Tracey Arklay, Liz van Acker and Robyn Hollander
School of Government and International Relations
Griffith University, Brisbane, Australia
Email contacts: t.arklay@griffith.edu.au, e. vanacker@grifith.edu.au, r.hollander@griffith.edu.au

Policy entrepreneurs searching for the open minded sceptic

A new approach to engagement in difficult policy areas.

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Abstract

State governments can be policy laboratories, testing out new ideas and innovative ways to respond to changing needs and an increasingly complex environment. As individual programs are devised, implemented and later evaluated, the public sector learns from their mistakes and adapts and redevelops their programs accordingly. Innovation has become a frequently heard catch cry of political leaders and at times can appear rhetorical, even faddish. This paper examines an innovative program that significantly changed industry practice in an important cane growing region in Queensland, Australia. Through the adoption of a new form of collaboration, an entrenched and formally oppositional group of stakeholders created public value by participating in trials which resulted in reducing the run-off of nitrogen contaminants into the Great Barrier Reef. The necessity for reduction in nitrogen had been recognised by governments and scientists for decades. For ten years governments had unsuccessfully attempted to achieve this through legislation, regulation and education of stakeholders. In the lead-up to RP20 public officials recognised that, given this resistance to change, in order to unlock public value they first had to unlock collaboration. Here we see policy entrepreneurs become effective agents of policy change. The bureaucrats involved with the development of RP20 acted entrepreneurially, taking advantage of a window of opportunity to encourage a new way of engaging with critical stakeholders. Collaboration was a crucial factor which led to successful outcomes. This was unusual because the canegrowers were initially sceptical if not defiant.

Key words: open minded sceptic, policy entrepreneur, innovation, public value

Introduction

This paper examines how federations enable innovative practice by allowing individual states to act as policy laboratories in order to trial new ideas that might challenge old ways and work practices; inspire other policy workers to consider different ways of engagement,

and provide lessons (on what to do and what not to do) that can be utilised in other jurisdictions. The Burdekin nitrogen trial (RP20) provides an example of an innovative strategy with the potential for application and modification in other jurisdictions. The challenge was to convince cane farmers about the importance of reducing nutrient runoff into the Great Barrier Reef. RP20 was widely acknowledged as innovative when it won the sustainability category and was judged the best overall entrant in the 2016 Queensland Premier Awards for Public Sector Excellence. RP20 was seen as outstanding for several reasons. First, it achieved its stated goals in demonstrating that lower nitrogen use could coincide with improved farm productivity and cost savings thus creating both private *and* public value. Second, it modelled good collaborative practice amongst government and non-government stakeholders. Third, and importantly, it introduced a new variant of stakeholder – the open minded sceptic[1]. Previously, successful collaborative endeavours engaged primarily with stakeholders who had some sympathy with the objectives. By contrast the RP20 case highlights how 'open minded sceptics' (OMS) can be crucial to driving a program, in this case from the science laboratory into the cane field. To be successful RP20 needed public officials who were willing to try a new way of collaboration. These officials displayed the characteristics of policy entrepreneurs including high levels of social acuity which was essential in reframing the policy problem (from one of environmental protection to one of improved farm efficiency); and in building teams within and outside of government. They were open to challenges from key stakeholders who engaged with them to prove them wrong. As our case study shows, sometimes, especially when a policy problem is wicked or long established, the policy entrepreneur needs to be open to stakeholders who are opposed to the policy solution. For cane farmers 'nitrogen was considered to be the determining factor that ensured optimum crop size and yield' (SRA: no date 7). Getting them to reduce the levels of nitrogen on their farms was a tough ask. As a third generation Burdekin grower, the original OMS later noted 'It is hard to change a practice you have done all your life' especially when the results have been positive (Defranciscis pers. comm 2017).

[1] The term 'open minded sceptic' was used by the project leader of RP20 when interviewed by the authors.

