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by

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A Critical Note on ‘Eco-Civic Regionalisation as the Basis for Local Government Boundaries in Australia *

Brian Dollery and Lin Crase **

Abstract

The notion of ‘eco-civic regionalisation’ has been applied recently to New South Wales by Brunckhorst et al. (2004) in order to identify the appropriate administrative boundaries for ‘socio-civic’ regions and ‘biophysical’ regions. On the basis of this analysis, they recommended inter alia that 49 future non-metropolitan ‘local government areas’ be established. This proposal was adopted with alacrity by advocates of the NSW government’s program of compulsory council amalgamation, including official ‘Facilitators’ appointed by the state government to draft formal consolidation proposals. This paper disputes the applicability of ‘eco-civic regionalisation’ as the foundation for local government boundaries in Australia.

Key Words: amalgamation; eco-civic regionalisation; local government boundaries

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1. INTRODUCTION

Structural reform of local government has a long history in Australia (Vince, 1996; May, 2003), with council amalgamation its primary instrument. Contemporary episodes of widespread municipal consolidation have occurred in South Australia, Tasmania and Victoria, and the present program of compulsory council amalgamation in New South Wales represents its most recent manifestation.

State government policy makers almost invariably predicate the case for council amalgamation on economic grounds. For instance, the stated rationale underlying the NSW government's new policy of forced amalgamations is the urgent need to consolidate small and financially 'unviable' rural and regional councils into larger amalgamated municipal organizations (Carr, 2003). The enduring belief that 'bigger is better' in Australian local governance seems to rest on three main propositions concerning the efficiency or otherwise of municipal activity. In the first place, despite overwhelming international and Australian evidence to the contrary (see, for instance, Allan, 2003; Bish, 2000; and Byrnes and Dollery, 2002), policy makers still appear wedded to the idea that substantial economies of scale exist in council service delivery that can be reaped through the amalgamation of small municipalities into larger local government entities. Secondly, economies

of scope are deemed to be significant in Australian municipal governance and presumed to flow from council consolidation, with some empirical justification (see, for example, Dollery and Crase, 2004). Finally, it is often maintained that small councils, especially in regional and rural areas, struggle to acquire the requisite administrative and other specialist capacity to make rational and informed decisions on complex questions, with larger local authorities enjoying a substantial comparative advantage in this regard.

However, the current NSW debate on municipal amalgamation has seen the emergence of a new argument in favour of council consolidation that holds that economic, environmental and other largely unspecified advantages accrue from an alignment of local government boundaries with natural boundaries (see, for instance, Varden, 2003). Since this proposition has not only proved persuasive in the present NSW controversy over municipal restructuring, but will also almost certainly materialize in future Australian amalgamation debates because of the purported persuasiveness of ‘green’ arguments with influential policy elites, it is worth critically evaluating the argument in detail. This forms the limited objective of the present paper.

The paper itself is divided into three main sections. The first section provides a synoptic outline of ‘eco-civic regionalisation’ in the report entitled *An Eco-civic Regionalisation for Rural New South Wales: Final Report to the NSW Government*, prepared by Brunckhorst *et al.* (2004) at the behest of the NSW state government, and its recommendations for local governance in NSW. The second part of the paper attacks the use of ‘eco-civic’ regions as the foundation for the determination of local government administrative boundaries in NSW. The paper proffers some brief concluding remarks in the final section.

2. ECO-CIVIC REGIONALISATION IN NEW SOUTH WALES

In his submission to the NSW Legislative Council’s (2003, p.94) *Inquiry into Local Government Amalgamation*, Brunckhorst outlined three ‘principles’ for ‘drawing boundaries that best reflect the social functions of regional communities as well as the ecological functions of the landscape’. In the first place, ‘the region should capture the place that is the social capital...the landscape area that is of greatest interest to the region or local residents’. Secondly, ‘that the region maximizes or captures the greatest similarities of environmental landscape, which reflects land uses, management of ecological resources, water supply, and so on’. Finally, jurisdictional boundaries drawn on these grounds must be capable of ‘being scaled up and scaled down for integration for other kinds of service delivery or management’. In essence, this argument proposes a partial move away

from current tests of economic and sociological ‘communities of interest’ in municipal boundary determinations by state local government boundary commissions to physical and ecological ‘communities of interest’.

