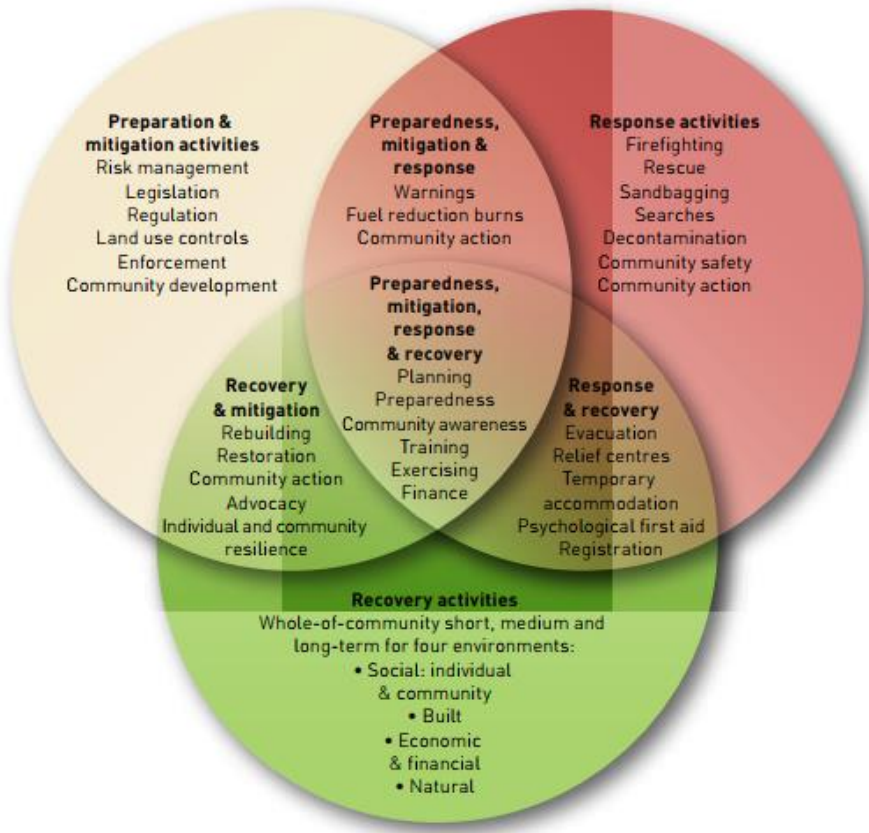


**ATTACHMENT 1**

# Noosa Local Disaster Management Plan 2018

## RECOVERY SUBPLAN



## Authorisation

The Noosa Recovery Subplan provides information and guidance to stakeholders on the governance, planning and operational issues relating to disaster recovery for all hazards.

The Noosa Recovery Subplan is maintained by the Noosa Council on behalf of the Noosa Local Disaster Management Group.

The Noosa Recovery Subplan is a subplan to the Noosa Local Disaster Management Plan. It is prepared under the authority of the Noosa Local Disaster Management Group, in accordance with section 30(b) of the *Queensland Disaster Management Act, 2003*.

The Noosa Recovery Subplan was endorsed and approved by the Noosa Local Disaster Management Group on **(date)** 2018.

## Acknowledgements

Portions of this document are wholly or partially derived from the Queensland Recovery Plan 2017.

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# Table of Contents

- 1. Introduction ..... 3**
  - 1.1. Purpose ..... 3
  - 1.2. Context ..... 3
  - 1.3. Definitions ..... 3
  - 1.4. Legislation ..... 4
  - 1.5. Maintenance of the Recovery Subplan ..... 4
  - 1.6. Abbreviations ..... 4
- 2. Foundations for Recovery ..... 5**
  - 2.1. Community-led recovery ..... 5
  - 2.2. Four functions of recovery ..... 5
  - 2.3. Principles for disaster recovery ..... 6
  - 2.4. Re-establishing resiliency ..... 7
  - 2.5. Post-disaster psychology ..... 7
  - 2.6. Levels of recovery ..... 8
  - 2.7. Emergency Management Assurance Framework ..... 9
  - 2.8. Queensland Disaster Management 2016 Strategic Policy Statement ..... 10
  - 2.9. Monitoring and Evaluation Framework ..... 10
- 3. Recovery Arrangements ..... 11**
  - 3.1 Noosa Local Recovery Group ..... 11
  - 3.2 District Recovery Group ..... 16
  - 3.3 State recovery arrangements ..... 16
- 4. Planning and Preparing for Recovery ..... 18**
  - 4.1 Local recovery planning ..... 18
  - 4.2 Pre-engagement with the community ..... 18
  - 4.3 Pre-engagement with potential advisory groups ..... 18
  - 4.4 Training and exercising ..... 18
- 5. Recovery Operations ..... 19**
  - 5.1 Disaster effects and reactions of communities ..... 19
  - 5.2 Steps to recovery ..... 20
  - 5.3 Activation process and transition between levels ..... 21
- 6. Triggers for recovery activation and actions ..... 22**
  - 6.1 Transitioning through phases of Recovery ..... 24
  - 6.2 Community needs analysis ..... 24
  - 6.3 Establish recovery framework ..... 26
  - 6.4 Recovery Operational Plan ..... 26
  - 6.5 Action plans ..... 29
  - 6.6 Community engagement strategies ..... 30
  - 6.7 Managing volunteers ..... 31
  - 6.8 Financial recovery ..... 34

6.9	Other assistance .....	35
6.10	Debrief, review and evaluation .....	36
<b>7.</b>	<b>Recovery Activities .....</b>	<b>38</b>
7.1	Human and social recovery .....	39
7.2	Infrastructure recovery.....	48
7.3	Economic recovery .....	61
7.4	Environmental recovery.....	69

# 1. Introduction

This Subplan describes the local interagency arrangements for managing recovery operations following a disaster event. Recovery planning and operations must be sufficiently flexible to deal with the needs of the impacted community, regardless of the nature of the disaster.

Recovery planning is integral to disaster preparedness. Planning for recovery operations will commence well before a comprehensive assessment indicates a particular hazard is likely to occur, creating exposures and risk that require response and recovery operations.

Capability and capacity planning are essential to ensure effective recovery operations.

## 1.1. Purpose

The Noosa Recovery Subplan (the Subplan) provides guidance and direction on the preparation for and conduct of disaster operations in the Noosa Shire.

The Recovery Subplan aims to:

- Ensure recovery operations are integrated and appropriate to the scale of the disaster event
- Outline recovery requirements for operations, planning and arrangements at the local level
- Detail the collaborative and coordinated approach to recovery across all functions of recovery, all government stakeholders and whole of community
- Describe the arrangements for transition from response to recovery
- Articulate the roles and responsibilities of the Noosa Recovery Group and the Noosa Recovery Coordinator
- Enable optimum recovery outcomes for disaster-impacted communities
- Clarify the roles and responsibilities of functional lead agencies in recovery
- Promote the support and enhancement of resilience through recovery.

## 1.2. Context

The Noosa Recovery Subplan:

- Is consistent with the [Queensland Disaster Management Act, 2003](#), the [Queensland Disaster Management Plan](#) and the [Queensland Recovery Plan](#)
- Aligns with the [Emergency Management Assurance Framework](#)
- Is a subplan to the [Noosa Local Disaster Management Plan](#)
- Takes an all-hazards approach to disasters
- Is the primary guidance instrument for disaster recovery in Noosa Shire to enable better recovery outcomes for impacted communities.

## 1.3. Definitions

A **Disaster** is:

- A serious disruption to a community, caused by the impact of an event, that requires a significant coordinated response by the local government and other entities to help the community recovery from the disruption.

**Disaster recovery** is:

- The coordinated process of supporting disaster-affected communities including:
  - their human and social needs (including people's psychosocial and physical well-being)
  - reconstruction of physical infrastructure

- economic restoration; and
- environmental rehabilitation (including regeneration of the natural environment, and the management of pollution and contamination).

**Relief is:**

- Efforts to meet the immediate needs of persons affected by a disaster, to minimise further loss through the provision of immediate shelter and basic human needs.

**Resilience is:**

- A continuous process of learning from experience, reassessment and adaption. In the disaster management context, resilience can be considered as a system’s or community’s ability to rapidly accommodate and recovery from the impacts of hazards, restore essential structures and desired functionality, and adapt to new circumstances.

Further definitions are articulated in the Queensland Disaster Management Act, 2003.

## 1.4. Legislation

Disaster recovery in Queensland is undertaken in accordance with the *Queensland Disaster Management Act, 2003* (the Act), [Queensland Disaster Management Regulation, 2014](#) and the [Queensland Reconstruction Authority Act, 2011](#).

Section 4(a) of the Act states that “local governments should primarily be responsible for managing events in their local government area and (d) district groups and the State Group should provide local governments with appropriate resources and support to help the local governments carry out disaster operations.”

## 1.5. Maintenance of the Recovery Subplan

The Recovery Subplan is maintained by the Local Recovery Coordinator. It is to be reviewed annually or after activation of recovery processes following an event to ensure it remains current and relevant. Any proposed changes to the Subplan are to be provided to the Local Recovery Coordinator, Noosa Shire Council for approval by the Noosa Local Disaster Management Group (LDMG).

## 1.6. Abbreviations

DDC	District Disaster Coordinator
DDMG	District Disaster Management Group
LDC	Local Disaster Coordinator
LDMG	Local Disaster Management Group
LRC	Local Recovery Coordinator
LRG	Local Recovery Group
SRC	State Recovery Coordinator
SRG	State Recovery Group

## 2. Foundations for Recovery

The need for recovery may arise from a range of events, both natural and man-made. The Noosa Local Disaster Management Plan identifies 24 possible hazard events, the likelihood of their occurrence in Noosa Shire and an assessment of the consequence to the community. Following a disaster, the impact on individuals, families, groups and organisations will differ. Some may be directly impacted by the event through injury, death or loss of property while others may be evacuated, emotionally affected or financially affected through loss of employment or livelihood. The response to a disaster can involve multiple agencies and the community, working together at the local, district and state levels to deliver recovery outcomes.

Impact assessments commence as soon as it is safe to do so during a disaster to identify individual and community needs. These assessments enable relief and recovery operations to be planned concurrently while response operations are underway. This reduces the gap between response and recovery operations, minimising further unnecessary impact on the community.

### 2.1. Community-led recovery

Successful recovery is responsive and flexible, engages communities and empowers them to move forward. Community-led recovery:

- Centres on the community and encourages those affected by an event to actively participate in their own recovery
- Seeks to address the needs of all affected communities
- Allows individuals, families, businesses and communities to manage their own recovery, with the support of government and the community and private sectors
- Considers the values, culture and priorities of all affected communities
- Uses and develops community knowledge, leadership and resilience
- Recognises that communities may choose different paths to recovery and that communities recover at different paces
- Ensures the specific and changing needs of affected communities are met with flexible and adaptable policies, plans and services
- Builds strong partnerships between communities and those involved in the recovery process.

Any event that requires significant recovery also provides opportunities to make communities more resilient for future events. Recovery should be viewed as an opportunity to enhance disaster resilience.

Effective recovery requires a range of services operating in a coordinated and streamlined way. The integration of government agencies and government owned corporations, non-government organisations, industry groups, the private sector and whole-of-community is the foundation of recovery.

### 2.2. Four functions of recovery

Effective recovery requires an integrated, multi-disciplinary approach. It commences with detailed needs analysis, consequence management, community engagement and planning then moves into service delivery. A coordinated effort by all agencies involved in the recovery process is necessary. It is a complex and potentially protracted process. To assist in managing complexity, recovery can be conceptually grouped into inter-related functions applicable in an all hazards environment:

- Human and social
- Infrastructure (transport, community and private, including housing)
- Economic
- Environment

## 2.3. Principles for disaster recovery

The following principles that guide the Noosa Recovery Subplan are based on the *National Principles for Disaster Recovery* detailed in the [Australian Emergency Management Handbook 2 – Community Recovery](#) and underpin recovery planning and operations in Queensland:

- Understanding the **context**
- Recognising **complexity**
- Using local, **community-led** approaches
- Ensuring **coordination** of all activities
- Employing effective **communication**
- Acknowledging and rebuilding **capacity**
- Identifying lessons and building **resilience**.

### 2.3.1 Understanding the context

Recovery must be relevant to the communities affected. No two disaster events are the same and the context of each event needs to be taken into account when planning and implementing recovery programs and activities. Understanding the impacts and circumstances of each individual event in the broader context of the Noosa Shire is needed to ensure recovery effort meets the community need.

### 2.3.2 Recognising complexity

Recovery is complex and dynamic. Information on disaster impact is usually limited at first and then becomes clearer as time passes. There are diverse and sometimes conflicting needs, wants and expectations within the community which may also change over time. As a result, priorities will shift and change. Recovery actions may require a variety of approaches and may leave long-term legacies.

The four functions of recovery often overlap and the relationship, or balance, between them must be considered based on the context of the event and the community(ies) affected. This complexity must be recognised by those developing and implementing recovery programs and activities.

### 2.3.3 Using community-led approaches

Recovery should be community-led which requires engaging with communities (listening and talking). It means empowering the community to be involved and enabling their participation in the recovery process. Communities who have no say in their recovery will take longer to recover. Building strong partnerships and involving community leaders in the recovery process will enable the delivery of recovery programs and activities that are embraced by the community.

### 2.3.4 Ensuring coordination of all activities

Successful recovery requires a planned, coordinated and adaptive approach based on continuous assessment of impact and needs. It requires skilled and trusted leadership, clearly stated shared goals based on desired outcomes, good information gathering and planning processes, teamwork among all supporting agencies and community groups, and clear decision making and reporting structures.

### 2.3.5 Employing effective communication

Effective communication is vital to achieve the above principles. It should be relevant, timely, clear, accurate, targeted, credible and consistent. Communications with the community must be two-way and input and feedback should be sought and considered. Information must be accessible to a variety of audiences in diverse situations using a variety of means. To ensure communications are effective and relevant an officer from Council's community engagement team will be a member of the Local Disaster Recovery Group.



### 2.3.6 Acknowledging and building capacity

Successful recovery recognises, supports and builds on community, individual and organisational capacity. Recovery planners should assess gaps between existing and required capability and capacity. They should quickly identify and mobilise community skills and resources and acknowledge that existing resources may be stretched requiring additional resources to be mobilised. Recovery should consider how to sustain effort over anticipated recovery timeframes. Opportunities to share, transfer and develop knowledge, skills and training should be promoted. There should be a clear understanding of when and how to disengage. Disengagement should be well-planned and communicated.

## 2.4. Re-establishing resiliency

One of the aims of recovery is to help re-establish individual's and community resilience and to build community connections and assets that support this process as soon as possible. This means developing strategies with individuals, businesses and communities to help them prepare for possible events and including these arrangements in relevant plans. It means working with leaders and their networks to understand what can be improved after an event to increase individual and community resilience. Recovery provides an opportunity to rebuild the community back stronger and better.

## 2.5. Post-disaster psychology

All emergencies cause a range of stressors on the individual resulting in a broad range of responses. Typically, these are 'normal' responses to an abnormal event that has touched the lives of an individual, a family or a community. It is important that those planning recovery and those implementing recovery services are aware of the psychological effects of disasters in order to better deliver recovery outcomes.

Immediately following an emergency, people primarily seek practical assistance and reassurance in an emotionally supportive manner. The emotional impact of traumatic events is very real. Strong feelings may arise when the experience is talked about. Increased worry may interfere with day-to-day living and the experience may leave people shaken and worried about the future. However, most people return to their usual functioning level given time and the support of family and friends.

It is important to note that individual responses will vary and that the cycle is not necessarily a single or linear one, but may alter, extend, diminish or re-occur at different times throughout the recovery process. Friends, family and local recovery support services can all assist in reducing the frustrations and amount of time people spend in the 'trough of disillusionment', or limit the depth of that trough.

If disaster affected people understand the types of experiences and emotions they may experience throughout their recovery process, they can establish a stronger understanding that what they are experiencing is not unusual but is a fairly typical response to a post-disaster situation. Understanding this may also help people to more strongly understand the transient nature of these experiences and that they will get through and recover from a disaster. Refer to Section 5.1 Disaster effects and reactions of communities.

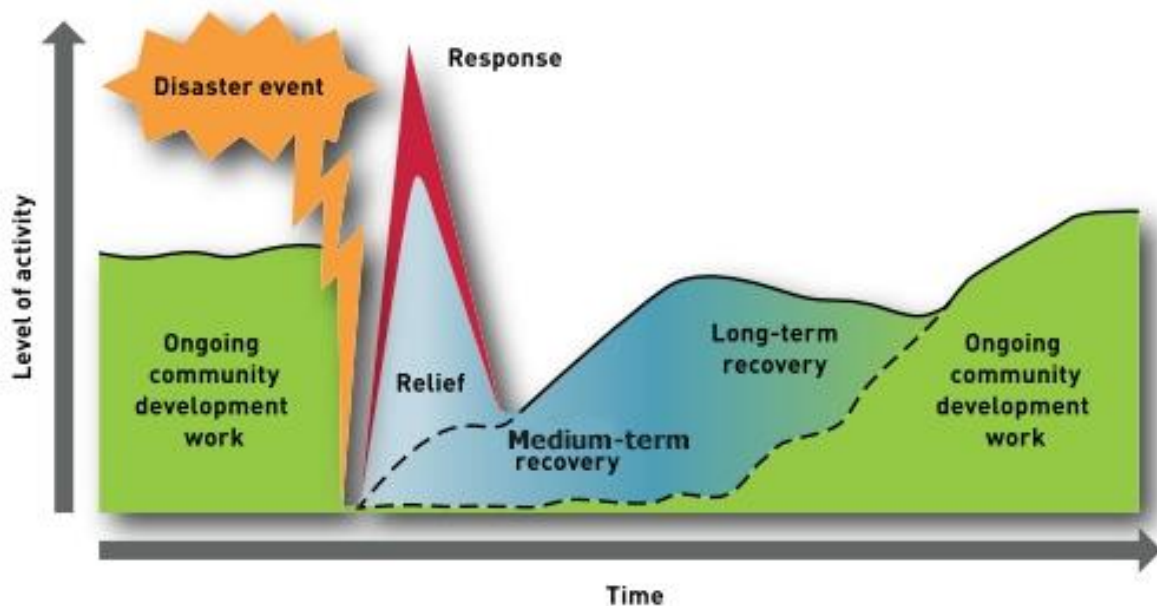
## 2.6. Levels of recovery

Recovery typically goes through three levels:

- Immediate / short-term (relief)
- Medium
- Long-term

These levels are graphically depicted below. Note that the levels commence during response operations and conclude when normal community development processes are returned. The period of time for each level will differ depending upon the:

- Nature and scale of the disaster
- Differing inherent qualities and characteristics of the functions undergoing recovery
- Resilience of individuals, families and communities
- Timeliness of recovery operations
- Any subsequent disaster events occurring before the completion of the recovery level.



### 2.6.1 Immediate / short-term recovery (relief)

Immediate / short-term recovery aims to address and support the immediate needs of individuals, businesses and the community affected by an event. It often occurs during disaster response operations and in the cross-over period when the LRG is becoming established.

Immediately after an event there is a need to identify what the impact has been, and what needs to be done to ensure the safety of life and property, and return the community to normal. This includes providing services such as:

- Immediate provision of shelter, food, clothing and community services
- Restoration of affected utilities and communications
- Clearance of debris and other hazards resulting from an event.

This level of recovery is challenging as it coincides with response operations. It is the period after a disaster when initial relief services are offered to the affected community and prior to the full recovery framework being established. It is also the period when detailed recovery planning, including needs analysis is undertaken.

Relief services provided to the community may take many forms however the operation of Recovery Centres and Outreach Programs are the primary mechanisms to provide initial recovery (relief) services and to gather information to support needs analysis and planning for medium and long term recovery.

The transition from the response and short-term relief operations to the next level of recovery must be carefully managed by the LDC and the LRC working together.

When it occurs it will be based on a combination of the following criteria:

- The emergency is contained
- Search and rescue groups have ceased activity
- Public safety measures are in place and work effectively
- No further hazard or secondary event is likely in the near future
- Initial rehabilitation has commenced
- Damage to community infrastructure has been assessed and/or restoration has commenced
- Temporary accommodation and services have been provided (if required)
- Local organisations which can provide services and/or a hub for services have been identified and engaged
- Local community organisations and cultural groups and their leaders have been identified and engaged
- The LRG is established and preliminary recovery plans are in place.

### 2.6.2 Medium-term recovery

Medium-term recovery continues the coordinated process of supporting affected communities in the reconstruction of physical infrastructure, restoration of the economy and the environment, and support for the emotional, social and physical wellbeing of those affected.

The following recovery activities are conducted during this level:

- Ongoing needs analysis so that recovery can support the changing recovery needs of the community
- Recovery Action Plans are implemented and progress monitored and reported
- Continued and enhanced community participation in decision making
- Plans are continuously updated to reflect changing recovery needs and progress of recovery.

The recovery activities of this level will assist the affected community to return to a state of normality although the community is likely to experience changes resulting from the event.

### 2.6.3 Long-term recovery

Long-term recovery involves the ongoing transition from recovery to normal community life. During this stage, most recovery workers leave and systems start to wind down as normal business processes return. It is important that this reduction in recovery support is managed and that documented arrangements are in place locally to continue to address individual and community recovery needs.

## 2.7. Emergency Management Assurance Framework

The four principles for effective disaster management, detailed in the *Emergency Management Assurance Framework* are fundamental to the establishment and continuous improvement of effective disaster recovery operations and planning:

- Leadership
- Public safety
- Partnership
- Performance.

