flood management. These floodplain frameworks need to support local approaches instead of prescribing a universal approach (Queensland Floods Commission of Inquiry, 2012).

The problematic nature of the state of floodplain management in 2011 is further amplified by the lack of scientific flood studies to assess proper floodplain management. Sufficient floodplain management is impossible without recent flood studies, which is why the QFCoI strongly recommended those studies to be executed (Queensland Floods Commission of Inquiry, 2012). A possible solution for this deficiency that was raised in the post-crisis phase of the crisis was a so-called land-swap, executed in the town Grantham, where residents can rebuild their houses in safer locations (The World Bank & Queensland Reconstruction Authority, 2011).

Communication systems between emergency services. Two issues emerged when analyzing the existing communication systems prior to the 2010-2011 floods disaster. Communication capabilities between different services are referred to as interoperability, defined as “the capacity for persons in different organizations or different parts of the same organization to exchange information” (Queensland Floods Commission of Inquiry, 2012, p. 650). First, the Department of Community Safety was responsible for both the ambulance and the fire services. The police services are not included in this portfolio. This was problematic, because the police’s communication system did not allow for any communication to go from their system to the system of the fire and emergency services (and vice versa).

Furthermore, the police services also lacked a framework for intra-organizational information exchange. The police services utilized a communication system that could only communicate with five out of the 21 police communication centers. The remaining 16 were all stand-alone computers and were unable to communicate with the other systems (Queensland

Floods Commission of Inquiry, 2012). This weak system makes it unnecessarily difficult to efficiently allocate resources and support between police centers, especially during a disaster that affects such a big area as in 2010-2011.

Institutional framework. The institutional arrangements in Queensland failed to adequately outline the task division between the State Emergency Services (SES) and the EMQ. According to the official inquiry conducted in the aftermath of the disaster, the task division between the SES and the EMQ was ambiguous and did not specify which of the two was responsible in certain situations. In addition, this ambiguity in the institutional plans relating to these organizations also harmed the relationship between EMQ and the local disaster management units from SES. These tensions all originate in an unclear marked domain and lack of directives on task responsibility (Queensland Floods Commission of Inquiry, 2012). This illustrates that the pre-determined institutional framework regarding these organizations was not sufficient to properly prepare for the disaster response.

4.3 Crisis-event

The following section applies to the crisis management performance that is evident through the immediate response during the crisis. This means that it includes how the emergency services, or other relevant actors, are handling the crisis. The aim is also to work on minimizing the disruption and enabling systems to go back to their normal state as soon as possible (Coombs, 2008).

4.3.1 Positive elements

Communication to the public. The massive scale of the 2010-2011 floods provided opportunities for the Queensland government and affiliated public safety entities to use social media as a way to effectively reach mass audiences. A best-practice came from the Queensland Police Service (QPS), which was underlined by two reports, one authored by the SDMG and

the other authored by the World Bank and Queensland Reconstruction Authority (2013; 2011). The QPS established itself as a key actor in communicating disaster information on social media (State Disaster Management Group, 2013). The 2010-2011 floods saw increased use of social media by the public, e.g. through the use of hashtags (The World Bank & Queensland Reconstruction Authority, 2011). The QPS provided those people on social media with key information about the flooding, using social media platforms such as Twitter and Facebook that allowed for up-to-date disaster response information to reach big groups of people (State Disaster Management Group, 2013). In addition, Queensland Business used social media to provide (informational) support to companies in need (The World Bank & Queensland Reconstruction Authority, 2011). These organizations effectively used social media during the disaster to quickly spread important information.

Nonetheless, traditional means of communication are still of key importance during contemporary disasters. The Department of Community Safety (DCS) actively held informational live streams during the disaster, which were aired on television. According to the SDMG, media representatives positively evaluated this strategy, saying it helped inform the public about the latest updates regarding the disaster (State Disaster Management Group, 2013).

Material resource allocation. Due to improved measures for material resource allocation, the Department of Public Works (DPW) found that a myriad of items was provided to an extensive range of communities during the 2010-2011 disaster response, such as bedding, bottled water, and even vehicles with fuel (State Disaster Management Group, 2013). The SDMG also proved to be essential in connecting the Queensland Government with the Commonwealth Government about coordinating an effective allocation of resources outside and within Queensland. This cooperation between the federal and state level increased

efficiency in the disaster response and allowed for a better overview of what resources were available (State Disaster Management Group, 2013).

Cooperation between institutions. According to the SDMG, cooperation between a department and disaster coordination organization made it possible to save people in need. The Department of Environment and Resource Management (DERM) gave information during the disaster response to the State Disaster Coordination Centre (SDCC) about the impact on the coast and in National Parks. Due to this information-sharing, the SDCC was able to safely evacuate recreational visitors stuck in nature areas, thereby mitigating the danger for those visitors (State Disaster Management Group, 2013).

4.3.2 Critique

Disaster communication. The official inquiry conducted into Queensland's 2010-2011 disaster response noted one major missed opportunity regarding communication between actors on essential infrastructure (Queensland Floods Commission of Inquiry, 2012). During the disaster, major parts of Queensland's sewage were damaged, which posed (health) risks to communities. The company responsible for the sewage system is Queensland Urban Utilities, an organization that did not play any significant role in the disaster response. Instead, the SEQ Water Grid Manager was appointed as the information source about the sewage system in Queensland, even though it has no responsibility for the sewage system. According to the QFCoI, this was a missed opportunity because the company is the one in direct line with the end-users which is a great source of information during the disaster. In addition, the company is the one that is responsible for the sewage system, thus should have a role in the communications. Therefore, the disaster response would benefit from including such a relevant private actor in its communications (Queensland Floods Commission of Inquiry, 2012).

Dam strategies. The QFCoI also noted an investigation into the functioning of the Wivenhoe and Somerset dams, since there were questions whether the manuals were followed properly by dam engineers. It was important to get clarity on this issue, because proper dam management can positively influence the disaster by minimizing the rising tides and the floods. In this disaster, the lack of proper dam management may have worsened the floods in Brisbane and Ipswich, but it must be noted that these “what if”-scenarios do not provide certainty on the course of the flood. The QFCoI proved that the dam engineers did not adhere to the manuals, from which a logical follow-up rises that the manuals need to be revised to take the difficulties that the engineers experienced into account (Queensland Floods Commission of Inquiry, 2012).

4.4 Post-crisis phase

The post-crisis phase is when most operations are returning to their normal state. The crisis is not the center of attention anymore; rather, the focus is on rebuilding society. An important component is that the political authorities need to communicate how this process of rebuilding is going. The recovery phase is also particularly important in entangling what could have gone better in the pre-crisis, crisis-event, and post-crisis phase (Coombs, 2008). It is also in the aftermath of the crisis that the analyzed documents have been composed, an illustration of the need to compile possible lessons.

4.4.1 Positive elements

Mobilization of funds. The combination of pre-disaster institutional arrangements and the preparedness by the authorities to be flexible where necessary made a quick and efficient mobilization of funds possible. This flexibility is evident through the Commonwealth Government allowing for an extra category in the NDRRA to support businesses that are unable to recover with the standardized assistance (State Disaster Management Group, 2013). As quoted by the report of the World Bank and the QRA, “Successful recovery is closely

associated with speedy mobilization of funds.” (2011, p. 19), illustrating the importance of fast and efficient fund mobilization. Due to this importance, the World Bank and the QRA specifically praise Queensland’s financial response to the disaster. The recovery phase of the disaster response has shown this quick mobilization by making funds available to both individuals and businesses, which allowed for a renewed stimulus in the economy that was necessary to rebuild the communities (The World Bank & Queensland Reconstruction Authority, 2011).

Recovery communication. Queensland Government used press releases and public media (such as newspapers, television, and radio) to update Queenslanders on the recovery in Queensland. The Queensland Government also used these communications as a way to applaud civilians who put in extra effort to rebuild the communities in Queensland and to instill public morale. Furthermore, the Queensland Government created an initiative called “The Premier’s Disaster Appeal” to ask citizens to donate money to help other Queenslanders in need. According to the World Bank & QRA, Queenslanders appreciated these recovery communications which assisted in managing expectations while simultaneously working on the community supporting each other (The World Bank & Queensland Reconstruction Authority, 2011).

Spatial data. Some technological advances that used spatial data have managed to make the recovery phase more efficient. One of these technological tools was the Damage Assessment and Reconstruction Monitoring system (DARMSys™), created by the QRA and the Queensland Fire and Rescue Services (QFRS), which continuously assessed affected communities. DARMSys™ has been essential in prioritizing those who need assistance the most. In addition, DERM supported the Premier’s Disaster Relief Appeal by providing spatial data on which locations in Queensland needed (financial) support the most (State Disaster Management Group, 2013). These technological advances were praised by the World Bank

since it enhanced the disaster response and it also illustrated the willingness to include innovative technology in the disaster framework (State Disaster Management Group, 2013).

Specialized recovery assistance. Even though there were already many response frameworks in place, the state of Queensland responded quickly to the unprecedented scale of this disaster by establishing a specific organization for Queensland's recovery. The SDMG mentions the establishment of the QRA in February 2011, through a legal framework, with the main aim to ensure a smooth and successful post-crisis phase (State Disaster Management Group, 2013)

Human resource mobilization. As already mentioned in the introduction, the 2010-2011 response was often praised by scholars for the massive inclusion of volunteers in cleaning up the affected locations (Ahmed & Sinnappan, 2013; Arklay, 2012). One of the main issues after huge flood disasters are indeed those excessive amounts of debris that need to be cleaned up. As also proven from the documents, the disaster response in Queensland saw a wide variety of human resource mobilization that assisted in this clean-up. Multiple departments such as DERM and Department of Justice and Attorney-General (DJAG) assisted in the clean-up, either by providing volunteers or helping in efficient volunteer management (State Disaster Management Group, 2013).

According to the SDMG, most note-worthy from these activities is the smooth coordination between departments, SDMG agencies, and the Australian Red Cross that enabled these clean-up operations. This included specialized clean-up assistance, such as cleaning tourist and production areas to ensure a speedy economic recovery and remove chemicals to ensure public health (State Disaster Management Group, 2013). The smooth cooperation between volunteers, the Australian army, and the emergency personnel in the clean-up has been

one of the reasons that the post-crisis phase has been so successful (The World Bank & Queensland Reconstruction Authority, 2011).

4.4.2 Critique

Recovery of essential services and infrastructure. In the aftermath of the flood, there were issues with the business continuity within the DPW that made it difficult to continue its governmental services. The SDMG notes a lack of proper communication framework with staff and dysfunctional information systems, which made continuity difficult. Nonetheless, it is acknowledged that lessons are learned from this dysfunctionality and that the relevant Department is working to increase its business continuity (State Disaster Management Group, 2013).

