

Planning for the interface between natural world heritage areas and cities – a look at Sydney and the Greater Blue Mountains.

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Word Count: 5,000

Running Head: Natural world heritage areas and city planning

Key words: Urban planning; natural world heritage; interface.

Abstract:

Not all natural world heritage areas are isolated wilderness. Many are located adjacent to substantial urban settlements. There are inevitable interface issues that arise from the proximity between these significant natural areas and cities. *The Convention Concerning the Protection of the World Cultural and Natural Heritage*, and its corresponding operational guidelines, provide minimal advice to the policy makers and planners of cities to ensure the conservation of the natural values of these significant protected areas. This paper summarises the literature on planning approaches to protected areas generally, concentrating upon the interface between urban areas and protected areas while looking to apply this literature to natural world heritage areas. Secondly, drawing on current doctoral research, the paper uses the city of Sydney and its interface with the Greater Blue Mountains World Heritage Area to explore the ways in which local planning schemes recognise and address issues associated with the protection of natural world heritage areas. As a result, the paper outlines implications for the planning policies and plans of urban settlements that adjoin world heritage areas, identifying planning approaches which specifically address the urban - natural heritage interface.

Introduction:

Natural world heritage areas are not always isolated wildernesses. Some are adjacent to cities, such as the Greater Blue Mountains World Heritage Area adjacent to Sydney or the Wet Tropics World Heritage Area in Far North Queensland, in close proximity to the city of Cairns. International examples include the Everglades National Park adjacent to the city of Miami, Florida, USA and Thungyai-Huai Kha Khaeng Wildlife Sanctuaries and Dong Phrayayen-Khao Yai Forest Complex, both located close to the outskirts of Bangkok, Thailand. There are inevitable interface issues that arise from the proximity between natural areas and cities. Patterns of human activities lead to the disturbance of ecosystem dynamics (Grimm, Grove, Pickett, & Redman, 2000), such as habitat & habitat corridor destruction, water, air, light and noise pollution, introduction of feral and noxious flora and fauna species, increase fire hazard and rubbish dumping which adversely impact upon the area's natural values (Beatley, 1995; Tryzna, 2003). It is crucial that the planners of the cities address these interface issues to ensure the conservation of the natural values of protected areas (Kozlowski & Peterson, 2005; Tryzna, 2003). However, there is little information available to city planners that guide their policy and decision-making in regard to natural world heritage areas.

Natural world heritage areas are protected areas which are unique because they are internationally recognised as being important for their natural values and important to both the international and local communities. This uniqueness may bring original innovations in terms of planning for the interface between these important natural areas and the urban areas located nearby.

Approaches to managing the interface between protected areas and urban settlements have been widely discussed in the conservation literature, although the subject has received less attention in

planning research. Nevertheless, a small trajectory of work examines approaches to the management of urban parks and biodiversity, and nature conservation within the context of sustainable urban form (Beatley, 2000; Berke & Manta Conroy, 2000). A small body of empirical research examines approaches to boundary management and interface planning between urban settlements and protected areas (Crofts, 2004; Gurrán, 2005; Kozłowski & Peterson, 2005; Watson & Sanders, 1997). This work establishes principles for managing conservation interface areas but implications for addressing landscapes of world heritage significance are relatively unexplored. Literature and research on world heritage meaning includes perspectives on potential applications to urban and regional planning policy (Bentrupperbaumber & Reser, 2006; Hamin, 2002; Worboys, Lockwood, & De Lacy, 2001). Again, the extent to which contemporary planning practice actually addresses particular issues associated with protecting natural world heritage areas and their interface with urban settlements is largely unexplored.

Protection of our natural areas is a *bona fide* and immediate problem for the city planners. More people than ever live in urban settlements. By 2015, 50% of urban dwellers will live in cities of over 500,000 people. The United Nations estimates that urban populations will continue to grow and rural populations will decline (United Nations, 2008). In Australia, population growth targets for cities are set down in planning policies. Some of these cities interface with natural world heritage areas. For instance, Sydney Metropolitan Plan (Department of Planning (NSW), 2005) and the Far North Queensland Regional Plan 2009-2031 (Department of Infrastructure and Planning, 2009).

