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A Monitoring and Evaluation Framework for Disaster Recovery Programs

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1. A Monitoring and Evaluation Framework for Disaster Recovery Programs

Australia is subject to a wide variety of disasters. According to the Commonwealth Government's *Community Recovery* handbook: "Disasters and emergencies are the result of an interaction between a hazard and a vulnerable population that disrupts lives and communities" (2018: 2). These disasters vary in terms of their intensity, location, scale, and the extent to which they are human-made or 'natural'.

Federal, state and local governments invest heavily to respond to these disasters. This includes efforts to prevent and mitigate disasters, emergency response and relief when a disaster happens, and recovery programs to rebuild affected communities.

This Framework relates specifically to recovery from disaster events.

1.1. Purpose of this Framework

A Monitoring and Evaluation Framework (the Framework) is needed to ensure that disaster recovery programs can be evaluated for their effectiveness. By improving the quality of disaster recovery evaluations, governments will be able to improve subsequent disaster recovery programs, to the extent that the learnings from these evaluations are incorporated into program design and delivery.

This Framework has been developed in response to recommendation 6(a) of the *Review of Commonwealth and State/Territory Relief and Recovery Payments: Report to COAG/SCPEM from the Australia-New Zealand Emergency Management Committee Recovery Sub-Committee* (2012), which was endorsed by COAG in 2012. Among other gaps and issues, the report highlighted that "jurisdictions and the Commonwealth do not measure or report on the effectiveness of their [disaster assistance] programs". Similarly, the *National Strategy for Disaster Resilience* (COAG 2011) highlights the increasing incidence and cost of disasters in Australia. To better deal with the increasing incidence of disasters, the National Strategy affirms a cooperative response that emphasizes shared responsibility and empowering communities.

This Framework provides a consistent approach to the evaluation of any individual disaster recovery program that will allow the lessons learned from each program evaluation to feed into an evidence base to improve subsequent disaster recovery programs. To achieve this, the Framework provides:

- a common understanding of the meaning of 'disaster recovery'
- a common understanding of what successful disaster recovery 'looks like'
- a high-level program logic for how successful recovery can be achieved
- an evidence base to support disaster recovery planning and evaluation
- a list of key evaluation questions that can be addressed in any disaster recovery evaluation
- a guide to source, collect, and use data to assess recovery
- a guide for disseminating the findings from recovery program evaluations.

1.2. What is a disaster recovery program?

The word 'program' is sometimes used interchangeably with other terms such as 'project' or 'effort'; in this Framework, we will use the word program whenever we talk about a set of coordinated activities that have disaster recovery as their key objective. A disaster recovery program is a set of activities that deploys resources to achieve desired recovery objectives and outcomes. These recovery activities are:

- 1 above and beyond the usual services that government provides to similar communities that are not affected by disasters, and

- 2 specifically focused on getting affected communities to a point where they can continue the recovery process on their own terms.

Even though other government programs may contribute indirectly to successful disaster recovery, this Framework only applies to programs that specifically have disaster recovery as their core objective.

The focus of this Framework is on government sponsored recovery programs, recognizing that such programs may be implemented by a variety of organisations. Government recovery programs include any activities that are 'sponsored' by government agencies, even where these activities are delivered by non-government organisations (NGOs).

Recovery programs may operate at different scales. The broadest scale is the entire set of activities that help affected communities recover. A recovery program may itself be made up of more discrete programs or projects that focus on aspects of the recovery process. For example, a grants program to promote economic recovery may be part of a much larger community recovery program. Similarly, projects may be funded to help specific groups of people within the community. Evaluation can focus on programs at any (or all) of these levels, but it must be made clear at what level the evaluation will focus. For example, the report by the Virginia Horticulture Centre, South Australia, *Gawler River Flood Recovery Program 2005–2007* (2008) only evaluated the horticulture recovery program rather than the entire flood recovery program.

Given that a broad recovery program will encompass several more targeted programs or projects within it, more than one evaluation may be conducted following a single disaster. If this Framework is used as a common guide for these evaluations, they can collectively contribute to a shared understanding of how recovery programs can be improved.

1.3. Evaluation and evaluative activity

For the purposes of this Framework, *evaluation* is any structured evidence-based analysis that draws together data (quantitative and/or qualitative) to answer questions about the effectiveness, efficiency, appropriateness, and implementation of disaster recovery programs, using clear criteria and standards for assessing the 'success' of the program against desired outcomes. This definition applies to any work that meets this criterion, even when not labelled as an evaluation, such as 'program review', 'after action review', 'project assessment', 'appraisal', 'effectiveness review', project audit', or 'post-implementation review'.

Routine monitoring information is an important input for answering evaluative questions. Monitoring supports evaluation through the collection of structured information on what is being done within programs, the outputs of program activity, and how these are contributing to the achievement of recovery outcomes. Routine monitoring information can be used by program managers to track progress of a program, adapt the program activities to changes in circumstances, and to support accountability.

Monitoring and evaluation depend on a range of *evaluative activities* conducted throughout disaster recovery planning and implementation and are therefore relevant to a broad range of people involved in disaster recovery. Table 1 lists the range of evaluative activity supported by this Framework, and identifies the relevant stakeholders involved.

Table 1: Evaluative activity supported by this Framework

Evaluative activity	Who is involved	Framework section
Identifying program outcomes	Senior managers	Section 2 and database
Developing a program logic	Evaluation advisor; program staff; funding agencies	Section 3
Community needs analysis	Consultants; evaluators	Section 2
Preparing a monitoring and evaluation plan	Evaluators; recovery program staff; stakeholders	Section 9 and database
Early-stage process evaluation	Evaluation team	Section 2-5
Internal program/project review	Program staff	Section 2-5
Monitoring and reporting progress	Program staff	Section 6
Interim evaluation of program processes and progress toward outcomes	Evaluators	Section 2-4
Outcome evaluation of a recovery program or its components	Evaluators	Whole document
Disseminating evaluation findings and updating database	Senior managers; program team	Section 7 and database

1.4. Using the Framework

1.4.1. Program staff involved in the design of recovery programs

The ultimate test for this Framework is whether it leads to better recovery programs. Over time, recovery programs should achieve their desired outcomes in more effective and efficient ways.

Evaluative thinking is an approach to designing, managing and evaluating programs to improve their effectiveness. Evaluative thinking requires an outcome-focus and thinking about appropriate outcomes and how a program can be designed to achieve these outcomes. It also involves ensuring that activities and resources are aligned with recovery outcomes, program logics are established as planning tools, and data collection and monitoring is facilitated through ‘up-front’ evaluation planning. In other words, even if an evaluation is not actually conducted for a disaster recovery program, that program will be more successful if evaluative thinking is incorporated into the design and implementation phase.¹

Recovery programs will also be improved through the feedback between the knowledge gained from past recovery evaluations and the delivery of future recovery programs. The National Disaster Recovery Monitoring and Evaluation Database, (<https://knowledge.aidr.org.au/resources/national-recovery-monitoring-and-evaluation/>) is the key tool through which this knowledge is captured and made available to help those involved in the design of disaster recovery programs. It is therefore essential that program staff (and others) consult the database early in the recovery planning phase to draw on the knowledge learned from previous recovery evaluations. A guide for this is presented in Box 1.

¹ Government staff should also be mindful of the requirements for evaluation planning and program design specified in their respective Whole of Government guidelines, which are listed in Appendix 1 of this Framework.

Box 1: Using the database to learn from the past

For program designers who are working with a 'blank page' to set up a new recovery program, or for program designers who have already designed a program and want to learn from past practice, the database provides a useful starting point. The following steps provide a guide for finding evaluations of past recovery programs, and other relevant resources such as Royal Commission reports. These resources can inform any aspect of disaster recovery planning and evaluation:

1. Go to <https://knowledge.aidr.org.au/resources/national-recovery-monitoring-and-evaluation/>
2. Select **Search monitoring and evaluation resources** to use the various search options to target the kind of resources that you want to find.
3. Click **Search**. The results will appear on a new page, the evaluations and other resources listed down the page.

1.4.2. Disaster recovery practitioners who commission evaluations

Providers of recovery program will be able to commission more rigorous evaluations of their programs through more focused tender briefs and clearer understanding of evaluation needs. These tender briefs should at minimum identify the recovery outcome(s) that the relevant program is trying to achieve.

1.4.3. Government at all levels

This Framework will help facilitate planning and coordination for disaster recovery at all levels of government to ensure that public resources are used effectively.

1.4.4. The affected communities

The Framework can help affected communities hold the government accountable for delivering recovery outcomes by clarifying what these outcomes are and how they can be identified. The Framework can also signal to the community the various ways the community can be involved in the recovery process.

1.4.5. Evaluators

Skilled evaluators will often undertake the evaluation of disaster recovery programs. In many instances these will be independent consultants or universities contracted by a government agency. Ideally, these evaluators will be involved in the upfront planning of the evaluation, as well as the conduct and reporting of the evaluation. It is also expected that evaluators will add their findings and information to the database so that it continues to grow and inform future disaster recovery programs.

1.4.6. NGOs who might want to evaluate their programs

The delivery of recovery programs is not always done by government agencies; non-government organisations also play a crucial role. These NGOs, whether funded by government or through their own resources, will also be interested in assessing the effectiveness of what they do, and, where possible, this should be consistent with the principles laid out in this Framework.

1.4.7. The research community

Interest in the effectiveness of disaster recovery programs extends beyond those immediately involved in funding and delivering the programs. A broader community of people, such as academics, are interested in understanding the process of recovery and the factors that support recovery. This Framework can provide topics of interest to guide basic and applied research into the area of disaster recovery and, through the database, provide material to support this research.

2. Disaster recovery outcomes

One of the principal objectives of this Framework is to ensure that recovery programs are focused on achieving outcomes. For the purpose of this Framework, outcomes refer to:

- changes in the knowledge, behaviour, skills, status, and level of functioning, of a group or set of individuals; or changes to an institution such as its context and organisational capacity.

Disaster recovery programs in the past, and the evaluations of them that have been conducted, have usually focused on processes and outputs rather than outcomes (Ryan, 2016). Shifting recovery planning to have an outcome focus is arguably the single most important change that this Framework can bring about; indeed, the other evaluative activities listed in Table 1 depend on this outcome focus.

Clear statements about disaster recovery outcomes will:

- assist the *design* of recovery programs through a clear and consistent understanding of what disaster recovery programs should achieve
- focus the *evaluation* of recovery programs around common notions of success and the types of activities that will help achieve it.

2.1. Disaster recovery as an outcome

The objective of disaster recovery programs is to help communities reach a point where they are sustainable and resilient. By achieving these objectives, the government can withdraw from the recovery process and allow the community to manage its own recovery.

The terms 'sustainable' and 'resilient' are used widely in recovery literature, but not always with the same meaning. For the purposes of this Framework, these terms are defined in the following way:

1. **A sustainable community has the capability to manage its own recovery**, without government disaster-related assistance. In other words, if government disaster-related programs are withdrawn, the recovery process in a *sustainable community* will continue; the gains achieved during the government-assisted phase will not stop or reverse.
2. **A resilient community is better able to withstand a future disaster**. A successful recovery process "promotes practices that minimize the community's risk to all hazards and strengthens its ability to withstand and recover from future disasters, which constitutes a community's resilience" (FEMA 2011, *National Disaster Recovery Framework*, 11). An example of building disaster resilience is illustrated by the Queensland Government's response to Tropical Cyclone Oswald, which included programs to reduce the impact of future floods on soil erosion (see www.youtube.com/watch?v=sypIVTHjuRU for a presentation of this example).

Box 2 provides an example of a program designed to improve a community's sustainability and resilience. The Brush with Kindness program aimed to make the community sustainable by restoring affected homes so that they are in a liveable condition. It also built resilience by training local volunteers to respond to any future disasters that reduce the liveability of homes.

Box 2: Supporting a sustainable and resilient community through recovery programs

As part of providing recovery support for the South Australian Sampson Flat and Pinery fires recovery, Habitat for Humanity recognized a need to engage with and recruit volunteers to enhance their ability to respond effectively and quickly to future disasters.

Through a South Australian Natural Disaster Resilience Program (NDRP) grant, Habitat for Humanity was funded to deliver the Brush with Kindness program to build volunteers' capability for disaster recovery. Brush with Kindness recruits and trains volunteers to go into the homes of people who are experiencing hardship and complete minor work to get these homes into a liveable condition.

