

"SR 22"

CTS No. 00066/11

Department of Environment and Resource Management
MINISTERIAL BRIEFING NOTE

TO: Minister for Natural Resources, Mines
and Energy and Minister for Trade

Advisor	OK
Dated	/ /
Approved	Not Approved
Further information required	
Minister	
Dated	5 / 1 / 11

SUBJECT: Rapid Assessment of Flood Mitigation Benefits of Dams

REQUESTED BY

- Minister's Office requested this brief by 5 January 2011.

TIMEFRAME

- Noting of this brief is required in preparation for the Cabinet meeting on 5 January 2011.

RECOMMENDATION

It is recommended that the Minister:

- note** the proposed matters to be considered as part of a rapid assessment of the flood mitigation benefits of dams and preliminary comments on the likely outcomes.

BACKGROUND

- Following discussions with the Minister's office the Department proposes to undertake a rapid assessment of the flood mitigation benefits of dams and provide a short report on:
 - What is the potential flood mitigation benefit of existing dams in Queensland?
 - What might be the feasibility of increasing the potential flood mitigation benefit of existing dams in Queensland?
 - What feasible options might exist to increase potential flood mitigation benefits through construction of new dams in Queensland?

CURRENT ISSUES

- Questions have been raised regarding what flood mitigation benefits might be provided by dams in Queensland. The potential for a dam providing flood mitigation benefits depends on many factors including hydrology, site geology and dam design, downstream population at risk, timing of a flood with respect to dam storage levels and the like. While case by case considerations are required to outline specific details, some generalised comments are possible.
- A few dams in Queensland have been provided with flood mitigation storage compartments including Wivenhoe Dam, Hinze Dam and Peter Faust Dam.
- There are a number of reasons why other dams in Queensland do not have significant flood mitigation capabilities.
- Factors for consideration when making the rapid assessment may include:
 - Most existing dams were constructed according to the economics of the time and these may change over time, for example the North Pine Dam was built in 1976 without flood storage. It is understood that the Commonwealth would not contribute towards flood storage in that dam at the time whereas it is understood that the Commonwealth did make contributions to the cost of flood mitigation storage in Wivenhoe and Peter Faust Dams;
 - Flood storage generally only mitigates (and does not eliminate) flooding and becomes less effective as the size of flood events increase;

Author Name: Richard Priman Position: DRWS Tel No: [REDACTED] Date: 4-01-11	Cleared by Name: Greg Claydon Position: ED, SWI Tel No: [REDACTED] Name: Position: Tel No:	Cleared by Name: Leslie Shirreffs Position: A/DDG Tel No: [REDACTED] Name: Position: Tel No:	Recommended: Name: Debbie Best A/Director-General, DERM Tel No: [REDACTED] Date: 4/01/11
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3. In the large river systems such as the Fitzroy and its tributaries such as the Dawson and Nogoa Mackenzie the cost/benefit return on providing increased flood storage generally would be small. (By way of example, the recent raising of Hinze Dam cost some \$395 million to provide an additional 79,000ML of flood storage and 16ML/d additional supply of water and was one of the few recent situations where such expenditure could be justified.)
 4. Flood mitigation benefits mostly only occur when the dam levels are significantly below full storage capacity prior to the event.
 5. In most situations when there are multiple flow events occurring in a short space of time and dams are full and ground conditions are saturated, the flood mitigation benefit of the dams would be small and limited to the temporary flood storage above spillway level as the flood passes through the constriction of the spillway. Additional flood storage and flow control capabilities can be provided by gated structures but these are relatively expensive depending on the nature of the site and benefits need to be assessed on a case by case basis.
 6. Nathan Dam proposed on the Dawson River would be expected to provide minor mitigation for Theodore, Woorabinda and Moura and virtually no mitigation at Rockhampton due to the potential scale of flood events and noting that the dam height is restricted by back-up flood impacts in Taroom.
- Preliminary advice to be confirmed as part of the rapid assessment is that:
 1. the flood mitigation benefit can vary from negligible to low/moderate depending on the size of the flood and the preceding levels in the dams at the time of the flood;
 2. the costs of increasing flood storage in dams in most regional situations, including around Emerald and the Condamine/Balonne, are likely to far exceed the benefits. (There are likely to be only a few circumstances similar to the raising of Hinze Dam where the right combination of factors warrants such action e.g. population benefiting, synergies with other economic or water supply planning outcomes, and catchment scale and dam size that could actually result in a meaningful flood mitigation benefit.)
 3. At first glance the obvious cases to investigate further might be Nathan Dam and the raising of North Pine Dam.
 - While climate change is likely to impact in the longer term through more intense but less frequent rainfall events, current climate variability already indicates that in the future we will see floods larger than those on the existing historical record.
 - Regardless of climate change or increasing flood storage, it would be hard to mitigate floods of the magnitude currently being experienced.

RESOURCE/IMPLEMENTATION IMPLICATIONS

- The rapid assessment will be undertaken in-house with no significant short term resource costs.

PROPOSED ACTION

- A rapid assessment of the flood mitigation benefits of dams in Queensland will be undertaken.
- The assessment will include a case by case analysis of existing dams and possible future dams and the communities that benefit or could benefit from flood mitigation storage.
- The assessments will be undertaken in consultation with the dam owners.
- A short report, summarising the results of the assessment, will be provided to the Minister's office within a week.

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OTHER INFORMATION

- Consultation: Dam Safety (Office of the Water Supply Regulator)

MINISTER'S COMMENTS

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Reef Protection Issues in Mackay / Proserpine Area - Flood Impacts

RESPONSE

- The Mackay Whitsunday catchment has 1,800 cane growers with 200 growers in the Proserpine area.
- Mackay Whitsunday growers are not required to prepare Environmental Risk Management Plans (ERMPs).
- They are required to calculate and apply no more than the optimum amount of fertiliser to their crops, observe new pesticide use requirements and keep records on fertiliser and chemical use.
- There are about 40 cattle graziers in the Mackay Whitsunday catchment but they are not required to submit ERMPs.

Impact on sugar industry

- Unseasonal heavy rain since mid 2010 in eastern Australia has seriously impacted cane growers with harvesting restricted and sugar content reduced.
- Overall, around 20% of cane production worth \$500 million has been lost.
- Growers in Central Region, which includes Mackay and Proserpine, lost 1.5 million tonnes worth \$126 million.

Impact on reef

- Runoff from all three regulated catchments has carried sediment, nutrients and pesticides to reef waters—much of this would have been 'legacy load' stored in the catchment over many years likely including significant amounts generated by current management practices.
- Reef scientists state that major outbreaks of crown of thorns starfish are almost certain to follow this major flood, due to elevated nutrient availability to their larvae.
- Nutrients will also promote seaweed which can cover corals blocking light and preventing new coral growth.

- Nutrients come from excess crop fertiliser and excess sediment from grazing lands.
- Media reports quote graziers saying they are not responsible for any elevated reef impacts because catchment cover levels are high and good management practices are widespread.
- Cover levels are high due to the unusually high winter rainfall not necessarily good management.
- A significant proportion of sediment loss is likely to reflect country in poor condition due to past and current poor land management (high cover does not necessarily mean good land condition).
- As a result of flooding, the legacy component of future flood plumes will be lessened and the contaminant content will increasingly reflect current practices.
- Demonstrated regulatory compliance will therefore help graziers and farmers defend their operations as being of low risk to reef water quality.

Impact on reef protection implementation

- Excessive rainfall hinders growers' compliance with the legislation as financial survival is paramount.
- Reef protection officers are sensitive to social stress in industry while ensuring that implementation and compliance continues at a reasonable pace.
- An "unseasonal rainfall policy" is being developed with industry to guide growers on fertiliser application when cane cannot be harvested and is left to 'standover', or when fertiliser is washed away and needs to be reapplied.

Impact on water quality targets

- The Reef Plan and reef protection package targets relate to reduction in the 'man-made load generated by current practices', not the 'man-made legacy load generated by past practices' or the 'natural load'.

- The baseline for the targets is an estimate of the long term average of the 'man-made load generated by current practices', which evens out the short term effects of floods and droughts.
- The achievement of targets is modelled from the change in the area covered by good management practices and the estimates of the water quality outcomes they will deliver on average over the long term.
- This approach overcomes the effects of floods and droughts when determining the benefit for the reef of improved management practices. For example, the mandatory adoption of the regulated nutrient calculator by 4,500 canegrowers.
- Regardless of the effect of the flood, this will have significantly reduced fertiliser losses to reef waters below what they would otherwise have been.
- Many growers will also have acquired better equipment from Reef Rescue grants, further reducing the impacts on the reef.

BACKGROUND

- On 1 January 2010, Chapter 4A 'Reef Protection Measures' was inserted into the *Environmental Protection Act 1994*. The objectives of Chapter 4A are to:
 - Reduce the impact of agricultural activities on the quality of water entering the reef
 - Contribute to achieving targets about water quality improvement for the reef under agreements between the state and the commonwealth from time to time.
- The *Chemical Usage (Agricultural and Veterinary) Control Amendment Regulation 2009* took effect on 10 November 2009 and amended the *Chemical Usage (Agricultural and Veterinary) Control Regulation 1999*.
- The provisions of the reef regulation package include:
 - Definition of agricultural Environmentally relevant activities (ERAs) as 'cattle grazing on more than 2000ha' and 'commercial sugar cane farming' in the Mackay-Whitsunday, the Burdekin Dry Tropics and Wet Tropics catchments
 - The requirement for graziers and sugar cane farmers to take soil tests and to calculate and apply no more than the optimum amount of fertiliser to their soil, and to keep records of soil testing results, and agricultural chemical, fertiliser and soil conditioner use

- New controls and restrictions for use of the prescribed agricultural chemicals, atrazine, diuron, ametryn, hexazinone and tebuthiuron, including mandatory operator or supervisor certification and training, and restrictions in relation to the preparation and use of prescribed agricultural chemicals
- Operators that cannot comply with requirements regarding application of the prescribed agricultural chemicals can prepare a Chemical Risk Management Plan proposing an alternative methodology
- Operators that cannot comply with requirements regarding calculation of optimum rate and application of nutrients can prepare a Nutrient Risk Management Plan proposing an alternative methodology.
- Consultation is ongoing regarding the "unseasonal rainfall policy".
- Based on a risk assessment, it was decided that only cane growers in the Wet Tropics with more than 70 hectares of cane and graziers grazing cattle on more than 2,000 hectares in the Burdekin would be required to submit ERMPs.

Contact: Doug Yuille, Director Reef Policy, Natural Resources and Environment
Department: Department of Environment and Resource Management
Telephone: 07 [REDACTED]
Date: 21 January 2011

IMPACTS OF THE FLOODS ON THE GREAT BARRIER REEF MARINE PARK (CORALS, DUGONGS, ETC)

RESPONSE - QPWS takes advice from GBRMPA on the impact of the flood waters on the Great Barrier Reef and this is provided below.