When reviewing the disaster response, the SDMG acknowledged a local need to increase hospital preparedness. For the Cairns and Hinterland Health Service District, the disaster made evident that they needed to be better prepared for emergency hospital sites to ensure continuity of essential care in the aftermath of the disaster (State Disaster Management Group, 2013). This illustrated that the hospital care in the 2010-2011 post-crisis phase had difficulty re-starting their essential care, thereby not managing to restore essential services fast enough.

4.5 2010-2011 floods: an unexpected crisis handled well

The size and strength of the floods overwhelmed many in Queensland. However, there are definitely critical issues that needed improvement, such as the lack of up-to-date and appropriate floodplain management. In spite of the enormous size and strength of these floods, as a disaster-prone community, there should have been better regulation on floodplain management. The fact that there was no proper floodplain management in place and local

councils actively tried to find loopholes in regulation showcased the lack of lessons learned from past flood disasters.

One of the main components that is (internationally) praised in the analyzed documents is the positive post-crisis phase of the disaster phase. It is used as a best-practice example in disaster management, due to the quick allocation of funds and the fast response by the governments to create a dedicated institution to the post-crisis phase (namely, the QRA). The low amount of negative elements in the post-crisis phase depicts a picture that there were no major issues in this phase. Nonetheless, it must be noted that issues in the post-crisis phase cannot be ruled out, as it is an obvious limitation that there was no time for this research to analyze all possible documents.

Queensland's extensive institutional framework for disaster management is praised for reasons such as its facilitation for quick mobilization of funds in the post-crisis phase of a disaster. Nonetheless, the institutional framework also has elements that still need to be improved. The 2010-2011 floods saw some conflict between the EMQ and SES regarding task responsibilities and authority. In a disaster, confusion about tasks and responsibilities severely affects the efficiency of the disaster response. The evidence that the institutional framework can be evaluated positively on one hand and negatively on another illustrates the multi-faceted nature of disaster elements.

It is naïve to assume that a disaster response could be perfect, but this analysis showcases a predominantly successful disaster response. With the exhibited issues, solutions, or recommendations were proposed, illustrating the desire to improve preparedness for a similar disaster. However, whether these solutions were effectively implemented is something that is out of scope for this research. In conclusion, the analysis of the disaster response depicted

a limited amount of deficiencies and showed regular success in both disaster management and operations.

5. The focus and justification of Queensland's disaster management reforms

The Newman government finalized a drastic set of reforms in 2014 for the public safety sector in Queensland, based on a review conducted by Michael Keelty. Since the review was commissioned in November 2012, it was strange that the disaster management system was evaluated as problematic, especially after a pre-dominantly successful response during the 2010-2011 floods. This chapter answers the following question: *What did the natural disaster reforms in Queensland entail and how were they justified by relevant actors?* The goal is to find out whether the reforms were as drastic as assumed by the media (Remeikis, 2013) and whether the reforms aim to solve the proposed problems. Since Keelty evaluated the public safety system as problematic, it raises the question what his reasoning behind this conclusion was and how he has justified the proposed reforms.

The *Public Safety Business Agency Act* was a set of reforms to change the public safety sector in Queensland. Not all reforms were related to disaster management, but only the impact specifically on disaster management or the legislation of the *Disaster Management Act* is discussed since the rest does not apply to this research. The legislative amendments of the reforms are based on the recommendations in the Police and Community Safety Review (PACSR) by Michael Keelty. The following part of the analysis is structured by discussing every remaining public sector actor after finalizing the reforms. Some actors were praised during the 2010-2011 disaster response, underlining the importance to find out what happened to these previously successful actors and the institutional framework in which they were embedded.

In the subsequent analysis, it is also discussed whether the reforms for the organizations fit the issues pointed out in the Keelty review. The Public Safety Business Agency plays an overarching role as a newly established organization, thus its tasks, responsibilities, and justification are first explained. Furthermore, the Inspector-General of Emergency Management (IGEM) and its office are also newly established, for which there is a need to outline the added value of its establishment for disaster management. The changes to the portfolios of pre-existing organizations are discussed to find out which tasks and responsibilities were transferred to other public safety entities. The conclusion will summarize the main components and its justification of the reforms, as well as question how appropriate and useful those reforms were.

5.1 A new standing authority aimed at technology and innovation

The major change to the disaster management framework is the establishment of the Public Safety Business Agency, a new portfolio business agency with the aim to manage “all the infrastructure, fleet, and information and communication technology assets, and will manage human resourcing, financial management, legal, policy, media and strategic planning functions for the QPS, the Queensland Fire and Emergency Services and the newly established IGEM.” (Public Safety Business Agency Bill 2014 Explanatory Note, n.d., p. 1). Most of the PSBA’s tasks were previously the responsibility of the Department of Community Safety (DCS), which are now dissolved into this new institution (Public Safety Business Agency Bill 2014 Explanatory Note, n.d.).

In his review, Keelty claims that there is a need for partial privatization of Queensland’s emergency services to improve the quality of the public safety sector. He states that the Portfolio Business (i.e. PSBA) is necessary for more and better innovation, a greater business knowledge among emergency services, and increased cost-efficiency amongst public safety

entities (Keelty, 2013). Since the privatization of large parts of the public safety sector is a major decision, the following section explains how Keelty justified these moves to privatization.

Keelty takes the standpoint that technological innovation is necessary to accomplish lower costs and more flexibility. He takes the pre-requisite that the degree of technological innovation that he desires is only possible in a (partly) privatized structure. A private sector service will continuously compete for the lowest costs, therefore accelerating technological developments. In addition, a higher degree of flexibility within the organization's capacity is enabled through this privatization, as Keelty warns not to take the current stable situation for granted (Keelty, 2013). While there is some truth to the added value of privatization, public safety privatization has been a disputable topic for decades already (Stewart, 1985), thus requiring it to be a careful and well-thought decision.

Keelty mentions two problems in the public safety sector that decrease productivity, which, according to Keelty, can be solved through privatization. First, he explains the importance of out-sourcing within public safety entities; an aspect that the QPS already developed for certain jobs. Nevertheless, Keelty finds the degree of out-sourcing unsatisfactory and wants to spread out-sourcing to all public safety entities. Regarding out-sourcing, the PSBA would be responsible for market contestability to ensure a constant thrive for innovation and cost-efficiency. Second, Keelty touches upon a cultural issue that creates an environment that does not maximize people's productivity and also does not attract new talent. According to him, especially the Queensland Fire and Rescue Service (QFRS), show a lack of hard work and no incentive to leave. Employees see their job as 'a job for life', which leads to 'financial entitlement' (Keelty, 2013, p. 46). Keelty is convinced that these problems can be solved through the establishment of the PSBA, where privatization and out-sourcing are the main pillars of the institution.

Since Queensland's disaster management is institutionalized in legal documents, some legal amendments were necessary to allow for the creation of this agency. First and foremost, the legal creation of the PSBA through the *Public Safety Business Act 2014*. The agency's responsibilities in the legal document are, in addition to the earlier mentioned occupations, also to assess the performance measures of the public safety entities (*Public Safety Business Agency Act, 2014*). The agency therefore also takes on an oversight role to ensure the workings of the public safety entities.

Regarding organizational structure, the agency has to report about its workings to the Minister of Police, Fire, and Emergency Services. The agency will have a chief executive officer (CEO) that is recommended by the Minister and appointed by the Governor of Council. The *Public Safety Business Agency Act* also shows that the CEO is obliged to follow any desired direction of the Minister and the CEO has a role to keep the Minister informed about any issues related to the agency. Regarding the agency's staff, the agency can hire staff that they deem necessary, as well as the possible transfer of police officers to the PSBA in cooperation with the QPS. Last, the PSBA needs to provide an annual report on the actions they've undertaken in the relevant financial year and indicate the direction the Minister had given (*Public Safety Business Agency Act, 2014*). In these legal arrangements, there are not necessarily any unsuspected elements, most of the amendments can be logically derived from the mere establishment of the agency.

5.2 An oversight institution for disaster resilience in Queensland

Keelty amplified that it is important to have specific institutions dedicated to the improvement of disaster management, also in times where there is no immediate danger. To ensure the quality of Queensland's disaster management, the Inspector-General of Emergency Management (IGEM) and its office were established. The aim is to preserve Queensland's

resilience and make sure that the state is better prepared for disasters (Keelty, 2013). The years leading up to the Keelty review there were no specific signs that the disaster arrangements were malfunctioning, but as stated by then Minister Dempsey, “It’s about making sure we are ahead of the game” (Keelty, 2013, p. 52). Therefore, the justification for this new function and its office was to preventively improve the disaster arrangements. While preventively increasing disaster resilience is a positive notion, it is questionable on which logical grounds the IGEM would be conducting certain tasks.

The office has a multitude of functions that are newly-established, such as ensuring interoperability between Queensland’s agencies under the PSBA, setting disaster management standards, and making sure that those standards are met by the public safety entities. Furthermore, the office’s tasks are also to increase cooperation with governmental institutions to increase resilience, as well as possible private alliances “to improve community outcomes” (Keelty, 2013, p. 156). The head of this office, the inspector-general, is predominantly responsible for ensuring that the office works efficiently and correctly (*Public Safety Business Agency Act*, 2014). The tasks of both the IGEM and the office are both outlined in the *Public Safety Business Agency Act 2014*. Taking the aim of the institution into account, namely to increase Queensland’s disaster resilience, these responsibilities are logical in nature as they are all focused on resilience-enhancing initiatives.

To facilitate the newly-established office, some amendments to the *Disaster Management Act* were necessary. The *Disaster Management Act* originally saw the function of a chief executive, whose responsibility it was to review the disaster management effectiveness on a State, district, and local level. In addition, this chief executive also had an obligatory reporting function to the State Disaster Management Group about the effectiveness and implementation of the State disaster management plan. These tasks are transferred from the

chief executive under the *Disaster Management Act* to the office of the IGEM under the *Public Safety Business Agency Act* (Public Safety Business Agency Bill 2014 Explanatory Note, n.d.).

The establishment of the IGEM is portrayed as a necessity by Keelty to ensure that disaster management standards are up-to-date and adhered to. The IGEM is also supposed to assess the capabilities of the district and local disaster management plans, to avoid outdated standards and ensure that local regions and districts also follow the correct standards (Keelty, 2013). The main goal of the establishment of the IGEM was to increase Queensland's disaster preparedness, which in itself is a legitimate goal. These objectives are portrayed clearly through the institutional arrangements of this public safety entity.

5.3 A centralization move: local disaster management to the state's fire service

Aside from the establishment of new organizations, the portfolios of existing public safety entities experienced major changes through the reforms. The name and responsibilities of the state's fire service were changed through these reforms, with the main outcome that more responsibility came into the hands of the Commissioner of the state's fire service. The Queensland Fire and Rescue Service (QFRS) was merged with Emergency Management Queensland (EMQ), which was made possible through legal amendments. Some parts of the *Disaster Management Act* were combined with the *Fire and Rescue Service Act 1990* and then renamed to *Fire and Emergency Services Act 1990* to correctly represent the contents of the act. These legal amendments enabled the establishment of a new department called the Queensland Fire and Emergency Services (QFES). It is important to realize that the sole responsibility for the QFES lied in the hands of the appointed Commissioner of QFES, which had to take care of a portfolio that was previously split between two functions, namely the Fire Commissioner and the DCS chief executive. Therefore, these reforms illustrated more authority

and responsibility going to the QFES (Public Safety Business Agency Bill 2014 Explanatory Note, n.d.).

