-----Original Message-----
From: Nick Heath
Sent: 10 December 2002 4:42 PM
To: Neil Byron (E-mail) (E-mail)
Cc: Andrew Dolling (E-mail); Gavan Dwyer (E-mail); 'Murtough, Greg'
Subject: Reef Policy Instruments

Neil and team

The future of the Great Barrier Reef is in your hands.

Economic instruments remain the most significant opportunity to reform reef catchment land use in a constructive way. Yet they must meet 5 criteria for implementation...

* low cost to government
* high value to farmer
* relatively low political risk
* implementable within current processes
* implementable within current knowledge

When evaluating all possible economic instruments listed in the table Greg presented at the recent workshop, six classes of economic instruments remain which best meet these criteria. The attached paper focuses on these for your further consideration. Please do not hesitate to contact me for clarification.

In essence the paper advocates for 6 classes of incentives to be offered to those farmers who voluntarily commit to achieving best practice. They are...

* improved tenure of natural resource access
* discounted future natural resource cost increases
* streamlined resource development approval proceses
* preferred access to the enitre cuurent spectrum of rural government assistance
* refunding and broadening of the existing rural water efficiency program
* extension of leading-edge science and profitable and sustainable practices

None of these cost government a great deal more than current obligations yet open up significant cost advantages for best practice performers. If over the years these significant incentives fail to grow adoption then higher cost and regulatory instruments will be required. Some regulatory instruments will be needed - but these can be largely implemented from

better enforcement of existing lefislation.

Please consider this latest version as part of the QSIA submission on policy instruments.

<<IfS Draft 3.ppt>> <<Dear Prime Minister3.doc>>
Regards

Nick Heath
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26 November 2002

Hon John Howard
Prime Minister
House of Representatives
CANBERRA ACT 2600

Hon Peter Beattie
Premier of Queensland
100 George Street
BRISBANE QLD 4000

Dear Prime Minister

Dear Premier

Re: Reef Water Quality Protection Plan

The Reef is being degraded. So too are our farms, fisheries and tourism assets.

The causes and consequences are economic, yet few policies address the economics of sustainability.

Intelligent use of economics can save the Reef. Economic incentives can contribute strongly to the productivity of our farm, fishing and tourism industries *without* significant public money. Incentives can and should take a lead role in the framework of innovative reforms needed to secure the Reef's health and the thousands of jobs at risk in downstream industries.

The logic of the attached proposal has been tested with government, industry, conservation and community representatives. While in broad terms it receives more support than any other alternative, we do not imply complete consensus. Nor can we wait for such consensus.

We now seek urgent government attention at the highest level to progress negotiation of this proposal.

Yours sincerely

John Olsen
PRESIDENT

Executive Summary

Pollution may be the greatest threat facing the Great Barrier Reef[1]. Reef health depends upon farm sustainability yet current rates of erosion[2], nitrate[3] and pesticide[4] run-off indicate significant farm sustainability issues.

Economics are the main barrier *and* enabler of farm sustainability[5]. This proposal identifies significant yet cost-neutral incentives that can be granted in exchange for accelerated adoption of farm best management practice.

While incentives should lead the reforms there remains a critical role for a supportive regulatory framework to defend existing legislation, ensure landholders perform their duty of care and to safeguard the reef if, despite significant incentives and time to adjust, landholders fail to adopt best management practice.

Economics as cause and solution to reef pollution

Lack of adequate return is the most significant barrier to farm sustainability[5].

Fortunately, the following economic incentives can make accredited sustainability more profitable and low cost to government:

- Improving natural resource and market security
- Discounting future resource cost increases
- Streamlining development assessment
- Prioritising access to existing and future government assistance
- Delivering a best practice water efficiency and drainage program (from existing funds)
- Promoting local, low risk, profitable and sustainable practices

Together, these incentives represent a powerful package to accelerate the uptake of sustainable farm practices. They have been chosen based on the following criteria..

- Low cost to government
- High value to farmers
- Low political risk
- Practicality (can be implemented with existing processes and knowledge)

Success of the package will be determined by the perception of its value by farmers. Farm value can be significant at low cost *to* government, but it depends greatly on the policies adopted *by* government. Of course, the bigger the incentive, the more accepted, automatic, efficient and complete the reforms will be. Therefore key risks to value must be addressed, especially:

- Weakened, partial or delayed implementation
- Continued perverse incentives
- Non-enforcement of current regulation

Implementation by the Joint Steering Committee must co-ordinate many existing processes and establish the reef as a **national pilot** in order to fast track the innovative tools in this proposal.

Perverse incentives are significant and lead to perverse cost / risk signals and perverse farm decision-making. They must be **phased out** and redirected to fund incentives for best management practice.

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[1] Zann, L.P., *Our Sea, Our Future – Major Findings of the State of the Marine Environment Report for Australia*, 1995, p112
[2] Land and Resources Water Audit, *Australian Agricultural Assessment 2001 – Volume 1, ix*
[3] Furnas, M., *Catchments and Corals, 2002* (in press)
[4] Haynes, D., *The Impact of the Herbicide Diuron on Photosynthesis in Three Species of Tropical Seagrass*, 2000, p1
[5] NFF /ACF publication *Leveraging Private Investment,* Allen Consulting Group, 2001. Bureau of Rural Science *Understanding Landholders' Capacity to Change Practices 2002*

For example, over $500m has been spent since 1991 (by River Trusts, Natural Disaster Relief Arrangements and other subsidies) on works that do not optimally reduce flood risks to people, property or the reef. Redirection of these funds represents a major opportunity for new incentives.

A *Reef Pollution Rescue Program* partly funded by existing flood funds might better address all flood risks by focusing on mitigation and not repair, as has been suggested by some in the recent CoAG review. Redirecting flood funds is however but one example - all significant perverse incentives need to be identified, quantified and opportunities for redirection assessed.

Government should also take the opportunity to **get tough on environmental crime** and **defend its existing environmental regulation.** Thankfully the government can do so with the expectation that it has the support of rural communities. While most farmers do not support regulation of mainstream practices, farmers consulted on this proposal support compliance of clear breaches of duty-of-care. As confirmation, the Queensland Minister for Natural Resources recently noted that local information is of increasing assistance to illegal land clearing prosecutions.

A recent public example was a farmer's degradation of the protected Cattle Creek Wetland by excavating along its boundary to "drain" it for irrigation water. It was a clear breach of regulatory intent yet no agency enforced its regulatory powers. Poor compliance to existing law appears endemic.

Given the amount of undefended existing and pending (subordinate) legislation, better enforcing the intent of the government's own laws will require significantly improved coordination and the funding of strategic litigation. Funding of $2m pa will be needed along with improved coordination of existing legal resources.

Failure to defend the community's agreed laws allows degradation of irreplaceable habitats, it fosters a culture that doesn't value these habitats, provides a disincentive to good farmers to adopt best practice and represents another perverse incentive for continued environmental vandalism by the recalcitrant few.

Phasing out both perverse legal and financial support will best signal the true reef costs and risks to landholders and thereby maximise the value, and the chances of success, of the incentive package.

Identifying property-based actions to reduce reef pollution

Incentives should only be exchanged for voluntary best management practice that meets defined environmental performance standards and exceeds duty of care. Best practice should be accredited, binding and guided by industry, regional environmental risks and continuous improvement.

Yet best management practice is meaningless without adoption. Adoption targets must be set at a level that reflects sustainability, reef risks in each region and the goals of the reef plan.

Best management practice is also difficult to define without maps that show the risks to the Reef. Mapping, largely from existing data, should be fast-tracked to assist in property (and regional) planning as a matter of urgency. It will then assist farmers clarify their rights and obligations under this proposal.

A Supportive Regulatory Framework

This proposal gives high priority to an incentive led best management practice approach. This approach has the best chance of success as it rewards positive on-the-ground action and is relatively inexpensive.

Yet if adoption targets for best practice aren't met by the recommended timelines, then governments must act further to give the reef the future it deserves and give the downstream jobs and industries reliant on reef health the future they deserve. Appropriate funding should be set-aside in 2005 to 2010.

If required, increased regulation should be extended via the *Water Act 2000, Vegetation Management Act 1999* and the *Environment Protection and Biodiversity Conservation Act 1999*. The EPBC Act already requires fisheries exports to be subject to ecological assessment prior to export approval by mid-2003. If the RWQPP fails to achieve its targets, these provisions may very well have to be extended to include land-based primary industries in the Reef catchment as well.

Major Recommendations

Incentives for Best Management Practice (BMP) Adoption

1. Provide on-farm incentives to adopt BMP that are low cost to government and include:

    - Improved access to natural resources and markets, including..
        - More secure water allocations
        - Rolling 30 year leasehold extensions every 10 years
        - Improved lease diversification (subject to Native Title and cultural heritage issues)
        - Preferred access to markets such as sugar mills, sale yards, export and supermarkets

    - Discounts from future natural resource cost increases, including..
        - Rebates for rates and land tax on freehold land
        - Discounts from future leasehold rent increases and for areas retired under covenant
        - Discounts from future COAG driven upper bound rises

    - Preferred access to existing government rural programs, including employment, industry development, NRM, natural disaster assistance, structural adjustment and tax assistance

    - Preferred access to integrated and one-to-one extension of profitable and sustainable practices across all government R, D &E agencies

    - Streamlined code and/or impact assessment of development proposals, under the *Integrated Planning Act 1997, Vegetation Management Act 1999* and *Water Act 2000*, providing it does not negatively impact on the need for appropriate regulatory control

2. Define BMP on an industry-by-industry basis that is…

    - Voluntary to enter (but binding once incentive benefits flow)
    - Guided by industry codes of practice, stakeholders and regional environmental risks
    - Greater than the statutory minimum duty-of-care
    - Continuously improving
    - Accredited by independent auditors consistent with GBRMPA guidelines, and
    - Consistent with defined environmental performance standards

3. Defined environmental standards should ..

    - Protect remaining wetlands; riverbanks; old growth; and those regrowth areas subject to degradation
    - Rehabilitate lands subject to erosion, nitrate leakage, salinity, sodicity, soil decline, flood risk and acidity and within 2m above sea level
    - Use the most efficient fertiliser and water input methods given soil and crop type
    - Introduce integrated pest management
    - Implement drainage systems (including revegetation) that mimic natural water flows

4. To ensure security of BMP outcomes and prevent rorting of public monies, BMP plans should be legally enforceable contracts. While voluntary to enter, ensure failure to implement BMP after incentives flow results in cessation, interest penalties and repayment by beneficiary landholders.

5. Review and re-accredit BMP plans three years after initial approval to ensure each BMP agreement remains at the cutting edge of management practice. GBRMPA random audits will also be required.

Economic Instruments

6. Introduce a levy on fertiliser and pesticide use. Proceeds from the levy should be redirected to local rehabilitation projects.

7. Phase-out financial support for poor practices, including withdrawal of tax deductibility in high-risk areas for non-BMP drainage and operational works.

Planning Instruments

8. Urgently undertake extensive constraint mapping of all degradation and biodiversity risks throughout the GBR catchment, firstly completing the GBRMPA high-risk catchments by December 2003 and progressively working through all low risk catchments by December 2004.

9. Use constraint maps to determine the appropriate management actions to be incorporated at different scales in NRM regional plans, regional coastal management plans; local government planning schemes and property-based BMP plans.

10. Better integrate Reef risks within sugar industry rescue, flood, river trust, water [7], vegetation, coastal, NRM, local government[8], research and all infrastructure planning:
    a) adopt the principle at all levels that no plan can conflict (or not support) the goals of the RWQPP and ensure this overriding principle is ratified by the Prime Minister and the Premier
    b) brief all plan committees of reef risks by 30 March 2003
    c) ensure RWQPP Working Group attend all future plan meetings and assist all plan committees develop consistent planning mechanisms to address Reef risks
    c) conduct and release independent reef science risk assessment for every relevant draft plan
    d) redraft plans if necessary to appropriately address Reef risks and support the goals of the plan
    e) approve plans based on recommendation of independent science panel and RWQPP Steering Committee
    f) ensure monitoring regimes are tiered and link goals of regional plans to the RWQPP.

11. Better integration of planning will improve consistency in many ways but as a minimum government should
    a) rationalise and improve water quality monitoring performed by over 7 different agencies
    b) suspend investigation of Urannah, Elliot Main Channel and all other infrastructure studies that would, if built, intensify land and Reef risks
    c) ensure flood mitigation practices are a requirement for dam operating licences, including use of flood gates and pre-releases to reduce the flood intensity

Target Setting

12. Establish end-of-river and up-stream water quality targets and associated land management targets through the NRM process. Targets and timetables must be signed off by GBRMPA and EA.

13. Implement BMP adoption targets and timetables on a catchment-risk basis (see below). Strongly support achievement of these targets with the extensive array of incentives identified in this submission.

    The coordinated efforts of all government R, D and E agencies will also be needed to support BMP adoption. All best endeavours must be exercised across government for a sustained period.

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[7] including drainage, legal reform, riverine management, pricing, allocation, efficiency and reuse, raw/waste supply regulation

[8] including regional planning advisory committees and individual council capital works budgeting and strategic planning

If however, targets are not met, some selected regulatory instruments will be required (see recommendation 17 below).

Reef BMP Adoption Targets

GBRMPA Risk Class	End of Year Adoption Targets (%)						
	2003	2004	2005	2006	2008	2010	2013
Very High	**30**	**80**	**100**				
Medium High		**50**	**80**	**90**	**100**		
Medium			**50**	**80**	**90**	**100**	
Low					**30**	**40**	**50**

Assumes Reef WQ Protection Plan starts July 2003

Legislative Instruments

14. Introduce a tracking system for fertiliser and pesticide use by legislating for sellers of such products to keep a record and notify the government of sales to primary producers on a regular basis.

15. Ensure that agricultural development with respect to carrying out operational work and making a material change of use is made assessable development under Schedule 8 of the IPA and made impact assessable under the Integrated Planning Regulations 1998.

16. Ensure that lease renewals are subject to the approval of a Property Management Plans that comply with Duty of Care requirements. (A Duty of Care prevents environmental harm whereas BMP covers both the prevention of environmental harm and the rehabilitation of areas subject to past environmental harm. While we believe PMPs should be mandatory for lease renewals, BMP should be promoted on an incentives-basis.).

17. Where a 'review event' under the Reef Water Quality Protection Plan is triggered by failure to achieve BMP adoption targets and timetables at a catchment level, a catchment should be declared a 'catchment area' under section 58 of the *Water Act 2000* or similar. Regulations under s.259 should then be prepared to tackle existing legal uses in declared catchment areas.

    The *Environment Protection and Biodiversity Conservation Act 1999* may also be needed. The EPBC Act already requires fisheries exports to be subject to ecological assessment prior to export approval by mid-2003. If the RWQPP fails to achieve its targets, these provisions may very well have to be extended to include land-based primary industries in the Reef catchment as well.

18. Significantly improve poor compliance with existing legislation by resourcing a 'public interest strategic litigation' program. The program's aims would be to obtain court rulings to create precedents relating to:
    (i) 'environmental harm' and 'duty-of-care' under the *Environmental Protection Act,*
    (ii) unlicensed drains and more significant riparian vegetation under the *Water Act* and
    (iii) other environment/NRM legislation that currently has low rates of compliance.
    It is expected the availability of constraint maps (Recommendation 8) will facilitate increased success of actions taken to enforce duty-of-care.

19. Ensure that all coastal wetlands in the GBR catchment are afforded secure legal protection.

New Programs

20. Establish a *Reef Pollution Rescue Program* to manage and restore GBR riverbanks and wetlands.

21. Redirect funds from River Trust, Flood Disaster Relief Arrangements, Sugar Industry Infrastructure Program and the drainage elements of the Local Governing Body Capital Works Subsidy Scheme to the above new program.

22. Establish *ReefSafe*, a GBR Catchment BMP Start-Up Program, to provide extension to farmers with implementation of approved BMP property plans. *ReefSafe* should use shed-style techniques developed by the Rural Water Use Efficiency Initiative.