- Flood waters which recently hit central Queensland towns are now flowing into the Great Barrier Reef lagoon.
- A coordinated monitoring program is in place to assess the impacts of the flooding, however, it will take some time before the full impacts of these flood plumes on the marine ecosystem and on the Reef dependent industries are known.
- The flood plumes from the Fitzroy and Burnett Rivers have affected inshore areas of the Great Barrier Reef off the Capricorn Coast near Rockhampton.
- Many marine plants and animals have mechanisms to cope with low salinity and low light associated with flood events. However, this event has unusually large amounts of flood runoff with suspended sediments, nutrients and pesticides as well as other potential contaminants.
- It will be some weeks before we have a good understanding of the impacts, and potentially several months before we know the full extent of damage caused by the flood plume.
- This current situation is not affecting popular tourism locations in the Whitsundays, Cairns or Port Douglas regions.
- Potential impacts of flood runoff include freshwater bleaching of shallow corals, increased algal blooms and

coral disease caused by high sediment and nutrient loads. Over the longer-term mortality may occur due to reduced resilience and increased pressure from algal growth and disease. Sediment carried in the flood waters can smother corals and sea grasses and this can lead to flow on impacts on species such as dugong and turtle that depend on these habitats.

- The inundation of freshwater can also increase the productivity of some inshore species. Breeding success of a number of species of fish, such as mangrove jack and barramundi, and some prawns and sponges may be increased as a result of flood events.
- Through the Australian Government's \$10.5 million Reef Rescue Marine Monitoring Program GBRMPA has been working with a range of organisations to collect and test water quality samples. This partnership includes James Cook University, CQ University, Australian Institute of Marine Science and Queensland's Department of Environment and Resource Management. The samples are being tested for salinity, turbidity, temperature and pesticides. The marine monitoring program is a part of the \$200 million Reef Rescue Program, which aims to improve the water quality of the Great Barrier Reef by increasing land management practices that reduce the run-off of nutrients, pesticides and sediments.
- DERM is assisting in the flood response by providing staff and vessels from Mackay, Rosslyn Bay, Gladstone and Heron Island to undertake flood plume monitoring.

BACKGROUND

- The Fitzroy River last flooded in 2008 resulting in a flood plume dispersing over the Keppel's and nearby reefs.

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Department: DERM – Central Qld Marine Region
Telephone: [REDACTED]
Date: 20/01/2011

Department of Environment and Resource Management
MINISTERIAL BRIEFING NOTE

TO: Minister for Natural Resources, Mines,
and Energy and Minister for Trade

SUBJECT: Impacts of Major Flooding in Queensland on
Statutory Land Valuations to be issued by March 2011

Advisor	OK
Dated 25/01/11	
Approved	Not Approved
Further information required	Noted
Minister	
Dated 29/1/11	

REQUESTED BY

- The Minister requested an urgent briefing on the possible impacts of the Queensland floods on departmental activities and options to help mitigate impacts on landowners.

TIMEFRAME

- Noting of this brief is required as soon as possible.

RECOMMENDATION

It is recommended that the Minister:

- Endorse** the Valuer-General's proposition to alter the current valuation program currently due to be issued on 21 March to be deferred but be issued prior to 30 June 2011. This deferral will require minor legislative amendment to the *Land Valuation Act 2010* (LVA) prior to the issue date.
- Sign** the attached letter to the Premier seeking her endorsement of the amendments to the LVA to defer the 2011 annual valuation issue date.
- Note** a Cabinet Budget Review Committee (CBRC) submission is also being prepared to assess the overall impacts of the latest round of land valuation movements in the 58 local government areas. The submission will rely on valuation data available in the QVAS system when all land valuations are completed.
- Note** that if this proposal is adopted, the CBRC submission outlining the site value "winners and losers" would be delayed to take account of delay in finalisation of valuation data.

BACKGROUND

- New statutory land valuations in 58 local government areas are currently being undertaken by the State Valuation Service (SVS) in accordance with the LVA.
- About 1.6 million new valuations are planned to issue on 21 March 2011 (this date is not publicly known) with a relevant date of valuation of 1 October 2010, to become effective for rating and taxing purposes from 30 June 2011.
- Approximately 1.4 million non rural land valuations will have a site value while the remaining 200 000 rural land valuations will be valued on an unimproved basis.
- While the revaluation program is well advanced and many land valuations have been entered into the Queensland Valuation and Sales system (QVAS) which houses valuation data, there is still a program of work required to complete this year's revaluation in light of the impact of flood on a number of local government areas. The impacts of the extensive flooding throughout many areas of Queensland must be reflected in the new valuations to be issued this year.

CURRENT ISSUES

- The impact of major flooding throughout large parts of Queensland on land valuations is currently being assessed by the SVS.

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- It is now likely that wet conditions throughout much of the State will limit further inspections being undertaken by SVS valuers, particularly in rural areas.
- Where on-ground physical conditions prevent inspections being carried out it is necessary for valuers to rely on existing records, recent aerial photography and mapping tools.
- While the extent of flooding in towns can be established through onsite inspection and the use of aerial photography and satellite imagery, it is more difficult to assess the full impacts on rural land.
- The SVS is currently reviewing land valuations that have been subject to flooding inundation and reviewing property data of the effected properties and making adjustments to land valuations where necessary. Details of these reviews by locality are outlined in Attachment A.
- Discussions with SVS Area Managers confirm that while land valuations are well advanced, the occurrence of recent flooding, particularly in south-eastern Queensland, will require a refocus of resources to determine the full extent of flooding and its impact on land valuations. A map of the disaster declared local government areas is shown as Attachment B.
- Following the 1974 floods in Queensland the market was very subdued for a number of years. Departmental records indicate that reductions were made to land valuations undertaken in Brisbane at that time, ranging from 5% for land flooded less than 0.6 metre to 20% for land flooded greater than 2.4 metres.
- While previous flooding in many areas is reflected in the valuation data, the 1974 floods levels, particularly in Brisbane and Ipswich is not considered to be a factor influencing the market prior to the 2011 floods.
- The previous flood related market stigma waned with assurances that the construction of the Wivenhoe Dam would alleviate further flooding and values for former flooded residential land close to the city rose in line with non-flooded land.
- The LVA prescribes for an annual valuation of all local government areas. However, Section 74(1) of the LVA provides for the Valuer-General not to make an annual valuation because of unusual circumstances.
- However, in the transitional phase between the LVA and the *Valuation of Land Act 1944* (VOLA), if no statutory valuation is issued, there is no legislative authority to continue interim valuations under the VOLA with an effective date after 30 June 2011.
- As the flood related data collection will take some time, the Valuer-General has considered options for the delivery of valuations under the current circumstances including the status quo that is, issuing as planned prior to 31 March 2011, delaying the valuation issue or not issuing new valuations in 2011 (refer to Attachment C).
- The Valuer-General's preferred option is option two: delaying the issue of the valuation, but issuing prior to 30 June 2011. It is proposed to issue all new valuations on 3 May 2010.
- This option would provide more time to analyse the impacts of the floods and make adjustments to the inundated properties by SVS valuers. The delayed issue will provide the Valuer-General with a level of confidence that the impacts of flooding have been accurately reflected in the valuations.
- Legal advice supports the option to delay but issue prior to 30 June 2011 and states that both legislatively and substantively, this is the simplest option from a legal perspective (other than option 1 of keeping status quo). The 'hindsight principle' outlined in case law supports the Valuer-General's approach to take into account the events occurring between the date of valuation and the date of issue.
- Local governments may have concerns about the delay in the issue of valuations. However, under Section 100 of the Local Government (Finance, Plans and Reporting) Regulation 2010 a local government can adopt its budget as early as 1 June but no later than 31 August. The Minister for Local Government may grant an extension.

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- The Office of State Revenue requires annual valuations by mid June, for land tax assessments. Timely advice of valuation trends is required for budget modelling purposes and this can be provided by the Valuer-General before the valuations issue publicly.
- State land rental valuations are required by late April to early May for billing purposes, so a slightly delayed issue of valuations will not affect this process.
- Section 90 of the LVA permits a landowner to write to the Valuer-General to have their valuation amended if a natural event such as flooding has permanently damaged their land. The application must be made within 6 months of the damage occurring.
- Once new valuations issue, landowners are able to lodge an objection if they believe insufficient allowance has been made for flooding on their land.

RESOURCE/IMPLEMENTATION IMPLICATIONS

- The SVS is currently analysing the additional resources that will be required to assess the impacts of flooding on land valuations.

PROPOSED ACTION

- If Ministerial endorsement is given to alter the current valuation program currently due to be issued on 21 March and for it to be deferred and issued prior to 30 June 2011 then work will commence on preparing documentation in line with DERM Cabinet Submission Process to seek authority to amend the *Land Valuation Act 2010* prior to the issue date.
- A letter has been prepared seeking the Premier's endorsement of the proposal (refer Attachment D). The letter also seeks approval from the Premier to authorise the Office of Parliamentary Counsel to commence drafting a minor amendment for inclusion in a draft Bill (refer to drafting instructions attached to the letter).
- These amendments must receive Royal Assent prior to 31 March 2011 as this is the date that the LVA requires valuation notices to be issued to property owners and valuations supplied to local governments and the Office of State Revenue.
- A CBRC submission will be prepared to assess the overall impacts of the latest round of land valuation movements in the 58 local government areas. The submission will rely on valuation data available in the QVAS system when all land valuations are completed.
- The CBRC submission will outline the site value "winners and losers" as well as include the impacts on flood affected land.

OTHER INFORMATION

- *Consultation:* The Government Valuation Reform Steering Committee with representatives from Premiers and Cabinet, Office of State Revenue, Department of Infrastructure and Planning and Department of Environment and Resource Management met on 21 January 2011 to discuss the options.
- The Valuation Reform Reference Group (VRRG) will also be consulted on the timing of the issue of the valuations. The next meeting of the VRRG is scheduled for 28 January 2011.
- *Legislation:* N/A.
- *Key Communication Messages:* N/A at this time.