The Framework has established performance requirements for all entities involved in relief and recovery and is the basis of assurance activities undertaken by the Office of the Inspector-General Emergency Management.

The Noosa Recovery Subplan supports the achievement of the standard's key outcomes pertaining to planning (component 4), relief (component 13) and recovery (component 14).

## 2.8. Queensland Disaster Management 2016 Strategic Policy Statement

Recovery activities are also directed by the [Queensland Disaster Management 2016 Strategic Policy Statement](#) and should:

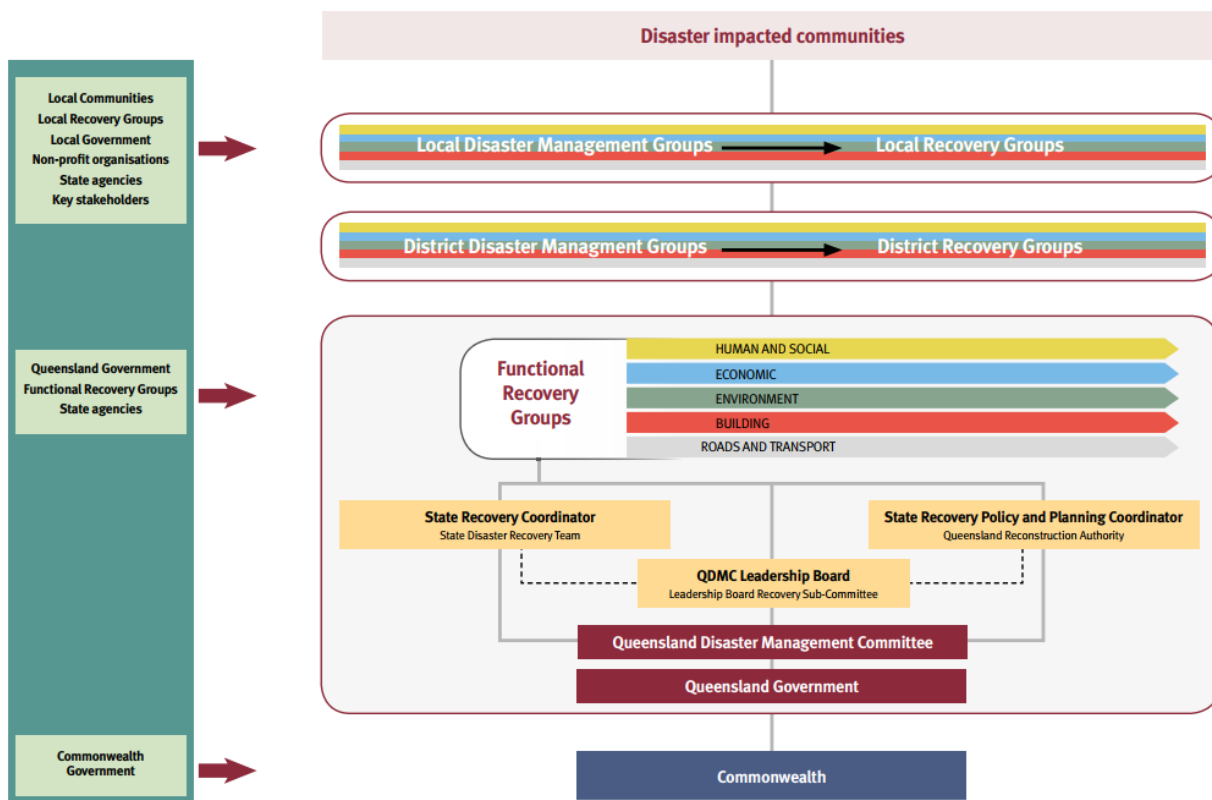
- Strive to safeguard people, property and the environment from disaster impacts
- Empower and support local communities to manage disaster risks, respond to events and be more resilient.

## 2.9. Monitoring and Evaluation Framework

The [National Monitoring and Evaluation Framework for Disaster Recovery Programs](#) (March 2016) provides a consistent approach to evaluating individual recovery programs for their effectiveness in achieving desired outcomes. At the local level, monitoring and evaluating outcomes from recovery will provide valuable learnings to improve the design and delivery of subsequent disaster recovery programs.

# 3. Recovery Arrangements

Successful disaster recovery requires clear and robust governance arrangements. Noosa’s disaster recovery arrangements align with those articulated in the Act and enable a collaborative approach that brings together all agencies, stakeholders and resources for planning and coordinating delivery of recovery functions.



Queensland’s disaster recovery arrangements reflect the priority given to the impacted community and the lead role of the Local Disaster Management Group (LDMG) and the Local Recovery Group (LRG).

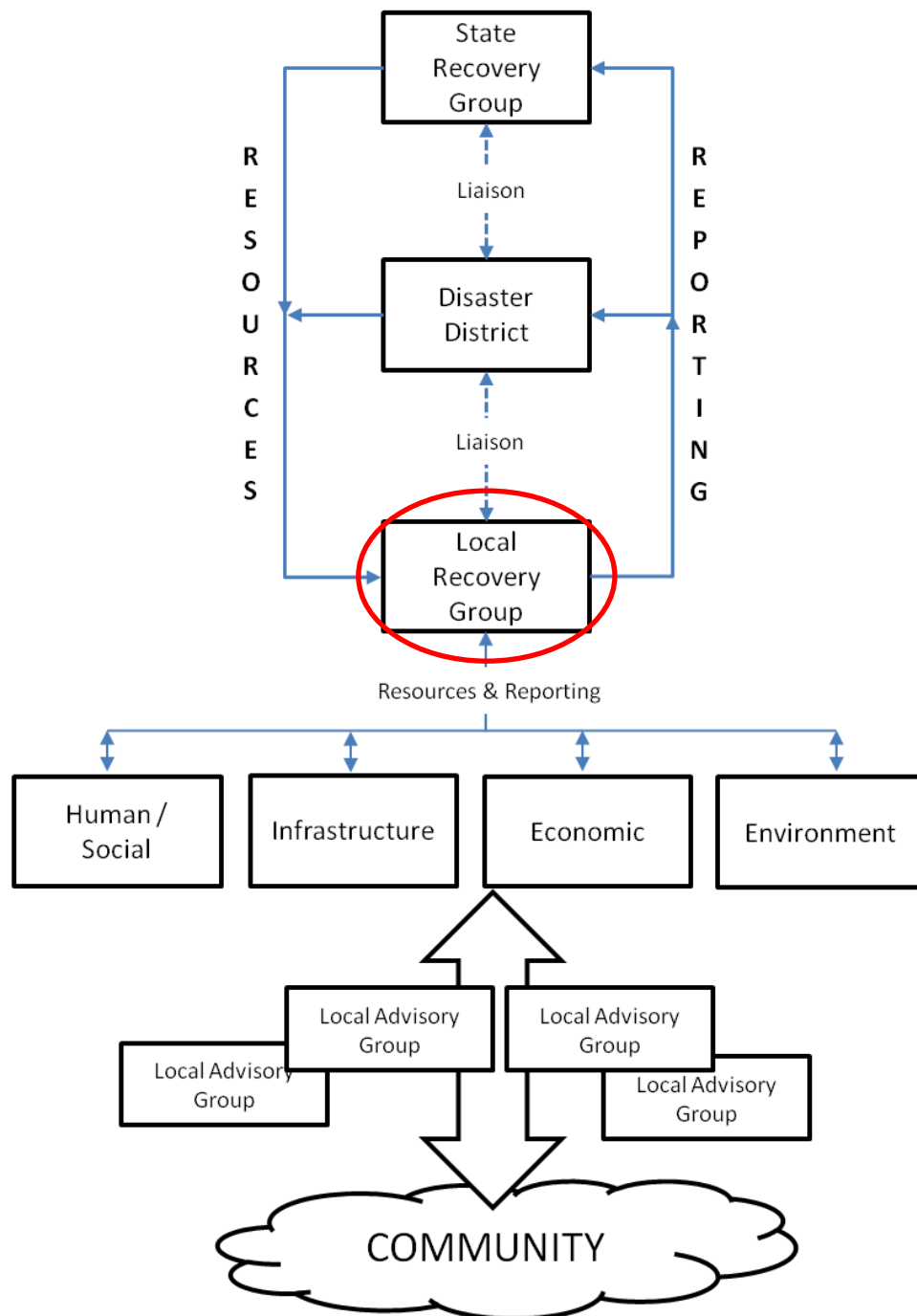
## 3.1 Noosa Local Recovery Group 3.1.1 Roles and responsibilities

The Noosa Local Disaster Management Group (LDMG) has responsibility for acting on behalf of the community and leading recovery efforts in Noosa Shire. The LDMG will assess the need for a coordinated, ongoing recovery operation during and/or at the conclusion of the Response phase. This decision may be based on a range of factors taken into consideration including:

- Scale of the disaster
- Outstanding issues and impacts that require a coordinated multi-agency approach
- Community connectedness is significantly disrupted
- The community’s capability to recovery independently is overwhelmed
- Ability of communities to return to their properties in the long-term
- Reconstruction and/or other impacts such as contamination require a long-term recovery plan.

Once the LDMG determines that a planned and coordinated recovery from a disaster event is required, a LRG is established by the LDMG and the decision is recorded and local recovery

arrangements are activated. The LRG comprises key decision makers from Noosa Council, multiple agencies and the community to contribute to the recovery effort.



The LRG will be chaired by the Deputy Chair of the LDMG and recovery operations will be coordinated by the Local Recovery Coordinator (LRC). The LRG will be supported in its efforts by relevant State and Australian Government agencies. Depending on the scale of the event and the complexity of the recovery effort, the LRG may establish up to four separate subgroups to address each of the four functions of recovery. The LRG will maintain a permanent core membership of Council officers to lead individual subgroups when they are established. When the LRG is activated the core group will be augmented by additional members representing the community, business and the State and Federal Governments.

The number of subgroups, their terms of reference and their membership will be dependent on the type of event, the needs of the community and the scale of the recovery effort. Local advisory groups may be formed to ensure community participation in the recovery process and to assist

the LRG and subgroups in determining community need and service delivery of recovery programs and activities.

### 3.1.2 Terms of Reference for Local Recovery Group

#### Role

The role of the LRG is to coordinate the planning and implementation of recovery strategies across the four functional groups.

#### Responsibilities

- Assess the impact of the event and undertake a community needs analysis across the four functions of recovery – economic, environmental, human and social, and infrastructure
- Coordinate the whole-of-government and community recovery from disaster events
- Identify and prioritise major areas of recovery
- Establish subgroups as required to coordinate specialist knowledge and expertise
- Develop and implement effective strategies for community participation and partnership in the recovery process
- Develop medium and long-term recovery policies and strategies
- Develop and implement a Recovery Operational Plan
- Coordinate the Action Plans developed by the subgroups
- Identify and obtain required resources
- Provide effective leadership to focus all necessary resources to achieve the most effective and efficient recovery of affected communities
- Monitor recovery programs and activities undertaken in the Noosa Shire
- Provide regular public information about recovery progress
- Develop a final report at the conclusion of recovery operations

#### Reporting

The LRG will provide advice and regular reports to the LDMG, the DDC and the State Recovery Group.

#### Subgroups

Subgroups are to report regularly to the LRG:

- Coordinator of each subgroup is to attend all meetings of the subgroup and will represent the subgroup at meetings of the LRG
- Subgroup is to meet as required at the discretion of the Chair of the subgroup
- Subgroup agendas, minutes of meetings and action plans are to be copied to the Chair of the LRG

### 3.1.3 Core membership of Local Recovery Group

Recovery Group Role	Representative
Chair	Deputy Chair Noosa Local Disaster Management Group
Local Recovery Coordinator	Director Community Services
Coordinator Human / Social Functional Group	Community Development Manager
Environment Functional Group	Environmental Services Manager
Economic Functional Group	Economic Development Manager
Infrastructure Functional Group	Project Manager Infrastructure Delivery
Media Liaison	Community Engagement Manager
Volunteer Coordinator	Libraries & Galleries Manager
Administration Support	Community Services Administration Officer
Dept Communities, Disability Services & Seniors	Appointed in liaison with Sunshine Coast District Disaster Coordinator
Dept Environment & Science	Appointed in liaison with Sunshine Coast District Disaster Coordinator

Dept Transport & Main Roads	Appointed in liaison with Sunshine Coast District Disaster Coordinator
Tourism Noosa	General Manager Tourism Noosa
Community Representatives	Appointed on an as-needs basis
Business and Industry Representatives	Appointed on an as-needs basis

### 3.1.4 Local Recovery Coordinator

The Local Recovery Coordinator (LRC) is appointed as a function within the LDMG to ensure recovery preparedness and to lead recovery operations. The person appointed as the LRC cannot be the same person as the LDC or the LDCC Community Liaison Officer as disaster operations and recovery planning need to occur simultaneously.

The Noosa Council has appointed the Director Community Services to be the Noosa Local Recovery Coordinator.

The role of the LRC is to:

- Maintain this Subplan
- Develop community recovery preparedness
- Ensure ongoing analysis of need is undertaken throughout the recovery effort to guide the recovery effort
- Work with the LRG, relevant agencies and the community to develop the specific aim, objectives and strategies of the Recovery Operational Plan
- Liaise with functional lead agency representatives to obtain required support for recovery programs and activities
- Manage the implementation of the Recovery Operational Plan and subgroup Action Plans with the assistance of the LRG, subgroups, Sunshine Coast District Recovery Group and State Recovery Group
- report on the recovery effort to the Disaster District, and the State Recovery Coordinator as well as the community

The LRC and the LDC should liaise regularly during disaster response operations. This will ensure that disaster response operations support the recovery effort and recovery planners have good situational awareness to ensure their planning is relevant to the community.

The LRC should be involved in disaster response planning and implementation in addition to the role of leading the recovery effort. This duality of roles immediately after disaster impact is often inevitable given the limited management resources available within the Noosa Council. While the LRC may need to be involved in operational response matters from time to time, they should focus on the recovery implications of such matters to ensure response supports the recovery effort.

### 3.1.5 Functional subgroups

Up to four subgroups may be established to address each of the four functions of recovery in Noosa Shire:

- Human and Social Subgroup
- Infrastructure Subgroup
- Economic Subgroup
- Environment Subgroup

Subgroups are “working groups” of the LRG and comprise the subject matter specialists relevant to a particular function of recovery. They develop and oversee the implementation of the plans, activities and programs related to their recovery function.



The formation of subgroups is at the discretion of the LRG based on the community recovery needs analysis. The LRG may decide to merge two or more subgroups together for greater effectiveness or efficiencies.

Membership of the subgroups shall comprise LRG core members augmented by State and Australian Government agency representatives, industry bodies and community groups as required and depending upon the scale of the event and recovery operations required. Membership of each subgroup is dependent on the situation however a suggested membership for each subgroup is provided in the subgroup's terms of reference.

### 3.1.6 Lead agencies for the functional subgroups

- Human and social – **Department of Communities, Disability Services and Seniors**
- Infrastructure – **Department Housing and Public Works** (housing); **Department Transport and Main Roads** (roads and transport)
- Economic – **Department of State Development**
- Environment – **Department of Environment & Science**

### 3.1.7 Local advisory groups

Local advisory groups may be established to enable members of the local community, including people affected by the event and representatives from local organisations, to meet and to provide input and guidance to the LRG and subgroups on such issues as community needs and service delivery. The formation and composition of any local advisory group is at the discretion of the LRG and is dependent on the needs of the community. Members may include:

- Economic – chambers of commerce, progress associations, individual/major businesses including primary producers and their representative bodies, suppliers and transport operators
- Environment – volunteer land care groups, major primary producers
- Human and social – citizens undertaking material donations services, representatives from a range of community organisations
- Infrastructure – progress associations, individual businesses and construction companies, community representatives from areas where works are to be undertaken

### 3.1.8 Meetings of the Local Disaster Recovery Group and subgroups

Outside times of disaster, the LRG shall meet a minimum of twice per annum, generally before and after the summer season. Once activated by the LDMG, the LRG and subgroups should meet regularly to perform their functions. Meetings of the LRG shall be at times and in places as determined by the Chair of the LRG.

### 3.1.9 Records of meetings

The LRG and each subgroup will keep minutes of all meetings. In addition, the LRG is to develop and maintain the event-specific Recovery Plan and subgroups are to develop and maintain action plans relevant to their function. These will be the principle reference documents used by the LRG and the subgroups in the performance and reporting of their functions.

### 3.1.10 Reporting

Regular reporting is required to ensure effective coordination and monitoring of progress and use of resources.

Upon activation the LRG for Noosa shall report regularly to the LDMG. The LRC will negotiate with the Sunshine Coast District Recovery Group (DRG) and the State Recovery Group (SRG) to establish their reporting requirements.

Reporting by the subgroups to the LRG shall be at the discretion of the LRC after consultation with the LRG and the Chairs of the subgroups.

Report formats may be negotiated, however the LRG is to provide regular updates on the Recovery Operational Plan to Noosa Council, the DRG and SRG. Subgroups are to provide regular updates on their Action Plans to the LRG. Reporting formats are to be primarily based on these two documents. Additional information may be required by the District, the State Recovery Coordinator or State Recovery Group.

**3.2 District Recovery Group** The principles for disaster recovery are realized by ensuring that the entry point for recovery is at the local level. While DDMG's will usually stand down from response operations when recovery operations begin or shortly thereafter DDMGs should ensure that recovery arrangements are prepared, planned and implemented to support LDMGs in the District.

DDMGs should include representatives from each of the functional recovery lead agencies to ensure that recovery operations and planning are included in overall disaster management activities at the district level and to coordinate the provision of State recovery resources within the District to the affected areas. These services should be coordinated through the LRC using agreed service delivery arrangements.

DDMG members will often be asked to contribute to the recovery effort through participation on the LRG or its subgroups as appropriate, though it should be noted that State agencies do not require approval or permission from the DDC to assist or sit on the LRG subgroups. State agencies are involved in the LRG as part of their normal business. The LRC can approach any State agency for assistance.

Ongoing liaison between LRC, the DDC and the DDC's Executive Officer on recovery matters is necessary to ensure support from the State through the District is relevant and coordinated. Reporting on the recovery effort should be provided to the District to assist in coordination and district level planning.

## 3.3 State recovery arrangements

### 3.3.1 Queensland Disaster Management Committee

The Queensland Disaster Management Committee (QDMC) is chaired by the Premier and governs recovery at a strategic level, with regular reporting on recovery progress from the Minister responsible for recovery and reconstruction.

### 3.3.2 Leadership Board Sub Committee (Recovery)

The Leadership Board Sub Committee (Recovery) oversees the implementation of the Queensland Recovery Plan and event specific disaster recovery plans and oversight on the planning and implementation of the state's whole of community recovery activities.

### 3.3.3 State Recovery Coordinator

The State Recovery Coordinator (SRC) is appointed by the Premier and coordinates the recovery and reconstruction efforts of government and non-government agencies, provides strategic advice on disaster operations and reports on progress of recovery operations. More than one SRC may be appointed following severe and/or widespread disasters.

### 3.3.4 State Recovery Policy and Planning Coordinator

The Chief Executive Officer of the Queensland Reconstruction Authority is the State Recovery Policy and Planning Coordinator to lead recovery planning, delivery of relief and immediate recovery operations until the appointment of the SRC and oversees state level preparedness for recovery operations.

### 3.3.5 Functional lead agencies

Under the Queensland Recovery Plan, key state government departments are defined as functional lead agencies for the four functions of recovery. These functional lead agencies are appointed to assist in the coordination of state level support to the local recovery effort.

<b>Function</b>	<b>Lead Agency (State and District Level)</b>
Economic	Department of State Development
Environmental	Department of Environment & Science
Human and Social	Department of Communities, Child Safety & Disability Services
Infrastructure	<ul style="list-style-type: none"><li>• Transportation infrastructure – Department of Transport &amp; Main Roads</li><li>• Building infrastructure – Department of Housing &amp; Public Works</li><li>• Energy infrastructure – Department of Energy &amp; Water Supply</li><li>• Water and sewerage infrastructure – Department of Energy &amp; Water Supply</li><li>• Water entities – Unitywater</li><li>• Telecommunications infrastructure – Telstra and other telecommunications providers</li></ul>
NDRRA and SDR coordination	Queensland Reconstruction Authority
Recovery coordination and monitoring	Queensland Reconstruction Authority

## 4. Planning and Preparing for Recovery

### 4.1 Local recovery planning

Recovery at the local level requires local knowledge, skilled employees and community connectedness with communities being actively involved and consulted. Noosa Council, the LDMG and the LRG works with key local community organisations to plan and lead recovery; community representatives are at the centre of planning for a community-led approach for a successful recovery.

Arrangements for recovery are at the local level and are established well before a disaster and are reflected in the Local Disaster Management Plan. The Local Plan is informed through a risk-based approach which has taken into account potential exposure to all known hazards. In the event of a disaster, the LDMG, through the LRG will develop a disaster specific local recovery plan to drive local recovery efforts.

### 4.2 Pre-engagement with the community

Improving the community's disaster resilience will shorten the time it takes for the community to recover. Noosa Council and the LDMG, in cooperation with State agencies such as Queensland Fire & Emergency Services and the Queensland Reconstruction Authority, undertake programmed community disaster resilience initiatives. Ongoing public information specifically about recovery is provided using normal community engagement media strategies.

### 4.3 Pre-engagement with potential advisory groups

Contact with prospective members of local advisory groups can be undertaken to tell them of the possible formation of such groups and their possible involvement. Prior engagement with prospective members of advisory groups familiarises them with the Noosa recovery framework and provides an opportunity for network building. The Noosa LDMG will consider an ongoing program of pre-engagement with potential local advisory groups.