Within this context, a key question is how planning for urban settlements has responded to these unique protected areas of world significance? To examine this question, local land use plans are investigated. Local land use plans are the principal instruments for development decision-making, (Talen & Knapp, 2003). Consequently, their examination should reveal how, if at all, the conservation of adjoining world heritage areas is addressed.

To empirically investigate the influence of natural world heritage areas upon local plans it is necessary to identify the degree to which the conservation of natural world heritage areas have, in reality, been identified as being an objective of land use plans. Secondly, if there are any corresponding mechanisms to support the conservation objective. Underpinning this empirical investigation is the identification of unique discourse for planning for the interface between natural world heritage areas and cities.

This paper addresses the question of how natural world heritage areas are considered in local plans using Sydney and the Greater Blue Mountains World Heritage Area as a case study. It draws on preliminary findings of a broader doctoral study examining the implications of natural world heritage listing for the planning of adjoining urban settlements. This doctoral study is examining the jurisdictional, administrative, policy and legislative frameworks that city planners and park managers work within and the impact that these frameworks upon the conservation of natural world heritage areas adjacent to cities. As part of this work, plan content analysis is used to explore the ways in which a sample of Australian planning instruments and protected area plans of management recognise and address world heritage areas. Benchmark criteria for this analysis is derived from the *Convention Concerning The Protection of the World Cultural and Natural Heritage* (The Convention) (UNESCO, 1972) and the *Operational Guidelines for the Implementation of the World Heritage Convention* (Operational Guidelines) (Intergovernmental Committee for the Protection of the World Cultural and Natural Heritage, 2005). These documents contain the guidance for managing and conserving natural world heritage areas provided by the international body, United Nations Educational, Scientific and Cultural Organization (UNESCO), that administers the Convention. The results of the pilot plan content analysis are presented in this paper. As a pilot, only a subset of NSW planning instruments were analysed and plans of management were excluded.

Principals for protecting World Heritage Areas

The Convention is an international treaty created in 1972 to conserve important places, both cultural and natural, for present and future generations. UNESCO administers the Convention through its World Heritage Centre (UNESCO, 2009). There are 148 State Parties, ie countries, that are signatories to the Convention. The State Parties are responsible for the protection of the properties in their jurisdiction that are on the World Heritage List. Properties of either cultural or natural or mixed cultural-natural values are inscribed onto the list. As of July 2009, there are 890 properties on this list, including 176 natural and 25 mixed. Australia has 17 properties on the list, including 11 natural properties and four mixed properties.

The current doctoral research is identifying the number of natural world heritage areas that are adjacent to cities. Subject to confirmation, approximately 30 of these unique and internationally recognized natural areas are located next to large cities (>1million). They are distributed across the world. For instance Huanglong Scenic and Historic Interest Area near Chengdu City in China, Keoladeo National Park near New Dehli in India and Cape Floral Region Protected Areas near Capetown in South Africa. It is anticipated that the research will also identify those natural world heritage areas adjacent to cities with populations between 100,000 and 1 million. The Wet Tropics of Far North Queensland fall into this category.

The Convention and the Operational Guidelines are the main documents that guide the world heritage process. The Convention outlines the purpose of world heritage and the responsibilities of state parties. The Operational Guidelines outlines the world heritage process from nomination to inscription, reporting and delisting processes. Importantly it also recommends the mechanisms, deemed by UNESCO as important, for the successful conservation of the world heritage property. Thus, these documents are important guiding documents for the conservation of natural world

heritage areas and therefore should be considered as useful tools for planners for areas that impact upon and influence the conservation of natural world heritage areas.