Convincing farmers to change the habits of a lifetime required a person of influence in their community; someone the farmers could trust. When Defranciscis presented himself to government officials by challenging what the government was making them do, the policy entrepreneurs in the Department of Environment, Heritage and Protection (EHP) jumped at the window of opportunity that had opened and worked closely with this farmer – who later, with the support of the EHP, co-opted other farmers who he knew had shared his perception about government intrusion on their farming practices. This OMS was instrumental in developing the trial and selecting farmers and trial sites to test RP20. As Defranciscis (pers. comm 2017) stated 'RP20 was always about profitability and sustainability of cane farms because I designed it'. It was a tough group to convince, but as one of the farmers explained, the initial angst he felt in being involved quickly dissipated (Sugar Research Australia, no date). Moreover, the bureaucrats' entrepreneurship was evident in taking risks by allowing more sceptics to be brought into the trial, providing assistance to them and setting the goals for the project. It did not stop there. The bureaucrats distinguished themselves through their willingness to invest their resources, putting in time and effort, working closely with farmers throughout the five year trial to ensure it had the best chance of success. They risked reputations in acting in this way. It was the beginning of a promising partnership where both groups invested time, energy and money in a project that, for the bureaucrats involved, had an ultimate objective of finding a solution to reduce nutrient run-off into the Great Barrier Reef (GBR). As such it had an end-goal of enhancing public value through the protection of Queensland's premier environmental land-mark.

Methodology

The methodology draws on multiple forms of inquiry. The empirical research accessed a range of documentary sources from the government departments, lobbyist publications and media reports. We examined Hansard debates, politicians' speeches, party platforms, committee hearings, government departmental reports, policy documents, stakeholder documents and responses to government policies as well as reviews and recommendations. But documents, official and other, can never tell the whole story. Thus we supplemented our survey of textual material with semi-structured interviews with the government officials

who acted as policy entrepreneurs in RP20. We also spoke or listened to individual farmers (who were the key stakeholders), industry representatives and scientists at a one-day forum in Townsville, North Queensland. Sponsored by the government, it was composed of scientists, academics, industry groups and farmers who listened to other farmers (including Defranciscis), agronomists and industry representatives present their farm management approaches and outline the impact of bringing new science to the cane field (Queensland Government, 2017). The significant message mentioned by several speakers was the importance of stakeholders listening to each other, interacting, providing feedback and making changes as necessary.

Below, we provide the background to our study which highlights how individual states can become policy laboratories. We present policy entrepreneurship as an explanation of policy change and introduce the possibility for policy workers involved in difficult policy areas to also consider the use of 'open minded sceptics'. RP20 highlights how a chance meeting with an open minded sceptic, and recognising him as a crucial stakeholder launched a new way of solving what was an entrenched policy problem. The paper does this through detailing the government actions that had occurred in the decade prior to the RP20 trial. It then explains RP20 in more detail before offering some conclusions.

Background and theories

Network and governance theories stress the importance of involving stakeholders in the policy process. Policy networks are the institutional linkages between government and key stakeholders based around the notion of shared interests in policy work and/or implementation (Rhodes, 2007, 1244). Innovation is commonly linked to the private sector with an aim of improving efficiency and has been defined as 'an original, disruptive, and fundamental transformation of an organization's core tasks' (Lynn 1997). Innovation is also regarded as desirable and important in the public sector. In Australia and elsewhere, the focus until recently has been on service delivery obligations and capacity (Moore 2005, National Audit Office 2006). Moore and Hartley (2008, 4) contend that a focus on innovations in governance more broadly can add to our knowledge of government as a 'value-creating institution'. They note however that there is a gap currently in the

operational focus of the current innovation literature (ibid, 5). The question of how innovation can be successfully operationalised remains.

The concept of policy entrepreneurship has not been 'broadly integrated' within analysis of policy change (Mintrom & Norman 2009). However, as our case study will demonstrate, this concept can be useful in understanding the politics of policy development. In RP20 the role of policy entrepreneurs provides one example of how public servants working with good will, and prepared to take risks can facilitate innovative practice by developing close relationships and collaboration with various stakeholders. An individual or small team can be a force for action, but the motives of different participants and their ways of acting may be idiosyncratic and thus make clear generalizable findings illusive. The early focus on the individual as change agents in the policy entrepreneur literature, Mintrom and Norman note, inhibited theorization and as a consequence led to a 'theoretical impasse' in understanding how policy entrepreneurs act. While we provide only one case study here, we argue RP20 contributes in a small way to further breaking down this impasse. In the case we detail below, we explain the contextual factors, individual actions within these contexts and how the context shaped actions. This fits with Mintrom and Norman's (2009, 651) assessment regarding the importance of examining the practices of 'entrepreneurial actors' in different settings (see also Schneider, Teske and Mintrom 1995). Policy entrepreneurs play a particularly important role when the broader context is resistant to change.

