

Sustainable disaster preparations, evacuation and recovery planning.

The Woodgate Beach example.



**Woodgate helping Woodgate
Maximise safety and recovery; minimise loss.**



Prepared by Dr Douglas Goudie 16/4/7 Updated 7/5/8

Woodgate Beach, Isis Shire Queensland

Disaster preparations and evacuation plan **Woodgate helping Woodgate**

Goal: Maximise safety and recovery, and minimise loss.

This draft Preparation and Evacuation plan is for residents, formal response groups, Isis Shire Disaster Management Group and Isis Shire Council

The process is to help Woodgate Beach residents (and visitors) maximise safety and minimise loss through disaster preparations, impacts and recovery. This Disaster preparedness and evacuation plan needs to be realistic and achievable, relying mainly on locals working together under the Local Disaster Management Group and the local State Emergency Services group.

Refined and approved by Woodgate Beach SES Group

.....
Signed	Name	Date

Refined and approved by the Community Safety Group

.....
Signed	Name	Date

Refined and approved by the Isis Shire Disaster Management Group

.....
Signed	Name	Date

Refined and approved by the Isis Shire Council

.....
Signed	Name	Date

Contents

Title	Page
Goal and approvals	2
Glossary	4
Objectives self-help, 6 steps	5
Overarching evacuation approach Defining threats	6
Community preparations and evacuation plan	7
Disaster preparation and evacuation plan detail	10
The Steps	14
Standing preparation and evacuation procedures Social good and social policy	18
The Community Safety Group	19
Conclusion	20
Useful web links	21
Appendix 1 Some background to operational structures if evacuation needed	22
Appendix 2 Local knowledge of threats	37

Rail as possible evacuation strategy



GLOSSARY

ADF	Australian Defence Force
AUSVETPLAN	Australian Veterinary Plan
BoM	Bureau of Meteorology
CDRS	Counter Disaster and Rescue Services
CBR	Chemical, Biological, Radiological
CBRE	Chemical, Biological, Radiological Emergency
CI	Critical Infrastructure
CTLO	Counter Terrorism Liaison Officer
CSG	Community Safety Group
DACC	Defence Aid to the Civil Community
DDC	Disaster District Coordinator
DDCC	District Disaster Coordination Centre
DDMG	District Disaster Management Group
DDMP	District Disaster Management Plan
DES	Department of Emergency Services
DM Act	<i>Disaster Management Act 2003</i> (Qld)
DOC	Department of Communities
DPI	Department of Primary Industries
EAP	Emergency Action Plan
ECC	Earthquake Coordination Committee (Queensland)
EMA	Emergency Management Australia
EOC	Emergency Operations Centre
EPA	Environmental Protection Agency
FMD	Foot and Mouth Disease
ICS	Incident Command System
ISC	Isis Shire Council
LDMG	Local Disaster Management Group
LDCC	Local Disaster Coordination Centre
NDRA	Natural Disaster Relief Arrangements
QAS	Queensland Ambulance Service
QCCAP	Queensland Coastal Contingency Action Plan
QFRS	Queensland Fire & Rescue Service
QFRS-RFS	QFRS – Rural Fires Service
QLDVETPLAN	Queensland Veterinary Emergency Plan
QPS	Queensland Police Service
QR	Queensland Rail
QT	Queensland Transport
QTCCC	Queensland Tropical Cyclone Coordination Committee
RAAF	Royal Australian Air Force
SATP	State Anti Terrorist Plan
SCC	State Crisis Centre (established for terrorist incidents)
SDCC	State Disaster Coordination Centre
SDMG	State Disaster Management Group
SDMP	State Disaster Management Plan
SDRA	State Disaster Relief Arrangements
SEWS	Standard Emergency Warning Signal
SES	State Emergency Service
SOP	Standing Operating Procedures
XO	Executive Officer

WB Disaster Preparations and Evacuation plan

Developed by Douglas Goudie, the WB community, SES and LDMG

OBJECTIVES

The objectives of this plan are to:

ensure maximum preparation and minimum impact on property and residents, and:

- coordinate community safety
- identify hazards that may impact, and understand their likely effects;
- confirm emergency services and supporting agencies' responsibilities in prevention, preparedness, response and recovery.
- establish and maintain a Community Safety Group, lead by SES.
- ensure this plan integrates with LG and DDMG planning, exercising and training through LDMG planning, exercises and training
- ensure resource support for the above is secured and maintained.
- ensure the Woodgate group LDMG coordinates arrangements with the LG & DDMG.
- liaise with the LDMG as needed to ensure the provision of State resources and services.
- review communications systems.

Preparations and evacuation self-help approach

To nurture aware, informed residents preparing to be safe through, and recover from natural disaster impacts.

For most threats, household preparation is necessary, although evacuation may not be necessary. Making safe where you are if intrinsically safe is the best approach to most disaster threats. If unsure of ongoing safety where you are, early and precautionary self-evacuation to somewhere clearly safer is recommended. In this way, the formal response groups will have reduced last-minute responsibilities, and recovery will be easier than mass last minute efforts to flee an imminent impact.

Six steps to community safety

1. Encourage those in hazard zones to accept that the risks are real.
2. Help create an aware, informed community, predisposed to safety-oriented action, as a precaution; as a practice.
3. Encourage information-sharing and support among friends, neighbours, family.
4. Seek hazard details and 'what to do' (action) information, via reliable sources, including web and community media.
5. When a hazard is threatening, messages should clearly convey: *this is real, this is coming at me. I need to make safe where I am, or move early to somewhere much safer. I will not travel during the impact period.*
6. Listen to timely, effective weather warnings and fine location and upcoming weather detail, and recommended local responses from SES and the Disaster Management Group.

WB Disaster Preparations and Evacuation plan

Developed by Douglas Goudie, the WB community, SES and LDMG

Overarching evacuation approach

- Identify vulnerable areas or houses
- Evacuate caravan park, visitors, people at risk unable to easily move themselves

The planning process:

1. DEFINE THE THREATS –

Fire, flood, wind, cyclone surge, earth movement, tsunami.

2. MOVE FROM WHERE TO WHERE?

Fires can be fought; floods, storm surge and cyclonic winds, tsunami or earthquake cannot be. IN all threats, make sure your property is as secure from impact as possible.

3. IDENTIFY THE VULNERABLE – Which buildings, infrastructure and people may be in the threat zone

Woodgate Beach Community preparations and evacuation plan

Threats and treatments

An all-of-community approach, lead by the SES and the CSG, supported by a committed Isis Shire (LG) Disaster Management Group, will develop an annual round of public education projects, press releases and pamphlets to inform residents and tourists of the annual cycle of dangers to be wary of, from cyclones to fire care and management. The Council newsletter will form a consistent source of information on threats and how to minimise risks, from the flying debris of a wind storm to being patient at a flood-swollen creek crossing.

This *preparations and evacuation plan* for Woodgate Beach nests within the Isis Shire Disaster Management Plan. This plan considers and summarises strategies to reduce impacts of extremes of natural or human error threats on Woodgate beach.

General approach

A main focus of this plan is cyclone impact and cyclone surge, highlit by a previous Disaster Risk Management Study and two day exercise in March 2007. There is one flood-prone feed road into Woodgate Beach and Walkers Point.

SEQUENCED EVACUATION – for storm surge, the only threat likely to need extensive evacuations:

1. Aged, infirmed, and those without cars in the highest risk, lowest areas. Move them first, in a precautionary way, as a practice.
2. Next most vulnerable group, in the lower areas.
3. Those that *may* be flooded in a major surge.

There are 4 stages to this plan: background preparations; near-impact (ramp-up) preparations; during impact, and recovery.

Background preparations

1. Woodgate Beach residents recognise and act on the need for background preparations to minimise the impacts of all hazard impacts. This includes property maintenance and upkeep.
2. Provide newcomers with an information pack, including a copy of extracts of this Community preparations and evacuation plan (CPEP). All community members, including tourists, the elderly, infirm, and needy are incorporated into this CPEP.
3. Provide dot points on evacuation for local residents in *Disaster Preparedness Information Kit*, delivered to each household.
4. Expose tourists to the essence of local threats and what will be expected of them: leave early, unless they or their vehicles can actively help, under direction.

5. Define safe shelters - preferably with friends or compatible households. Organising possible billets for any major impact on portions or all of Woodgate Beach can form a key function of the Community Safety Group.
6. Prepare logging sheets to record evacuation: name, home address, destination address and contact phone, car registration number.
7. Liaise with Queensland rail for viability of using the rail crossing as an emergency link with Woodgate Beach (Photo p3).
8. Go through whole plan, and address matters like the caravan park needing auxiliary power for fuel pumping before the cyclone season.

Threat types and community preparations

Fire

Conducting small controlled cool burns of about 30% of the town edge each cool season would reduce the risk of urban fire damage. Know that water pressure may be very low as a major fire approaches. The most vulnerable households are advised to have independent water reserves, petrol pump and competent fire fighting gear and clothing. The power may be down, and local fire trucks elsewhere.

The areas of Woodgate to the SE and NW are deemed most bushfire vulnerable, although poor conditions on an extreme fire danger day after prolonged drought and strong westerly winds means many houses in Woodgate may be subjected to ember attack. All residents are encouraged to be fully bushfire prepared each bushfire season and have their properties as fire-proofed as possible. If well prepared and psychologically and physically able, the usual recommendation is to stay and defend. Few people burn to death in their homes in a bushfire. The overwhelming likelihood is that you will save your house from ember attack and spot fires – see bushfire web sites, download for general use in understanding bushfire safety.