Article 5(a) of the Convention stipulates that one of the responsibilities of the parties who are signatories to the Convention is to ensure that the heritage of the area is to be part of the life of the community and to integrate the protection of the heritage into planning (UNESCO, 1972). Also, at Article 5(d) the Convention stipulates that signatories to the Convention are to take appropriate measures to identify, protect, conserve, present and rehabilitate the heritage (UNESCO, 1972). However, the Convention is silent on how to achieve these responsibilities.

The Operational Guidelines provide more detailed information on the processes to achieve the Convention's purpose. Three important principles of world heritage are established by the Operational Guidelines. First, properties become world heritage areas because of their outstanding universal value. In order to stay on the list, the properties outstanding universal value needs to be retained. The Operational Guidelines, at paragraph 88, indicate that in order to do this, the integrity of the natural world heritage area needs to be maintained (Intergovernmental Committee for the Protection of the World Cultural and Natural Heritage, 2005). Thus, there is a clear implication that signatories to the Convention will act in ways that protect this integrity through appropriate management and legal processes.

Secondly, the Convention acknowledges that no areas are pristine and that there is always some element of human-nature interaction. The Operational Guidelines, at paragraph 90, recognises and encourages the interaction of people with the natural world heritage area, and accepts that sometimes such interaction contributes to the outstanding universal value of that special place. This is particularly true for places where traditional or indigenous peoples live and work within and around the natural world heritage area (Intergovernmental Committee for the Protection of the

World Cultural and Natural Heritage, 2005). Therefore, signatories to the convention are obliged to establish management arrangements that preserve and support such ongoing patterns of access and interaction with the people of the world heritage area.

Lastly, the Operational Guidelines, at paragraph 108, identify that preservation of world heritage areas can only be successful through active community participation (Intergovernmental Committee for the Protection of the World Cultural and Natural Heritage, 2005), although the nature of such communication is undefined. Drawing on the considerable academic research regarding the significance of community participation for effective protected area management, and the importance of local community support (Gurran, 2005; Worboys et al., 2001) the need for appropriate opportunities for stakeholder involvement and engagement in caring for world heritage areas can be inferred from this third principle.

Within Chapter II.F of the Operational Guidelines, a number of mechanisms are outlined as guidance to achieving the protection of world heritage areas. These mechanisms include legislative, regulatory and contractual measures, boundaries and buffer zones, particular management systems and sustainable use of the world heritage area (Intergovernmental Committee for the Protection of the World Cultural and Natural Heritage, 2005). While the Operational Guidelines read as if they are addressing the world heritage area managers, the mechanisms outlined in this chapter are appropriate for land use plans applicable to land beyond the boundary of the world heritage area.

Beyond the boundary

During the 1980's, park managers began to consider the need to look beyond the boundaries of their protected areas in order to protect them. Professionals in the field say that protected areas could not be seen as islands, cut-off from surrounding lands and that they were linked via an ecological

framework (Garratt, 1982). Park managers, in recognising these links, needed to also understand the ecological processes that their parks were part of in order to better manage, and therefore conserve, the protected areas (Ovington, 1982).

A number of studies have identified the need to coordinate the park management with the plans and policies of the local communities and governments outside park boundaries (Brody, Carrasco, & Highfield, 2003). Similarly, practitioners and the park managers now advocate the need to share management decisions and allow each other to achieve their own long-term planning goals (Tryzna, 2003). Guidance on specific land use planning approaches is limited but there is some literature which explores the use of interface controls, mainly the use of buffer zones. Buffer zones as a form of interface control are also advocated by the international organizations, UNESCO and the International Union for the Conservation of Nature (IUCN), which seek the conservation of nature through protected areas (Intergovernmental Committee for the Protection of the World Cultural and Natural Heritage, 2005; Kozlowski & Peterson, 1996, 2005).