Education and Awareness

23. Establish an awareness raising campaign to highlight the interconnectivity between the catchment and the Reef and to increase public support for measures to reverse the decline in Reef water quality.

Statewide/National Conservation Measures

24. Ensure an immediate end to the broad scale clearing of old growth native vegetation and the loss of natural wetlands at a state and national level by introducing immediate regulatory protection. Provide incentives and assistance to farmers to enable them to manage these assets. Introduce a Heritage Rivers system to protect rivers of high natural heritage value.

Detailed submissions follow this document.

Incentives for Sustainability

Making sustainability more profitable…at low cost to government

Catching Fish for Everyone!
QSIA
QUEENSLAND SEAFOOD INDUSTRY ASSOCIATION INC

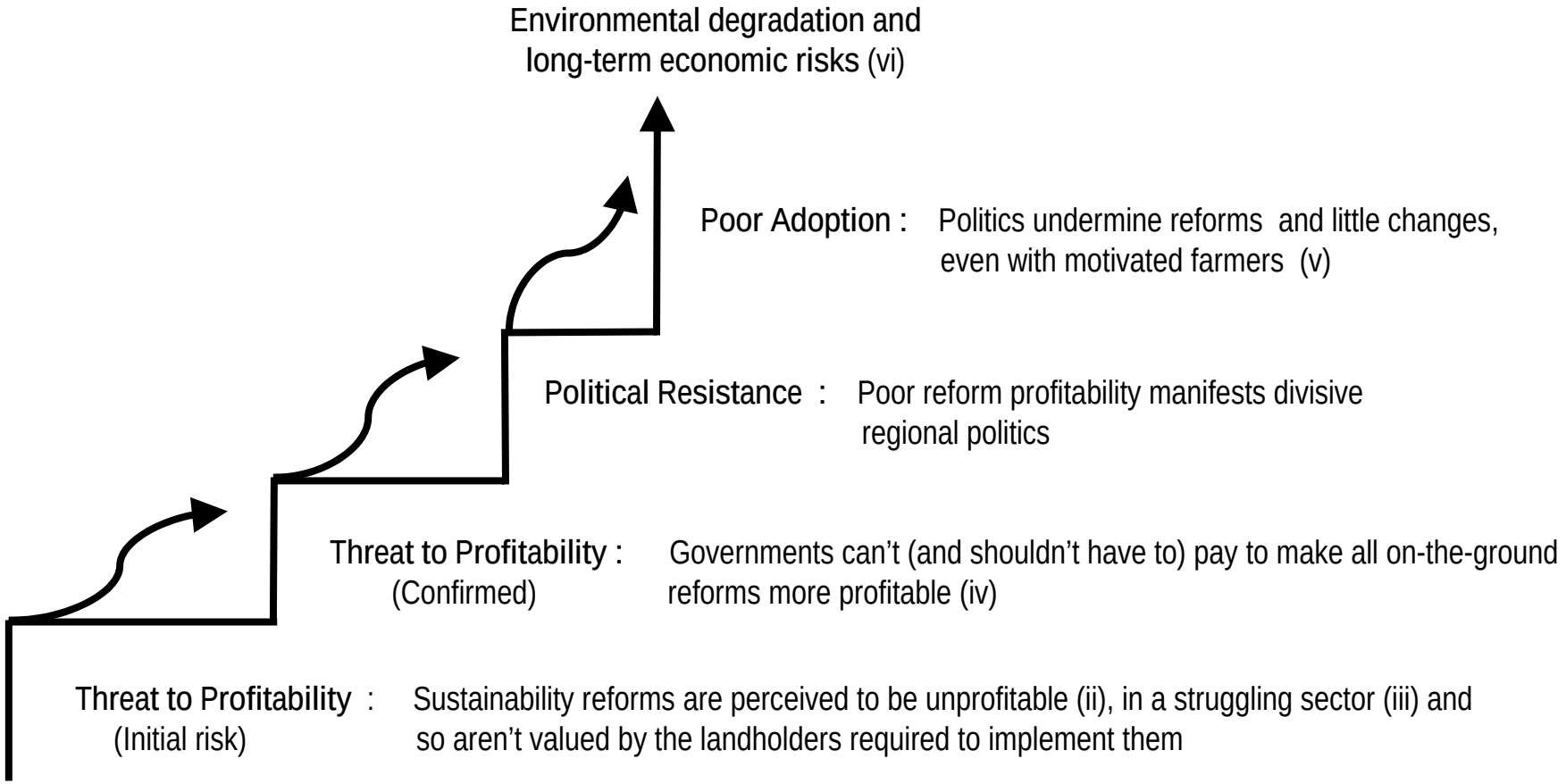
Summary

Improving the profitability of sustainability will achieve significant environmental outcomes at low financial and political cost to industry and government

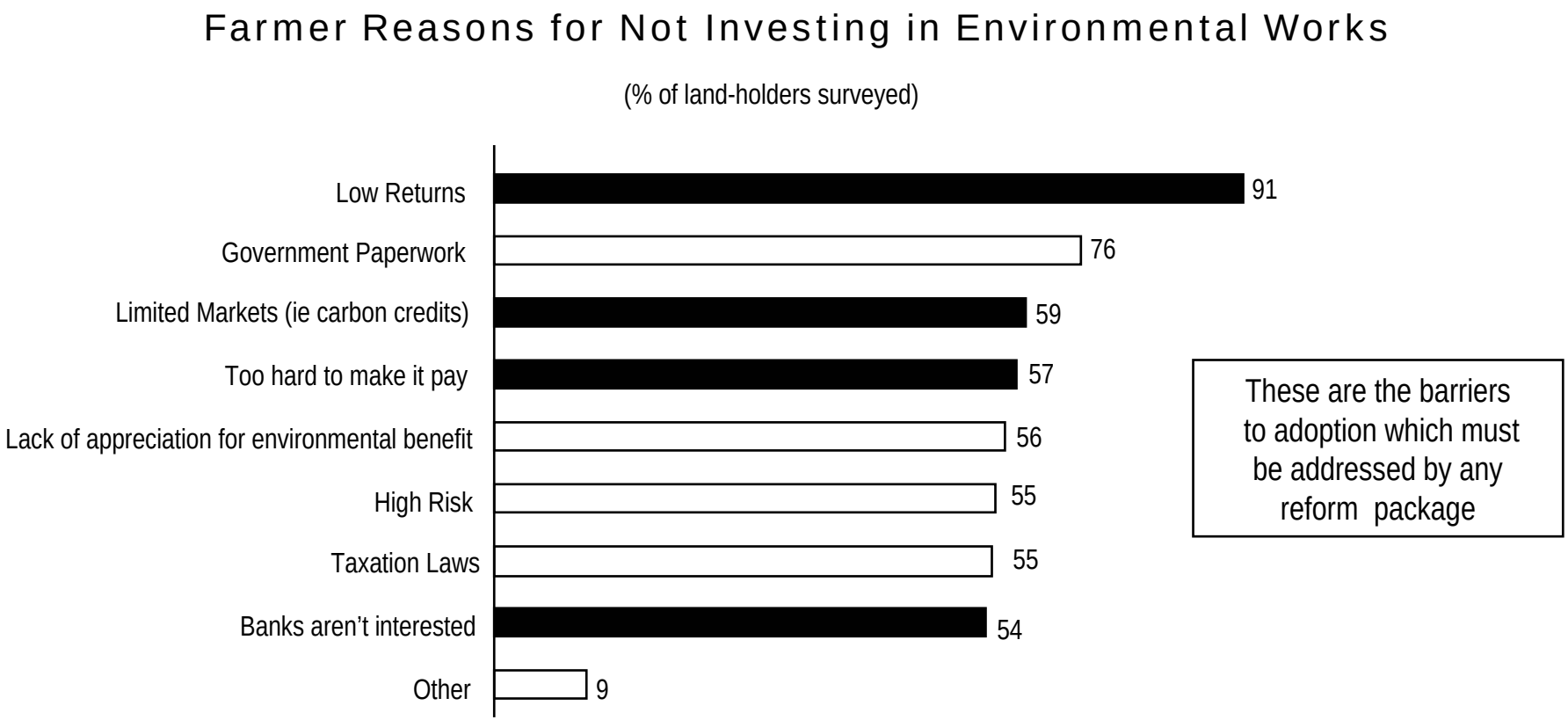
Would any of us be here if sustainability was perceived to be profitable?

Sustainability's foe is its perceived threat to profit

Barriers to Adoption of Sustainability



Sustainability reforms are seen as unprofitable

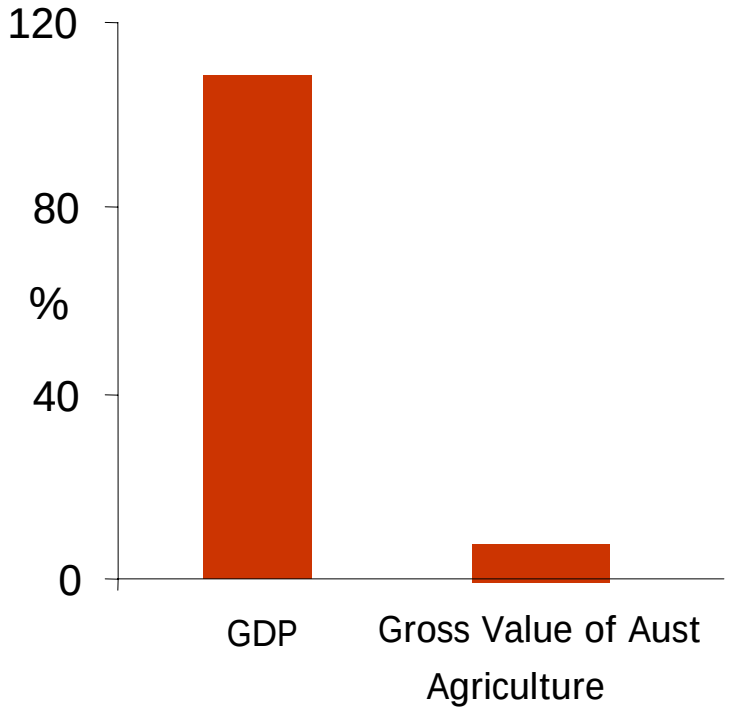


Source: *Leveraging Private Investment,* Allen Consulting Group, 2001

Threats to profit occur in a highly competitive and difficult economic background

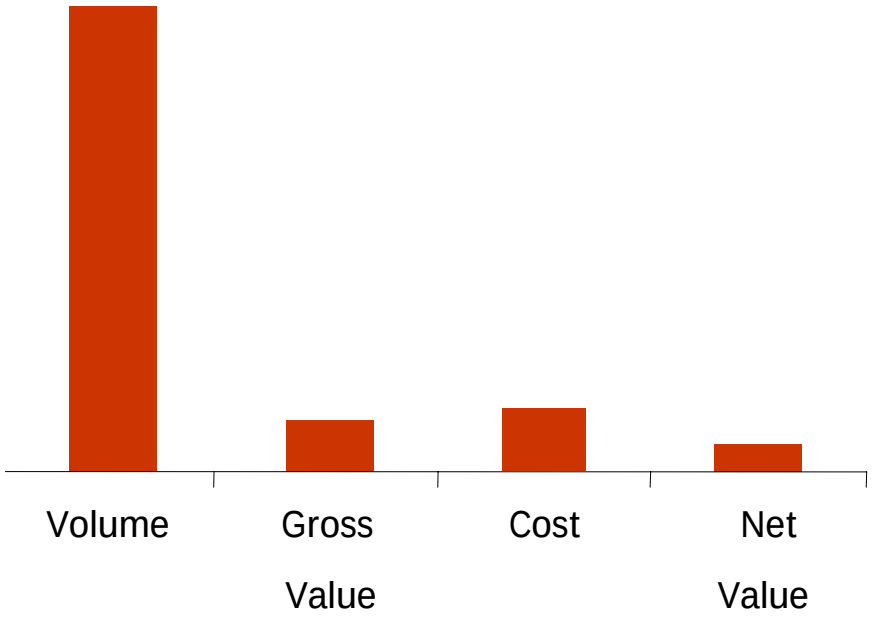
Change in GDP and Farm GDP

(% Growth 1980-2001)



Agricultural Performance

(% Growth 1980-2001)



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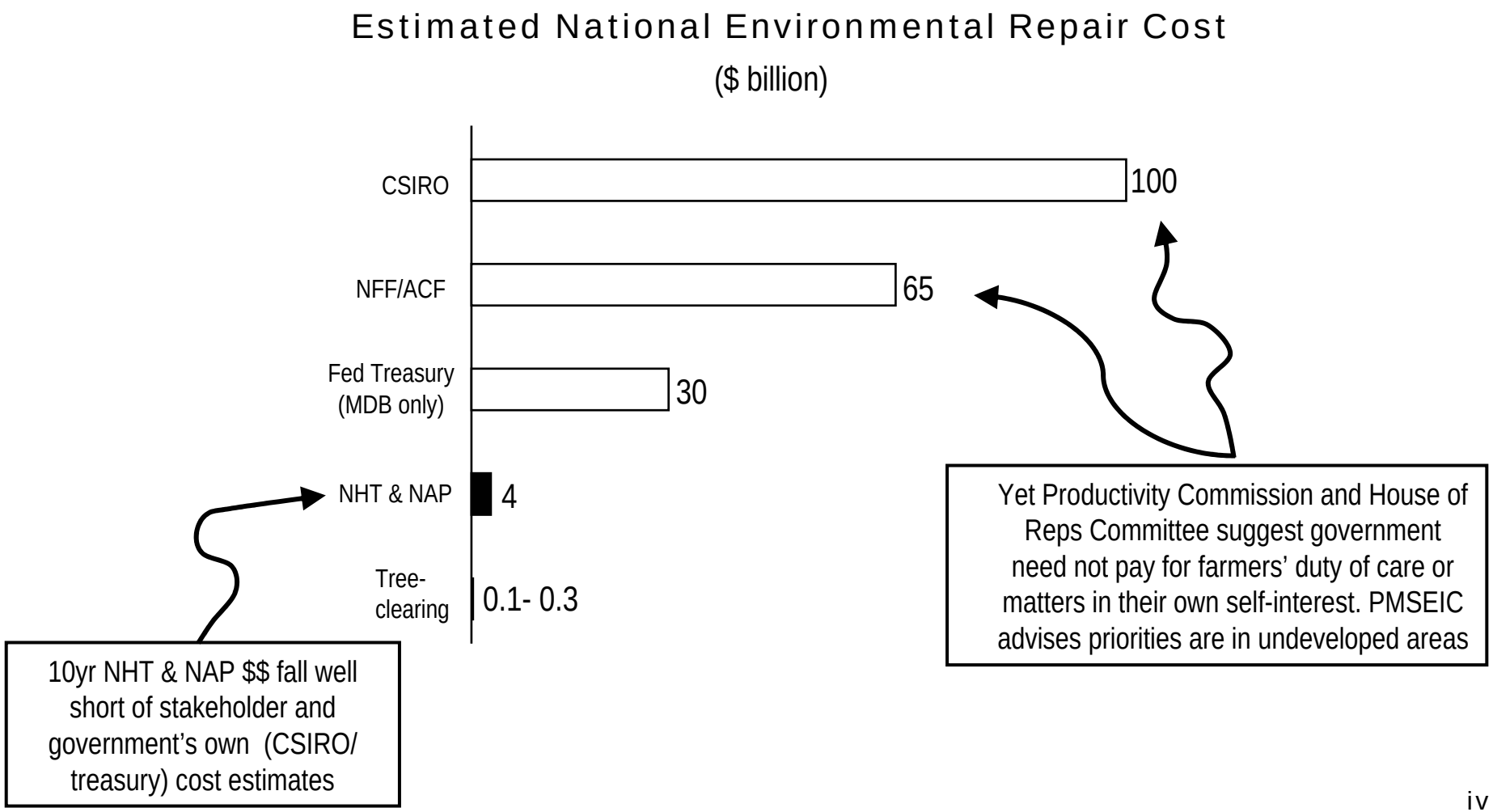
Source: Synapse Consulting, 2002, Reserve Bank and ABARE ACS 2001