MINISTER'S COMMENTS

Minister, we will engage LGAs and other stakeholders ASAP if you approve. John B 24/1

ATTACHMENTS

- Attachment A - Flood Impacts on Statutory Land Valuations by locality
- Attachment B - Map of Disaster Declared Local Government Areas
- Attachment C - Options for Issuing the 2011 Statutory Land Valuations
- Attachment D - Letter to Premier and Drafting Instructions

Author Name: Des Lucas Position: Director, Policy and Legislation SVS Tel No: [REDACTED] Date: 21/01/11	Cleared by Name: Neil Bray Position: Valuer-General Tel No: [REDACTED] Name: Meg Smith-Roberts Position: Principal Advisor, LIS Tel No: [REDACTED]	Cleared by Name: Chris Robson Position: ADG, LIS Tel No: [REDACTED] Name: Position: Tel No:	Recommended: Name: John Bradley Director-General, DERM Tel No: [REDACTED] Date:
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2011 Revaluation – Current status as at 19 January

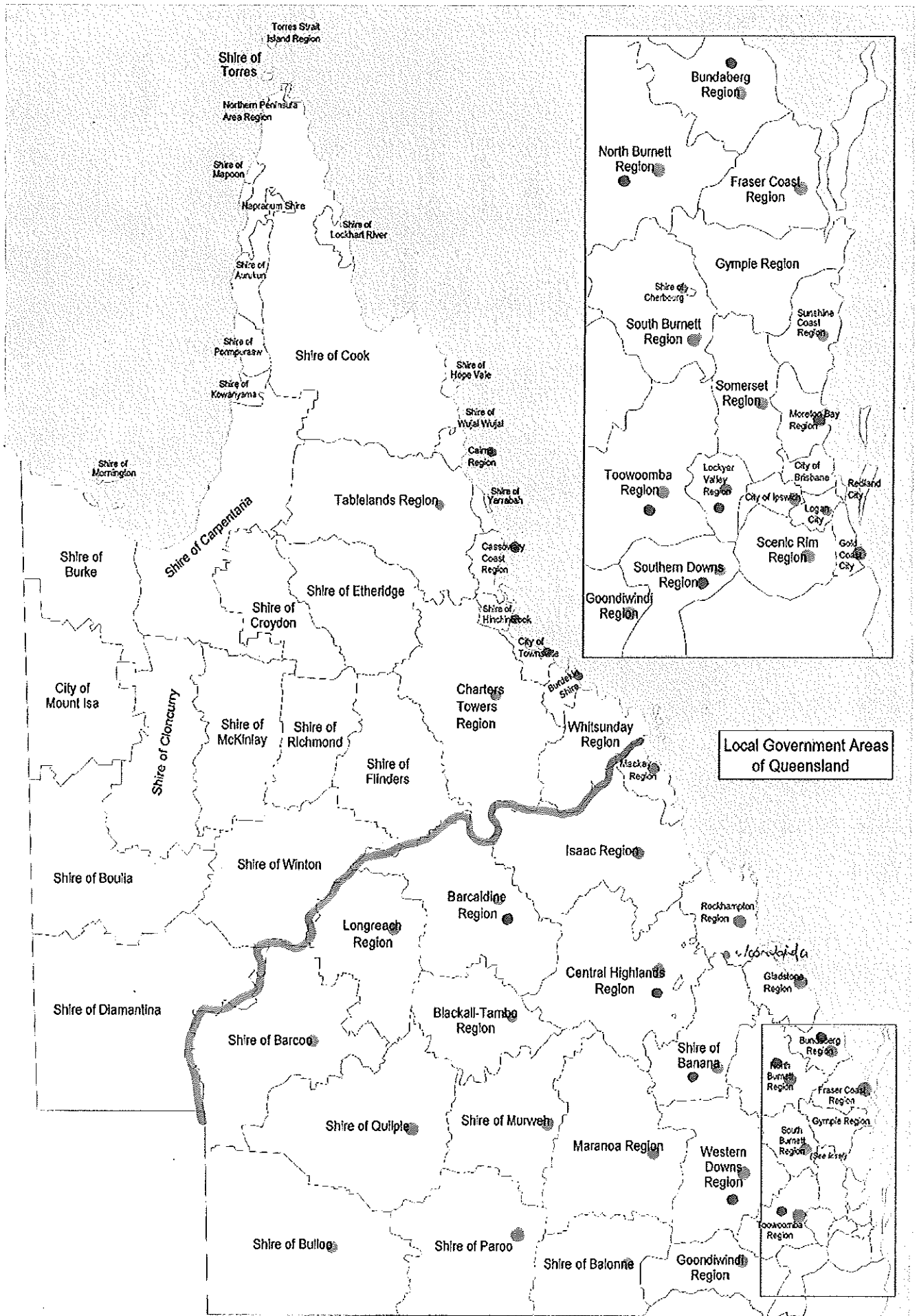
North Queensland	<ul style="list-style-type: none"> • Areas north of Rockhampton including Mackay, Townsville and Cairns have not been significantly affected by the recent flooding events, based on advice from valuation staff operating in those areas. • To date influences have been in line with a normal wet season experienced in North Queensland • Cyclone Tasha crossed the Tropical Coast south of Cairns on 25/12. Flooding occurred in the townships of Ingham and the Herbert delta, Giru and the Haughton delta, as well as the Burdekin delta. • The town of Ingham has flooded, as it does regularly • Rural inspections have ceased • Desktop analysis of existing flood data to 2010/11 flood events, to reflect in proposed valuation.
Rockhampton	<ul style="list-style-type: none"> • Much of the flooding problem in Rockhampton City is recorded and has been previously identified in the land valuations, through analysis of the market and reference to the Queensland 100 year flood levels (Q100) flood mapping. • Areas in Rockhampton such as Depot Hill, which is a well known flood area has been recognised as such in the valuation data base. There are strict town planning controls in place which restrict new construction. • Rural areas around the City of Rockhampton have flooded badly but the impacts are yet to be assessed.
Central Highlands	<ul style="list-style-type: none"> • Flooding in Emerald has impacted more properties than in the 2008 flood. It is estimated that approximately 500 residential, 300 industrial and 20 commercial properties were impacted during the recent flooding. The impact on these properties will be reviewed based on flood aerial photography, Local Government flood mapping and satellite imagery. In Emerald there have been major impacts on infrastructure in and around the town, as a result of the flooding e.g. flooding in a major shopping centre. • Rural farming lands have been adversely impacted but the extent of damage is yet to be assessed. • While statutory land valuations have been mostly completed in Emerald it will be necessary for valuers to review land valuations and make appropriate adjustments in those flood affected areas with special consideration for those properties which have not flooded previously.
Central / Western Queensland	<ul style="list-style-type: none"> • Smaller central western towns including Alpha and Jericho which were last valued in 2009 and are subject to flooding will also be reviewed.

	<ul style="list-style-type: none"> • Most of the town of Theodore was extensively flooded and proposed land valuations will be reviewed. • Moura was also impacted by flooding. • Rural areas have also been affected to an unknown extent, yet to be assessed.
Gympie	<ul style="list-style-type: none"> • The town of Gympie, and low lying areas along the Mary River and associated creeks have experienced significant flooding due to heavy rainfall in catchment. • The flood levels appear to be below previous flood level heights, which have been reflected in valuations. Small number of affected properties in the town. Staff are monitoring the situation in Gympie and surrounding areas. • Damage to rural areas is not known at this time • The small towns of Goomeri, Kilkivan and Woolooga had significant flooding and values will be reviewed once access is fully available. • Access within the region is severely limited due to flooding, and will limit inspections by staff.' • Valuers will review any affected areas and values once the waters recede
Maryborough and Fraser Coast	<ul style="list-style-type: none"> • The Mary River and associated streams have experienced moderate flooding, with low lying areas along the river and within the City of Maryborough experiencing minor to moderate flooding. • Flood levels appear to be below previous flood heights, which have been reflected in the valuations. Small number of properties affected. Staff are monitoring the situation in the City of Maryborough. • Damage to rural areas is not known at this time • Access within the region is limited due to flooding, and will limit inspections by staff. • Valuers will review any affected areas and values once the waters recede
Toowoomba Region / Lockyer Valley / Somerset Region	<ul style="list-style-type: none"> • Toowoomba City was severely impacted by localized flooding in the CBD as a result of a severe storm on 10 January. Valuations will need to be reviewed as a result. • Other parts of the city were also impacted by heavy runoff and damage as a result of continuing rainfall. • Areas along the Toowoomba Range were also affected by extreme runoff. • The Lockyer Valley also suffered severe flooding with loss of life. It is too early to assess what impact this flooding will have on land values. • Lockyer flood events of 10 and 11 January were extreme and exceeded existing known flood information. • Areas that will require review include Withcott, Murphy's Creek, Helidon and Grantham. • Towns of the Brisbane Valley catchment including Esk &

	Kilcoy also experienced flooding and isolation.
Bundaberg	<ul style="list-style-type: none"> • Bundaberg City and the associated port areas were also affected by the recent flooding. However the flood event was generally 0.5 of a metre lower than the 1942 flood level, which has been the benchmark level, relied upon by SVS valuers. • Low lying parts of Bundaberg flooded a couple of times in the recent event. • SVS staff in Bundaberg have commenced inspections of flood affected areas to identify affected properties. • Damage to rural areas is not known at this time as it is difficult to get around.
South Burnett	<ul style="list-style-type: none"> • Minor flooding to Barambah and Barkers Creek as well as smaller streams. This flooding is limiting access. • Major centres not greatly affected to date; however flooding has severed Nanango and small number of properties flooded. • Damage to rural areas is not known at this time • Valuers will review any affected areas and values once the waters recede
North Burnett	<ul style="list-style-type: none"> • Council and local representatives of the North Burnett Regional Council have been contacted and advised that flooding occurred mainly in the townships of Gayndah and Mundubbera. • Valuers are inspecting the affected areas in the towns and the impact on proposed valuations will be assessed. • Damage to rural areas is not known at this time •
Western Downs/ Southern Downs/ Goondiwindi	<ul style="list-style-type: none"> • In the south west the towns of Warwick, Dalby and Chinchilla were affected by heavy flooding, on a number of occasions. • While there are existing records relating to flooding in all of these towns they will be reviewed before new valuations issue • While the town of Goondiwindi escaped inundation rural areas around the southern and western downs were impacted causing crop and stock losses. • It has not been possible to inspect these areas for some time due to the wet and boggy conditions.
Moreton Bay Region	<ul style="list-style-type: none"> • Localised flooding to creeks and streams has limited access to parts of the region • There are reports of severe flooding affecting commercial and residential properties in the Caboolture catchment and in the Caboolture area. • There are also impacts on infrastructure, including roads and bridges. • Valuers will review any affected areas and levels of value once the waters recede

Sunshine Coast	<ul style="list-style-type: none"> • Significant rainfall plus high tides have flooded some roads in the urban centres. • Localised flooding to creeks and streams has limited access to parts of the region. • Landslip is a problem in some areas to Buderim and Blackall range • No clear idea of any significant flooding or damage to date. • Valuers will review any affected areas and values once the waters recede
Redlands / Gold Coast	<ul style="list-style-type: none"> • Redlands and the Gold Coast, while impacted by localized flooding, have not received severe flooding to date.
Brisbane	<ul style="list-style-type: none"> • Parts of the Brisbane area have been seriously affected by flooding from the Brisbane River and other watercourses. While many of these areas were inundated in the 1974 flood there are other areas believed to be newly affected. • The impacts of the January floods on property values will not be immediately known and will take some time to assess. • Following the 1974 flood there was buyer resistance in the market place for a number of years for flood affected properties. This impact was reflected in the valuations. • Inspections of flood affected areas are underway, with further inspections to be completed when larger volumes of water are released from Wivenhoe Dam and tides reach their peak. • At this stage there are a few reports of slippage/erosion and valuers have been instructed to review to ensure a correct allowance is made where necessary.
Ipswich / Scenic Rim	<ul style="list-style-type: none"> • Like Brisbane the City of Ipswich flooded extensively from the Bremer River with approximately one third of the City directly affected. Many of these areas were recognized as flood prone, following the 1974 floods. • Valuers will need to carry out inspections to determine the full impacts of the flooding in Ipswich City and surrounding rural areas. • Rural properties in the southern part of the Scenic Rim have not been adversely affected.