Due to the abolishment of the EMQ, responsibility for the State Emergency Services (SES) came into the hands of the newly-established QFES (Public Safety Business Agency Bill 2014 Explanatory Note, n.d.). The SES's main objective was to assist local disaster management departments by creating local emergency service units (Keelty, 2013). Keelty acknowledged that the local structure of ESU's dispersed amongst Queensland is crucial in managing crises, but there is also a need for a better capacity and capability assessment of local councils orchestrated by the State. At the point in time of writing the review, the local capacities of SES and its volunteers differed greatly between locations, which led to an overall waste of energy and resources (Keelty, 2013). To avoid this waste of energy and resources, Keelty deemed it necessary to place the SES and its ESU's under a more centralized authority as a way to regain an overview of the State's capabilities.

Keelty pointed out that the QFES must take on a much broader perspective when considering itself as a public safety entity. The name and portfolio change aim to support the attitude that the fire service is not only about putting out fires. Disaster management is also one of the fire service's main responsibilities, something that should be better portrayed through the organizational culture (Keelty, 2013). Keelty remarked that the previous QFRS and EMQ had unused potential that could strengthen each other by combining the organizations. As the police service is still the pre-dominant emergency service for disaster operations, the objective was to maximize QFES' potential as a supporting actor to the police service. Keelty argued that the merging between the QFRS and EMQ would enable the institutions to maximize their capabilities, therefore enhancing the probability of a successful disaster response (Keelty, 2013).

5.4 Problematic police services

Keelty strongly criticized the Queensland Police Service (QPS) in the review, dubbing it as the most important agency in a disaster response, while also presenting it as a problematic organization. Two main issues emerged from the Keelty review when looking at the role of the state's police service within the disaster management. First, Keelty outlined communication issues regarding interoperability between the QPS and other governmental organizations. This leads to deficiencies within the communication systems during a disaster (Keelty, 2013). Second, Keelty identifies the relationship with the SDCC as less than optimal. The QPS did not participate in certain pre-disaster season training, which hurt the quality of the disaster response during the 2013 floods, according to Keelty. When the QPS met with the SDCC to manage the 2013 disaster, the QPS was not aware of updated operating procedures, slowing down the disaster management (Keelty, 2013). To ensure a smooth and efficient cooperation between the QPS and SDCC in future situations, the Keelty review recommended to physically locate the QPS with the SDCC, which also fosters an attitude to continuously work on disaster management (Keelty, 2013).

The Keelty review takes the perspective that this important role of the QPS in disaster management and operations should be reinforced and echoed in institutional arrangements. During the 2013 floods response, a major deficiency was the lack of appointment of a State Disaster Coordinator, which is now set to be by default the Commissioner of Police, which is simultaneously the Deputy Chair of the SDMG (*Public Safety Business Agency Act, 2014*). This rule gives very direct authority in regards to disaster decision-making to the QPS. The QPS should also be creating the State disaster management plan, with approval of the SDMG (Keelty, 2013). These actions show the increasing authority put to the QPS as a dominant actor in disaster management. Nonetheless, Keelty touches upon the coordination issues between the QPS and the SDCC and indicates that a much bigger issue looms, which is the organizational

culture within these public safety entities that thwart the possibilities of efficient cooperation between these organizations (Keelty, 2013).

5.5 Reflections on the reforms: were they problem-solving?

Going through the reforms, it is clear that some of the recommendations within the Keelty review are contradictory and sometimes do not match the findings. One of the main changes in this new structure is the increased responsibility for the state fire service. Two pre-existing public safety entities, namely the EMQ and the QFRS, were merged. Additionally, local disaster management units from the State Emergency Services were also moved to the new state fire service. On the one hand, Keelty stated that the state fire service will be able to handle this increased authority due to its “structure, discipline, and capacity” (Keelty, 2013, p. 168). On the other hand, Keelty criticizes the stagnant culture within the state fire service that lacks talent and does not portray an ambitious organization (Keelty, 2013). It is contradictory that Keelty gave more responsibility to an organization that he calls both disciplined and lazy. It is also unclear what perceived problem he aims to solve with this restructuring, especially since the 2010-2011 floods assessment did not show any major issues with Queensland’s fire service.

The issue of interoperability within Queensland’s public safety sector and especially within the QPS is mentioned in the Keelty review as a critical issue that obstructed Queensland’s disaster management. This issue was not new, as the Queensland Floods Commission of Inquiry (QFCoI) also mentioned the QPS’ issues with inter- and intra-organization interoperability (Queensland Floods Commission of Inquiry, 2012). However, the reforms fail to show any constructive approaches on how to tackle these interoperability issues. It only states that the IGEM should have as a key focus on “ensuring the interoperability of

systems across portfolio agencies and those who support Queensland's disaster management arrangements" (Keelty, 2013, p. 53), but this is a rather empty promise.

The persistent problem of interoperability that was mentioned both in the Keelty review and the QFCoI will not magically dissolve through a new institutional structure. Keelty stated that the centralization of authorities due to the reforms would "allow a concentration of effort on the interoperability of the remaining agencies (...)" (Keelty, 2013, p. 37). This illustrates acknowledgment of the problem, but interoperability does not solely depend on formal frameworks, such as communication systems. One of the main barriers to efficient coordination in emergency services is cultural interoperability, stated by Waugh that "coordination is greatly facilitated when agencies have invested in developing relationships with those organizations" (Waugh, 2003, p. 381).

Keelty explicitly stated that the lack of cooperation in Queensland's disaster management originated in mistrust and misunderstandings (Keelty, 2013), which implies Keelty had the perception that there was mistrust amongst the public safety entities. He especially points out that the QPS were reluctant to cooperate on interoperability issues, from which Keelty concluded that the QPS "(...) are not team players when it comes to some whole of government issues" (Keelty, 2013, p. 268). Keelty found that the QPS and DCS have failed to improve the interoperability issues, but his own proposed reforms did not speak of any concrete measures to improve the relationships between public safety entities or to improve the interoperability problem.

Keelty also acknowledged the importance of cooperation between public safety entities regarding the State Emergency Services (SES), as the SES functions in local units that each have their own group of volunteers. Keelty pointed out that there is a complex issue within SES. Due to Queensland's dispersed area, the SES units are crucial in providing support for its

local communities during a disaster. Nonetheless, this local approach also leads to certain communities having way less or more resources and capabilities for a disaster response than others (Keelty, 2013). It is therefore understandable that Keelty calls for better coordination of local needs and capacities.

However, building on the importance of relationships within emergency management (Arklay, 2015; Waugh, 2003), it is questionable how the Queensland Fire and Emergency Services (QFES) would manage these local relationships. Through the reforms, the QFES incorporated Emergency Management Queensland (EMQ), including its responsibility for the local SES units. The EMQ “have been relatively good at building relationships with local governments” (Keelty, 2013, p. 154), especially supportive of local councils with fewer resources. Nonetheless, due to the dissolving of the EMQ, there was a huge risk of losing these local relationships – even though Keelty acknowledged how crucial the local disaster management councils are for Queensland (Keelty, 2013). The literature also emphasizes how important trusting relationships are to successfully manage a crisis and the main basis should be for any organization to ensure the existence of pre-existing network relationships (Boin & ‘t Hart, 2010, p. 367). Therefore, the Keelty review lacked perspective on how to practically execute these reforms that require strong relationships of trust between the state and local institutions.

In conclusion, this section discussed the content of the reforms per public safety entity. The reforms and the Keelty review showed a tendency to centralize management, in addition to an increased role for private actors to influence Queensland’s disaster management. The centralized reforms are an interesting move in a dispersed region like Queensland, where local needs and relationships are key in managing a disaster. Regarding the reforms’ justification, some of the reforms in the *Public Safety Business Agency Act* make sense and have solid reasoning, such as the establishment of IGEM to ensure disaster management standards

throughout the state. Other reforms seem to have been pushed through too soon, without taking into account the inherently complex nature of the projected issues. Most issues mentioned by Keelty were deeply institutionalized in the public safety sector's culture and would not necessarily go away through re-organizing the structure. Therefore, the reforms did not always fit the portrayed issues and the soundness of the reforms is questioned.

6. The political legitimacy of the reforms

In the following chapter, the attention shifts to the political process that precedes Newman's proposed reforms. Due to the lack of theoretical explanation for how these reforms could occur after the disaster management system was so positively evaluated in the 2010-2011 floods, there is an incentive to trace the process of the reforms back. In this chapter, the following sub-question is central: *"How is the political legitimacy of the reforms challenged?"*

The previous two chapters have argued that the 2010-2011 flood response showed a pre-dominantly successful disaster management system in Queensland. Furthermore, the reforms that followed included some questionable moves that did not always suit the projected problems. This chapter analyses which political factors were at play that enabled the Queensland disaster management reforms to be implemented.

6.1 Newman's entry to Queensland's state politics

After experiencing a long-term Labor government, there were multiple reasons why the Queensland public was not satisfied anymore with the functioning of the Labor government under Anna Bligh. First, Bligh had won the state election in 2009 with a focus on job creation and infrastructure development. However, due to the global financial crisis, most of these plans failed due to a lack of funds. To try and accumulate funds, Bligh decided to sell several state-owned assets; a strategy that was not appreciated by most of Labor's following (Colley & Grant-Smith, 2018; Prasser, 2012). Additionally, there were persistent problems with the payment system for Queensland Health employees' salaries, which cost millions (Hurst, 2012a).

Queensland was severely impacted by the 2010-2011 floods and the aftermath of the global financial crisis (Colley & Grant-Smith, 2018), which combined with the aforementioned

issues led to an environment where most citizens wanted a change. In addition, Anna Bligh had already been in office multiple years after being installed in 2007 to replace party-fellow Beattie as PM. Maintaining satisfaction from the Queenslanders became increasingly a challenge (Hurst, 2012a). Even though Bligh is praised for her performance during the 2010-2011 floods (Hurst, 2012a), it is clear that many underlying political issues severely impacted Queenslanders' trust in the Labor government.