### 4.4 Training and exercising

In accordance with section 16A(c) of the Act, it is a requirement that persons performing functions under this Act in relation to disaster operations are appropriately trained. The [Queensland Disaster Management Training Framework](#) outlines the recovery courses and training to be undertaken by key disaster management stakeholders to support the effective performance of each identified role within each phase of disaster management. Access to these courses is made through contact with the appropriate local Queensland Fire & Emergency Services (QFES), Emergency Management Coordinator.

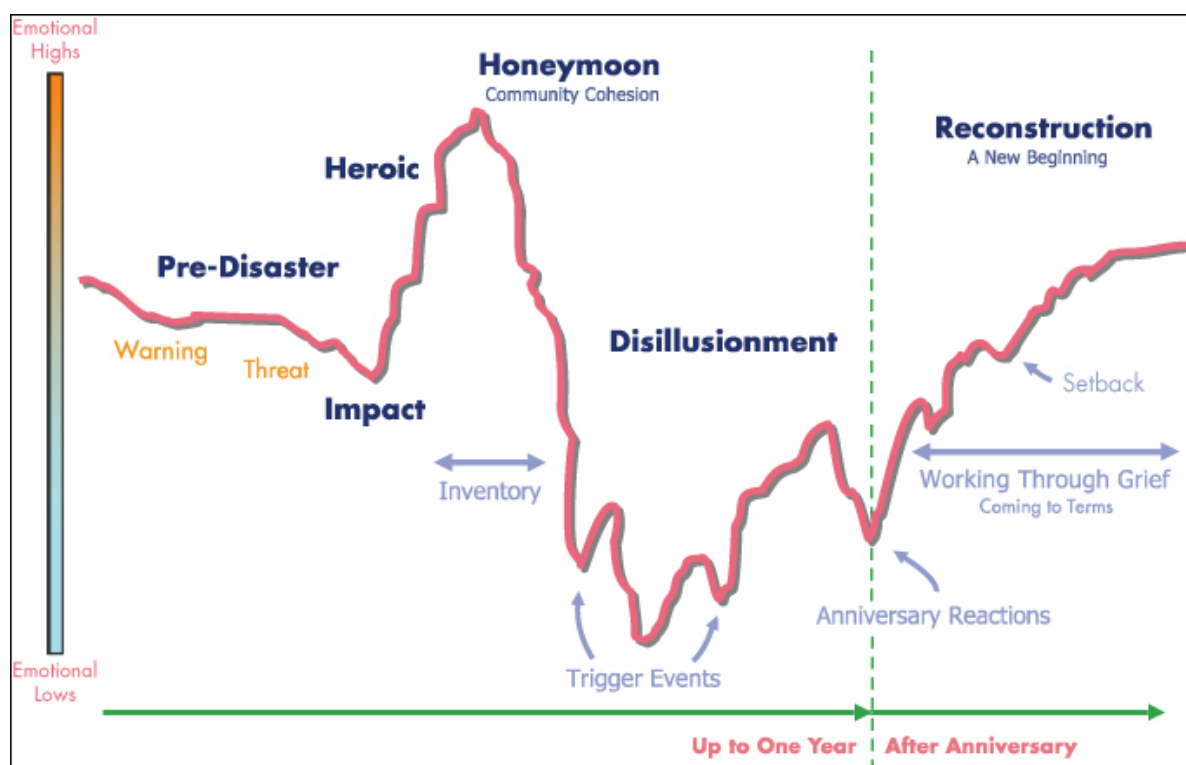
A recovery exercise is held as a component of the annual LDMG Local Disaster Coordination Centre exercise.

## 5. Recovery Operations

Community members are often the first responders during a disaster and take actions to save and protect themselves, their families, their communities and their property. In the majority of disasters, disaster-affected communities and local governments commence recovery processes while response operations are being conducted. The triggers and timings to tailor planned recovery operations for a specific event will vary between disasters.

### 5.1 Disaster effects and reactions of communities

The reactions of individuals and the community to a disaster will vary depending on the scale and scope of the event, as well as their levels of disaster preparedness and resilience.



Typically, the community will experience the following phases of reactions to a disaster which must be recognised and managed accordingly during recovery operations:

**Pre-disaster Phase:** the amount of warning a community receives and the perceived threat varies depending on many factors, such as preparedness, resilience, social cohesion and level of trust in disaster management arrangements and service providers.

**Impact Phase:** the scale and scope of the disaster influences the community's reactions. The larger the event and extent of personal and community loss as a result of the disaster, the greater the psychosocial effects.

**Heroic Phase:** this phase is characterised by high levels of self-sacrifice by survivors and emergency responders.

**Honeymoon Phase:** usually occurs in the following weeks and months and is evidenced by a short-lived sense of optimism by the disaster survivors.

**Disillusionment Phase:** as time progresses, survivors tend to progress through an inventory process in which the limits of available disaster assistance are realised and they recognise the reality of their situation. Triggers, such as the anniversary of the disaster, can initiate negative emotions related to the disaster as survivors relive their experiences.

**Reconstruction Phase:** set-backs are experienced by survivors as they go through their grief and feeling of loss, eventually readjusting to their new surrounding situations.

The cumulative nature of impacts from previous disasters must also be considered when planning and delivering recovery activities.

## 5.2 Steps to recovery

Recovery is a progressive activity that involves many steps. The timeframes for each of these steps is dictated by the situation:

Recovery Step	Phase	Actions and Tasks	Remarks
Pre-event preparedness	Pre-event phase	Undertake recovery preparedness including training, exercises, network management, and community engagement.	Ongoing under the direction of the LDMG, LRC and core members of the LRG.
<b>DISASTER EVENT</b>			
Activation	Post impact relief and early recovery (immediate - short-term) phase	<p>LDMG resolves to form a LRG and appoints the LRG Chair (usually the Deputy Chair of the LDMG) depending upon the impact of the event and the primary recovery requirements.</p> <p>Establishment of the LRG and identification of possible stakeholders to be included on the LRG.</p> <p>Build situational awareness within the LRG and agencies / organisations supporting recovery.</p> <p>Work with response operations in the LDCC to influence operational decisions that have recovery implications; and to build situational awareness for recovery planning.</p> <p>Oversee and coordinate the ongoing provision of short term recovery (relief) services to impacted communities.</p> <p>Undertake analyses of community need across the four function groups of recovery and/or by sectors. Engage widely across the community to ensure analysis is comprehensive.</p> <p>Establish Recovery Framework.</p> <p>Finalise membership of LRG to include community and state agency representatives.</p> <p>Establish subgroups and local advisory groups as dictated by needs analysis.</p> <p>Document and distribute a Recovery Operational Plan.</p> <p>Maintain plan throughout recovery process.</p> <p>Subgroups develop action plans for their function.</p>	<p>Commence communication with stakeholders.</p> <p>Distribute Situation Reports (may be formal or informal)</p> <p>Recovery is represented in the decision making processes for disaster response.</p> <p>This is an iterative process and the analysis will change over time as situational awareness improves</p> <p>These steps are often undertaken concurrently.</p>

Recovery Step	Phase	Actions and Tasks	Remarks
Continued activation	Recovery and reconstruction (medium to long term) recovery	<p>Continue to deliver recovery services as outlined in the Recovery Operational Plan and as detailed in subgroup action plans.</p> <p>Maintain and update the Recovery Operational Plan and subgroup action plans as recovery progresses.</p>	<p>This process may go for many weeks or months (or years in extreme cases).</p> <p>The LRG must strive to sustain effort in accordance with priorities.</p>
Staged withdrawal / standing down	Transition to long term recovery	<p>Progressively close:</p> <ul style="list-style-type: none"> <li>Local advisory groups</li> <li>Close subgroups</li> <li>Close LRG</li> </ul> <p>Debrief/review/evaluation of the recovery effort.</p> <p>Submit final report on recovery to the LDMG</p>	<p>Must have transitional arrangements in place.</p> <p>Suitable alternate process must be in place to support long term recovery needs.</p> <p>Update plans.</p>

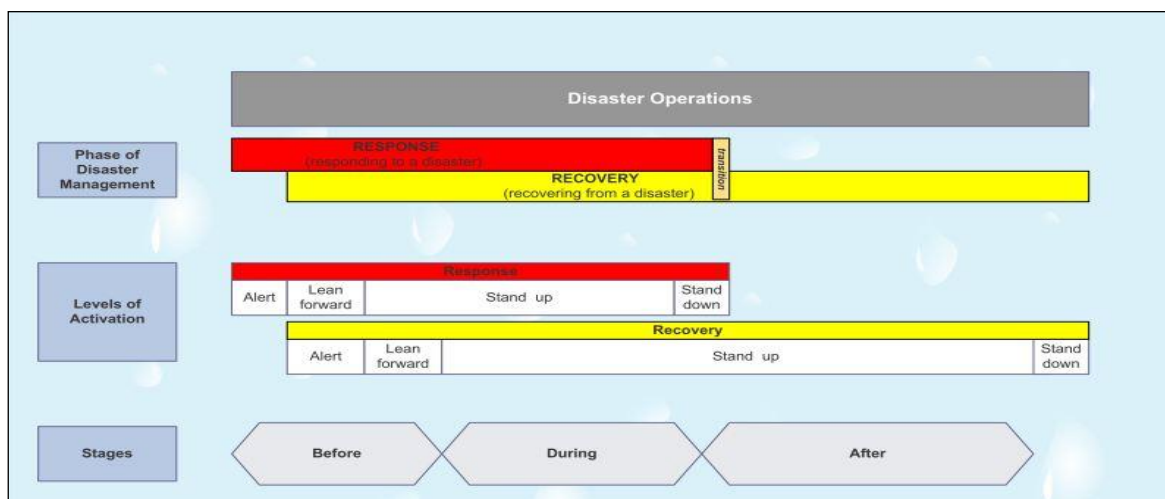
### 5.3 Activation process and transition between levels

The recovery process is activated in the same manner as disaster operations through four levels of activation:

- Alert
- Lean Forward
- Stand Up
- Stand Down

The LRC is to be notified once the LDMG goes to Lean Forward, or in rapid onset events, when the LDMG is activated to Stand Up. This is to ensure that the recovery framework can be established based on the emerging and anticipated needs of the community. The LRG needs to have a representative present at the LDCC intelligence cell (usually the LRC) when the initial damage assessments are undertaken. This will assist the LRG in developing their Recovery Plan. It also ensures that disaster operations consider the needs of recovery during the response phase.

This diagram depicts the activation of recovery relative to response.



# 6. Triggers for recovery activation and actions

The table below details the major recovery triggers, actions and communication requirements applicable to each level of activation. Note that the levels of activation are aligned with the three levels of recovery – short, medium and long term.

		Triggers	Actions	Communications
Response Alert		LRG inactive when LDMG is at Alert	Watching brief by members	Nil
Response Lean Forward	Recovery Alert	LDMG 'Lean Forward' level of activation.	LRG 'Alert' level. The LRC is briefed by the LDC when the initial damage assessment functions are undertaken during response operations. This will assist the LRC in developing their recovery plan. Core members of the LRG self-activate and commence to gain situational awareness of the event.	Whispir notification of Alert distributed to LRG members. LDC maintains communication with LRC who in turn liaises with core members of the LRG. Ad hoc reporting as required by the LDC.
Response Stand Up	Recovery Lean Forward \ transition to Stand Up	'Stand Up' of LDMG. LDMG assesses event impact and decides to activate the LRG. Immediate Relief arrangements are put in place.	LRG 'Lean Forward' level. DDC and SRG informed of establishment of LDMG response commences. LRC monitors response activities analyses hazard impact or potential impact. Relief and recovery planning commences through needs analysis and recovery operational planning. LRC and subgroup structures finalised along with reporting requirements. Deployments for immediate relief may be commenced by recovery functional agencies. Completion of initial needs analysis, finalisation of LRG and subgroup membership and issue of Recovery Operational Plan signal readiness to move the LRG to Stand Up and commence medium term recovery operations.	Whispir notification of Lean Forward distributed to LRG members. LRC and LRG members in routine contact and monitoring email remotely. LRG has an initial meeting for planning purposes. More regular reporting as required by the LRC and by the DDC and SRG. Community engagement and communication strategy developed by LRG.



		Triggers	Actions	Communications
Response Stand Down	Recovery Stand Up	<p>Immediate relief arrangements continue.            Medium term recovery commences.            Response phase moves to 'Stand Down'.</p>	<p>LRG at Stand Up.            Transition arrangements from 'response and relief' to 'medium term recovery' undertaken including formal hand over from LDC to LRC.            LRG activated to operate from Noosa Council offices.            DDC and SRG informed of the activation level of the LRG and transitional arrangements.            Deployments from functional agencies continue to provide immediate relief response.            Action plans developed addressing the four functions of recovery.            Participate in response debrief.            Action plans monitored and acted on.            Regular reporting to the Noosa LDMG the DDC and the SRG continues.</p>	<p>Whispir notification of Stand Up distributed to LRG members.            LRG and subgroups meet regularly.            Community engagement and communication strategy implemented.</p>
	Recovery Stand Down	<p>LRG completes its tasks contained in the Operational Plan.            The community returns to normal activities with ongoing long term recovery support provided as required under pre-agreed arrangements and processes.</p>	<p>LRG at Stand Down.            LDMG, DDC and SRG informed of date for LRG to stand down.            Financial records consolidate.            Reporting requirements finalised.            Participate in recovery review and assessment.            Long term recovery arrangements transferred to functional lead agencies including Council.            Return to core business</p>	<p>Whispir notification/s as LRG Stands Down.            As action items in the recovery plan are completed LRG members and ultimately the LRC resume standard business arrangements.            LRG stands down.</p>
	RECONVENE RECOVERY	<p>The LRG can be reconvened after it has stood down from an event if new issues come to light e.g. identification of primary producers' hardship some weeks after the event</p>	<p>The LDMG or the Chair of the LRG can reconvene the LRG if required.            The LDMG is informed that the LRG will reconvene.            The reconvened LRG to consult with LRC for briefing and handover</p>	<p>Chair of LRG seeks approval of LDMG to reconvene .</p>

## 6.1 Transitioning through phases of Recovery

The transition from response operations to recovery operations will be influenced by the nature of the disaster and therefore requires a degree of flexibility.

The transition will be informed by the circumstances and determined by the chair of the LDMG. Transition will be guided by:

- Situation reports which evidence the de-escalation of response operations
- Status of response and immediate recovery/relief operations
- Impact and needs assessments
- Response and early recovery situations that may escalate
- Anticipated recovery issues and risks.

### 6.1.1 From immediate / short-term relief to medium level recovery

The following tasks need to be completed before recovery moves from immediate / short-term to medium term:

- **Community needs analysis** across the four functions of recovery that define the community's recovery needs and which establishes priorities for the recovery effort and the resources required. This needs analysis will continue to be updated through the recovery process.
- **Membership of the Local Disaster Recovery Group** is finalised, as are reporting requirements to the LDMG, the DDMG and the SRG.
- **Subgroups** are established as required and membership and terms of reference for each are confirmed.
- **Recovery Operational Plan** outlining the aim, objectives and strategies for the recovery effort is finalised.
- **Community Engagement Strategy** is finalised and detailed in the Recovery Operational Plan.
- **Subgroup Action Plans** are well developed and outline relevant recovery programs and activities.

### 6.1.2 Transitioning to long-term recovery

Long-term recovery requires the State Government functional lead agencies, Noosa Council and the community to put in place systems and processes that ensure the ongoing provision of recovery support to those who need it after the departure of recovery workers from the disaster area. These arrangements should be included in the Recovery Operational Plan and subgroup Action Plans.

## 6.2 Community needs analysis

Community need is the driver for all recovery operations. It is imperative that analysis of community need is undertaken and regularly reviewed to ensure recovery operations are correctly focused and resourced.

The purpose of a community recovery needs analysis is to pull together information into a single, consolidated report. It should contain information on the physical impacts of a disaster, the economic value of the damages and losses, the human impacts as experienced by the affected population, and the resulting medium and long-term recovery needs and priorities. Needs analysis begins when the recovery process is first activated and continues through all levels of recovery. Stand down from recovery is possible only when all community needs have been met or where normal processes are in place to meet ongoing community recovery needs.

Needs analysis is about assessing what has changed within a community from the normal baseline and what programs and activities must be undertaken to assist the community to return to normal. These assessments, from which the needs analysis is done, are generally commenced during disaster response operations.

Community needs analysis underpins the development of the Recovery Operational Plan. Ongoing needs analyses throughout the recovery process will inform the evolution of this plan through the three levels of recovery (short – medium – long-term).

The LDC is responsible for ensuring that a rapid damage assessment and a preliminary community needs analysis is undertaken prior to the establishment of the LRG. The LRC and the LRG are responsible thereafter to ensure that ongoing needs analysis are undertaken to inform the transition between the three levels of recovery. Community needs analysis relies on the experience and local knowledge of the members of the LDMG, the LRG, subgroups and the local advisory groups combining to identify all aspects of community need throughout the recovery effort. Those undertaking needs analysis must have a sound situational awareness emphasizing the need for early activation of recovery during the disaster response phase and effective communications throughout recovery.

Impact assessments and rapid damage assessments undertaken to support disaster response operations are a foundation of community needs analysis.

**6.2.1 Format and process for community needs analysis**

There is no prescribed format or process for the conduct of community needs analysis following a disaster event as each function of recovery will need to apply specific processes to determine need relevant to their function. For example, the process and considerations for an economic needs analysis (economic impact assessment) will be significantly different to that undertaken in the environment, infrastructure or the human and social functions of recovery. Each of them will also be different to the others.

**6.2.2 Undertaking needs analysis by sectors**

Needs analysis may also be undertaken by community sectors. This table details the community sectors that may be considered when undertaking community needs analysis using a sector-based approach. The LRG may need to engage with representatives from these sectors when undertaking needs analysis:

Health, Aged Care	Education	Industry & Retail	Essential Services
Sport & Recreation	Retail & Business	Transport & Distribution	Communications
Rural Residential	Urban Residential	Energy	Community Services
Tourism and Recreation	Primary Producers	Individuals and Families	Emergency Services
Environmental Care	Building	Youth	

Selection of the correct people to the LRG and subgroups is important. Development of appropriate local advisory groups with well thought-out and diverse representation from the community will assist greatly in undertaking community needs analysis.

### 6.3 Establish recovery framework

The Chair of the LRG will likely need to augment the core membership of the Group to ensure representation by those who will contribute resources and services to the recovery effort as defined in the needs analysis. Such representatives should have appropriate authority within their organisation to mobilise resources and services in support of recovery. Supporting organisations that may assist in recovery are identified in the Terms of Reference for the LRG and individual subgroups.

### 6.4 Recovery Operational Plan

The Recovery Operational Plan is a strategic level document developed during the Lean Forward and Stand Up stages of recovery activation. It is prepared by the LRC with input from the LRG, its subgroups and the community and is approved by the LDMG. It details the recovery:

- Aim
- Objectives
- Strategies

to add address identified community needs across the four functional groups of recovery.

The LRG, subgroups and local advisory groups are responsible for assisting the LRC implement the Recovery Operational Plan. Implementation is through action plans developed and maintained by each subgroup.

The Recovery Operational Plan is a dynamic document that is reviewed and updated regularly to reflect the changing circumstances as defined by ongoing community needs analysis. It should be version controlled.

Recovery operational planning is similar to response operational planning in that it is a strategic plan specific to the event and the recovery requirements identified during community needs analysis. It is the primary mechanism used to ‘operationalise’ the recovery effort.

For ease of production, the Recovery Operational Plan may be developed and distributed in the SMEAC format used for response operational plans.

<b>Situation</b>	An analysis of the current and projected situation to determine: <ul style="list-style-type: none"> <li>• impact of the disaster across the four functional groups of recovery and/or by sector</li> <li>• analysis of community needs across the four functions e.g. analysis of the difference between the normal community baseline and the current situation.</li> <li>• opportunities and challenges arising from the needs analysis</li> <li>• key timeframes relevant to recovery operations</li> </ul>
<b>Mission (Aim &amp; Objectives)</b>	What we have to do. It includes the aim of the recovery effort and may include several objectives to be achieved. Objectives should be S.M.A.R.T e.g. Specific, Measurable, Achievable, Relevant and contain a Timeframe.
<b>Execution</b>	A description of how we are going to undertake recovery across the four pillars of recovery. These are broad statements of intent that are amplified in subgroup action plans. Detail the agencies who will contribute to the recovery effort and the services they will need to offer. Specify performance indicators.
<b>Administration and Logistics</b>	How we intend to resource and administer the strategies above. Specify extraordinary resourcing or logistics necessary.

**Coordination  
Communications**

Outline the recovery framework adopted for this event and detail membership of the LRG, subgroups and local advisory groups.  
Outline communications strategy.  
Specify reporting requirements for the LRG, subgroups and local advisory groups.

The Recovery Operational Plan should be provided to all stakeholders involved in community recovery including the Noosa Council, DDC, SRC and SRG. Copies may be provided to statutory bodies established by the State, e.g. the Queensland Reconstruction Authority.