Disaster Declared Local Government Areas. @ 7/11/2011



Options for issuing the 2011 Statutory Land Valuations

Attachment C

Option 1: Current program to issue annual statutory land valuations by 31 March 2011 (Whole State – site and unimproved value)				
Constraint: Time and resourcing to ensure valuations reflect the impacts of flood on affected land				
Fiscal (Clients and Stakeholders)	Social (Landowners)	Business (SVS)	Systems (QVAS)	
Positive: <ul style="list-style-type: none"> - VFRG stakeholder expectations are met in accordance in line with valuation reform program - Commercial landowners may benefit from reduced values - Implements Government's investment in valuation reform Negative: <ul style="list-style-type: none"> - Certainty of projected revenue (refunds from successful objections may increase against flood affected properties) 	Positive: <ul style="list-style-type: none"> - Majority of commercial business are expecting lower valuation Negative: <ul style="list-style-type: none"> - VG may not be able to provide assurance that all factors have been considered in the time available. - Impact on landowners who are adversely impacted by floods may not be fully reflected in valuations - Valuation issue may distract landowners with flood priorities - Could be viewed as vehicle for "money grab" 	Positive: <ul style="list-style-type: none"> - No legislative changes required - Business as usual approach - Budget already allocated - Much of the valuation work is already completed - Delivers on valuation reform and move to site value as announced by the Govt in March 2010 Negative: <ul style="list-style-type: none"> - Insufficient time to complete adjustments to the valuations to reflect flooding, particularly in Brisbane and Ipswich - Require major refocus of resources to ensure that affects of flooding are reflected in new valuations - Increased objection rate 	Positive: <ul style="list-style-type: none"> - Will provide on-line access to information to landholders on any valuation in the state - Searching will enable all landholders (including displaced landholders) to search the valuation roll on line post annual valuation Negative: <ul style="list-style-type: none"> - The tight schedule and changes to data content to stakeholders may cause issues with LG and OSR systems to record and use new valuations in a timely manner 	

Option 2: Delay the issue of statutory land valuations until May 2011 (Whole State – site and unimproved value)

Constraint: Requires minor legislative amendment

Fiscal (Clients and Stakeholders)	Social (Landowners)	Business (SVS)	Systems (QVAS)
<p>Positive:</p> <ul style="list-style-type: none"> - VRRG stakeholder expectations are met in accordance in line with valuation reform program - Commercial landowners may benefit from reduced values - Implements Government's investment in valuation reform <p>Negatives:</p> <ul style="list-style-type: none"> - Limits local governments time to undertake budget modelling prior to June 2011. - Limits the Office of State Revenue's time to undertake budget modelling prior to June 2011. - Certainty of projected revenue (refunds from successful objections may increase against flood affected properties) 	<p>Positive:</p> <ul style="list-style-type: none"> - Landowner confidence that flood impacts have been taken into account in determining new land values - Land owners rights preserved through the objection process - Credibility and reputation of SVS maintained <p>Negatives:</p> <ul style="list-style-type: none"> - Still issuing when landowners have been adversely impacted (lack of sensitivity) - Some records may be not updated with advice in relation to: death or street addresses of destroyed/uninhabitable properties. 	<p>Positive:</p> <ul style="list-style-type: none"> - Provides more time to produce targeted communication and information campaign in conjunction with stakeholders - The SVS will have sufficient time to make flood related adjustments. Introduces site value this year - Business as usual approach, other than delayed issue - Budget already allocated - Can review any subsequent wet season events - Allows more time to assess impacts on rural market <p>Negatives:</p> <ul style="list-style-type: none"> - Limited or no flood land sales - Date of issue is further from date of valuation - Other core business may be delayed due to extra time spent on annual valuation eg SLAM valuations - Additional pressure on delivery of 2011/12 valuation - Major refocus of resources - Committed to contracts (eg computer share, call centre) 	<p>Positive:</p> <ul style="list-style-type: none"> - Slightly relieve the very tight time frames for introduction of the reforms in the LVA - Provides more time for functionality to be available and training undertaken prior to it being required <p>Negatives:</p> <ul style="list-style-type: none"> - Additional costs to change support program currently based on issue prior to 31 Mar 2011 - Planned conversion of information by local governments is currently based on valuations being issued by 31 March 2011. Any alteration to this schedule may impact on this client group

Option 3: Delay the issue of statutory land valuations until after 30 June and take effect on 30 June 2012 for rating and taxing purpose (Whole State – site and unimproved value)

Constraint: Requires legislative amendment				
Fiscal (Clients and Stakeholders)	Social (Landowners)	Business (SVS)	Systems (Q/VAS Impacts)	
<p>Positives:</p> <ul style="list-style-type: none"> - Allows stakeholders sufficient time to plan for next budget cycle in 2012/13. - Government funding allocated and expended is preserved <p>Negatives:</p> <ul style="list-style-type: none"> - No benefit in 2011 as a result of valuation reform - Delayed realisation of the implementation of site value - Allows sufficient time to complete the objection process prior to valuations becoming effective - local governments and the Office of State Revenue 	<p>Positives:</p> <ul style="list-style-type: none"> - Sensitivity to Land owners in post flood recovery - VG assurance in delivering a valuation program - Timing of when the valuations take effect for rating and taxing purposes delayed until 2012 - More time to communicate site value change <p>Negatives:</p> <ul style="list-style-type: none"> - Land owner confidence may be diminished in valuation reform - Issue date is more remote from date of valuation and could be less reflective of the market and confusing to landowners - Adverse impact on landowners not affected by floods and whose properties will have a reduced valuation (eg commercial/industrial properties in Brisbane and the Gold Coast) - Perception of government is holding artificial pre-flood and market values in order to retain revenue 	<p>Positives:</p> <ul style="list-style-type: none"> - Allows more time to establish correct valuations and assess flooding impacts - Can still retain existing work completed for annual valuation to date by SVS valuers and external contract valuers (shopping centres, islands) - Provides opportunity for catch up on other work (eg SLAM) - Time to rebalance resources and subsequent "wet" season events - Allows sufficient time to complete the objection process prior to valuations becoming effective - Time to update records with records of: death and street addresses of destroyed/uninhabitable properties. <p>Negatives:</p> <ul style="list-style-type: none"> - Issue date is more remote from date of valuation and could be less reflective of the market - Committed to contracts (eg computer share, call centre) 	<p>Positives:</p> <ul style="list-style-type: none"> - More time to deliver training for systems changes - Stakeholders could receive the complete data/valuation extract post grievance and any site improvement changes well in advance of 30 June 2012 - Provides opportunity to further refine electronic service delivery <p>Negatives:</p> <ul style="list-style-type: none"> - Requires considerable system changes - currently no capacity to roll a revaluation past end of financial year - Stakeholder systems may require changes to accept on a different data schedule 	

Deleted: -> Adverse impact on landowners not affected by floods and whose properties will have a reduced valuation (eg commercial/industrial properties in Brisbane and the Gold Coast)¶
 -> Perception of government is holding artificial pre-flood and market values in order to retain revenue.¶

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Option 4: Do not issue statutory land valuations for 2011

Constraint: Requires legislative amendment

Fiscal (Clients and Stakeholders)	Social (Landowners)	Business (SVS)	Systems (QVAS)
<p>Positives:</p> <ul style="list-style-type: none"> - Existing valuations continue for rating and taxing purposes - Office of State Revenue (OSR) and Local Governments can model against known valuations - Not making provisions for refunds - Aligns with decision made in 2008/09 following GFC and flood event in North Qld <p>Negatives:</p> <ul style="list-style-type: none"> - Valuations may still change upon owner application for flood damage up to 6 months - Expected reductions by some landowners as a result of 2011 valuation and valuation reform will not occur - Delays introduction of site value and other methodology reforms. 	<p>Positives:</p> <ul style="list-style-type: none"> - Valuations are not a distraction from recovery efforts, or another concern for landowners - Less risk of being perceived as revenue raising exercise - No automatic right to objection but opportunity to adjust for flood if land permanently damaged <p>Negatives:</p> <ul style="list-style-type: none"> - Confidence in government to deliver valuation reform is diminished - Perception could be that the Government is holding artificial pre flood and market values in order to retain revenue 	<p>Positives:</p> <ul style="list-style-type: none"> - Data collection for flood affected areas will be enhanced - Opportunity to see how the property market moves in affected areas - Not issuing will mean no objections – allow focus on flood impacts and next valuation <p>Negatives:</p> <ul style="list-style-type: none"> - Relevance of contract valuations outdated (eg shopping centres) - Work done to date may not be of use in subsequent valuation - Already expended SVS and reform funds for a valuation that will be outdated - Contractual commitments already made with suppliers eg Computershare, Call Centre 	<p>Positives:</p> <ul style="list-style-type: none"> - Will take the pressure off the very tight schedule and enable a re-arrangement of support and development project / program <p>Negatives:</p> <ul style="list-style-type: none"> - Will require changes to support program to roll out the annual valuation - Will require significant manual intervention to retain work of 2011 annual valuation calculations. May impact on systems of Local Government's and OSR as full annual valuation expected and planned

Option 5: Issue a partial annual valuation – to local governments not affected by the flood