Kingdon (1984) maintains that policy entrepreneurs use their knowledge of the policy process to pursue their own ends and are able to exploit 'windows of opportunity' to promote their 'pet' solutions. Kingdon's use of policy entrepreneurs is tied to his multiple streams analysis whereby three streams – politics, policy and problem converge when a window of opportunity opens. As we have already discussed, the window opened when the OMS approached the government. The bureaucrats recognised this opportunity when it presented and responded quickly and with flexibility. The problem stream was obvious – but the policy solution in how to get farmers to change lifetime patterns of nitrogen usage remained stubbornly in place. The policy workers involved took the opportunity to test a new way of collaboration that to date has worked better than anyone expected. The third

stream politics – regarded by many as the most important stream – was assisted by the fact that despite three changes of government during the trial, RP20 received bipartisan support.

Mintrom and Norman (2009, 650-652) set out the following criteria for policy entrepreneurs who wish to promote significant policy change. They include social acuity, the willingness to re-define problems, to build teams and to lead by example (Mintrom and Norman, 2009, 651). Policy entrepreneurs should display some of these elements, at least to some extent. They need to be willing to take actions intended to reduce risks – both real and perceived. In RP20 the motivations of the various actors were different but the bureaucrats who were engaged with the trials displayed key traits of policy entrepreneurship mentioned above. For the task of reducing the use of nitrogen in sugar cane farming, however, previous experience suggested that policy entrepreneurs were not enough. Evans & Pratchett (2013, 541) state often the inability of government officials to affect significant progress in rural policy stems 'from a failure to understand the importance of localism'. In this case, it was the social acuity and *collaboration* between policy entrepreneurs, scientists and the open minded sceptic that led to successful policy change: the diverse policy actors responded effectively as ideas and concerns within the local policy context were understood.

To make sense of the RP20 trial we break down the case into two parts. Part A highlights the various attempts by government between 2001 and 2009 to encourage farmers to apply less nitrogen and hence reduce run-off to the GBR. The initial stage saw governments attempting to reform farming practices through regulatory means, self-regulation and education. It had minimal impact. Part B documents the events leading up to the RP20 trial, outlines how the trial progressed and finally summarises the results to date.

Case study: RP20.

Part A

The problem of nutrient runoff from activities on land primarily from agricultural activities into the GBR lagoon is a long standing one which governments began to address in the early 2000s. The connection between farming practices and water was made crystal clear in a

report to the intergovernmental Ministerial Council responsible for the reef by the GBR Management Authority in 2001 which stressed the urgency of action (The State of Queensland 2013, 8). While the problem was evident, the solution was less so. A Productivity Commission Report published the following year identified a number of barriers to effective action. These included the complex governance arrangements; the multiplicity of overlapping land and water management plans; some perverse policy incentives; and the limitations of the established regulatory strategies for dealing with water pollution. These established strategies were designed to deal with 'end of pipe' discharges and thus ill equipped to address the diffuse run-off created by agricultural activities (Productivity Commission 2003, 52). A different approach was needed.

In 2003, the Queensland and Australian governments signed off on the Reef Water Quality Protection Plan after consultation with stakeholders. It identified a number of key strategies to achieve the goal which went beyond standard command and control approaches such as the establishment of regulatory frameworks, the setting of priorities and targets and the imposition of monitoring and evaluation and the utilisation of existing natural resource management and land use plans. While they were part of the package, the Plan also nominated self-management approaches; education; research and information provision and the use of economic incentives (The State of Queensland 2003, 7-8).