Flood

Authoritative local knowledge indicates no dwellings are flood vulnerable. However, when there is a major flood threatening, people in low lying areas near known flood maxima are advised to move from their homes, taking valuables (things which cannot be replaced that you value); before their exit routes are blocked¹. If in a low-lying home, consider leaving early to a prearranged support household of family, friend, or otherwise arranged.

Some signage informing of the rise and fall of streams may convince travellers to wait rather than foolishly trying to cross temporarily dangerous waterways. Most flood drownings or rescues are people trying, perhaps for reasons good for them, to drive through swollen waterways. Don't.

¹ Many people in Cloncurry were unprepared and flooded out when floodwaters in 1997 rose 2 m higher than 100 years of known flood levels. Because of the spill-over into the sea, extreme floods are unlikely, unless combined with very high or storm tides.

Destructive winds – mainly from cyclones

Older, flimsier houses tend to disintegrate in severe cyclones (Category 3 or above). Houses built to withstand greater wind loads after 1983 tend to remain largely intact through cyclonic winds. Houses surrounded by trees tend to remain more intact through cyclones. If your home is above 4 m and has a core strong area, like a central bathroom, it is probably safe to stay through a cyclone impact – if you can cope with the terror usually induced by the sound of the gale, and your fear ‘the house may go’. Evacuate early if you want to minimise the psychological trauma, but evacuate to somewhere clearly much safer – inland, up slope, strong, protected, with little debris around it which may become airborne missiles.

Practical measures to reduce the impacts of destructive winds include cleaning up around buildings, re-screwing roofs, and improving structural strength as buildings receive maintenance or upgrades.

Storm surge

In a worst case, a storm tide connected with a Category 5 cyclone may increase seawater level 4 m above normal tide level. Judging who should evacuate (ahead of exit routes being flooded) will depend on the Bureau of Meteorology predicted storm tide height, the tide height around forecast storm time impact, and how accurate the predictions prove to be. The spot Australian Height Datum (AHD) levels in a map provided to SES by ISC should be used in lead-up evacuation decisions based on the above.

Tsunami

The likelihood of a tsunami overtopping the fore dune is miniscule. In the event of a tsunami alert, the local formal response from the March 2007 tsunami – stay back from the beach, be prepared to move to higher ground - should be adequate. Use of the CSG and the loudhailer on the fire truck to alert all residents rapidly of any large-scale threat, including a tsunami, forms part of the final preparations plan, when evacuation needs and inclinations can be assessed and acted on.

Earthquake

Evacuate those whose homes are compromised to other local residents if practicable, whilst SES keeps a register of who has gone where. If lifeline services are severely compromised, an evacuation staging ground at Goodwood School is recommended, whilst billets in households which remain safe and functional can be found.

Signs and information for outsiders

Anything which helps outsiders find their way around is important, especially during disasters. Using and upgrading understanding of the Rural Addressing system coupled with increased road signage is encouraged. Also, local knowledge should be used to direct large scale emergency responses.

Near impact preparations

1. As news of a disaster threat arrives at Woodgate, immediately inform the local SES (phone contactsxx).
2. As the nature of the threat is made clear, an early meeting of the SES can decide the level of response, from a 'watch', through an 'alert' to a 'warning'.
3. SES decide whether and when to call in the Community Safety Group to ensure the whole community is aware of the threat.
4. SES to consult with and take direction from the Isis Shire LDMG.
5. Depending on the severity of the threat, the SES may recommend residents enter the final impact preparations and consideration of informal, precautionary self-evacuations.
6. Facing a major threat, the SES fully mobilise resources to make property, people and pets as safe as possible according to the following plan.
For bushfire: if people are psychologically and physically able to stay and defend, they are encouraged to do so. If not, evacuate early. Evacuate to friends or the Community Hall.
7. An initial staging ground for evacuation can be the oval connected to the Community Hall.
8. Evacuees to mark their vacated house with a secure and prominent peach of white cloth.
9. Final action plan:
 - Call Ergon to cut power because of danger from fallen lines (see later about fallen power lines)
 - Develop a communication protocol.
 - Formally alert First Responders. They generally only respond to instruction from Ambulance Service. This protocol may need to be waived in an emergency, when police can commandeer them.
 - Use Council database of Woodgate residents to log/record evacuations. An updated copy could be filed with SES, RFB and NW. At road blocks logged information to include: name, no. of people in vehicle, where from, where to, number plate.

During impact

1. Fire: fight fire under direction of the fire brigade.
2. Cyclone: stay in strong upslope shelter whilst wind gust to 100kph +. Do not go out during the calm passage of the eye.
3. Flood: do not drive into flood waters. Restrain people from playing in flood waters.
4. Tsunami: head up slope immediately.

Recovery

1. Arrange rapid testing and repair of lifeline infrastructure, especially roads, bridges, power, mains water and sewage treatment.
2. As soon as safe, the SES reconvene to manage sequenced return of any evacuees.
3. Under the direction of the LDMG, the SES help secure buildings from further damage, and coordinate provision of essential services.
4. As buildings are deemed safe, allow able-bodied residents back into their homes as quickly as water and sewage facilities allow.
5. Arrange counselling as needed.

Note in Appendix 1, the clause: ***Exercising the plan.***

Disaster preparation and evacuation plan detail

Using disaster and Bureau of Meteorology web sites and ABC radio, Community members calmly alert each other of arising threat as it becomes known. The Community Safety Group can have media and web watchers. The CSG can devise phone trees and, under SES direction, conduct neighbourhood door knocks, with redundancies built in.

Elderly and infirm take priority to move to agreed locations of safety.

- Depending on the scale and nature of the threat and consequent precautionary evacuation, buses may be needed from: school, club, Bundaberg (3-4), along with suitable volunteer transport.
- Keep register of disabled and infirm consulted.
- Need log of those leaving.
- SES to road block at Goodwood: turn back visitors, record names, registration numbers, track movements. In event of a breakdown, there may need to be a motor bike patrol. Goodwood Fire Brigade could clear vehicle if kept in radio contact. Keep 2 lanes open for traffic out.

Contact police for approval to close lane. This request goes to LDMG, then Council workers or SES can be sent to man Goodwood entry.

- Keep command post manned.
- Knowledge of evacuation destination would make movement easier. Goodwood school is the closest establishment but does not have support services. Better as a staging post. Bundaberg is better if accessible.
- The fire truck has a PA system for alerting residents.
- Have lists of rental houses to indicate early if vacant.
- Work with caravan park and Park Ranger to help identify any camping or caravanning tourists. Ensure they are aware of the threat and what they should do.
- Record offered emergency room or shelters (SES).

- From BoM web site, become familiar with cyclone terminology: advice/watch/warning.
- Choose sign to show house evacuated eg sheet tied outside front of house.
- Neighbourhood Watch and Resident's Association can help SES with in planning the best way to contact all Woodgate Beach residents.
- Either have the Community Safety Group inform all residents using the 'Blocks' of Neighbourhood Watch, or: divide town into 4 quarters/zones for canvassing of residents with group task

Zone 1	Woodgate waters	– Fire Brigade
Zone 2	Theodolite to 3 rd Avenue	- SES
Zone 3	3 rd -7 th Avenue	- Neighbourhood Watch
Zone 4	7 th -12 th Avenue	- Res Assoc & Silver Cord
	Walkers Point	- Ian Kirby
- Perhaps teams of 6 from each service to do doorknock. Leave message of visit and reason if house unoccupied. Use detailed maps kept by Neighbourhood Watch to note street numbers visited and state of occupancy.
- If houses used as evacuation points, keep detailed log of those seeking shelter.

Assume power and water may be lost, possibly for days or weeks (this happened with Cyclone Larry in some 'isolated' areas). Assume formal response agencies may have other demands on their time than fully responding to YOUR needs. Self-help at the personal, householder, neighbourhood and community level is the key to maximised safety and minimised loss, moving early to ensure you come through the impact in the best shape possible.

Fire

Fire can happen over the dryer months of the year. The worst fires happen after long hot dry periods. The very worst fires happen in 'bushfire' weather. Do a web search on bushfires.

A fire may start locally and threaten the community quite quickly. Any smoke should be heeded. Dial 000 if you see a small fire. Although most likely from the West or NW, fire can come from north or south as well. Keep you property clear of trees which may burn too easily. If you live next to open bush, and your house is not fully protected, you may chose to evacuate. The biggest issue with bushfire is to be fully prepared to evacuate early, or stay and defend. Web links to these issues are found by web-searching *Bushfire preparations*. DO NOT flee at the last moment. Most bushfire deaths happen that way.

Cyclone

Early self evacuation, ideally to Childers area.

Police or delegates may undertake surveillance work to minimise the fear of looting.

As the threat becomes clearer, evacuate people in lowest areas first, ideally to a strong house, built after 1983, well above any possible flood or storm surge, with 'compatible' people – family, or friends or negotiated billet with like people (another CSG job – organising billets for the vulnerable without their own family or social links to a safe shelter). Make sure your personal valuables are stored somewhere strong, above 6 m.

From Woodgate contour map, T Phillips 14/3/ 7: The area around 1st. Ave is generally about 2 m AHD². Most of WB sits at about 4 m AHD, with the fore dunes rising to 6 m toward the SE end of the beachfront. There are some low areas south of Cyprus St and on the SW area of the block bounded by 2nd and 3rd and 4th Avenues. The area just north of the Acacia St. & 6th. Ave intersection is marked as 3m.

As an emergency storm surge shelter, strong buildings immediately south of the 2nd Ave & Esplanade intersection are built on ground marked as 6m. Emergency shelter may also be possible in the ridge area near Kookaburra Way.