The Greater Blue Mountains World Heritage Area and Sydney

About one-half of the Sydney region is made up of protected areas, such as national parks and state forests, bush reserves and wetlands (Department of Planning (NSW), 2005). These are important elements in contributing to Sydney as a place of natural beauty. It is partially this beauty that leads NSW policy makers to conclude that Sydney has a 'competitive edge' over other cities in Australia such as Brisbane (Department of Planning (NSW), 2005). In fact, the overarching strategic plan for metropolitan Sydney states, that:

"...protecting the natural environment ..[is] as important to Sydney's competitiveness as continuing to invest in education, social, transport and cultural infrastructure." (Department of Planning (NSW), 2005), p. 26).

While this statement reflects the politics of the government, the Blue Mountains is also recognised for its importance to Sydney in terms of its role in the water catchment, is one of the most popular tourist destinations in Australia and a scenic backdrop for the metropolitan of Sydney. It was declared a world heritage area in 2000 because of its outstanding universal value in terms of the eucalypt habitats, a high degree of endemism and invaluable natural assets including several species that are considered to be evolutionary relics such as the Wollemi Pine (UNESCO, 2009).

Sydney is the only major city in Australia that has a natural world heritage area at its door step. As such, it is an ideal case to explore how metropolitan planning for a major city in Australia takes into account the protection and conservation of an internationally recognised natural area. However, the study has applications to other large Australian settlements, such as Cairns in Far North Queensland, which is adjoined by the Wet Tropics World Heritage Area.

The Greater Blue Mountains World Heritage Area is located immediately to the west of the conurbation of Sydney (Figure 1). The planning for the metropolitan area of Sydney extends as far west as Blackheath, a village in the Upper Mountains linking the majority of towns and villages of the Blue Mountains City local government area (LGA) to Sydney. There are approximately 73,000 people that live in the Blue Mountains City LGA in 27 towns and villages along the Great Western Highway, which runs along the ridge through the Greater Blue Mountains World Heritage Area (Blue Mountains City Council, 2009).

INSERT FIGURE 1 HERE

The Greater Sydney Metropolitan Area extends from Newcastle to Wollongong, on the north-south axis, and the coast to the Blue Mountains on the east-west axis. The Greater Blue Mountains World

Heritage Area interfaces with the conurbation of Sydney along its eastern boundary primarily. A total of 16 LGAs interface with the Greater Blue Mountains World Heritage Area of which eight are part of the Sydney conurbation.

World Heritage management, land use planning beyond the boundary - The Australian/NSW

Context

The Commonwealth of Australia is the signatory to the Convention. However, day-to-day management of the world heritage areas fall to the states. Land use planning issues that affect world heritage areas can be divided into two distinct parts. Generally, any development within the natural world heritage area or where the development will have a significant impact on the world heritage area is considered under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The assessment is undertaken by the Commonwealth or by a state government where the Commonwealth has, under the EPBC Act, delegated such powers. The Act was reviewed in 2009 with the report due at the end of October 2009. At the time of writing it is not possible to identify any relevant changes in regards to world heritage management and development control.

However, where there is development that is not within the world heritage area or considered to have a significant impact on the world heritage area, the development is assessed in accordance with the appropriate state laws in the jurisdiction.

The Greater Blue Mountains World Heritage Area is made up of a number of national parks and wilderness areas. These areas are gazetted under NSW law, such as *The Wilderness Act, 1987*. The management of the natural world heritage areas fall to the states. In this case, the management of

the Greater Blue Mountains World Heritage Area is undertaken the NSW Department of Environment and Conservation through its national parks group. Generally, each national park or wilderness area has a separate plan of management and a strategic plan for the overall management of the Greater Blue Mountains World Heritage Area was published this year (Department of Environment and Climate Change (NSW), 2009).

The lands outside the world heritage area are, generally, subject to state law in terms of land use. In NSW, land use is governed by the *Environmental Planning & Assessment Act, 1979*. This Act sets strategic direction and delegates some land use planning powers to local government. Land use plans are statutory and known as environmental planning instruments. They include State Environmental Planning Policies (SEPP) and Local Environmental Plans (LEP)ⁱ. The latter are written by local councils but approved and gazetted by the NSW Government. There are some plans that are remnants of older legislative process. These are known as planning scheme ordinances (PSO) or interim development orders (IDO). It is the land use plans, particularly the LEPs, that stipulate zoning and land use controls. When an application for development is made, the application is assessed against the applicable environmental planning instruments.