Going forward, self-management and education were going to be of particular importance because the Plan did not envisage any expansion of existing regulatory frameworks specified in the various environmental protection and land and water management acts (The State of Queensland 2003: 24).[2] These were largely concerned with preserving and restoring areas of remnant vegetation; protecting wetlands within a general duty of care provision and, as we shall see, ill-equipped to tackle the problem of nutrient runoff more generally. Similarly, the economic incentives contained little to directly tackle the problem beyond identifying and addressing any perverse incentives in existing industry plans.

Key elements in self-management and education revolved around encouraging and supporting farmers to adopt best management practices. The Plan declared these 'the most

[2] *Water Act 2000; Vegetation Management Act 1999; EPA 1994; Land Act 1994.*

cost effective', presumably for both government and land managers. Much was made of the value of environmental systems approach (Access-Plan-Do-Check-Review) and specific comprehensive industry specific programs such as the COMPASS, a program and workbook designed for sugar farmers (Australian Government 2005, 160) . The Plan recognised that take-up of such strategies was going to be key to success and that education was going to be an integral component. What would such education look like? For The Plan, the first step was getting landowners to understand the threat their activities posed to the reef and then making them of aware of best practice to minimise their impact (The State of Queensland. 2003, 14). The limitations of this approach were soon to become evident.

The first independent audit of the Reef Plan was completed in 2005. It found implementation was broadly on track. While not all milestones had been achieved, progress was broadly 'consistent with … expectations for such a complex engagement-focused initiative'. Its recommendations reflected this in that they focused on improving consultation and communication with stakeholders; developing more effective partnerships with them; and extending monitoring of the uptake of sustainable practices (Australian Government 2005, 3-4).

The Audit also highlighted the value of emphasising the economic benefits to farmers in its detailing of the success of the 1999 Rural Water Use Efficiency Initiative. This Initiative, which combined education and financial incentives, achieved very high take-up rate. Over four years, 85% of growers improved their water usage, generating considerable savings (Australian Government 2005, 162).

While, implementation of the Plan may have been 'consistent with expectations', progress was painfully slow. A 2007 Water Quality Report found 'current management interventions were not effectively solving the problem' (Queensland Government 2008). Minutes of a meeting of the Water Quality and Coastal Development Reef Advisory Committee in late 2008 noted that targets still needed to be clarified and that monitoring and reporting mechanisms were underdeveloped (Australia 2008, 2).

Part B.

Tracey Arklay, Liz van Acker and Robyn Hollander
School of Government and International Relations
Griffith University, Brisbane, Australia
Email contacts: t.arklay@griffith.edu.au, e. vanacker@grifith.edu.au, r.hollander@griffith.edu.au

The RP20 followed new government regulations for reef protection introduced in 2009. The policy intent was unchanged from earlier attempts to minimise damage to the GBR through reducing the amount of nitrogen run-off from surrounding cane farms. Policy makers understood that farmers' management of their fertilizer usage was a key factor in the success of any policy attempt to reduce nitrogen run-off. Until RP20 though, despite multiple attempts to engage with these stakeholders, there had been only limited success in getting traction with this stakeholder group – and this had occurred when cost savings could be demonstrated as had occurred with the rural water usage scheme. The challenge therefore was how to involve farmers and convince them of reducing the nitrogen application on their farms when farmers could only see risk involved through diminished yield.

Cane farms, like many agricultural enterprises, are different from factories in that there is no easy way to record pollutants being produced. There is no 'end of pipe' measurement that can be recorded against individual farms and no really effective way to monitor which farmers might be 'doing the right thing' and which farmers were ignoring the new nitrogen guidelines.[3] Moreover there was no economic incentive for farmers to comply with new industry regulations desired by government. The concept of 'free riders' (Stigler 1974, 359) applies here – and highlights how intractable a problem the policy makers faced in turning around life time beliefs about how to grow cane to produce the most yield.

Numerous stakeholders were involved in RP20 including three state government departments, Sugar Research Australia PTY LTD (SRA) and cane farmers. All were essential for a successful trial in a project that required significant collaboration across government and non-government sectors. The Queensland Government through EHP provided the funding and were the project managers, the environmental regulator and the environmental standards leader. The Department of Science, Information and Technology and Innovation (DESTI) were instrumental in supporting the project through soil science and

[3] While cane farms can have tailwater dams which are used to ensure water run-off after irrigation can be captured and reused, any measurement of nutrient content could be challenged as not being a definitive reading of the amount of nitrogen losses flowing to the reef from each farm due to the diffuse nature of nutrient movement in the environment.

analysis, while the Department of Agriculture and Fishers (DAF) provided economic support. SRA was the key industry organisation who developed the science of SIX EASY STEPS and therefore RP20. The farmers provided the commercial scale trial blocks to enable the science to be tested.

