

Making the Environment Pay

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Healthy ecosystems provide a range of critical services that we largely take for granted. Created by the interactions of living organisms with their environment, these “ecosystem services” underpin society by purifying air and water, detoxifying and decomposing waste, renewing soil fertility, regulating climate, mitigating droughts and floods, controlling pests, and pollinating vegetation. Although awareness of ecosystem services dates back to Plato, and likely earlier, ecologists and economists have only recently begun systematically examining the extent and value of these services’ contributions to social welfare. Not surprisingly, their research has demonstrated the extremely high costs to replace many of these services if they were to fail, on the order of billions of dollars in the United States for pollination alone. One can dispute over the inherent uncertainty of such monetary estimates, but the high costs required to substitute for these services by artificial means is beyond dispute.

Given their significance, one might expect that ecosystem services would be prized by markets and explicitly protected by the law. With few exceptions, however, neither has been the case. The primary reason ecosystem services are taken for granted is that they are free. We explicitly value and place dollar figures on certain “ecosystem goods,” such as timber and seafood. Yet the services underpinning the production of these goods almost without exception have no market value – not because they are worthless but, rather, because there is no market to capture and express their value directly.

This is starting to change, however. From their origins as an obscure phrase just nine years ago, “ecosystem services” have gone mainstream, with new initiatives and markets for provision of services blossoming around the world. In preparing this paper for the ABARE conference, the organizers asked me to address a series of questions. The following remarks track their questions.

Is there an increasing demand for environmental services being observed globally?

Human society has always had a strong demand for environmental services. The importance of the natural environment in providing pollination, water purification, and flood control services, for example, is no less today than in the past. The difference today is the recent *recognition* of the value of these services and the *understanding* that we need to manage explicitly for their provision. Over the past decade, we have witnessed a steady increase in interest among academics, governments, and the private sector toward conservation and provision of ecosystem services. Put another way, the demand for environmental services is not new. Focusing on the threats to provision of services, however, and understanding how to satisfy this demand are new.

We can see this at the policy level, for example, with Australia’s Wentworth Group and the United States Environmental Protection Agency (EPA)’s creation of a Science Advisory Board on Valuing the Protection of Ecological Systems and Services. Government payment schemes for services have been on the rise, as well. In Costa Rica, the government has been administering a nationwide scheme of payments for services since 1997. The scheme, known as PSA (Pagos por Servicios Ambientales) permits the government to enter into binding contracts

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with landowners for the provision of four services: sequestration of carbon, water quality and quantity (i.e., for drinking, irrigation or hydroelectric power), biodiversity conservation, and aesthetic beauty for ecotourism. Perhaps the best-known example of payments for services and inspiration for similar programs has been the story of New York City and the Catskills watershed. Seeking to avoid the construction of multi-billion dollar filtration plant, the New York City government engaged in extensive watershed protection efforts, acquiring critical watershed lands and reducing contamination sources. Costing much less than building the filtration plant, New York's investment in "natural capital" in place of "built capital" has been held out as the archetypal services approach to ensuring high drinking water quality.

The international climate change negotiations are closely focusing on policy instruments that encourage carbon sequestration, with provision for both public and private payments. And this is just the tip of the iceberg. A recent study documented 287 cases of payments for forest ecosystem services from around the world¹ and an international marketplace website for services, known as the Ecosystem Marketplace, has just been launched.² Perhaps the best evidence of the high peaking interest in ecosystem services from the private sector is the fact that the popular business magazine, *The Economist*, dedicated one of its cover stories to ecosystem services just last year.³

Is the Australian situation typical?