Volunteers are recruited to provide services in the immediate term with Brush with Kindness, but with the understanding that when the next disaster strikes they will be mobilized as trained and experienced volunteers to the affected community. Habitat for Humanity believe this will improve the community's capability, in the event of another disaster, to respond straight away and 'hit the ground running'.

Resilience and sustainability are separate objectives of disaster recovery programs. They may overlap in important respects, but may not be achieved at the same time. In some instances, there may be a trade-off between resilience and sustainability. For example, to become more resilient a community may have to compromise its economic sustainability by relocating some industries to locations that are safer but slightly more remote.

The rest of this section details the steps involved in taking an outcome-based approach to disaster recovery. These steps should involve a range of people who bring a variety of perspectives and knowledge about what recovery programs should achieve. Some of these people might be:

- funding agencies and program sponsors
- recovery experts in relevant agencies
- the expert or academic community for that recovery context
- agency-level evaluation experts
- members or leaders of the affected community and specific groups within it
- service delivery teams
- interest and advocacy groups
- local government recovery officers.

2.2. Steps for taking an outcome-focused approach

To take an outcome-focused approach in disaster recovery planning and evaluation, the following series of steps can be followed:

1. Define the community or communities.
2. Select the appropriate outcome(s).
3. Restate the outcomes so that they are relevant to the community.
4. Embed the outcomes into relevant documents.

Step 1: Define the community or communities

The affected community is not always coincident with a clear geographic area, such as the region physically impacted by the disaster. It can also include people outside the impact region, such as people who are bereaved due to loss or emotional attachment with the affected area. As the *Community Recovery Handbook* (2018: 5) states:

When identifying disaster-affected communities or parts of a community, it is also important not to be restrictive in how affected communities are defined. Caution needs to be exercised so that the process does not alienate people who, although not appearing to be obviously affected, may be experiencing consequences from the disaster. These people may include those who have witnessed an event, helped others affected, become distressed by hearing information about the emergency or felt they were at potential risk of the emergency (even if that risk did not eventuate).

Evaluators should draw on the guide for identifying the relevant community in the *Community Recovery Handbook* (2018: 5) when developing evaluation plans. A summary of what makes up an evaluation plan is presented in Appendix 5.

Step 2: Select the appropriate outcome(s)

Sustainable and resilient communities exist when they are characterized by specific disaster recovery outcomes. A list of these has been developed in consultation with a wide group of stakeholders at a national level, presented in Tables 2–6. This nationally agreed list of outcomes is the starting point for identifying what is the ultimate objectives of a recovery program, or component of a recovery program.

These recovery outcomes are organized around the four domains from the *Community Recovery Handbook*: Economic, Social, Built, and Environment. There are several outcomes, however, that cannot be identified directly with a single domain, but rather are essential to all of them, which are presented in Table 2.

Table 2: Overarching recovery outcomes

Description
Broad, overarching outcomes that affect more than one of the recovery domains
Sustainability outcomes
<ul style="list-style-type: none">Displaced populations can return to the community if they prefer to return.The needs of vulnerable groups are addressed in disaster recovery.The community is aware of the disaster recovery processes.The community can express its changing disaster recovery needs.Government, private sector and civil society and organisations are engaged in plans for mitigation and management of the recovery.
Resilience outcomes
<ul style="list-style-type: none">Community members are aware of the risks of future disasters.The community has access to insurance (covering lives, homes and other property) through insurance markets or micro-finance institutions, where appropriate and viable.

Table 3: Economic recovery outcomes

Description	
<p>The local economy is the system whereby the affected community’s material and service needs are met through appropriate labor and employment, business development, land use, financial resources, and interaction with the broader economy. It sustains the livelihoods of the members of the community and contributes to the broader economy (see the <i>Community Recovery Handbook</i>, 2018: 102).</p>	
Sustainability objectives	Sustainability outcomes
Economy as a whole is functioning	<ul style="list-style-type: none"> Local business networks foster growth Economic activity is appropriately diverse Key industry sectors for the community are restored
Community members can meet their material and service needs and participate in the economy	<ul style="list-style-type: none"> Households have access to an adequate range of goods and services Individuals and households have sufficient financial security to allow them to take advantage of economic opportunities Community members have access to banking and financial services Vulnerable groups are not further disadvantaged by the impact of the disaster, in terms of their ability to participate in the economic system (e.g. employment prospects, accessing credit)
Businesses and industries in the local economy can operate and trade in line with broader economic trends	<ul style="list-style-type: none"> Consumer and business confidence levels support business operations (both within and outside of the community) Business models are appropriately adaptive to market conditions and fluctuations Local businesses have information they need to continue recovering from the disaster Early-stage and small businesses have the capacity to continue operation Businesses and not for profits can access or attract appropriately skilled workers Business and not for profits have access to critical banking and financial services Not-for-profit community service organisations can continue to provide regular services Businesses have secure and stable access to supply chains and networks (including markets, physical infrastructure and assets, as well as telecom networks)
Resilience objectives	Resilience outcomes
Business and not for profits have in place adequate mitigation practices for risks and threats	<ul style="list-style-type: none"> Businesses and not-for-profits have business continuity plans and dynamic organisational resilience practices that address relevant risks and threats Business insurance is accessible where viable Businesses and not-for-profits know and understand the risks and threats of operating in the area
The economy is sufficiently flexible and adaptable to shocks	<ul style="list-style-type: none"> Economic activity is appropriately diverse The workforce has transferable skills

Table 4: Social recovery outcomes

Description	
<p>The social domain is defined by “relationships and connected by networks of communication ... [it] consists of individuals, families and common interest groups that form whole communities” (<i>Community Recovery Handbook</i>, 2018: 79).</p>	
Sustainability objectives	Sustainability outcomes
<p>Adequate housing is available to community members at appropriate times in the recovery process</p>	<ul style="list-style-type: none"> • Community members have access to appropriate and affordable housing in a timely manner
<p>Community members have access and can meet health needs (including mental health) arising from the disaster</p>	<ul style="list-style-type: none"> • Community health levels are appropriate for the community profile • Existing health clients receive continuity of their care e.g. pharmaceutical supplies • Community members have the knowledge, skills, and resources for dealing with health issues related to the disaster experience • Community members can access appropriate services to deal with health needs • The community is not experiencing excessive stress and hardship arising from the disaster • The community has access to clean drinking water and basic food supplies • The community has access to adequate sewerage and sanitation services
<p>Community members have access to psychosocial support</p>	<ul style="list-style-type: none"> • Community members have social networks to support each other • Cultural and racial diversity is respected • The community can express its diverse spiritual composition • The community has opportunities for creative expression that help the community recover from disaster • Leisure, sport and artistic activities are part of the fabric of the community
<p>Households, families, and individuals can act autonomously to contribute to the recovery process</p>	<ul style="list-style-type: none"> • Households, families, and individuals have the information needed to make decisions • Households, families, and individuals are enabled to affect their own recovery through appropriate income sources
<p>Community members have access to education services</p>	<ul style="list-style-type: none"> • Community members receive continuity in the education services they need
<p>Community members have access to appropriate and coordinated social services</p>	<ul style="list-style-type: none"> • Community members receive appropriate social services • Displaced populations are reconnected with essential health and social services
<p>Community members feel sufficiently safe and secure following a disaster to engage in social activities and interactions with other members of the community</p>	<ul style="list-style-type: none"> • Possibilities for crime and social disorder because of the disaster are minimized • Community members can manage their own safety

Resilience objectives	Resilience outcomes
The community has improved capacity and capability to respond to future disasters	<ul style="list-style-type: none"> • Community members are aware of each other's potential needs from future disasters through formal and informal networks and plans (i.e. social connectedness) • Community members can respond to their own needs and can support the needs of other members of the community • Mutual assistance systems, social networks and support mechanisms can adapt to emergencies when these occur • Community members have the knowledge, skills, and resources, for dealing with disaster related health risks (e.g. hygiene, sanitation, nutrition, water treatment)

Table 5: Environmental recovery outcomes

Description	
<p>'[The] effects of disaster on the natural environment are considered in terms of the ecosystem components: air, water, land and soil (and organic matter, plants and animals" (<i>Community Recovery Handbook</i>, 2018: 114).</p>	
Sustainability objectives	Sustainability outcomes
The environment has returned to pre-disaster state, or to a state that is acceptable to the community	<ul style="list-style-type: none"> • The community's exposure to environmental health risks and public health risks is minimized • The natural environment operates to maintain healthy biodiversity and ecosystems • Cultural heritage sites or assets of importance are restored, where possible, in a way that provide these values to the community
Resilience objectives	Resilience outcomes
The risk of adverse impacts of future disaster on the environment is minimized	<ul style="list-style-type: none"> • The impact of future disasters on biodiversity and ecosystem is minimized • The community is aware of the risks of future disasters to natural and cultural heritage assets • The community understands the characteristics and functioning of local natural environment and ecosystems

Table 6: Built environment recovery outcomes

Description	
“The built environment is broadly defined as those human-made assets that underpin the functioning of a community” (<i>Community Recovery Handbook</i> , 2018: 92).	
Sustainability objectives	Sustainability outcomes
Infrastructure that relates to the provision of services to the community by infrastructure owners/operators, including water, sewerage, electricity and gas, transport, telecommunications	<ul style="list-style-type: none"> • Provide infrastructure that delivers essential services to the community • Infrastructure is built in accord with changing recovery needs • Local infrastructure is appropriately integrated with wider state and commonwealth infrastructure
Infrastructure that relates to education, health, justice, welfare and any other community infrastructure/buildings that support the community (private or public owned assets)	<ul style="list-style-type: none"> • Infrastructure is built in accord with changing recovery needs
Private infrastructure, including residential, commercial/industrial and rural assets	<ul style="list-style-type: none"> • Infrastructure is built in accord with changing recovery needs
Resilience objectives	Resilience outcomes
Infrastructure is rebuilt to reduce to a reasonable degree the impact of future disasters on communities	<ul style="list-style-type: none"> • Infrastructure is built with regard to local disaster risks • Infrastructure is built in accord with current knowledge and practices for mitigating disaster impact

To illustrate how to select recovery outcomes we can refer to the Brush with Kindness example in Box 2. This program aims to achieve two outcomes from the social domain. One is a sustainability outcome: ‘Community members have access to appropriate and affordable housing in a timely manner’. The other is a resilience outcome: ‘Community members can respond to their own needs and can support the needs of other members of the community’. Note, however, some programs may not have both sustainability and resilience outcomes; the selection of outcomes from the tables will depend on the program objectives.

This example highlights that, depending on the scale of the program to be evaluated, not all the outcomes listed in these tables will be relevant. In some instances, such as this example (i.e. a small-scale program funded by a grant) only one or two outcomes may be relevant.

When selecting outcomes, program designers may wish to identify which of the selected outcomes are those against which the program will be evaluated, and those outcomes the program might bring about but which are not considered as crucial to judging the program’s success. For example, in addition to the primary outcomes for the Brush with Kindness program in Box 2, this program might also try to achieve ‘Community members have social networks to support each other’. By identifying at the planning stage this ‘secondary’ outcome as something that is desirable, the program might be redesigned in some way to increase the chance of achieving this secondary outcome, along with the primary ones. In other words, some final outcomes may be considered more important than others, based on how crucial each outcome is to the success of the program.

Step 3: Restate the outcomes so that they are relevant to the affected community

The list of Framework outcomes presented in Tables 2–6 use generic terms such as ‘infrastructure’ and ‘community members’. As an overarching Framework that can be applied to a variety of disaster types, it is not possible for these to be more specific. Thus, after having selected one or more of the Framework outcomes from the list, the next step is to restate these Framework outcomes according to the context to which they are being applied. An example is provided in Table 7, where one of the outcomes from the environment domain is restated in a way that makes it program specific.

Table 7: An example of restating an outcome for a specific recovery program

Framework outcome (from Tables 2–6)	Program specific version of the outcome (restated in terms of the specific context for a recovery program)
The community is aware of the risks of future disasters to natural and cultural heritage assets	Residents living near the town hall know how to reduce the hall’s vulnerability to future bushfires

This restatement of a Framework outcome involves identifying the particular cultural heritage asset (i.e. the town hall) and also the particular community members to whom this outcome applies (i.e. residents living near the hall). Such a restatement of Framework outcomes into program specific terms will help focus the evaluation.