Yet government can't (and shouldn't have to) pay to make sustainability profitable

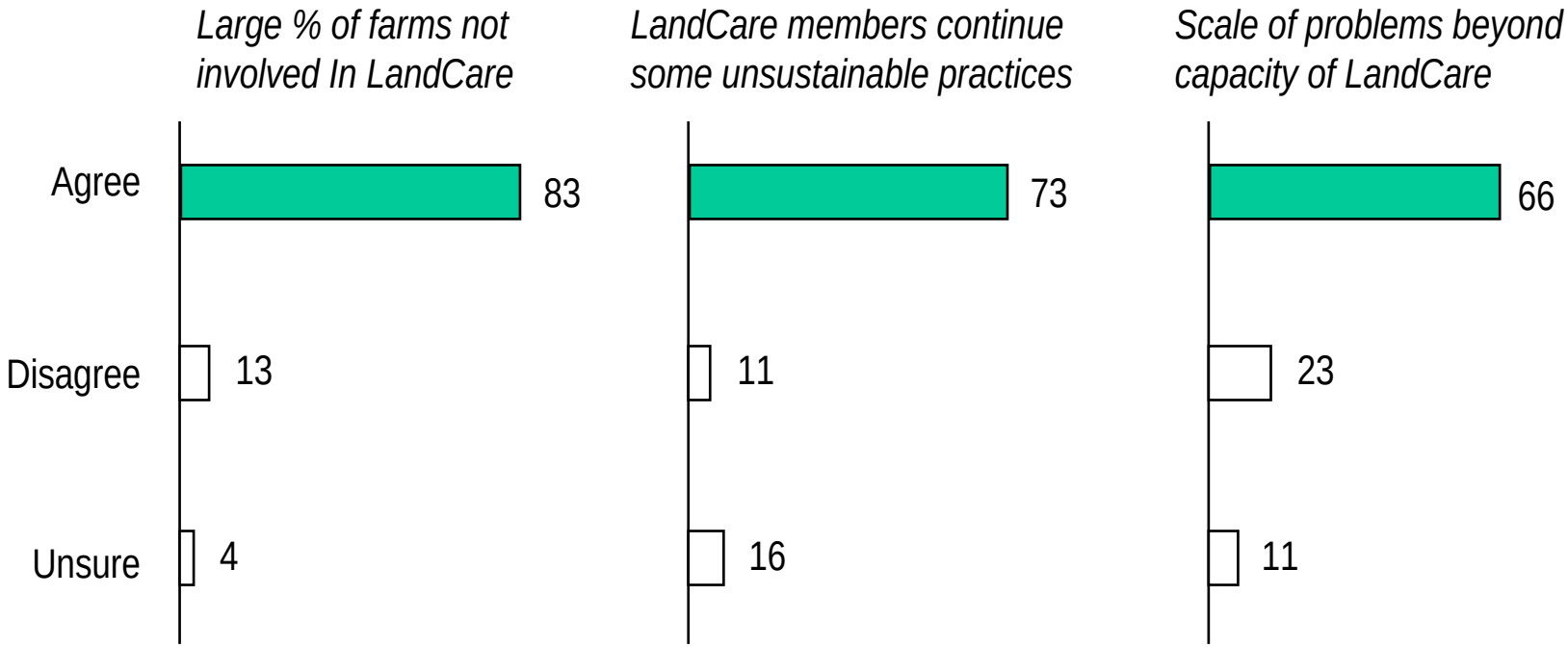


Source: House of Representatives *Coordinating Catchment Management,* 2001

Poor, un-cushioned economics leads to low adoption of best practice – even on LandCare farms

LandCare Coordinators Survey : LandCare & Sustainability Adoption

(% of survey respondents)



Source: Byron and Curtis *Exploring working conditions and job related burnout in Queensland LandCare coordinators and facilitators,* 2002

Which in turn leads to increasing degradation and economic risks

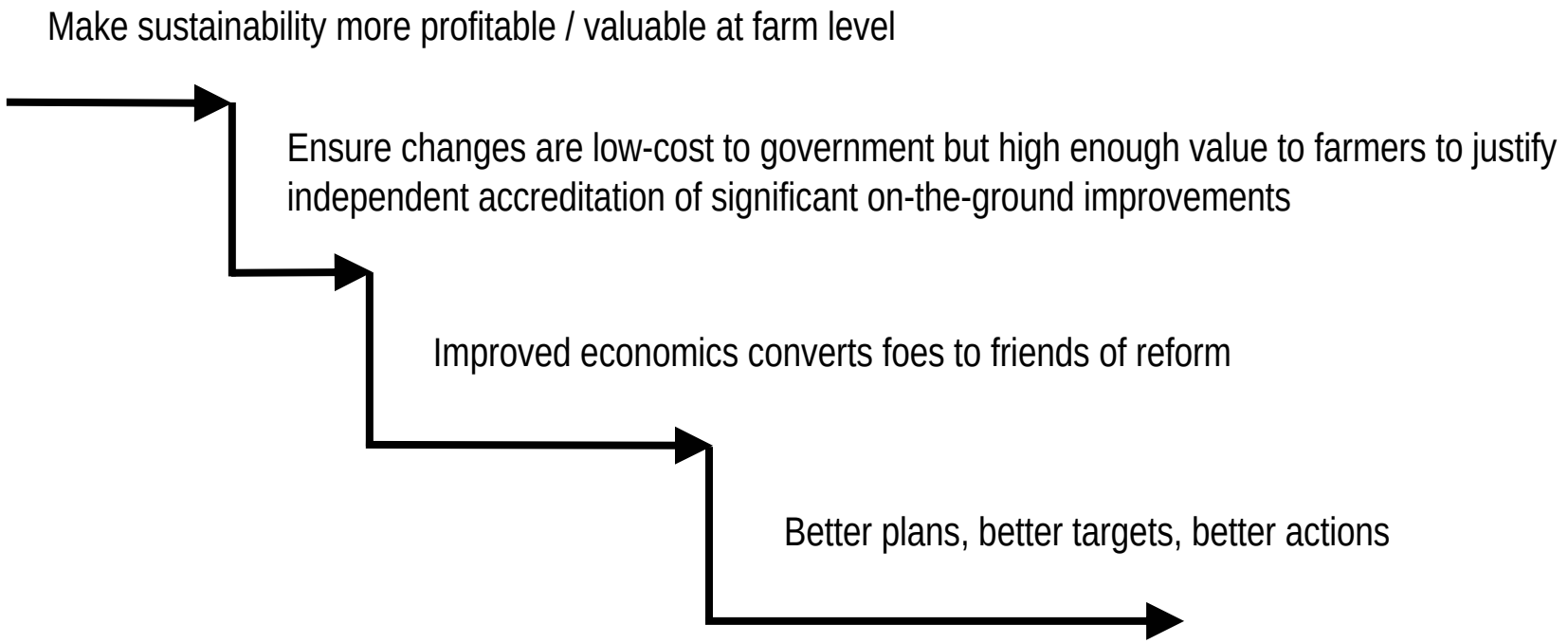
Findings of the Land & Water Audit and Others - 2001

- Large scale habitat loss
  - up to 80% of our wetlands lost
  - millions of hectares lost to production from salinity – millions more at risk each year
  - highest rates of land-clearing in the developed world
- Inefficient use of inputs and resources
  - Higher use of fertiliser than our rival international competitors (Brazil)
  - Highest rates of water use in world – in driest continent. 1kg of sugar = 1Tof water, 1kg cotton = 5T, 1kg beef = 50T.
- Leading to pollution and degradation
  - highest rates of greenhouse gas production in the world
  - several fold rise in mud and nutrient pollution of the Great Barrier Reef, risking over 600 reefs

Sources: Land and Water Audit, 2001, GBRMPA, 1996, CRC Reef, 2001, Queensland Sugar Annual and DNRM, Queensland Country Life, Bureau of Sugar Experiment Stations

A new approach is needed to support reforms

The Way Forward



Use economic-interest to increase adoption of sustainability

Making Sustainability Pay without New Money

- **Define** Best Management Practice (BMP), duty-of-care and adoption targets

- **Give** accredited BMP farms significant incentive at low-cost to government from ..

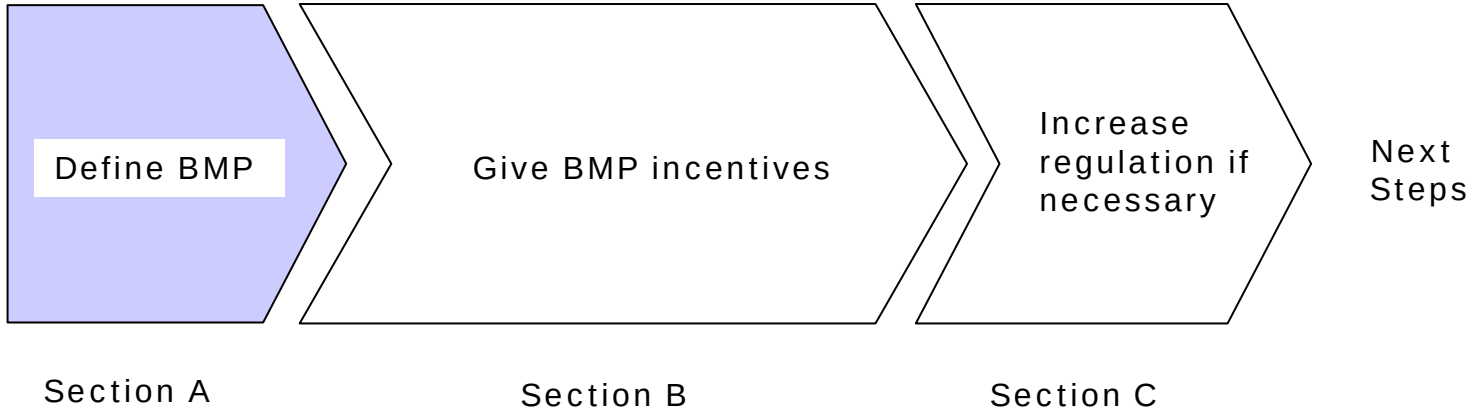
  - improved tenure of natural resource and market access
  - discounted future natural resource cost increases
  - streamlined development assessments
  - prioritised access to existing and future government services, loans, grants and assistance
  - re-funded and broadened water efficiency and drainage program
  - researched and locally extended low risk, profitable and sustainable practices

- **Phase-out** financial and legal support of poor practice and **prepare to increase regulation** - but only if, despite time and incentives, adoption targets aren't met

Use economic-interest to increase adoption of sustainability

Index : Making Sustainability Pay without New Money

Step 1 : Define BMP



BMP should involve a number of elements

BMP 6 Point Checklist and Section Overview

Element	Description	Refer
Voluntary entry	Voluntary but binding by covenant once benefits flow	A1
Industry ownership	BMP and duty-of-care should be guided by industry codes and documented in a property plan	A2
Regional negotiation	In regional plans, agree BMP, duty-of-care and adoption targets at a sufficient scale to address regional risks	A3,4,5,6,7
Cross-stakeholder support for defined outcomes	Government and stakeholders should agree the types of outcomes sought from BMPs and duty-of-care - perhaps similar in style to the *Guidelines for Land and Water Management Plans*	A8,9
Accreditation and reporting	Every 3-5 yrs; third-party; with checks to prevent rorting	A10
Continual Improvement	As our understanding improves BMP and duty of care will increase	A3

Voluntary entry but binding by covenant once benefits flow

Advantages of a Covenant or Similar Contract/Lien

- Voluntary – Voluntary approaches are more likely to encourage compliance, motivation and altruism (Young, 1997). Reforms that rely heavily on command : control often fail from lack of compliance resources or political will (the rarest of all natural resources)

- Enduring : entered on land title, passing benefits and obligations onto next owners/lessees. Only under certain circumstances can covenants be varied or removed by the court.

- Commitments are contractual with enforceable performance requirements

- Low-cost and supported by legislative amendments in March 2000 under S.373A and 373B of the *Land Act 1994 (Qld)* or S.97A and S.97B of the *Land Title Act 1994 (Qld).*

Source: Max Smith, *NRM Fact Sheet "Statutory Covenants – Their Use in Queensland", April 2002*

To maximise industry ownership, BMP and duty-of-care will be guided by industry codes

COMPASS 1 "Rating One" Grower Requirements

EXTRACT ONLY

Minimising Fertiliser Losses

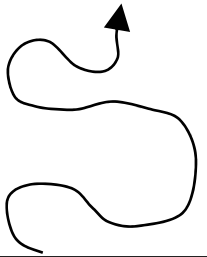
- Never exceed recommended application rates
- Use weather forecasts and avoid application where there is a risk of high rainfall
- Manage irrigation to minimise run-off/deep drainage
- Control traffic and rotation to increase root growth
- Laser level or contour blocks as needed
- Split application on plant cane in sandy soils
- Use cover crops to protect fallows
- Establish tail-water ponds to contain run-off
- Established grassed, slashed filter strips to slow run-off and trap particles
- Maintain a healthy riparian zone to intercept nutrients at depth and from overland flows
- Retain inter-row trash through minimum tillage
- Apply as close to stool as possible (not inter-row)

Managing Creek Vegetation

- Maintain dense vegetation cover to top of river bank
- Protect remnant vegetation 50m from bank
- Rehab trees,shrubs and grass >10m beyond bank
- Only use waterway registered weed chemicals
- Plan weed maintenance to prevent off-site movement (ie take weather into account)
- Ensure tank filling / wash areas are far from rivers
- Exclude stock from riparian zones
- Regularly mow or slash grassed filter strips near rivers
- Filter water before it reaches rivers through >6m grassed headlands, well designed drainage systems
- Slow water movement with contour banks / laser leveling
- Prevent fires moving to riparian areas
- Use approp. mix of grass, shrubs & trees to trap sediment
- Extend tree lines to shade rivers to reduce temperature

Managing Drainage

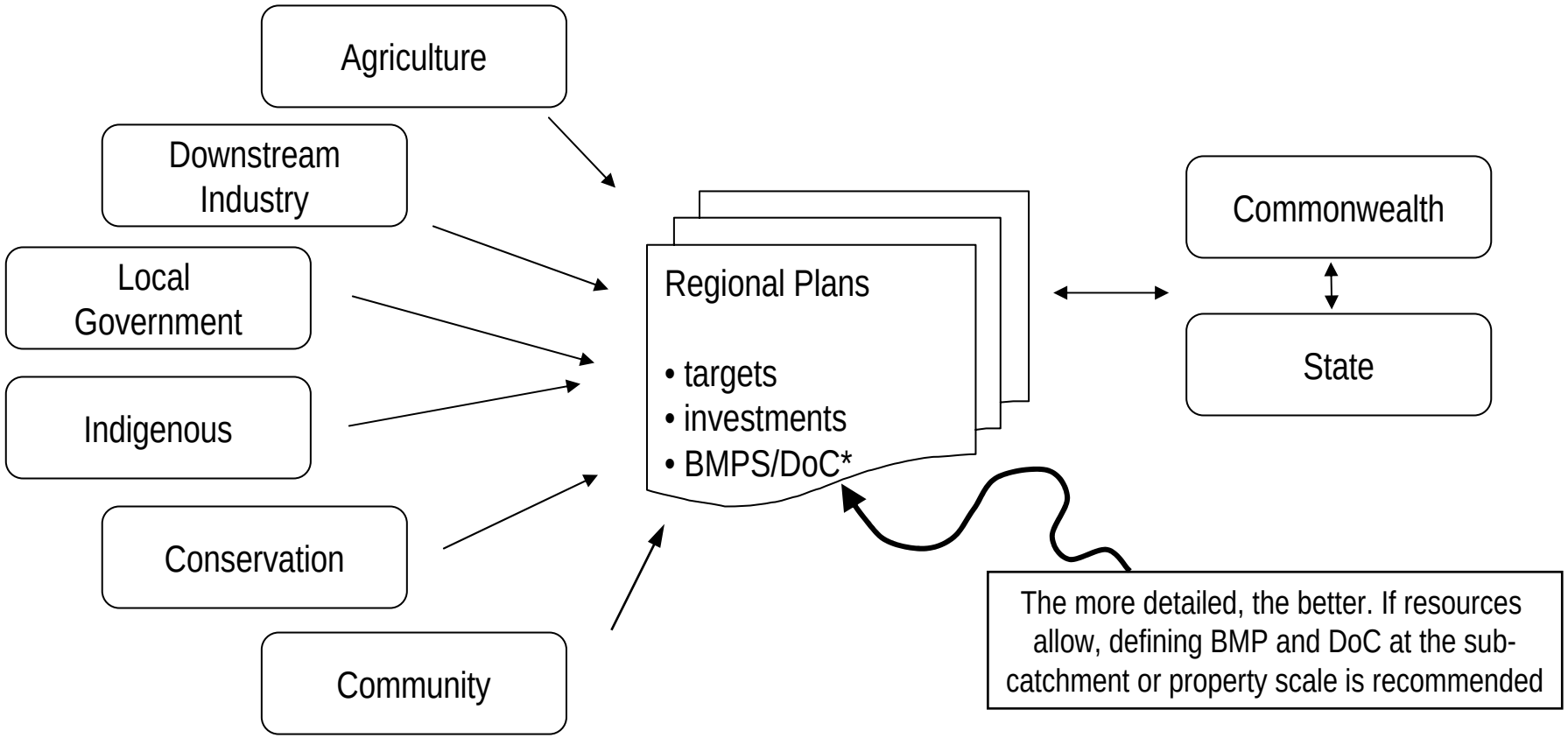
- System includes a tail-water recycling pit
- Design is wide, shallow, vegetated, gentle slopes
- Suits the row-length, direction and slopes
- Permanent waterways are shaded with trees
- Drainage does not alter creeks, streams, wetlands
- Drains are stable and maintained
- Drains provide a healthy habitat via aeration structures
- Establish and maintain sediment traps
- Drains remove water within 3 days