So how did it begin? Coinciding with the government's commitment to enforce the SIX EASY STEPS[4] management tool, as part of the new regulations in 2009, one farmer contacted the EHP challenging them to put their money where their regulations were. Offering some land on his cane farm for a trial of SIX EASY STEPS this farmer later stated that he didn't really care what the science was saying about the reef, he was challenging 'what the government was making us do on our farms' (Defranciscis pers. comm 2017). For him the issue was whether or not SIX EASY STEPS would still allow him to grow cane profitably. At the outset, he, along with the farmers he co-opted during the trial, remained sceptical that it would. For the policy workers in EHP this was an opportunity to engage with a key stakeholder and further ground truth the science behind the methodology. In the initial contact with Defranciscis they took a policy risk by allowing him to select other participants who were also doubtful.

Fourteen farmers initially agreed to host RP20 on their farms. This number grew to 23 as the trial results started to come in. At all times, productivity and cost savings were the key messages communicated from the project. Despite government promotions and banners that indicated that the ultimate goal of the project was reef protection - 'catchment to Reef' - at no time was the GBR mentioned by the policy entrepreneurs driving the project. This seemed to be a deliberate strategy as they recognised that reef protection was in and of itself not a motivator for stakeholders who were concerned with the continued viability of their sugar cane farms. As the results of the trial started to be disseminated by the farmers who were participating, others shifted their thinking also (SRA, no date, 26).

[4] SIX EASY STEPS is an established, evidence based, science led management tool designed to provide best practice nutrient management on individual farms. It works in conjunction with education and assistance to improve farm practices which include reference to efficient and measured use of water throughout the crop cycle.

All farmers reported a reduction in fertiliser usage, with one farmer reporting a 15 ton nitrogen fertiliser reduction in one year. As the leader of the policy team in EHP noted, finding their 'open minded sceptic' (Robinson, pers. comm 2017) provided the change agent they needed. The science did the rest. According to the economic assessment undertaken by DAF, profitability of farms involved in the initial trial had increased by up to $30 000 over 100 hectares over a crop cycle. At a Townville forum in late May 2017 a group of stakeholders were informed that most of the SIX EASY STEPS trial sites had higher commercial cane sugar (CCS)[5] than those trial sites that had applied higher nitrogen rates. There was no statistically significant difference in sugar yield between SIX EASY STEPS sites and others that applied higher nitrogen rates. SIX EASY STEPS trial sites also had 'higher profitability over crop cycle'. This is because above the optimum SIX EASY STEPS nitrogen rate, nitrogen accumulates in the stalk with no increase in yield. The results showed that excessive nitrogen use was money down the drain. Defranciscis told the authors that he estimated he had lost a considerable amount of money in the course of his farming life by applying excessive nitrogen. From sceptic to convert, Defranciscis told the Townsville forum that 'the data is the data, go out and get it' and that the scientists and bureaucrats who worked on RP20 'have got the facts, so listen to them' (Queensland Government, 2017). Other speakers at the forum emphasised the importance of a whole management plan, so that all farming practices – such as crop establishment, weed control and irrigation management - need to be considered in a holistic approach because nitrogen is just one part of the input in a balanced system. Due to the success of RP20 another project (RP161) is currently underway involving 100 additional farms which will receive government assistance as the project is implemented. The original farmer – the first open minded sceptic – continues to work with government to assist them in communicating to other growers his experience and the benefits that can be gained in engaging with the science of RP20.

Discussion and Lessons learned

[5] CCS represents the sugar content of cane as it is purchased by sugar mills. CCS is conventionally determined from the analysis for pol and brix of the first expressed juice at the first pair of rolls and the measurement of fibre in the variety of the cane. The CCS determines the payment made to the grower (http://www.sri.org.au/glossary-of-terms/).