The testimony presented by Brunckhorst to the NSW Legislative Council’s 2003 *Inquiry into Local Government Amalgamation* was based on an interesting study by the Institute for Rural Futures and the Centre for Bioregional Resource Management at the University of New England in Armidale, entitled *An Eco-civic Regionalisation for Rural New South Wales: Final Report to the NSW Government*, and prepared by Brunckhorst *et al.* (2004) at the request of the NSW Department of Lands.

An Eco-civic Regionalisation for Rural New South Wales: Final Report to the NSW Government is based on the application of a spatial modeling technique known as *nrm civimetrics* developed by Brunckhorst *et al.* (2002) and Coop (2003).

The pioneering *nrm civimetrics* technique enabled Brunckhorst *et al.* (2004, p.2) to ‘acquire spatial information on the areas within which residents wish to have representation in local government and resource management decisions’; ‘aggregate this information into a summary surface showing areas of high and low

community interest’; ‘assess the performance of defined regions in terms of the degree to which areas of interest to residents in those regions are captured by the region boundaries’ through a Community Capture Index; ‘define nested regions to maximize this performance’; and ‘optimize region landscapes to take account of ecological landscape types’. Following this procedure, ‘social surface boundaries’ describe community areas, whilst a ‘biophysical classification’ considers natural factors, like climate data, elevation, soil moisture and vegetation, to depict ecological borders. The optimal superimposition of social surfaces and biophysical classifications results in ‘eco-civic regions’ which maximize the overlap between the two.

The methodology employed by Brunckhorst *et al.* (2004) drew on several sociological perspectives, such as social participative theory (see, for instance, Meindenger, 1998), place theory (see, for example, Tuan, 1977), social capital and social network theories (see, for instance, Putman, 1993). It also incorporated models that allowed for the spatial representation of biophysical landscape elements and their integration with community associations (see, for Steinitz, 1993). The NSW eco-civic analysis was based on primary data gathered from a large social survey (involving more than 13,000 residents) of multi-criteria, multi cross-referenced question framings that provided the surrogate data gathering

techniques used in the *Report*. The surrogate data had a very high level of correlation and spatial accuracy indices with the primary survey data, and included some socio-economic and service access variables.

The result was a tripartite nested series of contoured spatial maps of NSW termed level 1 boundaries, level 2 boundaries and level 3 boundaries. Level 1 boundaries represent ‘boundaries from the social surface and the biophysical classification spatially optimised for best fit, giving greater weight to biophysical boundaries’ whereas level 2 and level 3 represent ‘boundaries from the social surface and the biophysical classification spatially optimised for best fit, giving greater weight to the social surface’ (Brunckhorst *et al.*, 2004, p.11). Put differently, level 1 depicted geographic civic regions for NSW at the highest and broadest level in the spatial hierarchy of regional communities of interest, level 2 illustrated spatial civic regions for NSW at the mid-level in the nesting of hierarchy of regional communities of interest, and level 3 showed geographic civic regions for NSW at the lowest level in the nesting of spatial hierarchy of regional communities of interest.

These nested spatial hierarchies have interesting implications from the perspective of policy makers concerned with determining the spatial boundaries of various

public administration zones within NSW. Certainly the authors themselves apparently entertain no doubts at all on the importance of spatial hierarchies for public policy and claim *inter alia* that they will not only ‘be an indispensable tool in the review and development of policies, planning, governance and representation issues, service delivery, co-ordination programs and natural resource management’, but also ‘of value to individuals, the private sector, government agencies, and non-profit organizations throughout NSW and Australia’ (Brunckhorst *et al.*, 2004, p.30). In particular, ‘the work is of immediate value and application in the government’s timely reform agenda in local government and resource management’ (Brunckhorst *et al.*, 2004, p.39).