A forecast surge of more than 1m coming in on a high tide³ may cause some damage in the low NW end of Woodgate. Residents of this area, along with those in structural or cladding-suspect houses should be consider precautionary evacuation ahead of a local severe cyclone warning. A predicted surge of more than 2 m above high tide, the extreme modelled event, should probably trigger a general early, precautionary evacuation.

Have 'flood spotters' or methodically monitor through feedback from passing vehicles to give frequent updates on any rising floodwaters at low points in the evacuation route, to feed back to residents wishing to leave the area (see web link below for cyclone evacuation details developed by Goudie for Cairns).

Earthquake

Know to get outside as soon as the first tremors are felt. The CSG, working with SES, can define neighbourhood level checks on the wellbeing of people in any housing that appears damaged, and define 'safe' outdoor meeting places to make sure every-one is accounted for. Assess degree of damage, injury and possible death. Work with, and be directed by formal agencies. This may involve evacuating to the oval. Roads and bridge approaches may be destroyed

² AHD Australian Height Datum, about the mean, average tide height; in turn, about 1.8 m?? below HAT; Highest Astronomical Tide, roughly the same as the 'King' or high high tide.

³ Given as a 'still water' estimate, excluding wave height and funnelling. Wave height may be about ½ the predicted storm surge height, and may flow over estuarine floodwaters on a high tide.

and needs to be treated with great caution after a tremor. Recovery will include making sure food and fresh water is available to all.

Tsunami

If birds and animals go still and quiet, it may be a tsunami. In the extreme, the only advice is to move upslope IMMEDIATELY. Flee for your life. If there is a formal warning, get upslope ASAP, only gathering valuables if the formal warning reliably predicted an impact time allowing you to gather pets and core possessions. If you see the sea drawing away from the coast, flee upslope with great haste. Warn neighbours as you go.

THE STEPS

Steps for the Woodgate Beach community and formal response groups in disaster planning, preparations, ramp-up, evacuation, response and recovery.

1. Identify assembly area for each threat
2. Develop a communication protocol
3. Develop an inventory of earthmoving and heavy vehicles, 4 WD, generators, tarpaulins, able bodied people willing and able to stay and help with final preparations; the aged and infirm who may need special assistance and care.
4. Ensure extra first aid equipment such as oxygen cylinders and bandages are available at all times.
5. Ensure each organisation has a list of people committed to stay and help. The composite list is to be held and kept current by SES.
6. Through the community safety group, develop a log of tasks requested from each service group to act as a guide to effective operation of that group in a disaster. A pro forma is issued and completed. All personnel active in evacuation encouraged to wear tabards for identification.
7. Reinforce the preference for early, precautionary evacuation (as a practice), preferably a day or two before if there is sufficient warning
8. Because of the possibility of earthquake, a communications CB Channel needs to be set in pre-warning phase, with a separate command channel identified. All need to be monitored by command group. The VHF in fire truck and shed can also be used.
9. Neighbourhood Watch can gather data on all local vehicles with UHF and household radio operators.
10. Arrange communication channels.
11. Give widespread encouragement for residents and formal organisations to purchase and use battery operated radios, tuned to ABC or other reliable radio station/s.
12. Management of triage centre is possible with 'Dad's Army' of volunteers from residents Association. This volunteer list needs to be established early in background preparations. Attention to meeting food & drink needs should be established early in background preparations.
13. Need permission to use First Responders. Assemble at command centre.

14. In the event of power failure there are generators which come on automatically to the sewerage pumping station. Need knowledge of how to turn this system off if there is damage to the station or water mains.
15. The fire truck or other heavy, high clearance vehicles, need to be placed on a central SES inventory, for emergency use for such things as reviewing road flooding situations.
16. Buses may be commandeered from Bundaberg & local school bus, potentially used to remove residents without their own transport.
17. If injuries are present or likely, set up triage centre set up at Woodgate Club. There is a generator. Liaise with SES command and listen to battery operated ABC radio, as predicted storm surge may make the club vulnerable.
18. Two houses in Mackerel Street have been offered as a field hospital. They have a generator and 7 beds.
19. Difficult triage decisions may have to be made.
20. Improvise with doors if insufficient stretchers (2) Pinch some mattresses. Cut up sheets for bandages. Keep number of resident chemist and assistant for access to pharmacy. Bring them to control centre
21. Evacuation of injured is preferred if possible and safe to do so.
22. Need back hoe, available operator list & gravel on active standby to repair any prior damage threatening the safe passage of traffic on evacuation route.
23. Need to move deceased to designated morgue. Recommended refrigerated truck from Supermarket, or cool room in pub.
24. Minimise use of showers/toilets. 'If it's yellow let it mellow, if it's brown flush it down'. There will probably be no town water or power; only tanks/pumps generators. Inform residents through radio, check point and PA system on fire trucks. Encourage use of shovel, porta loos.
25. Could have a fuel shortage, but overhead tank by fire shed is gravity feed, so no power will not cause fuel access problems. Ensure tank topped up at all times. National parks has 44 gallon drum of unleaded. Caravan Park pumps have no power- need auxiliary power.
26. If needed, call on EMQ crèche with satellite phone/radio/medical supplies that can come in by 4 wheel drive or boat from Maryborough or Bundaberg.
27. Satellite phones are needed by First Responders to seek medical advice from ambulance/doctors and by command centre
28. In a major emergency or threat, ensure all frail, elderly and inform evacuated as a first priority. Early evacuation of children and carers is also recommended. Some may refuse to move. Make sure evacuees have medications, biscuits, and fluids.
29. Attempt to keep log of evacuees.
30. Attend to food & drink needs of injured and workers.
31. Bowls club can be used as a gathering point. Keep Command Post informed of numbers gathering there. Log all entries.
32. Bus shed on 3rd Avenue can be coupled with SES/RFB spaces to keep resources together.

33. Residents can ascertain their height above sea level through markings on lids of sewerage manholes, remembering any surge generally has to break through frontal dunes first, or come from the low area near the pub.
34. People on second story *may* be fine in a strong house. 'When in doubt get out'.
35. Keep in mind wave action on top of tidal surge (Maximum in 1,000 years 4-5 metres)
36. **FOR A FULL EVACUATION AHEAD OF A CATEGORY 5 CYCLONE IMPACT. ALL PREPARATIONS AND FINAL SHELTER MUST BE GAINED ABOUT 6 HOURS AHEAD OF LANDFALL, BEFORE WIND GUSTS REACH 100KPH:** Ahead of a cyclone, there may be a need to evacuate the Club. Use local 4 wheel drives with room for prone bodies (vehicles and willing drivers on general emergency inventory, updated each September). May set up in Ted Buckland's shed or further on at packing sheds at Goodwood plantation.
37. Let people board up houses and take other precautions before leaving
38. Goodwood School may be used in a staged evacuation. Goodwood RFB to organise as a standing arrangement.
39. Set a deadline for vulnerability of fire shed from storm surge. Ted Buckland's is 10 kms out; a possible site to regroup and prepare to launch recovery.
40. Gain access to body bags through SES and also use triage tags have now been made available.
41. Ensure everyone turns off their gas. If a bushfire threat, make sure the gas vent points away from the house.
42. May need to evacuate volunteers before road floods, in which case only the fittest should remain to last for assistance.
43. Lost persons- check Club first. SES patrols to remain in search mode.
44. SES to ensure medical evacuations from Buckland property are facilitated.
45. Last 10 people from south end to be taken out in Club courtesy bus.
46. Need to organise for (and enforce) regular breaks for all response participants, from First Responders to tea makers and Incident Management Team. This is important.
47. Remaining residents are notified of last bus. No-one can force evacuation?? (especially if guns and bull terriers are involved!)
48. Constantly remind everyone that any downed power lines may be live.
49. Check if possible to control power from sub-station. If so, have responsible local residents gain access and know-how to disable power into the area. If this is achieved, have broadcast over ABC radio.
50. ABC radio can act as a communication channel from the disaster scene to remaining residents and formal response personnel.
51. With some concern over the safety of Goodwood School as an evacuation point if the cyclonic winds are very strong, the packing sheds at Goodwood Plantation may be better. Assess these alternatives.
52. Plan for supplying the evacuation point with food and water. The sheds are to be reconnoitred & facilities noted. If suitable they would need to be set up early on with barbeques, mattresses etc. The troop carrier could ferry food

- from the supermarket & pub in 1 hour round trip. If the Command Centre needs to move- it could go to the Goodwood Fire Shed.
53. Final check of town by SES & RFB
 54. Scale down the final preparation and team. Advise residents to take personal papers, drinking water, blankets, medicines, first aid.
 55. Concern that families have been evacuated and do not have contact with remaining member. Logs are important. SES should have that info from road blocks at Buckland's and Goodwood.
 56. Evacuees have the responsibility to let SES know if they end up in a centre other than the one first advised.
 57. RFB last to leave- check gas stop cocks are turned off on general Store, Supermarket & pub.
 58. Have vehicles and equipment salvaged from command centre on high ground so that it can be mobilized in a few days time once the crisis is over- 6 metre point found on dune on west side of Cypress Street, or 9 metres on Ocean View Drive if accessible across causeway. Tractors, grader, boats may also be taken to higher ground.
 59. Last out (SES etc) will be first back.
 60. **RECOVERY:** Have a disaster recovery coordinator, team AND PLANS IN PLACE TO:
 61. Consider looters – they will try to be first back, by any means. Need an early advanced return to thwart looters.
 62. Check and repair road integrity and safety.
 63. Restrict entry of people until building integrity was engineer-checked and classified to safe, possibly safe and unsafe to approach (coded green, yellow, red), then allow residents to return to view damage, and approach own property according to deemed safety. Some, where structures are marked as unsafe, will not be allowed to closely approach such structures.
 64. Acknowledgement that residents have a strong psychological need to view, and/or sift through ruins as deemed safe.
 65. Allow access to insurance assessors ASAP.
 66. **Needs of returning residents:** Acknowledge that, where safe, people deemed able will want to live back in their homes ASAP. Facilitate this:
 67. Use standing rainwater tanks (Mains water and power may take weeks to restore).
 68. Import and maintaining porta loos
 69. Import generators
 70. Use all available standing accommodation for residents and repair crews.
 71. There are many gas cookers which can be used by early returnees.
 72. Begin repairing houses and making roads fully operational.
 73. Advise elderly and infirm to undertake only occasional day-trips until town operational again, to reduce demands on restricted resources.
 74. Have a roster of First Responders. Replenish supplies as needed.
 75. Bedding, food and hygiene will be priorities dictating rate of residents returning. Need to test water for pumping to supply returning residents.