A different disaster recovery program may target the same Framework outcome, but will restate it in different terms depending on the asset in question and the composition of its community. But where program specific outcomes are all forms of the same Framework outcome, some comparison and learning can occur across the evaluations of these separate disaster recovery programs.

Identifying program specific outcomes is also the point at which the needs of vulnerable groups in the community can be identified, as emphasized by the *Community Recovery Handbook* (2018). It is essential that these outcomes are recast, where relevant, to identify any vulnerable individuals or groups that are “likely to be more susceptible to loss, or to have less resilience than other individuals and groups” (*Community Recovery Handbook*, 2018: 38). For more detailed guidance on how to assess recovery outcomes for vulnerable groups, the Vulnerable Sections of Society (an emergency management perspective) report, <https://knowledge.aidr.org.au/media/5938/vulnerable-sections-of-society-anzcmc.pdf> should be consulted).

Step 4: Communicate the intended outcomes

Program outcomes can be used in various ways to indicate the intent of the program. To develop a shared understanding of the program’s objectives, the intended outcomes developed through the preceding steps should be communicated to relevant groups and expressly used in a variety of important documents. These include:

1. *Relief and response teams*. If it’s possible to identify intended recovery outcomes while relief and response efforts are still underway, these can be communicated to the relief and response teams. These teams will thereby be able, to the extent that it is practical, to have recovery outcomes in mind so that their efforts can support, or at least not hinder, later recovery efforts.
2. *Strategic Recovery Plans*. Stating outcomes will give a clear focus and purpose to recovery program implementation. Indeed, best practice will be to develop a combined Strategic Recovery and Evaluation Plan.
3. *Communication documents to the community*. Inherent to the objective of community led recovery is the notion that the community is appropriately informed and involved from the early stages of recovery. It is essential that the community knows the outcomes that the program is trying to achieve; indeed, developing the intended outcomes can be done jointly with the community.
4. *Evaluation tender documents*. Evaluations, especially where the work will be contracted to consultants must be guided by the intended recovery outcomes. Tender briefs, approaches to market, and other

related documents should cite these outcomes so that consultants can plan evaluations with these outcomes in mind.

5. *Service delivery organisations.* Disaster recovery programs are often delivered by a variety of organisations, including non-government organisations (NGOs). These organisations should work toward achieving the desired program outcomes. For example, a grant program may state the intended outcome(s) in grant application documents and ask applicants to describe how they will achieve the outcome(s) with the funding.

3. Developing a program logic for disaster recovery

Once program outcomes have been determined, the next major task is to construct a program logic. A program logic provides a 'map' of the key elements that constitute the program, and how they contribute to achieving the intended outcomes. A program logic is a useful planning tool for program design, and a guide for evaluation, by setting out how the specific set of activities and resources deployed in a recovery program will achieve the intended outcomes. But before we discuss the steps involved in constructing such a program logic, it is important to understand some of the nationally agreed principles of disaster recovery that can inform the development of a specific program logic.

3.1. Theory of change

A program logic captures in a diagrammatic form some underlying understanding – theory of change – about what it takes to achieve 'successful' recovery. Based on the principles in *Community Development in Recovery from Disaster* (Emergency Management Australia 2003) and the *National Principles for Disaster Recovery* (Social Recovery Reference Group 2018) the theory of change that guides this program logic can be summarised **as community-led/government-assisted recovery**. By placing affected communities at the center of the recovery process, the role of government takes on a specific meaning. In particular, it highlights that government activities support and facilitate recovery by building community capability, and that there will be a stage at which recovery can continue without government assistance.

This theory of change captured in the *National Principles for Disaster Recovery* states that successful recovery relies on the following activities:

- *Understand the context.* Successful recovery is based on an understanding of the community context, with each community having its own history, values and dynamics.
- *Recognize complexity.* Successful recovery is responsive to the complex and dynamic nature of both emergencies and the community.
- *Use community-led approaches.* Successful recovery is community-centred, responsive and flexible, engaging with community and supporting them to move forward.
- *Coordinate all activities.* Successful recovery requires a planned, coordinated and adaptive approach, between community and partner agencies, based on continuing assessment of impacts and needs.
- *Communicate effectively.* Successful recovery is built on effective communication between the affected community and other partners.
- *Acknowledge and build capacity.* Successful recovery recognises, supports and builds on individual, community and organisational capacity and resilience.

Disaster recovery programs must contribute to building a community's capability to manage the recovery process once the government assistance has been withdrawn, and it is the extent to which program activities have developed this capability that will be the benchmark for judging success.

Aspects of this theory of change worth noting are:

1. Recovery continues even after communities become sustainable and resilient, and the government is no longer involved in any substantial way. In other words, government assistance is not aimed at restoration or returning communities to 'normal activity' or a 'pre-disaster' state, but to getting them to a state of affairs whereby communities continue the recovery processes themselves.
2. There is not a sharp transition between the government-assisted recovery phase and the phase where recovery continues without government assistance.
3. Disaster recovery might provide the opportunity to help communities go beyond the requirements of sustainability and resilience. The extent to which this happens can be an evaluative criterion for 'successful' recovery. Evaluations might investigate whether the program assisted communities to go beyond recovery, but this will not usually be an assessment of the success of the program.

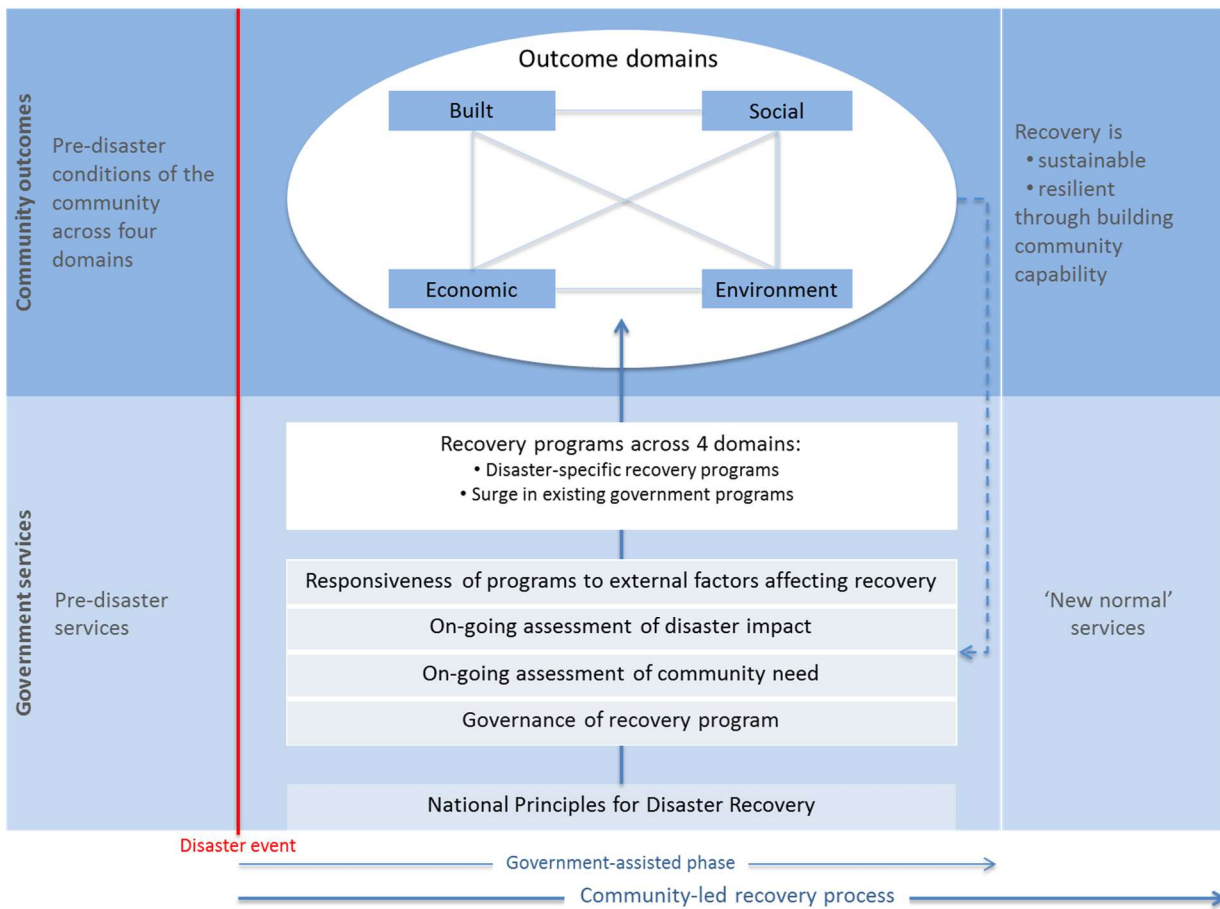
3.2. National program logic for disaster recovery

The principle of community-led/government-assisted recovery, and how recovery programs try to achieve this is presented in Figure 1 which captures, at a highly-aggregated level, the major outcomes and the broad factors that will contribute to the achievement of recovery outcomes, regardless of the specific disaster recovery program being evaluated. This national program logic embodies the following narrative for how recovery programs 'work'.

Disaster-affected communities functioned in a particular way prior to the event, and this includes any previous experience with disaster recovery, and the community's pre-disaster capability to manage its development.

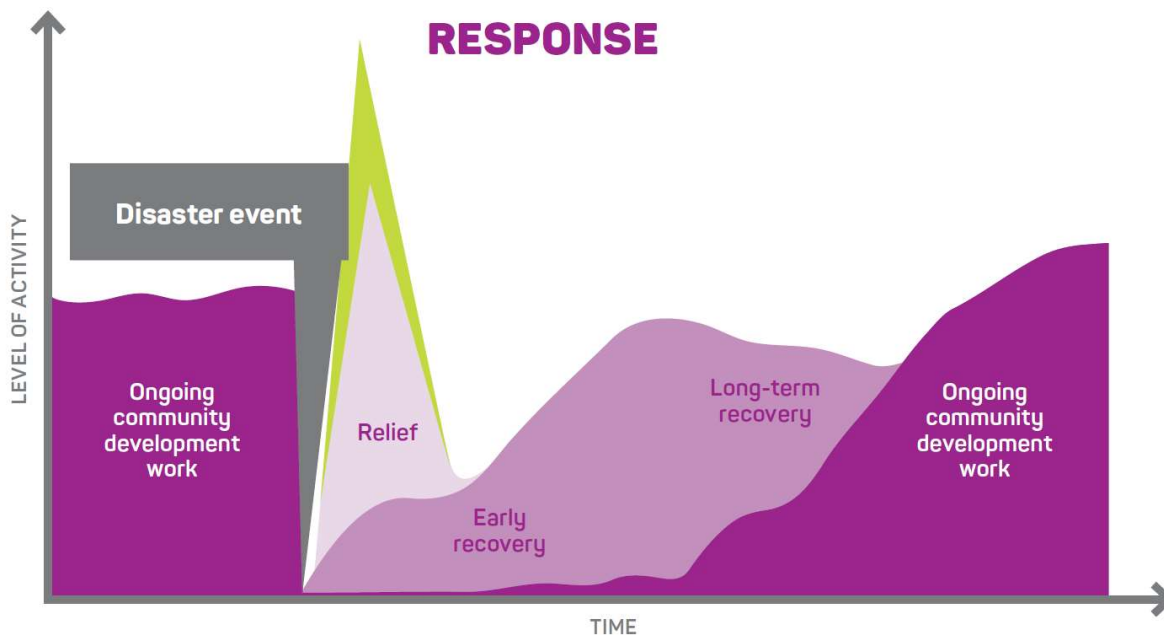
Following a disaster, and once response and relief efforts have dealt with the immediate emergency, recovery programs will be designed and implemented with the aim of building the community's capability to manage its own recovery process. The *National Principles for Disaster Recovery* will guide how the program is constructed. This will include a governance structure to oversee the government-assisted phase of recovery that involves the community in the decision-making process.

Figure 1: A high-level national program logic for disaster recovery



In response to the changing nature and extent of the disaster, and in response to changes in the external environment affecting the community, disaster recovery programs will be re-assessed. This re-assessment will ensure the activities are delivering the desired outcomes across four domains: economic, social, environment, and built; and that outcomes 'work together' to ensure that the community is sustainable and resilient. For many recovery programs, the government-assisted stage might itself be broken down into distinct but overlapping phases. For example, it is not uncommon to delineate an early recovery phase that emphasizes the transition from response to recovery efforts, such as Figure 5, from the *Community Recovery Handbook* (2018: 32).