In addition, the NSW Government has produced two strategic planning documents that apply to the Greater Blue Mountains World Heritage Area. The Sydney Metropolitan Plan, *City of Cities*, outlines the political planning vision for the metropolitan area of Sydney to the year 2031 (Department of Planning (NSW), 2005). The Metropolitan Plan has a number of sub-regional plans, including the North- West subregion of Sydney, which includes greater planning detail (Department of Planning, 2007). These plans are not considered planning instruments.

Methodology and Results

Content analysis aims to identify patterns or themes. Its main strategy is the detailed and systematic examination of a body of material (Leedy & Ormrod, 2005). Content analysis is ideal for the evaluation of land use plans (Norton, 2008). The objectives and goals of plans may vary considerably from one jurisdiction to another as these local plans reflect the requirements of the individual communities (Berke & French, 1994). Content analysis allows the analysis of plans to examine a specific criteria that may be treated differently in each plan. In this case, how different land use plans address the Greater Blue Mountains World Heritage Area. In addition to the land use plans, the Sydney metropolitan plan and the relevant sub-regional plan are examined. These latter documents are not land use plans but direction-setting documents.

The first step in data collection was the identification of the relevant plans to be analysed. As this piloted the research instrument as part of PhD research, it was decided to limit the investigation to the environmental planning instruments which apply to the local government areas which interface with the Greater Blue Mountains World Heritage Area's eastern boundary. Plans of management of the national parks and wilderness areas, as well as the strategic plan for the world heritage area, were excluded from this pilot but will be considered in the larger research project.

Of the eight local government areas (LGAs) that make this case, there are 12 relevant land use plans and 2 draft land use plans. Many LGAs have more than one land use plan. However, many were irrelevant for this study as the plans did not either encompass the land of the Greater Blue Mountains World Heritage Area nor the adjacent lands, or the purpose of the land use plan was distinctly geared to a unique purpose that was far too removed to be of relevance. For instance, the Penrith City Centre LEP which applies to land within a small, distinct geographic area to foster business and economic growth. One Sydney Regional Plan* is also included as it specifically addresses land within the interface with the world heritage area. These, along with the

metropolitan plan and the sub-regional plan, result in 17 documents to be analysed. These are listed in Tables 1-3.

The second step was the development of the research instrument to analyse each plan (Tables 1-3). The criteria for analysis was distilled from the principles and mechanisms that were identified from the Convention and the Operational Guidelines. The Convention stipulated that protection of the natural world heritage area is to be integrated into planning. Therefore, land use plans should recognise the existence of the natural world heritage area. The corresponding mechanism for this recognition in a land use plan would be the naming of the property, delineating the boundary of the property and showing this on the land use plan map, and dedicated zoning. As there is no legal status accorded world heritage areas in the state gazettal processes, land use plans are more likely to refer, by name, to the national parks. However, the metropolitan and sub-regional plans are not statutory documents and may refer to the Greater Blue Mountains World Heritage Area.

Three principles for world heritage area were identified in the Operational Guidelines namely the maintenance of integrity, the recognition of local and traditional peoples and active community participation. These principles could be supported in land use plans by the inclusion of specific objectives to conserve the natural world heritage area, linking of these objectives to specific mechanisms such as dedicated buffer zones, lots identified for acquisition, protection measures for view, habitats, water conservation and the like. Similarly, specific objectives to recognise and include local and traditional people and their way of life with corresponding mechanisms such as protection of traditional land uses and access ways in the interface. Referral mechanisms would be an indicator of active community participation that could be found in a land use plan. In addition, the recognition of the world heritage area in terms of its importance to both local and international communities could manifest itself in a land use plan or a policy document by way of objectives or vision statements.