In the present context, the intended implications of *An Eco-civic Regionalisation for Rural New South Wales* for local governance in NSW are our primary concern. The *Report* argues that ‘effective local governance, including natural resource governance and management, requires appropriate institutional arrangements and processes’, that should ‘allow decision making and action to occur at the lowest appropriate level’. In addition, the governance structure should incorporate the ‘capacity to scale up when required to the next appropriate level for decisions, or issues with external impacts that effect (sic) others’. Given this ostensible need for such geographic parameters, ‘a hierarchically nested framework allows scaling up

spatially and institutionally for planning or decisions which might affect other people, ideas, or resources outside the immediate area for which planning or decisions are being made' (Brunckhorst *et al.*, 2004, p.32).

The *Report* further contends that 'in the eco-civic framework presented here, level 3 eco-civic regions might be appropriate local government areas, but if planning has impacts beyond individual level 3 eco-civic regions, then this planning will need to be conducted by a group of level 3 regions, i.e. a level 2 eco-civic region'. Moreover, because current 'local government areas' (LGAs) in NSW have their origins in the nineteenth century, based on obsolete economic and demographic patterns, and accordingly 'bear little similarity' to contemporary economic and social interactions, they are thus defunct and should be replaced with the new hierarchical spatial system developed in the *Report*. This means that 'on average, there are about three current LGAs per level 3 eco-civic region, although in all cases entirely new local government boundaries would be required to reform local government administration to the more representative level 3 eco-civic regions' (Brunckhorst *et al.*, 2004, p.33).

The full implications of *An Eco-civic Regionalisation for Rural New South Wales* for local governance are clearly spelt out in the *Report* as follows (Brunckhorst *et al.*, 2004, p.39):

‘The new spatial understanding and synthesis provided by the eco-civic regionalisation and comparative analysis of administrative boundaries has identified some mal-alignment of LGA and catchment management [CMA] boundaries. The government’s reform agenda, however, provides the opportunity to concurrently adjust boundaries and administrative arrangements for both LGA and CMA regions so that new regional LGAs (eco-civic level 3) nest up into resource management regions (eco-civic level 2). This would provide a wide range of benefits, as well as efficiencies to the government and local communities, while maintaining and building civic interest and support. It would also raise planning and natural resource management to a whole new level of integration that would make NSW a world leader in bioregional planning and management’.

At a more mundane level, this would mean that ‘the NSW government consider adopting the 49 level 3 eco-civic regions as new non-metropolitan local government areas; and, that the 20 level 2 eco-civic regions encompassing these be

used as Planning Regions and Premiers Department coordination regions' (Brunckhorst *et al.*, 2004, p.39). It need hardly be stressed that this will involve the most drastic local government program in Australian history.

3. A CRITICAL ASSESSMENT OF ECO-CIVIC REGIONALISATION

If actual real-world policy makers were to take the policy injunctions that emerge from Brunckhorst *et al.* (2004) seriously, and we have already seen that key policy entrepreneurs in the present NSW council amalgamation program, like Varden (2003), have uncritically adopted these injunctions, then this will provide the basis for radical restructuring unequalled in Australian public sector reform, with massive attendant economic and social costs. It is thus imperative that the conceptual foundations of the notion that eco-civic regionalisation should form the spatial heart of NSW local governance be evaluated critically. Accordingly, we will now conduct preliminary investigation of this question, beginning with the relevant economic theory:

3.1 Economics of fiscal federalism

The theory of fiscal federalism (Oates, 1972) represents a highly developed model of optimal multi-level government that spells out the prescriptive characteristics of an economically efficient federal system of government. According to this theory,

a federalist state, like the Commonwealth of Australia, has two main properties: Separate and overlapping levels of government; and different responsibilities attached to different levels of government. In the ideal case, each level of government would be assigned specific functions and responsibilities and the power to determine both expenditure levels for its responsibilities as well as the taxation authority to finance all of its expenditure. In practice, no actual federal system has achieved this ideal structure, including Australia, Canada, Germany, the United States and other advanced federal countries.