Standing preparation and evacuation procedures

Social good and social policy

Woodgate Beach, a leading national example

community networking and self-responsibility for community safety is profoundly developed in the 700 strong, Central-coast Queensland settlement. The SES, rural fire service and community groups are made up of dedicated people – a strong asset to the area.

Your self-initiated efforts to maximise community safety and minimise loss ahead of, during and after a natural disaster risk are leading edge: an example other Australian neighbourhoods and local communities can learn from. Like fire-prone residents in the Bega Valley and the fire affected suburbs of Canberra, WB has strong community and neighbourhood links, and a will to look out for each other's wellbeing.

The expertise and initiatives of Woodgate Beach make you unique. Also, the active support of Isis Shire can be held up as an example of good local government. In March 2006 preliminary meetings with Goudie and community members and groups showed a willingness to advance community preparedness and self-help. Woodgate Beach will be threatened by cyclone, cyclone surge, and isolation by flooding and wildfires. And earthquakes.

Acutely aware of your relative isolation, Woodgate Beach initiated an advanced community-based first aid group: The First Responders. That highly trained and well equipped group have saved three lives since mid 2006. The initiative is now being implemented in other isolated Queensland communities; supported, trained and supplied by Queensland Ambulance Service. Woodgate Beach already has a well-earned reputation for formulating and implementing safety-oriented community self help.

In October 2006 an 80-strong community meeting was briefed on risks by earthquake, fire and cyclone experts on ways impacts can be minimised (Goudie D and King D 1999. Cyclone surge and community preparedness. *Austn. J. of Emergency management.* 13:1, 454-60. [http://www.ema.gov.au/agd/EMA/rwpattach.nsf/viewasattachmentpersonal/\(85FE07930A2BB4482E194CD03685A8EB\)~Cyclone_surge_and_community_preparedness.pdf/\\$file/Cyclone_surge_and_community_preparedness.pdf](http://www.ema.gov.au/agd/EMA/rwpattach.nsf/viewasattachmentpersonal/(85FE07930A2BB4482E194CD03685A8EB)~Cyclone_surge_and_community_preparedness.pdf/$file/Cyclone_surge_and_community_preparedness.pdf)). In March 2007, after a 20 strong community group meeting on flood and fire threats and community safety, a 1 ½ day exercise in emergency planning and response to a hypothetical cyclone and earthquake proved the worth of strong community links. In the Operations Control room, run by the SES, there were ambulance, fire-fighter and police representatives. There were also First Responders and other community group representatives: The Silver Cord, Neighbourhood Watch and the Resident Association, along with some designated 'community observers'. Many would-be community observers, due to space in the fire shed, were turned away in the

weeks leading up to the exercise, ably developed by seismologist Jack Rynn. The exercise was a resounding success.

Some outcomes of that meeting are listed below, after the thinking which supports the worth of helping develop the first Australian Community Safety Group.

The Community Safety Group

Purpose

1. Share threat and needed preparation information with neighbours, including new residents moved into the threat zone

At the neighbourhood level, encourage:

1A. Early warning alert

The CSG is an affiliation of existing community groups and neighbourhood-level residents who make first contact with 'walking-distance' neighbours as soon as any-one hears of a warning that a natural disaster may be approaching their area. This would be done by phone calls and casual meetings. At least one person in each neighbourhood 'block' would contact a member of adjoining neighbourhoods to let them know of the developing threat.

2. Final preparations (ramp-up) activation

Early local motivation for final safety preparations, before the formal response structures (Response Agencies/ Operational Staff: SES, Fire-fighters, Emergency Management Groups) are activated – to finalise property preparations to stay if clearly safe, or leave early if the property may be threatened with major damage or destruction. This will place the community in a well-prepared, 'stand-by' state of readiness ahead of formal recommendations.

3. Conduct doorknocks

Under direct instruction from the LDMG/SES, assist or assume responsibility to conduct door-knocks to alert residents once the threat had reached a point where the formal LDMG convenes.

Structure

The street 'Blocks' used as the units by Neighbourhood Watch (<http://www.nhw.com.au>) seem the logical building blocks for CSG units. This has the advantage of being used by what will be an affiliation of community groups and residents, as the lead community group to maximise community safety relating to natural disaster threats. The *community safety group* would activate at the earliest sign of a natural impact threat. Using street blocks with NHW is a structural unit used Australia wide. Whilst there are many state and Territory variations of emergency and fire management, there is a uniform national approach in the established Neighbourhood Watch structure. All affiliated community groups and local residents would, ideally, be linked through

WB Disaster Preparations and Evacuation plan

Developed by Douglas Goudie, the WB community, SES and LDMG

the CSG in Australian disaster threat zones (Note: most Australians are NOT in natural disaster threat zones – only those at risk of cyclone, fire, large hailstones or flood would be candidates to form CSGs).

Woodgate Beach pretty much already is a CSG. To give what you are doing so well the name of CSG means it can be talked about as a leading example, with other Australian communities at risk being encouraged to follow your lead. A WB CSG will make sure even the most isolated community members are included early in the preparations process.

To help achieve full community engagement and coordination in preparations and evacuation decisions and process, form a Woodgate Beach Community safety group, so that such tasks as Step 41 below (Step 41: Develop a log of tasks requested from each service group to act as a guide to effective operation of that group in a disaster. A pro forma is issued and completed. All personnel active in evacuation encouraged to wear tabards for identification).

If this new concept in disaster management is accepted by the community and community groups, please let me know – Douglas G.

The Woodgate Beach Community Safety Group:

1. is to help maximise safety and minimise loss in Woodgate Beach through maximum community awareness, preparation and precautionary responses ahead of, during and after any natural disaster threat.
2. is an affiliation of existing community groups and community members, focused only on community safety links, awareness, preparations and help.
3. provides one point of contact for formal agencies to effectively and rapidly reach the whole community.
4. works closely with, and, as needed in final emergency preparations and responses, under the direction of SES and other formal response groups.
5. takes on broad and agreed community safety roles associated with disaster preparations, threats, responses and recovery.

Recovery

Recovery is now seen nationally as part of the preparations package, rather than just looking to minimising impact. The developing approach is to see the whole threat event as one continuous process: from awareness and structural preparedness, through initial communication of threat, to final precautionary preparations and impact and rapid recovery to a fully functional community.

Conclusion

This *Local disaster preparations and evacuation plan* is a comprehensive ‘living’ document, requiring a high and ongoing level of community involvement, review and adaptation to changing circumstances.

Useful web links

[Cyclone knoweldge and household preparation – some insights from Cyclone Larry](http://www.ema.gov.au/agd/EMA/rwpattach.nsf/VAP/(A80860EC13A61F5BA8C1121176F6CC3C)~AJEM_EMA_Larry_Aug2006.pdf/$file/AJEM_EMA_Larry_Aug2006.pdf) (PDF). King, Goudie and Dominey-Howes
[http://www.ema.gov.au/agd/EMA/rwpattach.nsf/VAP/\(A80860EC13A61F5BA8C1121176F6CC3C\)~AJEM_EMA_Larry_Aug2006.pdf/\\$file/AJEM_EMA_Larry_Aug2006.pdf](http://www.ema.gov.au/agd/EMA/rwpattach.nsf/VAP/(A80860EC13A61F5BA8C1121176F6CC3C)~AJEM_EMA_Larry_Aug2006.pdf/$file/AJEM_EMA_Larry_Aug2006.pdf)

Full Larry and preparedness report:

http://www.tesag.jcu.edu.au/CDS/reports/Larry_mainReport.pdf .

For evacuation issues, see Goudie D and King D 1999.

[http://www.ema.gov.au/agd/EMA/rwpattach.nsf/viewasattachmentpersonal/\(85FE07930A2BB4482E194CD03685A8EB\)~Cyclone_surge_and_community_preparedness.pdf/\\$file/Cyclone_surge_and_community_preparedness.pdf](http://www.ema.gov.au/agd/EMA/rwpattach.nsf/viewasattachmentpersonal/(85FE07930A2BB4482E194CD03685A8EB)~Cyclone_surge_and_community_preparedness.pdf/$file/Cyclone_surge_and_community_preparedness.pdf)

For Storm surge detail, see

<http://www.longpaddock.qld.gov.au/ClimateChanges/pub/OceanHazards/Synthesisis.pdf>

Cairn City Council has put out a public access surge zone model at:
 Cairns City Council storm surge maps 2007.

http://www.cairns.qld.gov.au/council/services/stormtide_maps.html



A community that cares. March 2007.

Appendix 1
Some background to operational structures if evacuation
needed
ROLES AND RESPONSIBILITIES.

