Great Barrier Reef Water Science Taskforce and Queensland Government Response

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Department of Environment and Heritage Protection

Facts about the Great Barrier Reef

• **Globally significant** - the world’s largest coral reef.
• **Contributes an estimated $5.7 billion a year** to the Australian and Queensland economies
• Supports around **69,000 jobs**.
• **But the reef is in trouble** – climate change is the biggest long-term threat.
• **Improving water quality** now will help build resilience.
• Despite big efforts by farmers and graziers to improve management practices, **land-based run-off from agriculture remains the biggest water quality threat.**
Great Barrier Reef Water Science Taskforce

Formed May 2015 to provide advice to government on:

• **how it could meet its ambitious reef water quality targets** (reduce sediment run-off by up to 50% and nitrogen run-off by 80% by 2025)

• **priorities for investing an additional $90 million** over the next four years

Who was on the Taskforce?

The Taskforce was chaired by the Queensland Government’s Chief Scientist, Dr Geoff Garrett AO and consisted of experts in the following fields:

<table>
<thead>
<tr>
<th>Agriculture</th>
<th>Science</th>
<th>Government</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resources</td>
<td>Conservation</td>
<td>Tourism</td>
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<tr>
<td>Community</td>
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</tbody>
</table>
What did the Taskforce do?

- **Consulted widely** (what could work, what hasn’t worked and what are the investment priorities)
- **Released an Interim Report in December 2015** with draft recommendations for consultation
- **Received 103 responses** – consultation closed in February 2016
- **Provided a Final Report to Government in May 2016** with 10 recommendations

There is **no silver bullet** solution or intervention; rather a mix of tools and approaches will be needed.
10 recommendations

1. Review the reef water quality targets
2. Better communicate how everyone can improve reef water quality
3. Increase extension services
4. Use incentives to drive water quality improvements
5. Implement staged regulatory approaches

10 recommendations – cont’

6. Funding for innovation
7. Expanded monitoring
8. Establish two major integrated projects to trial different tools
9. Develop a strategic investment plan
10. Simplify and strengthen governance arrangements
Queensland Government response

May 2016 - Announced **immediate support** for **four recommendations**:

- two major integrated projects – Wet Tropics and Burdekin
- boost to agricultural extension services
- new Innovation Fund
- expanded monitoring.

August 2016 - **Agreed** or agreed in principle with **all 10 recommendations**.

In principle agreement

Agreed in principle with three recommendations that require formal consultation processes or working with stakeholders:

- Regulatory approach
- Investment planning
- Governance
Implementation

1) Reef water quality targets
   - The reef water quality targets are being reviewed as part of the update to the Reef Water Quality Protection Plan – due by June 2017
   - This will include the development of targets for the 35 basins
   - This will form part of the update to the GBR Scientific Consensus Statement, being led by JCU.

2) Better communication
   - Annual science synthesis workshop planned for November – focus on updating information for the Scientific Consensus Statement
   - GBR Communicators Network established to identify pathways for improved communication delivery
   - Qld Government overarching GBR communications strategy being developed

Implementation

3) Increase extension services
   - Provide additional funding ($20m allocated) for extension services to support large-scale land management practice change.
   - Scoping stage currently underway for expanding extension
   - Analysis of extension requirements
   - Expanding extension program (through both DAF and private providers)
   - Analysis into specialist ag advisory services
   - Funding behaviour change project in Wet Tropics (CaneChanger) – scoping stage complete - used behavioural psychology principles to providing an insight into the barriers to change in the cane industry.
     - Scoping is underway to trial the project in this region.
Implementation

4) Incentives
   • Being considered as part of MIPs in Burdekin and Wet Tropics
   • Innovative financing also being explored through Reef Trust (Qld involved)

5) Implement staged regulatory approaches
   • Policy development underway
   • Stakeholder consultation over next three months around regulatory options
     • Agricultural groups, urban and industrial, conservation groups
     • Scoping data needs (e.g. yield and fertiliser use data)