The theory of fiscal federalism holds that the assignment of functions and responsibilities between the different tiers of government should occur on the basis of the benefit regions of the goods and services produced. Thus, public services that convey nation-wide benefits, such as national defence, should be assigned to the central government, governmental services with a regional focus, like state fire services, should be assigned to provincial authorities, and public services with localized benefits, such as street lighting, should be allocated to municipalities. Following the same logic, sufficient revenue-raising powers to finance the requisite expenditure needs of each tier of federal government should be assigned to central, state and local governments. Where this is not the case, and expenditure and taxation powers are asymmetrically allocated between the different levels of

government, vertical fiscal imbalance results that can be accommodated by means of intergovernmental grants. In Australia, the Commonwealth and state government grants commissions deal with intergovernmental grants to reduce vertical and horizontal fiscal imbalance (Dollery, 2002).

The *principle of subsidiarity* holds that the functions and responsibilities of government should be discharged at the lowest possible level of governance congruent with the extent of the benefit regions of these functions and responsibilities. Justification for this principle in terms of economic efficiency stems from the so-called *decentralization theorem* (Oates, 1972, p.35): If there are no economies of scale or externalities, then decentralizing public service provision to the lowest level of government possible will enhance economic welfare by increasing allocative efficiency.

In essence, the decentralization theorem prescribes that local governments should be created such that preferences within a given jurisdiction are as homogenous as possible, whereas preferences between jurisdictions should vary as much as possible. Put differently, the greater the degree of preference heterogeneity within a municipal jurisdiction, the greater will be the economic welfare losses within that jurisdiction because the level and mix of service provision will meet the needs

of fewer citizens. In his *Structural Reform of British Local Government*, Chisholm (2000, p.14) has set out this argument and it is worth citing him at length:

‘If it is accepted that there are allocative inefficiencies in the delivery of local authority services because their provision is aimed at the common denominator and fails to reflect the diverse pattern of needs and desires among ‘customers’, it follows that efficiency would be improved if the residents of individual local authorities were homogeneous in their socio-economic characteristics; that is, if there were only a small dispersion about the local norm. If there were small differences among residents in each local authority, the standardized package of services provided by each council would closely reflect the local circumstances and allocative inefficiencies would be minimized. The simple way to achieve greater homogeneity in the populations of local authorities is for them to be small and based on identifiable communities’.

This conclusion is qualified by two factors. In the first place, if significant economies of scale exist in service provision, then this will increase the optimum size of a local government jurisdiction, since falling per capita costs in service provision may outweigh welfare losses deriving from rising allocative

inefficiency. Secondly, the presence of positive or negative externalities means that service delivery in a given jurisdiction has adverse or favourable effects on neighbouring local government areas. Where substantial interjurisdictional spillovers can be identified, then a case exists for either an enlarged local government area to encompass the externality or intervention by a higher tier of government through direct regulation, taxes or subsidies.

The prescriptions flowing from the theory of fiscal federalism enable us to evaluate the claims made by Brunckhorst *et al.* (2004) that their eco-civic schema should form the basis for delineating 49 larger municipal jurisdictions in NSW local governance. For instance, the ‘social surfaces’ underlying eco-civic regionalisation were determined not by the benefit regions of the public goods and services provided by councils but rather by a complex multiplicity of subjective factors and socioeconomic indicators. Information gathered from these sources was then deemed to provide an adequate measure of ‘community of interest’ to calculate level 3 administrative areas.

At least two objections can be raised to the eco-civic regionalization approach. In the first place, any overlap between patterns of subjectively perceived social networks and the benefit regions of municipal service provision would be entirely

coincidental. While councils obviously often do provide the infrastructure and facilities used by social networks, this represents only a small fraction of their overall service function. Moreover, state governments also support the activities of social networks. Secondly, critical economic aspects of the notion of community of interest is ignored in this procedure, not least the multiplier effects of municipal employment and expenditure on small rural towns that may play a critical role in their very survival. It is thus drawing a very long bow to argue that eco-civic regions constructed from an amalgam of social networks bear any real relationship to actual communities of interest, let alone the benefit regions of municipal service delivery.