Figure 2: Effect of disaster on ongoing community development and interface with relief and recovery



If these outcomes are achieved so that the community can manage its own recovery, government services can return to some 'new normal' level. The term 'new normal' has been used in slightly different ways in the past (e.g. Ellis et al 2004: 176; Winkworth 2007: 81; Archer et al 2015: 31; Ryan et al 2015b: 18), all of which emphasize the idea of government services operating at a level that is consistent with a similar community not affected by disaster. In other words, 'surge' activity, whereby pre-disaster services are expanded to meet recovery needs, and disaster specific recovery programs, are no longer necessary for the community to function. There may be limited disaster recovery activities that persist even after the government-assisted phase has finished, for example, to deal with chronic health problems arising from the disaster for a small segment of the community. But overall, the type of government programs that are available to the community as 'new normal' will not be characterised by the needs of disaster recovery.

These 'new normal' services may be different in type and level to the services that were in place before the disaster. The aim is not necessarily to 'restore' the community to where it was before the disaster, nor to necessarily use the recovery context to 'build back better' (although that may be something that governments want to do). As the *NSW Emergency Management Plan* states, recovery is about "returning an affected community to its proper level of functioning" (2011: 32), and it might be appropriate for the community to operate at some other level or in a different way than that which existed prior to the disaster. The principal aim is to equip the community and identify a point where it can manage the continuing recovery process without the need for special services or for increases to services that previously existed.

A program logic at this level of abstraction is not a prescription for how disaster recovery programs are to be designed. The specific way in which individual programs are designed to achieve these outcomes, for any disaster, cannot be prescribed in advance. The program logic in this Framework is an archetype that articulates a nationally agreed, consistent approach to achieving disaster recovery.

Some specific features of the program logic in Figure 1 are worth pointing out in more detail to help the development of specific program logics for individual disaster recovery programs:

- The four outcome domains are not presented in any hierarchical fashion in Figure 1; program logics for specific disasters should assess whether in a particular disaster context, a sequential ordering of these outcome domains is appropriate.

- The process of achieving the community-led recovery outcomes is not linear; there must be an iterative process of program redesign as the recovery process unfolds. There may be distinct ‘peaks’ and ‘troughs’ in the level of disaster recovery programs as community needs change and evolve. Some outcomes may be achieved earlier than others or may in fact be ‘enablers’ that are preconditions for the achievement of other ‘ultimate’ outcomes.
- Two types of recovery programs are separately identified. One is the set of activities that are specifically designed to assist the community to recover (disaster-specific). The other set comprises existing programs that are provided to the community, but which receive extra (‘surge’) resources or functions so that they can contribute to the recovery process.
- Governance of a recovery program is itself a key activity that must be examined as part of an evaluation. Part of this will include the extent to which the community has been involved in governing the recovery program, and also the coordination of the response efforts with recovery.
- The coordination and communication between recovery and relief efforts will be a major element affecting the success of recovery efforts.

3.3. Ex ante and ex post program logics

The rest of this section will work through the steps for devising a program logic for a recovery program. These steps will vary depending on whether the program logic is being developed ‘up front’, or *ex ante*, as part of the program planning stage. This is considered best practice, especially by the recent whole of government guidelines for evaluation (see Appendix 1). Developing program logics at this early stage of the program cycle will not only allow better evaluations, but will also interact with recovery planning to improve the delivery of the program itself.

However, it is not always possible to develop program logics prior to program implementation. For example, the need to deliver a recovery program in a timely manner may not allow the time needed to develop a logic for that program, especially if the capability to devise it is not readily available. In such situations, an *ex post* program logic is still desirable, whereby the program logic is devised after the program has been designed, and possibly even after it has been implemented.

We will begin with the steps for an *ex ante* program logic, given that this is seen as best practice, and then follow with the steps for an *ex post* program logic, acknowledging that the latter situation is probably the one that practitioners will encounter most often in practice. In either case, the final program logic will illustrate the program characteristics in the same way.

Before detailing the steps involved in constructing a program logic, we should note that in practice these steps are not always followed in a strict linear way. It is usually the case that there is an iterative process whereby the planning of outcomes, activities, resources, and outputs occur simultaneously and interact with each other. This is necessarily the case for something as complex as a disaster recovery plan (Rogers 2008), that inherently requires some element of creativity and input from multiple sources, which may include government recovery agents, evaluation experts, members of the affected community, and funding bodies. Thus, while we present these steps conceptually as distinct and sequential, so that those unfamiliar with them can understand each one separately, in practice these steps will often have considerable overlap.

3.4. Steps for devising an *ex ante* program logic

The following lists the steps for devising an ‘up front’, or *ex ante*, program logic for a recovery program, or for some smaller component of a larger program:

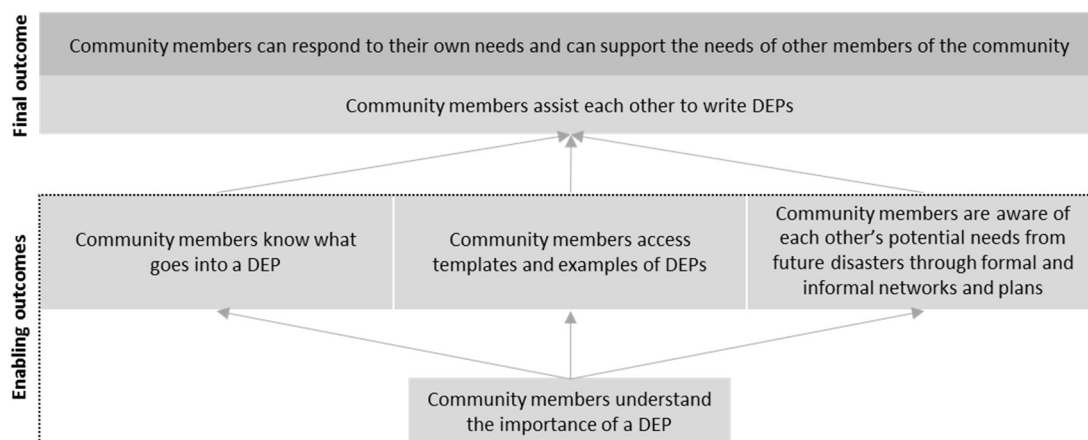
- Develop an outcomes chain.
- Add activities, resources, and outputs.
- Add relevant elements from the national program logic.
- Construct a timeline for achieving the program outcomes.
- Communicate the program logic to relevant stakeholders in an appropriate format.

Step 1: Develop an outcomes chain

In the previous section, we discussed the process of selecting outcomes that will define ‘successful recovery’ for a program. A program logic needs to show how the achievement of these final outcomes will emerge from the achievement of other outcomes that are necessary steps to the final ones. This is the development of an outcomes chain, which shows the sequence of earlier outcomes that will have to be realized for the final outcomes to emerge. In other words, recovery planning may have to bring about outcomes in a causal and sequential way before the final outcomes appear. Sometimes these earlier outcomes in the chain are described as ‘enabling’ or ‘intermediate’ (as opposed to ‘ultimate’ or ‘final’); in other instances, they are grouped into ‘short term’ and ‘medium term’, as opposed to ‘long term’ outcomes.

Based on the high-level program logic in Figure 1, these earlier, enabling outcomes, will often involve building the capability of communities to manage the recovery process. For example, one part of a larger recovery program may identify the following Framework outcome as its ‘target’: *community members are better able, in the event of a future disaster, to respond to their own needs, and can support the needs of other members of the community.*² The program specific version of this Framework outcome (from Step 3 in the previous section) is ‘community members assist each other to write documented emergency plans’ (DEPs). The program objective is for DEPs not to be ‘done by government’ for households, but for households to create DEPs for themselves and for each other. To prepare such emergency plans, recovery program designers believe that the community must first be aware of the importance of having a DEP. They must then know what goes into a DEP and have resources to help them develop a DEP for themselves and each other. This casual sequence is represented as an outcomes chain in Figure 3.

Figure 3: An outcomes chain example



² This example is based on the Queensland Community Preparedness Survey November 2013 – Household Preparedness for Natural Disasters, 2013: 24, www.disaster.qld.gov.au/dmp/Archive/Pages/QLD-Preparedness-Survey.aspx.

This outcomes chain has two features worth noting. The first is that one of the enabling outcomes (Community members are aware of each other’s potential needs from future disasters through formal and informal networks and plans) is a Framework outcome from Table 4, which supports the realization of the final outcome. The second is that other outcomes had to be developed that are not in Tables 2–6. Because of the variety of recovery programs that may be implemented, it is not possible to list all the possible outcomes that they might need to bring about.

Step 2: Add activities, resources, and outputs to the outcomes chain

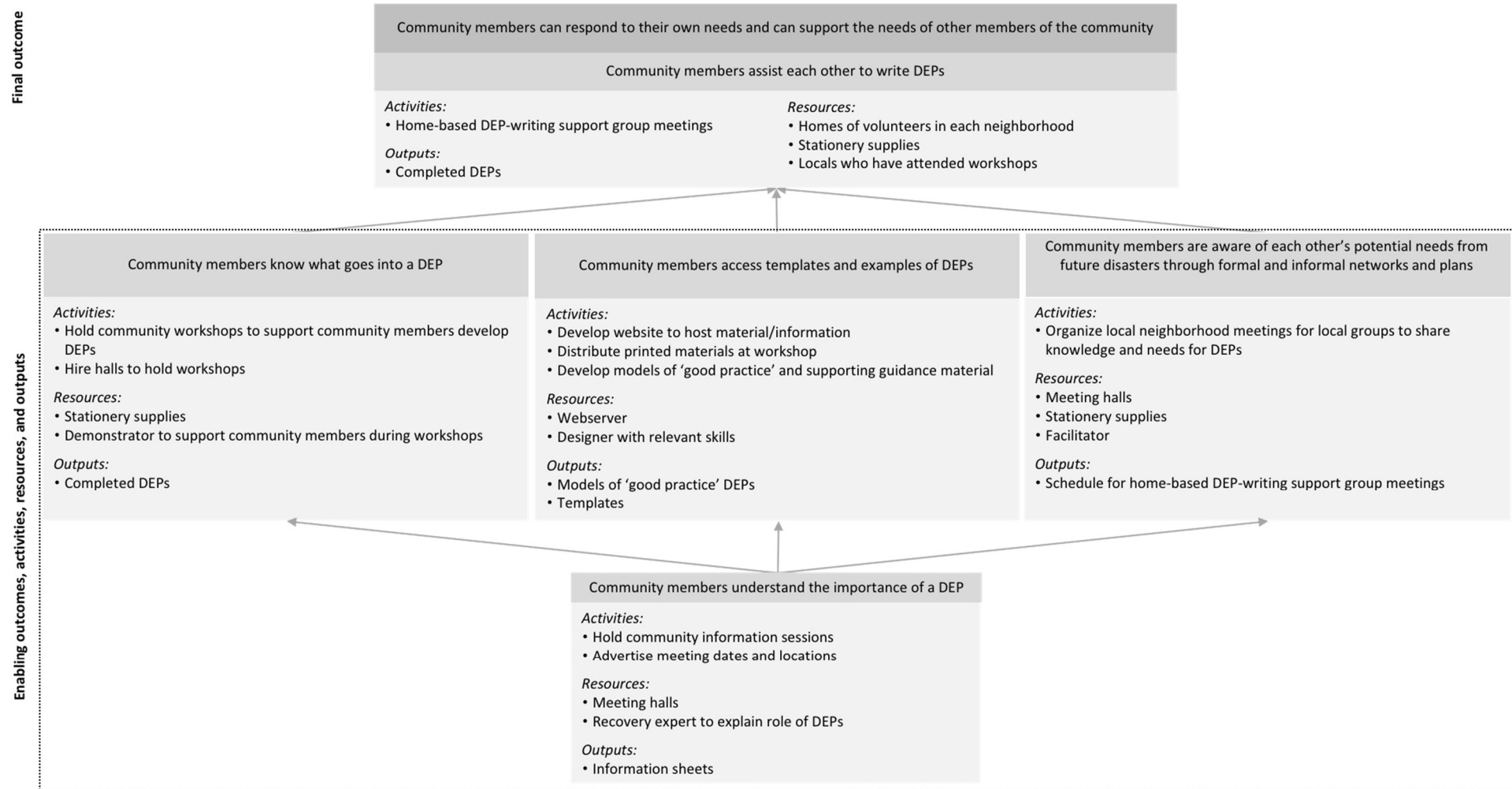
The previous step gives program design and evaluation an outcome-focus. A program logic, however, also identifies the activities, resources, and outputs that are intended to bring about these outcomes. These terms are defined in Table 8.

