Image: media.bom.gov.au

CONNECTING COASTAL CHAMPIONS

Jacqueline Balston

Climate Consultant

Climate Change Decision Support Tools for Coastal Councils

Dr. Jacqueline Balston

(Phd., Ba App Sc.)

Senior Research Fellow, UniSA

A Climate Champion's Journey

As a climate champion, you are on a journey…

… to understand the complex nature of climate change

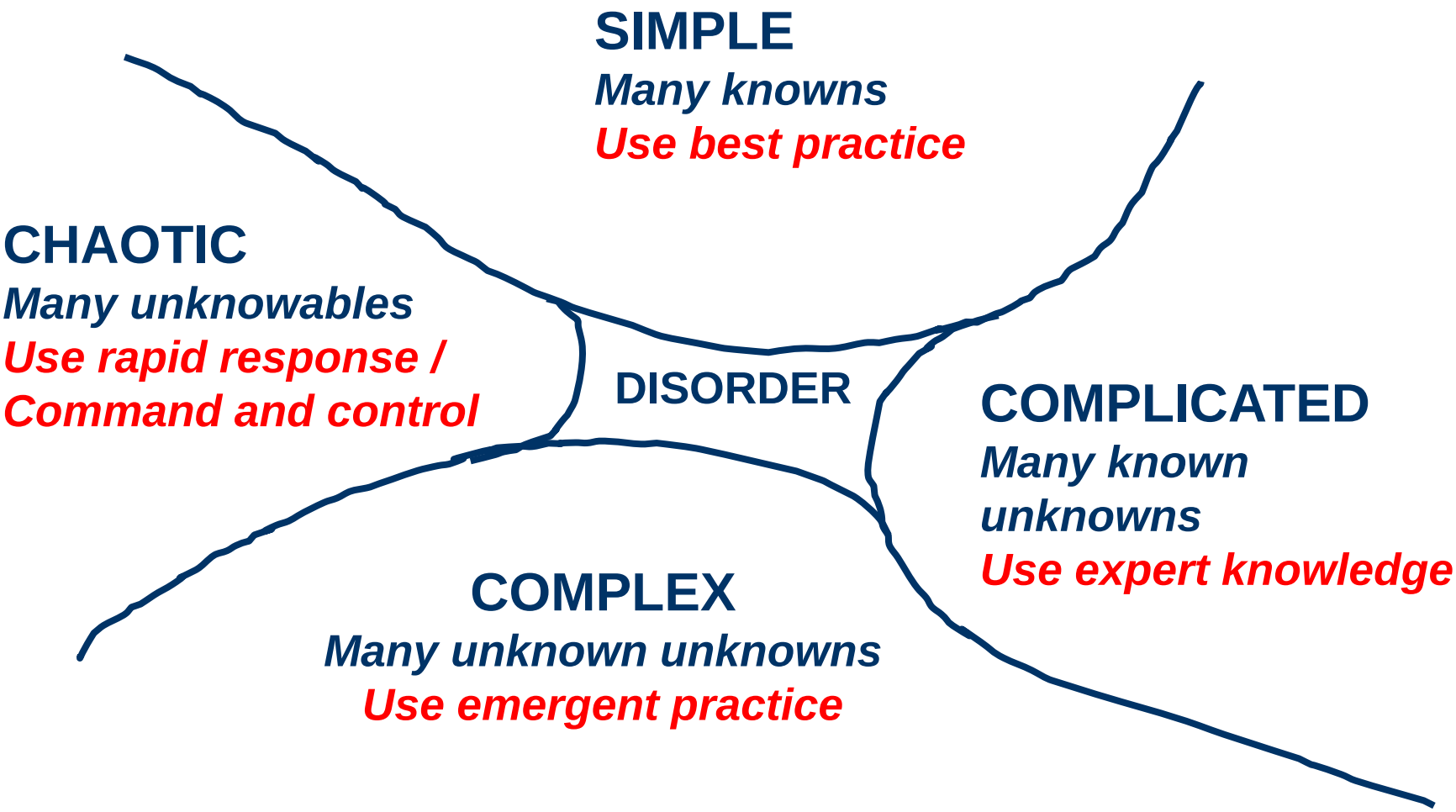
… to become response-able

… to decide how to act wisely.

It is a journey I have been on for over 20 years… here are some of the lessons and tools I've used.

The complexity of climate change

The complexity of climate change



The complexity of climate change

COMPLEX PROBLEMS
(*Many unknown unknowns)*

Use emergent practice:

- *Observe and inquire;*
- *Realise there is no single solution;*
- *Be guided by values and principals;*
- *Engage with others in an environment of collaboration, integration and co-creation; and*
- *Recognise that we will not have all the information we need and we will get it wrong – we need to be innovative and flexible and learn from our mistakes.*

Becoming response-able

However, our brains have not yet evolved to deal with complex problems well....

