# Protocol for the Communication of Flooding Information for the Brisbane River Catchment - including Floodwater Releases from Wivenhoe and Somerset Dams

#### **OBJECTIVE**

The purpose of this protocol is to outline the arrangements for the Brisbane, Ipswich and Somerset Councils, relevant Queensland Government agencies and the Bureau of Meteorology, which will ensure the provision of consistent and robust information to the community, concerning potential flooding impacts for the Brisbane River catchment, including release of floodwater from Wivenhoe and Somerset Dams.

The intent is to ensure that consistent, harmonised information, based on an agreed single technical report, is communicated to the public in a way that contributes to resilient communities.

#### BACKGROUND

Queensland's disaster management arrangements, based on disaster management groups at local, district and state level, ensure the collaborative and effective coordination of information for all hazards.

Existing local, district and state disaster management and hazard-specific plans outline arrangements and structures for disaster management, or the hazard, and amongst other things, identify the need for coordination of public communications.

This protocol adds to such plans by outlining specific arrangements necessary when advice to the community needs to be based on technical assessments from hazard-specific primary agencies and other complementary stakeholders across federal, state and local governments.

Factors such as storm surges, tides, creek flooding, flooding from the lower Brisbane River, including Lockyer Creek and the Bremer River, will influence inundation levels in Brisbane.

Wivenhoe Dam controls approximately half of the Brisbane River catchment above Brisbane City. The operational strategy for water release from Wivenhoe and Somerset Dams is governed by the Manual of Operational Procedures for Flood Mitigation at Wivenhoe Dam and Somerset Dam, henceforth referred to as the Flood Mitigation Manual.

This protocol also covers the possibility that, during an above-average wet season, the water supply level of the dams may be marginally reduced, on a temporary basis, by small water releases. The water supply level would be returned to normal prior to the conclusion of the wet season, to avoid affecting water supply security. These changes, if they proceed, will ultimately be incorporated into the Flood Mitigation Manual.

# **GENERAL DECISION MAKING - GUIDING PRINCIPLES**

 Protection of public safety is paramount throughout both this Protocol and the Flood Mitigation Manual;

- Impact on the community upstream or downstream is a legitimate consideration of any risk assessment;
- Regular and consistent communications within government and to the public, in relation to flooding impacts, are essential;
- Decision-making chains regarding the communications strategy and disaster management should remain flexible and highly responsive;
- The Flood Mitigation Manual is used to determine how Wivenhoe and Somerset Dams will be operated during flood events.
- This Protocol does not infringe the right of any party to issue information in line with their responsibilities.

# PROCESS OF COMMUNICATION

There are three stages in the process of communication:

- Monitoring and Assessment
- Briefing and Activation
- · Public Communications

#### Monitoring and Assessment

Communications with the public on flooding information, including floodwater releases, are based on a continuous process of monitoring and technical assessment. The process is dynamic and evolves according to the event, but will normally contain the following steps:

- Routine monitoring of weather events and dam levels by relevant agencies via established systems and procedures;
- The Bureau of Meteorology (BoM) provides weather forecasts and warnings (e.g. Tropical Cyclone, Severe Weather, Severe Thunderstorm, Flood). In the event of heavy rain and runoff in the Wivenhoe and/or Somerset Dam catchments, BoM and the Queensland Bulk Water Supply Authority (Seqwater) discuss modelled inflows to Wivenhoe and/or Somerset Dam, and downstream flood levels.
- Councils monitor, to the extent that they are able, creek levels, local runoff and flash flooding, consult with BoM and Seqwater on other potential events upstream that may contribute to and aggravate the situation.
- Seqwater discusses and models implications of the inflows on the necessary floodwater release from Wivenhoe Dam and/or Somerset Dam. The floodwater release strategy is a balance between releasing the water quickly enough so that the flood storage capacity is available if another major rain event occurs, versus minimising downstream flooding impacts (human safety and property damage) from the releases.
- Seqwater calculates the floodwater releases according to dam levels and predicted weather events in accordance with the Flood Mitigation Manual. A fundamental principle is that all floodwater should be released from the dams within seven days of the flood event peaking in Wivenhoe or Somerset Dam. This ensures the dams can cope with closely spaced major rain events.
- Seqwater shares predicted floodwater releases with BoM and with the Councils.
- Councils with the ability to monitor flooding share information on the status of

the Brisbane River catchment and its river systems with each other, BoM, Seqwater.