The criticism on the Labor government and the need for change in Queensland provided an opportunity for the Liberal National Party (LNP), an amalgamated political party in 2008, to take the stage. Whereas previous opposition to the pre-dominantly Labor government was fragmented, the LNP provided a unified and stronger stance against Labor. Nonetheless, the LNP also experienced challenges preceding the 2012 elections, especially regarding party leadership. In March 2011, Campbell Newman stepped forward, at that moment the Liberal Mayor of Brisbane and not a member of Queensland's parliament. Due to his surprising entrance, Newman was dubbed the "leader of the LNP", an external politician that was swept in to strengthen the opposition (Prasser, 2012, p. 31). For most voters, the last straw to swing to the LNP's side was Labor's smear campaign, including many personally aggressive advertisements against Newman (Hurst, 2012a; Prasser, 2012). The 2012 state election resulted in an extraordinary win for the LNP, taking a shocking 78 of the 89 seats in the Queensland parliament (Colley & Grant-Smith, 2018; Electoral Commission Queensland, n.d.; Hurst, 2012a; Prasser, 2012).

In spite of this immense electoral support for the LNP, soon after Newman's election as Premier of Queensland critique arose on his proposed policies. Newman had vouched pre-election for an improved public sector that would only see a decrease in employees due to regular attrition (Jabour, 2013) and he promised a higher public sector wage (Hurst, 2011). Newman stated that it was a key opportunity for the Queensland government to handle the

voluntary departure of public service employees smarter, as this could allow for drastic expenditure cuts in the public sector (Jabour, 2013). Despite Newman's pre-election statements that his proposed measures would not negatively affect public servants, during his term, he implemented measures that evoked the anger of public servants. Together Queensland, a workers union, protested ferociously against Newman's public sector reforms. They stated that Newman's public sector cuts were a betrayal to the workers in Queensland, their mistrust of Newman underlined by the creation of a website called <http://www.howcanwetrustyou.org.au/>. They felt betrayed by Newman's plans, especially since his pre-election plans and proposed public sector reforms during his term did not match (*How Can We Trust You*, 2012).

Newman was unable to keep his promise of protecting the public sector while simultaneously cutting costs. Newman's great entrance to Queensland's state politics was overshadowed by the harsh criticism on the public sector reforms that disappointed many of Queensland's public servants. Only two weeks after the Together Union openly questioned whether Queensland's public servants could trust Newman (*How Can We Trust You*, 2012), Newman commissioned Keelty to conduct a review of the Department of Community Safety (DCS) (Queensland Government, 2012). The public sector reforms that followed this review severely impacted Queensland's disaster management framework.

6.2 The Keelty review: a controversial instrument

One of Newman's first actions as Premier of Queensland was to commission Keelty to conduct a review on Queensland's Department of Police and Community Safety (Queensland Government, 2012). Jack Dempsey, the Minister for the reviewed Department of Community Safety, presented the *Public Safety Business Agency Bill 2014* to the Queensland Parliament on March 6, 2014. The Public Safety Business Agency already started operations in November 2013, as the Department of Community Safety (DCS) was renamed to the PSBA. However,

this proposed bill by Dempsey would lead to the creation of the PSBA as a separate public safety entity and the final dissolution of the DCS. As mentioned by Dempsey, these legal amendments were necessary to fully embody the recommendations that resulted from the review (Hansard, 2014a).

In the previous chapter, it has been discussed in detail what this Act entailed. This section will specifically argue why the Keelty review was a political instrument for Newman to justify his proposed public sector reforms. Analyzing the political context surrounding the disaster management reforms helps explain the overarching research question of how the natural disaster management reforms were implemented despite the previous positive evaluation of Queensland's disaster management system. The analysis outlines arguments used in a parliamentary hearing in Queensland by the political opposition.

After the introduction of the Bill by Dempsey, the opposition started the debate about the Keelty review on 6 May 2014. It is important to note, for a sense of context, that the opposition only held 11 seats. Due to Queensland's unicameral system, there was no other option to slow down the legislation process. Once it went through the parliament, it was passed. Therefore, the opposition's say in the passing of the bill was *extremely* limited. Nonetheless, Byrne, a parliament member for the Labor Party, voiced the concerns of the opposition about the quality and integrity of the Keelty review (Hansard, 2014b). The major concerns that he raised are outlined below.

Byrne acknowledges that a small number of the recommendations in the Keelty review are understandable, such as the creation of the IGEM to ensure disaster management standards are adhered to throughout the state. However, Byrne has stated that "30 percent of the report has some merit, 30 percent is pure nonsense and 40 percent is unsubstantiated hyperbole" (Hansard, 2014b, p. 1191). Despite Byrne's clear disapproval of the reforms, he follows with

solely process-related comments to the Keelty review and the reforms. It lacks arguments for why the proposed reforms, content-wise, are inappropriate. Nonetheless, the opposition's criticism focuses on three themes, namely financial issues with the review and reforms, transparency issues, and a general questioning of the review and reforms' integrity.

First, the Liberal National Party (LNP) members held the perspective that the reforms will be financed through already existing government budgets. Newman's government believed that the re-organization of Queensland's public sector would not draw any extra cuts, a perception that was challenged by the opposition. It is especially curious that the Newman government held this belief that existing budgets will suffice when there has been no financial analysis on this matter (Hansard, 2014b). Furthermore, it was unclear how the public safety budgets will be divided and redirected. The opposition asked for clarity on the financial arrangements, because it was not clear whether the commissioners of the QPS and QFES would be purchasing services from the PSBA or whether the funds were directly allocated to the PSBA which decides about the budget allocation. Byrne demanded clarity on this because "power and capacity is about where the money is." (Hansard, 2014b, p. 1194).

Second, there were major transparency issues related to the review and the reforms. Byrne argued that while the Newman government insisted on the supposed benefits of the PSBA, the employees from the police and emergency services were unaware of what these reforms would mean for them (Hansard, 2014b). The Keelty review remarked at some point the unwillingness of the QPS to cooperate with the review. The reason for this, according to Keelty, was the stand-alone nature of the QPS that instills an attitude not to adhere to general bureaucratic standards (Keelty, 2013, p. 244). However, Byrne argued that this attitude within the QPS might have originated in a general distrust in the Review team (Hansard, 2014b). It seems that the QPS' distrust is (partly) justified, since responsibilities of the Commissioner of Police are being transferred to the CEO of the PSBA without a transparent parliamentary

discussion on the topic. In addition, the Legal Affairs and Community Safety Committee, a committee from the Department of Community Safety (DCS) that formed the policy, did not include either the QPS or the QFES in the policy process (Hansard, 2014b).

Last, the general integrity of the Keelty review and the succeeding reforms were challenged in the parliamentary hearing. Byrne questioned the integrity of the reforms and states that the Keelty review was commissioned “to provide some operational authority or credibility in an attempt to implement the Costello audit recommendations” (Hansard, 2014b, p. 1191). The Costello audit was a questionable audit of Queensland’s financial situation, released previously to the first LNP budget in September 2012 (Hurst, 2012b). The LNP used the audit to state that Queensland currently had 20,000 public service jobs too many, which the state did not have financial means for (Jabour, 2013). However, the Costello audit compared the amount of Queensland’s public sector jobs to population growth since 2000 and concluded that if the equation had stayed the same since 2000, there would have been 18,500 fewer jobs (Jabour, 2013). It was not an audit per se on whether Queensland was able to afford these salaries; rather, it was framed this way by the LNP to justify their public sector cuts (Hurst, 2012b).

Since the Costello audit was used to justify the LNP’s budget plans that included a very impactful downsizing of the public sector, it is peculiar that shortly thereafter Keelty was commissioned to conduct a review of Queensland’s public safety sector (Arklay, 2015; Hansard, 2014b). In spite of this questionable policy process, the Keelty review itself also had questionable components that link with the argument that there might have been a pre-determined element to these reforms. The review was commissioned in November 2012 and proceeded to use the disaster management during the Queensland floods of January 2013 as an example for why the system was not working well. This created suspicion, because it implied that 2013 floods were used as a justification for a pre-determined restructuring (Arklay, 2015).

Overall, it also needs to be noted that statements by the opposition are naturally politicized in nature and therefore must be critically analyzed. However, elements such as the lack of a financial plan, the use of the 2013 floods in the Keelty review, and the controversial link with the Costello audit are evidence for the review being flawed. These components indicate that the Keelty review was used as an instrument to justify pre-determined public sector cuts, as the aforementioned evidence shows that the review was not a neutral, independent instrument.

6.3 The reforms: lessons learned or political opportunity?

The following section places the aforementioned findings more directly in the context of the crisis reform literature. As Boin states, crisis reform is often the outcome of a political opportunity, rather than successful learning (Boin et al., 2016). Therefore, the following section entangles how the reforms were an example of reform as a political opportunity. The proposed reforms are an example of crisis reform as a political opportunity, although under a slightly different context than normally considered in crisis reform literature. First, a short recap of the crisis reform thesis is given. Second, Newman's use of a policy window to implement the reforms is explained. Third, an explanation is given how the reforms illustrate a failure to consider lessons learned regarding Queensland's disaster management.

The crisis reform thesis states that crisis reform is not a given, rather, it is quite rare. Most crises restore their old systems instead of implementing reforms. Furthermore, when reforms are implemented, it is often because the crisis exposed severe deficiencies which opened up a policy window for the reforms to be implemented. The reason why the context of this thesis does not immediately fit the frame of the crisis reform thesis is that the disaster management system of Queensland was first perceived to be successful (Queensland Floods Commission of Inquiry, 2012; State Disaster Management Group, 2013; The World Bank &

Queensland Reconstruction Authority, 2011); a perception that was completely overturned by the succeeding government in 2012 (Keelty, 2013).

Even though the context surrounding Newman's government and the reforms do not immediately fit the frame of the crisis reform literature, it is clear that substantial reforms took place after a flood crisis. The Newman government stated that the public safety arrangements, including Queensland's disaster management framework, were inefficient. The many reasons given through the Keelty review for these reforms have been outlined in chapter five, such as low productivity, lack of innovation, and lack of communication between emergency services. This attitude of perceiving the system as flawed is outlined in the Keelty review, stating that "the system works well almost in spite of itself" (Keelty, 2013, p. 11).

Interesting to note is that Keelty mentioned this statement twice. First as a general comment, after which it stated that both the review of the 2013 Bundaberg floods and the QFCoI exhibited deficiencies in Queensland's disaster management system. Second, much later on in the review in a finding that the natural disaster management system required stricter control from a state-level, Keelty stated that "the system (during the 2013 floods) worked almost in spite of itself" (Keelty, 2013, p. 146). It is peculiar that, in the review, Keelty emphasized the fact that the analysis used solely the 2013 floods as a reference for the analysis. Keelty blamed a whole system to be flawed, while only considering the 2013 floods in the analysis and failing to take previous best-practices or lessons learned into consideration. This is especially worrisome considering Boin and Lagadec's statement that there is no routine-crisis (2000), making Keelty's conclusions on the whole disaster management system implausible.

Following the analysis in chapter four, there was a multitude of well-functioning elements in Queensland's disaster management framework during the 2010-2011 floods

response, which sometimes stood opposite to the proposed reforms by Keelty. An example of this is the local performance and relationships within Queensland that will now be overshadowed with the centralization moves through these reforms (Arklay, 2015). At the very least, not taking the 2010-2011 floods response into account, showed a lack of lessons learned in Queensland's natural disaster management history.