Becoming response-able

... to sofa man

Becoming response-able

... to sofa person

Becoming response-able

We still respond to PAIN and threats in much the same way as caveman did. We act if things are:

Personal

Abrupt

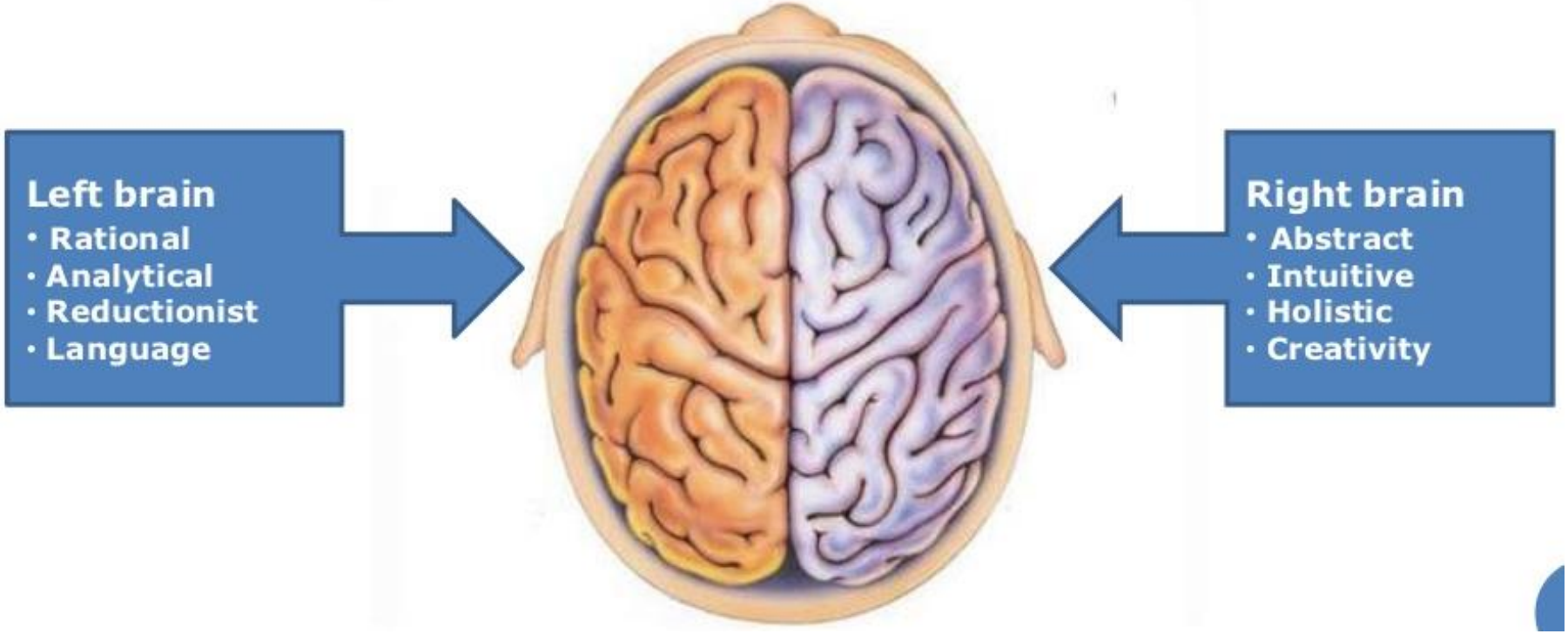
Immoral

Now!