**6.4.1 Example format of a Recovery Operational Plan**

**NOOSA LOCAL DISASTER RECOVERY GROUP  
Recovery Operational Plan**

<b>1. EVENT NAME:</b>	
<b>2. VERSION Number &amp; DATE / TIME (Plan Effective):</b>	
<b>3. SITUATION:</b> (impact assessments and outcomes of community needs analysis)	
<b><u>General Background:</u></b>	
<b><u>Human / Social</u></b>	
<b><u>Infrastructure</u></b>	
<b><u>Economic</u></b>	
<b><u>Environment</u></b>	
<b>4. RECOVERY MISSION</b> (AIM. A single statement of purpose for the recovery operation. Should encompass medium and long term view. Consider inclusion of improvement.)	
<b>5a. OBJECTIVES:</b> (SMART: Specific, Measurable, Achievable, Relevant, Time-framed)	
<b>Human and Social</b>	Objective:
	Objective:
	Objective:
<b>Infrastructure</b>	Objective:
	Objective:
	Objective:
<b>Economic</b>	Objective:
	Objective:
	Objective:

<b>Environment</b>	Objective:	
	Objective:	
	Objective:	
<b>5. EXECUTION:</b> (provide general overview of intent for recovery operations across the four pillars of recovery. Define major programs and activities for medium and long term recovery)		
<b>6. Execution Strategy Statements</b> (specify strategies to be used to achieve each objective. Define objectives as medium or long term. Include Key Performance Indicators for each strategy)		
<b>Human/Social</b>	Objective Number	
	Objective Number	
	Objective Number	
<b>Infrastructure</b>	Objective Number	
	Objective Number	
	Objective Number	
<b>Economic</b>	Objective Number	
	Objective Number	
	Objective Number	
<b>Environment</b>	Objective Number	
	Objective Number	
	Objective Number	
<b>7. ADMINISTRATION AND LOGISTICS</b> (Resourcing)		
<b><u>Key Agencies involved:</u></b>		
<b><u>Additional Resources:</u></b>		
<b><u>Recovery Funding:</u></b>		
<b>8. COORDINATION/COMMUNICATIONS</b> (Management, Communication and Reporting)		
<b><u>Noosa Recovery Framework (provide details on)</u></b>		
<ul style="list-style-type: none"> <li>• LDRC</li> <li>• Membership of LRG</li> <li>• Subgroups</li> <li>• Local advisory groups</li> </ul>		
<b><u>Recovery Centres/ One Stop Shops and/or Outreach Services</u></b>		
<b><u>Community Engagement Strategies</u></b> (scalable depending on size and nature of event)		
<b><u>Meeting and Reporting Requirements</u></b>		
<b><u>Recovery Contact List (Appendix –in confidence-)</u></b>		

<b>Prepared by:</b> <Name> <Date/Time>	<b>Plan Endorsed:</b> <Name> <b>Local Recovery Coordinator</b> <Date/Time>
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**Attachments:**

1. <add attachments as required>

**Plan Distribution:**

<enter distribution>

## 6.5 Action plans

Action plans are the primary tool used by subgroups to manage the recovery effort. They too are a mechanism to operationalise the recovery effort. Action plans are the detailed plans developed, maintained and implemented by individual recovery subgroups. Each subgroup’s action plan will specify the programs, activities, agencies, resources and timeframes required in order to achieve the objectives and strategies specified in the Recovery Operational Plan. Routine reporting by the subgroup to the LRG on the progress of their action plans is required to ensure the overall recovery effort is proceeding as planned.

### 6.5.1 Example format of an Action Plan

Priority	Issue or Need (objective)	Action to Address Need	Lead Agency	Supporting Organisations	Resources Required	Time frame	Supporting Information

## 6.6 Community engagement strategies

The LRC and the LRG must consider the community engagement strategies that will be needed to ensure the community is involved and effectively contributes to the recovery effort. The LRG should consider the stakeholders and how best to engage with them during the stages of recovery planning. Community engagement for recovery should use the community engagement processes as detailed in the Local Disaster Management Plan. They should be documented in the Recovery Operational Plan. Two specific strategies to engage with the community during recovery are:

- local advisory groups
- public forums or community meetings.

### 6.6.1 Local advisory groups

Forming local advisory groups is often an effective way of involving the community in the recovery effort. These groups may be geographically based or they may be functionally based e.g. economic, environmental, infrastructure or human and social. The formation, composition and terms of reference of these local advisory groups will depend on the needs of the community and the willingness, and capacity, of the community to participate.

They are formed at the discretion of the LRG and subgroups as required. Local advisory groups have no defined structure or governance arrangements. They may have a pre-defined membership or be ad-hoc in nature. They provide a mechanism to enable effective engagement with the community for planning and decision making.

### 6.6.2 Public forums and community meetings

Public forums and/or community meetings may be called in order to listen to and talk with communities affected by the disaster. They are useful in the needs analysis process and should be undertaken throughout recovery to maintain public dialogue, resolve issues and to gauge recovery progress.

Public forums are often specific to a particular function e.g. a public forum for businesses that are economically affected by the event or land owners affected by environmental issues arising from the disaster. Community meetings are usually geographically focused and often cover a broad suite of issues across the four functions of recovery. They are conducted at the discretion of the LRG and subgroups as required. Local advisory groups may augment public forums and community meetings.

It is important that such meetings or forums are accessible, well promoted and involve community and business leaders who can disseminate information to and from the community.

It can be valuable, where possible, to identify and utilise existing community events or activities where the community gathers rather than initiate an additional activity that the community may be hesitant to attend that is not a community environment that they feel comfortable with and trust.



## 6.7 Managing volunteers

Noosa Council will act as the managers of spontaneous volunteers within the Noosa area, within local capacity. The long-term recovery period in disaster situations presents volunteer management challenges that include maintaining the motivation of disaster response volunteers, developing strategies to mobilise new volunteers for the recovery period, and organising large-scale volunteer efforts for clean-up and rebuilding.

### 6.7.1 Noosa volunteer philosophy

Recovery planning in Noosa recognises the role of volunteers in community recovery. Volunteering often emerges spontaneously within a community and coordination and support is required to maximise outcomes for both the volunteers and those that receive volunteer assistance.

Volunteer coordination is a function of the Human and Social Subgroup. The Subgroup is responsible for promoting, coordinating and supporting the volunteer effort with the assistance of the other subgroups as required.

The Subgroup will work closely with Volunteering Queensland and other volunteer organisations including not-for-profits to develop appropriate volunteering programs and supporting frameworks to assist the community where practicable.

Volunteer management on the ground e.g. briefings, tasking, resource support, safety etc is to be undertaken by Council and/or non-profit organisations with the appropriate insurance, policies and procedures for effective and safe volunteer management.

The LRG will monitor and report on volunteer effort within the community including providing public information on volunteer progress and outcomes.

### 6.7.2 Setting objectives for volunteer effort

It is likely that a range of volunteer programs will be needed to address diverse needs in the community. For example, volunteers may assist in urban clean up, farm debris removal and fencing, environmental care projects, provision of psychosocial support, recovery event management, provision of specialised or technical work, or management of donated goods. Matching volunteer availability and skill and resources will be required across diverse functions that operate over different timeframes. For example, farm fence repair may be undertaken over months whereas clean up of community infrastructure will often need to be completed in the immediate aftermath of a disaster.

It is important for the LRG and the subgroups to clearly define objectives for the volunteering effort to assist planning and to enable the matching of volunteers' availability and skills with tasks on the ground. Volunteering programs, recruitment and management can then be undertaken to achieve those objectives.

Objectives should be SMART i.e. Specific, Measurable, Achievable, Relevant and include a Time Frame. Volunteer objectives may be short, medium or long term. Long term volunteer objectives should be developed to ensure that volunteer effort can be managed to support the long term recovery of the community.

A volunteer management plan should be developed and endorsed by the LRG. It should be updated regularly to reflect the changing volunteer environment.

The LRC or the Volunteer Coordinator, on behalf of the LRC, may consider the following when planning and developing volunteer objectives and the programs to achieve them:

- Initial clean up (mud army)
- Farm clear and fence repair programs
- Pet foster care
- Wildlife care and treatment
- Donations management and closure of donation centres
- Psychosocial support
- Assistance in community recovery event management
- Environmental care
- Support to community organisations for rebuilding / repairs
- Support to businesses for rebuilding / repairs
- Creative fund raising for identified public appeals
- Technical or specialised work or advice
- Assistance in transport of goods and/or donations

### 6.7.3 Coordinating volunteer effort

A Volunteer Coordinator may be required to assist the LRG in planning and implementing recovery volunteer programs and activities and the LRG should consider the need for such an appointment early in the recovery process. The appointment of a Volunteer Coordinator provides a central point of contact within the community for volunteer matters and enables volunteer effort to be closely coordinated, monitored and reported. If a Volunteer Coordinator is deemed necessary by the LRG, the LRC will liaise with the Noosa Council CEO to appoint a suitable council staff member to the role.

It should be noted that such an appointment may need to be on a full-time basis during the initial planning and development of volunteer programs and activities. The workload of a Volunteer Coordinator is likely to decrease as longer term programs are established e.g. once the volunteering effort has settled into a routine.

### 6.7.4 Roles and responsibilities of Volunteer Coordinator

#### **Role**

To plan for, coordinate, monitor and report on volunteer effort to support community recovery on behalf of the Local Recovery Coordinator.

#### **Responsibilities**

- Assist in the development and implementation and maintenance of the volunteer management plan endorsed by the LRC
- Assist in promotion of volunteering opportunities as defined in the volunteer management plan
- Maintain volunteer documentation and records
- Match offers of assistance to identified community recovery volunteer needs
- Work with Volunteering Queensland and other volunteer providers and registered non-profit organisations to ensure volunteers are identified, engaged, coordinated and managed effectively
- Provide public information on recovery volunteering needs, and the progress of recovery volunteering programs and activities
- Identify opportunities and implement strategies to recognise volunteers
- Report regularly to the Chair of the Human and Social Subgroup on the implementation of the volunteer management plan

As a guide, the Volunteer Coordinator will be expected to report and provide advice on:

- The community need for volunteers to support recovery (assisted by other subgroups)
- Offers of assistance within the community and how effectively such offers are able to be matched to community need
- Availability of volunteers and strategies to overcome volunteering shortfalls
- Resources required to support volunteers

### 6.7.5 Working with volunteer organisations

The Chair of the Human and Social Subgroup and/or the Volunteer Coordinator will work closely with Volunteering Queensland and other volunteering bodies to develop relevant and achievable recovery programs and activities. These bodies are critical to effective volunteer management in Noosa Shire as they offer the mechanisms and protection needed to effectively use volunteers in response and recovery. Volunteering Queensland is the primary body charged with volunteer registration and referral in Queensland.

### 6.7.6 Recognising and supporting volunteers

While volunteers do not participate for the sole purpose of reward or recognition, it is important to acknowledge and thank volunteers for their time and efforts. Recognising and celebrating volunteers also supports ongoing participation and promotes volunteering in the community.

The LRG should consider ways to recognise volunteer effort throughout recovery. Often this is best done through providing stories of volunteering in local media and on Council's website and Facebook page. Conducting functions, barbecues and local award ceremonies should be considered and undertaken wherever practicable. Visits to volunteers in the workplace by community leaders should be undertaken regularly to recognise volunteers.

### 6.7.7 Maintaining volunteer documentation and record-keeping

The Chair of the Human and Social Subgroup or the Volunteer Coordinator should maintain documents and records relating to the volunteer effort. These may include but are not limited to:

- Volunteer Management Plan including agreements between the LRC and individual volunteer organisations
- Community volunteer needs register that records the volunteer needs within the community and enables the matching of need to offers of assistance
- Community offers of assistance register that records offers of assistance from the community and enables matching of offers to community volunteer need
- Register of pet foster care providers and those who need such services to assist in ensuring effective pet foster care services
- Register of suitable non-profit organisations both locally and those offering services from outside the local government area
- Register of donation centres established by the community following a disaster to assist in determining how these centres may be progressively closed down

## 6.8 Financial recovery

### 6.8.1 Natural Disaster Relief and Recovery Arrangements (NDRRA)

The NDRRA is the Australian Government program intended to assist the recovery of communities whose social, financial and economic wellbeing has been severely affected by a natural disaster or terrorism event. These arrangements provide a cost sharing formula between the Queensland and Australian Governments on a range of pre-agreed relief and recovery measures.

Further information on NDRRA is available from the Queensland Reconstruction Authority website: <http://qldreconstruction.org.au/ndrra>.

### 6.8.2 State Disaster Relief Arrangements (SDRA)

The SDRA is an all hazards relief program that is 100% State funded and covers natural and non-natural disasters. The purpose of the SDRA is to address personal hardship and community response needs for disaster events where the NDRRA is not activated.

### 6.8.3 Federal Disaster Arrangements

#### **Disaster Recovery Payment (DRP)**

When a major disaster has had such a significant impact on individuals and families that assistance over and above the measures available under NDRRA is needed, the Australian Government may provide the Disaster Recovery Payment which is a one-off recovery payment. The DRP is a non-means tested payment of \$1,000 for eligible adults and \$400 for eligible children who have been adversely affected by a major disaster either in Australia or overseas.

The DRP is administered by the Department of Human Services. Refer to [www.disasterassist.gov.au](http://www.disasterassist.gov.au) website for further information.

#### **Disaster Recovery Allowance (DRA)**

The DRA is a short-term income support payment to assist individuals who can demonstrate their income has been affected as a direct result of a disaster. When available, the DRA assists employees, small business persons and farmers who experience a loss of income as a direct result of a disaster event.

The DRA is administered by the Department of Human Services. Refer to [www.disasterassist.gov.au](http://www.disasterassist.gov.au) website for further information.

## 6.9 Other assistance

### 6.9.1 Donations and spontaneous volunteers

Following disasters, it is often the case that offers of assistance such as financial, goods and services or volunteers to assist start to overwhelm the affected area. A large influx of donations or volunteers often results in problems such as:

- Stewardship
- Proper disbursement
- Disposal of goods that did not fit the needs of the affected community
- Storage issues
- Health issues relating to donated food
- Difficulty arranging effective means of donation transportation or delivery
- Inability to match offers of services with current needs.

**Goods** - In order to assist with the management of donations to affected communities following a disaster event, the LRG will work with GIVIT, a not-for-profit organisation, to manage all donations of material items for the disaster. GIVIT will accept pledges of donations from individuals and businesses via its website at [www.givit.org.au](http://www.givit.org.au) and then work with charity and front line services to access donated goods and services.

**Cash** - Ultimately the best and most versatile way of helping disaster affected communities is through a cash donation to a reputable disaster relief agency. Previous experience has shown that it is best for a local government to avoid establishing an 'in house' collection of donated funds, such as a Mayor's appeal fund. The effort required to effectively collect, manage, distribute and account for funds is onerous, especially when Council's resources are already being fully utilised in other recovery activities.

**Volunteers** – spontaneous volunteerism can be a valuable resource in recovery if properly managed. During the initial / short-term recovery phase, the LRG will appoint a Volunteer Coordinator to plan for, coordinate, monitor and report on volunteer efforts.

All efforts will be made to show appreciation in the spirit in which offers of assistance are made, the LRG should work with the LDMG and disaster relief agencies in providing media releases on what is and what is not needed at a very early stage of response and/or recovery.

All offers of assistance, donated goods and the management of volunteers shall be in accordance with the [Queensland Policy for Offers of Assistance](#) and the [Queensland Offers of Assistance Guidelines](#).

### 6.9.2 Recovery centres and outreach services

The Department of Communities, Disability Services and Seniors is responsible for the coordination of setting up recovery centres known as Recovery Hub and Outreach Coordination Centres (Recovery Hub). Recovery Hubs provide community members with access to a range of support services offered by government and non-government organisations. These outlets engage the maximum number of the affected population by providing a unified point of contact and support to people requiring assistance.

Recovery Hubs are a useful two-way conduit of practical recovery, information and advice. They can also be a good means of assessing 'health checks' on the affected population.

The Department of Communities may also provide outreach services to address the needs of those unable to attend Recovery Hubs. Outreach programs are usually based on teams of recovery workers provided by the Department of Communities who visit people in their homes and businesses to render assistance and determine needs.

Outreach services are primarily designed to reach those isolated and will likely be a key strategy for the Noosa area. The LRG may need to assist the Department in providing support services for outreach teams e.g. accommodation, local knowledge, etc.

## 6.10 Debrief, review and evaluation

A formal review and evaluation of the recovery effort should be undertaken at the conclusion of recovery operations. This is usually conducted on Stand Down and should be undertaken in accordance with the National Monitoring and Evaluation Framework for Disaster Recovery Programs and reported to Noosa Council and the LDMG.

The primary method of undertaking review and evaluation is through the conduct of debriefs after the event. A debrief in this context is the gathering of relevant stakeholders to review, discuss and document the learnings from the event and the changes that need to be made to incorporate this learning. Evaluation can also be taken from assessing the status of action plans and needs analysis over time. Community input into the debrief, review and evaluation is also important to inform the reporting and look at improvements for future events.

### 6.10.1 Periodic debriefs

Recovery can be a long process and debriefs may be undertaken at any time during the recovery process for any particular activity. Undertaking periodic debriefs will assist in capturing recommendations for improvement and may improve ongoing delivery of recovery services. The LRC, LRG and subgroups will determine the nature and extent of periodic debriefs during the recovery process as part of ongoing continuous improvement. For example, a debrief of those involved in facilitating a public forum or community meeting should be conducted following the activity to determine how to improve for the future. Periodic debriefs of individual recovery programs and activities are encouraged and should be promoted by the LRC, LRG and subgroups.

### 6.10.2 Final debrief

At the conclusion of recovery operations formal review and evaluation processes should be undertaken of the entire recovery effort. The most effective way of undertaking this overall review is through a series of debriefs of local advisory groups, subgroups and the LRG upon Stand Down. Such debriefs should be conducted as close to the conclusion of recovery operations as possible.

Usually debriefs are conducted from the bottom up, meaning that subordinate entities debrief first and their findings are included in the debrief of the next higher group. On this basis, debriefs should, where possible, be conducted in the following priority order:

1. Local advisory groups
2. Functional subgroups
3. Local Disaster Recovery Group.

### 6.10.3 Debrief framework

Debriefs should be conducted using an agreed framework to ensure all aspects are adequately covered. All participants must understand and adhere to this framework in order to effectively contribute to the review and evaluation process.

The debrief framework for review and evaluation of Noosa recovery operations is based on responding to three primary questions:

1. *What did we do well? (sustain)*
2. *What did we do well but needs improvement? (improve)*
3. *What were the gaps and how do we fix them for next time? (develop)*

This broad framework can be expanded depending on the nature of the debrief. For example, the debrief of the LRG and subgroups may examine each of these broad questions against the major steps of the recovery process. A more flexible debrief framework may be needed for local advisory groups.

### 6.10.4 Debrief reports

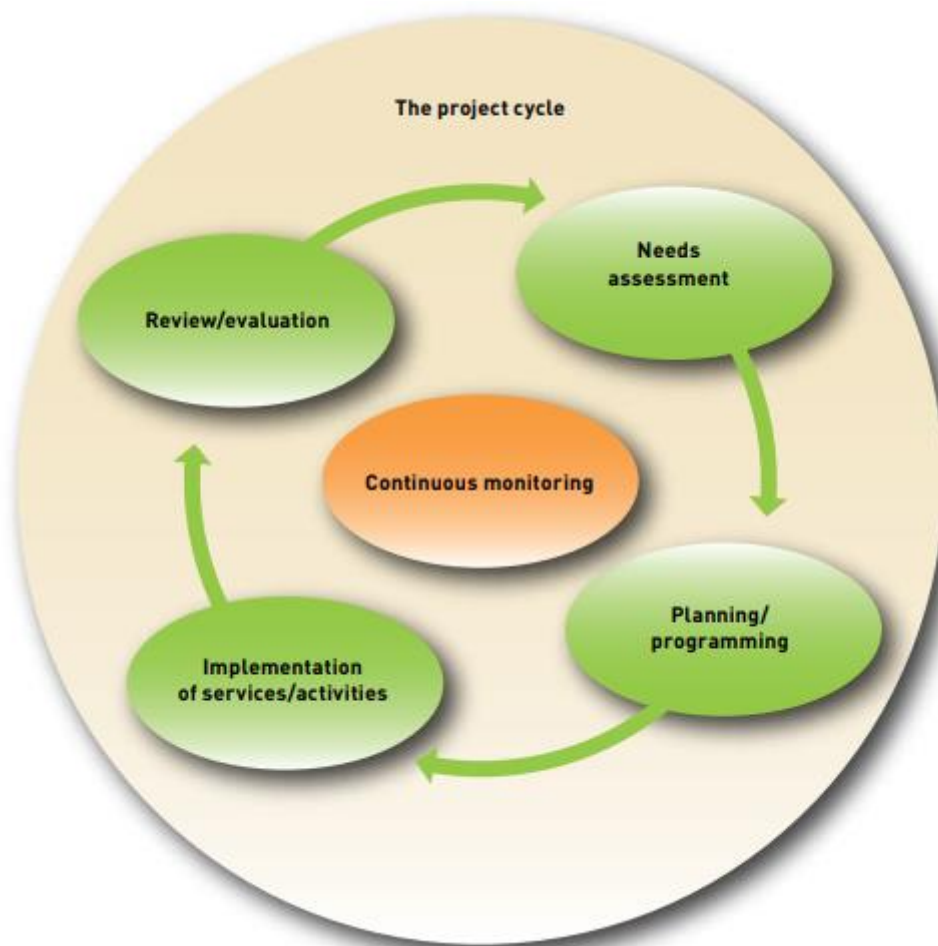
Individual debriefs are to be documented using the framework applied to that debrief and provided to the next higher level group in a reasonable timeframe after the event. The final review and evaluation report from the LRG is to be provided to the LDMG, DDMG and the State Recovery Group no later than three (3) months after Stand Down from recovery operations.