Constraint: Requires legislative amendment

Fiscal (Clients and Stakeholders)	Social (Landowners)	Business (SVS)	Systems (QVAS)
<p>Positives:</p> <ul style="list-style-type: none"> - Site value program introduced in line with VRRG stakeholders expectations for some local government areas - Some stakeholder needs are met in accordance with existing valuation reform program - Some commercial landowners may benefit from reduced values - Government investment in valuation reform protected <p>Negatives:</p> <ul style="list-style-type: none"> - Site value program not introduced in line with VRRG stakeholders expectations for some local government areas - Stakeholders expectations will not be met in the local government area's where a valuation is not issued – impacts relativity between property type across the State when some will be on site value and others will remain on unimproved value. - The Office of State Revenue expectations will not be met of consistent state-wide application of new methodology - Methodology cliff faces – some Local Government's move to site value and others do not - Local Government's not receiving valuation may complain about fees - Certainty of projected revenue (refunds from successful objections) - Accuracy of products may be questioned 	<p>Positives:</p> <ul style="list-style-type: none"> - Confidence in government's ability to deliver valuations - Majority of commercial business are anticipating lower valuation - Flood affected area landowners assured that the Government is reviewing their land values <p>Negatives:</p> <ul style="list-style-type: none"> - May impact adversely on land owners - Distraction for flood affected landowners - Could be viewed as "money grab" - Stakeholder confusion in methodology used i.e site or unimproved - More difficult to communicate valuation reforms 	<p>Positives:</p> <ul style="list-style-type: none"> - SVS resources prioritised to deliver quality product in Local Government's being valued - Opportunity to phase in site value methodology and practice - Catch up on other work (existing objections, SLAM) - Rebalance resources across the State to high volume work <p>Negatives:</p> <ul style="list-style-type: none"> - Relevance of contract valuations outdated (eg shopping centres) in local government areas where valuations not issued. - Work done to date may not be of use in subsequent valuation in local government areas where valuations not issued. - Already expended SVS and reform funds for a valuation that will be outdated in local government areas where valuations not issued. 	<p>Positives:</p> <ul style="list-style-type: none"> - System capability <p>Negatives:</p> <ul style="list-style-type: none"> - That is a staged introduction of site over 2 years when recently assessed was a significantly higher cost option than full implementation of valuation reform - Statistics and data processing of valuations for grants commission will be inconsistent and require recalculation for non issued Local Government's.



Hon Stephen Robertson MP
Member for Stretton



Minister for Natural Resources,
Mines and Energy and
Minister for Trade

Ref CTS 00597/11

28 JAN 2011

The Honourable Anna Bligh MP
Premier and Minister for the Arts
Member for South Brisbane
PO Box 15185
CITY EAST QLD 4002

Dear Premier

I am writing to seek your endorsement to delay the issue of the statutory land valuation until 3 May 2011 by way of amendment to the *Land Valuation Act 2010*.

In line with the Land Valuation Act, the Valuer-General is scheduled to issue approximately 1.625 million valuations in all 58 rateable local governments in Queensland prior to 31 March 2011. The valuation issue day is currently 21 March 2011.

The recent flooding events which extended across approximately 70% of Queensland have impacted on the completion of the valuation program and the possible effects these will have on a significant number of valuations. The Valuer-General, Mr Neil Bray has recommended deferring the issue of the valuation until May 2011.

Deferral of the valuation issue day to 3 May 2011 will allow more time for the Valuer-General to analyse spatial imagery and other data, inspect flood affected properties to assess impacts and make flood related valuation adjustments where necessary.

A minor legislative amendment to the Land Valuation Act is required to delay the issue of the valuation until after 31 March. As the Land Valuation Act stands, section 79 (2) specifies that the valuation notice must be given as soon as practicable, but no later than 31 March in the year in which the annual valuation is to take effect. There is no provision within the Land Valuation Act for the Valuer-General to defer this date after 31 March, and therefore legislative amendment is required to allow deferral.

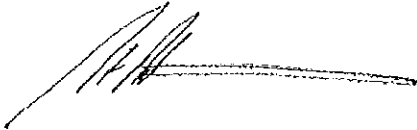
The momentum of the valuation reform program, particularly the introduction of site value in 2011, will not be impacted by the deferral of the valuation issue day. In addition, the date of valuation effect, which is the day from which revenue gatherers can use the valuations (30 June 2011) will not change.

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Subject to your endorsement, approval is also sought to request the Office of Parliamentary Counsel to draft the necessary amendment as per the attached drafting instructions; and include the amendment in an existing Authority to Introduce Cabinet Submission scheduled for the Cabinet of 14 February 2011. This amendment has a sunset clause until 30 June 2011. As this provision is proposed to be enacted as an exceptional change to policy due to the floods across Queensland, it is not proposed to change the prescribed date in the future. It would be necessary for the amendment to receive Royal Assent prior to 31 March 2010.

Should you have any further enquiries, please do not hesitate to Mr Neil Bray, Valuer-General of the Department of Environment and Resource Management on telephone 3330 5955.

Yours sincerely

A handwritten signature in dark ink, appearing to read 'S. Robertson', with a long horizontal flourish extending to the right.

STEPHEN ROBERTSON MP

Att

Land Valuation Amendment Bill 2011**1. INSTRUCTING OFFICER**

Department of Environment and Resource Management

Contact details: Joe Piccini

work phone: [REDACTED]

fax: [REDACTED]

email: [REDACTED]

2. APPROVAL

Details of approval to be inserted after Cabinet meeting.

3. URGENCY AND CRITICAL DATES (including reasons)

3.1 The Land Valuation Bill 2011 (the Bill) must be debated during the February/March sittings of Parliament and receive Royal assent prior to 31 March 2011 as this is the date that the Land Valuation Act 2010 (the Act) requires valuation notices to be issued to property owners and valuations supplied to local governments and the Office of State Revenue.

3.2 The Bill is scheduled to be submitted to Cabinet as a combined Authority to Prepare/Authority to Introduce on XXXXXXXX. This date cannot be extended beyond XXXXXXXX.

4. BACKGROUND

4.1 The provision of statutory valuation services is a fundamental input into the Queensland (QLD) economy. The valuations are used for rating, State land rentals and land tax purposes by local governments, the Department of Environment and Resource Management (DERM) and the Office of State Revenue.

4.2 New statutory land valuations in 58 local government areas are currently being undertaken by the State Valuation Service (SVS) in accordance with the *Land Valuation Act 2010*.

4.3 About 1.6 million new valuations are planned to issue on 21 March 2011 (this date is not publicly known) with a relevant date of valuation of 1 October 2010, to become effective for rating and taxing purposes from 30 June 2011.

4.4 The revaluation program is well advanced and many land valuations have been entered into the Queensland Valuation and Sales system (QVAS) which houses valuations data. While land valuations are well advanced, the occurrence of recent flooding, particularly in south-eastern Queensland, requires investigation to determine the full extent of flooding and its impact on those valuations.

Department of Environment and Resource Management
MINISTERIAL BRIEFING NOTE

TO: Minister for Natural Resources, Mines
and Energy and Minister for Trade

SUBJECT: Potential Failure of Bazley's Dam

Advisor	OK
Dated / /	
Approved Not Approved Noted	
Further information required	
Minister.....	
Dated / /	

REQUESTED BY

- The Director-General requested this brief which is required by 24 January 2011.

RECOMMENDATION

- It is recommended that the Minister:
- note** that the department has been advised that the Bazley's Dam which is on the right bank of the Euri Creek flood plain, approximately 15 kilometres from Bowen could potentially fail at the spillway. There is currently considered no threat to downstream population at risk. However three crossings are likely to be affected should the dam fail including the Bruce Highway.

BACKGROUND

- Bazley's Dam (the dam) is a large farm dam approximately 7.9 metres high and 2,000 to 3,000 Megalitres in capacity.
- The dam is situated 20° 4' 29" S, 148° 46' 48" S approximately 15kilometers West of Bowen.
- The dam is categorised as 'non-referable' dam as it does not have a population at risk from a failure of the dam. Note that 'population at risk' does not include road users on the downstream crossings.

CURRENT ISSUES

- A landholder adjacent to the dam (Rob Dyson) notified the department this morning that the dam is in the process of failing.
- While it is considered that there is no risk to any population, there are three crossings downstream of the dam likely to be affected should the dam fail. These are: East Euri Creek Road; West Euri Creek Road; and the Bruce Highway.
- The Euri Creek currently has only a few feet of water flowing down it so is less likely to significantly affect any flood event should the dam fail.
- The department has contacted Emergency Services Queensland (EMQ) as required by the incident protocol. EMQ is responsible for contacting all other relevant authorities including the police.
- The local police have been in contact with the department and advised that they were at the dam on Saturday 22 January and that water was going over the spillway at that time.
- Police officers were asked to watch the dam and to have people ready to close the three downstream crossings at risk if the dam failure progressed.
- The dam spillway has just been inspected by Guy Bignell from the Mackay Office. Guy was accompanied on his inspection by three uniformed police and a couple of landholders. His initial verbal report to the Office of the Water Supply Regulator (OWSR) indicates that there is only about 1cm of water currently going over the crest and it is unlikely to fail at this time.
- However, there is some erosion occurring of the spillway embankment and there is a crack along the spillway crest. Therefore, if major spillway discharges occur, it could well fail relatively quickly.

Author Name: Penny Douglas Position: A/GM OWSR Tel No: [REDACTED] Date: 24 January 2011.	Cleared by Name: Dean Ellwood Position: ADG OER Tel No: [REDACTED] Name: Position: Tel No:	Cleared by Name: Terry Wall Position: ADG ENRR Tel No: [REDACTED] Name: Position: Tel No:	Recommended: Name: John Bradley Director-General, DERM Tel No: [REDACTED] Date:
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- As the dam is 'non-referable' and there are no population at risk if it were to fail, the dam is not subject to regular inspection reports. In addition, the department does not have the power to ensure that an emergency action plan is in place and the department is unable to apply the emergency powers in the Water Supply Act to direct the dam owners to take actions to minimise the risk and or consequences of dam failure.
- Following his inspection, Guy Bignell is going to talk to the managers of the property and discuss with them how they might reduce the risk of failure or minimise the consequences of failure.
- A further briefing note will be provided updating the discussions with the managers of the property.
- An incident report will be prepared by OWSR.

RESOURCE/IMPLEMENTATION IMPLICATIONS

- Regional OWSR staff will continue with investigations.

PROPOSED ACTION

- Further investigations will be undertaken by DERM regional staff.
- An incident report will prepared within 48 hours of the notification.