While seen by many as a great first step, minor tightening of some of these practices will be required to meet the higher BMP standard – see A9 for QSIA requirements

Source: Azzopardi, M. (2001) COMPASS : A Self-Assessment Workbook, BSES Indooroopilly

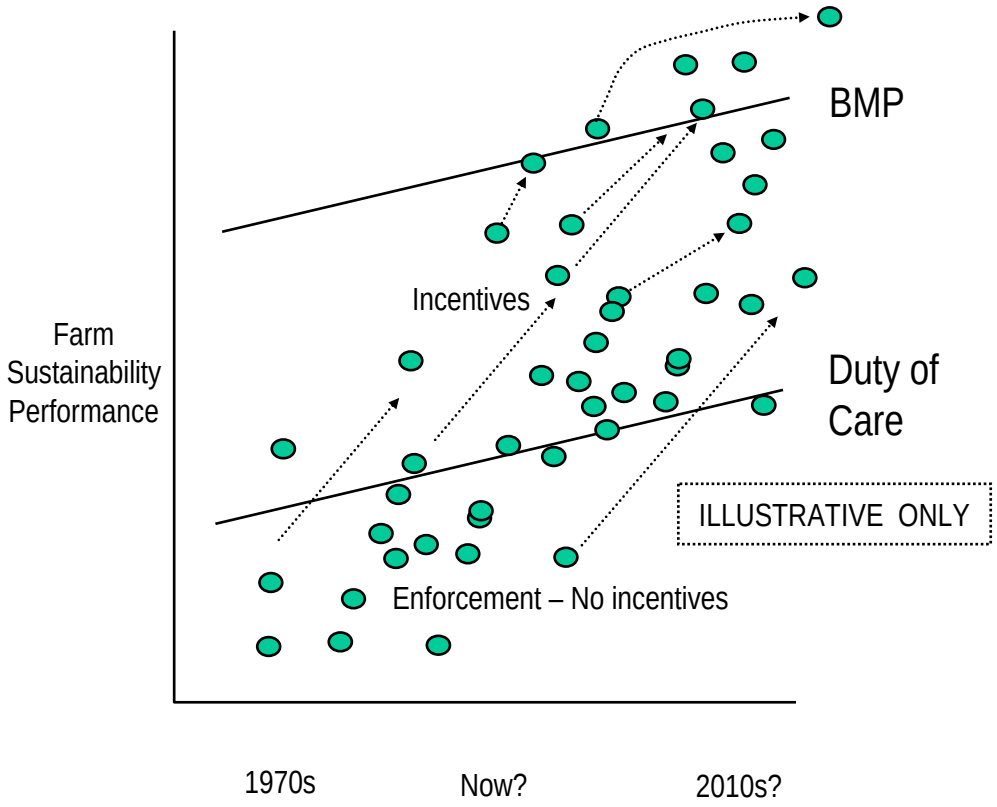
BMP, duty of care and adoption target definition should be agreed within regional plans



* It is QSIA's understanding that BMPs and DoC will be developed at a regional scale within "Standards" required by the NAP Bi-lateral

BMP is greater than duty of care – a distinction needed for incentive eligibility

BMP vs. Duty of Care



What is Duty of Care and should it earn incentives?

Definition of Duty of Care varies (See A5) yet in the broadest sense requires landholders to take all reasonable steps to…
- be ecologically sustainable
- prevent or minimise harm to the environment

and is…
- arguably greater with state lands / public subsidies
- limited by information, some legal gaps and poverty
- fluid and increases over time with increased community expectations, government assistance & improved information

No incentives should be given for meeting Duty-of-Care, except in cases where there is a..
a) demonstrated incapacity to pay (aka Sugar Package)
b) guaranteed capacity to pay in the near future
c) commitment to BMP deadlines
Otherwise we would be rewarding poor performance.

Source : Productivity Commission *A Duty of Care for the Protection of Biodiversity on Land,* 2001, EP Act 1994 (Qld), others.

Duty-of-Care definitions regarding degradation enjoy some consensus ...but vary for biodiversity

Peak Body Definitions of Duty of Care – Tree-Clearing

TO BE CONFIRMED

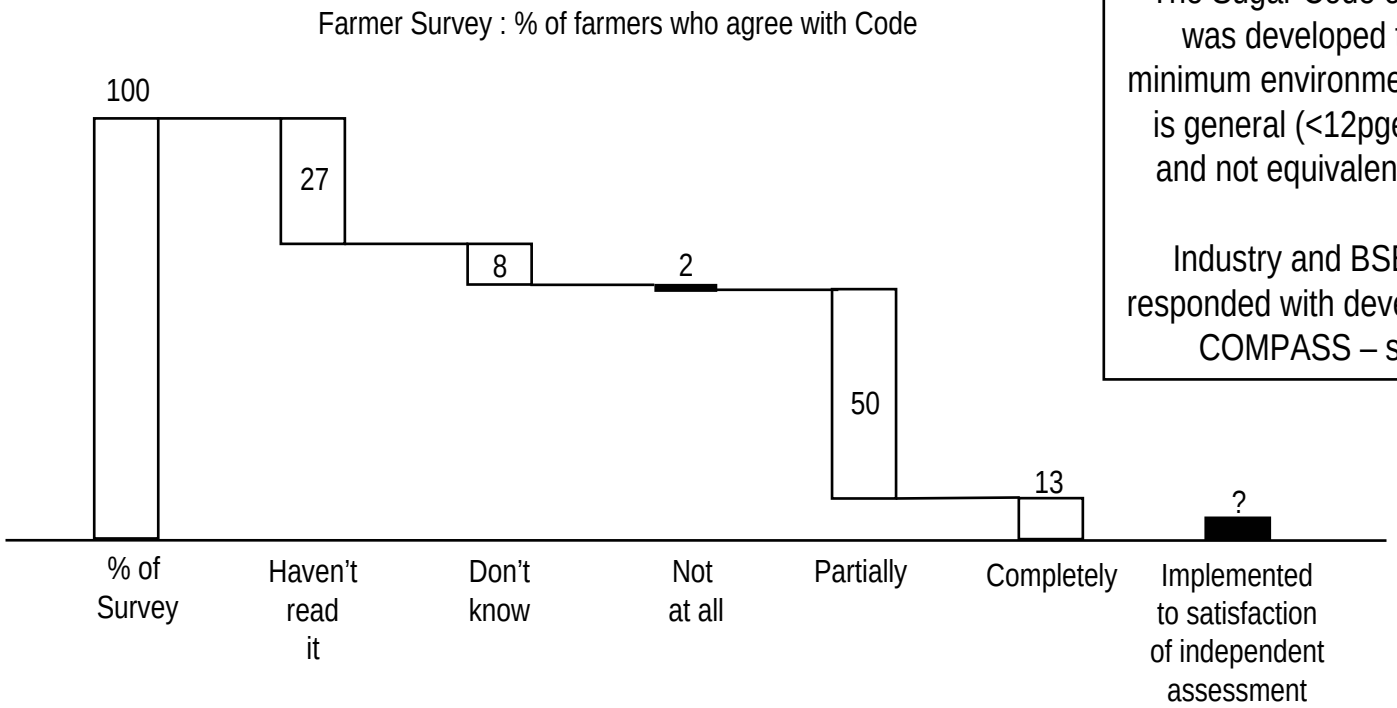
Duty of Care Principle		Greens	Fishing	DNRM	QFF	AgForce
Lands Subject to Degradation	Salinity - recharge	✓	✓	✓	✓	✗
	Salinity - discharge	✓	✓	✓	✓	✓
	High erosion hazard	✓	✓	✓	✓	✓
	Riparian Buffers	✓	✓	✓	✓	✓
High Conservation Value	Endangered	✓	✓	✓	?	?
	Of-Concern	✓	✓	✓? [1]	?	✗
	Downstream – GBR,etc	✓	✓	? [1]	✗	✗

Areas of greater support for compliance

1 Government has defined a higher duty of care to of-concern vegetation on state lands. Duty of Care on freehold land will be determined by Regional Vegetation Management Plans

Adoption targets must be at a scale well in excess of current low rates

Less than 13% of cane farms have fully adopted their code of practice



The Sugar Code of Practice was developed to meet minimum environmental duties, is general (<12pges of text) and not equivalent to BMP.

Industry and BSES have responded with development of COMPASS – see A7

Lack of incentive (page ii) is suggested as the major reason for poor adoption

Source: BSES/SRDC *Cane Growing and Sustainability, 2000*

BMP targets must be based on risk

QSIA BMP Adoption Targets (%)

GBRMPA Risk Class	Years					
	2001	2003	2004	2005	2008	2010
Very High		40	80	100		
Medium High			50	80	100	
Medium				50	80	100
Low						50

Industries and regions to regularly report on performance against targets

Alternatively, risk could = $\frac{\text{Threatened Values X Sensitivity}}{\text{Past Environmental Performance}}$

Cross-stakeholder support is needed to agree on BMP and duty-of-care outcomes at state level

Example of Desired State Outcomes : LWMP Performance Criteria[1]

EXTRACT ONLY

Measure	Performance requirement	Acceptable solutions
Riparian Zone management	Farming activities do not adversely impact on ecological integrity of riparian zones. These areas are maintained in such a way that vegetation is retained to protect stream bank stability, and maintain water quality by filtering sediment, nutrients and other pollutants.	Retained or replanted vegetation provides stability for stream banks in accordance with Guidelines for Stabilising Streambanks With Riparian Vegetation. Grassed buffer zones provide a filtering mechanism where farm runoff enters a watercourse or drainage line leading to a watercourse.
Soil Management	**Soil conservation** Soil erosion or mass movement is prevented or minimised.	Appropriate soil conservation strategies used: • soil conservation measures (row direction, banks, waterways). • agronomic measures • silt traps and/or grass buffers • irrigation methods and practices • soil binders, conditioners or mulches/trash blanket

Cross-Stakeholder support would require agreement from farming, tourism and fishing industries, conservationists, GBRMPA and relevant agencies – see A9 for fishing requirements

1 Extract from *Guidelines for Land and Water Management Plans* prepared for the *Water Act 2000.*

Cross-stakeholder support of guiding BMP and duty-of-care principles at state level

Example : On-farm Duty of Care and BMPs required by the Fishing Industry

EXTRACT ONLY

- Retire, rehabilitate and protect marginal, degradable lands..
  - under 2m > sea level, all existing/former wetlands & riparian buffers as defined by *CSIRO Guidelines*
  - subject to erosion, salinity, sodicity, ASS, etc hazards as defined by the *Land & Water Audit*
  - sufficient to protect all old-growth trees and the hydrological cycle
  - where economically unviable
  - switching to forestry is possible where viable, sustainable, using mixed species and ARCS code of practice

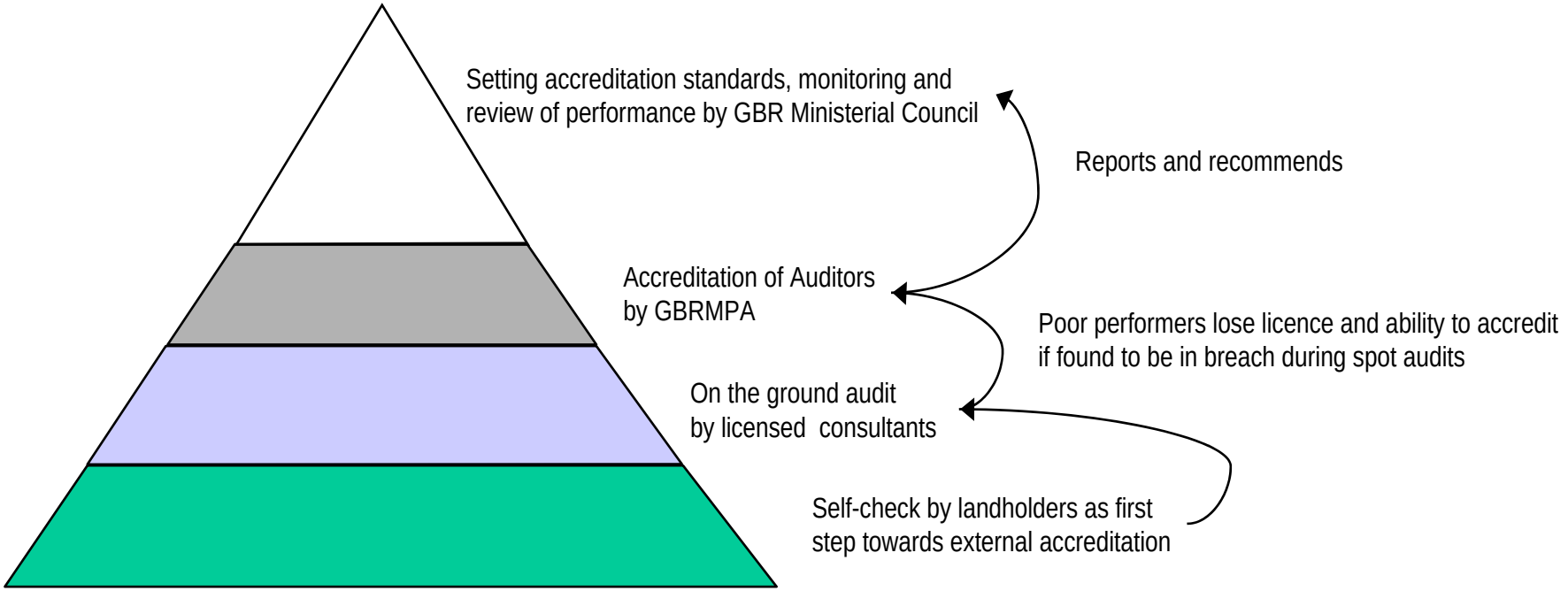
- Retention of all inputs on-farm, including enhanced soil loss, weeds, tail-water, fertiliser, pest/herbicides via
  - minimum tillage, organic and IPM
  - micro-management of inputs including drip, soil / crop need-based farming
  - tail-water catchment via artificial wetlands, filter strips or similar but no drains, levees
  - retirement where input movement can't be prevented, including ponded-pastures
  - ground-cover retention throughout drought via stocking to capacity, fencing and use of forecasts

- Mimic natural processes via environmental flows (releases and shaping of floods with gates) and natural fire regimes

Source: Queensland Seafood Industry Association, 2002

BMP will require 3-5yr 3rd party accreditation and checks to prevent rorting or 'tick & flick'

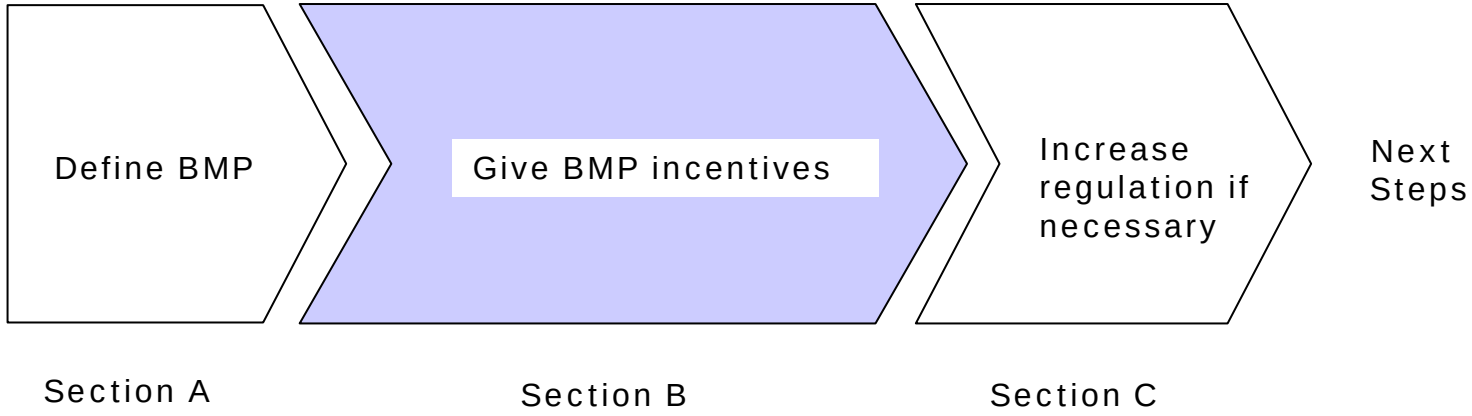
Accrediting the Accrediter – How will it work?