- BoM undertakes modelling of the Brisbane River catchment and its river systems using Seqwater advice of actual and projected Wivenhoe Dam and/or Somerset Dam releases when these are occurring, or are expected to occur.
- BoM participates in technical discussions with Seqwater, Brisbane City Council, Ipswich City Council and Somerset Regional Council as necessary, to share modelling results. The discussions aim to establish a technical agreement on the flood situation, on which public communications should be based.
- Councils with the necessary resources and expertise undertake modelling, form
  predictions, identify flood inundation areas and assess impacts for their
  communities, and regularly share this information with all relevant parties.
  Councils without the necessary resources and expertise will rely on information
  from other agencies to complete the impact assessment for their communities.

During this continuous process, it may become apparent to either BoM, local governments or Seqwater that the situation is likely to result in public safety issues.

These public safety issues may arise from a decision to release floodwater, a significant change in the severity and scope of the event, or a pre-agreed trigger-point being reached.

Any of the agencies may initiate the public communications process and engage with the disaster management arrangements as appropriate.

The trigger points for commencing public communication of flooding information are defined according to an agency's responsibilities.

The initiating agency will instigate a technical staff teleconference. Decisions from the teleconference will be distributed to senior management and media representatives of each agency.

In these circumstances all agencies agree that technical advice will form the basis of public communications messages.

- In every case of floodwater release from Wivenhoe or Somerset Dam, Seqwater coordinates the completion of the Technical Situation Report - TSR (Appendix C) and provides the Report to the SEQ Water Grid Manager (according to their Emergency Response Plan), and to relevant local governments.
- In other circumstances where a formal technical statement would enhance clarity, the local or state agency initiating the public communication of flooding information will pull together relevant information from other agencies in the form of a TSR. If initiated, the TSR should be circulated to all parties.

# **Briefing and Activation**

If public safety is considered to be at risk, consideration will be given to the activation of the disaster management arrangements, if not already activated.

- Councils will consider activating their Local Disaster Management Groups (LDMGs);
- 2. LDMGs will inform the relevant District Disaster Coordinators (DDCs);

- The Queensland Police Service (QPS) will consider initiating disaster management actions as provided for under the Disaster Management Act 2003;
- 4. In the case of floodwater release:
  - (a) the SEQ Water Grid Manager will alert the Director-General (DG) of the Department of Community Safety (DCS), DG Department of Environment and Resource Management (DERM), and the local governments
  - (b) DG DCS will inform the DG of the Department of Premier and Cabinet (DPC) - the Chair of the State Disaster Management Group (SDMG) and will activate the State Disaster Coordination Centre (SDCC). DG DCS will also inform the Minister for Police, Corrective Services and Emergency Services
  - (c) DG DERM will inform the Minister for Natural Resources, Mines and Energy
  - (d) DG DPC will inform the Premier;
- In the case of an extreme event, the Crisis Communications Network, chaired by DPC, may be activated at the direction of the SDMG Chair to coordinate public messaging from BoM, Seqwater, SEQ Water Grid Manager, QPS, relevant Councils and DCS as per this protocol;
- 6. In the case of a non-disaster, public communications will be in accordance with existing arrangements, supported, where appropriate, by this protocol.

## **Public Communications Issues**

Each agency has its own responsibilities to issue information commensurate with their role without prior approvals. The obligation under this protocol is to share that information with other agencies and operate in a fully consultative process to ensure consistent public information.

The BoM, Local Governments and relevant State Government agencies agree to maintain continual discussions, to ensure that conflicting information is not released to the public at any time. Genuine efforts should be made to ensure consistency by basing public communications on technical reports. Inter-agency consultation should not cause delays in the issuance of public warnings. All agencies agree to exchange public communications at time of release. No power of veto to any organisation is implied under this protocol.