PRINCIPLE AGENCIES

HAZARD	RESPONSE AGENCY
Law Enforcement Emergency	Qld Police Service
Search and Rescue	Qld. Fire and Rescue, Queensland Rescue (Helicopter) Qld Police Service State Emergency Service
Fire	Qld Fire & Rescue Service
Hazardous Materials	Qld Fire & Rescue Service
Flood	Local Authority
Earthquake	Local Authority
Exotic Disease	DPI
Multiple Casualty Accident	Qld Police Service Qld Ambulance Service Qld Fire & Rescue Service.

Management structure

The management structure for disaster management activities in Queensland are outlined in the Disaster Management Act 2003 (Figure 1):

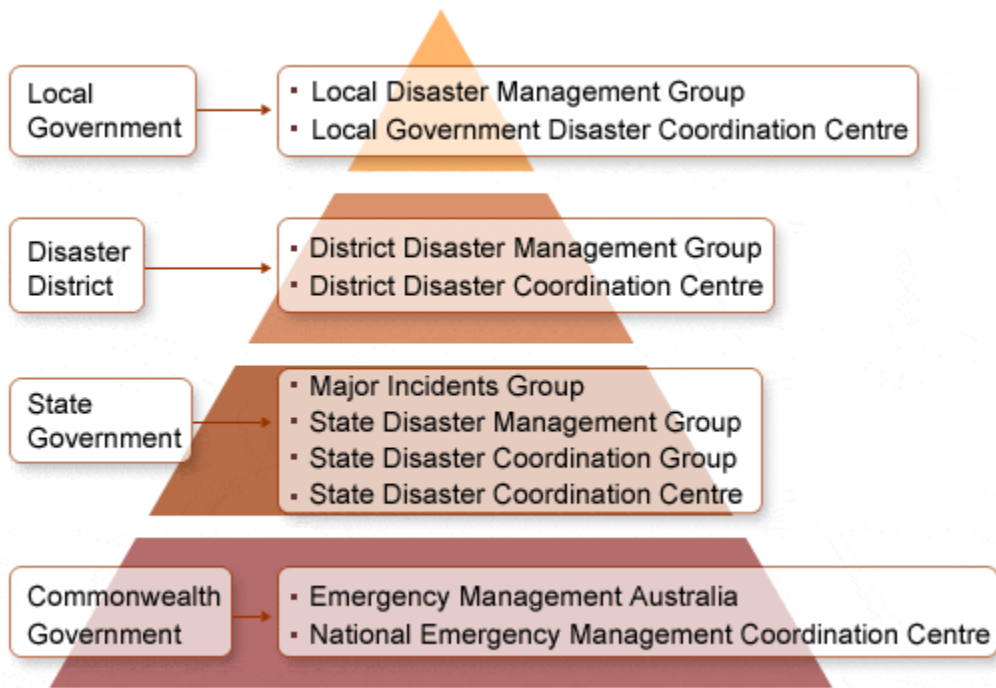


Figure 1 - The Queensland Disaster Management System (courtesy of CDRS QLD)

Figure 2. Organisational chart DDMG

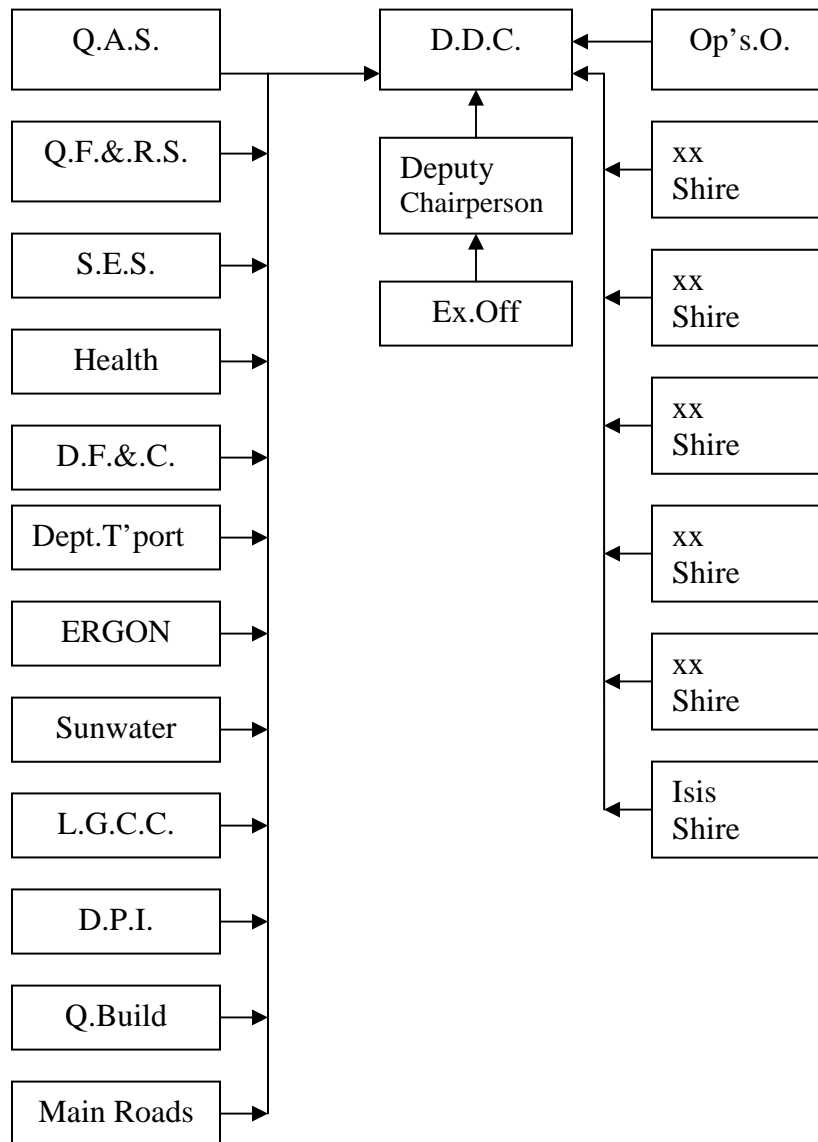
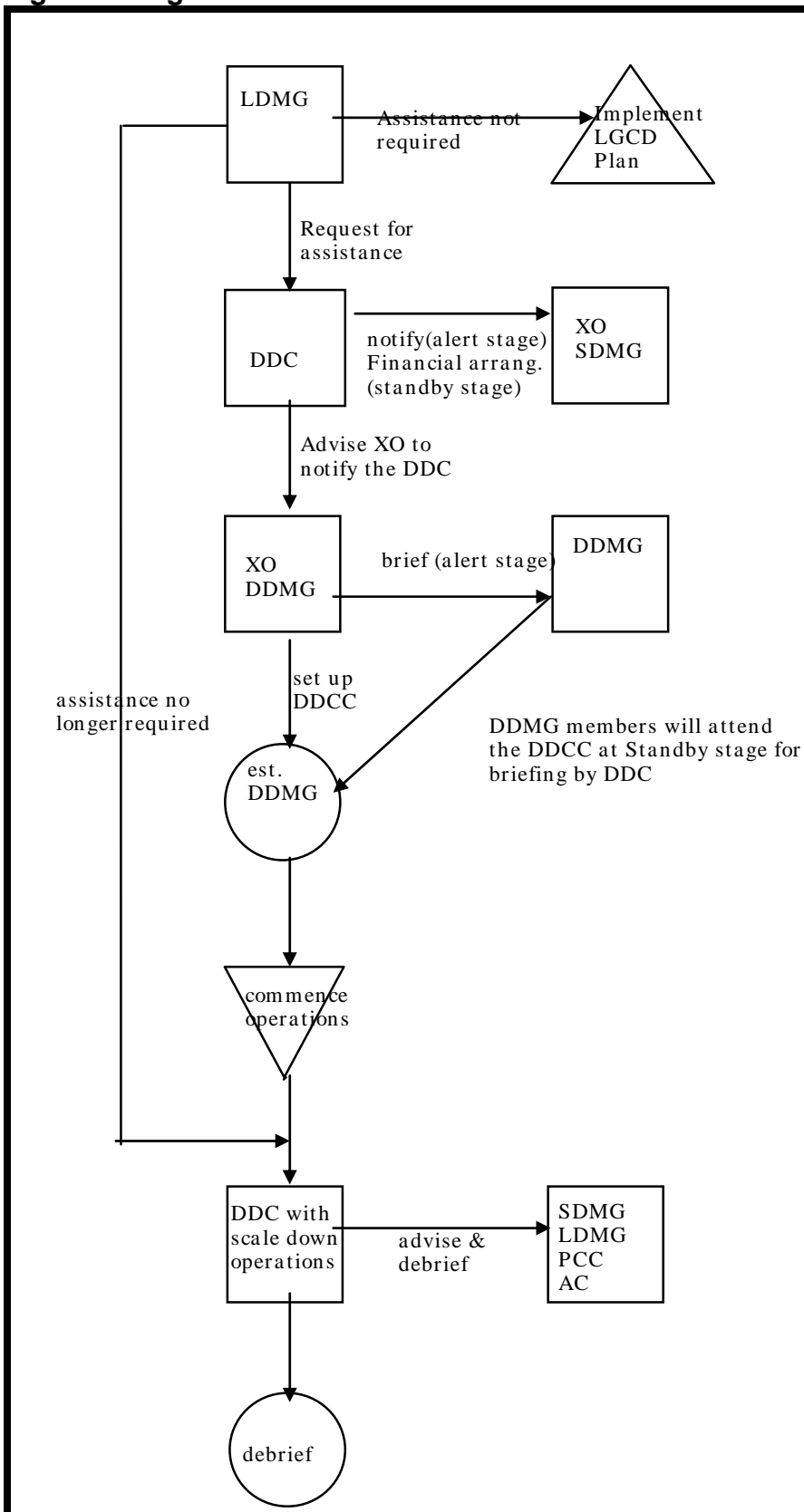