Use economic-interest to increase adoption of sustainability

Index : Making Sustainability Pay without New Money

Step 2 : Give BMP Incentives



Give BMP farms significant incentive – sufficient to drive adoption automatically

Section Overview

- Incentive-led approaches have superior characteristics (B1) to other approaches – as long as they are integrated with the other sustainability tools (B2)

- In order to meet targets (A7) and re-enforce still-infant BMP attempts, incentives must be sufficient to upscale adoption automatically (B3,4) and should include all of the following …

  - improved security of resource and market access (B5,6)
  - discounted future resource cost increases (B7,8,9,10)
  - streamlined development assessments (B11)
  - prioritised access to existing and future government services, loans, grants and assistance (B12-16)
  - re-funded and broadened water efficiency and drainage program (B17,18,19)
  - extended existing and future profitable and sustainable practices (B20,21)

- Incentives may need to be brokered (B22) and their value must be maintained across a wide variety of regions and industries, as demonstrated in selected case studies (B23,24,25)

Incentive-led approaches have superior attributes

Possible Tools : Analysis of Suitability

Possible Sustainability Tool	Criteria of Suitability				
	Low Cost to Govt	High On-farm Value	Low Risk Rural Politics	Practicality: Within Existing Processes	Practicality: Within Existing Knowledge
Security of resource and market access	✓	✓	✓	✓	✓
Reduced future resource costs	✓	✓	✓	✓	✓
Streamlined development assessments and access to government assistance	✓	✓	✓	✓	✓
Refunded / broadened water efficiency	✓	✓	✓	✓	✓
Full compensation	✗✗	✓	✓	✗	✓
Ecosystem Services/Stewardship Payments	✗✗	✓	✓	✗	✗✗
Riverbank / Wetland Buybacks / Lease	✗✗	✓	?	✗	✓
Produce premium	?	✗	✓	✗✗	?
Regulation of practices	?	✗✗	✗✗	✗✗	✗

Picking "The Low Hanging Fruit". This presentation will focus on developing these incentives

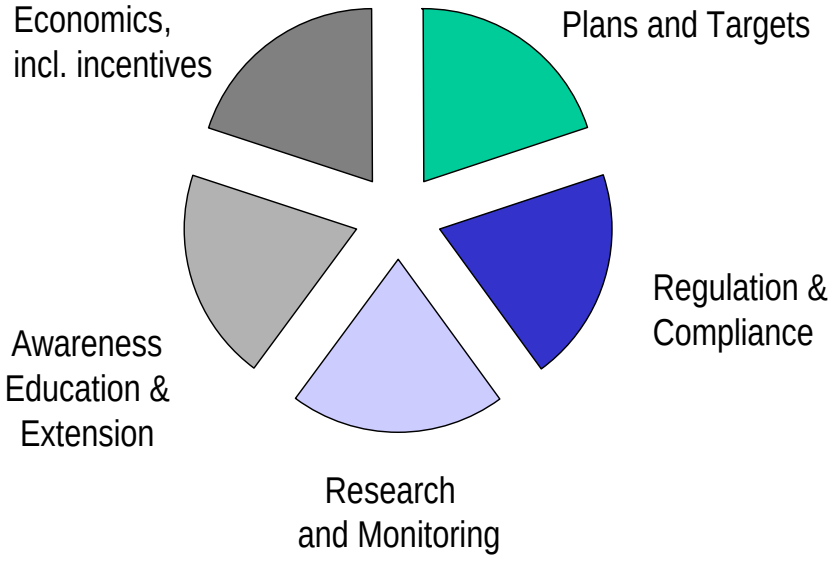
These are legitimate tools but beyond the scope of this paper.

Incentive-led approaches must be integrated with a mix of other sustainability tools

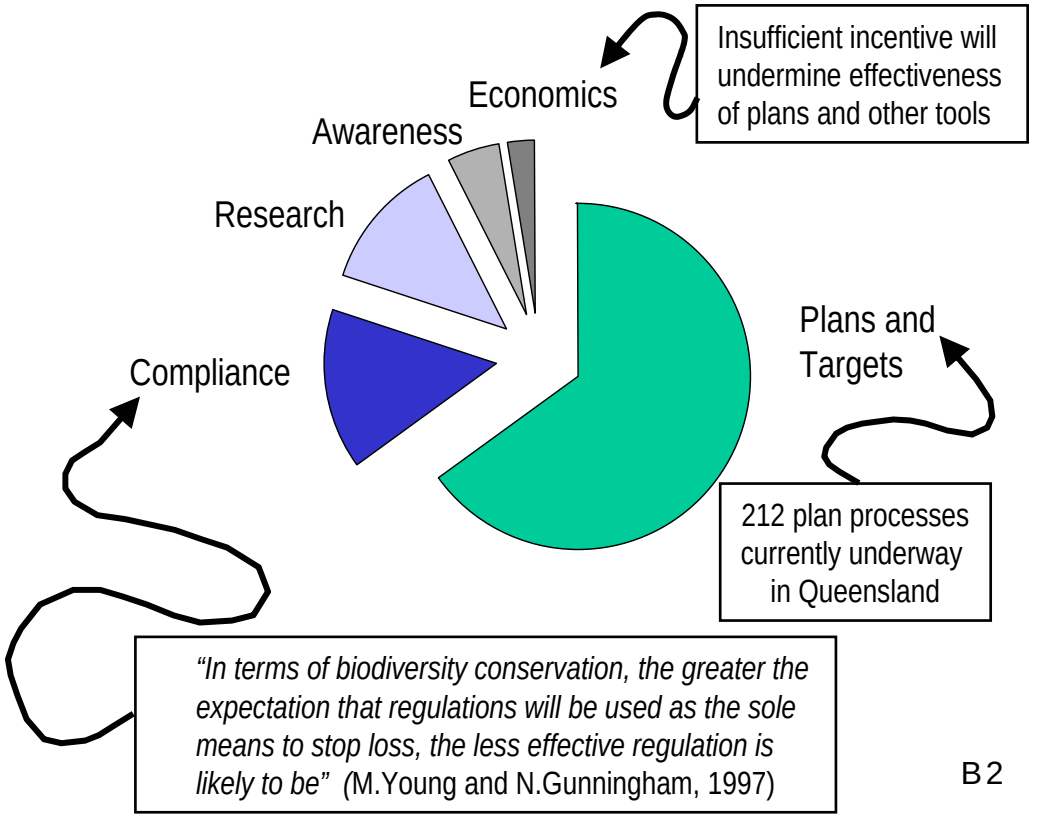
The Minister's Realm : Tools for Sustainability

ILLUSTRATIVE ONLY

Balanced Mix of Tools

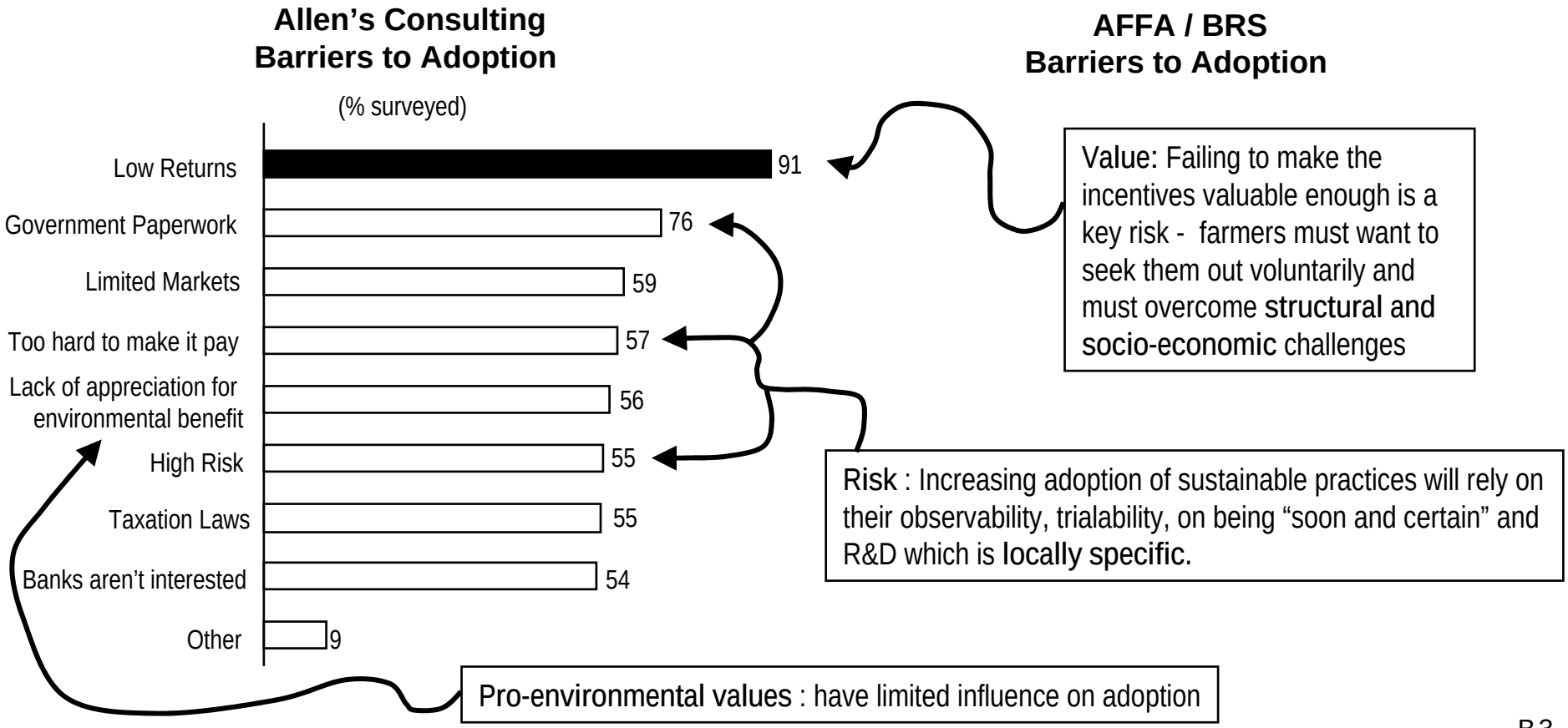


Current Mix of Tools



To improve on past failed BMPs, incentives must be sufficient to upscale adoption automatically

Adoption Barriers must be Addressed in Incentive value and design



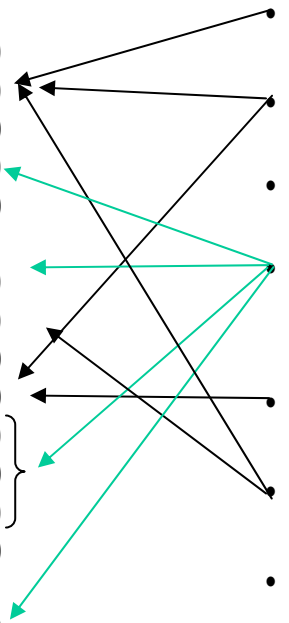
Source: *Leveraging Private Investment,* Allen Consulting Group, 2001; Cary, Webb and Barr, *Understanding Landholder's Capacity to Change to Sustainable Practices,* 2002.

Give BMP farms significant incentive – sufficient to drive adoption automatically

Farm Profit & Loss Analysis

INDICATIVE ONLY

	Non-BMP 200Ha	BMP 160Ha
Yield (t/ha)	80	100
Production(t)	16,000	16,000
Price ($/t)	10.00	11.00
Grants	0	10,000
Crop Revenue	160,000	176,000
Labour	55,000	40,000
Fertiliser	32,000	15,000
Pesticide	6,000	1,500
Water	4,000	1,500
Interest	15,000	15,000
Depn, Fuel & Maint	40,000	35,000
Administration	14,000	20,000
Lease,rates, etc	6,000	2,000
Tax	0	14,000
Profit	(12,000)	42,000



BMP Difference = $54,000 p.a.