It can still be argued by exponents of eco-civic regionalisation that economies of scale and the presence of significant interjurisdictional spillovers may overcome these objections. For example, even if a given level 3 eco-civic local government area is based on a flimsy interpretation of community of interest, and thus greater heterogeneity of preferences, substantial economies of scale may nevertheless warrant overriding the decentralization theorem with a larger spatial municipal jurisdiction, and accordingly the amalgamation of existing small councils into a larger local government authority. However, this argument cannot be sustained on either conceptual or empirical grounds.

Economies of scale refer to a decrease in average cost as the quantity of output rises and are frequently cited as a reason for larger council jurisdictions. Accordingly, the bigger the jurisdictional unit, the lower will be the per capita costs of service provision. In comparison to its counterparts in comparable countries, excepting New Zealand, Australian local government has a predominantly ‘services to property’ orientation in terms of the goods and services it provides. However, despite its relatively narrow range, Australian local governments still provide a wide range of goods and services that are produced by heterogeneous technological means. Accordingly, for a given benefit region, there is no *a priori* reason for different goods and services to exhibit the same cost characteristics. On the contrary, there is every reason to expect that no uniform pattern of economies of scale will emerge across the range of good and services produced by Australian councils. For example, it is highly unlikely that the optimal service district for libraries will coincide with, or even resemble, optimal service districts for, say, garbage collection, public parks, or sewage treatment services (Dollery, 1997). It follows that whereas larger councils may capture economies of scale in some outputs, they could reap diseconomies of scale in other areas. Sancton (2000, p.74) has crystallized the argument: ‘There is no

functionally optimal size for municipal governments because different municipal activities have quite different optimal areas’.

After evaluating the international and Australian empirical evidence on economies of scale in municipal service provision, Byrnes and Dollery (2002) drew three main conclusions. Firstly, ‘given the mixed results that emerge from the international evidence, it seems reasonable to conclude that considerable uncertainty exists as to whether economies of scale do or do not exist’ (Byrnes and Dollery, 2002, p.405). Secondly, Australian work was almost uniformly misspecified and thus did not measure scale economies at all. Finally, from a policy perspective, the lack of rigorous evidence of significant economies of scale in municipal service provision casts considerable doubt on using this as the basis for amalgamations. Moreover, while ‘advocates of amalgamation have premised their arguments on the proposition that substantial efficiency gains would flow from the formation of larger local authorities’, it appeared that ‘research on economies of scale in local government does not support this proposition’ (Byrnes and Dollery, 2002, p.405).

Even if no significant economies of scale exist to justify ignoring the stipulations of the decentralization theorem, larger local government jurisdictions based on

eco-civic regionalisation may still be vindicated if substantial spillovers occur between current small municipal areas. However, if there are indeed significant positive or negative externalities overlapping council boundaries in NSW, given the range of services provided by municipalities, which all have limited benefit regions, then these externalities will involve natural resource management issues rather than traditional ‘services to property’ *per se*. After all, where public services do have extended benefit regions, then either state government’s provide the services themselves, like education, health and policing, or subsidise council production through grants, as in the case of roads, bridges, and other infrastructure with spatial spillovers. By contrast, ecological and biophysical externalities are likely to affect extended spatial areas and should thus be dealt with by regional authorities, such as state governments. Indeed, in NSW, public agencies, like the Department of Environment and Conservation, the Department of Infrastructure Planning and Natural Resources, and the Department of Lands, as well as the recently created Catchment Management Authorities (CMAs), already oversee ecological and biophysical externalities.

It would thus appear that no solid conceptual or empirical case can be made in support of the claim that eco-civic regionalisation should form the basis for local government boundaries in Australia. Not only do the computations that underpin

the basis of the calculation of social surfaces and eco-civic regions bear no relationship to actual municipal service benefit regions, but neither do compelling scale economy arguments nor spillover effects exist that can overturn the prescriptions of the decentralization theorem.