Figure 3. Organisational chart LDMG



Legislation	URL
Disaster management Act 2003	http://legislation.govnet.qld.gov.au/Legislation.nsf/0/00000000000000000000000000000000?open
Public Safety Preservation Act 1986	http://legislation.govnet.qld.gov.au/Legislation.nsf/0/00000000000000000000000000000000?open
Ambulance Service Act 1991	http://legislation.govnet.qld.gov.au/Legislation.nsf/0/00000000000000000000000000000000?open
Fire and Rescue Services Act 1990	http://legislation.govnet.qld.gov.au/Legislation.nsf/0/00000000000000000000000000000000?open
Police Powers & Responsibilities Act	http://legislation.govnet.qld.gov.au/Legislation.nsf/0/00000000000000000000000000000000?open
Police Service Administration Act 1990	http://legislation.govnet.qld.gov.au/Legislation.nsf/0/00000000000000000000000000000000?open
State Transport Act 1938	http://legislation.govnet.qld.gov.au/Legislation.nsf/0/00000000000000000000000000000000?open
Transport Operations (Marine Pollution) Act 1995	http://legislation.govnet.qld.gov.au/Legislation.nsf/0/00000000000000000000000000000000?open
Queensland Exotic Diseases in Animals Act, 1981	http://legislation.govnet.qld.gov.au/Legislation.nsf/0/00000000000000000000000000000000?open
Commonwealth Quarantine Act, 1908	
Radiation Safety Act, 1999	http://legislation.govnet.qld.gov.au/Legislation.nsf/0/00000000000000000000000000000000?open
Explosives Act. 1999	http://legislation.govnet.qld.gov.au/Legislation.nsf/0/00000000000000000000000000000000?open
Environmental Protection Agency Act. 1994	http://legislation.govnet.qld.gov.au/Legislation.nsf/0/00000000000000000000000000000000?open
Contaminated Lands Act,	http://legislation.govnet.qld.gov.au/Legislation.nsf/0/00000000000000000000000000000000?open

1990

Gas Act, 1965

<http://legislation.govnet.qld.gov.au/Legislation>**Declarations**

The statutory machinery for declarations relative to disaster management and the management of emergent situations are contained in the following Acts:

'Disaster Situation' *Disaster Management Act 2003* (the Act)
Section 64: 'Declaration'

The District Disaster Coordinator may declare, with the approval of the Minister [for Emergency Services], a 'disaster situation' if satisfied:

- a) *A disaster has happened, is happening or is likely to happen, in the disaster district; and*
- b) *It is necessary for the district disaster coordinator ... to exercise declared disaster powers to prevent or minimise any of the following:*
 - i. *Loss of human life;*
 - ii. *Illness or injury to humans;*
 - iii. *Property loss or damage;*
 - iv. *Damage to the environment*

Section 64 of the Act further prescribes that before declaring a disaster situation, the DDC must take reasonable steps to consult with the DDMG and the local governments within the area to be included in the declaration.

Section 65: 'Form and notice of declaration' of the Act prescribes that the declaration of a 'disaster situation' must be in the approved form. A copy of the approved form will be included in this plan as an Appendix once drafted and approved by the SDMG.

'Emergency Situation' *Public Safety Preservation Act 1986*
Section 5: 'Declaration of emergency situation'
May only be declared by a *Commissioned Officer, QPS*.

Warnings

The DDC has a responsibility to ensure that the various communities that comprise the district and their respective LGDMG's receive appropriate advice in order to '*...prepare for, responding to and recovering from a disaster (S23. Disaster management Act 2003)*'.

Information and or warnings may be communicated to the community by a LGDMG in consultation with the DDMG. To provide a cohesive and uniform message to the community the DDC and the chairperson of a LGDMG may issue a joint statement (refer media plan).

Departments or organisations with specific responsibility for issuing warnings or the management of specific threats, for example, the Bureau of Meteorology for

WB Disaster Preparations and Evacuation plan

Developed by Douglas Goudie, the WB community, SES and LDMG

meteorological related information and the Department of Primary Industries for Emergency Diseases in Animals, shall issue warnings in accordance with their standard operating procedures.

Community awareness

23 (f): 'Functions' (Disaster District), and 30 (1) (e): 'Functions' (Local Government) of the *Disaster Management Act 2003* outlines DDMG and LDMG's responsibility for raising awareness within the community of mitigating the adverse effects of an event, and preparing for, responding to and recovering from a disaster.

The Isis DMG will use a number of mediums to raise awareness and promote education in the community regarding preparation for, response to and recovering from a disaster. This may include (but not limited to);

- community messages through media outlets,
- liaison with community groups,
- fostering or strengthening partnerships with community networks
- supporting LGDMG community education and awareness initiatives,
- notification of *emergency* and *disaster* relevant exercises and training being conducted.

The Disaster Management plan will be available for viewing by members of the public upon request as per S56 of the Act. A copy of the plan will also be made available to members of the public upon payment of an appropriate fee as determined by the DDC (refer S56 of the Act).

Media Management

Isis DMG media strategy is to

“develop and maintain a healthy and respectful ‘partnership’ with the media to assist the DMG in achieving its aims and objectives under the Act to

- *prevent the potential adverse effects of,*
- *prepare for managing the effects of,*
- *effectively responding to,*
- *and recovery from adisaster or emergency situation.*

This strategy recognises that the '*media*' has an integral role in relaying information to the community, particularly with regard to warnings, preparations, evacuations, affected areas and general incident and disaster information.

It is also recognised that the '*media*' has a role in informing the community about the activities being undertaken by the DMG, responsible agencies and organisations in compliance with their statutory obligations under the Disaster management Act. The provision of such information will, in many cases, allay undue community concern and provide support and direction for community members.

The DMG believes a coordinated, informed and unified approach to media management is the most responsible approach to be taken to ensure the community receives correct information and advice which will inform decisions to take appropriate action

Media interviews and comments relating to disaster events will be dealt with at the local level, or, In a larger event, coordinated by the DDC or Deputy Chairperson in consultation with and assistance from other DDMG members or appropriate persons as necessary.

The State Anti Terrorist Plan outlines that the QPS is the responsible agency for providing information about a criminal/terrorist CBR incident. The QPS will call upon expert commentary from relevant agencies as necessary.

Administrative Reporting:

- a) The chair of the Isis Local Disaster Management Group shall provide details in respect to the membership of the group annually to the District Disaster Coordinator and the Executive Officer of the State Disaster Management Group;
- b) Local Government Disaster Management Groups and the District Disaster Management Group shall, at least twice annually, conduct full meetings of their respective groups and report the outcomes the Executive Officer, State Disaster Management Group;

Operational Reporting:

- c) Local Government Disaster Management Groups shall advise the DDC immediately the LGDMG is activated or placed on stand-by;
- d) The DDC shall advise the Executive Officer of the SDMG immediately the DDMG is activated or placed on stand-by;
- e) Once activated, or placed on stand-by, Local Government Disaster Management Groups and Functional Committees will provide situation reports (SITREPs) on the disaster event and disaster management operations in the approved form to the DDMG within the timeframes as may be required;

Report Format for LGDMG's and Functional committees is located at;
<https://community.emergency.qld.gov.au/farnorthernregion/cairnsddmg>

Exercising the plan

Exercises are a key component of disaster management strategies and are conducted with the objective of:

- practicing the coordination procedures during an event including;
 - activation of Disaster Management Groups;
 - activation of District Disaster Coordination Centres;

- information management including dissemination of information in respect to threats and warnings, requests for assistance and providing situation reports;
- enhancing the interoperability of agency representatives;
- evaluating emergency plans;
- identifying planning and resource issues;
- promoting awareness;
- developing competence;
- evaluating risk treatment strategies;
- validating training already conducted;
- identifying performance gaps and areas for the potential improvement in the skills of agency representatives involved in disaster management;
- evaluating equipment, techniques and processes in general.

The DDMG will conduct at least two (2) exercises annually, one of which will include all functional committees.

Functional committees will exercise their respective sub-plans, independent of the aforementioned disaster district exercise, annually.

SUB-COMMITTEES, AS APPROPRIATE

Health: In the event of multiple casualty/injury response, or a response with a potential to affect the health of the greater community, a Health Sub-committee will be established.

Transport: In the event of a response requiring specific management of transport issues, a transport sub-committee will be established, chaired by the Department of Transport liaison Officer.

Welfare: In the event of a response requiring substantial welfare assistance, a welfare sub-committee will be established chaired by the liaison officer from the Department Family and Community services, and consisting of liaison officers representing the relevant local authority and the State Emergency Service.

Other members will be appointed to any committee as deemed appropriate by the DDC having regard to the requirements of the DCC.

Disaster District Issues that must be considered:

Civilian infrastructure damage – water, sewage, electricity, Telstra services
 Evacuation assembly areas + shelter, food & fresh water, medical, hygiene, pets
 Economic impact – personal, business, farming and Local Govt.
 Roads – flood waters must recede before damage and costs can be assessed & washed in rubbish removed for vehicle use
 Medical support – hospital needs & early medivacs ie late pregnancies
 Recovery operations & Incoming external support –
 Environmental Health – fresh water, sewage, mosquitoes, rotten food in homes, rubbish, animal care & control

Emergency food resupply

All resupply operations will be based on the contents of the latest edition of the Federal Government's Resupply Manual.