Valuable Farm Benefits

- Improving security of resource access (B4,5)
- Discounting future resource cost increases (B6,7,8,9)
- Streamlining development assessments (B10)
- Prioritising access to services, loans, grants, assistance and future programs (B11-15)
- Re-fund and broaden water efficiency program (B16,17)
- Extending profitable and sustainable practices (B18)
- Several case studies (B19,20,21)

Sufficient to automatically drive BMP adoption

Improve resource and market security for BMP farms

- Leasehold Land : preferred access to more flexible and longer lease

  - preferred access to more BMP lease diversification and amalgamation options,
  - preferred access to rolling 30 yr extensions every 10 yrs, subject to native title
  - performance, not prescription, based lease operational/renewal conditions

- Freehold Land : preferred access to resources and markets

  - preferred access to more secure sugar mill allocation, mill cane premiums and ethanol markets
  - preferred access to Woolworth's/Cole's contracts for vegetable growers
  - preferred access to future vegetation trading on a net gain basis

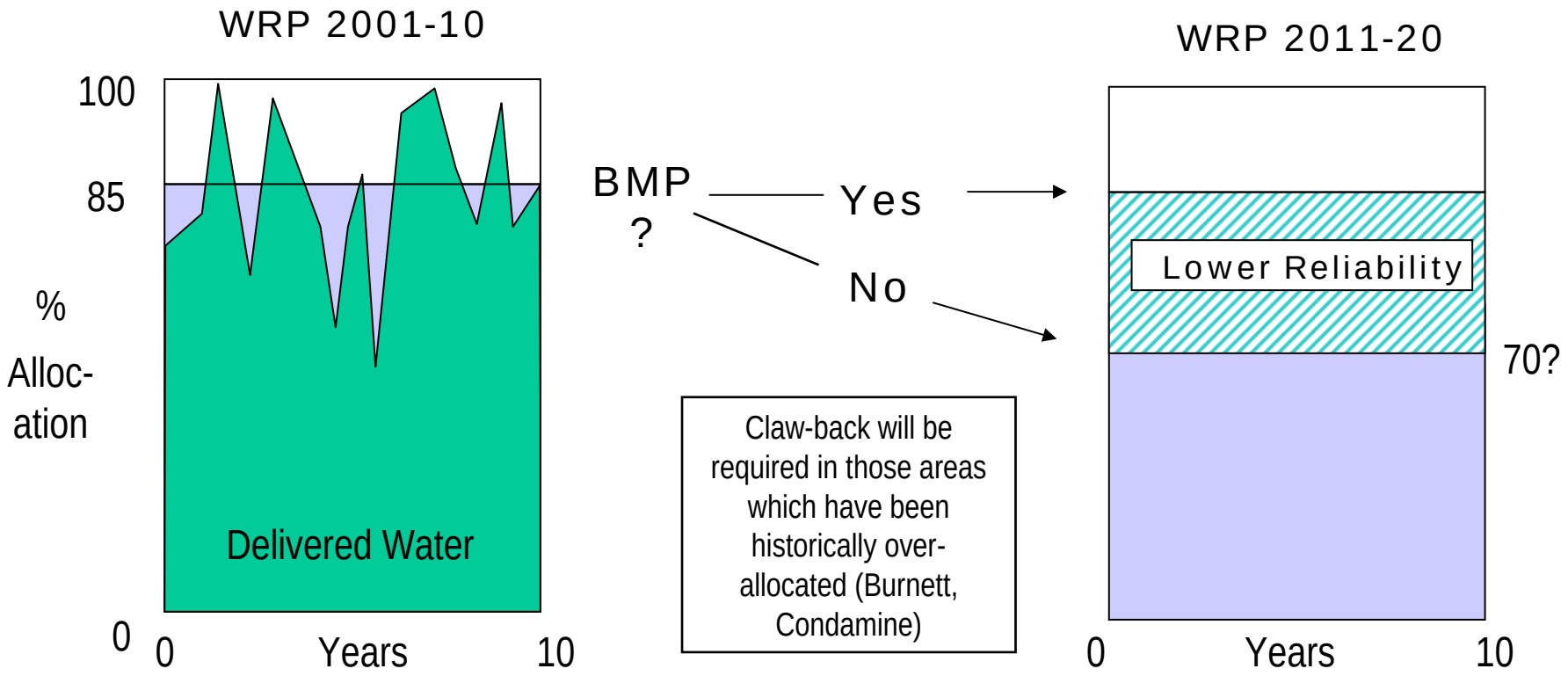
- Water : preferred access to more trade-able, more secure water allocation

  - preferred access to water trading, (often allowing windfall gains)
  - preferred access to claw-back protection (B6)

Grant BMP farms more secure water use

Conversion of Allocation at End of WRP

ILLUSTRATIVE EXAMPLE

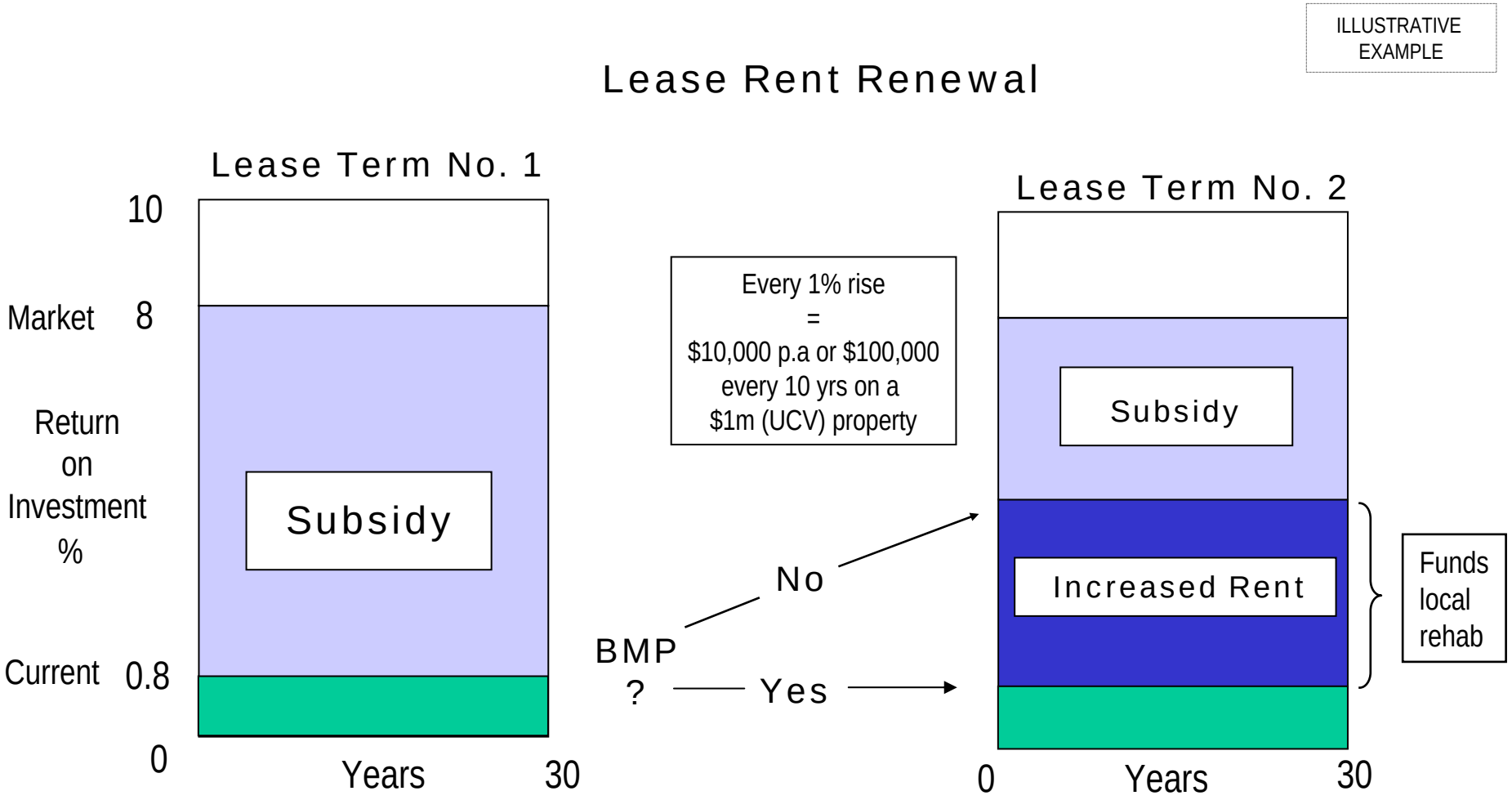


Discount future resource cost increases for BMP farms

- Facilitate cheaper use of land and water resources
  - leases : discounts from future rent increases (B8) and lease exemptions for areas retired under covenant
  - freehold : continued and increased rebates for rates and land tax
  - water : discounts from future CoAG driven upper bound rises (B9)
  - chemical / fertiliser inputs : give BMP exemptions to new levies (aka sugar) for local rehabilitation (B10)
  - increased levies from non-BMP farms can fund local riverbank rehabilitation
- While resource costs are relatively cheap, farms face upside risk
  - leasehold land discussion paper and Productivity Commission findings – Queensland leases are less than half of South Australia, Northern Territory, New Zealand. NSW has just reformed its system
  - COAG water reform agenda
  - financial squeeze on councils / resource agencies with increasing responsibilities
- As prices rise, discounts become more valuable - giving the greatest level of certainty available for restricting increases in government supplied farm input costs

Discount future rent increases

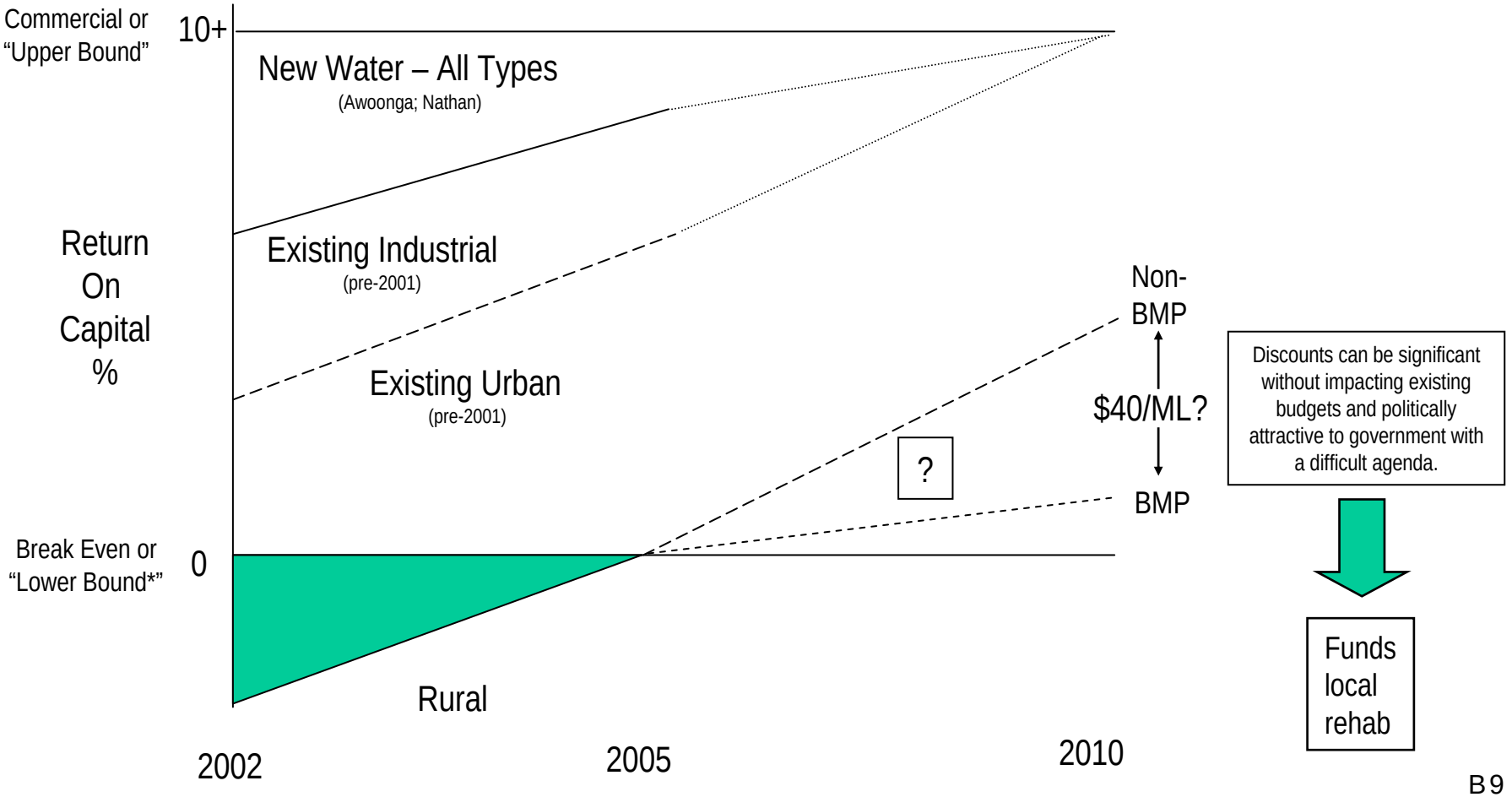
ILLUSTRATIVE EXAMPLE



Source: DNRM and discussion with regional real estate agent

Discount future CoAG water price rises

Future Water Pricing Scenarios – By Sector

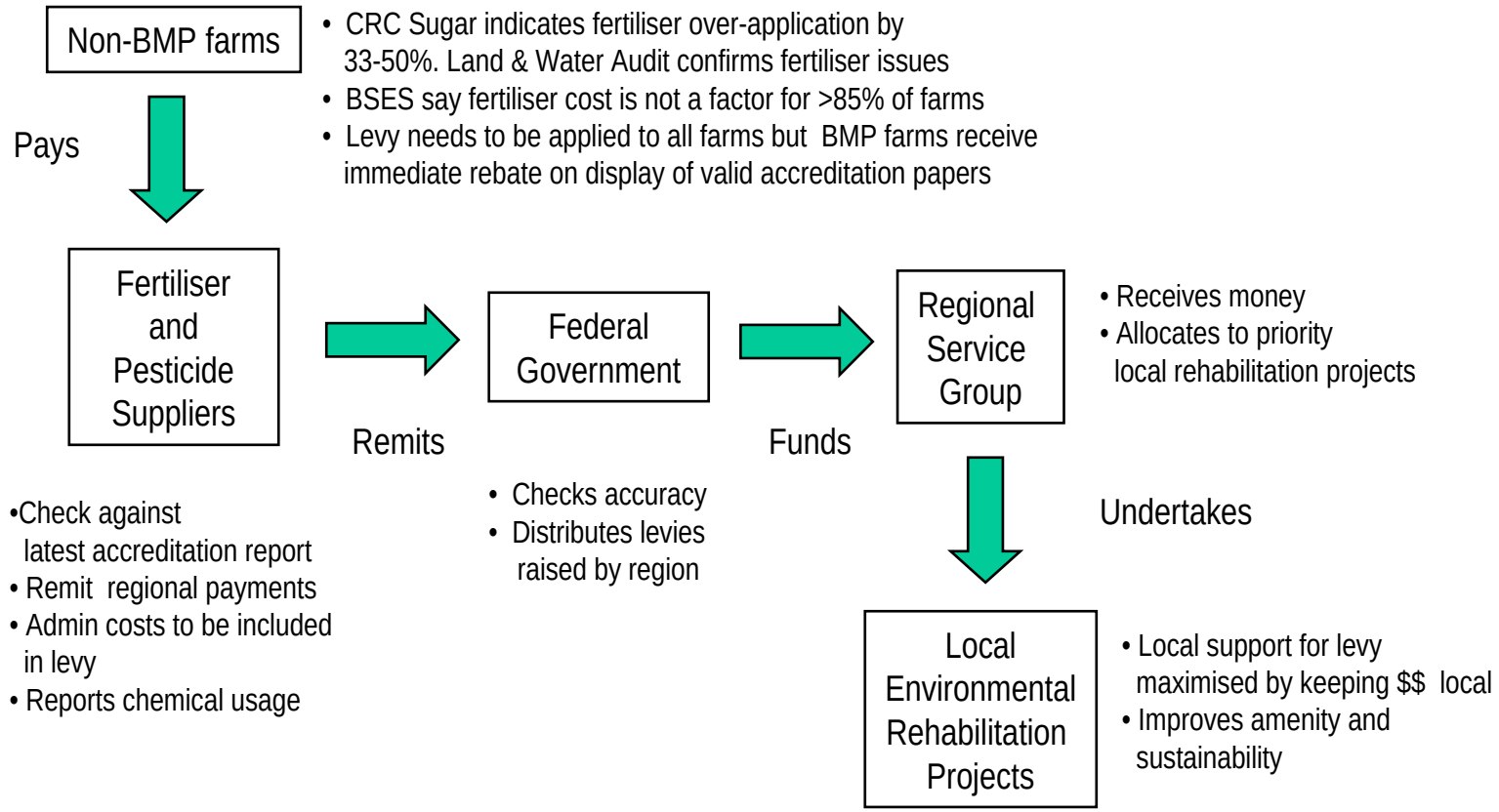


* Items not yet included are resource management and externalities (fisheries, etc)

Exempt BMPs from new local input levies on fertiliser and pesticides in high risk areas

INDICATIVE ONLY

Non-BMP Farms Fund Local Rehabilitation Projects



Source: BSES *Cane Growing and Sustainability* 2000; Land and Water Audit *Agricultural Assessment,* 2001, CRC Sugar *Working Paper No.2* 2001.