Tracey Arklay, Liz van Acker and Robyn Hollander
School of Government and International Relations
Griffith University, Brisbane, Australia
Email contacts: t.arklay@griffith.edu.au, e. vanacker@grifith.edu.au, r.hollander@griffith.edu.au

Collaboration and Engagement

Collaboration is regarded as an essential aspect of new governance models and allows for trade-offs and necessary compromises that are part and parcel of policy change (see Wanna, 2008:3). First-hand accounts by public servants we teach suggest consultation is part and parcel of contemporary practice. However this consultation is usually restricted to those actors who are in broad agreement with the policy proposals. Dissenting voices are crowded out in favour of consultation with the 'usual suspects' (Sørensen & Torfing 2012:8). Yet, these dissenting voices must be brought onside and the literature provides scant advice on how this can be achieved. RP20 exemplified good collaborative practice through its engagement with local growers from the start. While this began as an accident of circumstance when Defranciscis sought to prove the government wrong by his challenge to government, the public servants at the EHP were policy entrepreneurs who grabbed the opportunity presented to them. Included in the collaborative practice was the decision to embed SRA agronomists who worked intensively with each farmer from RP20s inception. Dealing with individual farmers, the agronomist was able to provide one-on-one advice. While agronomists do work in the field as part of normal practice, RP20 was unusual in that the science was delivered as results came in from each trial site. These results were then immediately communicated to growers. Thus RP20 was a iterative process that enabled flexible practices to evolve according to the science..

RP20 is an interesting case study of how to tackle 'difficult problems' through innovative strategies. The success of the trials can be explained by four significant factors.

First, the rigour of the science, backed by experts was demonstrated in the trials. Farmers decided the parts of the land which would serve as policy laboratories to confirm the value of the 'SIX EASY STEPS' with the objective of improving the productivity and profitability of sugar cane. The EHP was able to demonstrate that farmers could save money and produce a better or at least the same value crop. It must be noted that while reef protection was a driving factor in supporting the trials, the policy entrepreneurs had learned that this was not a principal concern for growers and so pushed this objective to the background, taking a longer term view. The focus on profitability, rather than environmental protection, helped

convince farmers of the value and credibility of the project and made them more open to the trial. This also indicates that governments must be prepared to allow time for results to become obvious and understand the motivations of the stakeholders concerned. RP20 was fortunate in that it received bipartisan support from successive governments of different political ideologies[6].

Second, the 'open-minded sceptic' in this case became a key player. The project began around Defranciscis's kitchen table with two other members of the farming community and agronomists, leading to a change of attitudes. If his initial challenge of a trial had not been supported by government, attempts to improve the water quality of the reef might have continued without showing much progress. Defranciscis stated that the 'real heroes' were the 'collaborators who went in with an open mind – even if they were criticised' (Queensland government, 2017). Mintrom and Norman's (2009) criteria are relevant here and assist in explaining the trial's achievements. The farmer was acutely aware of government attempts to introduce new ways of working in the Burdekin. Thus he was aware of the policy problem but was unconvinced that government's methods would be helpful to farmers. Network theory is also useful, as the farmers represent an issues network originally with different objectives from the government. Overtime, the farmers involved in RP20 joined forces with government making the network look more like an advocacy coalition (Sabatier, 1988). The open minded sceptic led by example, and even supported other farmers with practical help such as lending them his tractor and equipment. Furthermore, due to his work along with the bureaucrats, he assisted in developing a network of participants who participated in a rigorous trial, the results of which convinced other stakeholders to buy-in to RP20 originally and even more to join the new trial RP161.

Third, effective partnerships contributed to the overall success of the trials, breaking down the barriers between the government and the sugar cane growing community. The policy entrepreneurs in the EHP were open to working closely with the farmers to develop RP20 and were prepared to put in the time to commit to the project at critical points and monitor

[6] Three governments presided over the trials. The Bligh Labor government introduced the new regulations in 2009. The LNP (Conservative) government was elected in 2012 and toward the end of the trial, another Labor government was elected.

the industry's adjustments. Many players remained involved because the Department gave them direct feedback and adapted the learned lessons. This flexibility considered new situations faced by individual growers, who had different soil types and farm practices. As such they showed social acuity, perceiving a window of opportunity within a complex social and political context. They were able to understand how the farmers perceived the problem and came to appreciate their concerns. They developed their commitment to work from peer to peer and tailor the approach to suit the particular situation. The long term results indicate government has forged a more productive relationship now with these valuable stakeholders – a benefit that may well continue long after the trials are concluded.