This is not to argue that no areas of current council service delivery in NSW exhibit either substantial economies of scale or significant externalities. Rather, some important services currently under the auspice of NSW local government possess both characteristics, perhaps most notably municipal water and wastewater services. Internationally, the existence of scale economies in water and wastewater has been well documented (see, for instance, Fraquelli and Giandrone, 2003; Mizutani and Urakami, 2001; Ashton, 2000) and in many instances has stimulated significant reform within the urban water and wastewater industries. Water management is also generally confounded by externalities (see, for instance, Green, 2003). Moreover, this has manifested itself in the emergence of numerous institutional arrangements to deal with the externality problem. Perhaps most notable in the Australian context, is the Murray-Darling Basin Ministerial Council which owes its existence to the inter-state externalities attendant on water resources.

Australian states have responded differently to the challenge of scale economies and externalities in water and the Victorian reforms that span three decades are particularly instructive. In the early 1970's the Victorian non-metropolitan water industry comprised 370 water trusts, sewerage authorities and local councils each operating independent water and sewage services. Currently, non-metropolitan water and wastewater services are ostensibly provided by only 14 regional water authorities. The most drastic reforms to the Victorian water industry occurred throughout the 1990's and were accompanied by non-trivial economic gains. For instance, the 1993 amalgamations, that reduced the number of water authorities from 83 to 17, were estimated to have reduced operating costs by about 20% statewide (Department of Treasury, 1995, p.2).

Importantly, water reform was undertaken separately from local government reform in Victoria, an approach not accommodated by the eco-civic governance model proffered by Brunckhorst *et al.* (2004). Put simply, it is possible to address the issue of economies of scale and externalities without abandoning the compelling logic of the *principle of subsidiarity* and the *decentralization theorem*. What is required is an examination of the underlying economic characteristics of the production and distribution of particular services and then an assignment of those services to the level of governance best equipped to optimize on delivery.

Universally allocating services on the basis of an eco-civic calculation is unlikely to result in an economically efficient outcome.

3.2 Direct costs of municipal restructuring

The authors of *An Eco-civic Regionalisation for Rural New South Wales: Final Report to the NSW Government* recommend *inter alia* that the boundaries of NSW local government should be adjusted in accordance with eco-civic regionalisation so that 49 large non-metropolitan councils are constructed from the existing spread of smaller regional and rural municipalities. A further unfortunate aspect of this drastic proposal is that it stresses only the purported benefits the eco-civic regionalisation of NSW local governance, without any consideration of the enormous costs involved.

The direct costs of the massive structural adjustment envisaged by Brunckhorst *et al.* (2004) would undoubtedly be substantial. Although the present program of forced municipal amalgamation in NSW has already reduced the number of non-metropolitan councils, with more compulsory consolidation programs presently under way, this is bound to decrease the number of regional and rural municipalities still further. Nevertheless, achievement of the target figure of 49 councils would require additional and even more draconian amalgamations.

The direct costs of council consolidations are difficult to compute with any degree of precision. However, at least two categories of cost must be taken into account. In the first place, the costs of transformation from existing multiple small councils into a series of single large amalgamated municipalities will be substantial. At a minimum, several expensive actions will have to be undertaken, including the relocation of management personnel to the urban centre designated as the new local government headquarters, office accommodation expanded or even constructed afresh, depot staff and equipment moved, and many other costly initiatives involved in setting up the new consolidated council. Secondly, costs associated with the new larger scale of operations will have to be borne: Inherited duplication and overlap of both staff and equipment will have to be eliminated through exorbitant redundancy payments and extensive retraining programs; communication and transportation systems will have to be introduced to serve a much larger spatial scale of activity; centralised information technology systems will have to be installed; new administrative structures developed to reassign service and functional responsibilities, etc.

It must be added that both transformation costs and scale of operation costs are essentially of a 'once and for all' sunk cost nature. This implies *inter alia* the

burden of these costs applies at the beginning of any consolidation process associated with the realization of eco-civic regionalisation in the determination of local government boundaries.