Streamline development assessments

BMP : The “Farmer’s Passport” to Approvals

- While the level of regulation of traditional farm practices is low, impending and often overlapping regulation for new development is of increasing concern to farmers

  - *Integrated Planning Act* : ‘Material change of use’ may require ‘code’ or ‘impact’ assessment
  - *Vegetation Act* : requires a Property Vegetation Management Plan for clearing approval
  - *Water Act* : requires Land and Water Management Plan for trading approval
  - *Land Act* : lease renewal may require a Property Management Plan
  - There are also a range of other impending NRM and work place health and food safety requirements

- Regional BMP should always be defined in excess of minimum legislative requirements and so fulfill (and exceed) the intent of (& streamline compliance with) all requirements

- BMPers will then be closest to the “Farmer’s Passport” once-only, ‘one-stop-shop’ approval ideal for IPA code assessment, water, vegetation, lease renewal, water trading, etc

Prioritise BMP access to existing loans, grants, services and assistance

BMP : The "Farmer's Passport" to Assistance

- Prioritise access to the existing suite of government rural programs

  - Industry Development : Export / domestic market development grants, R&D, AAA, SIIP
  - Employment : facilitation, assistance, training, distance education
  - NRM : NHT/NAP and other grants, assistance, resource CSOs
  - Emergency Assistance : flood, drought, exceptional circumstance
  - Structural Adjustment : SIAP, QRAA PIPES and other loans
  - Tax breaks : accelerated depreciation for farm works

43% of surveyed farmers indicated tax breaks as the most preferred form of incentives[1]

- Prioritisation doesn't alter total funding but ensures a greater benefit goes to those who try the hardest – and helps prevent rewarding poor performance

1 Allen's Consulting *Leveraging Private Investment* 2001

Prioritise BMP access to future markets, loans, grants, services, assistance and philanthropy

BMP : The "Farmer's Passport" to Future Assistance

- Prioritise access to future programs

  - Greenhouse/Veg Management packages from any future agreement between State and Commonwealth
  - $150m Sugar Adjustment Package, Ethanol industry
  - Eco-labelling developed to compete for preferred access to overseas and domestic markets
  - Auctioning of environmental services (aka "Bush Tender" in Victoria)

- Pre-condition for access to philanthropy / revolving funds like Nature Conservancy, Land Trusts and Allen's *Leveraging Private Investment* to facilitate BMP but also land purchase to allow industry exit with dignity.

- Pre-condition to taxation reforms based on adopting USA tax treatments and others identified by the *Ian Potter Foundation, Melbourne, 1999.* (B13,14). Lost taxation revenue will be offset by phasing out deductibility for a range of perverse practices (see C1)

Prioritise BMP access to US led tax reforms to grow philanthropy and use of revolving funds

BMP : The "Farmer's Passport" to Future Assistance

Comparison of Australian and American Tax Treatments – Tools involving Conservation Covenants

Tool	US Situation	Australian Situation	Changes Required
Donation of Conservation Covenants	Deduction of difference in land pre and post covenant	Not currently, although possibly via gifting provisions. Requires test case.	Confirm current situation and make legislative changes if required.
Deduction of management costs	No	No – unless carrying on a business	Give access to the 34% LandCare rebate where covered by a conservation agreement
Negative gearing and primary producer status	Not Applicable	No	Allow negative gearing and primary producer status for those entering covenants
State Government Land Tax	Exempt in many states	No exemption in any state	Grant exemption for covenants
Local Government Rates	Exempt in many states	Some (<15) council exemptions	State governments would need to credit valuations under covenant
Revolving Funds	Exempt from land sales taxes and charges in some states	Only state agencies and Victoria's Trust for Nature are exempt	Allow conservation trusts to enter covenants Exempt trusts from stamp duty, taxes and other charges associated with buying and selling land

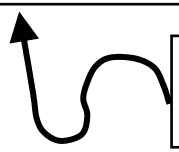
Source: Reprinted in House of Representatives Environment Committee , 2001 from 'Philanthropy: Sustaining the Land, The Ian Potter Foundation, 1999, P11-12

Prioritise BMP access to US led tax reforms to grow philanthropy and use of revolving funds

BMP : The "Farmer's Passport" to Future Assistance

Comparison of Australian and American Tax Treatments – Other Financing Options

Tool	US Situation	Australian Situation	Changes Required
Bargain Sale of Land	Deductible Capital Gains exempt Maybe apportioned over 5 years	Not deductible Not capital gains exempt Can't be apportioned	Allow deductibility for any market gap, exemption of capital gains and apportionment over 5 yrs
Land Swaps and Exchanges	Does not trigger capital gains tax	CGT triggered buy disposal and acquisition	Allow capital gains to be rolled over negotiated land swaps
Capital Gains roll-over for Land voluntarily acquired	Proceeds can be re-invested in similar capital (ie land) w/n 2yrs	No roll-over	Allow capital gains roll over for properties voluntarily sold to conservation trusts
Donation of land with retained right of occupation	Donation of land value allowed over 5yrs and capital gains are exempt	May be deductible but is untested	Allow deductibility if occupation retained, exemption of capital gains and apportionment over 5 yrs
Conservation annuities, bonds and shares	Receive favourable capital gains and estate tax treatment	Only deductible once annuity, bond or shares mature or are sold	Allow donations of the principle to be deducted over 5yrs , exempt from CGT and treat life time annuities as income



BMP can be the mechanism missing in the US, where rorts are a risk

Source: Adapted from 'Philanthropy: Sustaining the Land, The Ian Potter Foundation, 1999, P11-12

Support industry, council, RSG and state efforts to lift BMP adoption

Industry, Council and State Level Incentives for BMP Adoption

- Industry : prioritise peak body and industry development assistance on the basis of commitments and progress towards improved BMP adoption
- Council : prioritise DLGP and QT grants to council which support BMP adoption within IPA (IDAS, material change of use, planning schemes, code assessment and Schedule 8)
- Regional Strategy / Landcare Groups : Plans with more ambitious/better value targets and supportive BMP arrangements should receive more funding through their investment plans
- State : Link NCC 2003 competition payments review to state's progress towards establishing an NRM framework which supports incentives for and achievement of BMP adoption
- Document these linkages requirements and steps within the Reef Water Quality Protection Plan

Refund and broaden the water efficiency program

- The Rural Water Use Efficiency Initiative (RWUEI) has been one of the most successful NRM reforms in Australia (B13)

- Yet funding runs-out June 2003, risking momentum and committed staff

- Opportunity to refund and seek broader NRM issues with a successful model

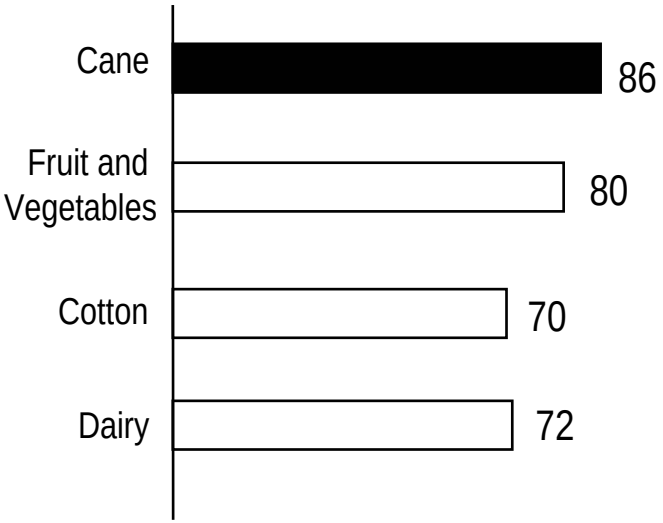
  - industry support critical to successful roll-out of any changes to scope
  - industry supports program extension to drainage issues and rain-fed farms to address run-off issues and inequity of irrigation focus (which excluded un-irrigated farms)

- River Trust (~$7m pa), Flood Relief (>$65m pa) and Council Capital Works Subsidies (~$30m pa) currently fund drainage works using traditional rather than BMP methods – opportunities exist to use this money to address flood and drainage risks simultaneously

  - doubts are rising about the cost:benefit of hard-facing drainage works which concentrate flows downstream
  - funding could be re-directed to optimise drainage, water quality and flood risk concerns within this program

RWUEI was very successful at raising farmer awareness of need to improve practice

Industry RWUEI Participation and Awareness Rate (%)



RWUEI Achievements

- $41m over 4 yrs for BMP trials, demos and “shed” extension
- Initial target was BMP within existing technology (efficient or not)
- By half-way industry requested faster reform and new technology
- 20% of Tableland farms converted to new technology in 1yr
- Cane farmers invested $4 to every $1 of incentive
- “Most farmers shake when you mention “the government”, however I can honestly say this is one of the best programs I have been involved in.” Fruit and Veg Farmer, 2002
- Over 50% of Fruit & Veg growers made changes to their system
- Cotton Irrigator achieved 147% increase over benchmark
- Dairy demo sites showed average 30% increase in efficiency

Source: DNRM Analysis and surveys

RWUEI was very successful at raising farmer awareness of need to improve practice

WORK IN PROGRESS

Need diagram of successful extension method

Shed meetings, etc

And how this could work with CANEGROWERS ‘water cycle’ proposal

Research and extend profitable and sustainable BMPS

BMP : The "Farmer's Passport" to Innovation

- Build on existing profitable and sustainable practices (B21)
- Better coordinate research agency $$ to fast-track on-farm BMP 'breakthroughs' like…
  - low N / fertiliser / poison / water sensitive crop varieties (aka NutriSmart)
  - new low N / P fertilisers / Diuron replacement
  - identification of worst risks and least cost fix in each catchment
  - low cost techniques to improve water / N / P / soil measurement
- Reduce risk of adoption through more locally specific identification of profitable and sustainable practices which are "Soon and Certain", observable, trialable and not complex[1]
- Refocus agency resources on better targeted community education and on-farm extension via the new RWUEI, BSES and QDPI
- Better coordinate monitoring of key catchment & end-of-valley risks

1 BRS *Understanding Landholder's Capacity for Change to Sustainable Practices, 2002*

Research and extend profitable and sustainable BMPS

BMP : The “Farmer’s Passport” to Innovation

- Build on existing profitable and sustainable practices

WORK IN PROGRESS

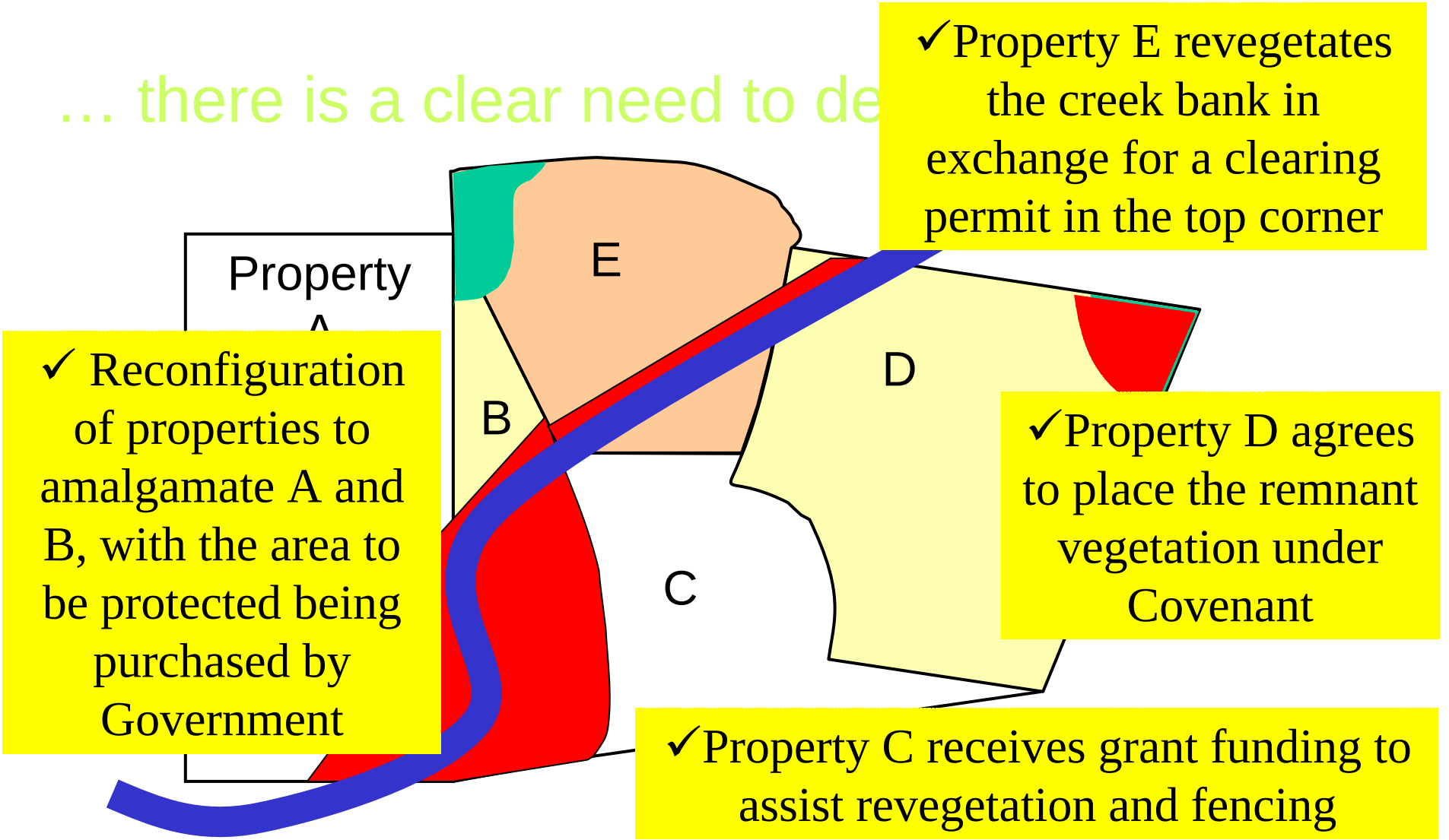
NEED LIST OF PRACTICES ALREADY TRIALLED WHICH DEMONSTRATE CROSSOVER BW PROFIT AND SUSTAINABILITY

NEED IS NOW TO DEMONSTRATE MORE WIDELY IN RURAL MEDIA, FIELD DAYS, NEW RWUEI

1 BRS *Understanding Landholder’s Capacity for Change to Sustainable Practices, 2002*

The incentive package can be piloted in DNRM's proposed regional brokerage service

… there is a clear need to de



✓Property E revegetates the creek bank in exchange for a clearing permit in the top corner

✓ Reconfiguration of properties to amalgamate A and B, with the area to be protected being purchased by Government

✓Property D agrees to place the remnant vegetation under Covenant

✓Property C receives grant funding to assist revegetation and fencing

This package of incentives would cover wide areas in the reef's biggest polluting catchment

Burdekin Tenure Map

BMP and Incentive Potential

- Over 85% of the catchment is state land
- As the landowner, Government can play a big role in improving land and water management
- BMP can be a requirement of all lease renewals and even stipulated as Duty-of-Care for on-going leases
- A wide range of lease security and discount conditions can be applied to encourage early BMP adoption
- Fencing, disciplined grass cover management based on L-T weather forecasts and riverbank rehab would be BMPs

This package of incentives would cover wide areas in the Fitzroy – another big polluter

Fitzroy Tenure Map

BMP and Incentive Potential

- Over 56% of the catchment is state land
- As the landowner, Government can play a big role in improving land and water management
- BMP can be a requirement of all lease renewals and even stipulated as Duty-of-Care for on-going leases
- A wide range of lease security and discount conditions can be applied to encourage early BMP adoption
- Fencing, disciplined grass cover management based on L-T weather forecasts and riverbank rehab would be BMPs
- Irrigator incentives would include greater water security and discounted future water prices

This package of incentives would cover wide areas in the heavily impacted Burnett-Mary

Burnett Mary Tenure Map

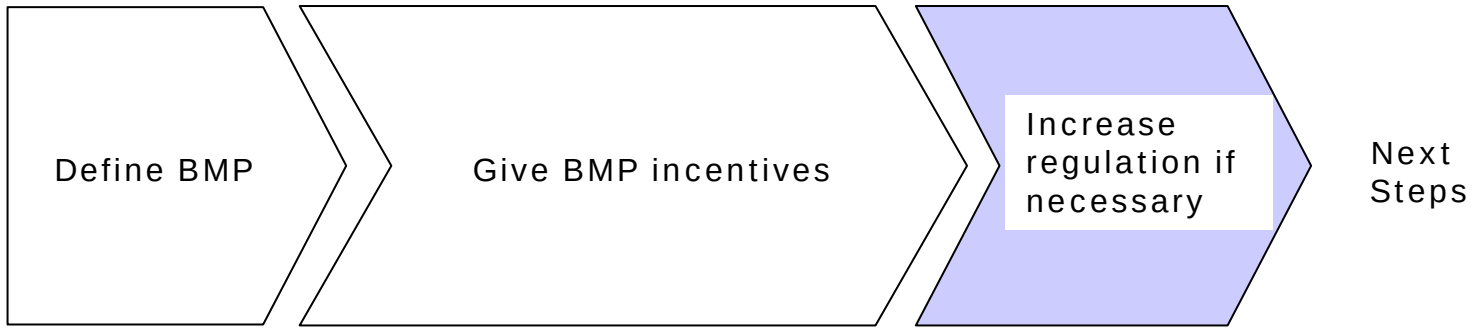
BMP and Incentive Potential

- 38% of the catchment is state land and 62% freehold land
- State land is still significant and all available incentive opportunities should be explored
- But a greater emphasis should be placed on incentives which will motivate change in behaviour on private lands
- These include water allocation security, pricing, efficiency and drainage program incentives – all highly relevant in intensive sugar and fruit cropping areas like Bundaberg
- Also access to existing government services will be attractive given some of the structural adjustment issues of the region

Use economic-interest to increase adoption of sustainability

Index : Making Sustainability Pay without New Money

Step 3 : Phase-out Poor Practice



Phase-out support of poor practice.....