Fourth, collaboration and goodwill were vital. Collaboration began by convincing a cranky sceptic through the science that the trial was valuable. Once Defranciscis was committed to the project and its worth, he collaborated with other stakeholders, including government officials and farmers and built solid networks. His cooperation made the Department's job much easier as he became a convert in informing other sceptics. As he explained in his presentation at the forum, it was 'hard to change from a practice you've been doing all your life. It's necessary to have a good reason' (Queensland government, 2017). Despite the closed community of growers who historically had always farmed in particular ways, he was able to sell the message and gain their support in ways that would have been much more difficult for the Department and the scientists to achieve without his efforts.

As the project developed it received further support when the main industry group came on board despite its initial reservations. Several public servants, growers, conservationists and natural resources groups attended public meetings to discuss ways of contributing to best farm practices and reducing damage to the Great Barrier Reef (GBR). These forums provided the political actors with the opportunity to swap stories, ideas and techniques with the focus on how they could reduce the impact sugar cane production has on water quality in the GBR (Sherrington 2012).

Overall, the trials delivered effective outcomes for the Qld sugar industry. The farmers involved in the early stages became active in spreading the word and were not only helpful in getting the message out into their communities, but in providing the project with legitimacy at the grassroots level. Similar trials could potentially move into the sugar farms

in other reef regions such as the Wet Tropics but the Department acknowledges that this will require fine tuning as there are different conditions and issues to tackle. The use of open minded sceptics might assist with other tricky policy problems – such as irrigation in the Murray Darling Basin or grazing practices but that is still to be tested.

Conclusions

This paper has attempted to contribute to the concept of policy entrepreneurship by examining a successful collaboration between public servants, scientists and sugarcane producers in Queensland's Burdekin district. Our preliminary research suggests that the success was the product of engaging with dissenting voices and building a coalition of support. The Burdekin region is adjacent to the GBR and nutrient run off had long posed a significant threat to the health of the lagoon. Previous attempts at changing practices had failed because key stakeholders believed they were being asked to make individual economic sacrifices to enhance unproved public value.

In 2009 the Queensland government embarked on a new approach that combined a more rigorous regulative regime insisting on the implementation of SIX EASY STEPS. The policy entrepreneurs in the EHP understood that this would be unlikely to succeed without adopting a vastly different approach towards collaboration. When one farmer, our 'open minded sceptic' approached these officials they seized the opportunity presented and hence began the Burdekin nitrogen trials (RP20). These trials have yielded positive outcomes and demonstrate the effectiveness of this new form of collaborative practice in this particular instance. What was novel about RP20 was a willingness to engage directly with sceptical stakeholders who were initially unreceptive to any attempts to reform industry practice. As Hartley et al (2017:672) note there is currently a rather limited literature on how trust and legitimacy (or its absence) when dealing with stakeholders can assist or harm public value objectives – of which the limiting of run-off into the GBR surely can be counted.

Our preliminary investigation of RP20 revealed the different roles played by the chief protagonists which were crucial in explaining its success. First, the public servants behaved as 'policy entrepreneurs' as they sought new ways of dealing with an entrenched policy problem. They sought to bring the farmers along in the process, but the public servants did

not impose their views on them. Second, the farmers who we label 'open minded sceptics' engaged with RP20 to prove government attempts to regulate their business practice was wasteful of their time and damaging to their profits. The roles, actions and coordination between these actors are crucial in understanding the success of RP20 to date and the conversion of laboratory evidence to tangible results in lowering fertiliser run-off from the cane fields.