http://poptech.org/popcasts/dan_gilbert__poptech_2007

Becoming response-able

The lateralization of brain function…

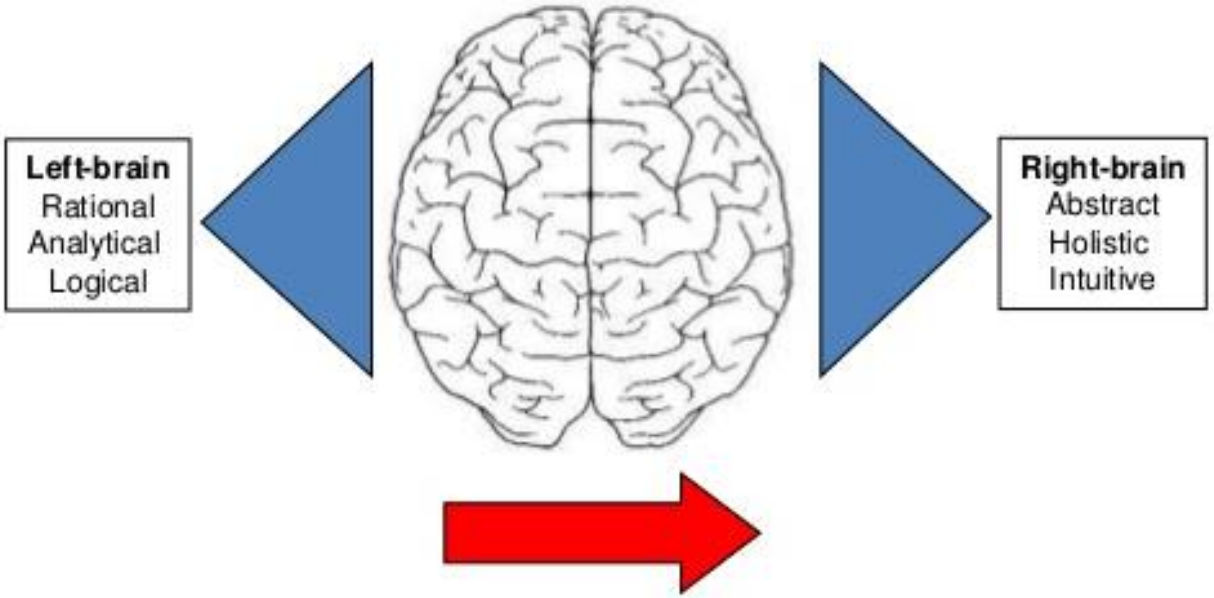


Dr. S. Nataraja , The Bilssful Brain (2012)

Becoming response-able

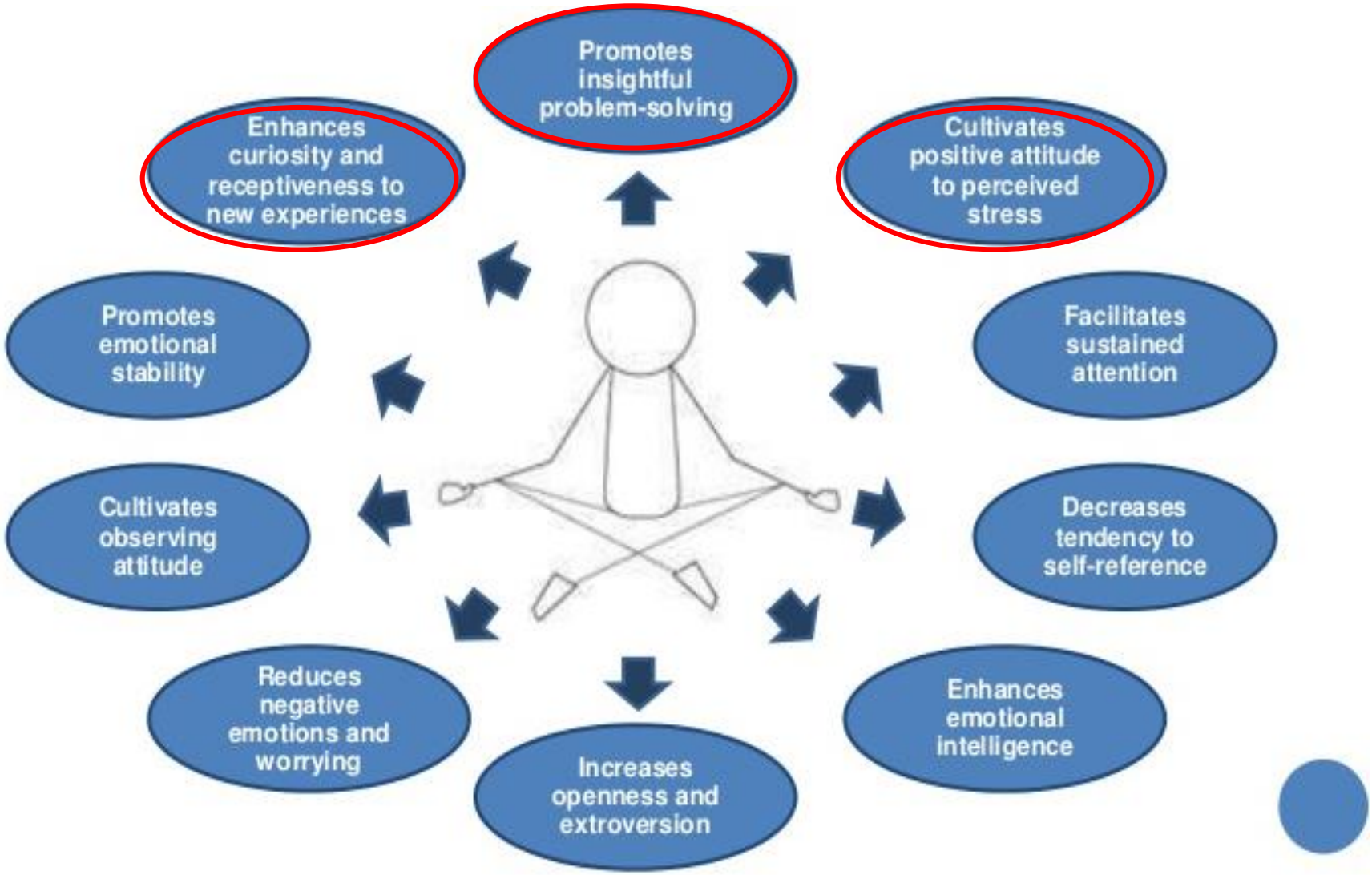
Becoming response-able

Practicing mindfulness (focussing our attention) prompts a shift from left brain to right brain thinking.



