The New Bradfield Scheme
The Bradfield Party

It’s time to build Stage 1 of the modified Bradfield Scheme - Hells Gate to St George

Presenter: David R.B. Stockwell PhD
Founder: Matthew Spurgeon
The (new, revised, modified) Bradfield Scheme will deliver 4 Sydney Harbours (2000GL) of water into the Murray Darling System every year, and create new irrigation areas through Central Queensland.
The Bradfield Party is committed to ensuring this infrastructure project delivers long-term benefits to the people of Queensland, New South Wales, Victoria and South Australia.
Network Promise:

The Bradfield Party are farmers, engineers, scientists and regular folk committed to achieving the best possible outcome and holding government to account for the full delivery of the large scale infrastructure project.
Social Promise:

Ensure agricultural infrastructure for the next 100+ years

Revitalise rural Australia

Serve the growth of existing and new population centres

Encourage conservation, animal welfare, and sustainable agriculture

Be around in 1000+ years
In order to achieve this goal, if necessary, the Bradfield Party will field candidates in the next general election. We are looking for volunteers now.
Stage 1 Mission

The project will…

1. Develop an irrigation food bowl in the Mitchell Grass Downs
2. Add 4 Sydney Harbours full of water (2000GL) into the Murray Darling System every year,

Here is how.
The Plan:

Capture and convey flood water from high summer rainfall area of Northern Australian to lower winter rainfall inland agricultural regions of the Centre and South via a long aqueduct.

Provide year-round reliable water supply for inland Eastern and South Australia.
Upper Burdekin River

- Average 2000GL JFM
- Massive daily flows 900GL
- Capture FLOOD FLOWS
- Mt Foxton gauging station is lower than Mt Fullstop
Options

1. Sir Leo - Large dam and tunnel >400m ASL
2. Dr Stockwell - Small weir at Mt Foxton ~350m ASL and off-stream storage
3. Leon Ashby – the largest plan of all
Stockwell Plan

100km half open aqueduct 1000GL

Lake Buchanan at 300m ASL up to 14,000 GL

Lake Galilee at 280m up to 10,000 GL

Lake Webb at 300m ASL around 5000GL
Harvest – high transient flood flows

Section from Burdekin River to Flinders Highway captures high daily flow. The storage captures seasonal flood flow. Opportunity to place low pressure hydropower at linear infrastructure.
Distribution

Heights allow free gravitational conveyance of water from storages at Lake Buchanan and Lake Galilee as far as Julia Creek, Blackall, St George and Bourke in the Murray Darling River System.
Distribution - agriculture

- Mitchell Grass Downs (grey area)
- Vertosols (heavy clays, deep, impermeable when wet, good for channels, annual crops)
- Currently only grazing, but has roads and facilities to quickly become an exporting ‘food bowl’
Distribution - mining

- Mines of the Galilee Basin
- Avoid use of surface or subsurface waters
- Environmental benefit
- Adani Mine
Distribution

Gravitational Routes to the Murray Darling Basin

- West of Blackall near Hell Hole Gorge National Park
- St George on the Balonne River and
- Bourke on the Darling River
- West of Great Divide to Albury?
Returns – benchmarks

- internal rate of return for the scheme 5-10%
- supply 2000GL of North Queensland flood water – up to 8000GL
- capital expenditure of $12.75B, and 5% finance charge
- annual agricultural revenue between $1.4B on 0.2-0.4M ha
- at water cost of 10% of production, estimated fair price is $70ML ($300M/2000GL)
- delivery price $50ML (operational) full recovery $250ML (5% on $10B)
- supply of water for the Murray Darling Basin, mines and towns and hydropower generation would provide additional revenue
Murray Darling Basin comparison

• MDB produces $7.1B of produce each year from around 10,000 GL of irrigation water on 1.6M ha.

• MDB 22,000GL of storage, the Snowy Mountains Scheme providing 2,100GL irrigation water pa.

• Leon Ashby estimates Queensland annual potential 21,000 GL of irrigation in Queensland (2x the MDB Plan)

• Another 5,000 GL from the Burdekin Dam.

• Once developed, these systems could increase National GDP by $20B pa.
Social Benefits

- Construction output $12.75B
- $8.1B contributions to GRP
- $2.4B in household income
- 25,000 FTE jobs
- ‘Drought proofing’
- Regional stability
- Population growth
Social Benefits

- Sustainable
- Humane (reduced drought and flood stock losses)
- Opportunity to create equitable water plan
Funding options

- Land grants – like the railroads
- Value of irrigated land is x100 that of resumed land
- Water sales
- Bond issues – attractive at 5% in low interest environment
- Mining Royalties
- Off-balance sheet, no cost to taxpayer
Get Involved - Find Out More

• My Website - http://landshape.org

Join Facebook Group -The Bradfield Party Group
https://www.facebook.com/groups/775926182857208/

• Like and comment

• Facebook Page – The Bradfield Party
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• Twitter - https://twitter.com/BradfieldThe

• Expressions of interest in The Bradfield Party to founder Matthew Spurgeon