OTHER INFORMATION

- *Consultation:* EMQ has been advised as required by the incident protocol. EMQ is responsible for contacting all relevant authorities.
- *Legislation:* Water Supply (Safety and Reliability) Act 2008
- *Key Communication Messages:* A media release may need to be prepared, once a clearer assessment of the situation is known

MINISTER'S COMMENTS

ATTACHMENTS

- Map of the Brazley's Dam and surrounding area. Note Brazely's Dam is number 2261

Author Name: Penny Douglas Position: A/GM OWSR Tel No: [REDACTED] Date: 24 January 2011.	Cleared by Name: Dean Ellwood Position: ADG OER Tel No: [REDACTED] Name: Position: Tel No:	Cleared by Name: Terry Wall Position: ADG ENRR Tel No: [REDACTED] Name: Position: Tel No:	Recommended: Name: John Bradley Director-General, DERM Tel No: [REDACTED] Date:
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Department of Environment and Resource Management
MINISTERIAL BRIEFING NOTE

TO: Minister for Natural Resources, Mines
and Energy and Minister for Trade

Advisor	OK
Dated	/ /
Approved	Not Approved
Further information required	
Minister.....	
Dated	/ /

SUBJECT: Moreton Water Resource Plan

REQUESTED BY

- The Minister's Office requested this brief by 24 February 2011. The brief also relates to CTS 01666/11, which was requested by the Minister's Office (by 11 February 2011).

RECOMMENDATION

It is recommended that the Minister:

- note** that the Department of Environment and Resource Management does not believe that the Moreton Water Resource Plan should be reviewed as a result of the flood that occurred throughout the plan area in January 2011;
- note** that the response to the Chief Executive of the Somerset Regional Council provided in CTS 20553/10 (Attachment 1) is still relevant with only minor changes
- sign** the reply to the Chief Executive Officer of the Somerset Regional Council.

BACKGROUND

- The Moreton Water Resource Plan (WRP) was finalised in March 2007 and the Resource Operations Plan (ROP) was finalised in December 2009. These plans were developed in consideration of rigorous technical assessments (hydrologic, environmental, social, economic and cultural) as well as extensive community consultation.
- The independent environmental assessment that underpins the WRP confirmed that the Moreton Basin is a highly developed system, with over one third of the river's average annual flow already allocated for consumptive purposes. Therefore, the WRP allows for very limited additional water resource development and does not allow for additional take through waterharvesting downstream of Wivenhoe Dam (the dam).
- The Chief Executive Officer of the Somerset Regional Council wrote to the Minister on 26 October 2010 in response to a request from irrigators downstream of the dam seeking clarification as to whether waterharvesting can occur when water is released from the dam and is running over Mt Crosby Weir.
- The department prepared a response explaining that irrigators below Wivenhoe Dam only have the authority to take water in accordance with their existing water allocations and that it is not appropriate for additional entitlements to be granted for waterharvesting.
- The Minister did not sign the letter and requested that the department consider amending the WRP to take into account large flooding events.

CURRENT ISSUES

- The Moreton WRP already takes into account large flooding events as well as drought conditions over a 111 year simulation period that includes extreme events such as the 1893 and 1974 floods as well as the severe Federation drought that occurred in the Moreton Basin during the late 1890s through to the early 1900s.
- As subordinate legislation to the Act, WRPs must be reviewed before the end of their 10-year statutory timeframe. The Moreton WRP must be reviewed by 2017. Updated technical assessments will inform the review, including an extension of the hydrologic model to

Rec'd - ODG

16 FEB 2011

Author Name: Bernadette Hogan Position: A/Director, Water Planning South East Tel No: [REDACTED] Date: 10/02/2011	Cleared by Name: Lyall Hinrichsen Position: A/GM WAP Tel No: [REDACTED]	Cleared by Name: Debbie Best Position: DDG WEO Tel No: [REDACTED]	Recommended: Name: John Bradley Director-General, DERM Tel No: [REDACTED] Date: [REDACTED]
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File Ref:

include the flood event that occurred in January 2011, as well as the Millennium Drought that immediately preceded it.

- Currently, there are several undeveloped and underutilised water entitlements held by irrigators downstream of the dam. When the Moreton ROP was finalised, the existing rural entitlements were converted to tradable water allocations separate from land, which allows for additional demand to be met through the trading of previously underutilised water entitlements.
- Irrigation entitlements downstream of the dam are already extremely reliable with a similar reliability to urban entitlements. Any water harvesting would provide little to no additional access to water and therefore no benefit. Opportunities to water harvest downstream of the dam rarely occur and entitlements to take this water would have a low reliability that may not justify the additional investment needed to install the necessary infrastructure. Furthermore, only increased water taking in periods when Mt Crosby Weir was overflowing would adversely affect the health of the estuarine reaches of the Brisbane River, which relies on regular inflow of fresh water.
- An amendment to the WRP to allow for additional water harvesting downstream of the dam would provide little to no benefit to existing users and would not provide any additional flood mitigation for Brisbane.

RESOURCE/IMPLEMENTATION IMPLICATIONS

- There are no resource/implementation implications.
- An amendment to the Moreton WRP is not considered to be necessary. It would divert resources away from high priority projects, such as finalisation of the Mary Basin ROP and the release of a draft Logan Basin ROP to incorporate Wyaralong Dam as part of the Logan River Water Supply Scheme.

PROPOSED ACTION

- That the Minister respond to the Somerset Regional Council as per the attached draft letter.
- Proposed changes to the Moreton ROP, which are necessary to facilitate the temporary lowering of water levels in Wivenhoe Dam do not necessitate an amendment of the Moreton WRP.

OTHER INFORMATION

- *Consultation:* N/A
- *Legislation:* N/A
- *Key Communication Messages:* N/A

MINISTER'S COMMENTS

ATTACHMENTS

- Draft response letter

Author Name: Bernadette Hogan Position: A/Director, Water Planning South East Tel No: [REDACTED] Date: 10/02/2011	Cleared by Name: Lyell Hinrichsen Position: A/GM WAP Tel No: [REDACTED]	Cleared by Name: Debbie Best Position: DDG WEO Tel No: [REDACTED]	Recommended: Name: John Bradley Director-General, DERM Tel No: [REDACTED] Date:
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Prepared by:	Bernadette Hogan	Approved by:	Lyall Hinrichsen
Title:	ADirector South East Water Planning	Title:	GM WAP WEO
Division/Region:	Water and Ecosystem Outcomes	Telephone:	
Telephone:		Date Approved:	11 February 2011
Date Prepared:	11 February 2011		
Date Received in MO:	MO Clearance by:		Date Cleared:

Ref CTS 01689/11

Mr Robert Bain
Chief Executive Officer
Somerset Regional Council
PO Box 117
ESK QLD 4312

Dear Mr Bain

Thank you for your letter dated 26 October 2010 regarding water harvesting in the Brisbane River, below Wivenhoe Dam.

Your query relates to the ability of mid Brisbane River farmers to take water during times when the Mt Crosby Weir is overflowing. Officers from the Department of Environment and Resource Management advise that there is no allowance for irrigators to harvest additional water from releases, regardless of whether Mt Crosby Weir is overflowing.

Extensive consultation occurred as part of the process for developing the Moreton Resource Operations Plan. The consultation process specifically included meetings with Mid-Brisbane River Irrigators where the plan's proposals were discussed. I am advised that departmental officers provided detailed explanations of the water allocations and how these allocations would reflect previous access to water. The advice included a description of the advantages of the greater flexibility of supplemented tradeable water allocations. Detailed submissions were made by irrigators about the draft plan, however none of the submissions related to this particular issue. All issues raised during the consultation and submission process are addressed in the consultation report, which was published with the final Moreton Resource Operations Plan and is available on the department's website.

Through the water resource planning process, previously held licences have now been converted to water allocations, and extractions must be in accordance with conditions on the water allocation. The *Water Resource (Moreton) Plan 2007* prohibits the Chief Executive of the department from making a decision that would increase the average volume of water taken in the plan area. This is because over one third of the pre-development average flow value for the Brisbane River system is already allocated for urban and rural consumptive use purposes. Even when Mt Crosby Weir is overflowing, such water is not wasted, but is playing an important function in maintaining the health of the lower Brisbane River, which relies on regular supplies of fresh water.

Clearly, in major floods which as those that occurred in January of this year, there is excessive water in the system. However, such flows occur extremely infrequently

and it would be unviable to establish and maintain water infrastructure reliant on such infrequent events.

Enquiries on the take of water, including opportunities for irrigators to increase their entitlements, should be directed to Seqwater, as seasonal water assignments (temporary trading) are allowable in this section of the Brisbane River.

Should you have any further enquiries, please do not hesitate to contact Mr Fred Hundy, Acting Principal Project Manager, Water Services, South East Region of the department on telephone [REDACTED]

Yours sincerely

STEPHEN ROBERTSON MP

Prepared by:	Bernadette Hogan	Approved by:	Lyll Hinrichsen
Title:	A/Director South East Water Planning	Title:	GM WAP WEO
Division/Region:	Water and Ecosystem Outcomes	Telephone:	
Telephone:		Date Approved:	11 February 2011
Date Prepared:	11 February 2011		
Date Received in MO:		MO Clearance by:	
		Date Cleared:	

Ref CTS 01689/11

Mr Robert Bain
 Chief Executive Officer
 Somerset Regional Council
 PO Box 117
 ESK QLD 4312

Dear Mr Bain

I refer to your letter dated 26 October 2010 to the Honourable Stephen Robertson MP regarding water harvesting in the Brisbane River, below Wivenhoe Dam. As I have now been appointed Minister for Environment and Resource Management, I am pleased to respond to your letter.

Your query relates to the ability of mid Brisbane River farmers to take water during times when the Mt Crosby Weir is overflowing. Officers from the Department of Environment and Resource Management advise that there is no allowance for irrigators to harvest additional water from releases, regardless of whether Mt Crosby Weir is overflowing.

Extensive consultation occurred as part of the process for developing the Moreton Resource Operations Plan. The consultation process specifically included meetings with mid-Brisbane River irrigators where the plan's proposals were discussed. I am advised that departmental officers provided detailed explanations of the water allocations and how these allocations would reflect previous access to water. The advice included a description of the advantages of the greater flexibility of supplemented tradeable water allocations. Detailed submissions were made by irrigators about the draft plan, however none of the submissions related to this particular issue. All issues raised during the consultation and submission process are addressed in the consultation report, which was published with the final Moreton Resource Operations Plan and is available on the department's website.

Through the water resource planning process, previously held licences have now been converted to water allocations, and extractions must be in accordance with conditions on the water allocation. The *Water Resource (Moreton) Plan 2007* prohibits the chief executive of the department from making a decision that would increase the average volume of water taken in the plan area. This is because over one third of the pre-development average flow value for the Brisbane River system is already allocated for urban and rural consumptive use purposes. Even when Mt Crosby Weir is overflowing, such water is not wasted, but is playing an important function in maintaining the health of the lower Brisbane River, which relies on regular supplies of fresh water.

Clearly, in major floods such as those that occurred in January of this year, there is excessive water in the system. However, such flows occur extremely infrequently and it would be unviable to establish and maintain water infrastructure reliant on such infrequent events.

Enquiries on the take of water, including opportunities for irrigators to increase their entitlements, should be directed to Seqwater, as seasonal water assignments (temporary trading) are allowable in this section of the Brisbane River.