An isolated community can be resupplied with essential food and service items provided certain criteria are met. The food & service items are not paid for by the Government, only the transport costs to deliver that emergency resupply.

Disaster District Issues that must be considered:

Recovery operations & Incoming external support – is a resupply necessary
 What communications and information are available from the isolated community itself.
 Has a formal request been obtained from the relevant LDMG.

If there will be more than one (1) resupply – ensure foodstuffs are long lasting foods
 Ensure a Cost Code number is obtained from SDMG.
 Ensure a SitRep and financial reports are forwarded to SDMG regularly.

5.2 Major fire – bush / rural areas

Wild, uncontrolled bush fires within rural bushland areas are likely. An uncontrolled rural fire is most likely towards the end of the dry season The Rural Fire Brigade backed up by the Qld Fire & Rescue Service should be able to contain an uncontrolled fire.

It is most likely that this threat will be contained and handled at a local level. This may have a social & economic impact upon the District.

WIND

Risk statement
Buildings damaged or destroyed
Summary – Recommended response & expected outcomes
To minimise damage to buildings: Encourage or require upgrade in wind rating of new building or major renovations
Action (Disaster Mitigation) plan
Proposed actions High wind rating already required by Council in development applications.
Resources required
Usual building regulation controls Personnel to write relevant articles in Shire newsletter.
Responsibilities
Isis Shire Council Building Inspector to educate, guide and enforce

Earthquake

No warnings normally precede an earthquake.

An earthquake's destructive power is directly associated with the intensity, duration, geology and location of the epicentre (whether populated or rural). This also applies to the destructive power of 'after shocks'.

Low level Richter scale earthquake events may not cause any damage or service disruption. Areas in the broader district have experienced such tremors, ie 1998. Low to medium strength Richter scale events may see considerable minor building and infrastructure damage and service disruption.

A medium to high strength Richter scale event will see widespread building destruction, essential infrastructure damage and major service disruption along with considerable death & injury.

In a larger earthquake event, considerable media and concerned relatives will attempt to contact affected victims. This interest will require management to prevent telephone and emergency services being over burdened and side tracked with inquiries.

Disaster District Issues that must be considered:

External recovery operations & support in response to an earthquake impacting a populated area will be absolutely necessary. The speed of 'on scene' recovery operations commencing will be critical to saving lives. Police escorts & emergency helicopter landing sites close to the affected area MUST BE given a very high priority.

Establish and augment what communications are available with the affected community or the Forward Incident Command Centre.

Ensure a suitable media officer or team carefully manages the considerable media interest an event of this nature will generate.

Liaison between Isis LDMG for and the DDMG for longer term planning & reporting is strongly recommended.

Chemical / Gas hazards – non terrorist related

A chemical spill or released gas emergency hazard is combated by the Qld Fire & Rescue Service using the Multi Agency Hazmat Plan. Generally speaking a chemical spill or released gas will be handled by the combating agency supported by additional staff & equipment along with company & expert consultants attending the scene.

An activation of the Local Govt Disaster Management Group will mean an activation of the District Disaster Management Group in a monitoring role only.

Should a chemical spill or released gas incident cause widespread community disruption, damage, explosions or evacuations for more than 1 day / night, it may be necessary to request assistance in respect to evacuation centres + community welfare & economic needs.

Should the chemical spill or released gas hazard result in a death, police will be required to report to the Coroner.

From the outset of an incident such as this – police & other Agency investigations will be commenced. A chemical spill or released gas incident will be deemed suspicious until proven otherwise by a comprehensive investigation.

See also Terrorist incident.

District issues

A mass casualty incident resulting from a chemical or gas release is world news – considerable media management will be required.

Make shift morgue for deceased persons.

Disaster Victim Identification Squad may be required.

Grief Counselling will be required.

1800 hot line number for relatives must be established & provided to media & foreign consulates.

Addition police from neighbouring Districts or Regions may be required – if requested by the LDMG.

Exotic diseases – animal

Should an exotic disease be identified in animals (ie: mad cow disease), the Dept of Primary Industries will be immediately notified by one or more vets making the diagnosis. This will then activate the Queensland State Vet. Plan and the DPI response plan. From this time on, the social and financial impacts will be felt throughout the community.

The Qld State Veterinary Plan calls for an immediate quarantine on the property affected and generally a considerable area surrounding. It will also prevent the movement or transport of animals into or out of the quarantined area, as well as the full wash down and cleaning of any vehicles, machinery, boots and clothing worn by any person.

This type of an event will normally be combated by the Dept of Primary Industries and the Australian Quarantine Service, however should a situation change for any reason, then the Local & District Disaster Management Groups must be prepared to assist.

An exotic disease in the area will have state-wide & national implications in relation to export & primary production.

District issues

Recent Foot & Mouth diseases in the UK are a reasonable indication of how events may progress.

1800 hot line number for public information must be established & provided to media.

Addition police from neighbouring Districts or Regions may be required.

GENERAL

<p>Risk statement Helpers get lost Providing information of the full range of disaster mitigation processes to residents.</p>
<p>Summary – Recommended response & expected outcomes Improve signage. Hold induction courses if outside help used Seek local knowledge Place report copies on reserve in local libraries. Use Council's newsletter.</p>
<p>Resources required Local personnel with knowledge of area</p>
<p>Responsibilities SES</p>

OPERATIONS**CO-ORDINATION CENTRES**

Isis Disaster Co-ordination Centre is located at xxx Childers.

The alternative location is the xxx, xxx.

Section DECLARATIONS OF STATE OF DISASTER**DECLARATION OF STATE OF DISASTER**

A declaration of a Disaster Situation may only be made by the DDC in accordance with Section 64 of the Disaster Management Act 2003

64 Declaration

(1) A district disaster coordinator for a disaster district may, with the approval of the Minister, declare a disaster situation for the district, or a part of it, if satisfied—

(a) a disaster has happened, is happening or is likely to happen, in the disaster district; and

(b) it is necessary for the district disaster coordinator or a declared disaster officer to exercise declared disaster powers to prevent or minimise any of the following—

- (i) loss of human life;
- ii) illness or injury to humans;
- (iii) property loss or damage;
- (iv) damage to the environment.

(2) Before declaring the disaster situation, the district disaster

coordinator must take reasonable steps to consult with—

- (a) the district group for the disaster district; and
- (b) each local government whose area is in, or partly in, the declared area for the disaster situation.

(3) A failure to consult under subsection (2) does not affect the validity of the declaration.

WEATHER WARNINGS

Weather warnings are distributed to Police Stations. The D.D.C will be notified immediately of any situations with disaster potential.

The SDMG faxes weather warnings to QPS District Offices.
Distribution:

Local warnings and specialised information will be distributed through local media channels by the Executive Officer with prior approval from the DDC.

RESOURCES CONTROL

UTILISING RESOURCES FROM OTHER LOCAL AUTHORITIES

The DDC may utilise any resources within the Disaster District in support of a Local Authority requiring assistance.

A register shall be maintained within the DCC cataloguing all resource allocations.

REVIEWING AND EXERCISING LDMG PLANS

The DDMG will review each LDMG plan twice yearly. The LDMG plans are to be presented to DDMG in MayXxx? and OctoberXxx? of each year. The DDMG will review each plan and recommend changes to the respective LDMG, where identified as necessary.

Each LDMG. required to amend plans will ensure such plan is amended and returned to the DDMG for the next immediate DDMG meeting.

EXERCISES AND TRAINING

Exercises will be conducted at least annually for the purpose of:

- practicing coordination and liaison procedures between participating organisations in responding to a disaster event, and
- identification of procedural and functional weaknesses.

Disaster management exercises are to be conducted as follows:

LDMG DISASTER EXERCISES AND TRAINING

The DDC will ensure the respective LDMG's conduct an exercise and training programme for their individual co-ordination centres at least annually. The performance of the LDMG exercise is to be monitored by the DDC and Executive Officer.

Recommendations for changes identified are to be made in writing by the DDC through the Executive Officer, to the LDMG

The DDMG will ensure such changes have been made, and review such changes within the LDMG Disaster Management Plan, or any sub plan.

Exercising the Plan and Training

At least once a year the exercising of the District Disaster Plan is required under Sect 55(2), in part to refine the interaction of the District Disaster Plan with the Local Govt Disaster Plans.

All training is to be documented, debriefed and a report submitted to the Executive Officer, State Disaster Management Group.

It is well acknowledged that without training –professional standards cannot be achieved, there may be increased public & media criticism, and the potential for civil litigation greatly increases.

Evaluation of exercises:

Evaluation of exercises will be based upon clearly delineated evaluation principals, designed for easy use in respect to plan review or remedial training implementation, to ensure their ongoing validity towards professional disaster management conduct.

Appendix 2

Local knowledge of threats

Recounted at community meetings in October 2006 and March 2007

From October 2006:

The forum was opened at 8.45 by *Cr Bill Trevor, Mayor Isis Shire*. Bill said the forum was not to scare, and that there had been an evacuation of north Woodgate ahead of a bush fire. He wanted to make sure every-one responded in an efficient manner. He pointed out that the evacuation route had some flood points, but Council was looking at putting in culverts in the floodways near Woodgate.

Ian McGeachen, Acting Area Director Emergency Services said that things were changing since the *Emergency Management Act 2003*, there was more emphasis on team building, of preparing for the future to build resilient communities, so now groups in emergency management work very well together, and work with the local community.