Implementation

6) Funding for innovation
   • Establish an Innovation Fund and seek to match funds from corporate and philanthropic sources.
   • Innovation Fund program design being drafted
     – Discussions with organisations about matching funding
     – Advance Qld SBIR process for more affordable sensors

<table>
<thead>
<tr>
<th>Initial planned breakdown of Reef Innovation Funding</th>
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<tbody>
<tr>
<td>Funding area</td>
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<tr>
<td>Agricultural management practices</td>
</tr>
<tr>
<td>Water quality monitoring</td>
</tr>
<tr>
<td>Water treatment systems</td>
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<tr>
<td>Restoration of ecological function</td>
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<tr>
<td>Total</td>
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</tbody>
</table>
Implementation

7) Expanded monitoring

- Provide funding ($9m) to fill critical monitoring gaps
- Reef wide monitoring
  - New end of catchment sites being identified with regional stakeholders
  - Additional funds to be rolled out soon

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost 1</th>
<th>Cost 2</th>
<th>Cost 3</th>
<th>Cost 4</th>
<th>Sub-Total</th>
</tr>
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<tbody>
<tr>
<td>Expanded catchment monitoring (approx 17 sites)</td>
<td>$1,000,000</td>
<td>$1,000,000</td>
<td>$860,000</td>
<td>$860,000</td>
<td>$4,720,000</td>
</tr>
<tr>
<td>Enhanced wetland condition monitoring - GBR/ide top up (exc WT in MP)</td>
<td>$200,000</td>
<td>$200,000</td>
<td>$200,000</td>
<td>$200,000</td>
<td>$800,000</td>
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<tr>
<td>Additional modeling support including scenario modeling, (2 scenario models/1 coder)</td>
<td>$390,000</td>
<td>$330,000</td>
<td>$330,000</td>
<td>$330,000</td>
<td>$1,380,000</td>
</tr>
<tr>
<td>Land use mapping update for GBR catchments (OLUMP)</td>
<td>$250,000</td>
<td>$250,000</td>
<td>-</td>
<td>-</td>
<td>$500,000</td>
</tr>
<tr>
<td>Paddock scale monitoring of priority field trials to evaluate effectiveness of land management practices</td>
<td>$800,000</td>
<td>$800,000</td>
<td>-</td>
<td>-</td>
<td>$1,600,000</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td>$3,640,000</td>
<td>$2,580,000</td>
<td>$1,390,000</td>
<td>$1,390,000</td>
<td>$11,000,000</td>
</tr>
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Implementation

8) Two major integrated projects

- Deliver two major integrated projects ($33m) in the Wet Tropics and Burdekin to reduce sediment, nutrient and pesticide loads
- Will use range of mechanisms (i.e. incentives, extension, improved monitoring, innovation) to achieve practice change and water quality improvement
- EOI for program coordination currently being assessed by OGBR
- Much of the first year will be planning and set up
Implementation

9) Develop a strategic investment plan
   • Develop a strategic investment plan and establish public-private partnerships.
   • Partnership funding
     – GBRF matched funding ($3M)
   • Investment plan being drafted for existing and new funding across agencies

10) Simplify and strengthen governance
    • Funding allocated for annual “governance health check”.
    • Need to scope undertaking a forum with the Australian Government regarding critical delivery systems and opportunities

Funding

• Committed almost $22 million in 2016-17 for implementing the Government response to the Taskforce’s recommendations.
• Brings the Government’s total 2016-17 reef water quality investment to almost $57 million.
• Seeking to leverage that investment with private and philanthropic funding.
The Queensland Government is:

- Firmly committed to working with the agricultural sector to ensure the sustainable growth and prosperity of our farming communities while safeguarding the Great Barrier Reef.

- Recognises the good performance of many producers but greater water quality improvements are needed.

Thank you.


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