Given the recent emergence of ecosystem service provision as a legitimate focus of governmental interest, it's hard to say that any situation is truly typical. Sketching in broad strokes, one might place countries into three rough categories in terms of ecosystem service management. The first, and largest, group of countries could best be described as "*aware but not engaged.*" This would include governments that are aware of what the term, "ecosystem services," means, but have few if any programs on the ground explicitly directed at conserving services. Some of its laws and initiatives may end up conserving services, but the results are either small or unintended. The second group could be described as "*getting their toes wet.*" This would include countries that are interested in the concept of ecosystem service provision and are either starting some programs or joining them. Most of the European Union would fall in this category. The recent "decoupling" of the Common Agricultural Policy, for example, provides potential payments to farmers for conservation of the rural landscape, some of which might be described as ecosystem service management. Interest in the Clean Development Mechanism of the Kyoto Protocol provides an obvious example, as well, of paying for the ecosystem service of carbon sequestration.

The last category, and the smallest, could be described as "*service leaders.*" This would include countries with a range of initiatives to conserve and promote ecosystem services at the national and state level. The United States, Costa Rica, and Australia would fall in this group. In all three of these countries, national and regional dialogues are increasingly focusing on

¹ SILVER BULLET, *Supra* note 6, at 3.

² The Katoomba Group's Ecosystem Marketplace, at <http://www.ecosystemmarketplace.com/> (last visited Feb. 18, 2005). The author of this Article serves on the Katoomba Group's Ecosystem Marketplace Advisory Board. Michael Jenkins, the president of the nonprofit organization Forest Trends, described the website as a "Bloomberg meets Google meets CNN" for the emerging environmental services market. *World's First Multi-Billion Dollar Green Marketplace Opens*, ASIA PULSE, Oct. 12, 2004, LEXIS, News Library, Asia Pulse File.

³ *Rescuing Environmentalism*, ECONOMIST, Apr. 23, 2005, at 11

ecosystem services, and exploring how the status quo would need to change in order to provide more effective service provision.

If one looks across the environmental laws of the United States, for example, it's fair to say that the laws were not designed with ecosystem services in mind. Legal protection of ecosystems was not a primary objective when the basic environmental laws were drafted over two decades ago. The air and water statutes focus primarily on human health, and the natural resource statutes follow a discretionary mandate of "multiple use, sustained yield." Because these laws were not primarily intended to provide legal standards for conservation of natural capital and the services that flow from it, in practice they usually don't. A fork never serves soup as well as a spoon.

The beginnings of a change at the national level may be emerging, however, with recent high-profile statements from the Secretary of Agriculture, who boldly declared in a recent speech that his department "will seek to broaden the use of markets for ecosystem services through voluntary market mechanisms. I see a future where credits for clean water, greenhouse gases, or wetlands can be traded as easily as corn or soybeans."⁴

While Australia and the United States share many similarities in terms of the initiatives underway (described below), there is a significant difference worth noting. There is far greater public recognition Down Under (indeed, to an outsider, it seems close to a consensus) of the threats posed by salinity and the need for greatly enhancing the ecosystem service of evapotranspiration.

How has the United States approached the task of changing the production/conservation balance when it's on a large scale comprising diverse landscapes?

There is no clear parallel in the United States with the change in NSW vegetation policy that ended broadscale clearing and led to land use change (in particular, from grazing to cropping). While there is a great deal of talk about the importance of landscape-level management, this is the exception rather than the rule. This is due in large part to the basic fact that political jurisdictions are rarely aligned with ecologically significant areas such as watersheds. Far more often, governments exercise authority instead over politically bounded areas as defined by municipal, county, or state lines. Not surprisingly, ecosystem services don't track political boundaries and managing coherently across these political authorities raises serious collective action challenges. A small number of interstate initiatives, such as the Chesapeake Bay Initiative, have sought to better align political actors within the natural ecosystem boundaries, and a number of states have also aligned political and natural boundaries within their state jurisdictions, as in the cases of the New Jersey Pinelands Commission and the Adirondack Park Agency of New York. But such instances are rare. Indeed, Australia has been a pioneer in this regard, creating catchment management bodies that exercise land use planning authority throughout an entire watershed, not to mention the much larger Murray Darling Basin Commission.