One of Keelty's major critiques in the review in regards to mismanagement during the 2013 floods was the lack of appointment of a State Disaster Coordinator during the disaster. While this was indeed a mistake, this was a fault directly made by Premier Newman. The Premier of Queensland was also by default the chairperson of the State Disaster Management Group (SDMG), whose responsibility it was to appoint a State Disaster Coordinator if deemed necessary by the incumbent Premier. As also pointed out by Arklay (2015), Newman had a lot of experience with local disaster management due to his previous position as Mayor of Brisbane, but was unfamiliar with state-level disaster management. The same goes for his whole government; a newly-amalgamated political party that had broken through a persistent pattern of Labor as a majority party. It indicates that the Newman Government was unable to properly handle the 2013 floods, due to its major and new entrance to Queensland's state politics. For a sake of emphasis, it must be noted that 78 out of 89 seats in the parliament were held by members of the LNP, illustrating that there was barely any counter-weight to decisions made by the government during the disaster.

Keelty's lack of lessons learned comes forward through the lack of inclusion of previous disaster management in the analysis of the review. As explained by Boin & 't Hart (2003), crises form a threat against the system that is perceived to be weak. The political leader either decides to defend the system to avoid any reform, or, a leader can use the policy window that opened up to change the system. However, Newman's approach was slightly different. He used the proposed reforms to defend his political trajectory and created a policy window,

illustrating how Newman's context showed characteristics of both elements of the crisis reform thesis.

First, it was necessary to find problems in the public safety sector that could be improved through reforms, as a way to defend the government's path forward. The findings of the Keelty review and the succeeding reforms were an instrument to justify public sector cuts that were announced shortly before the commissioning of the review. The proposed reforms were therefore a way to defend the status quo; the status quo being, in this case, the scenario of the public safety sector restructuring that was already announced prior to the elections. After the public realized that these public sector reforms led to harsh cuts, it became a deeply controversial policy and angered many people, as explained in chapter 6.1.

Second, the 2013 floods and its projected problems allowed for a growing sense that there *was* something wrong with the system. As also put forward by scholars, a crisis depends on the perception of the system's workings; not whether it is objectively speaking a well-functioning institution (Ansell et al., 2016). The mismanagement during the 2013 floods was not per se intentional, but used in the Keelty review to create a flawed picture of Queensland's disaster management. Through this, Newman managed to create both a justification and a policy window for his reforms, which were already unlikely to be challenged due to the political division in the parliament. Standing united within the parliament is one of the possible characteristics of a successful implementation of reforms (Bovens et al., 2001, p. 617), which was easy to accomplish with such an overwhelming majority for the LNP.

Keelty's supposed independent character is severely challenged merely by the fact that he does not take it into account *once* that Queensland had a completely different political context during the 2013 floods as compared to the 2011 floods. The relationship between Keelty and Newman is unclear, as Byrne from the Labor party also raised the question of who

Keelty was and why he seemed qualified for this review (Hansard, 2014b). Instead of holding the Newman government accountable for their mismanagement during the 2013 floods, Keelty blamed the system.

6.4 Conclusion on the politicized nature of the reforms

Despite a successful disaster response in 2010-2011, combined political factors such as the global financial crisis and dissatisfaction with the Labor party led to the opponents' electoral victory. The political context and Newman's sweeping victory gave leeway to overhaul the disaster management system, as part of a larger public sector restructuring. The sweeping electoral success of the LNP at the 2012 state elections surely put pressure on the table for the LNP to prove itself to the public, especially since Queensland's civilians were unsatisfied with the Labor government. The political legitimacy of the reforms is challenged due to the flawed nature of the Keelty review and the lack of adequate justification for the reforms. The use of the 2013 floods as the only reference, a disaster that partly failed due to the government's mismanagement, fuels the notion that the main point of the review was to find a justification for Newman's budget plans that included the sacking of 20,000 public servants.

However, taking the politicized nature of the reforms into account, it is also useful to take a step back and look at Queensland's general political context. After the 2015 state elections where Palaszczuk for Labor again won a majority of the seats, the Palaszczuk Government immediately announced a review into the Public Safety Business Agency (PSBA) (Queensland Government, 2016a). Additionally, the Palaszczuk Government openly labeled the PSBA as a "bureaucratic mess" from the LNP government (Queensland Government, 2016b). It illustrates that the public safety sector in Queensland remained a major political issue. Whereas it is out of scope for this research to assess the political dynamics of

Queensland's public policy sector, the immediate blame-game under Palaszczuk's Government shows how important these issues were for the political realm in Queensland.

Taking into account the flawed nature of Keelty's review, the public safety sector cuts, and the political scenery of Queensland preceding and during Newman's term, it illustrates that the crisis reform process had a multiplicity of factors at play. As stated in the literature that reform is very unlikely to happen (Ansell et al., 2016), a complex context is, therefore, necessary to allow for a complete overhaul of the sector. Building onto Boin's claim that reform does not automatically mean a positive change (Boin et al., 2016), it is clear from this chapter that the Keelty review and Newman's government failed to take the previous lessons learned into account. As explained in detail in chapter five, some of the reforms do not solve the projected problems. At the very least, these reforms thus show both unsatisfactorily implementation of the reforms, as well as a failure to take previous lessons learned from the 2010-2011 floods into account. However, following this chapter's analysis, it is likely that the review was used as a player in Newman's political game to drastically overhaul Queensland's public safety sector.

7. Conclusion

This research has used both content analysis and process-tracing as a way to entangle the story behind Queensland's drastic disaster management reforms. Since the current literature on crisis reform could not provide a full answer to Queensland's disaster management reforms, there was an incentive to search for a possible explanation. The research question was as follows: "*How can the disaster management reforms that followed the seemingly successful disaster response of the 2010-11 floods in Queensland, Australia, be explained?*" This research question entails multiple components that need to be answered, therefore chapter four, five, and six each answer to a different sub-question. The findings from those chapters are shortly summarized.

First, the research is based on the assumption that the 2010-2011 floods response was indeed a success. Since policy evaluation is inherently subjective (Bovens & 't Hart, 2012), a combination of documents was analyzed to provide an as complete as possible overview of positive and negative elements in the disaster response. The assumption was that the disaster response of the 2010-2011 floods was successful, which was confirmed by the conducted research. Despite some evident issues such as the lack of floodplain management and the lack of interoperability between emergency services, the response was evaluated as predominantly successful. The QPS used social media as a tool to reach a wide audience with disaster information and the post-crisis phase saw concrete and fast measures to assist civilians in need. While there were elements that needed improvement, most systems in place relevant to the disaster response proved to function well.

Second, an analysis on what the reforms entailed was necessary to understand the scope and impact of the *Public Safety Business Agency Act*. Two components needed to be analyzed regarding these reforms. First, whether these reforms entailed such drastic changes as stated in

the media (Remeikis, 2013). Second, to understand the process behind the reforms, it was also essential to understand what the justifications were according to Newman and Keelty. Taking this into account, the reforms illustrate a centralization of authority by the installment of a new standing authority called the Public Safety Business Agency. The PSBA would have authority over almost all of Queensland's disaster management, ranging from infrastructure to financial management and policy planning. Overarching values in this PSBA were the focus on innovation and market contestability, referring to the possibility of outsourcing a large part of jobs.

Furthermore, the Emergency Management Queensland (EMQ) was dissolved and its tasks were transferred to the newly-established state fire service. This also included the transfer of local disaster management services, namely the State Emergency Services and its units. These local groups depend on local relationships that may have been lost through these institutional changes. Nonetheless, the creation of the Inspector-General for Emergency Management (IGEM) was a more reasonable decision, as this position focused on ensuring disaster standards across the state. There was clear evidence that both in the 2013 and 2010-2011 floods, there were issues with floodplain management and local disaster standards, thus making it logical to tackle this problem through a new position with the aim to increase disaster resilience.

The justifications of these reforms were often contradictory and the reforms did not always solve the proposed problem. Keelty states that the state fire service was a highly problematic organization that showed a lack of ambition, but he gave them much more authority through the reforms, as they were now also responsible for all the local emergency management. In addition, previously established problems in Queensland's disaster management such as the lack of interoperability are pointed out and said to be taken care of through this new structure, but there are no concrete plans on how to tackle these problems.

Third, the political legitimacy of the review and the reforms is challenged. This part used the process tracing technique to analyze what contextual factors were at play that made the outcome; namely, the reforms, possible. The results show that multiple relevant factors impacted the political situation. The political situation in Queensland preceding the 2012 state elections made it possible for the LNP to take the stage. The public sector was already a topic in the election campaign, then stated by Newman that any changes to the public sector would not negatively impact public servants. This promise was not kept and outrage unleashed on the public sector cuts. Very shortly after, the Keelty review was commissioned, seen as an instrument to justify those cuts. This conclusion is reached through the illustrated lack of integrity in the Keelty review, which failed to take previous disaster management lessons into account.

In conclusion, the natural disaster management reforms of Queensland were part of a bigger set of reforms that included Queensland's public sector. The reforms were able to take place, in spite of the previous successful disaster response, because the system was framed by Keelty and Newman to be at fault. Blaming "the system" was a particularly interesting move considering that the 2013 floods exposed deficiencies within Newman and his government on managing disasters. These deficiencies were used to justify Newman's own proposed reforms. The importance of the political context in crisis reform is amplified by Resodihardjo (2009) who explained that newly appointed policymakers can open up an opportunity for policy reform. As a newly appointed leader, Newman could maneuver himself through the political space and propose reforms. In addition, the room for Newman to move was broadened by the political division in the parliament, where the opposition only held 11 out of 89 seats.

The major takeaway from this research is that the political perspective on the right way forward dominates how crisis management performance is evaluated. This perception is linked with the literature which states that whether something is positively or negatively evaluated

depends on the person's position and the context surrounding the evaluator (Bovens et al., 2001). The correlation between the political perspective of the incumbent leader and the policy evaluation is demonstrated in the notion that Keelty states that "the system works well almost in spite of itself" (Keelty, 2013, p. 11). There was no reasonable basis on which Keelty could blame the whole system to be faulty. Keelty evaluated the system as a failure, because it fitted the political trajectory of Newman. Newman seemed to be needing some "operational authority or credibility" (Hansard, 2014b, p. 1191) for his proposed public sector cuts that enraged many Queenslanders.

7.1 Discussion and avenues for further research

Overarching in this research is the persisting consensus that policy evaluation is inherently political. This thesis opens up the possibilities to research more crisis reform case studies that had the political authorities fabricate a problematic system that needed a fix. While it might be unlikely to find crises with a highly-similar context as this case, more case study research in similar situations will still add to our knowledge on how heavy the political perception of a system, institution, or sector weighs on enabling crisis reform. The academic field would surely benefit from more in-depth case studies on natural disaster management, however, other public sector case studies are also appropriate to improve the understanding of crisis reform.