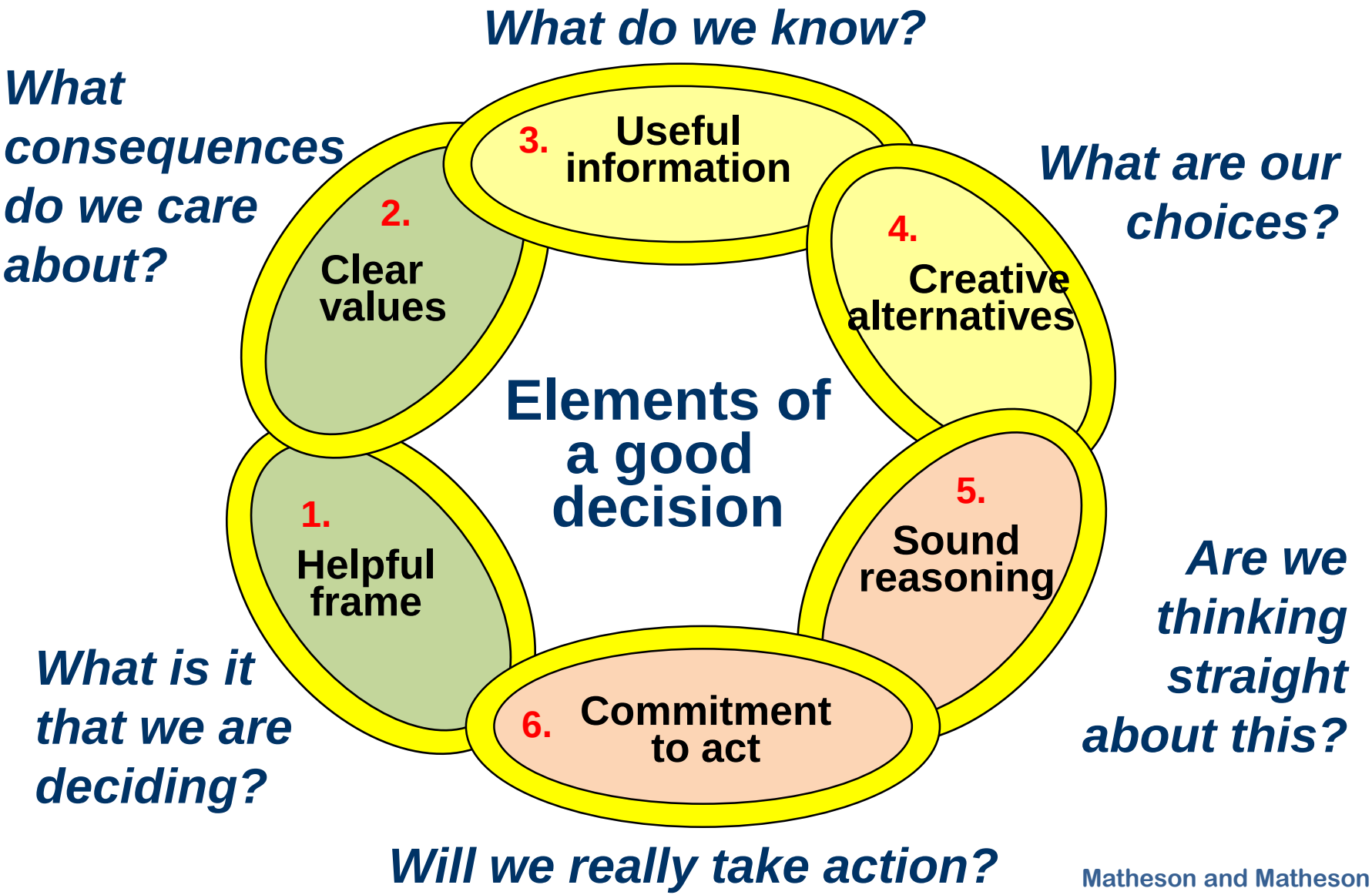
Copyright 2012 Dr Shanida Nataraja, Author of *The Blissful Brain: Neuroscience and Proof of the Power of Meditation*

Becoming response-able



Copyright 2012 Dr Shanida Nataraja, Author of *The Blissful Brain: Neuroscience and Proof of the Power of Meditation*

Acting wisely



Matheson and Matheson (1998)

Acting wisely - Helpful Frame

A Helpful Frame is provided by having a clear and agreed understanding of the question / problem to be addressed and the context within which it sits.