## 7. Recovery Activities

This section provides guidance on how to conduct recovery operations. It draws from material provided in the Australian Institute for Disaster Resilience [Handbook 2 Community Recovery](#) (2011) which offers current best practice guidance on recovery.

It should be noted that recovery is essentially a creative endeavour aimed at addressing and resolving problems and issues to achieve defined objectives. Each disaster is essentially different and the recovery activities undertaken for each disaster event will often be unique to that event. This section is divided into the four functional groups of disaster recovery - economic, environment, human and social, infrastructure, and their subgroups and provides typical methodologies and considerations for recovery. It is not exhaustive and the LRG and subgroups must recognise that a range of methodologies and considerations may be applicable to any particular event.

The LRG and subgroups should strive to manage recovery operations using the recovery project cycle:





## 7.1 Human and social recovery

Human and social recovery often begins spontaneously within a community and it is the role of the Human and Social Subgroup to provide structure and resources to support, integrate and coordinate these spontaneous efforts.

In Noosa, human and social recovery activities are coordinated through the Community Welfare Sub Committee which meets regularly and has a broad based membership.

This section outlines the range of social recovery activities and services that address aspects of safety, health and psychosocial wellbeing.

### 7.1.1 Principles of effective human and social recovery

There are five empirically supported principles to guide intervention efforts in the early to mid-term stages post-disaster:

1. Promoting a sense of safety
2. Calming – providing reassurance, strategies to reduce worry, fear and distress
3. Enhancing ‘self-efficacy’ and ‘community-efficacy’ – giving people a sense of control over positive outcomes
4. Promoting connectedness, encouraging support networks, helping people to feel part of their community
5. Instilling a sense of hope and optimism for the future

Effective recovery is strongly influenced by very practical issues such as the availability of food, housing, jobs and financial security. As a general rule, the more the community can be supported to rebuild the social and physical infrastructure, to return to their jobs and schools, and to regain financial stability, the greater the benefit for their wellbeing and recovery process.

The following seven indicators of social wellbeing may be used by the Community Welfare Sub Committee:

1. Wealth
2. Employment
3. Amenity
4. Health
5. Social issues
6. Social belonging
7. Recreation and leisure

As a guide, the Community Welfare Sub Committee should strive to:

- Provide timely and accurate information
- Reconnect people with their families, friends and community networks
- Empower people to manage their own recovery and to access practical assistance
- Provide engagement and emotional support at individual, family and community levels

### 7.1.2 Categories of human and social recovery

#### **Safety and security**

Loss of life, injury, loss of shelter and threats to safety as a result of a disaster all impact on an individual's and/or a community's sense of safety and security. Social order and strong governance provide the sense of safety that people require to reduce their anxiety about the future. Disaster affected people will need timely information about safety, protection issues and mitigation actions to address emerging safety and wellbeing issues.

## **Shelter**

A paramount concern for displaced people is to have safe, alternative accommodation when their homes have been damaged, destroyed or are inaccessible due to contamination or ongoing hazard threats.

Ensuring displaced households and individuals have appropriate shelter is a key to ensuring their safety and commencing their recovery. Accommodation arrangements may range from short term to long term. Further information on building matters is provided in the section on infrastructure recovery.

The Community Welfare Sub Committee should:

- Keep accurate and up-to-date records of where people relocate and their contact details
- Organise emergency accommodation in conjunction with local agencies
- Preferably arrange for transitional or longer-term accommodation on or near home sites of those people whose own homes are not habitable
- If people need transport, consider how this may occur
- Ensure privacy is respected and maintained at all times
- Establish a referral mechanism for psychosocial support

Emergency and short-term accommodation is considered to be that provided in evacuation centres during the response phase of disaster management. However, it may include the use of hotels, motels, caravan parks, private houses including family and friends. It will usually be provided only for a few days during the impact and immediate aftermath of an event.

Arrangements to meet people's emergency or short-term accommodation needs are managed by the LDCC's Community Support Officer and the LDC. When people need longer term accommodation following a disaster these needs will be managed by the LRC and the LRG.

The Community Welfare Sub Committee should work closely with the Department of Housing and Public Works and the community to develop and implement appropriate inter/medium-term accommodation to suit the needs of those displaced. Use of any of the following should be considered:

- Rental properties on the market
- Existing caravan park accommodation
- Tourism accommodation providers, particularly those who cater for longer term stays
- Transport of demountable buildings to designated locations
- Community billeting using the resources offered by the community

Locations for temporary accommodation will vary considerably for each person and family. Temporary accommodation solutions should be tailored to meet people's needs as far as is practicable. Considerations for interim/medium-term accommodation include ensuring equity, adequate safety and security as well as access to services such as:

- Water and waste management, power and communications
- Health
- Transport
- Schools and work
- Social services including social networks and support organisations

## **Health**

Health is a state of physical, mental and social wellbeing and not merely the absence of disease and infirmity. Queensland Health is the primary responsible agency for the provision of health care services to the community and should have effective representation on the Community Welfare Sub Committee, in consultation with the Health Services Subgroup and in accordance with the Health Services Subplan. Public health services are provided by both Queensland Health and Noosa Council and play a key role in recovery to reduce adverse public health affects after a disaster:

- Managing communicable disease issues – surveillance and review of morbidity that may be occurring in the community and subsequent implementation of interventions such as vaccine programs if, for example, there is an increase in diagnosis of influenza or hepatitis A
- Health protection, environmental health and air quality, food and water inspections and advice e.g. advice to boil water, water tank quality, disposal of spoilt food, review of food preparation procedures in evacuation centres, etc
- Inspections and review of sewerage and other contamination issues that may impact on the health of the community
- Health promotion activities such as information and advice about heat stress, clean-up health hazards such as mould and asbestos, and other activities that aim to enhance self-care and prevention of later hazards in recovery

### **Psychosocial support, including individual and community activities and services**

Psychosocial impacts can be very broad and may be a result of how a disaster affects peoples' emotional, spiritual, financial, cultural, psychological and social needs as part of a community.

Disaster affected people often receive the majority of their support from their families, friends, colleagues and community organisations. In addition, social recovery is enhanced through the provision of adequate food, water and shelter and the return of services such as transport, communication, power and health.

Psychosocial support builds on these measures by providing a variety of services that range from supporting individuals and households to communities through community development activities and projects.

Psychosocial support to individuals and households includes psychological first aid and personal support services.

Community development activities and projects are often low cost, simple activities that provide the foundation for the establishment of a meaningful recovery program. They are focused on providing assistance in re-establishing social connections and functionality through group and community activities. Examples include:

- Neighbourhood barbeques
- Street meetings
- School activities
- Community recovery planning
- Spiritual and sporting events
- Ceremonies and remembrance activities
- Virtual forums
- Impromptu displays such as photographs or artwork depicting the event and/or the community's recovery

Psychological first aid is a key component of psychosocial support and provides a set of skills to underpin the effective provision of psychosocial support services. It is an evidence-informed approach based on common-sense principles of support to promote normal recovery and includes helping people to feel safe, connected to others, calm and hopeful and facilitating access to physical, emotional and social support; and enabling people to be able to help themselves.

The goals of psychological first aid are to:

- Reduce stress
- Assist with current needs
- Promote adaptive functioning
- Get people through periods of high arousal and uncertainty
- Set people up to be able to naturally recovery from an event
- Assist early screening for people needing further or specialised help
- Reduce subsequent post-traumatic stress disorder

Community leaders and other key members of the community can be trained in the principles and delivery of psychological first aid to ensure that an appropriate response is immediately available within the community and to allow community members to work alongside emergency support workers to manage community needs. Under the current Queensland State Disaster Management Plan, Lifeline Community Care Queensland is a key agency involved in the community recovery process and has been delegated the lead agency in the provision of psychological first aid following a disaster event.

### 7.1.3 Personal support services

The term, personal support services, refers to the specific role within the social recovery workforce, which provides a diverse range of practical assistance coupled with physiological first aid for the immediate and early recovery needs of individuals, families or groups of disaster affected people.

Personal support services can be provided by a wide range of personnel from government and non-government agencies and local communities. These personnel can be employees, trained volunteers or trained local community members who have the capacity and interpersonal skills to support people in distress. These personnel do not provide counselling or psychological services but should be able to recognise people with these needs and refer them to the appropriate service providers. These services are primarily provided and coordinated by the Department of Communities and are evident in services such as evacuation and recovery hubs and outreach programs.

#### **Practical assistance as a component of personal support services**

Personal support personnel and key recovery agencies can provide, or ensure access to, a wide range of practical assistance. Practical assistance is usually available through evacuation and recovery hubs and through outreach programs and can include:

- Information about what has happened, services available and plans that are in place
- Access to available communication such as telephone, satellite services, free internet access
- Comfort and reception
- Referral to other agencies
- Reassurance and security
- Material aid (food, water, toiletries, hygiene kits, bedding, clothing)
- Time away for families (respite)
- Reassurance and security
- Child minding
- Child and aged care services
- Transport
- Advocacy, legal aid, insurance
- Pet care and foster care services
- Support with clean-up
- Meetings and forums
- Assistance with funeral arrangements
- Medication and medical care
- Locating relatives and loved ones

#### **Designing individual and household psychosocial support programs**

Several issues need to be taken into account when designing and delivering personal support services:

- The majority of people affected by the disaster will not be used to using welfare or social services and may find it difficult to approach, access or fully utilise emergency relief and recovery services
- Some people may need specialist support that is not readily available or may require a complex mix of services to meet their needs

- In identifying the need for individualised support services, recovery planning needs to consider the impact the event has had on local service providers. There may be a need to develop strategies to augment the availability of local community services to meet a surge in demand
- Individualised support programs can graduate in intensity from self-accessed information to coordinated service delivery and case management approaches

To be successful, delivery of individual and household psychosocial support programs should be:

- Simple and easy to understand
- Consistent
- Accessible
- Seamless
- Have a single point of contact

#### 7.1.4 Community development activities and programs

To address the important recovery issues of family and community interaction, the organisation of social activities has proven very effective. Neighbourhood barbeques and local social events that make use of the arts, music, theatre or sporting activities all provide opportunities for people to mix, tell their accounts of events and work cooperatively to plan future events. Practical activities such as fence building or weed clearing can also include a social component and may be attractive to people who would not necessarily attend a 'social' event.

Community development programs can be managed by Noosa Council, local community organisations or the Department of Communities. The decision about the management of these programs is often related to local presence, community trust and capacity to manage.

#### **Men and women**

It is widely recognised that men and women have different needs and human and social recovery activities and programs may need to be categorised by gender. This is particularly important for males who may find it difficult to acknowledge problems, to ask for assistance and to make use of naturally occurring support networks. Examples of types of social recovery networks for men may include:

- Men's sheds, which encourage men to work on projects that will have real and practical benefits for themselves and the community and at the same time, provide opportunities to talk over their issues with others, seek advice and give help
- Tool libraries which are a practical and tangible way for men to receive assistance with tools that may have been lost or damaged as a result of the disaster
- Locally organised events relevant to the men in an area affected by an emergency such as sporting and leisure activities and other outdoor pursuits

For many women, sharing their experiences is one of the most important aspects of their personal recovery. Programs that focus on ways in which women can interact, learn and share experiences are vital and may include:

- Local women's organisations and networks
- Locally organised events relevant to the women in an area affected by the disaster such as pampering weekends, gardening groups or women's health information sessions
- Support groups that facilitate the sharing of stories and experiences

## **Children and young people**

The additional needs of children and youth need to be considered by the Community Welfare Sub Committee. Considerations include:

- Recognition that children and youth are uniquely vulnerable following an emergency event and require targeted and specialised support
- Children are not little adults and should not be managed in the same way as adult population
- There is no one size fits all approach to recovery for children and youth and recovery plans must consider the developmental stage of those affected

The importance of family and community support in helping children and young people overcome the impact of their experiences cannot be overstated. Parent information sessions that provide advice and information to parents on ways to support their children may be beneficial.

Local schools are key community organisations that can provide support to the younger members of the community. Engaging with schools and education facilities to gauge the level of impact on the young people in a community and involving them in development of plans and activities will assist in ensuring young people are cared for after a disaster.

The Community Welfare Sub Committee should consider providing information to school and childcare centres perhaps through newsletters that explain the activities and support that are available to young people and children. While schools are an important conduit to reach young people and children, consideration must be given to supporting young people after school or during school holidays or closures. Holiday programs and mobile playgrounds may be useful to provide suitable activities to children and young people.

## **Aged**

Members of the aged community can be incredibly resilient but in other cases are particularly vulnerable during a disaster. Their life experiences include events such as wars, the Depression, bushfires, floods and droughts, which demanded great self-reliant resources, gave them the strength to deal with unusual circumstances.

People who are older, however, may be isolated, frail, suffering from chronic illness or dependent on others for transport, meals and self-care. Some older people may have lived in the community all their lives and suddenly be put in a position of needing to relocate, in addition to losing a lifetime of memorabilia and familiarity.

The Community Welfare Sub Committee needs to quickly establish who these people are and where they are located in the community and link them into aged care services that can help them re-establish a sense of safety and security as quickly as possible. In the same way that children and youth may be brought together to help them talk about and process their experiences of the disaster, it may be helpful to organise groups of aged people to get together and share stories and information.

## **Culturally and linguistically diverse communities**

Non-English speaking people may be especially vulnerable to prolonged impacts following a disaster by virtue of their inability to communicate well with emergency and relief workers, and their difficulty in accessing information that helps them to make sense of the event and its aftermath.

Different cultures approach and react to disasters in different ways. This can potentially cause tensions in the broader community if these reactions are not understood by others. It may mean that minority groups in the community can feel left out, marginalised and misunderstood if they do not understand or cannot relate to the recovery processes put in place by the government and other organisations. They may also feel unable to express and manage their grief or distress in their usual ways.

The Community Welfare Sub Committee should be aware of the different cultural groups in their communities and should ensure that appropriate recovery services are made available to meet their needs. However, it is also important to be cognisant that many of these communities demonstrate great resilience because they often possess a range of experiences and skills in dealing with emergencies.

### **Support for the bereaved**

People who are bereaved are an example of a vulnerable group that needs specialised support and attention. The bereaved group will include surviving family members who directly experienced the emergency event and family members who did not, so plans need to be made to identify extended family members who may not be local to the community of impact.

Counselling services should be identified to assist with grief and bereaved communities. The Community Welfare Sub Committee should maintain close liaison with the police and the Coroner's Office to ensure clear communication about support services is available to bereaved groups.

Bereavement services are led by the Department of Communities, Child Safety and Disability Services. Services may include:

- One-on-one and family counselling
- Bereavement support groups
- Delivery of an annual commemorative event, including consultation and input from the bereaved community

### **People temporarily separated from or have lost, their companion animals**

Companion animals can help people to maintain their social, emotional and physical wellbeing. Companion animals are significant partners in many people's lives. Increasingly, research shows that companion animals can also contribute to the recovery and maintenance of both physical and mental health. The Community Welfare Sub Committee should:

- Recognise that restoring animal – owner links in the aftermath of evacuation is an important aspect of social recovery and return to normalcy
- Recognise that the grief from loss of companion animals can be as equally powerful for some people as other losses, and this should be recognised in access to services and remembrance activities
- Work with animal welfare agencies, e.g. the RSPCA, and take the opportunity to use volunteer support to provide services related to animal welfare

In addition, the loss of stock and native animals can cause distress in both children and adults. Arrangements for the care of stock and native animals should be provided for an information on them given to the community.

### **Cultural and spiritual factors**

The Community Welfare Sub Committee should be aware of and respect the cultural and spiritual world views that shape many communities' views of the disaster.

Cultural and spiritual symbols and rituals can provide an essential dimension to the community recovery process. Rituals and symbols provide something that is familiar and comforting in times of uncertainty and change. Commemorative events and memorials can assist the community to interpret and share their emotions and collectively make sense of the disaster, e.g. spontaneous floral tributes at or close to the sites of a disaster and probably beginning in the immediate aftermath.

The Community Welfare Sub Committee should note that these symbols may be identified pre or post-disaster. If these are recognised, supported and coordinated as part of the recovery process, which is owned by the community, they will provide the focus for cultural and spiritual activities.

Remembrance activities must recognise that all people are affected and have equal rights to participate in planning commemorative events or permanent memorials. Memorialisation has traditionally honoured a society's dead so there is a tendency to focus upon the bereaved. The Community Welfare Sub Committee should facilitate processes that are sensitive to the wishes of the bereaved but that are inclusive of all people affected by the disaster.

These activities assist in the long-term integration of the emergency or disaster into the history of the community. Often these activities can be conducted on anniversaries or other significant community occasions.

### 7.1.5 Additional support for Community Development Officers

In some circumstances it may be necessary to provide additional resources to support the community development component of the recovery process. In particular, the employment of one or more community development workers may be necessary to facilitate a range of activities which will enhance the recovery of individuals and the broader community affected by any given event.

Funding for Community Development Officers will vary however they may be funded as part of a Community Recovery Package under NDRRA funding. The Human and Social Recovery Subgroup should consider the need for one or more community development officers and prepare funding submissions and business cases to the LRG to enable advocacy for appropriate funding.

### 7.1.6 Checklist for Human and Social recovery

#### **Components**

- Safety, security and shelter
- Health
- Psychosocial wellbeing

#### **Partners and stakeholders**

- Affected communities
- Response agencies
- State and Australian Government agencies
- Non-government organisations
- Local government
- Health authorities, doctors, community health
- Representatives of sectors or groups – ethnic, rural, social and sporting clubs
- Media

#### **Immediate / short-term (relief)**

Conduct immediate needs assessment:

- How many affected
- Mortality and injury
- Potential for psychological / emotional trauma
- Displacement
- Loss of property
- Loss of pets or companion animals
- Isolation
- Individuals or groups with special needs



Prioritise needs for affected community and for recovery operations:

- Safety
- Water and food
- Psychological first aid
- Emergency accommodation
- Personal needs
- Reuniting families
- Material and financial
- Transport
- Health and medical
- Communication
- Information
- Community meeting spaces and connectivity
- Culturally specific needs

### **Medium term recovery**

Conduct medium-term recovery needs assessment:

- Psychosocial support
- Temporary accommodation
- Material and financial support
- Health and medical
- Communication
- Information
- Assistance with recovery processes e.g. grants, insurance, clean-up
- Community meeting spaces and connectivity
- Culturally specific needs
- If required, implement outreach programs
- Ensure that displaced persons are connected and able to re-engage with their 'home' communities
- Provide psychosocial support mechanisms
- Provide support and resources to enable people to access services, including interpreters to cater for cultural and linguistic diversity, resources for people with mobility, vision and hearing impairment and for people with a cognitive disability
- Consider the needs of tourists and persons from interstate and overseas
- Ensure that planning and implementation of services and activities maintain an awareness of cultural implications for various groups
- If established, coordinate the management and operation of recovery centres
- Monitor and manage public health advice, safety and disease control
- Assistance to local community organisations to help them recovery and maintain services

### **Long term recovery**

- Food and water supply
- Safety and security
- Access to private, self-contained accommodation for displaced persons
- Restoration of personal health and clinical services
- Management of public health issues
- Ensure that persons with special needs are not forgotten in planning processes
- Establish systems for ongoing psychological and emotional support for affected persons
- Ensure the redevelopment of social networks and connections
- Establish ongoing information provision

## 7.2 Infrastructure recovery

Depending on the nature of the event, infrastructure recovery may require more scope than simply the restoration of essential services. The built environment is the physical foundation of our society and damage to any part of it may have widespread impact on many sectors of the community.

The complex character of the built environment is highly regulated and legislated. It has a mix of public and private service providers, and has evolved over a long period of time so that it incorporates facilities built to different standards. Ownership of elements in the built environment brings another layer of complexity. Parts of the environment may be owned by multinational companies, individuals, government, community groups and all manner of other entities.

Recovery of the built environment also provides opportunities to build to meet future community needs. It supports the recovery of the social, economic and natural environments of the community. A coordinated response across levels of government, the private sector and the community is necessary to resolve complex infrastructure recovery issues.

It is, therefore, important that the Infrastructure Subgroup's membership reflects the scope of infrastructure recovery required as defined in the recovery needs analysis.

This section details the matters the Infrastructure Subgroup should consider when addressing infrastructure recovery.

### 7.2.1 Categories of infrastructure recovery

The following categories of recovery will need to be considered by the Infrastructure Subgroup:

- Essential services
- Transport networks
- Rural infrastructure
- Residential infrastructure
- Commercial and industrial infrastructure
- Public buildings and assets

### 7.2.2 Essential services

#### **Communication systems**

Communication systems are essential to effective recovery. Communications underpin social and business networks and are essential in ensuring effective public information. The Infrastructure Subgroup should involve the communication sector to assist in prioritising communication network repair and reconstruction.

#### **Energy supplies**

This includes liquid fuel, electricity and gas. Consequences of loss of energy supplies may be widespread. The Subgroup should consider the following possible impacts of power supply disruption:

- Perishable food spoilage
- Impacts on supply of essential services such as water, sewerage and gas
- Failure of communication and information technology-based systems
- Disruption to fuel distribution
- Potentially high demand for portable generators
- Security and safety concerns due to lack of lighting and loss of traffic lights and rail signals, compromising transportation
- Impacts on commercial and industrial activities
- Impact on primary production
- Impact on other key essential services such as food storage and distribution

- Implications for the location of a recovery centre
- Difficulties in maintaining accommodation for displaced people and recovery workers
- Problems for medically dependent residents who require electricity

The Infrastructure Subgroup should involve the energy sector to assist in prioritising energy repair and reconnection.