RP20 is noteworthy for breaking the standoff between governments and cane farmers. When it became clear that traditional regulatory and cooperative attempts to reform the industry had failed, the public managers seized a window of opportunity opened when one farmer – the first OMS –challenged the government to commit to a trial on his land. His intent, openly expressed, was to prove the government position wrong. In rising to this challenge the public managers showed a preparedness to take a risk in order to improve public value. In doing so they used social acuity, and overtime built sufficient trust that overturned 100 years of entrenched views on how fertiliser should be applied on cane farms in the Burdekin. Building on this trust and momentum for change has led to an extension of the trial on a larger scale and the adoption of SIX EASY STEPS with other farmers in the Burdekin in the form of an extension of the first trial RP161. It is yet to be seen if adopting this hands-on, cooperative approach with oppositional stakeholders might work for other difficult policy areas - but with this knowledge in the policy maker's toolkit, the future looks more positive for similarly entrenched policy problems.

References

Australian Government, Queensland Government 2005. *Implementation of the Reef Water Quality Protection Plan Report to the Prime Minister and the Premier of Queensland*.

Australian Government Great Barrier Reef Marine Park Authority 2008. Water Quality and Coastal Development Reef Advisory Committee 22 October, Brisbane.

Evans, M and Pratchett, L 2013. 'The localism gap –the CLEAR failings of official consultation in the Murray Darling Basin' *Policy Studies* Vol 3, (5-6) 541-558.

Hartley J, Alford, J Eva Kniew and Douglas S 2017. 'Towards an empirical research agenda for public value theory' *Public Management Review,* Vol 19, 5, 670-685. .

Kingdon, J.W. 2011. *Agendas, alternatives, and public policies.* (2nd ed.). Boston: Longman.

Lynn, L. 1997. 'Innovation and the Public Interest: Insights from the Private Sector' in Altchuler, A and Behn, R (eds) *Innovations in American Government,* Brookings Institution: Washington DC. Cited in Moore M and Hartley, J 2008. 'Innovations in governance', *Public Management Review*, 10:1, 3-20,

Mintrom, M., and Norman, P. 2009. Policy entrepreneurship and policy change. *Policy Studies Journal.* 37(4): 649-667.

Moore, M. 2005. 'Break-Through Innovations and Continuous Improvement: Two Different Models of Innovative Processes in the Public Sector', *Public Money & Management*, 25:1, 43-50.

Moore, M and Hartley, J, 2008. 'Innovations in governance', *Public Management Review*, 10:1, 3-20.

National Audit Office, 2006.

Productivity Commission 2003. *Industries, Land Use and Water Quality in the Great Barrier Reef Catchment*, Research Report, Canberra.

Queensland Government 2008. *Scientific Consensus Statement on Water Quality in the Great Barrier Reef.*

Queensland government, 2017. *Forum, RP 20 Burdekin Nitrogen Trials Final Update*. Townsville, 31 May.

Schneider, M, Teske, P and Mintrom, M. 1995. *Public Entrepreneurs: Agents for Change in American Government*. Princeton, NJ: Princeton University Press.

The State of Queensland and Commonwealth of Australia 2003. *Reef Water Quality Protection Plan; for catchments adjacent to the Great Barrier Reef World Heritage Area*, Queensland Department of Premier and Cabinet, Brisbane.

The State of Queensland and Commonwealth of Australia 2013. *Reef Water Quality Protection Plan.* Queensland Department of Premier and Cabinet, Brisbane.

Rhodes, R.A.W. 2007. 'Understanding Governance: Ten Years on' *Organisational Studies,* Vol. 28 (08) pp. 1243-1264.

Sabatier, P. 1988. 'An Advocacy Coalition Framework of Policy Change and the Role of Policy-Oriented Learning Therein', *Policy Sciences.* Vol. 21, pp. 129-68.

Sherrington, M. 2012. 'Key word of the day was Innovation', North Queensland Register, 8th March, http://nqr.farmonline.com.au/

Sørensen, E & Torfing, J. 'Collaborative Innovation in the Public Sector' *The Innovation Journal: The Public Sector Innovation Journal*, Volume 17(1), 2012, article 1.

Sugar Research Australia. No date. *Burdekin Nitrogen Trials: Case Studies and Trial Results*.

Stigler George J. 1974. 'Free Riders and Collective Action: An Appendix to Theories of Economic Regulation'. *The Bell Journal of Economics and Management Science* Vol. 5, No. 2 (Autumn) pp. 359-365.