INSERT TABLE 1 HERE

INSERT TABLE 2 HERE

INSERT TABLE 3 HERE

Two of the documents are not planning instruments namely the Sydney Metropolitan Plan and the corresponding sub-regional plan. Treatment for these documents was slightly different. It could not be expected that these documents would contain land use controls. However, these documents could contain objectives and policy statements which support land use controls or other mechanisms which would support the objective of conserving the Greater Blue Mountains World Heritage Area.

Each plan was analysed to see whether the objectives and corresponding mechanisms were present. A simple “V” was recorded where the document contained the criteria.

The results of the analysis are presented in Tables 1-3.

The results in Table 1 indicate that very little recognition of the Greater Blue Mountains World Heritage Area or its corresponding parts is given in local land use plans. In fact, only the Blue Mountains LGA plans and the SREP for Mulgoa mention the Blue Mountains National Park, with the Blue Mountains LEP 2005 the only document which uses the term “Greater Blue Mountains World Heritage Area”, which is contained in its objectives. The majority of the corresponding statutory maps show the boundary between the protected area and the non-protected areas. However, the

protected area is given a broad range of zonings. While approximately one-half of the land use plans zone the protected area as a national park, three plans zone the area “Water Catchment Protection” and five plans do not show any zones at all. These latter plans are quite old in terms of planning instruments. In many instances, the plans apply to individual lots or to small areas within a LGA. While the land that falls under these instruments can be considered to be in the interface with the Greater Blue Mountains World Heritage Area, the plan itself show only those lots in its respective map and there is no connection with the surrounding lands. For instance, Penrith’s IDO No. 2 has been the subject of extensive repeal so that it only applies to a small handful of relatively small parcels of land.

Only the Blue Mountain LEPs and SREP for Mulgoa cite objectives to conserve the Greater Blue Mountains World Heritage Area and have corresponding mechanisms. All statutory plans do show the boundary with the protected area. Some plans zone the protected area as national park but there are no objectives or mechanisms aimed at conservation/protection of that area. In other cases, the protected area is zoned as a protection zone, for example Zone No 5 (c)(Special Uses “C” (Water Catchment) Zone), Wingecarribee LEP 1989 with objectives aimed at protecting water quality. The zone objectives are complimented by corresponding mechanisms. For instance, Zone 7(a)Environmental Protection Zone, for some lands located in the interface, in Wingecarribee LEP 1989 where uses are restricted and the clearing of vegetation is permitted only with consent.

In most cases the statutory plans limit development in the interface. For instance, some plans include controls that limit the scope of subdivision and development type in lands in the interface. Often the interface lands are zoned rural or semi-rural and the zones’ objectives include the retention of the land for rural purposes. As a result, the subdivision controls ensure large lot size, for instance 40ha, and a restriction of the number of dwellings, often only one, to be built.

Environmentally sensitive lands in the interface are excluded, in some plans, in the calculations of lot sizes. For instance, draft Penrith LEP 2008.

Generally, all statutory plans include objectives and mechanisms for the conservation of nature. In some instances, the objectives and mechanisms are focussed on land within the interface, such as the specific uses of land and subdivision size as mentioned above. In addition, there are some specific environmental conservation measures. For instance, Hawkesbury LEP 1989 has an objective to protect wetlands and these wetlands may well exist on land within the interface with the Greater Blue Mountains World Heritage Area. However, there is nothing in the words of these objectives and mechanisms that link them to the conservation of the Blue Mountains, but rather appear as isolated measures.

This could highlight a limitation of the study. That is, relying solely upon the content of the plans may not give the entire picture of the approach of all the local government areas to the protection and conservation of the Greater Blue Mountains World Heritage Area. However, the doctoral research will examine the whole picture.