Because there is little direct management of service provision at the broader landscape level (in the sense of a master plan), the American strategy has become one of indirect

⁴ Remarks As Prepared by The Hon. Mike Johanns, Secretary U.S. Department of Agriculture, Innovations In Land and Resource Governance, White House Conference on Cooperative Conservation - St. Louis, MO - August 29, 2005 (U.S. Department of Agriculture Press Release No. 0335.05).

management, resulting from separate rules and incentives for public lands, farms, and private lands that are, at best, loosely coordinated at the policy level.

The most effective coordination occurs on public lands, which account for large parts of the Western United States (31% of the total U.S. land area is federally owned). Much of this land, particularly the rangelands, is used for grazing and significant parts of the National Forest system are used for logging. The major public lands statutes rely on a “multiple use, sustained yield,” strategy of balancing competing uses on behalf of the public interest. Historically, management of the National Forests has focused primarily on timber production and management of rangelands on grazing. With the increasing population in the Western United States and greater calls for outdoor recreation, recent years have witnessed battles within the resource agencies over how best to manage the public lands, with many calling for a shift in emphasis from resource extraction to recreational use and conservation. These competing interests play out through the mandated planning process, with the result that some lands are managed explicitly for service provision (particularly water quality on forest lands).

Once one moves to private lands, however, there are no master plans for land uses that balance services and agricultural activities. Beyond regulations restricting land use changes that would adversely modify the habitat of endangered species, there is very little direct federal control over state or private land management. As a result, policy instruments addressing service provision on private lands are almost entirely economic instruments. These can be grouped into negative and positive instruments.

Negative economic instruments

Under the “Swampbusters” program, for example, farmers who drain wetlands for agricultural production crop payment program benefits. The “Sodbuster” program does the same for farmers who place highly erodible land into production without an approved conservation plan. Given the importance of crop support programs to many farmers, these policies have great potential. In practice, however, their impact has been limited by exemptions from ineligibility and a spotty enforcement record.⁵

Positive economic instruments

As with much of American farm policy, subsidies are more significant than penalties. The largest ecosystem services program is the Conservation Reserve Program (CRP). Created in 1985, CRP was the inspiration for Victoria’s BushTender program. CRP provides annual rental payments and shares the cost of conservation practices on farmland. First created to address problems of soil erosion and to support farm incomes at a time of plummeting crop prices, the program has grown over the years, now paying for land changes that promote water quality and wildlife habitat, as well. Its payments are huge – exceeding US\$1.6 billion dollars *annually* for activities on over 34 million acres. Farmers wishing to enroll in the CRP have their offers ranked by government field officers according to an Environmental Benefits Index measuring improvements in erosion control, wildlife habitat, water quality and air quality. Farmers submit a bid for their land to be accepted in the program. To increase the likelihood of their bid being accepted, farmers can stipulate that they will accept a lower rental rate than the local market

⁵ Charles E. Grassley & James J. Jochum, *The Federal Agriculture Improvement and Reform Act of 1996: Reflections on the 1996 Farm Bill*, 1 *DRAKE J. AGRIC. L.* 1, 4 (1996). For the history of farm conservation policy, see Christopher R. Kelley & James A. Lodoen, *Federal Farm Program Conservation Initiatives: Past, Present, and Future*, 9 *NAT. RESOURCES & ENV'T* 17 (1995).

price. Offers are ranked according to score and bids selected from their relative ranking. CRP offers 100% of the restoration costs and legal fees if farmers are willing to enter into permanent conservation easements. While CRP is operated by local officials, the program does not appear to be closely tailored to specific management priorities. Eligible land owners receive an annual rental payment and cost-sharing of up to 50 percent of the eligible costs to implement approved management practices.⁶