### **Water supply, treatment and sewage**

The consequences of damage to the water and sewage infrastructure may be widespread. The Subgroup should consider the following impacts:

- Impact on the quality of water for community and commercial use
- Impacts on community health caused by failure of sanitation systems
- Firefighting may be compromised
- Overflows caused by blockages and local flooding may lead to flooding of homes and businesses

### **Food distribution**

Following an event some households will have sufficient food and groceries to sustain them for a period of time, but many will not. The food and groceries industry suggests that on average 95% of households have between two and four days of pantry supplies and that 40% of meals are purchased and consumed outside the home. People in rural areas however may have significant pantry supplies due to their experiences and location.

The impact on the food supply chain depends upon the extent of the event. The food supply chain is flexible and can respond very quickly where the event is regionally contained. However, in the affected area supplies may be limited due to the direct impact of the event and panic buying by the community. The food supply chain is also the primary channel to market for a range of essential household health, sanitary, cleaning and disinfecting supplies.

Restoration of the food supply chain is a priority.

### **Health infrastructure**

This includes aged care, hospitals and health care facilities (general practitioners, chemists). Health and community services are primarily delivered from premises within the built environment. Damage and disruption to these premises reduces the capacity of the service system to meet the existing and emerging health and psychosocial needs of the community.

At the same time, a disaster event almost always carries with it the likelihood that people will be killed or injured and/or experience emotional trauma. The demand for medical and personal support is likely to increase which will place extra burden on a community with an already diminished capacity.

Impacts within health and community services include:

- Hospitals, clinics and aged care facilities and/or their equipment may become damaged and inoperable – disruption to water, gas and power will also severely restrict the services these facilities can provide even if they continue to function
- Damage to supported accommodation facilities for housing vulnerable people (frail, aged and people with disabilities) which may put them at higher risk of harm
- Public health concerns that arise with the displacement of large numbers of people including into temporary accommodation. Interruption and disruption of utilities and sanitation creates a high risk of infectious disease outbreak.

In a major event the DDMG Health Sub Committee will be an important reference group for the LRC to liaise with.

### **Sanitation (liquid and solid waste disposal)**

The level of sanitation may well be severely compromised and result in a risk of infectious disease outbreak or spread. In addition to contaminated water, risks can result from:

- Rotting food
- Other contaminated materials, such as soft furnishings, papers and even building materials
- Dead animals including pets and farm animals
- Closure of landfill and/or inability to provide refuse disposal services

### **Security**

Security infrastructure such as fire alarms and security lighting and cameras may be all impacted. Security issues following an emergency may also relate to a crime scene or coronial inquiries. The forensic requirements of these issues can hamper recovery of the built environment. Looting may also be an issue requiring additional security resources. Damage to buildings presents genuine concerns for the security of premises and possessions.

### **7.2.3 Transport networks**

Transport networks, including road, rail, aviation and maritime networks and the infrastructure that support them such as bridges, railway lines, ferries and airports can be affected during an event.

Restoration of these networks is a priority in support of recovery and a special subgroup may be formed to focus on the restoration of the region's transport networks.

### **7.2.4 Rural infrastructure**

Damage to rural areas can impact on livelihoods and on living conditions. For rural people, the loss of their homes may result in dislocation from their livelihoods. It may be very difficult for them to remain living onsite to maintain their enterprises.

The following aspects of rural infrastructure may be damaged:

- Fences
- Pasture
- Machinery
- Sheds
- Irrigation infrastructure

Other specific rural issues include:

- Length of time needed to restore livelihoods in rural areas may be extended
- There may be a difference between commercial and hobby farmers
- Impact on livestock by loss of fodder and pasture and the consideration to sell, agist or cull livestock may be foremost in farmers' minds
- Biosecurity can be compromised by damage to fences or movement of soil and water

### **7.2.5 Residential infrastructure**

Residential losses can occur in the following categories:

- Houses, home units, apartments, flats and sheds
- Nursing homes, hostels, aged care facilities
- Boarding houses, hotels, motels, caravan parks
- Residences in commercial buildings and businesses

## 7.2.6 Commercial and industrial infrastructure

Much of the economic activity in a community is driven by the commercial and social networks that depend on the built environment. Demand on most commercial facilities increases during the recovery period but the capacity to supply need is often hampered by the damage to the built environment.

Damage or disruption to commercial facilities and infrastructure may inhibit the community's access to the services and support provided by:

- Transport
- Banking and finance e.g. cash accessed by automatic teller machines
- Employment
- Hospitals and emergency facilities
- Tourism
- Supply chains such as for food (supermarkets, warehousing and transportation offices), fuel, hardware and building supplies, chemists and suppliers of other controlled substances

Adverse effects of damage to commercial facilities can include:

- Contaminated debris e.g. hazardous waste (asbestos)
- Health hazards e.g. biochemical, animals, food

## 7.2.7 Public buildings and asset infrastructure

For a community to function or to be viable, it requires operational public buildings and assets, including:

- Community and neighbourhood centres
- Schools
- Kindergartens
- Places of spiritual worship
- Sporting clubs
- Cultural centres
- Entertainment venues
- Restaurants and cafes
- Heritage listed properties and cultural icons
- Parks and gardens, public spaces and amenities

Each facility has the potential to help considerably during the recovery but may be unable to perform its community functions if damaged. The community is reliant on the restoration or replacement of the above infrastructure to re-establish and function.

## 7.2.8 Infrastructure recovery planning

In planning infrastructure recovery, the subgroup must:

- Undertake detailed damage and needs assessment
- Develop contingency plans to allow work to be done, despite the immediate difficulties including reduced transportation and communication services
- Recognise the strong links between infrastructure recovery, economic recovery and people's response to the emergency or disaster
- Prioritise infrastructure restoration and its eventual recovery according to the importance of the service that the infrastructure supports
- Recognise that people may be traumatised if they feel that their buildings have not protected them or if they have suffered loss as a result of the event
- Recognise that these feelings of loss and deprivation will be heightened if the normal community structures for support are not in place and if the damage to infrastructure places further threats on their continued wellbeing
- Understand that reconstruction of the infrastructure by external parties can alienate the community unless the community is involved in the formulation of recovery strategies

### 7.2.9 Key steps in infrastructure recovery

The key steps include:

- Understand what needs to be done to recovery
- Identify external constraints and internal organisational restraints
- Prioires tasks
- Put in place short term / interim fixes
- Identify the resource and material requirements
- Strategic planning including long term recovery outcomes.

### 7.2.10 Infrastructure needs assessment

Infrastructure assessments may be categorised into three separate activities:

- **Initial assessments** which are usually undertaken in the first few hours after impact during the response and immediate/short term (relief) state of disaster management. These assessments usually only provide an indication of the scale of the problem and allow for response and relief operations.
- **Rapid impact assessments** which are usually conducted within the first 24 to 48 hours after impact and involves the sending out of damage assessment teams to make first hand assessments. Rapid impact assessment can be undertaken by Queensland Fire & Emergency Services (Fire & Rescue).
- **Detailed assessments** which are normally conducted after the disaster response phase and which inform the development of the Recovery Operational Plan and the Infrastructure Recovery Action Plan. These assessments will normally be undertaken by individual agencies and coordinated by a suitably qualified person appointed by the Director Infrastructure Services.

When gathering information for infrastructure recovery assessments the subgroup should consider:

- Power
- Water and sewerage
- Waste disposal infrastructure
- Roads and bridges
- Rail
- Communication networks, including exchanges
- Damage to residential and commercial buildings
- Damage to public buildings including schools and hospitals
- Damage to recreation and cultural facilities
- Dam walls
- Hazard footprints, locations
- Displaced people
- Food supplies and food and merchandise supply chains
- Alternative access points
- Fences

Complications in damage and impact assessment often occur because:

- Owners of properties are not present at the time of inspection
- Professional advice may be needed and may not be readily available
- Organisations and individuals have differing priorities and agendas which impacts on the timeliness and relevance of the impact / damage assessment
- Data on damage may not be complete due to inaccessibility
- Insufficient resources available to analyse impact data and needs
- Data reporting in a variety of incompatible formats

### 7.2.11 Planning for reconstruction

Reconstruction is generally more complex than regular building and development activity. Some of the key issues to be considered by the subgroup include:

- **Community consultation.** Works should be prioritised and staged i.e. temporary fixes with more detailed solutions developed over longer time frames, in consultation with the affected community
- **Assessment.** There are likely to be differing assessments e.g. insurance versus those affected. Limited assessments done early may miss things or under report or over report the scale and nature of the damage. Damage may be missed by inexperienced or overwhelmed assessors
- **Environment.** There is a need to reduce exposure to future risk or creation of new risk from reconstruction effort
- **Regulation and frameworks.** Temporary relaxation of planning regimes may allow buildings and structures to be built that reinstate pre-disaster vulnerabilities or threats. In addition, house repairs might not have to meet new building codes, whereas rebuilding is usually to the new standard. Underinsurance and low damage write-offs may place a significant burden on building owners and the subgroup may engage with insurers and building owners to assist in negotiations. Betterment programs and initiatives should also be explored to 'build back better' damaged infrastructure to a higher standard than the pre-disaster standard.

### 7.2.12 Approvals for reconstruction

Appropriate standards for reconstruction may not always be clear. Buildings must conform to the current building regulations at the time of their construction, however over time, these regulations may change. This can cause difficulties for owners, insurers and financiers. In addition, supervising the reconstruction may bring other problems.

Many people may not be aware of the need to apply for building approval for major repairs and may try to start major repairs without approval and in the confusion of clean up and general construction activity, their work may go unnoticed.

Although temporary repairs to give some amenity are accepted in the early stages of recovery, some temporary repairs may become incorporated into the final structure without approval. Additional staff to approve and inspect building and construction will likely be required to augment existing staff overloaded with planning and approvals. Planning approval processes need to be streamlined to ensure quicker turnaround to those affected by disaster.

Volunteers may be required to show that they are appropriately qualified, particularly interstate trades people who may not be familiar with Queensland requirements for building and construction.

### 7.2.13 Implementing reconstruction

Wherever possible, the Subgroup should encourage the use of local contractors for reconstruction and building tasks. This enables local work opportunities and supports the local economy. Local contractors also have local knowledge.

Delays in reconstruction are inevitable either because of continuing hazards, the scale of the event and/or the availability of resources. Lack of funding can also cause delays. The Subgroup should seek to minimise delays wherever possible to alleviate stress in the community. Where delay is unavoidable, the Subgroup should engage with the community to provide public information and to confirm temporary arrangements.

Many organisations involved in recovery may be contracting work or issuing tenders. Normal tendering, awarding work and contracting processes should be followed. The Subgroup should encourage all organisations to ensure they adopt sensible and accountable procedures for the contracting of services.

The changing nature of recovery means that:

- Staged reinstatement may be needed to deliver some quick but temporary outcomes that address the immediate needs, with later work required to address longer-term needs
- Plans may need to change to meet the changing needs
- At all stages, time should be set aside to reflect on the decisions that have been made and to make sure that they provide the best solutions – in some cases, rushed decisions are not necessarily the best ones
- Communication, both by listening and talking, is important with all stakeholders. This includes the subgroup and local advisory groups

#### 7.2.14 Other considerations for reconstruction

##### **Make safe**

It is important that safety and security is maintained throughout the recovery process. There is a risk that people will not maintain normal safety measures and procedures in their haste to effect repairs and restore some sense of normality to their lives e.g. ensuring that only appropriately qualified people perform work. The term 'make safe' means many things and can include:

- Classifying structural soundness
- Establishing safe areas by removing hazards
- Maintaining health, public health and safety standards
- Managing ingress and egress routes
- Receiving suitable sign-off
- Requesting domestic and industrial consumers of water and electricity to shut off equipment to preserve limited supply

The Subgroup should plan for and implement programs that promote and enhance safety in building and construction. Agencies such as the Building Services Authority and trade unions can assist in these matters.

##### **Clean up**

A significant volume of damaged material must be removed prior to the construction of new facilities. In many cases this operation must be performed to restore amenity to the community.

Clean up operations include:

- Removal of debris and other matter – green waste, building waste
- Removal of rotting food from shelves and refrigerators in commercial establishments and houses, both attended and unattended
- Removal and disposal of hazardous substances e.g. asbestos containing material, dust from fluorescent tubes
- Removal of enviro-hazards e.g. oil or chemical spills, copper and arsenic, treated timber, lead, silt, flood debris which may become a future fire risk
- Disposal of carcasses from pets or agricultural animals. This may require special disposal and environment health officers should be consulted for appropriate areas and requirements
- Processing waste – grinding, compacting, recycling
- Disposal of medical waste, including pharmaceutical waste. This may require special supervision and disposal at secure sites. Consult with environmental health officers.
- Managing and removing debris that presents a safety hazard to the community and may require special steps to remove e.g. glass in school playgrounds



### **Handling, safety and regulation**

- Care to be taken with removal, handling and disposal of hazardous substances e.g. lead or asbestos containing products
- Calculating the logistics of moving the waste and debris – transport and heavy equipment within built-up areas and high traffic levels at the disposal site may impact communities
- consulting the Department Environment & Science to obtain approvals for some disposal processes
- assigning landfill and burial sites. These may have to be new sites and would be subject to permissions and approvals
- obtaining specialist services, contractors and expertise
- obtaining suitable approvals at the commencement of the work or on completion of debris removal. The requirements for these may vary for different services.
- Disinfecting water-damaged facilities and other areas where there is concern about continuing health and amenity of the facility
- Maintaining normal safety measures through all operations

### **Site-specific issues**

- Work performed on and around heritage-listed facilities may require special permissions
- Working in an environment affected by coronial matters. Where there are deaths associated with the event, or crime has been associated with the event, access to the site may require clearance from police or coronial staff.

Refer to Operational Subplans:

- Emergency Debris Storage and Disposal
- Asbestos Containing Material

## **7.2.15 Checklist for Infrastructure Recovery**

### **Components**

- Essential services
  - Transport – roads, rail, bridges, ports, airports, public transport
  - Energy – power, fuel, gas
  - Communications – telephone (fixed line and mobile), internet and data, radio and television
  - Utilities – water, sewerage, drainage, sanitation, waste and recycling facilities
- Rural infrastructure
  - Fencing, sheds and buildings, produce handling, irrigation
  - Animal welfare – shelters, pounds, veterinary facilities, stock containment
- Residential infrastructure
  - Residential buildings – domestic homes, hotels and motels, caravan parks
- Commercial and industrial infrastructure
  - Distribution infrastructure – food and merchandise
  - Commercial and retail – shops, banks, food outlets, hardware and building, fuel outlets, white goods, pharmacies
- Public building and asset infrastructure
  - Public facilities – hospitals, doctors' surgeries, aged care, schools, police and emergency services stations
  - Community buildings – halls, churches, cultural and historic, sporting clubs
  - Government administration – council and government offices
- Recovery infrastructure
  - Evacuation centres
  - Relief and recovery centres
  - Warehousing of donated goods

## Partners and stakeholders

- Affected communities
- Road and rail authorities and operators
- Public transport operators
- Energy suppliers and retailers
- Water and sewage authorities and retailers
- Communication operators
- Health and education authorities
- Building control authorities
- Professional bodies (architects, engineers, building surveyors)
- Others as required, depending on emergency event and local needs

### 7.2.16 Noosa infrastructure profile

Critical infrastructure detailed in this report includes public and community assets as follows:

- Community facilities – schools, community centres and halls, health care facilities, aged care, sports facilities, local government administration and works depots
- Emergency services – Police, Ambulance, Fire and Rescue, SES, Rural Fire and Coast Guard
- Transport – roads, bridges, ferry and rail
- Services – electricity, water, sewerage and telecommunications

It does not include residential, industrial or commercial infrastructure.

## Schools

School name	Address
Kin Kin State School	26 Main Street, Kin Kin
Cooran State School	31 James Street, Cooran
Federal State School	40 Middle Creek Road, Federal
Pomona State School	74 Station Street, Pomona
Cooroora Secondary College	120 Summit Road, Pomona
Cooroy State School	59 Elm Street, Cooroy
Noosa District High School (Cooroy)	2 Tulip Street, Cooroy
Noosa Christian College	20 Cooroy Belli Creek Road, Cooroy
Tewantin State School	10 Werin Street, Tewantin
Noosa Flexible Learning Centre	12 Ernest Street, Tewantin
Noosaville State School	75 Beckmans Road, Noosaville
St Teresa's Catholic College	45 Sea Eagle Drive, Noosaville
Good Shepherd Lutheran College	115 Eumundi Noosa Road, Noosaville
Sunshine Beach State School	269 Sunshine Beach Road, Sunshine Beach
Sunshine Beach State High School	45 Ben Lexcen Drive, Sunrise Beach
St Thomas More Catholic Primary School	75 Ben Lexcen Drive, Sunshine Beach

## Community buildings

Centre name	Address	Potential evacuation centre Yes/No	Potential recovery centre Yes/No
Kin Kin School of Arts	26 Main Street, Kin Kin	Yes	Yes
Ridgewood Hall	2 Donnellys Road, Ridgewood	Yes	Yes
Federal Hall	2 Skyring Creek Road, Federal	Yes	Yes
Cooran School of Arts	14 King Street, Cooran	Yes	Yes
Pomona School of Arts	6 Reserve Street, Pomona	Yes	Yes
Pomona Community House	1 Memorial Avenue, Pomona	No	Yes
Cooroy Memorial Hall	23-29 Maple Street, Cooroy	Yes	Yes
Cooroy RSL	23-29 Maple Street, Cooroy	No	No
Cooroy Library	9 Maple Street, Cooroy	No	Yes

Centre name	Address	Potential evacuation centre Yes/No	Potential recovery centre Yes/No
Tinbeerwah Hall	865 Sunrise Road, Tinbeerwah	Yes	Yes
Tewantin Noosa RSL	5 Memorial Avenue, Tewantin	No	No
Noosa Leisure Centre	54 Eumundi Noosa Road, Noosaville	Yes	Yes
Noosa Heads Surf Club	61 Hastings Street, Noosa Heads	No	Yes
The J Community Centre	60 Noosa Drive, Noosa Heads	Yes	Yes
Sunshine Beach Surf Club	4 The Esplanade, Sunshine Beach	No	Yes
Bicentennial Community Centre	Bicentennial Drive, Sunshine Beach	Yes	Yes
Peregian Beach Surf Club	11 Kingfisher Drive, Peregian Beach	No	Yes
Peregian Beach Community House	255 David Low Way, Peregian Beach	Yes	Yes
House with No Steps (located outside Noosa Shire boundary)	Charles Duke Memorial Drive, off Fellowship Drive, Doonan	Yes	Yes

### Health care

Facility name	Address	Type
Eden Private Hospital	50 Maple Street, Cooroy	Private rehabilitation hospital
Noosa Hospital	111 Goodchap Street, Noosaville	Public / private hospital
Noosaville Seven Day Medical Centre	Shop 4, Homemaker Centre, 18 Thomas Street, Noosaville	General practitioners
Noosa Heads Day & Night Pharmacy	32 Hastings Street, Noosa Heads	7 days, open late

### Aged care

Facility name	Address	Type
Carramar	186 Cooroy Noosa Road, Tewantin	Nursing home
Kabara	20 Topaz Street, Cooroy	Nursing home
Ozcare	80 Cooyar Street, Noosa Heads	Nursing home
Noosa Nursing Centre	119 Moorindil Street, Tewantin	Nursing home
Domain	35 Walter Hay Drive, Noosaville	Retirement village
Hibiscus	71 St Andrews Drive, Tewantin	Retirement village
Laguna	21 Lake Weyba Drive, Noosaville	Retirement village
Southern Cross Noosa Waters	39 Lake Weyba Drive, Noosaville	Retirement village

### Sports facilities

Facility name	Address	Owned by	Clear area
Kin Kin Recreation Grounds	57 Main Street, Kin Kin	Noosa Council	2 hectares
Cooran Recreation Club	Cnr Bridge Street & Railway Road, Cooran	Noosa Council	1 hectare
Pomona Show Grounds	26 Exhibition Street, Pomona	Noosa Show Society	8 hectares
Cooroy Sports Complex	35 Mary River Road, Cooroy	Noosa Council	10 hectares
Noosa District Sports Complex	31 Butler Street, Tewantin	Noosa Council	10 hectares
Girraween Sports Complex	Eenie Creek Road, Noosa Heads	Noosa Council	3 hectares

## Local government administration

Name	Address	Type
Noosa Council Administration	9 Pelican Street, Tewantin	LDCC, Administration
Noosaville Depot	10 Bartlett Road, Noosaville	Depot
Pomona Depot	11 School Street, Pomona	Depot

## Emergency services

Agency	Address
Pomona Police Station	22 Red Street, Pomona
Cooroy Police Station	2 Myall Street, Cooroy
Tewantin Police Beat	87 Poinciana Avenue, Tewantin
Noosa Heads Police Beat	48 Hastings Street, Noosa Heads
Noosa Heads Police Station	9 Langura Street, Noosa Heads
Ambulance Station Pomona	17 Reserve Street, Pomona
Ambulance Station Cooroy	41 Kauri Street, Cooroy
Ambulance Station Tewantin	4 Cooroy Noosa Road
Ambulance Station Noosa Heads	14 Langura Street, Noosa Heads
Fire & Rescue Service Cooran	50 Queen Street, Cooran
Fire & Rescue Service Pomona	2 Factory Street, Pomona
Fire & Rescue Service Cooroy	16 Myall Street, Cooroy
Fire & Rescue Service Tewantin	2 Hilton Terrace, Tewantin
Fire & Rescue Service Noosa Heads	2 Langura Street, Noosa Heads
SES Boreen Point	Teewah Road, Boreen Point
SES Pomona	21 Reserve Street, Pomona
SES Cooroy	26 Emerald Street, Cooroy
SES Tewantin	36 Goodwin Street, Tewantin
Rural Fire Service Kin Kin	57 Main Street, Kin Kin
Rural Fire Service Black Mountain	Mary River Road, Cooroy
Rural Fire Service Boreen Point	Davis Road, Cootharaba
Rural Fire Service Teewah	19 Mulloway Street, Teewah
Rural Fire Service Noosa North Shore	Homeport Track, Noosa North Shore
Rural Fire Service Tinbeerwah	865 Sunrise Road, Tinbeerwah
Coast Guard	Munna Point, Noosaville