3.3 Economic and social costs of municipal restructuring

Although the direct costs of council amalgamations are likely to be prohibitive, they will nonetheless be swamped by the indirect costs of obligatory consolidation. In the present context, the indirect costs of municipal amalgamation that seeks to redraw local government on the basis of eco-civic regionalisation are taken to encompass the economic and social costs imposed on the communities concerned.

Councils often represent the focal point of small communities and enhance people's 'sense of place' and identity with their towns and regions. Effective participatory democracy is facilitated through small councils where citizens often feel that they can influence local outcomes. It also captures the benefits of detailed local knowledge and thus may improve the quality of decisions taken at the local level. It typically involves people in their local communities and seems to encourage socially beneficial behaviour, such as volunteering. These and many other unquantifiable social benefits associated with small rural and regional municipalities will disappear through amalgamation and thus need to be taken into

account in any rational assessment of the costs and benefits of eco-civic regionalisation.

Municipal councils in many small rural Australian towns are not only often the largest single employer of local people, but also typically one of the largest purchasers of local goods and services. Councils thus play a pivotal role in the economic well being of rural communities. Accordingly, if the reconfiguration of municipal boundaries attendant upon eco-civic regionalisation means that municipal consolidation occurs, then the negative multiplier effects of reduced employment and lower levels of council expenditure could easily destroy many fragile rural economies, with resulting social devastation.

Adding to the costs that have been largely overlooked by Brunckhorst *et al.* (2004) is the inter-temporal opportunity costs that result from eco-civic regionalization. The seminal work of Challen (2000) serves to remind policy makers that altering governance institutions not only changes the existing arrangements but may also close off useful options for the future. As we have already noted, embracing eco-civic regionalization in NSW would invariably impose significant social and economic costs on small communities. Once altered in line with the eco-civic regionalization model it may be impossible to rebuild the

social and economic structures of the present if the calculations of Brunckhorst *et al.* (2004) prove to be flawed. Accordingly, there would appear to be scope for a more critical and cautious appraisal by proponents of eco-civic regionalisation.

4. CONCLUDING REMARKS

This paper has sought to question the proposition that eco-civic regionalisation should form the basis for local government administrative areas in NSW or any other Australian jurisdiction. Three main arguments have been presented. In the first place, it has been argued that the decentralization theorem, and its constituent subsidiarity principle, should form the conceptual capstone for the assignment of functional responsibilities between the various tiers of government in a federal system since this maximizes the prospects of economically efficient service provision. As a matter of formal logic, the prescriptions of the decentralization theorem can only be overridden if either substantial economies of scale exist on service provision or if significant externalities can be identified. We have sought to demonstrate that, for the range of services generated by Australian local government at least, neither of these exceptions to the principle of subsidiarity applies. Moreover, we have acknowledged that alternative economic criteria provide a more robust basis for allocating services to regional or state authorities than those proffered by Brunckhorst *et al.* (2004). It follows that the benefit regions of council service delivery should be the primary determinant of municipal

boundaries. Since these benefit regions are very limited for the majority of council services, small local government areas therefore maximize economic efficiency. Present limited municipal jurisdictions, roughly approximated by current council boundaries, thus satisfy this condition once major services for which there are economies of scale and externalities are ceded to appropriate levels of governance.

This conclusion runs directly in the face of the central claims advanced by exponents of eco-civic regionalisation as the basis for the redesign of NSW local government areas. Precisely because the benefit regions of biological and ecological spatial areas are much larger than the corresponding benefit regions for archetypal Australian municipal services, a strong case exists for assigning responsibility for them to different administrative structures, like state government departments or CMAs, that can effectively ‘internalize’ externalities into planning and decision making.

Quite apart from contesting the purported advantages claimed to flow from an eco-civic alignment of natural and municipal boundaries, we have also identified two categories of costs that will accompany any local government restructuring along eco-civic regionalisation lines that have been ignored by proponents of this system. Not only will the direct costs of municipal boundary be enormous, but the

indirect economic and social costs will also be astronomical. In addition, such reforms are likely to be irreversible and therefore warrant a more circumspect approach. We thus contend that eco-civic regionalisation should be entirely discarded by state government policy makers as the basis for drastically restructuring NSW municipal governance.

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