Table 8: Elements of a program logic – Definitions

Term	Definition
Outcomes	Changes in knowledge, behavior, skills, status, and level of functioning, of a group or set of individuals; or changes to an institution such as its context and organisational capacity
Resources	The inputs, such as staff, funding, and materials that are used to deliver program activities
Activities	Things the program does with available resources to meet its objectives
Outputs	Direct products of the program’s activities that can be used as evidence that the program was implemented

For the example of achieving resilience through DEPs, separate activities might be undertaken to achieve each of the enabling outcomes. Each of these activities will require resources and may lead to specific outputs, such as DEP templates. A program logic that captures this information (and builds on the outcomes chain), is presented in Figure 4.

Figure 4: A program logic for a Documented Emergency Plans program



A starting point for devising program activities and resources to achieve the intended outcomes is the database (<https://knowledge.aidr.org.au/resources/national-recovery-monitoring-and-evaluation/>) This database draws on an extensive review of past disaster recovery programs to facilitate better program design and program evaluation in the future. One of its principal uses is as a starting point for program design; the database identifies activities that have been used in the past to try and achieve selected outcomes. Box 3 provides a guide for using the database to help design outcome-focused recovery programs.

Box 3: Using the database to think about program activities

For program designers who are working with a 'blank page' to set up a new recovery program, or for program designers who have already designed a program and want to refine it based on past practice, the database provides a useful starting point. The following steps provide a guide for using the database:

1. Go to <https://knowledge.aidr.org.au/resources/national-recovery-monitoring-and-evaluation/>.
2. Select **Disaster Recovery Outcomes Search** and select the desired outcomes that your program is intended to achieve from the list provided under the relevant domain(s).
3. Click **View Activities and Indicators** at the bottom of the page.
4. The results will appear on a new page, with activities listed under each of the selected outcomes.
5. You can refine the list of activities based on criteria relevant to your program, by clicking **Show Filters**. For example, if you are designing a recovery program for a flood disaster, you can choose **Flood** under the **Disaster Types** drop-down menu.
6. Not all of these listed activities will be relevant to your program; they are simply a record of what has been done in the past. You need to look at past evaluations, reviews, or other assessments of recovery programs contained in the database, to decide which of these activities were actually effective and which you should build into your program.

The program logic in Figure 4 shows how the capability of community members to develop and document emergency plans is brought about. It reflects the underlying principle of community-led/government-assisted recovery because it shows that when enough community members have developed the capability for developing DEPs they can then act as a community resource to help others do the same so that government programs can be withdrawn. The objective is to get to a point where the special government programs, such as information sessions, can be withdrawn, and households continue to develop DEPs without this aspect of the recovery program.

Step 3: Add relevant elements from the national program logic

Where possible, a program specific program logic such as that in Figure 4 should illustrate how it is applying the general principles represented in the program logic discussed earlier (Figure 1). Central to this is the need to show how the program is achieving community-led/government-assisted recovery. Other possible factors that a specific program logic may include are:

- How the program is being governed, and the role of the community in this governance
- How community need is being assessed and reassessed, especially in relation to the changing impact of the disaster
- How external factors beyond the control of the program may affect the desired outcomes.

Step 4: Construct a timeline for achieving the program outcomes

The final element that should be added to a program logic is a timeline by which the final program outcomes are intended to be achieved. It might be realistic for the outcomes of a very focused and small-scale program, such as the DEP example, to be achieved within a very short timeframe such as 12 months. But for more complex programs that have several components, each with their own respective outcomes, the timeframe may be much longer. For 'whole of disaster' programs, the timeframes for some outcomes, such as those related to psychosocial wellbeing, may take many years to successfully achieve.

Step 5: Communicate the program logic to relevant stakeholders in an appropriate format

Program logics serve several functions. They guide evaluation activity by drawing attention to how the program is intended to 'work'. They are also important communication tools, providing a shared understanding for how the program should unfold and what it is meant to achieve. It is also a planning tool that will help coordinate the actual implementation of the program.

Program logics should be communicated to the relevant stakeholders if they are to meet the various functions. Some of these stakeholders include:

- Program managers, who need to know the broad outlines of how a recovery program is intended to bring about recovery outcomes, in order to ensure the program is effectively implemented.
- Program delivery agents, who need to plan and see through the roll-out of the program and integrate it with other recovery activities that may be occurring in parallel with it.
- The affected community, who need to understand why a program looks the way it does and how it will help them eventually manage the recovery process.
- Evaluation or program review teams, who need to assess the actual way that a program has been implemented against how it was intended to be implemented and the outcomes it was meant to bring about.
- Program funding agencies, who need assurance that their funds are being spent with a clear understanding of how they will produce desired outcomes.
- Service delivery providers, including NGOs, who need to understand how their contribution to the program contributes to outcomes.

Given this array of stakeholders and their different needs, it is usually the case that a program logic should be presented in a variety of formats suitable to the audience to which it is being given, and what the audience needs to know. For example, a program logic might be presented in a summarized format when given to senior managers, who only need to understand the main components of the program. For program delivery staff, on the other hand, that program logic will have a lot more detail about the links between activities, resources, and outcomes. For the affected community, the program logic should be stripped of any technical language and may use engaging graphics.

3.5. Developing an *ex post* program logic

The previous section presumes that a program logic is developed as part of the recovery planning phase, which then underpins later evaluations of the program. However, such 'best practice' is not always possible, and program logics, such as that in Figure 4, sometimes must be constructed after a program has been implemented. Much of the same processes that were discussed in the previous section are followed in constructing these *ex post* program logics, but in a different order. The steps below are illustrated in Figure 5, which is a program logic developed to evaluate the Queensland Community Recovery Package, which was implemented following Tropical Cyclone Debbie in 2017.

Step 1: Determine the structure of the program and how it is delivered

The first step is to lay out the 'architecture' of the program as it has been or is planned to be delivered. The structure of the activities and resources that are rolled out as part of a recovery program can be determined by:

- reviewing key program documents such as recovery plans
- reviewing program descriptions in funding requests such as grant applications
- reviewing communications among program planning staff when they were deciding how to design and implement the program
- discussions with program delivery staff
- funding bodies and decision-makers
- stakeholder consultations.

In Figure 5 this is represented by the orange boxes, which show that there were two broad sets of activities to the Tropical Cyclone Debbie Community Recovery Package: the Individual Support Program and the Community Development Program. Within each of these 'arms' of the program there were several interrelated activities undertaken, sometimes in a sequential manner.

Step 2: Identify the final outcome(s) against which the program will be judged as a 'success' or not

Ideally the program outcome(s) will have been determined in advance of planning and implementation, even though the program logic was not. For example, in Figure 5 the final outcomes are those in the dark blue boxes and were determined as part of the funding package between the Commonwealth and the Queensland governments.

If program outcomes were not determined before implementation, these will have to be imputed, from those in Tables 2–6, by following the procedures listed in Step 1. If such imputation of final outcomes must occur, it is important that this corresponds with and is cross-checked with the understanding of key program managers and sponsors of the evaluation.

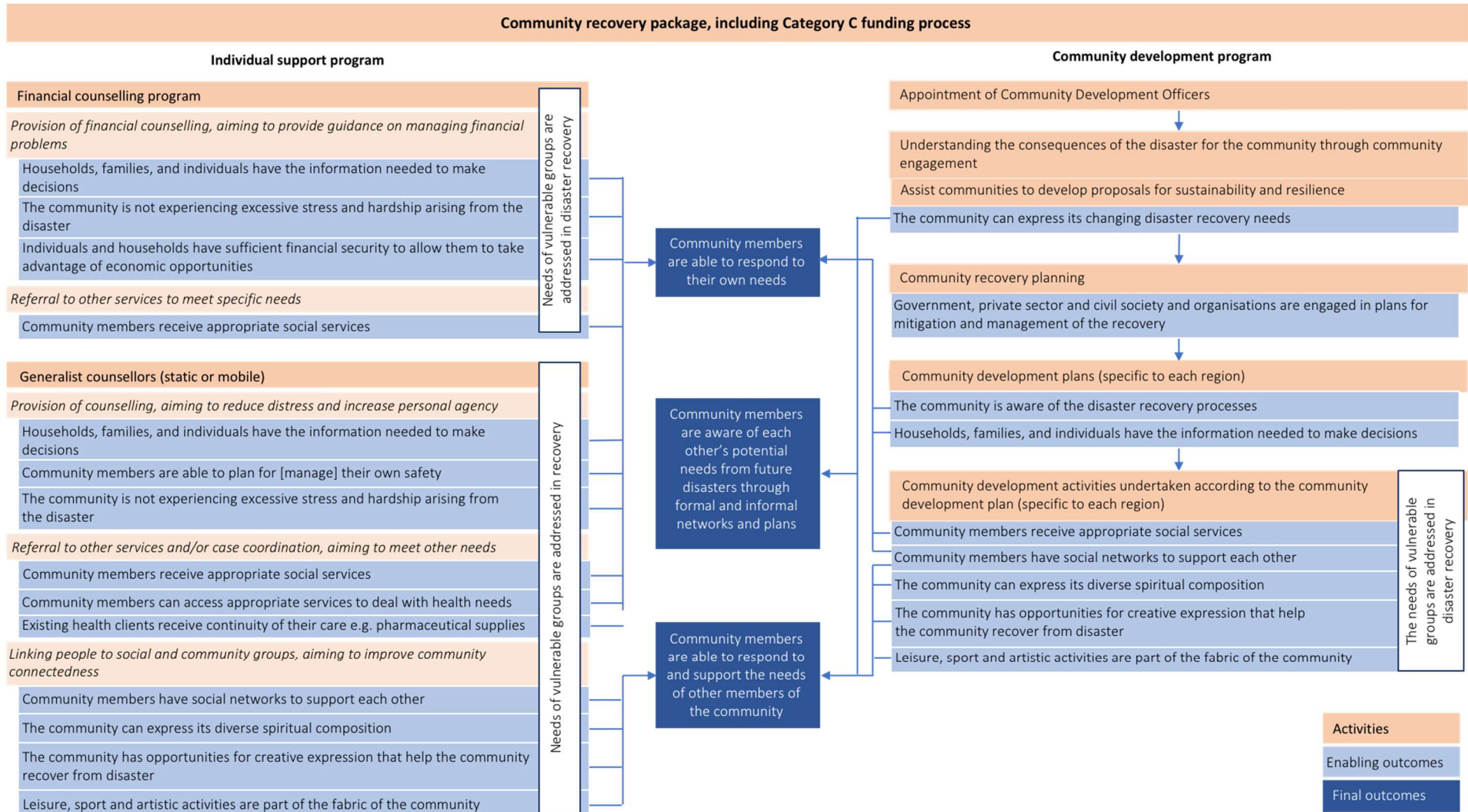
Step 3: Identify any intermediate outcomes that the program activities, either explicitly or implicitly, are intended to bring about and how these might lead to the final outcomes.

As with Step 2, these intermediate outcomes may have to be imputed from the evidence about the nature of the program and what was intended by the funding agencies, the program managers, and other key stakeholders. These outcomes may be listed in Tables 2–6, but may also be new ones that are specific to the program. They should be linked to specific activities/resources that were established in Step 1, as shown by the lighter blue boxes in Figure 5.

Step 4: Communicate the program logic to relevant stakeholders in an appropriate format

This is identical to Step 5 for developing an ex ante program logic, above.

Figure 5: Ex post program logic for Cyclone Debbie Community Recovery Package



3.6. Developing a program logic: Some practical suggestions

Developing specific program logics to guide actual disaster recovery programs and their respective evaluations is a skill that requires some expertise, and program staff should refer to Appendix 1 of this Framework for starting points. An example of a disaster specific program logic that details how activities and interventions are intended to lead to very specific outcomes can be found in UNICEF, 2009, *Children and the 2004 Indian Ocean Tsunami: Evaluation of UNICEF's Programmes in Aceh, Indonesia*, Child Protection Report, www.unicef.org/evaldatabase/index_59604.html. For a more general and very accessible guide for developing program logics, people involved in disaster recovery should consult the resources available at www.betterevaluation.org and Funnell and Rogers (2011).