Harmonised public communications messages will be released from the following agencies:

- Bureau of Meteorology concentrating on Flood Warnings which are widely disseminated to the BoM website, agencies and the media. BoM also participates in media (radio, television, newspaper) interviews to provide factual information regarding observed and forecast weather conditions, rainfalls and water levels;
- Local Governments / Local Disaster Management Groups concentrating
  on the effects of weather related events and safety for their local communities
  and residents, and the impacts on councils' assets. Local governments have
  primacy of public communications within their community. Community service

announcements from local governments will be shared with the relevant agencies, prior to public release if time allows;

 SEQ Water Grid Manager - if floodwater releases from Wivenhoe and Somerset dams are involved, the SEQ Water Grid Manager concentrates on the communication aspects of release timings and duration of effects as the State's lead communication agency on floodwater release. Seqwater operational staff are to ensure that technical information is communicated to the SEQ Water Grid Emergency Response Team (if activated), the SEQ Water Grid Communications Unit and relevant local governments.

If necessary these will be augmented by:

- Queensland Police Service concentrating on specific community safety messaging during operations;
- Department of Community Safety concentrating on general safety matters regarding flooding;
- Department of Premier and Cabinet (extreme events only) concentrating on consistent messages to media and agencies concerned.

Event-specific information will be released to the public as frequently as required by the severity and scope of the event. Timings of media releases will be dependent on the event, guided by the frequency of technical reports and may range from once a day to once an hour.

In the case of floodwater release from Wivenhoe and/or Somerset Dam, SEQ Water Grid Communications Unit will centrally track all communications and ensure they are shared. The unit will liaise with the following or their representatives over pubic safety messages:

- BoM;
- Seqwater;
- · Councils' Media Directors;
- QPS Media Director; and
- DCS Media Director.

## **Questions from the Public**

All questions from the public should be directed to the relevant local government in the first instance. Questions expressly relating to the event should be directed to the hazard-specific primary agency. Any questions relating to the release of floodwater should be directed to the SEQ Water Grid Communications Unit. Any queries about disaster management should be addressed by the relevant local and district disaster management groups.

#### **Protocol Maintenance**

This protocol will be reviewed annually by agencies involved and exercised, during non-operational season, under DDMG arrangements.

The protocol should provide for a review after each event of what worked and could be improved for management of future events, to be led by DCS.

WGM TRIM: D/10/7645

# Communications process for the release of floodwater from Wivenhoe and Somerset Dams Routine monitoring by relevant agencies via established systems and procedures BoM provides weather and flood forecasts and warnings Local governments monitor creeks, local runoff, flash flooding Monitoring Seqwater models implications of inflows and calculates floodwater release and Assessment BoM undertakes modeling of river systems and catchments BoM, local governments, Seqwater - technical discussions Local governments assess impact for their communities Apparent public safety issue No Yes Agency initiates process TSR completed Agreed public safety issue Consideration Briefing Councils alert LDMGs and LDMGs inform DDCs Activations QPS consider DM actions under DM Act 2003 In case of flood water release SEQW Grid Manager alerts DGs DG DCS alerts DG DPC - Chair of SDMG SDMG alerts DDMGs DG DERM alerts Min NRM&E Extreme Event State Public Info arrangements activated Harmonised information BoM - on event SEQW Grid CU - on release Public Councils - on effects DCS/QPS - on safety communications

(Extreme event) (State - strategic issues)

#### **ROLES AND RESPONSIBILITIES**

 The Bureau of Meteorology (BoM) is the agency responsible for issuing flood warnings for the Brisbane River and its major tributaries. These, when required, include rainfall forecasts for the Brisbane catchment and predicted river heights for Brisbane City, Ipswich, Jindalee and Moggill according to established procedures.

River height predictions are agreed in consultation with Seqwater, Brisbane City Council (BCC), Ipswich City Council (ICC) and Somerset Regional Council (SRC), as required.

Queensland Bulk Water Supply Authority (Seqwater) operates Wivenhoe and Somerset
Dams in accordance with the Flood Mitigation Manual. It provides dam outflow
information to BoM, to allow the development of Flood Warnings and to local
authorities, to assist them in quantifying likely impacts within their areas.

It informs BoM and other agencies on the status of dams, and actual and projected releases from Wivenhoe and Somerset dams. It consults BoM regarding inflows to Wivenhoe and Somerset dams and expected flood heights along the Brisbane River downstream of Wivenhoe Dam.

Seqwater initiates proposed reviews or updates to the Flood Mitigation Manual, undertaking consultation with Councils and other stakeholders. Seqwater coordinates the production of the TSRs relating to floodwater releases from the Wivenhoe and Somerset dams.