If any further information is required, please do not hesitate to contact Mr Joshua Cooney, Principal Policy Advisor in my office on telephone [REDACTED]

Yours sincerely

Kate Jones MP
Minister for Environment and Resource Management

Department of Environment and Resource Management
MINISTERIAL BRIEFING NOTE

TO: Minister for Natural Resources, Mines
and Energy and Minister for Trade

Advisor	OK
Dated 15/02/11	
Approved	Not Approved
Further information required	
Minister	
Dated 17/2/11	

SUBJECT: Facilitating water-related dealings to aid disaster recovery

TIMEFRAME

- Noting of this brief is not urgent, but is recommended by 11 February 2011 so that the Minister is aware of the initiatives to facilitate a rapid response to flood and cyclone disaster related water resource management dealings.

RECOMMENDATION

It is recommended that the Minister note that for those parts of the state that have been declared disaster areas, the Department of Environment and Resource Management has implemented initiatives to facilitate:

- Access to water by local governments and state agencies for repair of infrastructure such as roads.
- Repair or replacement of certain water infrastructure such as pumps lost or damaged by recent floods
- De-silting of water bores that were inundated and open to flood water.
- Placement of fill, excavation or destruction of native vegetation in watercourses required to repair or reinstate watercourses

BACKGROUND

- The recent heavy rain, floods and cyclones across Queensland have caused extensive damage to watercourses and infrastructure, both in and outside of watercourses.
- Dealing with an influx of applications for authorisations to undertake repairs or replacements under a normal interpretation of policies and legislation would significantly delay recovery efforts.
- The department needed to facilitate certain water-related dealings to enable a faster return to productive use of water, land and public use infrastructure and to minimise the impact on departmental work load such that other authorisations can be dealt with as quickly as possible.

CURRENT ISSUES

- The government and the people of Queensland are expecting a quick, pragmatic and coordinated response in the declared disaster areas resulting from the recent heavy rains, flooding and cyclones.
- The recovery initiatives with respect to water-related dealings are:
 - A proposed amendment to section 20 of the *Water Act 2000* (the Water Act) which has "Authority to Prepare" and has already been drafted. It is included in the Water and Other Legislation Bill currently due to be introduced to Parliament in May (and potentially passed in August). It will provide a right for 'constructing authorities' to take water without a water permit. Such a take of water is considered low risk in resource management terms. As an interim measure, State Government agencies and local governments can

Rec'd - ODG
- 8 FEB 2011
JD

Rec-ODDG
- 4 FEB 2011

Author Name: Barry Lawson Position :Principal Policy Officer Tel No: [REDACTED] Date: 3 February 2011	Cleared by Name: Paul Sanders Position: A/ Director water Management Tel No: [REDACTED] Name: Lyall Hinrichsen Position: A/GM WAP Tel No: [REDACTED]	Cleared by Name: Debbie Best Position: DDG WEO Tel No: [REDACTED] 7.2.11	Recommended: Name: John Bradley Director-General, DERM Tel No: [REDACTED] Date: 11/2/11
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File Ref:

access water without a water permit as an emergency provision under section 20(2) (a) of the Water Act until 30 April 2011 in areas declared by a 'disaster event' since 1 November 2010;

- Allowing lost or damaged water pumps to be replaced or repaired on a 'like for like' basis without the need for an application for development approval under the *Sustainable Planning Act 2009*;
- Allowing bores to be de-silted by a licensed driller without development approval in areas where this would normally be required provided there is no substantial change to the bore (same depth, casing and water entry details) and
- Publishing guidelines to be mentioned in the *Water Regulation 2002* (by amendment) that will allow water scheme operators (for example SunWater and Seqwater) and landowners to place fill, excavate or destroy native vegetation in watercourses without the need for a riverine protection permit under the Water Act.

RESOURCE/IMPLEMENTATION IMPLICATIONS

- These initiatives will reduce some of the administrative burden for landholders already suffering from the effects of recent natural disasters.
- Apart from facilitating ongoing and future disaster recovery efforts, the section 20 amendment to the Water Act will provide significant ongoing savings for the department and for 'constructing authorities' such as local governments and the Department of Transport and Main Roads.

PROPOSED ACTION

- Advise service delivery staff of the proposed initiatives
- Develop external communication material in consultation with the Client Communications and Information area of the department.

OTHER INFORMATION

- *Consultation:* In developing the initiatives, staff from Water Services and Environmental Services; and the Department of Employment, Economic Development and Innovation (Fisheries) were consulted. There was widespread support. It is proposed to communicate these initiatives to clients through the production of fact sheets, internet pages and letters to local governments, State agencies and client groups (for example Agforce).
- There is no Ministerial power or delegation being exercised under legislation.
- *Key Communication Messages:* The government is cutting 'red tape' to facilitate disaster recovery.

MINISTER'S COMMENTS

RECEIVED
MINISTERIAL OFFICE
15 FEB 2011

☐ MINISTER
☐ POL ADV
☐ MEDIA ADV
☐ PARL SEC
☐ ADMIN

Author Name: Barry Lawson Position :Principal Policy Officer Tel No: [REDACTED] Date: 3 February 2011	Cleared by Name: Paul Sanders Position: A/ Director water Management Tel No: [REDACTED] Name: Lyall Hinrichson Position: A/GM WAP Tel No: [REDACTED]	Cleared by Name: Debbie Best Position: DDG WEO Tel No: [REDACTED]	Recommended: Name: John Bradley Director-General, DERM Tel No: [REDACTED] Date:
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**Department of Environment and Resource Management
EMG BRIEFING NOTE**

TO: The Executive Management Group

SUBJECT: DERM post-flood analysis of priorities

TIMEFRAME

- Noting of this briefing note is required by 24 January 2011.

RECOMMENDATION

It is recommended that the EMG **note**:

- the attached preliminary analysis that is comprised of a summary by each division of their new and changing priorities following widespread flooding in Queensland in December and January 2011;
- that while a significant number of new activities have been identified as necessary in the coming months, fewer activities have been identified as low priority where resources can be used elsewhere, or as activities that should not proceed at this time;
- that some responses have highlighted that decisions made in other divisions will have impacts on their activities and further work may be needed to ensure cross-divisional issues are identified and appropriate mechanisms established to deal with these possible impacts;
- that there are likely to be implications for the re-prioritisation on the cabinet forward timetable and legislative program and further work may be required to adjust the timing of submissions and legislative development processes.

BACKGROUND

- Severe flooding has impacted some 60 to 70 per cent of Queensland over the December 2010 /January 2011 period. Large centres such as Toowoomba, Ipswich, Brisbane and Rockhampton have experienced flood peaks higher than experienced in decades. Additionally, many smaller centres have experienced both river and overland flow flooding events of unprecedented levels.
- While most activities already underway are to address immediate threats to public safety and property, the department has also undertaken some initial exploratory work as a scene setting exercise so that priorities can be considered by EMG and the DG, prior to briefing Ministers. At this stage, this work has not been endorsed at any level in the organisation or discussed with Ministers.
- In that context, divisions were requested to consider how DERM's operations could be affected by:
 - The need to provide information and services to other key government agencies responding to the flood situation;
 - The need to remove direct flood-related threats to protected wildlife and habitat;
 - Legislative obligations (particularly where amendments may be required to ensure obligations are met in different ways due to flood constraints) or exemptions available during the flood situation and powers that become available in a natural disaster situation;
 - Key stakeholders that are flood affected and not able to respond to consultation for some time; and
 - Access to infrastructure, services, locations and resources, including staff, which may be restricted during recovery operations.

Meeting No:		
Agenda Item No:		
Date:		
SECRETARIAT USE ONLY		
Approved	Not Approved	Noted
EMG		
Dated	/	/

Author Name: Arnae Burton / Narelle Osborne Position: PPO/PO, Strategic Advisory Services Tel No: [REDACTED] Date: 20 Jan 2011	Cleared by Name: Penny Douglas Position: A/Director, Strategic Advisory Services Tel No: [REDACTED]	Cleared by Name: Doug Watson Position: General Manager, Governance and Strategy Tel No: [REDACTED] Date: 20 January 2011	Recommended: Name: Danielle Anderson Position: Assistant Director-General, Corporate Services Tel No: [REDACTED] Date: 21 January 2011
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- *Consultation:* Each division in DERM has been consulted and provided a response on their priorities.
- *Legislation:* N/A, noting the issue below regarding potential implications for the legislative program for 2011.

CURRENT ISSUES

- DERM's operations have been affected by the flooding events across Queensland in a multitude of ways and will continue to be affected during flood recovery, particularly where DERM is the State Government's sole provider of critical infrastructure and services.
- The responses show a significant number of new activities have been identified as necessary in the coming months and some prioritisation of current activities. However, relatively few current activities have been identified as low priority where resources can be used elsewhere, or as activities that should not proceed at this time. This may result in failure to deliver milestones over the next six months as current activities are progressively delayed due to capacity constraints caused by flood recovery.
- Cross-divisional implications feature prominently in some responses—for example, the Environment and Natural Resource Regulation (ENRR) division has highlighted the need to assist Regional Service Delivery in undertaking compliance activities. More generally, responses have highlighted that decisions made in other divisions could have impacts on their activities or clients. Further work may be needed to ensure cross-divisional issues are identified and appropriate mechanisms established to deal with possible impacts.
- While most business areas have indicated that delays in consultation with flood-affected stakeholders will need to occur, it is advisable that these delays are consulted / negotiated with stakeholders to ensure that these stakeholders are supportive of the delays and have sufficient capacity on recommencement.
- There are likely to be significant implications of the re-prioritisation on the cabinet forward timetable and legislative program. Further work may be required to adjust the timing of submissions as stakeholders provide advice on their capacity to participate in consultation processes. Cabinet and Parliamentary Services in Corporate Services will work with divisions over the coming weeks to re-assess cabinet timeframes.
- The department will also have to devote resources over the coming months to providing information to, and then responding to the findings of, the newly established Commission of Inquiry into the flood disaster.

RESOURCE/IMPLEMENTATION IMPLICATIONS

- There are significant short-term resourcing implications arising from the new activities identified in Attachment A. Many of these implications are difficult to quantify at this stage, and as indicated above, further work will be required to establish new timeframes.
- The Administration Unit in Corporate Services has one surplus staff member listed as an Employee Requiring Placement who could be made available to other business units.