4. Outcomes, indicators, and standards of successful recovery

Indicators that measure progress need to be identified for the outcomes identified in a recovery program logic. Box 4, for example, shows how specific resilience-building outcomes from the infrastructure domain can be measured in a community survey.

Box 4: An example of outcome indicators for bushfire recovery

A community has experienced a bushfire that destroyed several homes. As part of resilience-building, the recovery program aimed to ensure that housing is better able to withstand a future fire. It therefore targeted the following two built environment outcomes:

- Infrastructure is built with regard to local disaster risks
- Infrastructure is built in accord with current knowledge and practices for mitigating disaster impact.

The program also aimed at ensuring that households are better prepared to take care of themselves in the event of another bushfire, which relates to the following social resilience outcome:

- Community members can respond to their own needs.

To identify whether these outcomes have been achieved, relative to a pre-disaster benchmark, the following items were included in a community survey (adapted from the Pinery Bushfire Community Survey).

For each of the following, indicate whether these were in place before the fire, and whether they are now in place	Did your house have any of the following safety features prior to the fires?		Does your house now have any of the following safety features?	
a. Metal gutter guards	No	Yes	No	Yes
b. A fire-rated roof	No	Yes	No	Yes
c. A clearing on the fire-prone side of the house	No	Yes	No	Yes
d. An emergency water supply	No	Yes	No	Yes
e. An emergency electricity supply/generator	No	Yes	No	Yes
f. Other (specify):				

All the items relate to the two infrastructure outcomes, and the last two items (d and e) also relate to the desired social outcome.

Given the range of outcomes that a recovery program may try to achieve, it is not possible to provide a definitive list of indicators for these outcomes. To provide a starting point for constructing indicators for the outcomes in Section 2, the database provides a suggestive list. These indicators come from three sources:

- past evaluations of disaster recovery
- official statistics such as ABS publications
- input from specialists in the field of disaster recovery and related expertise.

Box 5: Using the database to develop outcome indicators

For program designers who are working with a 'blank page' to set up a new recovery program, or for program designers who have already designed a program and want to refine it based on past practice, the database provides a useful starting point. The following steps provide a guide for using the database:

1. Go to <https://knowledge.aidr.org.au/resources/national-recovery-monitoring-and-evaluation/>.
2. Select **Disaster Recovery Outcomes Search** and select the desired outcomes that your program is intended to achieve from the list provided under the relevant domain(s).
3. Click **View Activities and Indicators** at the bottom of the page.
4. The results will appear on a new page, with indicators listed under each of the selected outcomes.
5. You can refine the list of indicators based on criteria relevant to your program, by clicking **Show Filters**. For example, if you are designing a recovery program for a flood disaster, you can choose **Flood** under the **Disaster Types** drop-down menu.
6. Not all listed indicators will be relevant to your program; they are simply a record of what has been done in the past. You need to look at past evaluations, reviews, or other assessments of recovery programs contained in the database, to decide which of these indicators can be used to measure the outcomes for a program.

The list of indicators in the database is not complete; they are sufficiently general in nature so that they might be commonly used across a variety of disaster recovery programs. But each recovery program is also unique, and it is expected that other indicators will also be used where relevant to a specific context. It should also be stressed that while these indicators lend themselves to quantitative measures; qualitative measures for some indicators will usually be required to fully capture the complexity of the disaster recovery process.

When completed, each disaster recovery evaluation will add the indicators it uses into the database so that it grows over time from the accumulated experiences of real-world disaster evaluations (see Section 7).

4.1. Standard setting for 'successful recovery'

Indicators on their own will not suggest whether successful recovery is occurring or has occurred; some 'target' level or rate needs to be set for what will constitute successful recovery, as defined by the community-led approach. This is the process of 'standard setting'.

Such standard setting will not be part of this Framework; it is the function of evaluation plans to identify which indicators are relevant for the outcomes that are desired, and the 'values' these indicators need to attain before we can specify that recovery is happening or has finally been achieved. Many of the outcomes use words such as 'adequate' and 'appropriate'. Such words are deliberately vague because there cannot be a predetermined and universal standard of success that applies for all recovery programs. In other words, specific recovery evaluation plans will decide what is 'adequate' and 'appropriate' in their circumstances.

Setting standards for outcome indicators often involves measuring change against some comparator for judgment. A number of factors can be taken into account when selecting an appropriate comparator:

- *Pre-disaster state*. The state of affairs prior to the disaster will act as a reference point for setting standards. Official data sets such as the *Census* or the *National Health Survey* can often provide such pre-disaster measures. It should be noted, however, that it is not the main purpose of recovery to redress non-disaster related problems that existed prior to the disaster, except in so far as these may impact on the sustainability and resilience of the community.
- *Disaster impact*. The pre-disaster state of affairs also needs to be coupled with the nature, severity, and extent of the disaster. In some circumstances, it may not be reasonable or necessary to expect disaster recovery to achieve pre-existing levels of community functioning. Recovery may become

sustainable and resilient before these levels are achieved. There are a range of possible sources of impact measures, such as state and territory damage, loss and impact assessments, and the National Impact Assessment Framework (<https://knowledge.aidr.org.au/resources/recovery-further-resources/#niaf>), which can help inform 'reference' measures for many outcomes, against which recovery can be assessed.

- *On-going community needs assessment.* This will help establish the time-frame over which it is reasonable to expect the desired outcome 'targets' to be reached.
- *Comparison with generally recognised standards* e.g. safe levels of air pollution; safe levels of asbestos risk.
- *Time-frame.* For some recovery outcomes it will not be possible to observe a significant change within a short time period. Indicators and standards for change need to be mindful of what a 'realistic' change can be observed at different times.
- *Comparison with similar communities unaffected by disasters.*

4.2. Outcomes, indicators, and methodologies for data collection

The mapping of outcomes to indicators in the database is a starting point for constructing a data collection plan. However, evaluators should not feel restricted to this list. They should also be open to forms of data collection and associated indicators that are emerging. The following approaches to data collection and measurement should be considered:

- *Most Significant Change (MSC).* This is a method that explores the important outcomes and how they are identified, through a qualitative approach to community values. MSC can be used to construct the specific program logic for a given disaster recovery process, based on a structured feedback process that engages the community and other stakeholders. But it can also be used in conjunction with quantitative measures to assess movement toward community outcomes such as disaster recovery; for example, to uncover important outcomes that were not identified in the evaluation plan. It is important that qualitative indicators be used in conjunction with the quantitative indicators listed in the evidence base to ensure a 'complete' picture of recovery is presented. MSC, among other techniques, provides a useful way of doing this (useful guides for using this method are Dart and Davies (2003), and Davies and Dart (2005)).
- *The Australian Regional Environmental Accounts.* The Wentworth Group of Concerned Scientists has developed a system for measuring the state of environmental assets at any given point in time, and over time. The application of these Accounts should be assessed: if they are conducted nationally and at regular intervals they will provide an invaluable source of secondary data for measuring environmental recovery outcomes. If this does not happen, the methods developed for constructing these accounts can still be used to gather primary data, where appropriate, for disaster recovery (wentworthgroup.org/programs/environmental-accounts).
- *Innovations in data collection using digital and other tools.* For example, developments in geospatial imagery and the use of satellite data may provide tools that can capture in detail changes in a community's structure and assets (Brown, et al 2011). The scope for using such innovations in collecting monitoring and evaluation data needs to be constantly assessed, and the experience gained by using such innovations fed back into the database.
- *Community involvement,* for example, by using social media, and through qualitative methods such as ethnographic studies.

5. Planning an evaluation

5.1. The evaluation focus and scale

Evaluations can focus on different aspects of a recovery program. For example, an evaluation can focus on the whole recovery program, or an individual component of the overall recovery program, such as a grant program. Depending on the focus of the evaluation, there will be implications for the degree of evaluation expertise required, the resources needed to conduct the evaluation, the time period within which it can be concluded, and the degree of planning required.

Some factors that help determine the evaluation focus and scale are:

- *The audience for which the evaluative activity is conducted.* If the staff delivering a recovery program need to assess how the program is tracking in the early stages of implementation, then the scale of evaluative activity will probably be small and highly focused. If, on the other hand, the audience is major funders who require a comprehensive assessment of the program over its lifecycle, then a major evaluation will be needed.
- *Process or outcomes.* While all evaluations should be guided by the outcomes that the program intends to achieve, some may focus on the process by which these outcomes are achieved. Alternatively, the focus may be on whether the outcomes have been achieved.
- *Range of outcomes.* Some recovery programs may target a small set of outcomes (rather than the full set listed in Section 2), which then allows for a narrower focus in evaluative activity.
- *Type of disaster.* Some disasters require recoveries that will occur over a long period, and evaluation timing will have to correspond to this.
- *Timing of evaluation.* For example, where some sense of progress needs to be made in a very short time-frame, a more focused and internally conducted review may be sufficient.
- *Community data collection capability.* Larger communities tend to have better data collection systems already in place, and/or are better able to build systems specifically for monitoring disaster recovery progress. Similarly, disaster-affected communities that align with the boundaries of existing 'statistical areas' tend to have an advantage in terms of data collection, as they are able to draw more neatly on government and other publicly available data sources.

5.2. Key evaluation questions

Evaluations are also given focus by the identification of Key Evaluation Questions (KEQs). We first list a set of KEQs that relate to common elements of recovery programs: the governance of the recovery process, and community engagement.

5.2.1. Governance of the recovery process

It is generally recognized that the system to manage and oversee the delivery of recovery programs is itself an important element in achieving recovery objectives. Governance arrangements are needed to ensure that interventions are timely and efficient, and because governance is crucial to engaging the community, key stakeholders, and agencies. It is central to the theory of change guiding this Framework that the governance arrangements are understood as critical activities for achieving community-led recovery.

Governance structures can help achieve recovery outcomes by:

- taking a long-term perspective on outcomes and recognizing the complexity of the process
- ensuring recovery programs are monitored on a regular basis
- ensuring programs are adaptive to changing needs and impact

- ensuring recovery plans clearly define roles and responsibilities for disaster recovery
- ensuring governance procedures conform to legislation, policies, and other plans
- establishing community-managed funds and other resources for disaster recovery
- having a shared understanding among stakeholders regarding disaster recovery responsibilities, authority and decision-making
- ensuring governance is transparent and accountable
- managing unintended consequences that might flow from recovery activities
- coordinating response and relief efforts with the recovery process so that the two 'work together'.

Each of these functions of recovery governance can be recast as evaluation questions to assess the extent to which these functions supported the realization of recovery outcomes.

5.2.2. Community engagement

If the disaster recovery process is to be community-led, the affected communities must be involved in the governance of the recovery programs. This will include:

- stakeholder/community engagement in a timely and on-going way that provides adequate representation of community views
- establishing a shared vision of a sustainable and resilient community that is understood by the community
- joint planning between community actors and emergency teams and structures
- organisations having capacity to develop and manage community volunteers for disaster recovery
- recovery plans are developed through participatory processes
- the community having the capacity and formal avenues to lobby and challenge external agencies on disaster recovery plans, priorities, and actions
- inclusion/representation of vulnerable groups in community decision-making and management of disaster recovery
- agreed plans and management arrangements are well understood by the community and all disaster management agencies
- information is developed and disseminated in multiple media, multi-lingual formats, alternative formats; is appropriate to a diverse audience, user-friendly; and accessible to under-served populations
- community members have information they need to continue recovering from the disaster
- evolving community needs are assessed and prioritized during the recovery process to inform recovery activities
- governance processes are appropriately inclusive and representative of the affected community.

Reformulating each of these functions into questions will help answer the overarching engagement question: 'How appropriately did the engagement process draw from the community to ensure the community was integral to the recovery process?'

In addition to KEQs addressing these two aspects of the recovery process, some evaluations will focus on whether these outcomes were achieved (effectiveness) or achieved in the most efficient manner (efficiency). Other evaluations may focus on the process by which they outcomes are being achieved (implementation). For each of these broad objectives, several KEQs can be adopted.

5.2.3. Effectiveness

- To what extent did the disaster recovery program produce a sustainable community?
- To what extent did the disaster recovery program produce a resilient community?
- Was there any trade-off between achieving resilient outcomes and sustainable outcomes? If yes, how was this negotiated?
- To what extent did program activities and resources allow positive interaction among the recovery domains?