Tools include:

- Project scope meetings
- Agreed question / problem
- Agreed project aims
- Agreed problem solving / project methodology
- Draft Project scope document

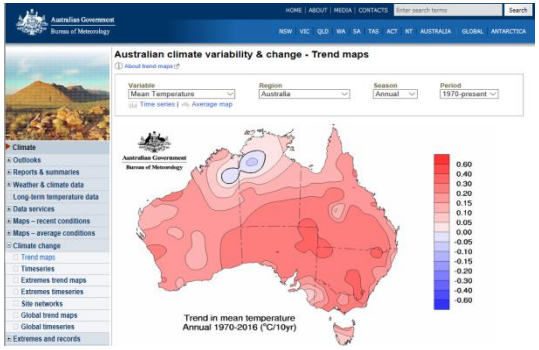
Acting wisely – Clear Values

Clear Values are determined by engaging stakeholders and agreeing on a values statement that can be included in the final scoping document.

Acting wisely – Useful Information

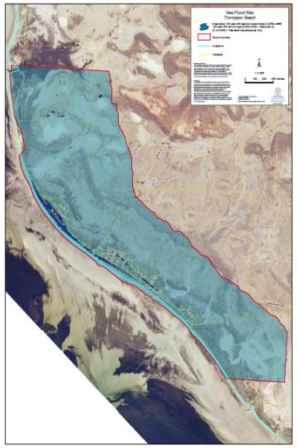
Useful Information is found by getting the facts from a literature review of reputable sources including:

- Bureau of Meteorology Climate Change pages (observed changes, data, maps)
- CSIRO Climate Change in Australia Report / website (climate change scenarios, maps, data)
- IPCC, NCCARF, other websites and resources
- Google Scholar for journal searches



Acting wisely – Useful Information cont.

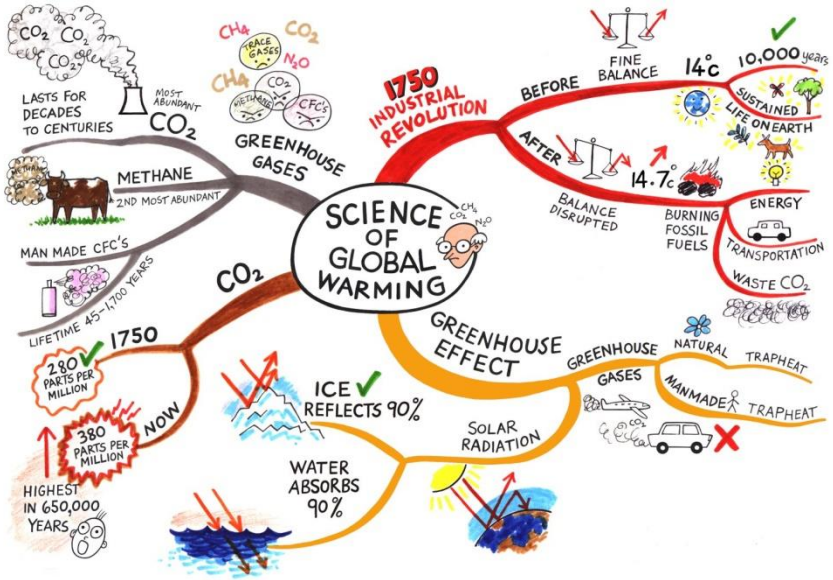
- Coast Adapt (definitions, factsheets, maps)
- Canute (sea level rise maps)
- National Tidal Centre SLR data and LiDAR maps
- Local consultant reports, case studies
- Community knowledge / engagement
- Relevant plans, policies and guidelines
- Ring another Climate Champion!



Acting wisely – Creative Alternatives

This is where the right brain function comes into action and includes activities such as:

- Stakeholder engagement / questioning
- Imagining possibilities / scenarios
- Brainstorming
- Word webs

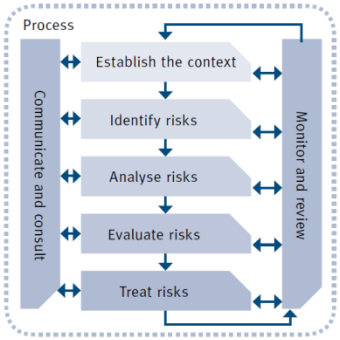


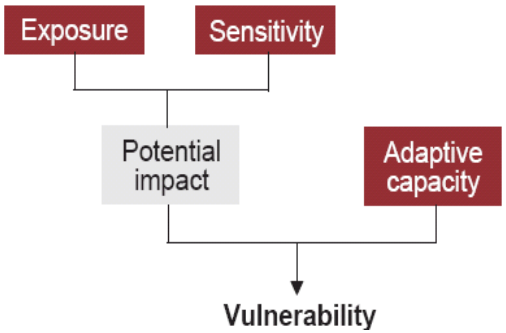
"What if we don't change at all ...
and something magical just happens?"