The Forest Land Enhancement Program (FLEP) similarly encourages the active stewardship of forested lands. Applicants must be private owners of non-industrial forests who have developed and submitted a management plan that protects, enhances and restores the forest. FLEP is a cost-sharing program, with maximum payment limited to 75 percent and total payment to any one landowner limited to US\$100,000. The management plan must be for no less than 10 years and must be approved by the State Forester. The program is administered at the state level, and it is expected that state officials will prioritize applicants on the basis of local needs and priorities. It is also worth noting the Private Stewardship Grants Program. This program provides grants and other assistance on a competitive basis for conservation efforts on private lands that benefit federally endangered species. A 10% cost-share (cash or through in-kind contributions) is required.⁷

If time permitted, we could also review the Environmental Quality Incentives Program (incentive payments and cost sharing for agricultural conservation practices addressing water quality), the Grassland Reserve Program (payments to restore and protect grassland, rangeland, pastureland, and shrublands from conversion to cropland), the Wetlands Reserve Program (payments and cost-sharing to restore wetlands), the Wildlife Habitat Incentives Program (cost-sharing to develop habitat for fish and wildlife on private lands), etc.⁸ The main point, however, should be clear – there is a wide range of government payment programs for farmers, foresters, and ranchers willing to implement conservation practices in different habitats. Taken together, these programs have the potential to increase significantly the provision of services on agricultural lands.

A potential problem with all these programs, however, is one of moral hazard. Imagine, for example, a program that pays farmers to erect riparian fencing to reduce runoff by increasing the services of nutrient retention and erosion control. This may be effective in improving water quality, but it also suggests a tension. Those farmers who have *already* put in riparian fencing no longer have a significant potential for increased service provision and, as a result, are unlikely to be paid. Should every landholder who provides environmental services be paid? Given a finite budget, the answer to this would seemingly have to be “no.” It is hard to imagine a practical scheme, for example, that pays everyone whose vegetation reduces nutrient flow in the watershed. If one seeks to pay for discrete cases of ecosystem service provision, clearly some land uses are more important than others. But which landholders should be supported by ecosystem service payments – those who currently provide services or those whose properties pose the greatest nutrient or sediment problems (and hence the greatest potential for increased service provision)?

If we say people are being paid to provide a service, then how can we ignore those who already provide it? What kind of message does that send? More generally, how do we equitably

⁶ See generally, <http://www.fsa.usda.gov/pas/publications/facts/html/crep03.htm>

⁷ See generally, http://www.fws.gov/endangered/grants/private_stewardship/FY2006/psgp_2006.pdf.

⁸ See generally, http://www.nrcs.usda.gov/programs/programs_faq.html#program4

account for the baseline that is already out there? Those farmers who have already made the investments and managed their land responsibly may not receive any payments. Only those who have been *less* responsible will benefit, the argument goes, creating a disincentive to land stewardship. As critics of the CRP program have made clear, responsible land managers can become dispirited if those who employ less responsible land management practices effectively are paid for doing so. This surely is not conducive to the kind of land management ethic we are trying to encourage.

To address these problems, the Department of Agriculture has created a series of “Stewardship Programs” offering money to farmers who implement conservation measures voluntarily. The Conservation Security Program (CSP), for example, supports stewardship of private agricultural land (farming and grazing) with grants and technical assistance for maintaining and enhancing natural resources. Farmers and ranchers who meet “the highest standards of conservation and environmental management” may apply. The program’s first year of operation was in 2005, when 2,180 people applied for total funding of \$202 million. All applicants who successfully completed the application process were selected. Thus, at least in the first year, there was no need to rank applicants against one another.

To be eligible, the majority of the applicant’s land must be located within a selected priority watershed. The applicant must already be in compliance with management standards for highly erodible lands, wetlands, and have addressed soil quality and water quality for eligible land uses.⁹ Avoiding the perverse incentives of CRP, the CSP initiative explicitly favors landowners with strong conservation practices, providing funding to continue and extend their activities.

Does cost-effectiveness influence the choice of instrument?

In many agricultural settings, managing for service provision will result not only in implementation costs but opportunity costs, as well. To fence off streambanks, for example, farmers must not only account for the labor and materials of fencing but, equally important, the opportunity cost of land taken out of production. Such trade-offs in managing land for service flow, on the one hand, and crop production, on the other, may be inevitable, but they are generally not taken into account at the policy level.