ATTACHMENTS

- Attachment A – Preliminary analysis of DERM's post-flood priorities

Author Name: Arnae Burton / Narelle Osborne Position: PPO/PO, Strategic Advisory Services Tel No: [REDACTED] Date: 20 Jan 2011	Cleared by Name: Penny Douglas Position: A/Director, Strategic Advisory Services Tel No: [REDACTED]	Cleared by Name: Doug Watson Position: General Manager, Governance and Strategy Tel No: [REDACTED] Date: 20 January 2011	Recommended: Name: Danielle Anderson Position: Assistant Director-General, Corporate Services Tel No: [REDACTED] Date: 21 January 2011
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CTS No. 00566/11

Department of Environment and Resource Management
MINISTERIAL BRIEFING NOTE

TO: Minister for Natural Resources, Mines
and Energy and Minister for Trade

Advisor	OK
Dated	25/1/11
Approved	Not Approved
Further information required	Noted
Minister	[Signature]
Dated	21/2/11

SUBJECT: Interim Brief - Request for advice – Queensland Gauging
Stations

RECEIVED
MINISTERIAL OFFICE
25 JAN 2011

REQUESTED BY

- Minister's Office requested this brief urgently (via memo dated 19 January 2011)

TIMEFRAME

- Noting of this interim brief is required as soon as possible.

RECOMMENDATION

It is recommended that the Minister:

- note the currently available information provided in this brief regarding the Queensland Gauging Station network
- note that further information is being collated and also sought from the Bureau of Meteorology (BoM) and an updated brief containing this information is expected be available by 27 January 2011.

BACKGROUND

- The Department of Environment and Resource Management (DERM) operates 389 gauging stations for water resource assessment and management purposes. Data about these stations, including location, is set out in Attachment 1 - 'The Stream Gauging Station Index 2010'.
- The BoM utilises in excess of 2000 rainfall and streamflow stations for flood warning purposes. These excess which are operated by DERM, the BoM and a range of other entities. The full list of flood warning stations used by the BoM is set out in Attachment 2 - 'BoM's Queensland Flood Warning Stations'.
- Data is provided from 338 of DERM's gauging stations to BoM to support their Flood Warning Service. Ownership of gauging stations operated by entities other than DERM that contribute to the BoM's Flood Warning service is set out in Attachment 3 - 'Non-DERM flood warning stations'.
- Water resource monitoring is undertaken by the department under an approved quality management framework (ISO 9001). The Water Quality and Accounting branch (Water and Ecosystem Outcomes Division) sets policy and standards. Regional staff operate and maintain the monitoring network in accordance with the approved standards. Activities are coordinated through a state wide management team including policy, science and regional representatives.
- Departmental data obtained using telemetry is uploaded to the DERM website in near real time. The website clearly states that the data has not been validated. The data is subsequently confirmed by departmental staff. Where the flow of information from a station has been interrupted due to telemetry issues, the backlog of data is uploaded to the website once telemetry is restored.

Author Name: Greg Long Position: Director, Water Accounting Tel No: [Redacted] Date: 20 January 2010	Cleared by Name: Graeme Milligan Position: GM, Water Quality and Accounting Tel No: [Redacted] Name: Position: Tel No:	Cleared by Name: Debbie Best Position: DDG, Water and Ecosystem Outcomes Tel No: [Redacted] Name: Position: Tel No:	Recommended: Name: John Bradley Director-General, DERM Tel No: [Redacted] Date:
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- DERM gauging stations are routinely maintained by departmental officers. Frequency of maintenance depends on location and access, but is generally at least four times a year. Repairs to meet BoM priorities are undertaken as a matter of priority.
- Departmental staff are members of the Queensland Interagency Flood Coordinating Committee and the BoM's Jurisdictional Reference Group for Water Information.
- Under the BoM's Modernisation and Extension of Hydrologic Monitoring System Program, Queensland organisations have received funding of \$14.6 million over the last four years for projects which have included additional monitoring sites, modernisation of instruments and enhancements to data management and systems. The department has received \$8.3 million to date.

CURRENT ISSUES

- The Minister has requested information on DERM's streamflow gauging network. A summary the responses is provided below. Further details are provided at Attachment 4 – 'Detailed response to Ministerial enquiries'. **This attachment will be updated when additional information is collated and further advice has been received from the BoM.**

1. Maintenance schedule for DERM gauging stations

- DERM gauging stations are routinely maintained by departmental officers. Frequency of maintenance depends on location and access, but is generally at least four times a year.

2. Maintenance priorities for DERM gauging stations

- Repairs to meet BoM priorities are undertaken as a matter of priority.
- DERM endeavours to have gauging stations operational with 24-48 hours of a known failure, however access to the sites due to remoteness, flooding and the availability of instrumentation impact on this timeline.
- If a site is known to be dry or in base flow recession and is remote, repairs may not be undertaken until the next routine trip.

3. Arrangements between BoM and DERM for maintenance of gauges used for flood warnings

- DERM operates 389 gauging stations for water resource assessment and management purposes. Data is provided from 338 of these gauging stations to the BoM to support their Flood Warning Service. Repairs to these gauging stations are actioned as a matter of priority.
- DERM does not maintain any BoM stations or equipment.
- Other entities, including the BoM, Local Government and Industry, have equipment installed within some departmental stations. Service level agreements are in place for shared use of departmental facilities. These entities maintain their own equipment.

4. BoM requests to DERM for maintenance of flood warning gauges and actions undertaken

- Twelve requests from the BoM were received by the department for maintenance for flood warning purposes since September 2010. All requests have been responded to and feedback given to BoM regarding actions undertaken. Repairs have been undertaken to all stations where departmental staff are able to access the site safely and/ or replacement equipment is available.
- Details of requests received, action taken and current status of gauging stations is outlined in Attachment 4 (Table 1 - Departmental responses to requests from BoM for maintenance/ repairs of flood warning gauges). **This information will be updated when further information is received from the BoM.**

Author Name: Greg Long Position: Director, Water Accounting Tel No: [REDACTED] Date: 20 January 2010	Cleared by Name: Graeme Millgen Position: GM, Water Quality and Accounting Tel No: [REDACTED] Name: Position: Tel No:	Cleared by Name: Debbie Best Position: DDG, Water and Ecosystem Outcomes Tel No: [REDACTED] Name: Position: Tel No:	Recommended: Name: John Bradley Director-General, DERM Tel No: [REDACTED] Date:
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5. Gauging stations that are not fully functioning, including telemetry failures

- Regions are currently assessing flood damage where access is possible.
- Damage or telemetry issues have been reported at 49 of the 389 departmental gauging stations. Repairs have been undertaken at all stations where departmental staff are able to access the site safely and/ or replacement equipment is available. Repairs required include addressing telemetry issues, replacement of instrumentation and major works.
- Details of known damage and actions required for repair departmental gauging stations is outlined in Attachment 4 (Table 2 - Known damage to departmental gauging stations and actions required). **This table will be updated with the date the failures were identified, the date repairs were undertaken, if the site is used by the BoM for flood warning purposes and if the BoM is satisfied with the repairs when additional information is compiled and further feedback is received from the BoM.**
- Attachment 5 – 'Current Telemetry Status Report 21/1/2011' provides a current status report on performance of the network. The report shows the operational performance of receipt of data from both streamflow gauging stations and groundwater bores. The system is functioning well and performance issues are currently being addressed. Details on issues with telemetry for streamflow gauging stations are addressed in Attachment 4 - 'Detailed response to Ministerial enquiries' (Table 2 - Known damage to departmental gauging stations and actions required).

6. Watercourse gauging across the state by all entities and their relevance to flood warning

- The BoM utilises in excess of 2000 rainfall and streamflow stations for flood warning purposes. These stations are operated by DERM, the BoM and a range of other entities.
- Data from 338 of the department's 389 stream flow gauging stations is provided to the BoM for this purpose.

RESOURCE/IMPLEMENTATION IMPLICATIONS

- The unprecedented wide scale flooding has challenged the department's capacity to maintain the operations of the gauging station network and related systems. Priority was given to timely responses to requests from the BoM.
- The New South Wales Department of Water and Energy (DEW) has provided a hydrographic team to assist South West region with stream gauging activities. Offers have also been made by HydroTAS and Hydrologic Services (a private company). At this stage, these offers have not been accessed. System support is being sought from DEW.
- DERM's Hydrographic Support Unit located at Rocklea was inundated and power is yet to be restored. This unit provides technical support to the network and all spare equipment is housed at this location. Some critical equipment was able to be safely relocated prior to inundation and repairs with this equipment started on 24 January 2011. Additional equipment required for repairs/ maintenance of critical gauging stations is being sourced from suppliers, other low priority departmental stations and from other jurisdictions. It is anticipated that this unit will be able to provide reduced support to the restoration of the network within two weeks and will be fully operational in three months. The risk to the functionality of the overall statewide network is considered to be low.
- Repair to the gauging station network has been included in the department's application for Natural Disaster Relief funding.

PROPOSED ACTION

- Departmental staff will continue to undertake repairs to all gauging stations that are not fully

Author Name: Greg Long Position: Director, Water Accounting Tel No: [REDACTED] Date: 20 January 2010	Cleared by Name: Graeme Milligan Position: GM, Water Quality and Accounting Tel No: [REDACTED] Name: Position: Tel No:	Cleared by Name: Dabbe Best Position: DDG, Water and Ecosystem Outcomes Tel No: [REDACTED] Name: Position: Tel No:	Recommended: Name: John Bradley Director-General, DERM Tel No: [REDACTED] Date:
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functional (where safe access allows), with priority given to BoM requests.

- The department is developing a proposal to review the adequacy of the gauging station network in consultation with other stream gauging entities. A briefing note will be prepared seeking approval for this review.

OTHER INFORMATION

- *Key Communication Messages:* A media enquiry has been received from the Courier Mail regarding the operation of a gauging station at Murphy's Creek/Spring Bluff on 10 January 2011, and about the operation and maintenance of the department's gauging stations more generally. A media response has been prepared by the department.

Key messages include:

- the department's streamflow gauging network is for water assessment and management purposes only
- information from DERM stream gauging stations is used as part of the BoM's flood warning service and priority is given to responding to requests from the BoM.

MINISTER'S COMMENTS

ATTACHMENTS

- Attachment 1 – Stream Gauging Index 2010
- Attachment 2 – Bureau of Meteorology's Queensland Flood Warning Stations
- Attachment 3 – Non-DERM flood warning stations
- Attachment 4 – Detailed response to Ministerial enquiries
- Attachment 5 – Current Telemetry Status Report 21/1/2011

Author Name: Greg Long Position: Director, Water Accounting Tel No: [REDACTED] Date: 20 January 2010	Cleared by Name: Graeme Milligan Position: GM, Water Quality and Accounting Tel No: [REDACTED]	Cleared by Name: Dabbe Best Position: DDG, Water and Ecosystem Outcomes Tel No: [REDACTED]	Recommended: Name: John Bradley Director-General, DERM Tel No: [REDACTED] Date: [REDACTED]
	Name: Position: Tel No:	Name: Position: Tel No:	