The Sydney Metropolitan Plan and the corresponding draft sub-regional plan for the area contain mentions of the Greater Blue Mountains World Heritage Area and its importance to Sydney. However, while these documents contain key directions and actions, these tend to place the importance of the conservation of Greater Blue Mountains World Heritage Area in terms of retaining the areas to ensure improved access to Sydney residents and visitors for recreational opportunities.

None of the statutory plans nor policy documents make specific mention of the natural world heritage area in terms of the importance of this place to indigenous people. Only the strategic plans

mention the importance of the Blue Mountains at the international and local levels but is silent of further measures to maintain this importance.

Discussion

More people than ever live in urban settlements. Most of these people live in settlements with populations over 500,000 and some small cities are growing faster than those cities with large populations (Tryzna, 2003). Growing populations put greater pressure upon nature.

Inter-relatedness between cities and nature is not confined to the increased dependence upon nature for its resources. Inter-relatedness is seen through the connection that urban dwellers may have towards a place. For instance, a protected area may provide an aesthetic backdrop to the city they live-in or a place for relaxation, economic benefit or spiritual/cultural connection (Tryzna, 2003).

The understanding of the interrelatedness of nature and people has grown and developed over the years, reflecting the changing views and values that people have about nature (Cronon, 1996).

People still perceive protected areas, such as national parks, as places of beauty which connect people at the emotional/spiritual level. However, there is also the realisation that these places are important for human survival (Olwig, 1996). Nature provides us with water, food, medicines, fuel, economic and social opportunities. Due to these perceived and real values, people desire the continued existence of protected areas (Worboys et al., 2001).

Natural world heritage areas are protected areas with special, international status. These areas are recognised for their unique natural values and are important both for now and in the future, as well as being important to both local and international communities.

Cities have a particular role in the protection of nature (Beatley, 2000; Tryzna, 2003). A more sustainable pattern of urban settlement should decrease the pressure on nature. For instance, there are many examples of the link between increasing urbanization and habitat destruction (Beatley, 2000). Thus, those natural world heritage areas which are located in the vicinity of urban settlements face great pressures that threaten their integrity.

Urban plans need to address these pressures and to seek ways to ensure the conservation of the natural world heritage areas. The current guidance available to planners is limited. The Convention and Operational Guidelines do highlight principles, objectives and mechanisms to be followed and implemented in order to conserve and protect these important places.

However, this research has shown that in the case of the Greater Blue Mountains World Heritage Area and Sydney, there is very little connection between the international guidance and the local plans. Arguably, the policy intention of the policy makers should be found in the meaning and words of the local plans (Norton, 2008). However, the majority of the plans analysed contained no world heritage discourse. Only one plan contained the name of the world heritage area within it. This plan was gazetted post-inscription of the Blue Mountains on the World Heritage List. However, there are two draft statutory plans that do not contain any reference to world heritage. These plans are being drafted under current NSW planning legislation to standardize the format of statutory land use plans. These new plans incorporate zoning and mapping which show the protected area as a national park. However, the principles of world heritage are not included within these documents. There does not appear to be any particular treatment of this area that for any other protected area

with national park status. This may appear contrary to the discourse contained within the Sydney Metropolitan Plan which mentions specifically the importance of the Greater Blue Mountains World Heritage Area to Sydney. However, there does not seem to be a connection between the overarching metropolitan plan and the new local plans.

The lack of discourse within planning documents does not lead to the conclusion that the Greater Blue Mountains World Heritage Area is without planning protection. Most plans provide protection zones to the area. However, the objectives of the plans clearly lack conservation of the protected area for its own natural values and its importance to the city. The Convention and the Operational Guidelines provide clear guidance to all responsible parties that play a role in the conservation of special protected areas. Urban planners should look to the principles and mechanisms that are embodied in these international documents for inclusion in local land use plans.

This paper aimed to identify how plans of urban areas addressed the conservation of natural world heritage areas. Based on the case of Sydney and the Greater Blue Mountains World Heritage Area, it was found that there is very little world heritage-driven land use objectives and corresponding mechanisms. This paper does not explore why world heritage discourse is limited in urban plans.