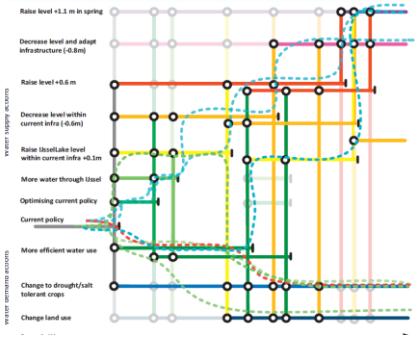
Acting wisely – Sound Reasoning

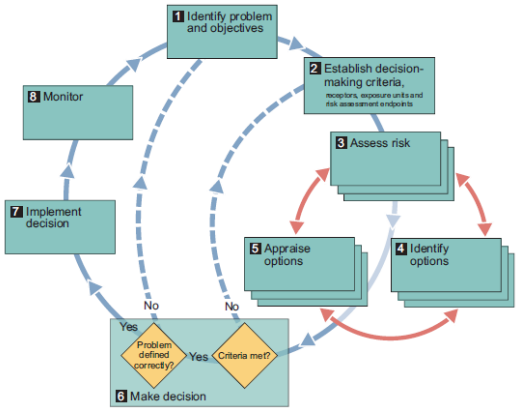
Sound reasoning is where the left brain kicks in and we can use tools such as:

- Risk analysis (ANZ ISO 31000 Risk Assessment)
- Vulnerability assessments (IPCC, UK CIP climate adaptation planning framework and tools)
- Multi-criteria analysis
- Cost benefit
- Decision trees
- Modelling





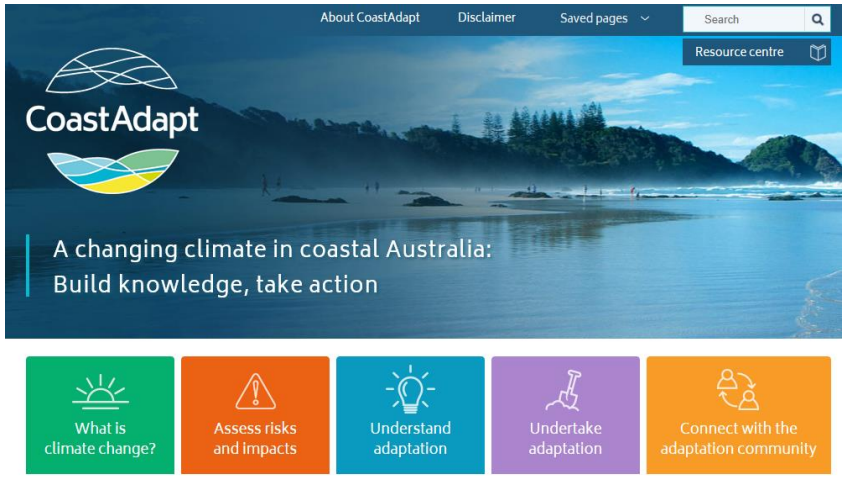


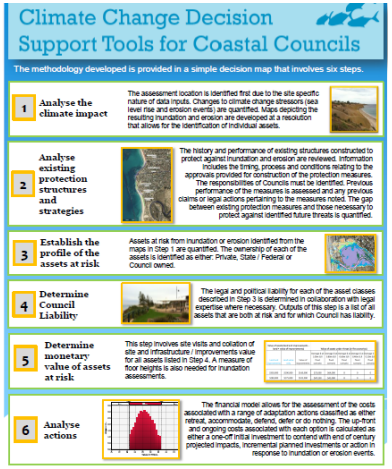


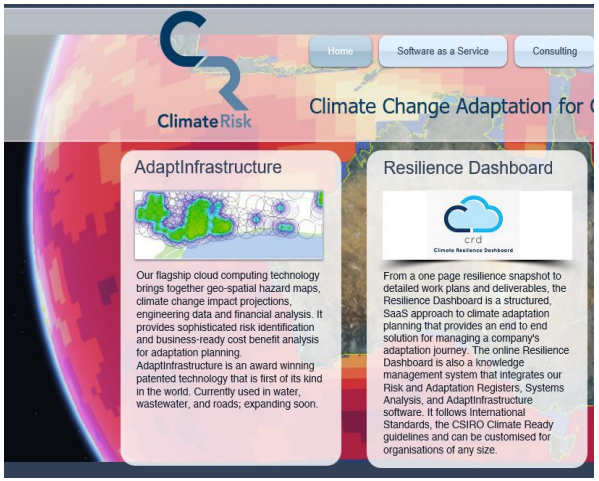
Acting wisely – Sound Reasoning cont.