Cost considerations do, however, play a very important role in terms of how the payment schemes operate in practice because of individual landowner decisions. All the programs described above are voluntary and farmers themselves decide whether to apply for subsidies or, conversely, whether to engage in activities that prevent payment of subsidies. In this regard, researchers have noted that landowners will flip in and out of support programs depending on commodity prices. Because landowners are price sensitive, those setting the level of service payments and cost-sharing schemes must take this into account. If the clearing price for the CRP is set so low that farmers will earn more farming the land than setting it aside, one can expect few participants. The same is no doubt true for BushTender, as well.

Do they recognise heterogeneity in both agricultural production and ecosystem services across landscapes?

⁹ See generally, <http://www.nrcs.usda.gov/programs/csp/cspqa5905.pdf>.

A basic fact in management of ecosystem services is that context matters. While two pieces of land may provide the same level of flood control, the provision of this service by one piece of land may be far more valuable than another site because, for example, it lies upstream of a large community. Aside from biodiversity, the location of service providers is fundamental to the value of services provided. With rare exception, however, such heterogeneity is not factored into payment schemes. One can begin to account for heterogeneity through a program's scoring scheme. This should identify relatively more important land in terms of absolute service provision (i.e., potential improvements in erosion control, etc.), but it does not adequately account for heterogeneity. Put another way, the application requirements should, in principle, be effective in identifying land practices that will conserve and enhance service provision, but the economic analysis – how valuable provision of this service actually is – remains unexamined.

How successful have the various U.S. approaches been?

Successful compared to what? In terms of creating incentives for farmers and grazers to change their land management policy in a manner that favors greater production of services (or, conversely, prevents the loss of services through conversion of wetlands to fields), the initiatives have clearly been effective. We are not losing wetlands to farmlands at nearly the same rate as prior to the Swampbusters program. The more difficult question is whether these actions have been cost-effective. Put another way, could we have gotten the same value of service provision for less cost? Should we be focusing on service provision across agricultural lands or just focus on a few key services in a small number of areas, i.e., where changes in service provision will lead to the greatest public benefit?

Public monies for agricultural support payments are limited, and environmental funds are scarcer still, both in the States and Down Under. As people become increasingly familiar with ecosystem services and the pros and cons of various policies, serious discussions of cost effectiveness will necessarily follow. I cannot speak to the nature of these discussions in Australia, but they have not matured yet in the United States. This is, to my mind, the next great challenge in management of services on private lands.

NATIVE VEGETATION REGULATIONS: A FARMER'S PERSPECTIVE

SANDY STUMP

Mixed Cropping and Livestock Producer

Good afternoon, I am a farmer from Burren Junction which is in the North West of NSW in the Walgett Shire. My family have been in this shire for five generations going back to the late 1800's. Over the years we have been able to survive droughts, floods, disease, isolation, poor infrastructure and low commodity prices but our biggest challenge in this past decade has been to work with inappropriate government legislation.

I have been asked to give a farmers perspective on the Native Vegetation Regulations. Just to give you a bit of history SEPP 46 was introduced in August, 1995...it failed. The NVA of 1997 failed. The NVA of 2003 also failed. I predict the current act of November 2005 will also fail because the major stakeholders, the landowners, have not been seriously included in the process. It was a political agenda from the start and though good in principle, it still continues to be too inflexible and doesn't take into account the socio-economic changes it has caused within our community. The current Act involves a system that relies on so many other Acts it makes it virtually impossible for the ground staff and landholders to deal with.

My wife and I run three properties within the Eastern half of the Walgett Shire. This area is part of the Namoi Valley and is a large alluvial floodplain with the predominant soil type being a grey, cracking clay. Our yearly rainfall varies between 200mm and 1200mm, the average being 500 mm.