Due to the researcher's time and position constraints, the most appropriate research methods were a combination of content analysis and a process-tracing. Nonetheless, this research topic could benefit greatly from a possible interview method. Through interviewing, more personal insights are possible, that would allow for a welcoming context to these reforms. While interviewing is sometimes difficult to organize, it can be considered a possibility for

crisis management students and researchers residing in Queensland. In addition, their local knowledge could also provide a deeper understanding of the political context.

Finally, as this research provided a nuance to the concept of crisis reform, any research that aims at broadening the possible theoretical hypotheses related to crisis reform is a welcoming addition. The work of Bovens, 't Hart, and Peters (Bovens et al., 2001) was a great first step into a generalization of public governance success and failures. The aspiration for future researchers on crisis reform should be to explore theoretical hypotheses and at last aim to find similar patterns between these cases. The goal of these researchers should always be to ensure that public safety and accountability are taken most seriously by incumbent leaders. Reforms should not be pushed through for political reasons; a pattern that hopefully can be detected in the future to ensure public safety for all citizens.

References

- Ahmed, A., & Sinnappan, S. (2013). The role of social media during Queensland floods: An empirical investigation on the existence of multiple communities of practice (MCoPs). *Pacific Asia Journal of the Association for Information Systems*, 5(2), 2.
- Ansell, C., Boin, A., & Kuipers, S. (2016). Institutional crisis and the policy agenda. In *Handbook of public policy agenda setting*. Edward Elgar Publishing.
- Arklay, T. (2012). *Queensland's state disaster management group: An all agency response to an unprecedented natural disaster*.
- Arklay, T. (2015). What Happened to Queensland's Disaster Management Arrangements?: From 'Global Best Practice' to 'Unsustainable' in 3 Years. *Australian Journal of Public Administration*, 74(2), 187–198. <https://doi.org/10.1111/1467-8500.12122>
- Australian Disaster Resilience Knowledge Hub. (n.d.-a). *Cyclone—Cyclone Yasi, Queensland*. Retrieved May 23, 2020, from <https://knowledge.aidr.org.au/resources/cyclone-cyclone-yasi-queensland/>
- Australian Disaster Resilience Knowledge Hub. (n.d.-b). *Flood—Queensland, 2010/11*. Retrieved May 15, 2020, from <https://knowledge.aidr.org.au/resources/flood-queensland-201011/>
- Beach, D., & Pedersen, R. B. (2013). *Process-tracing methods foundations and guidelines*. University of Michigan Press.
- Blatter, J., & Haverland, M. (2012). *Designing Case Studies: Explanatory Approaches in Small-N Research*. Palgrave Macmillan.
- <http://ebookcentral.proquest.com/lib/leidenuniv/detail.action?docID=931717>
- Boin, A. (2005). From Crisis to Disaster: Towards an Integrative Perspective. In E. L. Quarantelli (Ed.), *What is a disaster?* (pp. 153–172). International Research Committee on Disasters.

- Boin, A., McConnell, A., & 't Hart, P. (2008). Governing after crisis. In *Governing after crisis: The politics of investigation, accountability and learning*. University Press.
- Boin, A., & 't Hart, P. (2003). Public Leadership in Times of Crisis: Mission Impossible? *Public Administration Review*, 63(5), 544–553. <https://doi.org/10.1111/1540-6210.00318>
- Boin, A., & 't Hart, P. (2010). Organising for Effective Emergency Management: Lessons from Research1. *Australian Journal of Public Administration*, 69(4), 357–371. <https://doi.org/10.1111/j.1467-8500.2010.00694.x>
- Boin, A., 't Hart, P., & McConnell, A. (2009). Crisis exploitation: Political and policy impacts of framing contests. *Journal of European Public Policy*, 16(1), 81–106. <https://doi.org/10.1080/13501760802453221>
- Boin, A., 't Hart, P., Stern, E., & Sundelius, B. (2016). Learning and Changing: From Crisis to Reform. In *The Politics of Crisis Management: Public Leadership under Pressure* (2nd ed., pp. 126–144). Cambridge University Press. <https://doi.org/10.1017/9781316339756.007>
- Bovens, M., Hart, P. 't, & Kuipers, S. (2008). The Politics of Policy Evaluation. *The Oxford Handbook of Public Policy*. <https://doi.org/10.1093/oxfordhb/9780199548453.003.0015>
- Bovens, M., & 't Hart, P. (2011). *Understanding policy fiascoes* (Fourth printing.). Transaction Publishers.
- Bovens, M., & 't Hart, P. (2012). Assessing Policy Outcomes: Social and Political Biases. In M. Hill & P. Hupe (Eds.), *Public Policy: Volume 3 Public Policy in Action* (pp. 291–320). SAGE.
- Bovens, M., 't Hart, P., Peters, B. G., & Albæk, E. (2001). *Success and failure in public governance: A comparative analysis*. Elgar.

- Bureau of Meteorology. (n.d.-a). *Known Floods in the Brisbane & Bremer River Basin, including the Cities of Brisbane and Ipswich*. Retrieved May 22, 2020, from http://www.bom.gov.au/qld/flood/fld_history/brisbane_history.shtml
- Bureau of Meteorology. (n.d.-b). *Severe Tropical Cyclone Yasi*. Australian Government: Bureau of Meteorology. Retrieved May 15, 2020, from <http://www.bom.gov.au/cyclone/history/yasi.shtml>
- Bureau of Meteorology. (2011, March 1). *Queensland in Summer 2011*. Australian Government: Bureau of Meteorology. <https://reg.bom.gov.au/climate/current/season/qld/archive/201102.summary.shtml>
- Bureau of Meteorology. (2012). *Record-breaking La Niña events: An analysis of the La Niña life cycle and the impacts and significance of 2010-11 and 2011-12 La Niña events in Australia*. Bureau of Meteorology.
- Colley, L. K., & Grant-Smith, D. C. C. (2018). Of “Strong” Leadership, Crisis Communication, and Pooper Scoopers: Change in the Queensland Public Service Under Newman. *Australian Journal of Public Administration*, 77(2), 236–252. <https://doi.org/10.1111/1467-8500.12311>
- Coombs, W. T. (2008). 5. Conceptualizing Crisis Communication. In H. Dan O’Hair (Ed.), *Handbook of Risk and Crisis Communication*. Routledge.
- Disaster Management Act 2003*, State of Queensland (2018). <https://www.legislation.qld.gov.au/view/pdf/inforce/current/act-2003-091>
- Disaster Research Center*. (n.d.). Retrieved May 27, 2020, from <http://udspace.udel.edu/handle/19716/35>
- Dynes, R. R., & Drabek, T. E. (1994). The structure of disaster research: Its policy and disciplinary implications. *International Journal of Mass Emergencies and Disasters*, 12, 5–23.

- Electoral Commission Queensland. (n.d.). *2012 State General Election—Election Summary*.
2012 State General Election. Retrieved June 6, 2020, from
<https://results.ecq.qld.gov.au/elections/state/State2012/results/summary.html#9>
- George, A. L., & Bennett, A. (2005). *Case studies and theory development in the social sciences*. MIT Press.
- Hansard. (2014a, March 6). *Record of Proceedings 6 March 2014*. Queensland Parliament.
https://www.parliament.qld.gov.au/documents/hansard/2014/2014_03_06_WEEKLY.PDF
- Hansard. (2014b, May 6). *Record of Proceedings 06 May 2014*. Queensland Parliament.
https://www.parliament.qld.gov.au/documents/hansard/2014/2014_05_06_WEEKLY.pdf
- How Can We Trust You*. (2012, November 19). Trove.
<https://webarchive.nla.gov.au/awa/20121119001143/http://pandora.nla.gov.au/pan/136728/20121110-0001/www.howcanwetrustyou.org.au/index.html>
- Hurst, D. (2011, December 5). *Higher pay in lean public service, Newman pledges*. Brisbane Times. <https://www.brisbanetimes.com.au/national/queensland/higher-pay-in-lean-public-service-newman-pledges-20111205-1of5a.html>
- Hurst, D. (2012a, March 26). *Was she really THAT bad? Examining Anna Bligh's legacy*. Brisbane Times. <https://www.brisbanetimes.com.au/national/queensland/was-she-really-that-bad-examining-anna-blighs-legacy-20120326-1vtt3.html>
- Hurst, D. (2012b, August 20). *Nicholls stands by job cut rationale*. Brisbane Times.
<https://www.brisbanetimes.com.au/national/queensland/nicholls-stands-by-job-cut-rationale-20120820-24hg5.html>

- Jabour, B. (2013, August 7). *Campbell Newman the public service jobs bogeyman: True or false?* The Guardian. <http://www.theguardian.com/world/2013/aug/07/campbell-newman-as-jobs-bogeyman>
- Keelty, M. (2013). *Sustaining the Unsustainable—Police and Community Safety Review, Final Report*. <https://researchoutput.csu.edu.au/en/publications/sustaining-the-unsustainable-police-and-community-safety-review-f>
- Krippendorff, K. (2003). *Content analysis: An introduction to its methodology* (2nd [rev.] ed.). Sage.
- Lagadec, P. (1993). *Preventing Chaos in a Crisis: Strategies for Prevention, Control, and Damage Limitation* (J. Phelps, Trans.). McGraw Hill.
- Lagadec, P., & Boin, A. (2000). Preparing for the Future: Critical Challenges in Crisis Management. *Journal of Contingencies and Crisis Management*, 8(4), 185–191. <https://doi.org/10.1111/1468-5973.00138>
- Lindquist, E. (2013). *1. Putting Citizens First: Engagement in policy and service delivery for the 21st century* (S. Vincent & J. Wanna, Eds.). ANU E Press.
- Mukherjee, M., & Jensen, O. (2020). Making water reuse safe: A comparative analysis of the development of regulation and technology uptake in the US and Australia. *Safety Science*, 121, 5–14. <https://doi.org/10.1016/j.ssci.2019.08.039>
- NASA. (n.d.). *NASA - Hurricane Season 2010: Tropical Storm Tasha (South Pacific Ocean)* [Image Feature]. http://www.nasa.gov/mission_pages/hurricanes/archives/2010/h2010_Tasha.html
- Prasser, S. (2012). What went wrong?: The Queensland election. *Viewpoint*, 9, 29.
- Public Safety Business Agency Act 2014*, Queensland Government (2014). <https://www.legislation.qld.gov.au/view/pdf/asmade/act-2014-017>

Public Safety Business Agency Bill 2014 explanatory note, no. 5414T4605, Queensland Parliament, 38.

<https://www.parliament.qld.gov.au/Documents/TableOffice/TabledPapers/2014/5414T4605.pdf>

Public Safety Business Agency Bill 2014, Queensland Government, 167 (2014).