5.2.4. Efficiency

- To what extent did the program achieve the right balance between centralisation of some activities to achieve economies of scale while at the same time being responsive to local needs and conditions?
- Did the program prevent price escalation stemming from the level of demand and competition between organisations?
- How well did the program balance the need to optimize between cost of restoring essential public assets and the cost of delaying such projects?
- How appropriate were the price benchmarks used to evaluate service providers?

5.2.5. Implementation

- Was the recovery program consistent with the *National Principles for Disaster Recovery*?
- To what extent has the program been implemented according to the recovery plan? In cases where activity has departed from the recovery plan, how was this managed and what were the implications?
- Did the speed of the recovery process compromise quality of services?
- Did the recovery program meet community needs as they changed over time and in response to changes in disaster impact?
- To what extent did program activities and resources effectively encourage interaction between outcome domains (for example, did the restoration of cultural assets also promote economic tourism)?
- Where disaster recovery involved several separate components or projects, how well coordinated were these with each other? If each of these components or projects were evaluated separately, did these evaluations draw common conclusions?
- To what extent was the recovery process affected by external factors that may have had an impact on the community's ability to recover (e.g. general economic conditions, microeconomic conditions in specific markets, demographic changes, technological changes, government policy and climate and weather patterns)?

5.3. Other sources of KEQs

In addition to these KEQs, evaluation plans can draw on previous evaluations and the questions they tried to answer. Many of these can be found on the database (see Box 1). Another source of KEQs is the checklist in *Applying the National Principles for Disaster Recovery post-disaster* (available at <https://knowledge.aidr.org.au/resources/recovery-further-resources/>). The items listed there in the tables can be rephrased as KEQs for the relevant aspect of recovery program evaluation.

6. Monitoring disaster recovery

Disaster recovery is an on-going and iterative process whereby programs are adapted as community needs evolve and the impact of the disaster changes in scope and intensity. The progress toward sustainability and resilience cannot therefore be captured retrospectively or at a single point in time; some monitoring of outcomes, and how program activities are delivering those outcomes, must take place.

This regular and planned monitoring of disaster recovery outcomes will help ensure that:

- programs are adapted to emerging needs
- resources can be redirected to meet other outcomes as early outcomes are achieved
- an early warning system is in place to identify progress towards outcomes that are not progressing as planned
- progress toward successful recovery is communicated to the community and other relevant stakeholders
- all the groups involved in the delivery of recovery programs are accountable for their respective performance.

Monitoring should happen through the periodic publication of community recovery progress reports (CRPR). Such reports should be completed according to a timetable set out in the evaluation plan, but it is envisaged that these reports should occur at least annually, and in the early recovery phases on a more regular basis, such as quarterly. The outcomes that are monitored will be specified as part of the data collection plan, a template for which is available at Appendix 4.

Community recovery progress reports must be more than periodic 'newsletters' or information leaflets. These types of publications tend to focus on 'good news' stories and on individual case studies, rather than providing a comprehensive assessment of progress toward recovery outcomes.

To provide this comprehensive assessment, recovery reports should include sections that:

- report on key outcome indicators that are considered significant ‘markers’ of progress for a particular recovery program (rather than reporting on all the indicators that might be relevant). In selecting the indicators that will be included in the reports, consideration needs to be given to any ethical issues related to gathering and reporting the data, ease of data collection, the extent to which the community can be involved in reporting on these indicators, and the range of disaster recovery outcomes that they cover
- provide appropriate qualitative assessments of recovery progress
- summarize the key activities that have been undertaken in the reporting period
- summarize the key activities that will be undertaken in the next reporting period and the outcomes that they are expected to achieve
- identify where progress has not met expectations and discuss the reasons for this and the responses that will be taken for future progress
- identify the ways in which the community has been involved in the recovery process.

This Framework does not specify a format for presenting these community recovery progress reports or a mode of distribution. The media and format for reporting will depend on the nature of the community and other audiences to whom these reports are directed. Indeed, the same report may be presented in multiple formats to suit the needs of different audiences. The relevant forms of reporting should be specified in the evaluation plan, but also be adapted to suit changing needs. But to assist in the development of CRPRs, we cite the following two examples:

- The Greater Christchurch Earthquake Recovery includes a Monitoring and Reporting Plan (<http://ceraarchive.dpmc.govt.nz/sites/default/files/Documents/monitoring-and-reporting-plan-june-2013.pdf>) that provides an overarching guide for monitoring activity, with specific and regular monitoring reports organized around the main outcome domains, such as the Canterbury Wellbeing Index (<https://www.cph.co.nz/your-health/canterbury-wellbeing-index/>)
- The New Orleans Index provides an international example from a very wide scale disaster, which has been published annually (see for example www.datacenterresearch.org/reports_analysis/new-orleans-index-at-ten/). Significantly, the community has been heavily involved in developing this index through the Greater New Orleans Data Center.

7. Presenting, disseminating, and learning from evaluation findings

Evaluations of recovery programs are not undertaken for their own sake; they must contribute to the improvement of that recovery effort (if it is ongoing) and subsequent recovery efforts. In other words, while program evaluations are important to ensure accountability (e.g. that funds have not been misspent; programs have been delivered as planned), they are also important to ensure learning takes place and is fed back into program design.

7.1. Presenting findings

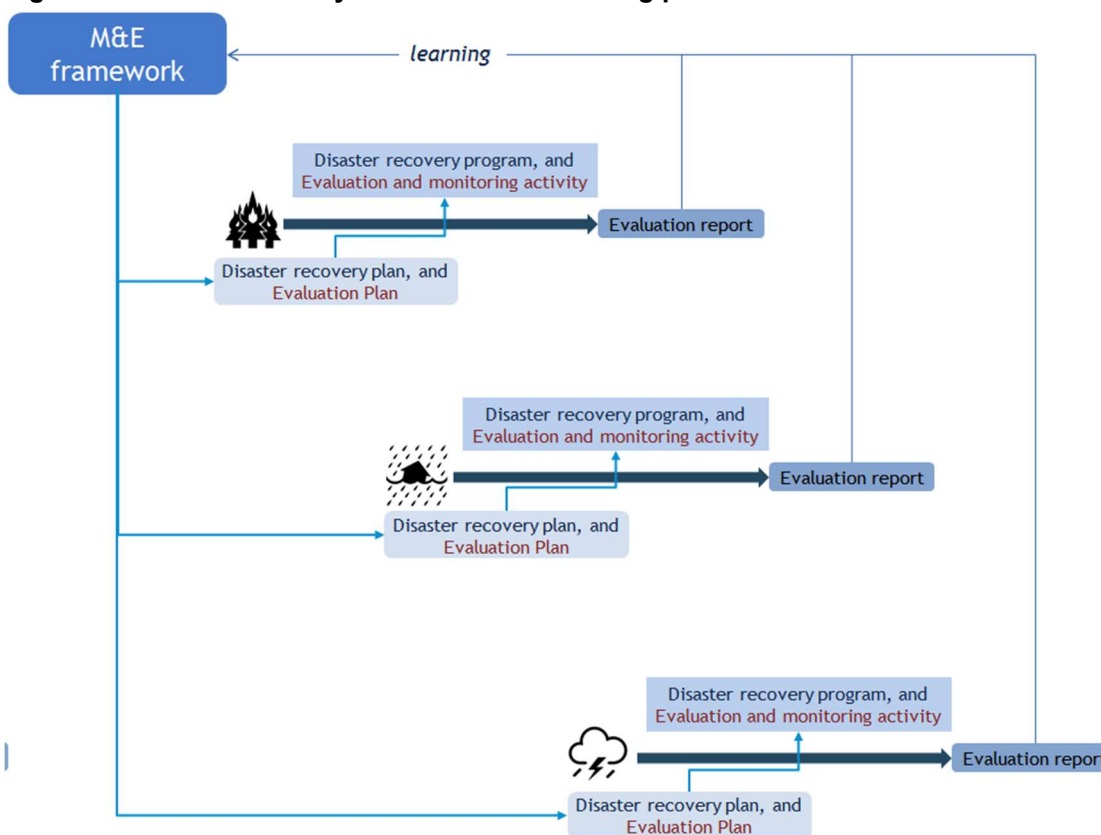
Findings should be presented in a way that is suitable for the intended audience. This general point should be particularly borne in mind when the intended audience includes the affected community. A balance needs to be struck between accessibility of these findings to the affected communities and to the broader public, and the need to be sufficiently comprehensive to inform decision-making.³ This can be addressed by using multiple forms of publication to suit the needs of specific audiences. An example from the US is provided by FEMA at www.fema.gov/pdf/rebuild/ltrc/2011_report.pdf.

The evaluation report itself should include:

- a clear answer to each of the Key Evaluation Questions
- a discussion of the limitations of the evaluation such as any possible sources of bias
- alternative explanations for the results, including the extent to which factors external to the recovery process may have had an impact on recovery outcomes
- a discussion of the extent to which the evaluation looked for both positive and negative unintended consequences
- a discussion of how the results compare with those of similar recovery programs
- a discussion of the extent to which the different data collection methods lead to similar results and a discussion of any differences.

³ In deciding what elements of an evaluation report need to be published and publicly available, the requirements specified by each jurisdiction's whole-of-government evaluation guidelines need to be followed (see Appendix 1).

Figure 6: Disaster recovery evaluation and learning process



7.2. Disseminating and learning from the evaluation findings

As indicated in Figure 6, the findings from evaluations need to inform future recovery planning. A written evaluation report on its own does not ensure that future practice will change. It is important therefore that evaluation reports are accessible to all who might need them, and the findings are widely disseminated. To build this 'culture of learning' several approaches can be taken, listed below. The main issue is to 'repackage' the evaluation report in a way that extracts only the relevant information and presents it in a way that suits the intended audience. Some examples include:

- A summary newsletter to the community or a report in the local media
- An 'advice to practitioners summary sheet' that clearly explains the main aspects of the evaluation that should guide future practice
- For findings that require major changes to future practice, a 'critical reflection workshop' among relevant decision-makers
- Presentations to appropriate committees or groups involved in high-level recovery planning.

Apart from these forms of dissemination, the database should be updated to provide a single point of reference for evaluation learning. Box 6 provides a guide for doing this.

Box 6: Using the database to add evaluation findings

To upload an evaluation report, and other relevant information that will help learning for future recovery programs:

1. Go to <https://knowledge.aidr.org.au/resources/national-recovery-monitoring-and-evaluation/>
2. Instructions on how to **Contribute a resource** to the database is located at the bottom of the page.
3. Complete the form (ensuring you select 'yes' to 'National Recovery Monitoring & Evaluation Database'), upload the report and any other relevant information and select 'submit'.

To facilitate the updating of the database, key elements of an evaluation report can be summarised and uploaded along with the report. Appendix 5 provides an illustrative example of a table that would capture this information. In essence, this table is simply a reformulation of the program logic that was used to guide the evaluation, with additional information from the data collection plan. The production and uploading of such a table, along with the evaluation report, could be made a required output when contracting external evaluators.

8. Implementation and review of the Framework

The existence of a Framework for disaster recovery on its own will not ensure that it is implemented. A series of workshops with key stakeholders were held in parallel with the development of this Framework to discuss practical steps that can be taken to ensure the Framework is implemented. The following lists these steps.

1. Build evaluation capability among the various groups that might be involved in implementing this Framework. For example, program design staff will have to have some working knowledge of how to design program logics and how to commission evaluations that will satisfy the requirements of this Framework. This will not be the same set of capabilities that might be expected of the team of people who will undertake the evaluations.

To support capability building, a set of disaster recovery case examples have been developed and are available from the database (<https://knowledge.aidr.org.au/resources/national-recovery-monitoring-and-evaluation/>). These case examples can be used to build the skills needed to apply the Framework in a context that does not have the immediate urgency of an actual disaster. They can be used as scenarios around which relevant teams can be brought together and build the relevant capability. For example, these examples can be used to work through the steps detailed in Section 2 or Section 3, or both. The output of these exercises can then be part of a reflective practice exercise to further develop necessary skills in evaluation planning and implementation.