I make this point about variable rainfall because I want to stress that the natural environment is dynamic. It is constantly changing according to when rain falls, how much and how often. We can have good seasons for summer grasses or good seasons for the annual winter medics. We can also have good seasons for undesirables such as roly poly or turnip or massive regrowth of timber such as Coolibah, myall or whitewood trees, especially after summer flooding.

I've included some photos of our farm to illustrate its' regenerative capabilities. The top two photos show native pasture. The first shows pasture using managed grazing techniques and the second showing the timber regrowth after 5 years of country being locked up, or excluded from grazing. The bottom two photos show country that was farmed for a number of years and then let go to pasture. The one on the left was farmed for 15 years and has been pasture for the last 15 years. On the right the country was farmed for 5 years and this is what it looked like after three years. The main points to take home are that:

1. Woody weeds need some form of control.
2. Pasture should be managed, not "locked up".
3. This land is quite capable of sustaining a pasture/farming rotation.

Nothing in our environment is constant. No two seasons are identical and land managers are constantly aware of the need to adapt to our ever changing environment. Up until the 1960's we were mainly pastoralists. Through the 70's and 80's we gradually increased our farming percentage as new techniques, crops and styles of farming sustainably became available. We grow a wide variety of crops, which include cereals and legumes as the next slide shows. This follows the pattern in nature with summer grasses and winter medics and we firmly believe this to be a sustainable and economically viable way to run our operation. It is not a hit and miss operation. We plan carefully and rotate paddocks religiously to provide the best results, year after year. We use minimum till techniques and guidance systems to maximize the variability of the rainfall and utilize the wonderful moisture holding capacities of our soils. In doing this we have been able to achieve consistent gross margins of around ten times that of our pasture country, even through the drought years.

The Native Vegetation Regulations have affected us in four major ways:

1/. Growth in any region is vital to long term survival. Our shire produces high quality export grains and legumes and, with sensible development, it has the potential to double this output without, I would argue, negatively affecting the environment. Just imagine the flow on effects of such growth for our infrastructure, schools and employment. It is interesting that the government hasn't seriously considered the socio-economic impact that stifling development has had on our shire.

2/. In preparing these regulations the State government has failed to utilize what I see as one of its major resources – us, the people who live here and have lived on the land for generations. In the beginning it appeared that farmers were going to have a say. I sat on the Walgett Native Veg Committee for almost 5 years negotiating riparian areas, wildlife corridors and species thresholds. It gradually became apparent that the farming community, with generations of anecdotal and practical local knowledge was being sold out to the powerful environmental lobbies and the process became unworkable. After a lot of soul searching we, the farmers, resigned from the process. To give you an example of how such historical anecdotal evidence might have been useful in considering a regional plan; over the past 70 years there has been an increase in coolabah trees of approximately 1000% in certain areas of the shire. Although farmers have produced old photographs to illustrate this there appears to have been a policy of not recognizing any of this valuable information. This failure to respect the major stakeholders and land managers has led to a loss of trust in the entire process.

3/ The third affect of the regulations has been to create two tiers of landholders. We have those that have developed and those that haven't. Prior to SEPP 46 land was valued according to soil capability, location and rainfall. Now it is valued on "developed" or "undeveloped" and the difference in value can be as much as \$900/ha. The bloke that stuck his plough into his country before 1995 now has country worth 3 or 4 times as much as his neighbour who had perhaps been on the verge of developing identical country. This second bloke has spent the last ten years frustrated by his inability to grow his business and uncertain what direction to take. It's not just a question of the system not being fair. It is a question of it not making sense.

4/ I have been asked here today to give you a farmer's perspective on how these regulations have affected us in our area. By failing to work with farmers and get them on board with the process two things have happened. The first is that farmers, people for whom the environment is a real priority, for whom sustainability is not just a buzzword but a real goal since it affects their long term viability, feel they have had the right to manage their land taken away from them. The second is that is that the government has pursued many landholders over the development they have embarked upon to a ridiculous extent. Were it not for the enormous financial and emotional strain that such actions by the government have resulted in, it would be laughable. I will give you an example. A neighbour of mine, a responsible land manager, has just spent 15 months and \$120,000 defending his development in the Land and Environment Court, only to end up with an out of court settlement that endorsed the developments he had already made.