Quarantelli, E. L. (1993). Converting Disaster Scholarship into Effective Disaster Planning and Managing: Possibilities and Limitations. *International Journal of Mass Emergencies and Disasters*, 11(1), 15–39.

Quarantelli, E. L., & Dynes, R. R. (1985). Community response to disasters. In B. Sowder (Ed.), *Disasters and Mental Health Selected Contemporary Perspectives* (pp. 158–168). U.S. Government Printing Office.

Quarantelli, E. L., & Dynes, R. R. (1986). Role simplification in disaster. In *Role Stressors and Support for Emergency Workers: Proceedings from a 1984 Workshop* (pp. 23–37). U.S. Government Printing Office. <http://udspace.udel.edu/handle/19716/1122>

Queensland Floods Commission of Inquiry. (2012). *Queensland Floods Commission of Inquiry: Final Report*.

http://www.floodcommission.qld.gov.au/__data/assets/pdf_file/0007/11698/QFCI-Final-Report-March-2012.pdf

Queensland Government. (2011, June 16). *Queensland's disaster recovery recognised on world stage*. <http://statements.qld.gov.au/Statement/Id/75285>

Queensland Government. (2012, November 29). *Keelty to head Queensland police & emergency services review*. <http://statements.qld.gov.au/Statement/2012/11/29/keelty-to-head-queensland-police--emergency-services-review>

Queensland Government. (2016a, February 17). *Report into the Public Safety Business Agency (PSBA) tabled in Queensland Parliament today*.

- <http://statements.qld.gov.au/Statement/2016/2/17/report-into-the-public-safety-business-agency-psba-tabled-in-queensland-parliament-today>
- Queensland Government. (2016b, August 30). *New arrangements formalised for Public Safety Business Agency*. <http://statements.qld.gov.au/Statement/2016/8/30/new-arrangements-formalised-for-public-safety-business-agency>
- Remeikis, A. (2013, September 11). *Emergency services review recommends massive overhauls*. Brisbane Times.
- <https://www.brisbanetimes.com.au/national/queensland/emergency-services-review-recommends-massive-overhauls-20130910-2tidf.html>
- Resodihardjo, S. L. (2009). *Crisis and change in the British and Dutch prison services: Understanding crisis-reform processes*. Ashgate.
- State Disaster Management Group. (2013). *2010-2011 Annual Report* (No. 8).
- Stewart, J. K. (1985). Public Safety and Private Police. *Public Administration Review*, 45, 758–765. JSTOR. <https://doi.org/10.2307/3135033>
- The State of Queensland. (n.d.-a). *Queensland disasters | Disasters and emergencies* [Collection]. Retrieved April 20, 2020, from <https://www.qld.gov.au/community/disasters-emergencies/queensland-disasters>
- The State of Queensland. (n.d.-b). *System of government | How government works* [Text]. Retrieved May 15, 2020, from <https://www.qld.gov.au/about/how-government-works/system-of-government>
- The World Bank, & Queensland Reconstruction Authority. (2011). *Queensland Recovery and Reconstruction in the Aftermath of the 2010/2011 Flood Events and Cyclone Yasi*.
- Waugh, W. L. (2003). Terrorism, Homeland Security and the National Emergency Management Network. *Public Organization Review*, 3(4), 373–385.
- <https://doi.org/10.1023/B:PORJ.0000004815.29497.e5>

Whiteman, H. (2019, May 8). *Australia is being devastated by climate change. So will it swing the election?* CNN. <https://www.cnn.com/2019/05/07/australia/australia-climate-election-intl/index.html>

Appendix A: Coding samples chapter four

Table 1A

Coding sheet for the first analyzed document for Queensland's disaster response in the 2010-2011 floods

CODING SHEET				
	Name:	Caitlin Woltman		
	Research question:	How effective was the 2010/2011 floods response?		
	Unit of analysis:	paragraph		
#	Coded unit	Preparatory phase	Crisis-event	Recovery phase
1	The Queensland Government, in consultation with councils, should determine which urban areas in Queensland do not have access to flood information from a current flood study. The Queensland Government should rank those areas in order of priority in accordance with their need for updated flood information by reference to factors including: a. population b. sophistication of land use planning and emergency management measures already in place in those areas c. currency of any flood risk information available to the council d. approximate frequency of damaging floods in the area according to the historical record.	Yes		
2	A recent flood study should be available for use in floodplain management for every urban area in Queensland. Where no recent study exists, one should be initiated.	Yes		
3	The Department of Community Safety should put in place administrative arrangements which ensure it can readily ascertain whether its comments are being reflected in council planning schemes. If the Department of Community Safety becomes aware that its comments are not being adequately addressed, it should take steps to follow this up with the Department of Local Government and Planning.			
4	The Queensland Government should draft model flood planning controls, using a similar format and structure to that in the Queensland Planning Provisions, that councils can adapt for local conditions. The Queensland Government should require these controls to be reflected in new planning schemes. This may be achieved by including the controls in either: • a state planning policy dealing with flood, with an accompanying amendment to the Sustainable Planning Act 2009, or • the Queensland Planning Provisions.	Yes		Yes
5	The Queensland Government should include in the model flood planning controls a requirement that councils have a flood overlay map in their planning schemes. The map should identify the areas of the council region: • that are known not to be affected by floods • that are affected by flood and on which councils impose planning controls (there may be subsets in each area to which different planning controls attach) • for which there is no flood information available to council.	Yes		Yes
6	The proposed new part of the Queensland Development Code, Mandatory Part 3.5 'Construction of buildings in flood hazard areas', should be amended so that the performance requirement relating to building design and construction (Performance Requirement P1) for building on a lot will only be triggered where the council has: • designated part of its area as a natural hazard management area (flood) under section 13 of the Building Regulation 2006, and • either: – declared a height to be the expected flood level under section 13 of the Building Regulation 2006, or – adopted a highest recorded flood level for the lot, and • either: – declared a velocity to be the expected maximum velocity of flood water for the area in which the lot is located, or – designated the area in which the lot is located an inactive flow or backwater area.			Yes

Note. This is a sample coding sheet for the document from the Queensland Floods Commission of Inquiry (2012). The sheet illustrates how the content analysis process was conducted.

Table 2A

Coding sheet for the second analyzed document for Queensland's disaster response in the 2010-2011 floods

CODING SHEET				
	Name:	Caitlin Woltman		
	Research question:	How effective was the 2010/2011 floods response?		
	Unit of analysis:	paragraph		
#	Coded unit	Preparatory phase	Crisis-event	Recovery phase
1	Australia now benefits from a robust and efficient disaster preparedness regime. Australia's disaster risk management system recognizes that not all types of natural hazards and hazard intensities throughout the vast expanse of the continent can be mitigated. This serves as the raison d'être for a robust multi-sectoral disaster response mechanism which addresses the multi-dimensional recovery needs of public sector infrastructure and services, as well as privately owned assets. Over the years, the country has built a comprehensive ex-ante disaster response strategy and a preparedness regime into its normal public service delivery systems. This includes the necessary legislation, institutionalization, financial instruments and coordination mechanisms for effective disaster response.	Yes		
2	Multi-tier institutional arrangements, legislation and formal coordination forums for disaster management are in place. The State of Queensland's Disaster Management Act-2003 (dated 21 February 2011) provides the legislative basis for the State's elaborate and well-functioning disaster management arrangements. The Act requires the establishment of disaster management groups and committees at the State level, as well as within local government in disaster-prone districts. For disaster recovery, each disaster management group is served by Community Recovery Committees (CRC) and Plans at the State, District and Local levels. The CRCs are tasked with specific functions and deliverables, such as inter-agency coordination; development and review of annual recovery plans; monitoring the multi-agency MOU for the provision of community recovery services in disaster events; monitoring preparedness levels and activities; support and advice on disaster recovery operations, and liaison with Emergency Management Queensland (EMQ) and downstream recovery organizations and committees. The fusion and interplay of State and lower-tier departments helps ensure both central-level monitoring and coordination, and standard-setting in advice and recovery, as well as decentralized decision making, and fostering of strong regional and local capacities for the implementation of disaster management and recovery plans.	Yes		
3	There is a clear distribution and delineation of disaster management functions across departments, facilitating coordinated reaction processes. The responsibilities of the various departments for disaster management are clearly and carefully determined and delineated, including those of EMQ, and the Departments of Communities, Health, Primary Industries and Fisheries, Tourism, Regional Development and Industry, Public Works (for damage assessment of impacted built infrastructure); education and the arts, housing, families, community services and indigenous affairs. Likewise, there are formal roles and specific responsibilities for other institutions, such as peak bodies ² and civil society groups, including the Australian Red Cross, Local Government Association of Queensland (LGAQ), Lifeline Community Care, St Vincent de Paul, Salvation Army and Centrelink.	Yes		
4	The Australian Government has proved quick and flexible in the institutional and financial response to the floods. In the aftermath of the quick succession of the floods and cyclones, the Government has rapidly established additional institutional and financing arrangements for efficient and effective early recovery. These include: - A Premier's Disaster Relief Appeal that has attracted more than A\$257 million as of May 2011; - Immediate availability of early recovery financing through at least 3 pre-existing financial assistance windows for grant payments to flood-affected individuals; - The establishment of the Queensland Reconstruction Authority (QldRA) by an Act of Parliament, effective February 21 2011, for 2 years.			Yes
5	The use of an integrated approach to Disaster Risk Management and Reduction between each of the reconstruction focal lines seeks to achieve a mutually reinforcing, interdependent, synchronized and tailored approach to the end goal of Achieving a Stronger, More Resilient Queensland and Queenslanders.			Yes

Note. This is a sample coding sheet for the report of the Queensland Reconstruction Authority and the World Bank (2011). The sheet illustrates how the content analysis process was conducted.