## Roads

Name	Suburb	Width (2 or 4 lane)	Type TMR controlled; Local Road of Regional Significance (LRRS); Critical Local Road (CLR)*
Bruce Highway	Within Noosa Shire	4 lane	TMR
Gympie Kin Kin Road	Cootharaba	2 lane	TMR
Pomona Kin Kin Road	Kin Kin	2 lane	TMR
Old Bruce Highway (?)	Federal	2 lane	TMR
Louis Bazzo Drive	Pomona	2 lane	TMR
Pound Road	Pomona	2 lane	TMR
Factory Street	Pomona	2 lane	TMR
Reserve Street	Pomona	2 lane	TMR
Pomona Connection Road	Pomona	2 lane	TMR
Yurol Forest Drive	Pomona	2 lane	TMR
Elm Street	Cooroy	2 lane	TMR
Myall Street	Cooroy	2 lane	TMR
Tewantin Road	Cooroy	2 lane	TMR
Cooroy Noosa Road	Cooroy	2 lane	TMR
McKinnon Drive	Tewantin	2 lane	TMR
Eumundi Noosa Road	Doonan	2 lane	TMR
Emu Mountain Road	Doonan	2 lane	TMR
Dr Pages Road	Cootharaba	2 lane gravel	LRRS
Kinmond Creek Road	Cootharaba	2 lane gravel	LRRS
Cootharaba Road	Cootharaba	2 lane bitumen	LRRS
Junction Road	Cootharaba	2 lane bitumen	LRRS

Greenridge Pinbarren Road	Cooran	2 lane bitumen	LRRS
Queen Street	Cooran	2 lane bitumen	LRRS
Bridge Street	Cooran	2 lane bitumen	LRRS
King Street	Cooran	2 lane bitumen	LRRS
Traveston Cooran Road	Cooran	2 lane bitumen	LRRS
Cooroy Belli Creek Road	Cooroy	2 lane bitumen	LRRS
Maple Street	Cooroy	2 lane bitumen	LRRS
Myall Street	Cooroy	2 lane bitumen	LRRS
Ernest Street	Tewantin	2 lane bitumen	LRRS
Memorial Avenue	Tewantin	2 lane bitumen	LRRS
Doonella Street	Tewantin	2 lane bitumen	LRRS
Sidoni Street	Tewantin	2 lane bitumen	LRRS
Poinciana Avenue	Tewantin	2 lane bitumen	LRRS
Butler Street	Tewantin	2 lane bitumen	LRRS
McKinnon Drive	Tewantin	2 lane bitumen	LRRS
Cooroy Noosa Road	Tewantin	2 lane bitumen	LRRS
Goodchap Street	Noosaville	2 lane bitumen	LRRS
Gympie Terrace	Noosaville	2 lane bitumen	LRRS
Hilton Terrace	Noosaville	2 lane bitumen	LRRS
Mary Street	Noosaville	2 lane bitumen	LRRS
Gibson Road	Noosaville	2 lane bitumen	LRRS
Weyba Road	Noosaville	2 lane bitumen	LRRS
Reef Street	Noosaville	2 lane bitumen	LRRS
Beckmans Road	Noosaville	2 lane bitumen	LRRS
Eenie Creek Road	Noosaville	4/2 lane bitumen	LRRS
Eumundi Noosa Road	Noosaville	2 lane bitumen	LRRS
Walter Hay Drive	Noosaville	4/2 lane bitumen	LRRS
Hastings Street	Noosa Heads	2 lane bitumen	LRRS
Noosa Drive	Noosa Heads	2 lane bitumen	LRRS
Sunshine Beach Road	Noosa Heads	4/2 lane bitumen	LRRS
Noosa Parade	Noosa Heads	2 lane bitumen	LRRS
Edwards Street	Sunshine Beach	2 lane bitumen	LRRS
David Low Way	Sunshine Beach	2 lane bitumen	LRRS
Heathland Drive	Sunshine Beach	2 lane bitumen	LRRS
Main Street	Kin Kin	2 lane bitumen	CLR
James Street	Cooran	2 lane bitumen	CLR
Middle Creek Road	Federal	2 lane bitumen	CLR
Skyring Creek Road	Federal	2 lane bitumen	CLR
Memorial Avenue	Pomona	2 lane bitumen	CLR
Station Street	Pomona	2 lane bitumen	CLR
Summit Road	Pomona	2 lane bitumen	CLR
Exhibition Street	Pomona	2 lane bitumen	CLR
School Street	Pomona	2 lane bitumen	CLR
Red Street	Pomona	2 lane bitumen	CLR
Tulip Street	Cooroy	2 lane bitumen	CLR
Marara Street	Cooroy	2 lane bitumen	CLR
Mary River Road	Cooroy	2 lane bitumen	CLR
Emerald Street	Cooroy	2 lane bitumen	CLR
Lake Macdonald Drive	Cooroy	2 lane bitumen	CLR
Sunrise Road	Tinbeerwah	2 lane bitumen	CLR
Werin Street	Tewantin	2 lane bitumen	CLR
Pelican Street	Tewantin	2 lane bitumen	CLR
Goodwin Street	Tewantin	2 lane bitumen	CLR
Maximillian Road	North Shore	2 lane bitumen	CLR
Beach Road	North Shore	2 lane bitumen	CLR
Wallace Drive	Noosaville	2 lane bitumen	CLR
Sea Eagle Drive	Noosaville	2 lane bitumen	CLR
Bartlett Road	Noosaville	2 lane bitumen	CLR
Rene Street	Noosaville	2 lane bitumen	CLR
Russell Street	Noosaville	2 lane bitumen	CLR
Lake Weyba Drive	Noosaville	2 lane bitumen	CLR

Langura Street	Noosa Heads	2 lane bitumen	CLR
Park Road	Noosa Heads	2 lane bitumen	CLR
Noosa Springs Drive	Noosa Heads	2 lane bitumen	CLR
Bicentennial Drive	SunshineBeach	2 lane bitumen	CLR
Ben Lexcen Drive	Sunrise Beach	2 lane bitumen	CLR
Kingfisher Drive	Peregian Beach	2 lane bitumen	CLR

\*Note:

1. Includes all bridges and culverts on the listed roads
2. Critical Local Roads (CLR) are roads that service community facilities/infrastructure, emergency services, important services infrastructure such as water or sewerage treatment plants or are the sole access to communities vulnerable during a disaster event and not already LRRS.

## Ferry

Location	Owner	Type
Between Moorindil St, Tewantin & Maximillian Road, North Shore	Noosa North Shore Ferries Pty Ltd: Ferry: 5447 1321 Contacts: Cliff Andreassen 0428 712 218 / 5449 9346 & Tom Smith 0428 497 443	Vehicular

## Rail

Station	Address
Cooran	King Street, Cooran
Pomona	10 Station Street, Pomona
Cooroy	Elm Street, Cooroy

## Electrical and water services

Type	Lot & Plan	Address
Energex Zone Substation SST70-SSCRY	Lot 1 RP174325	Cooroy Mountain Road, Cooroy
Energex Zone Substation SSSRH	Lot 2 SP142258	379 Eumundi Noosa Road, Noosaville
Energex Zone Substation SSNVL	Lot 4 RP159386	8 Reef Street (access via Nannygai Street) Noosaville
Energex Zone Substation SSTWT	Lot 1 RP196624	117 Eumundi Noosa Road, Noosaville
Energex Zone Substation SSCOR	Lot 2 SP216695	20 Grahams Road, Pomona
Energex Zone Substation SSBMT	Lot 347 SP156926	59 Black Mountain Range Road, Black Mountain
Energex Zone Substation SSPGN (services Peregian, not in Noosa Shire)	Lot 5 RP858635	Doonan Bridge East Road, Doonan
Sewerage treatment plant	Lot 17 SP239726	Cnr Eenie Creek Road & Wallum Lane, Noosa Heads
Sewerage treatment plan	Lot 2 SP248288	Mary River Road, Cooroy
Water supply reservoir	Lot 23 RP862535	Gumboil Road, Cooroy
Water supply reservoir	Lot 25 CP862534	Gumboil Road, Cooroy
Water supply reservoir	Lot 1 RP226728	Viewland Drive, Noosa Heads
Water supply reservoir	Lot 1 CP907984	347 David Low Way, Peregian Beach
Water supply reservoir	Lot 1 RP105072	7 Pine Tree Drive, Cooroy
Sewerage pump station	Lot 7 MCH842016	7 David Low Way, Marcus Beach
Sewerage pump station	Lot 1 RP889602	37 Banksia Avenue, Noosa Heads
Water treatment plant	Lot 118 MCH814	Lake Macdonald Drive, Cooroy

## 7.3 Economic recovery

Disasters can cause devastating and widespread economic impact. Houses, businesses and community infrastructure may be damaged or destroyed and people's livelihoods may be temporarily and sometimes permanently disrupted. While physical damage is the most visible economic impact, less obvious impacts such as loss of income from disruption of trade can often be more significant and extend well after infrastructure has been repaired or replaced.

### 7.3.1 Categories of economic impacts after disaster

#### **Household:**

- Loss of employment and/or income (loss of livelihood)
- Loss of household assets
- Instability or loss of social networks
- Increased costs due to short supplies of goods and services
- Lack of childcare and school facilities

#### **Business and industry:**

- Loss of supply chain networks
- Loss or damage to business assets
- Loss of employees due to business closure and migration of skilled staff
- Infrastructure damaged or devastated
- Damage to or loss of natural resources

Communities are economically disadvantaged when individuals are unable to work, either because their place of employment has been impacted by the disaster event or by other disruptions, such as school and childcare closures. Being able to work in paid employment or to run a business profitably empowers affected individuals and motivates communities to regain charge of their lives by meeting their own needs as they best see fit. The consequences of extended periods of downtime in trading or production can result in:

- Loss of experienced workers
- Depleted customer base due to temporary or permanent population shrinkage
- Forced sale of stock
- Business closure or forced sale of businesses
- Bankruptcy

### 7.3.2 Economic impact assessment and needs analysis

Assessing the impacts of emergencies and disasters is integral to the recovery process. Impact assessments provide communities and policy makers with invaluable information about how a disaster manifested and what needs to be done to return the community to normal as well as helping to identify strategies to build back stronger. These assessments can inform future disaster risk management, as well as broader sustainability goals.

### 7.3.3 Measuring economic impact

Measuring the economic impacts of a disaster can be a complex undertaking and needs to be strategic in nature. The principle reference for disaster loss assessment in Australia is the Australian Institute for Disaster Resilience [Disaster Loss Assessment Guidelines](#) (Manual 27)(2002). It provides guidance on assessing disaster loss primarily for the purpose of planning and justifying future risk mitigation and community resilience measures.

Due to the complexity of undertaking an economic impact assessment some specialist expertise will be required. At a minimum some members of the Economic Subgroup should have formal experience or training in disaster loss assessment or economics.

Economic impact assessment attempts to quantify in dollars all impacts (both costs and benefits) possible. Importantly, the assessment applies not only to goods and services that are traditionally traded in the market place, but also to the value attributed to social and environmental assets. Economic impact assessments are conducted to ensure long-term economic outcomes can be visualised and planned for.

### 7.3.4 Economic impact versus financial impact

Economic impact assessment is distinct from financial impact assessment. Economic impact assessment includes all impacts on a community while financial impact assessment often concerns a single economic unit such as an industry, business or household. In the early stages of recovery, the Economic Subgroup may well focus on the conduct of a series of financial impact assessments across sectors, which will in turn collectively help inform the overall economic impact assessment.

### 7.3.5 Tangible versus intangible impacts

As well as direct and indirect impacts, economic impacts are typically divided into tangible and intangible impacts:

- **Tangible impacts** – the loss of things that have a monetary (replacement) value e.g. buildings, livestock, infrastructure
- **Intangible impacts** – the loss of things that cannot be bought and sold e.g. lives and injuries, environment, memorabilia, heritage

Tangible impacts are typically easier than intangible impacts to replace and assign a dollar value to because they are traded in the market place. Intangible impacts are much harder to assess. Intangible impacts are often described as a ‘catch all’ that includes all those costs that are very difficult to estimate, for which there is no agreed method of estimation and for which there is no market to provide a benchmark. However, they should be considered and included appropriately in impact assessments.

### 7.3.6 Direct and indirect economic impacts on key community sectors

The table below lists some of the economic impacts on the community that will require consideration in an assessment:

Sector / area of impact	Direct	Indirect
Residents and households	<ul style="list-style-type: none"> <li>• structural (roofs, walls etc)</li> <li>• contents (furniture, floor coverings etc)</li> <li>• external (swimming pools, gardens etc)</li> <li>• death and injury</li> </ul>	<ul style="list-style-type: none"> <li>• additional costs - alternative accommodation and transport, heating, drying-out costs, medical costs etc</li> </ul>
Public infrastructure, community facilities and natural environment	Damage to or loss of <ul style="list-style-type: none"> <li>• roads</li> <li>• bridges</li> <li>• dams</li> <li>• sports grounds and facilities</li> <li>• schools</li> <li>• halls</li> <li>• parks</li> <li>• waterways</li> <li>• bushland</li> </ul>	<ul style="list-style-type: none"> <li>• transport (traffic delays, extra operating costs etc)</li> <li>• loss of computer-controlled systems</li> <li>• loss of other lifelines (electricity etc)</li> </ul>



Sector / area of impact	Direct	Indirect
Business enterprises and supply networks	<p>Structural damage to</p> <ul style="list-style-type: none"> <li>• buildings</li> <li>• shops</li> <li>• factories</li> <li>• plants</li> <li>• sheds</li> <li>• barns</li> <li>• warehouses</li> <li>• hotels etc</li> </ul> <p>Asset damage or loss:</p> <ul style="list-style-type: none"> <li>• farm equipment</li> <li>• food</li> <li>• records</li> <li>• product stock (finished manufactured products, works in progress and input materials)</li> <li>• crops</li> <li>• pastures</li> <li>• livestock</li> <li>• motor vehicles</li> <li>• fences or irrigation infrastructure</li> <li>• contents damage to fixtures and fittings (carpets etc)</li> <li>• furniture</li> <li>• office equipment</li> <li>• virtual business interruption.</li> </ul>	<p>Impact on production</p> <ul style="list-style-type: none"> <li>• manufacturing,</li> <li>• agriculture</li> <li>• services etc</li> </ul> <p>Impact on</p> <ul style="list-style-type: none"> <li>• income</li> <li>• trade</li> <li>• sales</li> <li>• value added (tourism operators, retail traders etc)</li> </ul> <p>Increased costs</p> <ul style="list-style-type: none"> <li>• freight</li> <li>• inputs</li> <li>• agistment etc.</li> </ul> <p>Loss of supply chain networks</p> <p>Increased work (construction industry)</p> <p>Opportunity to renew struggling business</p>
Government	<p>Loss of income – for example if population base shrinks or council waives tip fees as a gesture of goodwill</p>	<ul style="list-style-type: none"> <li>• costs of implementation of royal commission recommendations</li> <li>• increased demand on government services (education, health etc)</li> <li>• loss of business continuity (state government may provide case management involving significant resources to be redeployed immediately for long periods)</li> <li>• loss of tax revenue</li> <li>• cost of engaging extra resources and/or backfilling positions</li> </ul>

### 7.3.7 Guidelines for economic recovery

The following provide guidance to the Economic Subgroup in developing economic recovery programs after a disaster:

- Economic recovery strategies are an integral part of the overall recovery management process
- Coordination of all recovery programs is needed to support and enhance the economic structure
- It is important to recognise that affected people need to re-establish their means of making a living to enable them to manage their own recovery
- Response and recovery actions actively support the recovery of business and industry
- The best outcomes are achieved when business and industry is returned to activity as early as possible
- Adaptive change is adopted in light of previous knowledge of the sustainability of business and communities, and strategies
- Business and/or industry representatives must participate in economic recovery decision making
- It is important to retain skilled workers in the affected area through paid employment
- It is important that measures are taken to mitigate the impacts of future disaster on business continuity

### 7.3.8 Economic recovery – management strategies

Examples of specific management initiatives include:

- Formulate short-term business survival strategies
- Identify all aspects of the economic impact of a disaster and continue to assess, analyse and monitor to inform the level of support required by community
- Plan from the beginning for the transition back to mainstream service provision
- Establish and maintain communication channels between community, business, industry and government representatives in the community
- Proactively seek and involve investment and technical assistance parties from within and outside affected communities
- Facilitate local advisory groups as required that are representative of business, industry and employee groups
- Ensure communication strategies incorporate information around economic recovery support to the broader community
- Support and facilitate the development and maintenance of partnership arrangements to enhance economic activities
- Establish positive images to attract visitors when appropriate
- Report information on the effectiveness of the economic recovery program to all stakeholders
- Develop risk management assessments for the economic recovery program
- Avoid duplication of services and identify gaps
- Maintain confidentiality and privacy principles
- Ensure monitoring, evaluation and reporting processes are embedded in all economic recovery activities

### 7.3.9 Economic recovery – enabling initiatives

Examples of other initiatives include:

- Procure goods and services via local businesses and tradespeople wherever practical e.g. use local electricians for power safety checks and repairs, encourage agencies to employ local residents and to purchase resources and services locally
- Encourage response agencies to implement procedures to support economic recovery e.g. local employment program for clean-up
- Support and promote opportunities for sustainable economic recovery

- Actively work and/or negotiate with financial institutions on behalf of affected people and businesses
- Value and build on the local capacities of services that support economic activities childcare services and non-profit groups
- Build on local, regional, state or territory industry and business organisations and their networks e.g. home business network, tourism boards, chambers of commerce
- Encourage the community to buy locally through known and trusted businesses
- Facilitate the creation of work placement projects e.g. clean up activities
- Provide short-term paid employment to retain skilled workers in their current location while they await their former place of employment to recovery and re-open
- Facilitate the provision of government grants, appeal distribution and charitable payments as financial, rather than material assistance in support of economic and local business recovery

### 7.3.10 Financial services

The purpose of financial assistance measures is to support those in need, while encouraging appropriate personal responsibility. Resilience and preparedness, such as appropriate and adequate levels of insurance, are to be encouraged.

The recovery of communities from the effects of emergencies and disasters is assisted by a range of financial measures which provide a source of funds to businesses, local and state government, householders and the community to assist with and promote recovery. These sources include insurance and may also include government provided natural disaster relief and public appeals.

Assistance may also be provided by banks e.g. the suspension of mortgage or loan repayments and provision of financial counselling and advice, and the Australian Taxation Office has information to guide tax payers who have been affected by a disaster.

Communities should be encouraged to explore their own resources, and to plan and be prepared for an emergency event. Changing community expectations and the political landscape have historically impacted on the provision of financial services.

The need for financial assistance measures such as insurance, federal and state government assistance and appeals are critical after a disaster because of the effect on people's employment and livelihoods.

### 7.3.11 Insurance

Insurance is the primary means of gaining financial compensation for the cost of restoration. The major types of insurance cover are for home and contents, income protection and property and business interruption.

The Insurance Council of Australia assists people affected by a disaster to navigate and negotiate the insurance process through the [Insurance Taskforce Catastrophe Coordination Arrangements \(2012\)](#) by providing:

- Senior industry representation to the state and federal recovery groups
- A 24hr escalation path for insurance queries from the impacted community
- Key insurance data and decision support to the community and government
- Clear public communication about the insurance response to the event
- Liaison between insurers, assessors, brokers, trades, suppliers at an industry level on issues of collective importance to delivering services to the impacted community

The Economic Subgroup should consider involving Insurance Council of Australia participation in insurance and insurance claim matters arising from the disaster.

### 7.3.12 Public-private partnerships (PPP)

PPPs can capture the goodwill that exists in the private sector and its willingness to be part of the recovery process. They do not include the normal procurement that enables services to be provided and they do not necessarily involve exchange of money. An example is the provision of goods or services following a disaster by a private enterprise to a relief agency that is covered by a memorandum of understanding. These partnerships can increase capability to respond in a timely manner, and can provide a mechanism to assist the smooth provision of services.

In preparing and planning it is useful to consider the PPPs that could be established prior to an event to assist with contingency planning. Traditionally, corporate support has been a spontaneous response to an emergency event and needs to be negotiated after the event has taken place and taking into account the needs of a community.

For PPPs that can be established as part of preparedness and planning, consideration should be given to:

- Identifying goods and services that can be procured through this means
- Establishing and identifying accredited / licensed / certified suppliers, and seeking indicative costs to avoid cost inflation or profiteering post-impact e.g. to provide food and supplies to individuals at recovery centres
- Including local suppliers in recovery efforts where possible
- Establishing links between non-regional and local suppliers to retain local employment
- Establishing links between non-regional and local suppliers that are able to continue or re-commence trading to keep money in the community
- Documenting partnerships between suppliers – use of non-regional suppliers needs to be handled with some sensitivity for local suppliers

### 7.3.13 Steps to economic recovery

#### **Step 1: Conduct post-disaster economic and financial impact studies**

The Economic Subgroup should seek to perform economic and financial impact studies where necessary and appropriate. Financial impact studies will focus on specific economic units such as a business or a sector of the community. An economic impact study should build upon these financial impact studies to determine the overall impact on the economy. Both financial and economic impact studies will build upon the initial damage assessments undertaken during response operations. These impact studies should be conducted as quickly as possible following the disaster. They provide intelligence for decision-makers and support any requests for the state or federal governments to provide appropriate funds for rebuilding and recovery. These impact studies assess both physical damage (properties, inventories etc) and economic damage to industry and the local economy.