- Brisbane City Council (BCC), Ipswich City Council (ICC) and Somerset Regional Council (SRC) distribute consistent, detailed local flood level information, both to their respective operational units, their senior management and their broader communities. This should include the interpretation of BoM flood warnings and river height forecasts into expected areas and depths of inundation. Councils are responsible for activating their respective Local Disaster Management Groups (LDMGs), which then undertake the disaster management responsibility for response in the community.
- Department of Environment and Resource Management (DERM) consults with the stakeholders prior to the approval of any updates to the Flood Mitigation Manual.
   DERM also approves any necessary variations to the strategies in the manual if required during the course of a flood event.
- Queensland Police Service (QPS) assumes a legislative role, as per the disaster management system, to provide disaster management at a district level during an event, including provision of necessary community advice for public safety.
- <u>Emergency Management Queensland (EMQ)</u> provides support and general community safety advice on flooding issues, during non-operational times.
- <u>SEQ Water Grid Manager</u> in the case of floodwater release alerts the Director-General (DG) of the Department of Community Safety (DCS), DG Department of Environment and Resource Management (DERM), and the local governments.
- <u>SEQ Water Grid Communications Unit</u> tracks the general harmonisation, but not specific detail of public messaging relating to floodwater releases, with BoM, SEQ Water Grid, Councils and DCS, as required. It does this by ensuring that each agency understands the extent of the release and that there is a general consensus as to the level of potential impacts.

#### Appendix C

# **TECHNICAL SITUATION REPORT**

TSR Number	Date of TSR	Time of TSR
	release	release

This report is as at the time of assessment, and may quickly become out of date, depending on the current events. It relies on timely information provided by Seqwater, BoM and Councils. A reply will be required by a specified time and if not received by that time no information will be included. If any information is not provided, the section will remain blank. There will be no follow up requests.

Each authority will provide an email and telephone contact for all communications. If an event escalates, there may be less time to respond or it may not be possible to respond to requests.

In floodwater releases Seqwater will email advices on releases to the organisations email address provided. Once a flood event is initiated, at any time a Council or agency can contact Seqwater to discuss if they have a serious concern regarding the information on releases provided. This would normally be by phone and followed by email. However, the ability to respond to any queries depends on the event. The frequency of advices will depend on the severity of the event and the needs of each agency.

Sequater will also request at that time, a situation assessment from each agency as per details outlined in this document. Each agency will then email in return the requested information if possible or advice that it has not changed. If it is not received within the specified timeframe, it is assumed it is not being provided.

# Seqwater status of inflows and dam operations

(to include information on the current and/or predicted levels of Somerset and Wivenhoe Dams and the probable or planned release strategy with assessment as governed under the Manual of Operational Procedures for Flood Mitigation at Wivenhoe Dam and Somerset Dam )

This is Seqwater's status report on the dam levels, probable inflows and planned releases.
***************************************
This has been supplied to
BCC on
ICC on SRC on
SRC OII
Issues raised by Councils were
Actions taken were
Seqwater Technical Officer name
Seqwater Technical Officer position title
Segwater Technical Officer contact details
BoM assessment
(consisting of references to latest Flood Warning for the Brisbane River and other relevant Bureau
forecasts and warnings (e.g. weather/rain forecasts, Tropical Cyclone Warning etc) and other updates/comments if needed)
BoM is to provide either a copy of, or links to, their current information and other updates or
comments if needed. This will be their current set of warnings and may be updated or changed at any
time.
BoM Technical Officer name
BoM Technical Officer position title
BoM Technical Officer contact details

This is an assessment as provided by BCC. A request for this information will be sent to the email address provided by BCC.
BCC Technical Officer name
BCC Technical Officer position title
BCC Technical Officer contact details
Ipswich City Council (ICC) assessment (if required) (to include predicted local inundation areas and depths of inundation based on the information)
This is an assessment as provided by ICC. A request for this information will be sent to the email address provided by ICC.
ICC Technical Officer name
ICC Technical Officer position title
ICC Technical Officer contact details
Somerset Regional Council (SRC) assessment (if required) (to include predicted local inundation areas and depths of inundation based on the information)
This is an assessment as provided by SRC. A request for this information will be sent to the email address provided by SRC.
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Brisbane City Council (BCC) assessment (to include predicted local inundation areas and depths of inundation based on the information)