2. Ensure senior management understand the principles embodied in the Framework and communicates to all staff the need to follow its principles.
3. Reference the Framework in relevant material and documentation. This includes State and local government tools for disaster recovery planning, such as state recovery plans, emergency management plans, community recovery handbooks and operations manuals. It also includes staff 'induction' processes and documents, websites, and evaluation tender documents and other tender documents involving evaluation work.
4. Communicate the role and principles of the Framework with preparedness and relief/response teams so that they can draw on any relevant content.
5. Communicate the role and principles of the Framework to NGOs and other external organisations.
6. Coordinate with other relevant government agencies, such as those involved with asbestos removal, biohazards, and counterterrorism.
7. Engage with relevant public-sector evaluation units. Many government agencies have evaluation teams with high levels of expertise. To effectively draw on this expertise when conducting evaluative activity, the content of this Framework can be proactively discussed with them and how they can support its implementation.
8. Ensure funding for evaluative activity is built into recovery planning and implementation budgets 'up front'.
9. The key findings from each disaster recovery evaluation are incorporated into the database to inform subsequent disaster recovery programs.

The Framework itself should be periodically reviewed and revised. This can only be done after a sufficient period has elapsed and experience using the Framework has accumulated (for an example of how this can be done see the Case studies section of Twigg, 2009). It is anticipated that a review of this Framework will be undertaken every 3–5 years. After a sufficient body of evaluations have been conducted this Framework itself should be reviewed. This will include the extent to which the community-led/government-assisted logic that guides this Framework is appropriate for designing recovery programs. It should also involve a meta-review of evaluations to assess the extent to which they met the requirements of the Framework and whether they lead over time to improved program delivery.

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Appendix 1: Resources for disaster recovery evaluation

Official government resources

National Principles for Disaster Recovery, 2018, December, <https://knowledge.aidr.org.au/resources/recovery-further-resources/>

Community Recovery Handbook 2, 2018, Australian Emergency Management Handbook Series, <https://knowledge.aidr.org.au/resources/handbook-2-community-recovery/>

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NSW Recovery Plan, <https://www.emergency.nsw.gov.au/Pages/publications/plans/supporting-plans/recovery-plan.aspx>

NSW Ministry for Police and Emergency Services, 2012, *NSW State Emergency Management Plan*, (EMPLAN), December 2012, <https://www.emergency.nsw.gov.au/Documents/publications/EMPLAN.pdf>

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Whole of Government evaluation guidelines

Commonwealth Department of Finance, Public Governance, Performance and Accountability Act, www.finance.gov.au/resource-management/performance/

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Appendix 2: Glossary

Activities

Things the program does with available resources to meet its objectives.

Built domain

“Those human-made assets that underpin the functioning of a community” (*Community Recovery Handbook*, 2018: 92).

Capability

Skills and knowledge possessed by members of the affected community, such as awareness of disaster risks and appropriate disaster mitigation strategies.

Community

“A group with a commonality of association and generally defined by location, shared experience, or function. A social group which has a number of things in common, such as shared experience, locality, culture, heritage, language, ethnicity, pastimes, occupation, workplace, etc.” *AIDR Knowledge Hub Glossary*

Community Recovery Progress Reports

Documents that monitor and report on a regular basis the progress and future plans for meeting disaster recovery outcomes.

Disaster recovery program

A set of activities that deploy resources with the aim of achieving disaster recovery outcomes. Disaster recovery programs can range from small programs targeted at a particular outcome or outcomes, or towards overall community recovery.

Economic domain

The system whereby the affected community’s material and service needs are met through appropriate labour and employment, business development, land use, financial resources, and interaction with the broader economy.

Environmental domain

Encompasses the natural and cultural resources of the community.

Evaluation

Any structured evidence-based analysis that draws together data (quantitative and/or qualitative) to answer questions about the effectiveness, efficiency, appropriateness, and implementation of disaster recovery programs, using clear criteria and standards for assessing the ‘success’ of the program against particular desired outcomes.

Evaluation plan

A ‘document’ that sets out in detail how evaluation activities will be conducted to ensure that key evaluation questions are properly answered in the evaluation report, and that standards of success are established prior to evaluation activity being undertaken.

Evaluation report

The ‘document’ that presents the findings and recommendations from a disaster recovery program evaluation.

Government assistance for disaster recovery

Any activities that are ‘sponsored’ by government agencies, even where these activities are delivered by non-government organisations (NGOs). They are activities that are (1) more than the usual level and type of government services that would be provided to similar communities that are not affected by disasters, and (2) whose aim is to get affected communities to a point where they can continue the recovery process on their own terms.

New normal government services

Government services provided to a community after disaster recovery that are consistent with a similar community not affected by disaster.

Outputs

Direct products of the program's activities; evidence that the program was implemented.

Outcomes

Changes in participants' knowledge, behavior, skills, status, and level of functioning, or changes to an institution such as environmental conditions and organisational capacity, because of the program.

Program logic

Captures in a diagrammatic form some underlying understanding about what it takes to achieve 'successful' recovery.

Resilient community

A community that is better able to withstand a future disaster.

Social domain

The "relationships connected by networks of communication ... [it] consists of individuals, families and common interest groups that form whole communities" (*Community Recovery Handbook*, 2018: 79).

Sustainable community

A community that has the capability to manage its own recovery, without government disaster-related assistance.

Appendix 3: Example of a flyer for community engagement in evaluation

EVALUATION OF THE DECEMBER STORMS RECOVERY PROGRAM

BACKGROUND

The Australian and State governments, with your local council, have funded a range of activities to help your community recover from the December storms.

As part of this the government would like to know if this recovery program is effective: has it helped your community recover?

To answer this question, we have engaged XYZ Consultants to work with the community to evaluate the recovery program.

KEY CONTACTS

If you would like more information, or would like to express your interest in being involved in the evaluation, contact:

Grace Crealy

Director, XYZ Consulting
gcrealy@xyz.com.au

HOW YOU CAN BE INVOLVED

You can participate in this evaluation in several ways:

- Attend a community briefing session where the evaluation team will outline what it plans to do. This will be held in the **Community Hall on 12 February at 7 pm**
- Be part of a committee to give regular feedback and advice to the evaluation team on the work it will do
- Join one of the focus groups where the evaluation teams will hear about community experience of the recovery program.

HOW THE COMMUNITY WILL BENEFIT

Helping the evaluation team will benefit your community by:

- Ensuring that government programs address the real needs of the community
- Improving the community's resilience to future disasters
- Making sure that all community views are represented in recovery planning.

The evaluation team will report its findings in July and this will be made available to the community. Watch the local media and local government website for more details.

Appendix 4: Disaster recovery data collection plan template

Outcome	Indicators	Data collection method	Responsibility for collection	Baseline measure	Interim reporting requirements	Desired change in measure and date
<i>Selected from the database across the four domains</i>	<i>Selected from the database and any others that are appropriate</i>			<i>Where appropriate, this should be pre-disaster measures, or comparison measures from similar unaffected communities</i>	<i>Indicate whether this will be included in a Community Recovery Progress Report</i>	<i>At least specify date at which outcome is expected to be reached and the desired level/change that will define success</i>
Outcome 1						
...						

Appendix 5: Developing an evaluation plan

The processes described in the Framework will often be captured in an evaluation plan, which lays out how a specific disaster recovery project will be evaluated. The plan serves both as a management tool to ensure that the evaluative work follows agreed procedures, and also ensures that the final evaluation report will have the necessary elements that will facilitate learning. The plan should include the following sections:

1. Statement of objectives and outcomes.
This section should identify its audience and the decisions that will be informed by the evaluation
2. A program logic.
3. A grouped list of evaluation questions.
4. Agreed definitions of key constructs and how to measure them.
5. Data collection and management.
As part of this the following issues are addressed:
 - Issues of sampling
 - Ethical considerations in conducting the evaluation and how these will be handled.
6. Evaluation management plan and governance structure.
This will identify how the evaluation will be conducted independently and to an appropriate standard of rigour. It will also discuss how community engagement will occur as well as an overall stakeholder engagement plan.
7. Evaluation capability needs and development.

Appendix 6: Monitoring and evaluation summary sheet

Complete this summary sheet⁴ with submission of recovery program evaluation reports to the National Disaster Recovery Monitoring and Evaluation Database.

Examples are provided below each criteria – provide the relevant information for your submission by typing over the grey text in final row of the table.

Outcome	Major activities used to achieve the outcome	Outcome indicators	Method of data collection	Notes
<i>The outcomes that were evaluable (from Tables 2-6 in the National Monitoring and Evaluation Framework for Disaster Recovery Programs). These are usually identified in the program logic.</i>	<i>For each outcome, provide a high-level outline of the major activities carried out to achieve it as part of the program (even where these were not effective).</i>	<i>Outline the indicators by which the outcomes were measured (not the results of the measurements).</i>	<i>Outline the techniques used to collect data on the indicators (for example, community survey; secondary data from the ABS Census).</i>	<i>Outline other important considerations that should be taken into account when using these outcomes, activities and indicators in the future.</i>
Examples				
The community is not experiencing excessive stress and hardship arising from the disaster.	Provision of financial counselling through existing financial counsellors.	<ul style="list-style-type: none"> Demand for financial hardship support through NGO welfare agencies Number of community members registered on energy retailers' hardship programs 	<ul style="list-style-type: none"> Secondary data from NGOs Secondary data from energy retailers 	Need to ensure data is specifically about financial counselling and support.
Outcome	Activities	<ul style="list-style-type: none"> Indicator Indicator 	<ul style="list-style-type: none"> Technique Technique 	Notes

⁴ This summary sheet is derived from the National Disaster Recovery Monitoring and Evaluation Framework for Disaster Recovery Programs developed by the Australia and New Zealand School of Government.

Appendix 7: Our approach to developing this Framework

This Framework was developed through several related processes.

Meta-review of previous literature reviews

This Framework is informed by a number of reviews of the literature on disaster recovery. These are not extensively cited within this Framework, but we acknowledge the contribution that each has made to the development of this Framework:

- Archer, F, McArdle, D, Spencer, C and Roberts, F, 2015, *Literature Review: What Does Good or Successful Recovery Look Like?* Monash University Injury Research Institute.
- Regional Australia Institute, 2013, *Domestic and International Practices in Long-Term Economic Recovery: Literature Review*, Regional Australia Institute. <http://inform.regionalaustralia.org.au/rai-research/item/domestic-and-international-practices-in-long-term-economic-recovery-literature-review>
- Regional Australia Institute, 2013, *From Disaster to Renewal: The Centrality of Business Recovery to Community Resilience*, www.regionalaustralia.org.au/wp-content/uploads/2013/08/From-Disaster-to-Renewal.pdf.
- Ryan, R, Wortley, L, O'Shea, É, Molloy, L, and Campbell, N, 2015, *Review of Current Evaluation Practice Material*, Centre for Local Government, University of Technology, Sydney.
- Winkworth, G, 2007, *Disaster Recovery: A Review of the Literature*, Institute of Child Protection Studies, Australian Catholic University.

Meta-review of official disaster recovery guidelines

Australian disaster recovery guidelines, as well as disaster recovery guidelines from other English-speaking countries, were collected. These official disaster recovery guidelines served as an important base to establish common meanings of disaster recovery, an understanding of disaster recovery concepts and to begin conceptualising the program logic for disaster recovery.

Review of past evaluations

Past evaluations were collected, guided by the grey literature accumulated by Ryan et al (2015). From these evaluations we were able to understand how disaster recovery has been evaluated in the past, source common activities undertaken in disaster recovery, as well as how success was measured quantitatively and qualitatively. The activities and indicators were entered into a database, which forms the database for future evaluations of disaster recovery.

There is a variety of reports that assess disaster recovery programs: formal inquiries or reviews, academic papers, consultant reports, agency evaluations and community reports.

Facilitated workshops with ongoing expert review

A series of workshops were held to seek the former Australia-New Zealand Emergency Management Committee Recovery Sub-committee's feedback in developing various parts of the Framework. Experts were also enlisted during this process to attend workshops and provide continuous feedback as the Framework was developed.

Peer-review

Evaluators experienced in disaster recovery were engaged to provide feedback on the first draft of the Framework and the database from a practical evaluation perspective.

Trial of using the Framework to evaluate two recovery programs

ANZSOG was engaged by the Australian Government to undertake a trial of the first (2016) version of the Framework in two jurisdictions using real life disaster events. The aim of the trial was to assess the practical application of the Framework. Results from the trial were used to further refine this second version of the Framework.

The two recovery programs chosen to trial the Framework were:

- the Pinery bushfires recovery program in South Australia, and
- the Mildura storm recovery program in Victoria.

ANZSOG sub contracted University of Technology, Sydney (UTS) and Urbis Pty Ltd (Urbis) to assist in the trial. A Discussion Paper with recommendations was discussed in December 2017 at a national workshop, and the suggestions from this meeting were used to revise the Framework.