Kevin Murphy, retired from the Bureau of Meteorology (The Bureau) introduced the next session

Mike Bergin, Cyclone & Storm Surge Regional Manager Weather Services, Bureau of Meteorology. Mike said that knowledge is power, and that although the number of cyclones had decreased since 1975, the rate of coastal development had gone up, as had the number of Category 3 or greater cyclones on the Queensland east coast. Until 2004 there was only one major Queensland coastal impact in 15 years. Since then, Queenslanders had been reminded of the power of cyclones by Ingrid (2005), Catrina and Larry (2006).

Storm surge is not a passive flow-in of sea water, but is quite destructive. It is affected by the slope of the sea bed.

A storm surge in Mackay in 1918 killed people, with a surge 2m above spring tide. **Emergency Management Queensland assumes the surge will come in on the top of the prevailing tide cycle for evacuation purposes.** That is wise for precautionary evacuation planning. For flood and planning reasons, the decision to evacuate should be made 24 hours before forecast landfall of the cyclone, or well before roads are cut by land-based flooding; whichever comes first.

Local stories: *Lew Hall* told us, with newspaper clippings, of impacts in 1915, '49, '55, '63, 74, 76, 80, 81 and ' 92 – fire.

Gaile Thompson told of prior three surges at Barrum Heads, *removing 100 m of sand hills*. In about 1973, the sea had carried away foreshore sand to 2 m deep,

and that there were waves over the Esplanade which splashed up near the top of the dunes.

In the 1970s there was 16 inches of rain in a very short period of time, and in 1993 the roads were cut by flood water twice for nearly three days. If the Gregory River is flooded, evacuation could go via Foley Rd. *The goal is for communities to become comfortable with evacuations.*

Ian, of EMQ said that staff and the community had become complacent. There are police based in Childers to help if the roads are out, but there is a real need to get the SES up and running again in Woodgate [That happened in early March 2007! – congratulations].

Six inches of rain (~150mm) will flood the Gregory River road crossings.

Weather forecasts will need to be followed closely if rain is likely before a local cyclone landfall. *John* said, after living on the Woodgate Beach Esplanade Road, that there were 3 cyclones, around 1992 and 1994, where all roads were flooded, and Foleys Rd could only be crossed in a 4WD.

Six inches of rain (~150mm) will flood the Gregory River road crossings. Weather forecasts will need to be followed closely if rain is likely before a local cyclone landfall. There have been 3 cyclones, around 1992 and 1994, where all roads were flooded, and Foleys Rd could only be crossed in a 4WD.

Fire

**Phil Williams spoke of a Bushfire prepared Communities program. **This needs to be followed up.*

In 1969 one resident died in a bushfire. “The big one is just a matter of time”.

Prepare property, stay or go, but decide and act early. In a fire emergency, the few local units may not be able to respond to all calls, and that all burn offs needed a permit.

Fire needs heat, oxygen and fuel – remove the fuel, as part of responsible land management. Make sure you have a clear house number so response units can find you, and **ring 000 early on if you see a fire** – response agencies may not know. The movie used the concept of “Firesafe” to encourage people living near or in the bush to think about fire in all aspects of their surroundings, gardens and buildings.

The Woodgate area has been mapped for fire risk, deemed moderate at worst in the Isis Shire, based on vegetation types, slope and aspect (which direction the slope faces). There was a bushfire in Goodwood in 2003 and one north of Theodolite Creek in early 2007.

The National Parks used small patchy burns and maintained fire trails to help manage the BF risk.

Residents were advised to consider ember attack. That's what largely caused more than 150 houses to burn down in Canberra in the 2003 fires. There may be sparks which light door mats, mulch, dry matter in gutters, or wind trap places where leaves and dry grass gather next to houses.

The main risk to Woodgate would be a wildfire from the west, because the worst gusty dry 'fireweather' winds come from the west. Smoke may be a hazard to breathing, and visibility, and complaints about smoke sometimes make it more difficult to do the necessary burn-offs.

The top of Theodolite Drive is seen as a high hazard, as any fire would quickly run up slope through the bush, especially with NW winds. Sparks would set it off. Woodgate Waters is also seen to be at risk. People near bush need a 30m buffer. Woodgate has 2 fire vehicles. If there is no access into an area, the trucks can't get there to put any fire out. There should be no need for evacuation of the Woodgate community because of fire, but the large oval can be used as a good community fire refuge*.

The Mayor commented that *there is a need for more burns*. A local resident said there was a need to plan to *mobilise the community* ahead of any bushfire threat, and that that could be one focus for forming a *Woodgate Community Safety Group*.

There was some expression of support for having *fire alarm sirens* to alert people when a fire looked like it may develop into a threat to Woodgate. It was said there had been fires from the boat ramp to the far end of the Esplanade. An aim of the Disaster Management Act 2003 was to prepare for the future, aiming to build resilient communities, and that groups in emergency management work well together with the local community.

Earthquake & Tsunami.

Earthquakes give no warning and they cannot be predicted. With a tsunami, you may get a little warning. Earthquakes usually have aftershocks, which can cause further problems and damage. The Wide-Bay Burnett area is an active earthquake zone, previously experiencing 6 on the Richter scale.

There have been quakes in the area in 1947 and 1952 around Maryborough. There are 8 seismology stations in the area. In the western area of the shire there are two 'faults'. In 1918 there was an off-shore quake out from Gladstone/Rockhampton, and quakes near Gaynor in 1883 and 1935.

Woodgate is on sand, which can turn into a kind of jelly (liquefaction), so things like the approach earthworks to bridges may disintegrate and make evacuations and assistance impossible by road.

With earthquakes and tsunamis; There was an earthquake near Chile in 1960 which produced a wave front of 1 m in Sydney harbour, and about 30 cm at Urangan. There may be some warning.

We need to acknowledge that our recorded history is very short. Need to acknowledge that extremes may happen. We need to understand there will be big earthquakes, floods, bushfires cyclone winds and storm tides. The Approach of preparedness and evacuation is: not if, but when. With global warming, extreme weather events are more likely. Preparedness is the key. Community preparedness is the key.

There was an earthquake in 1983, and bushfires in 1984. The bushfire was big. It travelled very quickly, jumped the river. The fire made a frightening noise, flames went through the tree tops. There was not time to get from the Rangers House to the beach – 50 yards. Then the scrub fire came through.

The southern point of Theodolite extended out about 1 km. The cyclone in the early 70s took it away.

Awareness, preparedness and prioritising are paramount.

Self help is the main need. A community group, an affiliation of existing community groups and individuals who will work together, under the SES and the DMG will actively help maximise community safety. The community needs to worry about flooding of exit routes. Like bushfire, the sounds and fury of cyclones is most frightening.

Woodgate Beach's worst surge may be more than 3m above king tide (see web link at end of this report). There is destructive winds and destruction of buildings during the surge. Need to consider low-lying houses, the infirm, the elderly, and helping a local community evacuation. Buxton is probably above surge height, but need to consider bush fire. Locals say Buxton has been underwater from floods, and a storm surge tends to ride over the top of floodwaters.

All new developments about 3 m above AHD, about 1 m above king tide. All need to think of where and when to go ahead of a surge. Stories from Cyclone Larry, especially that residents knew their lives were under threat, and they moved to maximise their safety. Need to be an aware and informed community. Think about practices. BoM is very good at predicting cyclones and fireweather. Take on board that individuals and the community needs to do things in a precautionary way.

Getting the warning for final preparations and possible evacuation

About 1/3 of the 80 October participants have web access, so can access BoM site. All should listen to the ABC radio. Use reliable sources, and talk to each other. Knock on the door of neighbours to let people know if danger looms, and check up on them afterward.

Other mitigation considerations

Coastal vegetation is a good buffer against cyclone surge.

Act early. The area near the pub is known to be low. A surge is like a temporary sea, with clawing waves, and smashing debris.

There are bushfire risks. Tsunamis may get an hour's warning.

Does the community want to consider having a phone tree, or a fixed warning siren, to wake you, so you can find out what is the threat?

Flood points, including Stockyards Creek. One at Crystal Creek. One at Lagoon Creek.

Sgt Geoff Fay:

QPS involved with Counter Disaster Committee (Disaster Management Group). With bigger incidents, Police call on Council, or may call it an emergency, and draw on outside resources. There is a difference between an emergency and a disaster. District Disaster Committee joins in. QPS act as coordinators. QPS bring in expertise. Can draw on more and more resources. May end up with a coordination centre in Brisbane. Core message: you are not alone.

Woodgate started 'First Responders'; well appreciated by the community. *Community safety group* under neighbourhood watch.

The success of the First Responders provides a good precedent to a Community Safety Group.

Problems with some community groups where there are personal politics, which gets in the way. Gary alerted that there are other major threats – like the avian bird flu, which may kill millions. With a flu pandemic, towns will be shut down. People will not be allowed to move around in pandemic 'flus.

You have everything you need to manage fire in this town. A good idea would be to reduce the hazard (fire fuel load).

Visits to residents in October 2006

There was an expressed desire to reduce some vegetation to reduce risk of fire destroying homes.

There was discussion of energy-adsorbing vegetation along the foreshore. There is a real tension between living there because of the vegetation – want trees for their and birds' beauty – 'A whole ecology', but there are tensions with: sandy soil, need for a good root mat and flexibility for surge, but that are low combustion. Residents are encouraged to have water tanks and petrol pump as mains water pressure may be very low as a bushfire approaches, and power may be out (burnt poles).

Yours,

Douglas Goudie SSaB. 0419726384 Douglas.Goudie@jcu.edu.au
16/4/7 for Woodgate Beach and near coastal Isis Shire residents