Table 3A

Coding sheet for the third analyzed document for Queensland’s disaster response in the 2010-2011 floods

CODING SHEET				
	Name:	Caitlin Woltman		
	Research question:	How effective was the 2010/2011 floods response in Queensland?		
	Unit of analysis:	paragraph		
#	Coded unit	Preparatory phase	Crisis-response	Recovery phase
1	In 2010-11, the SDMG provided strategic direction and support in response to the flood and cyclone events that impacted Queensland. The group provided high-level direction for disaster operations under the leadership of the SDC, who was appointed by the chair of the SDMG on two occasions. The Deputy Commissioner, Regional Operations, QPS was appointed to the position from 24 December 2010 to 21 January 2011 in response to the Queensland floods and from 28 January to 11 February 2011 in response to Tropical Cyclones Anthony and Yasi.	Yes		
2	The SDMG also facilitated effective coordination between the Queensland Government, the Commonwealth Government and other key stakeholders to support disaster management during the challenging events of 2010-11. This included the identification of resources within and outside the state that could be used to enhance disaster operations and expedite recovery.		Yes	
3	In 2010-11, the Department of Local Government and Planning (DLGP) reviewed aspects of State Planning Policy 1/03: Mitigating the Adverse Impacts of Flood, Bushfire and Landslide (SPP 1/03). This policy is one of a suite of statutory State Planning Instruments under the Sustainable Planning Act 2009. The review considered how SPP 1/03 communicates state interests relating to flood, bushfire and landslide in order to inform local decisions on land use planning and development. It also assessed the technical guidance available for the identification of natural hazard management areas across Queensland.			Yes
4	In 2010-11, DLGP partnered with the QRA to audit current flood related provisions in the planning schemes of 25 local government areas that were affected by the Queensland floods. The audit has commenced and seeks to identify, collate and analyse the provisions of selected Queensland Planning Schemes in order to develop a comprehensive understanding of their application in the assessment of development in flood plain areas.			Yes
5	QH undertakes risk assessment of health facilities in accordance with its Emergency Preparedness and Continuity Management policy, and in 2010 established a new consultation process to better identify preparedness and response capability issues.	Yes		
6	During September and October 2010, EMQ delivered its annual Pre-Season Disaster Preparedness Seminars to disaster management stakeholders across the state. These seminars are supported by the Queensland Tropical Cyclone Consultative Committee (QTCCC), the Bureau of Meteorology (BoM) and DERM for the purpose of providing public information on weatherrelated risks for the coming season and promoting disaster preparedness in Queensland communities. A total of 538 participants attended seminars in ten regional locations.	Yes		
7	State-level agencies aim to support local government and Queensland communities with consistent primary awareness and action messages for disaster preparedness. In 2010-11, disaster preparedness information was developed for general audiences and special needs groups.	Yes		
8	In preparation for the 2010-11 storm and cyclone season, EMQ released the SES Get Ready Guide. This ten page information booklet provides advice for individuals and households on how to best prepare for natural disasters. The key messages are: <ul style="list-style-type: none"> - prepare an emergency plan - prepare an emergency kit - prepare your home - tune into warnings. <p>The SES Get Ready Guide will be used as a foundational resource to support community education activities undertaken by the SES and EMQ and may be disseminated by local councils.</p>	Yes		

Note. This is a sample coding sheet for the report of the State Disaster Management Group (2013). The sheet illustrates how the content analysis process was conducted.

Appendix B: Coding samples chapter five

Table 1B

Coding sheet for the first analyzed document on Queensland's disaster management reforms in 2014

CODING SHEET for Public Safety Business Agency Act 2014 (3rd version)			
	Name:	Caitlin Woltman	
	Research question:	What did the natural disaster reforms in Queensland entail and how were they justified?	
	Unit of analysis:	paragraph	
#	Coded unit	Content of the reforms	Justification for the reforms
1	<p>5 Meaning of public safety entity (1) Each of the following is a public safety entity—</p> <p>(a) the Queensland Fire and Emergency Service under the Fire and Emergency Services Act 1990; (b) the department in which the Fire and Emergency Services Act 1990 is administered; (c) the Queensland Police Service; (d) the Office of the Inspector-General of Emergency Management established under the Disaster Management Act 2003.</p> <p>(2) Also, the Minister may, by gazette notice, declare an entity, or part of an entity, to be a public safety entity for this Act.</p>	Yes	
2	<p>7 Agency's functions (1) The main functions of the agency are as</p> <p>(a) to provide support services to public safety entities; (b) to hold and maintain infrastructure, fleet and communication technology assets for public safety entities; (c) to develop, in consultation with each public safety entity, performance measures that apply to the entity in carrying out the functions; (d) to review, assess and report on the performance of public safety entities against the measures mentioned in paragraph (c); (e) to report to and advise the Minister about resourcing public safety entities and the matters mentioned in paragraphs (a) to (d); (f) to perform a function incidental to a function mentioned in paragraphs (a) to (e).</p>	Yes	
3	<p>8 Membership of agency The agency consists</p> <p>(a) the chief executive officer; and (b) the staff of the agency.</p>	Yes	
4	<p>9 Chief executive officer (1) There is to be a chief executive officer for the agency. (2) The chief executive officer is appointed by the Governor in Council on the recommendation of the Minister. (3) The Minister may recommend a person for appointment as the chief executive officer only if the Minister is satisfied the person is appropriately qualified to perform the functions and exercise the powers of the chief executive officer effectively</p>	Yes	
5	<p>11 Functions of chief executive officer (1) The main functions of the chief executive officer are as</p> <p>(a) to manage the agency in a way that ensures the agency performs its functions effectively and efficiently; (b) to prepare a budget for the agency; (c) to report to the Minister about any matter (i) relates to the effectiveness and efficiency of the performance or exercise of the or chief executive functions; or (ii) may help the Minister in the proper administration of this Act.</p>	Yes	
6	<p>12 Ministerial direction (1) The chief executive officer is subject to the direction of the Minister in performing the chief executive functions under this Act. (2) The chief executive officer must comply with a direction given by the Minister.</p>	Yes	

Note. This is a sample coding sheet for the *Public Safety Business Agency Act (Public Safety Business Agency Act 2014, 2014)*. The sheet illustrates how the content analysis process was conducted.

Table 2B

Coding sheet for the second analyzed document on Queensland’s disaster management reforms in 2014

CODING SHEET			
		Name:	Caitlin Woltman
		Research question:	What did the natural disaster reforms in Queensland entail and how were they justified?
		Unit of analysis:	paragraph
#	Coded unit	Content of the reform:	Justification
1	<p>Policy objectives and the reasons for them</p> <p>On 2 January 2013, former Australian Federal Police Commissioner Mick Keelty commenced the Police and Community Safety Review (PACSR). PACSR examined the two departments within the portfolio of the Minister for Police and Community Safety, the Queensland Police Service (QPS) and the Department of Community Safety (DCS), which comprised the Queensland Ambulance Service, the Queensland Fire and Rescue Service (QFRS), Queensland Corrective Services and Emergency Management Queensland (EMQ).</p>		Yes
2	<p>Most significantly, PACSR recommended:</p> <ul style="list-style-type: none"> - the QFRS be merged with EMQ within a new department, namely the Queensland Fire and Emergency Services; - the Office of the Inspector-General of Emergency Management (IGEM) be established and tasked with reviewing and assessing the effectiveness of disaster management in the State; and - a new portfolio business agency, the Public Safety Business Agency (PSBA), be created. This agency, headed by a Chief Executive Officer (CEO) who reports directly to the Minister for Police, Fire and Emergency Services (the Minister) is to hold all the infrastructure, fleet and information and communication technology assets and will manage human resourcing, financial management, legal, policy, media and strategic planning functions for the QPS, the Queensland Fire and Emergency Services and the newly established IGEM. 	Yes	
3	<p>Achievement of policy objectives</p> <p>The objective of creating the Queensland Fire and Emergency Services will be met through amalgamating EMQ with the previous QFRS. This will be achieved through amending the Disaster Management Act 2003 and merging relevant provisions from that Act with the Fire and Rescue Service Act 1990 which will be renamed the Fire and Emergency Services Act 1990.</p>	Yes	
4	<p>The Fire and Emergency Services Act 1990 establishes the Queensland Fire and Emergency Service (QFES) and provides for the appointment of the Commissioner of QFES (the Fire Commissioner). This Act amalgamates the roles and functions of the former DCS chief executive and the Fire Commissioner. The Fire Commissioner’s functions are therefore increased to include overseeing the operation of QFES which includes the State Emergency Service, emergency service units and authorised rescue officers. This will be achieved through relocating provisions relating to the State Emergency Service from the Disaster Management Act 2003 into the Fire and Emergency Services Act 1990.</p>	Yes	
5	<p>26. Amendment of s 3 (Main objects of Act)</p> <p>Clause 26 is a minor technical amendment to omit that an object of the Disaster Management Act 2003 is to establish a framework for the management of the State Emergency Service and emergency service units. Arrangements for the management of the State Emergency Service and emergency service units will be relocated to the Fire and Emergency Services Act 1990.</p>	Yes	
6	<p>27. Amendment of s 4 (How the objects are to be primarily achieved)</p> <p>Clause 27 omits references to the State Emergency Service and emergency service units. This clause also includes the establishment of the Office of the Inspector-General of Emergency Management as a mechanism for achieving the objects of the Disaster Management Act 2003.</p>	Yes	

Note. This is a sample coding sheet for the explanatory note on the *Public Safety Business Agency Bill* used for the Queensland Parliament (Public Safety Business Agency Bill 2014 Explanatory Note, n.d.). The sheet illustrates how the content analysis process was conducted.

Table 3B

CODING SHEET for Sustaining the Unsustainable						
	Name:	Caitlin Woltman				
	Research question:	What did the natural disaster reforms in Queensland entail and how were they justified				
	Unit of analysis:	paragraph				
#	Coded unit	Content of the reform:	Justification			
1	The Police and Community Safety Review (the Review) was initiated by the Minister for Police and Community Safety in late 2012. The Review commenced on 2 January 2013 against the background Queensland public sector reform and a restructure of the Queensland Police Service undertaken by the recently appointed Commissioner.		Yes			
2	It is clear that over recent times most of the Department of Community Safety agencies have featured prominently in what have been a series of high profile natural disaster responses, criminal investigations, public order events and tragic fires. Some of these events have resulted in multiple deaths and/or		Yes			
3	It follows that the portfolio is a critical one for both the government and the Queensland community. It is a portfolio of agencies that is often at the centre of news stories and is therefore always high in profile.		Yes			
4	That said, we also observed on occasions that the system works well almost in spite of itself. Separate reviews of the 2013 Bundaberg floods, the 2011 Floods Commission of Inquiry and		Yes			
5	In terms of disaster management the Review team has found: - Emergency Management Queensland finds itself in an invidious position having no line authority over the significant collective capability of other agencies and is considered to be floundering - the lack of clarity on these issues makes accountability of decision makers unclear and creates tension leading to a sometimes uncoordinated capability - the same lack of clarity makes it also difficult to find 'the person in charge'		Yes			
6	While other operational divisions within the Department of Community Safety are established by legislation, Emergency Management Queensland exists to oversee delivery of aspects of the Disaster Management Act 2003, by virtue of authority delegated by the Chief Executive Officer of the department that administers the Act (Director-General Department of Community Safety). This authority could equally be delegated to another agency within the department that administers the Act and so we have recommended that the delegations	Yes				
7	Emergency Management Queensland is a non-combat agency attempting to do combat work. The authority delegated to Emergency Management Queensland is in fact mostly an advisory role in support of the State Disaster Management Group. However, due to the Department of Community Safety role in administering this whole-of-Government legislation, many additional responsibilities are handed to Emergency Management Queensland by default. To further complicate this, stakeholders have commented to the		Yes			

Note. This is a sample coding sheet for the explanatory note on the *Police and Community Safety Review “Sustaining the Unsustainable”* by Michael Keelty (2013). The sheet illustrates how the content analysis process was conducted.