- Phase-out current perverse financial and legal support of poor performance (C1)
- Re-allocate savings to grants for poor farmers and improved compliance (C2)

... but prepare to regulate if, despite time and incentives, targets aren't met and slow adopters choose not to improve

- Prepare regulation… but only if heavily supported targets aren't met (C3)
- Regulate BMP based on existing legislation with minor refinements based on overseas experience (C4)
- But only regulate after giving time and significant support and incentives (C5)

Phase-out perverse support of poor practice

Removal of Rewards for Poor Practice

Element	Description
Higher minimum standards	• Enforcement of Duty-of-Care via strategic litigation under *Land Act, Vegetation Act, Water Act, EP Act, etc* to protect old growth, wetlands, riparian areas, reduce pollution, etc.
Lower resource security	• Shorter lease terms, shorter water allocations, less certain market access
Higher input costs	• Investigate withdrawal of tax deductibility for non-BMP land clearing, dams, pesticides, nitrogen fertilisers, drainage and levee works • increased lease, rates and land tax revenue from non-BMP landholders • Impose more and higher fines • Commercial water, lease and service charges
Phase out or redirect some Government programs	• Withdraw “stump” subsidies to old-growth forest to encourage plantations • Withdraw drought, flood and other subsidy programs which perpetuate reliance • Redirect LGBCWSS, RIT, NDRA, SIIP, SIAP
Restrictive development assessment / access to government programs	• Restricted lease term / diversification / forestry and carbon rights • Restricted water trade, land clearing and grant options

Re-allocate savings to grants for poor farmers and improved compliance

- Savings will accrue from discontinuing perverse subsidies ..

  - increased lease, rates and land tax revenue from non-BMP landholders
  - increased water revenue from non-BMP irrigators
  - increased service revenue from non-BMP farms
  - reduced capital works from discontinuing RIT, LGBCWSS, NDRA, SIIP, SIAP, etc
  - lifting penalties to breaches of duty-of-care, monitoring, load licences

- Redirect savings to grants for poor farms in local areas, as well as enhanced compliance and constraint mapping

  - grants for local fencing and riparian rehabilitation of poorest farmers
  - currently little licensing of drainage works / levee banks as required by the *Water Act*
  - currently compliance to *Vegetation Management Act* constrained by poor data/mapping

Prepare regulation but only if targets aren't met

- New regulation is not expected to be needed as time and significant incentives will be offered for BMP adoption
- Only if we fail to achieve adoption (and therefore) regional sustainability targets will regulation be needed
- This threat of regulation by itself is an incentive to change
- If needed BMP regulation can be via extension of existing legislation with refinement based on overseas approaches (C4)

Regulate BMP based on existing mechanisms and refine in light of approaches taken overseas

- Regulate BMP based on existing and planned mechanisms

  - EA export accreditation of low-adoption industries – as fisheries is already
  - scheme, Schedule 8 and material change of use provisions the *Integrated Planning Act*
  - environmental harm under the *Environmental Protection Act* and the *EPP (Water)*
  - declarations and controls under the *Water, Vegetation, Land and Coastal Acts*
  - assignment conditions under the *Sugar Act*
  - various mechanisms under other Acts, including *Fisheries, EPBC, RIT, etc*
  - planned mechanisms under the *Review of Riverine Management, Leasehold Strategy and Wild Rivers*

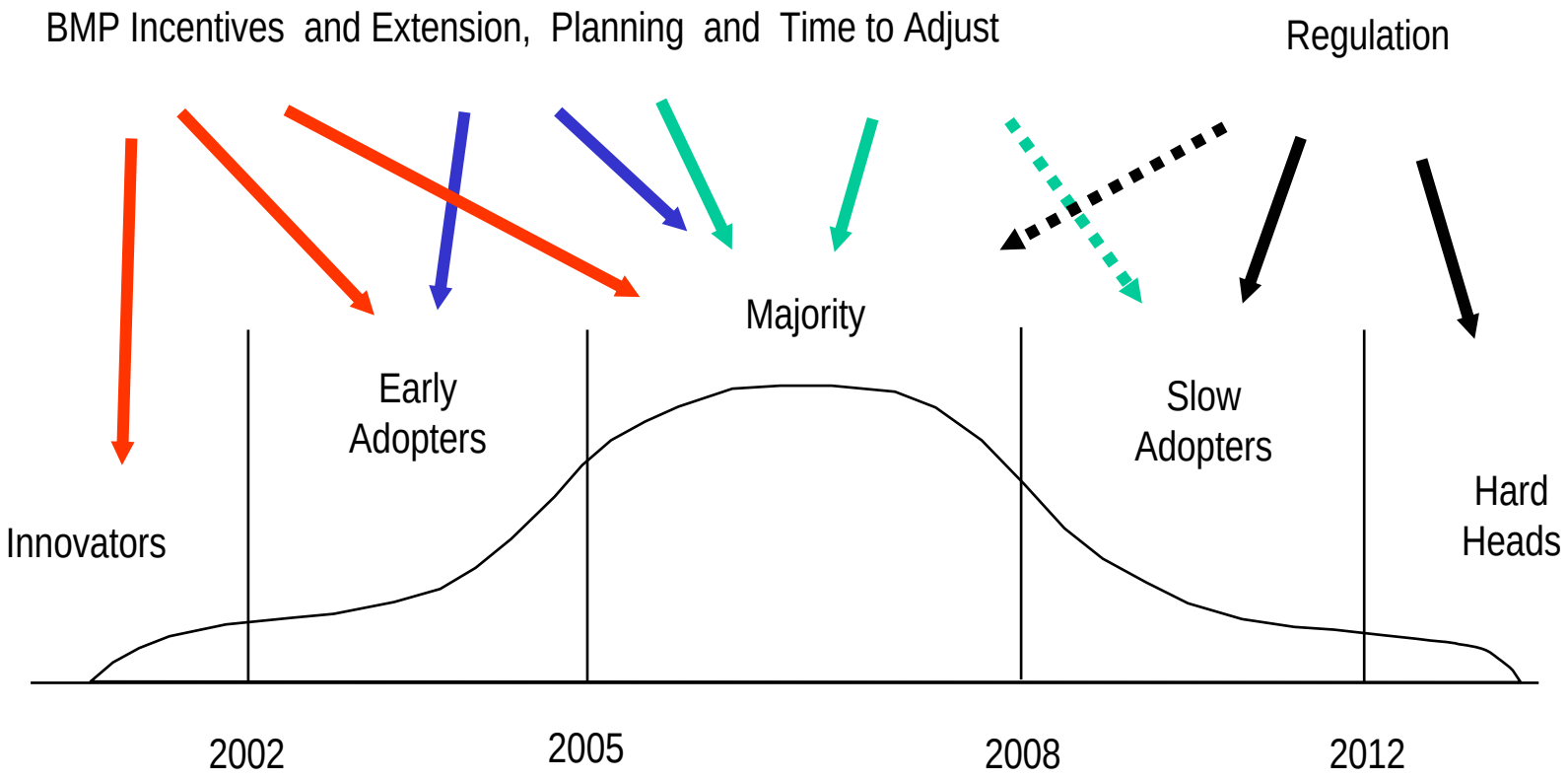
- Government can pass the legislation and not declare it unless adoption rates fail to meet targets

- Refine regulation based on US / EU fertiliser management areas

  - Nebraska
  - Baltic States
  - Great Lakes

Regulate only after giving time and significant support and incentives

Government Policy Timeline – Medium Risk Areas



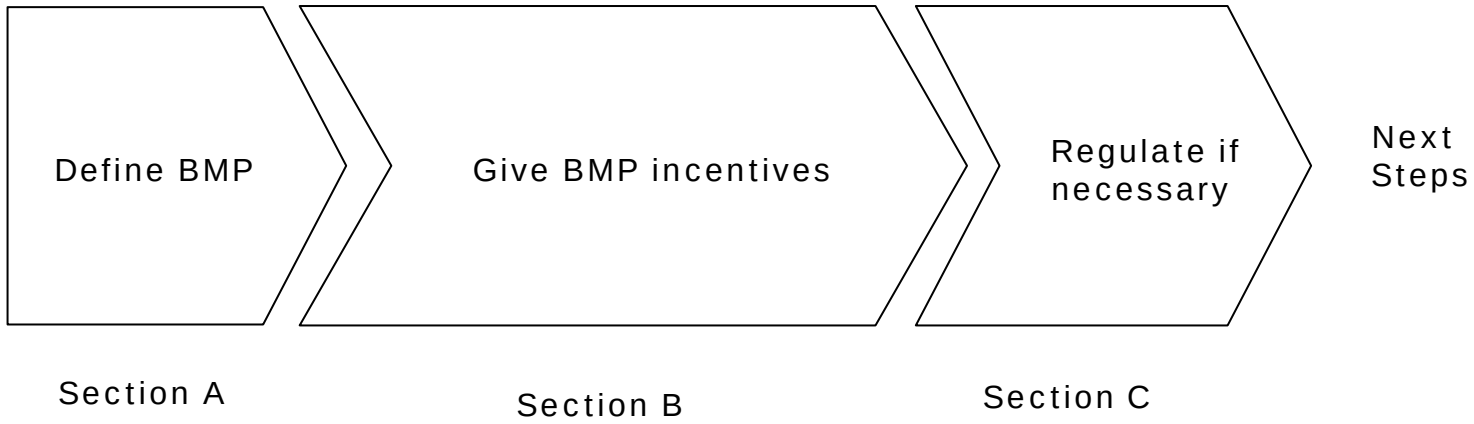
Conclusion : Profitable sustainability

Making Sustainability Pay without New Money

- Define *Best Management Practice* (BMP), duty-of-care and adoption targets in regional plans
- Give accredited BMP farms significant incentive at low-cost to government from ..
  - improved security of natural resource and market access
  - discounted future resource cost increases
  - streamlined development assessments
  - prioritised access to existing and future government services, loans, grants and assistance
  - re-funded and broadened water efficiency program
  - extended existing and future profitable and sustainable practices
- Phase-out support of poor practice and prepare to regulate if, despite time and incentives, adoption targets aren't met because slow adopters choose not to improve

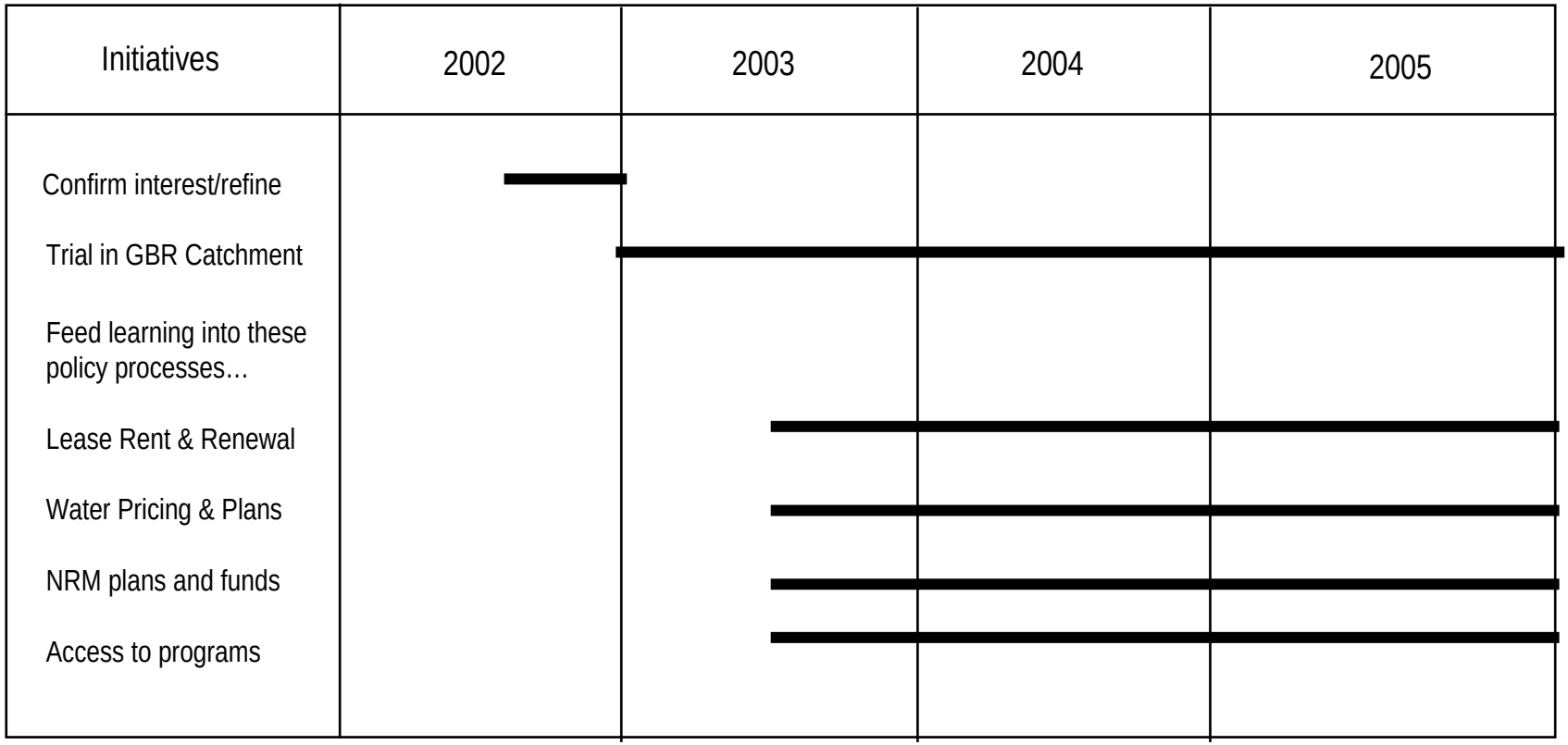
Harness economic-interest to upscale adoption of sustainable practices

Conclusion : Making Sustainability without New Money



Next Steps : Confirm interest, trial and integrate this proposal within government processes

Next Steps Workplan - DNRM



We can do it

The Triple Bottom Line

1. Environmental Sustainability and Protection
2. Economic Production and Productivity
3. Social Progress