So we have to ask ourselves, what is actually wrong with the current system?

1/. It severely restricts sensible, sustainable development. Generally landholders will still need to develop country, they will need to control regrowth on grazing country when they can afford to and will rotate older farming country back into grazing as long as they are able to maintain an economy of scale that permits long term economic survival.

2/. It is politically based and not trusted by the end users of the legislation. Farmers believe that there has been too much negative propaganda being published by well-organized green lobbyists pushing their case to misinformed governments. Most farmers are environmentalists, they care for the land they own and work but they need to be economically viable to look after that environment.

3/. The PVP developer model is unworkable in its present form. It may improve over time but, after speaking to a number of farmers who have or are using the model, the tool ranges from totally inept to not relevant and inflexible. The Walgett Shire, according to the statistics, is a little over 20% developed. Under the computer methodology most of the species in our shire are reported as 70% developed. No application will meet the criteria and so no development can proceed. Yet again the credibility of the information is questionable. It needs more flexibility and common sense put into the equation.

4/. The threshold level of a large number of species needs to be revisited or independently evaluated. For example, the Coolibah tree is abundant in our shire yet it remains on the list as a threatened species!! Let me tell you here and now it is not threatened.

5/. There has been no mention of land capability in the criteria for assessment to date. There is abundant information in the Government's databases that should be reworked and updated and included in the assessment criteria.

6/. There is no incentive in the plans for good land managers. For any development to occur it seems that the land has to be degraded to an incredible extent before changes can occur.

7/. To date I have not seen a proper socio- economic study done of our region. The local community has been crying out for this since 1998 when Minister Amery came to Walgett.

8/. There has been no real attempt to educate the farming communities as to what the Government is trying to attempt with these regulations. This is especially true in my area. I have kept abreast of the situation over the years and find it frustrating. Imagine young farmers wanting to develop, they just think the Government is their greatest enemy.

Now what is right with the regulations?

1/. It delivers the Government's commitment to end broadscale clearing.

2/. The CMA's are a good idea. To encompass regions that are separated by nature rather than straight lines on a map is a great start.

There has to be a **way forward** that somehow balances the needs of farmers with society's demands for environmental outcomes. Firstly:

We need to move away from the political arena and give the regional CMA's the structure and the operational powers to approve common sense development applications with flexibility in conjunction with landholders.

Species thresholds need to be looked at seriously so that sensible development can occur on holdings while retaining a reasonable percentage of native vegetation. Offsets could work but not on a property by property basis. They need to encompass the whole of the State.

Compensation will have to be considered in instances where a landholder is perceived to be foregoing income for the greater good of the community.

Matching land use to inherent capability needs to be high on the agenda. If I can mention climate change here without being sent to the Bradman Theatre it is a known fact that the carbon levels in the atmosphere are greater now than at any time in the last 400,000 years. The level is still increasing and even if the Kyoto protocols are put in place will be double the 1976 level of 250ppm by 2050. This will cause more variability in our rainfall. It may not change the average but it will change the frequency and duration. We will have longer dryer spells followed by heavier rainfall events. I mention this because most farming districts in Australia are not suited to this pattern of rainfall. The next generation will find less and less suitable land for consistent cropping. Our shire has deep alluvial self-cracking clays that hold large amounts of water when fallowed correctly and is thus eminently suitable to the predicted future rainfall patterns. I make this point to illustrate that even with climate change we are sustainable.

A completely independent view needs to be taken of the situation. Perhaps a Royal Commission into the government's true agenda should be called for. The farmers certainly feel that the agenda has had little, or nothing, to do with good management and Native Vegetation.

TAKE HOME MESSAGE: The environment is dynamic. A common sense vegetation plan needs to be flexible, user friendly and involve the key stakeholder, the land manager.