Some tools specific to the coastal zone include:

- Coast Adapt (SLR mapping, decision tools)
- Coastal Adaptation Decision Support Tool (LGA SA – decision tree, maps and SLR model)
- AdaptInfrastructure (Climate Risk – GIS hazard mapping, climate change projections, infrastructure risk identification and cost risks)



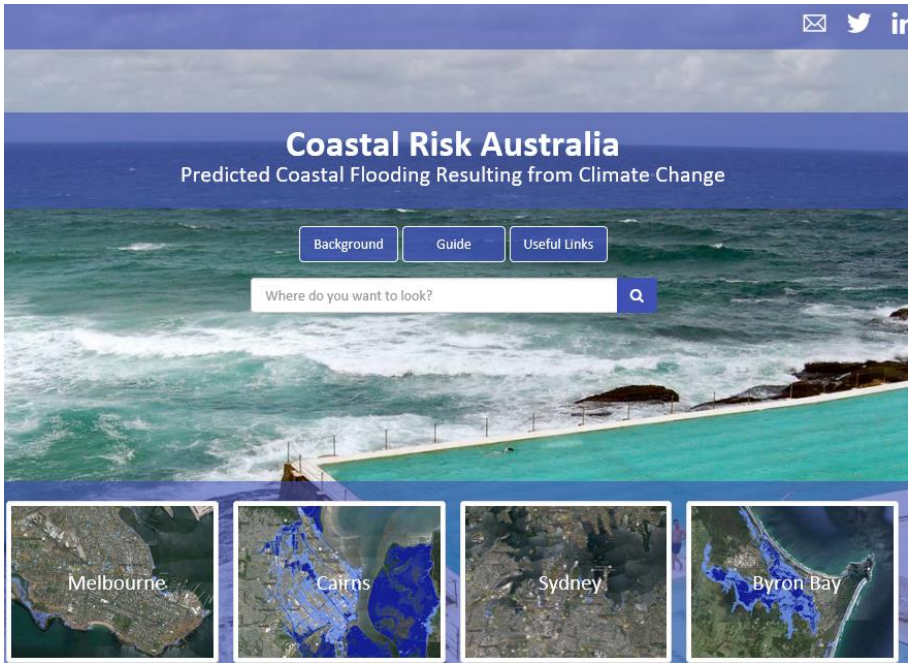


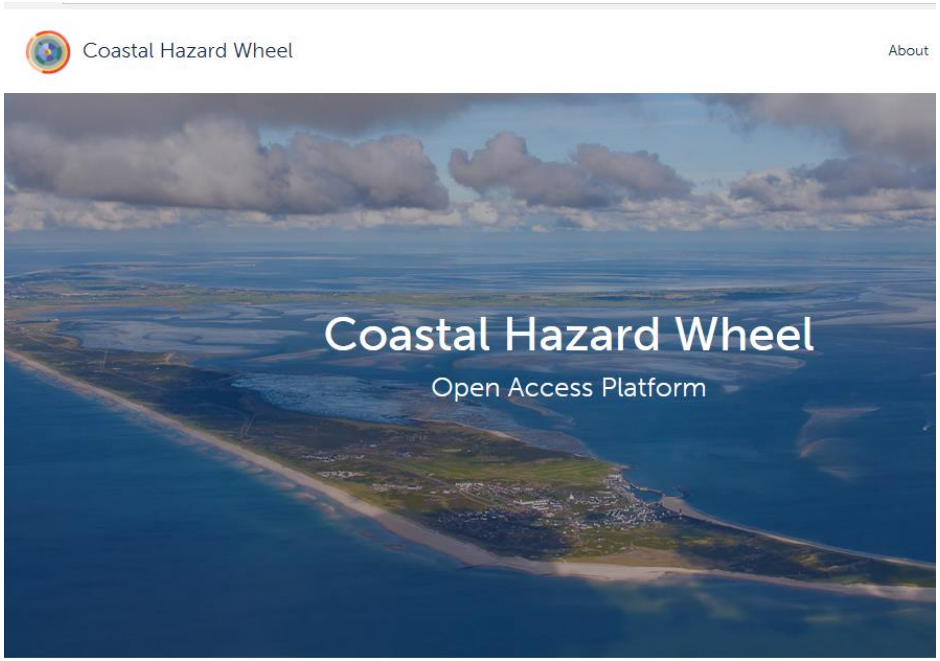


Acting wisely – Sound Reasoning cont.