It is likely that there will be many challenges in acquiring both pre-disaster and post-disaster data, particularly in an initial chaotic environment immediately after the disaster impact. This emphasizes the need to identify the stakeholders and include them either on the subgroup or as members of local advisory groups.

As far as possible the studies should measure the following economic impacts:

- Job loss
- Loss of wages
- Business closures and interruption (loss of productivity)
- Damage to infrastructure
- Damage to property (commercial, industrial, residential)
- Damage to natural resources which have an impact on local industries

## **Step 2: Initiate a post-disaster economic recovery assessment and planning process**

The LRC should take the lead in initiating the economic recovery planning process with support and engagement from state government agencies, Council, other businesses, industry groups, civic and community organisations (see Terms of Reference for the Economic Subgroup). This process should begin as soon as possible after the disaster event to take advantage of the sense of urgency and unity following a disaster and to ensure strategies and resources of economic recovery can be planned for and acquired.

### **Step 2a: Identify the roles and responsibilities of all economic recovery stakeholders**

Confirm roles and responsibilities among partner organisations for all phases of recovery.

### **Step 2b: Establish local or industry advisory groups to gather relevant data and information**

Local Economic advisory groups should be established to cover major topics e.g. business retention, small business assistance, tourism promotion etc. Each advisory group should have a chairperson and be responsible for compiling relevant data. The Group can also begin identifying major issues and suggesting strategies and resources to address those issues.

### **Step 2c: Produce a complete economic analysis, including financial assessments**

This economic analysis needs to include a detailed look at key industries and anchors and specific quantitative and qualitative data on how they have been impacted by the disaster. This analysis will provide insight into the current state of the economy including whether economic development targets should be re-evaluated, a better understanding of competitive positioning; and will lay the foundation for a long-term economic development strategy for the community.

It may be beneficial to have a third party conduct this economic analysis, due to:

- Limited local capacity issues
- Assurance of a speedy planning process
- The need for a fresh perspective on the situation

The following steps will assist with the economic analysis:

- Reviewing existing strategic plans and studies for relevancy, evaluate existing business development targets and revisit economic issues
- Solicit information and input from local advisory groups
- Conduct additional focus groups around key topics and help identify specific challenges and opportunities
- Conduct economic development forums with various stakeholders (economic developers, planners, local government, businesses, citizens etc) to focus on specific geographic areas such as Noosa Heads, the eastern beaches, industrial areas, shopping centres, rural towns and rural residential areas; or functional areas like tourism precincts or primary production

## **Step 3: Fully assess the situation on the ground**

It is important to take the time to really understand the post-disaster economic analysis before any actions are proposed or implemented. A deep understanding of the current situation will provide critical insight on how the community should move forward.

## **Step 4: Create an action plan outlining strategies, programs and activities to be undertaken to achieve economic recovery**

Create action plans to provide direction on economic recovery priorities. The plans should be updated as needed.

Seek to:

- Include a phased approach to economic recovery where clear goals and objectives are set for the short, medium and long term recovery. Emphasis should be placed on long-term goals to ensure transition between economic recovery and long-term development. This could be for many years
- Assign appropriate organisations to take ownership of and carry out each task
- Ensure these organisations have the resources to carry out each task in terms of capacity, ability and financial means. Seek additional resources as necessary.
- Ensure that business retention and expansion is addressed before any new business efforts take place. Existing businesses are the ones that are most likely to rebuild the economy.
- Ensure that strategies and actions are specific with measureable outcomes to provide a basis for monitoring progress

#### **Step 4a: Coordinate the action plan with the development of an effective communications strategy**

The public should be aware of the planning effort and how time, resources and funds will be priorities.

#### **7.3.14 Checklist for economic recovery**

##### **Components**

Each component may be directly or indirectly affected and the impacts might be tangible or intangible.

- Residents and households
- Public infrastructure (water, sanitation systems, electricity, telecommunications and transport), community facilities and the natural environment
- Business enterprises and supply networks, peak bodies and not-for-profit sector
- Government

##### **Partners / stakeholders**

- Affected communities
- Local industry and business
- Industry bodies
- Government agencies
- Local government
- Insurance Council of Australia
- Banking and financial operators
- Charitable organisations
- Others as required

##### **Immediate operational activities**

- Emergency cash grants
- Access to banking and finance
- Facilitation of insurance claims
- Management of appeals donations
- Information
- Identification and support to businesses and employers

##### **Short to medium term operational activities**

- Support with insurance claims
- Access to employment
- Renegotiation of loans
- Assistance with grant applications
- Support with rebuilding contracts
- Support to small, medium business

- Restore banking and other financial services as soon as possible
- Reopen businesses and restore community services
- Set up business assistance facilities as required
- Assess employment issues
- Establish a communications strategy to support local businesses to re-establish or remain open
- Work with the insurance sector to ensure coordinated response by insurance companies and address adequacy of cover for reconstruction
- Develop a fast-track insurance processing system and address insurance issues
- Liaise with the LRG and other LRG subgroups to develop a strategy to maximise use of local resources during reconstruction and establishment activities
- Identify transport and information technology/communications needs and prioritise reconstruction activities to meet community business and manufacturing continuance requirements
- Facilitate, where required, new mutual aid agreements between authorities and contracts with suppliers
- Support small to medium enterprise e.g. advice, referral to a business advisor etc
- Re-establish retail and commercial facilities essential for community wellbeing or recovery activities

### Long term operational activities

- Examine viability and appropriateness of damaged or destroyed business to the community
- Identify opportunities to upgrade business infrastructure
- Identify opportunities to establish new businesses and services
- Where possible, restore business and infrastructure to be sustainable and more resilient to future events
- Prioritise and secure supply chains
- Re-establish commercial, retail and distribution infrastructure
- Support the restoration of rural infrastructure
- Reassess employment and livelihood issues
- Explore need and opportunities for ongoing local business support network
- Communicate planned actions to affected communities, recovery management team and stakeholder organisations

## 7.4 Environmental recovery

### 7.4.1 Components of environmental recovery

The ways in which damage to the natural environment impacts on the community, infrastructure and the economy are considered in other parts of this plan. This section deals with the effects of a disaster on Noosa's ecosystems particularly:

- The air
- The coastline
- Water and rivers
- Land and soil (including organic matter)
- Plants and animals

The table below outlines some of the effects if impact of disasters on our natural ecosystems:

Component of the natural environment	Aspects of this component relevant to disaster management	Some examples of effects
Air	<ul style="list-style-type: none"> <li>• particulates</li> <li>• chemicals</li> <li>• biological aerosols</li> <li>• radiation</li> </ul>	<ul style="list-style-type: none"> <li>• immediate: asthma cases</li> <li>• longer term: deposition of particulates residues on assets</li> </ul>

Component of the natural environment	Aspects of this component relevant to disaster management	Some examples of effects
		<ul style="list-style-type: none"> <li>dust from wind erosion—denuded landscape (fire, drought)</li> <li>heatwave deaths</li> <li>deaths from bushfire smoke affecting air quality</li> </ul>
Coastline	<ul style="list-style-type: none"> <li>oil and chemical contamination</li> <li>changes to the coastline</li> </ul>	<ul style="list-style-type: none"> <li>oil spill contaminating beaches</li> <li>severe storm eroding beaches and sand dunes</li> <li>changes to river mouth</li> <li>debris washed onto beaches</li> </ul>
Water and rivers: <ul style="list-style-type: none"> <li>surface water</li> <li>ground water</li> <li>marine</li> <li>artificial storages</li> </ul>	Quality: <ul style="list-style-type: none"> <li>biological contamination</li> <li>particulate contamination</li> <li>chemical contamination</li> <li>dissolved oxygen levels/ quality in waterways</li> </ul> Quantity <ul style="list-style-type: none"> <li>changed river flows</li> <li>changed groundwater storage</li> <li>flow regimes</li> <li>biological contamination/ introduced pests</li> </ul>	<ul style="list-style-type: none"> <li>impact on economic production from loss of irrigation systems</li> <li>loss of capacity (drinking water etc)</li> <li>severe flooding and erosion</li> <li>changes to ecosystems</li> </ul>
Land and soil: <ul style="list-style-type: none"> <li>landscapes</li> <li>rocks</li> <li>soil</li> <li>geo-heritage</li> </ul>	<ul style="list-style-type: none"> <li>loss and movement - erosion and/or deposition</li> <li>quality and condition - contamination</li> <li>changes to soil—acidification, structure change, compaction</li> <li>damage to landforms and landscapes</li> </ul>	<ul style="list-style-type: none"> <li>significant erosion after a fire or flood, earthquake or cyclone can change the course of waterways, reduce the productivity of farmland and create erosion risks for infrastructure both up and down stream</li> <li>impacts on flora and fauna. Including natural, cultural and geo-heritage sites</li> </ul>
Plants and animals	<ul style="list-style-type: none"> <li>loss of species and populations (biodiversity), especially threatened species</li> <li>change in abundance of species</li> <li>predators</li> <li>competitors</li> <li>changes in recruitment -whether seedlings can survive</li> <li>loss of habitat</li> <li>disease</li> <li>pollination</li> </ul>	Increased interaction between wildlife and humans due to animals being <ul style="list-style-type: none"> <li>disorientated,</li> <li>displaced</li> <li>vehicle collisions</li> </ul> Undesirable impacts: <ul style="list-style-type: none"> <li>kangaroos/rabbits grazing in gardens,</li> <li>noisy birds (such as corellas) concentrated in civic areas</li> <li>foxes coming into yards and killing domestic animals or spreading disease to pets</li> <li>introduced predators concentrating on native species and livestock remaining in the landscape (advantaged by no harbour for wildlife). This can wipe out threatened species and can impact on farm production/survival.</li> <li>weeds are first to establish on</li> </ul>



Component of the natural environment	Aspects of this component relevant to disaster management	Some examples of effects
		<p>bare ground and can outcompete native plants and agriculture/pasture plants.</p> <ul style="list-style-type: none"> <li>• birds may move out of the area thereby reducing pollination activity and/</li> <li>• or allowing insect activity to get out of balance.</li> </ul>

## 7.4.2 Environment impact assessment and needs analysis

Usually environmental impact statements (EIS) are designed to assess and protect environmental values where development is proposed. These procedures can easily be adapted to the post-disaster situation to identify significant ecosystem attributes and the likely impacts from the disaster.

An EIS usually includes a broad survey of the impacted area, usually through desktop analysis of existing data resources and, if required, the use of survey methods. Attached below is an initial environmental impact assessment carried out by Sunshine Coast LDMG after ex TC Oswald (2013):

Local Government Area	Sunshine Coast Council
<b>Coastal</b>	Noosa beaches have been eroded by high tides and waves generated by ex-TC Oswald. There have been reports of seawall failure at some locations. Most beaches have been closed to the public due to high seas and erosion. Council can actively manage the beach area to reduce safety hazards associated with high erosion scarps on dunes under an existing minor works guideline prepared by EHP. This may also include the removal of debris.
<b>Debris</b>	Coastal areas and structures suffered erosion and damage by high tides and waves. Tidal works required to protect and recover areas and structures.
<b>Landfills</b>	Newly constructed landfill liner inundated with flood waters. TEL issued to release flood water. No further recovery effort required.
<b>Protected Area Estate</b>	Closed - Croamhurst Conservation Park; Cooloola (Noosa River) Resources Reserve. Partly open - Dularcha National Park; Bribie Island National Park; Kondililla National Park; Maleny National Park; Mapleton Falls National Park; Mapleton National Park; Mooloolah River National Park; Parklands Conservation Park; Ringtail Forest Reserve; Tuchekeoi National Park.
<b>Temporary Emissions Licences (TELS)</b>	EHP Southern Region: 4 TEL applications received. 3 approved, 1 refused. Noosa Shire Council landfill - approved 31/1/13; Transpacific Industries, Bundaberg - approved 1/2/13; Holicim, Toowoomba - refused 1/2/13; Holicim approved 6/2/13
<b>Local Council advice</b> Contact: Michael Anderson <a href="mailto:Michael.Anderson@sunshinecoast.qld.gov.au">Michael.Anderson@sunshinecoast.qld.gov.au</a>	<ul style="list-style-type: none"> <li>• European heritage sites damaged through sewer/flooding issues/ coastal erosion (WW2 bunkers on Bribie)</li> <li>• Region wide coastal erosion</li> <li>• Bribie island break through issue</li> <li>• Increased sediment movement through rivers to open ocean including impacts on near shore ecology/ reefs, impacts on coastal ICOLL fish breeding habitats</li> <li>• Landslips at a number of sites</li> <li>• Loss of dunal vegetation from erosion</li> <li>• Vegetation dieback from foam impacts</li> <li>• Increased midden site exposure due to erosion</li> <li>• Turtle nest lost due to erosion (16 nests)</li> </ul>

Local Government Area	Sunshine Coast Council
	<ul style="list-style-type: none"> <li>• Vegetation loss and damaged throughout the protected area network (including significant hollow bearing trees)</li> <li>• Significant riverbank/ creek bank erosion issues and assoc riparian vegetation loss</li> <li>• Damage to protected area infrastructure – e.g. signage/ trails/ fire tracks</li> <li>• Seagrass decline</li> <li>• Sewer network failure and associated contamination issues (e.g. reduction of DO levels)</li> <li>• General debris and aquatic weed movement through waterways</li> <li>• Increased acid sulphate leachate movement from development sites</li> <li>• Exotic fish movement through waterways (e.g. Ewen Maddock Dam)</li> <li>• Public health/ hygiene issues associated with wide spread event factors such as power loss e.g. food/ water contamination</li> <li>• Able to provide specific examples of each of the listed items above if needed.</li> </ul>

In some cases, ecological survey techniques need to be employed to assess specific concerns or to gain a broad audit of natural environmental impacts and likely consequences of the disaster. A rapid response research capacity following a large-scale natural disturbance assists in understanding the ecosystems' dynamics and long-term consequences of natural disasters.

### 7.4.3 Interaction with the other functions of recovery

Often there is a high level of activity post-disaster to restore infrastructure services and 'normal' environmental considerations may be bypassed e.g. seeking vegetation clearance approvals. Although quick action is essential, good environmental practices, if built into the process beforehand, can still be applied. The LRG should consider any competing outcomes between the environmental recovery effort and that of the other functions of recovery.

Noosa will seek a balanced approach to environmental recovery and abide by the objectives and principles of the [National Strategy for Ecologically Sustainable Development](#) (1992)

### 7.4.4 Using an environmental risk management approach

Given the complexity of the natural environment it is likely that there will be significant uncertainty in managing environmental recovery. Decisions will often involve lengthy time spans and assumptions about projected impacts and may involve significant uncertainty. Using a risk management approach may help determine the environmental risks and how best to treat them. Such an approach provides a structure, systematic approach to decision making:

- Establish the context for recovery of the environment
- Identify environmental risks
- Analyse environmental risks
- Evaluate environmental risks
- Treat environmental risks
- Monitor and review
- Communicate and consult

Below is a table that gives examples of options or strategies for treating risk in the natural environment:

	Air	Water	Land and soil	Plants and animals
<b>Monitor/observe</b>	<ul style="list-style-type: none"> <li>emissions (source) air monitoring program</li> <li>ambient (community) air monitoring program</li> <li>personal (recovery Worker) air monitoring program</li> <li>deposition (fall out) monitoring program</li> </ul>	<ul style="list-style-type: none"> <li>drinking water sampling program</li> <li>recreational water body sampling</li> <li>natural water body sampling program</li> </ul>	<ul style="list-style-type: none"> <li>soil stability and erosion potential surveys</li> <li>soil contamination assessments and environmental and health risk assessments</li> <li>topsoil capability for regeneration of flora</li> </ul>	<ul style="list-style-type: none"> <li>establish survival of and current threats to important species</li> <li>flora/fauna surveys</li> </ul>
<b>Prevent/avoid</b>	<ul style="list-style-type: none"> <li>aerial incendiary practices</li> <li>whether or not to put hazardous materials fire out—let it burn out and get the oxygen out or stop it burning so it doesn't contaminate the air</li> <li>extinguish fires</li> <li>there may be occasions where the decision is made that the benefits gained by allowing the fire to burn outweigh the smoke pollution. Assessment should always be based on the fire rather than the smoke pollution</li> <li>in planning post fire recovery of an ecosystem sufficient time for recovery must be given before the next control burn is implemented. Frequent fire too often can reduce floral biodiversity, such as in dry sclerophyll eucalypt or heathland. Refer to SEQ fire and biodiversity guidelines</li> <li>prevent dust lift off by stabilising land/use of fencing, mulching etc</li> <li>manage wastes to prevent emissions</li> <li>manage pesticide applications to prevent spray drift</li> </ul>	<ul style="list-style-type: none"> <li>keep people out of contaminated waterways</li> <li>remove oils, fuels etc from wrecked vehicles etc</li> <li>recycling of wastes to minimise discharges or</li> <li>impacts on water resources</li> </ul>		<ul style="list-style-type: none"> <li>implement hygiene protocols to prevent spread of disease to /within the natural environment</li> <li>keep livestock out of sensitive areas by fencing (to avoid grazing impact, improve recovery of plants)</li> <li>hygiene protocols</li> <li>controlling where machinery goes so it doesn't impact on certain /threatened species</li> <li>replacement of nesting boxes where they are a part of a monitoring or research program</li> <li>supporting the welfare of fire-affected wildlife</li> </ul>

	Air	Water	Land and soil	Plants and animals
<b>Reduce/minimise</b>	<ul style="list-style-type: none"> <li>treat air emissions (e.g. apply water sprays, filters, containment) to reduce the volume and/or render the emission less harmful</li> <li>minimise impact on the environment through response techniques/practices</li> <li>minimise exposure to humans and animals by keeping them away from the area where the air is contaminated</li> </ul>	<ul style="list-style-type: none"> <li>use booms, filters on oil spills</li> </ul>	<ul style="list-style-type: none"> <li>rehabilitating control lines minimises the potential for erosion</li> </ul>	<ul style="list-style-type: none"> <li>control of introduced predators at key sites to protect threatened species and livestock</li> <li>conduct works to minimise the potential for invasion of weed species to ground made bare from wildfire and along waterways</li> </ul>
<b>Render harmless</b>		<ul style="list-style-type: none"> <li>filter contaminated water to remove suspended solids, chemicals, biological hazards</li> </ul>	<ul style="list-style-type: none"> <li>interventions between hillsides and creeks (such as straw/wire) to stop hill creep and sedimentation in creeks</li> </ul>	
<b>Mitigate the effects</b>	<ul style="list-style-type: none"> <li>limit the exposure of people and animals to areas of air contamination</li> <li>decontaminate plants, animals, buildings, equipment</li> <li>provide suitable protection and safety for recovery volunteers</li> </ul>	<ul style="list-style-type: none"> <li>composting practices for disposal of carcasses—less impact on the water table</li> <li>wildlife rescue</li> <li>temporary habitat construction and feeding</li> <li>cleaning of rain water tanks, replacement water supplies and filtration</li> </ul>		<ul style="list-style-type: none"> <li>translocate key (e.g. highly threatened) species to safer refuge (including into captive breeding facilities if necessary) to ensure survival of the species</li> <li>replace protective fencing around threatened plants to exclude browsing and grazing animals such as rabbits, deer and kangaroo</li> </ul>
<b>Offset the damage</b>				<ul style="list-style-type: none"> <li>where an event causes irreversible damage to high-priority</li> </ul>

	Air	Water	Land and soil	Plants and animals
				vegetation, selecting a separate patch of land for restoration may be an acceptable offset <ul style="list-style-type: none"> <li>• provision of artificial nesting boxes can provide temporary habitat for displaced animals (shelter from weather and predators, provide safe breeding etc)</li> <li>• high-priority vegetation that has been devastated by a bushfire—select a separate patch of land for reforestation over a period until the initial area has recovered</li> </ul>

### 7.4.5 Checklist for environmental recovery

#### Components

- Air
- Water and rivers
- Coastline
- Land and soil
- Plants and animals

#### Partners / stakeholders

- Affected communities
- Government agencies
- Local government
- Landcare, 'friends of' environment groups
- Wildlife rescue services
- Catchment management authorities
- Others as required, depending on event and local needs

**Immediate operational activities**

- Conduct risk management
- Make an immediate impact assessment
- Identify priority needs for the natural environment
- Containment of contaminants
- Rescue of wildlife
- Emergency erosion stabilisation
- Emergency action for threatened species
- Management of stormwater runoff
- Restoration of habitat

**Short to medium term operational activities**

- Clean-up of contaminants
- Rehabilitation of damaged areas
- Ongoing care and management of endangered species and injured wildlife
- Response operations damage restoration
- Ecological impact assessments
- Management of ongoing erosion
- Prevention of further contamination – weeks invasion, fungal disease from response and recovery operations
- Restoration of social amenity
- Recovery of damaged natural resources
- Restoration of social amenity elements essential for community wellbeing

**Long term operational activities**

- Improve / upgrade amenity and/or ecosystems from previously degraded conditions
- Restore natural environment elements to be sustainable and more resilient to future events