More tools specific to the coastal zone include:

- Coastal Risk Australia (Mapping tool for IPCC scenarios and local tidal influences)
- The Coastal Hazards Wheel (UNEP – Coastal classification tool and analysis framework)

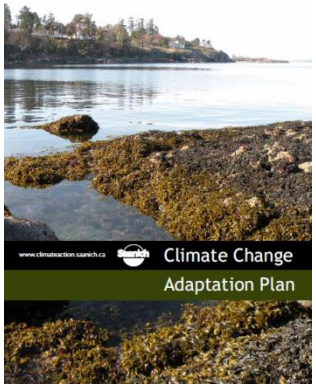


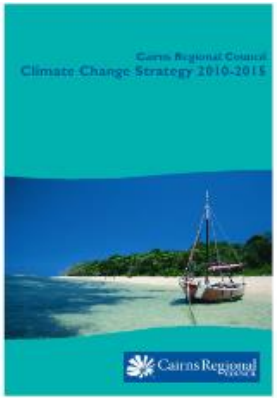


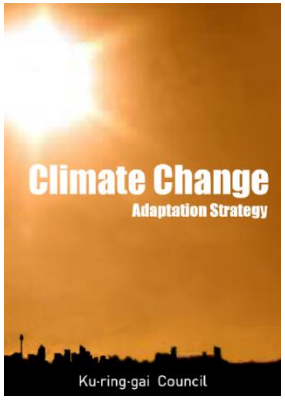
Acting wisely – Commitment to Act

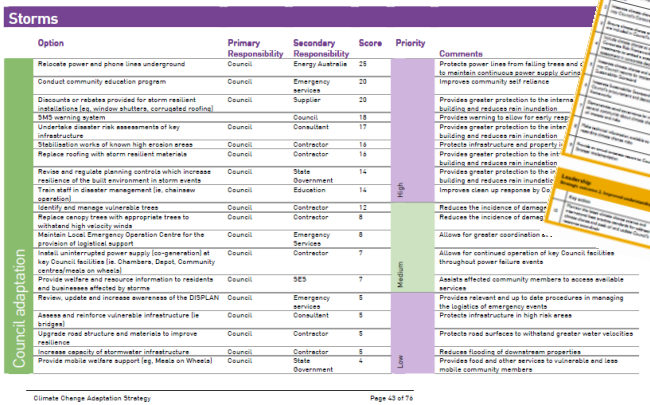
A commitment to act is the final link in the good decision chain. Tools that are used for this include:

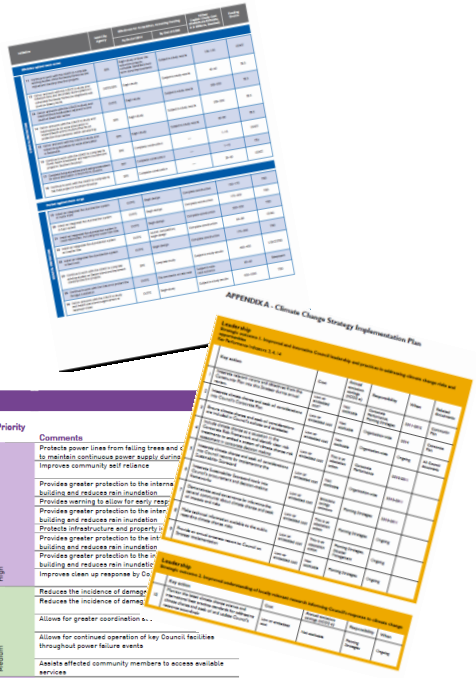
- Gantt charts
- Financial plans
- Operational plans
- Action plans
- Monitoring and evaluation processes
- Regular review











In summary – Decision Principals

COMPLEX PROBLEMS
(Many unknown unknowns)

Use emergent practice:

- Observe and inquire;
- Realise there is no single solution;
- Be guided by values and principals;
- Engage with others in an environment of collaboration, integration and co-creation;
- Recognise that we will not have all the information and we will get it wrong – we need to be innovative and flexible and learn from our mistakes;
- Practice mindfulness to develop right brain functions.

In summary – Decision Practices

- Framing of the problem includes a clear and agreed question and scope
- Values of stakeholders are included
- Relevant and rigorous information from a literature review provides context, impacts, options, costs
- Alternatives identified by brainstorming, engagement
- Sound reasoning uses a logical decision process to options (screening, risk, cost benefit, vulnerability assessments, decision trees, multi-criteria analysis)
- There is a commitment to implement actions embodied in a Gantt Chart, Operational, Financial or Action Plan (identifies actions, responsible persons, budgets, timelines, monitoring, evaluation and regular review).

Thank you

Jacqueline Balston

Climate Consultant

Dr. Jacqueline Balston

P.O. Box 315, Bridgewater SA 5155
0488-010466 jacqueline.balston@jbalston.com