This paper does not examine the processes behind the creation of the land use plans nor does it examine any other mechanism or influences that affect the conservation of the Greater Blue Mountains World Heritage Area. However, the analysis of local land use plans does provide a starting point for further examination of the extent that world heritage affects urban planning and how urban planning should be addressing the planning of the interface between urban settlement and these special natural areas.

Acknowledgements

I wish to thank the people who have made comments on this paper namely, my supervisor, Associate Professor Nicole Gurran, members of the Urban Policy Publication Syndicate of the Faculty of Architecture, Design & Planning, University of Sydney, and to the two anonymous reviewers as part of SOAC09.

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Figure 1: Locality map – Greater Blue Mountains World Heritage Area (light green) to the west of Sydney metropolitan
Adapted from *The Greater Blue Mountains* boundary map (Department of the Environment and Water Resources (Cwth), 2007)

Criteria: Recognition

| Land Use Plan | Post protected area gazettal | WHA or components named | Boundary shown | Dedicated zoning |
|--|------------------------------|-------------------------|----------------|------------------|
| 1. Blue Mountains LEP 1991 | √ | √ | √ | √ |
| 2. Blue Mountains LEP 2005 | √ | √ | √ | √ |
| 3. Gosford City Council IDO No. 122 | √ | - | √ | - |
| 4. Hawkesbury LEP 1989 | √ | - | √ | √ |
| 5. Hornsby Shire LEP 1994 | √ | - | - | - |
| 6. Draft Penrith LEP 2008 | √ * | - | √ | √ |
| 7. SREP No 13 - Mulgoa Valley | √ | √ | - | - |
| 8. Penrith LEP No 201 (Rural Lands) | √ | - | √ | √ |
| 9. Penrith LEP 1998 (Urban Land) | √ | - | - | - |
| 10. IDO No. 2 - City of Penrith | √ | - | - | - |
| 11. IDO No. 93 – Penrith | √ | - | - | - |
| 12. Penrith LEP No. 226 | √ | - | - | - |
| 13. Wollondilly LEP 1991 | √ | - | √ | √ |
| 14. Wingecarribee LEP 1989 | √ | - | √ | √ |
| 15. Draft Wingecarribee LEP 2009 | √* | - | √ | √ |
| 16. Sydney Metropolitan Plan | √** | - | √ | n/a*** |
| 17. Draft Subregional Metropolitan Plan: North-West Sector | √** | - | √ | n/a*** |
| TOTAL: | 17 | 3 | 11 | 8 |

* land use plan yet to be gazetted. ** plan will not be gazetted but table shows it is post gazettal of protected area. *** plans do not contain zone controls

Table 1: Plan Content Analysis Criteria: Recognition

Criteria: Land Use Controls

| Land Use Plan | Objectives to conserve protected area | Mechanisms to meet objectives | | | | | | | |
|--|---------------------------------------|-------------------------------|-----------------|----------------------|--------------------|------------------|-------------|-----------|-------|
| | | Interface zoning | View protection | Catchment protection | Habitat protection | Invasive species | Acquisition | Risk Mngt | other |
| 1. Blue Mountains LEP 1991 | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| 2. Blue Mountains LEP 2005 | √ | √ | √ | √ | √ | √ | √ | √ | √ |
| 3. Gosford City Council IDO No. 122 | - | - | - | - | - | - | - | - | - |
| 4. Hawkesbury LEP 1989 | - | - | - | - | - | - | - | - | - |
| 5. Hornsby Shire LEP 1994 | - | - | - | - | - | - | - | - | - |
| 6. Draft Penrith LEP 2008 | - | - | - | - | - | - | - | - | - |
| 7. SREP No 13 - Mulgoa Valley | √ | - | √ | - | - | - | - | - | - |
| 8. Penrith LEP No 201 (Rural Lands) | - | - | - | - | - | - | - | - | - |
| 9. Penrith LEP 1998 (Urban Land) | - | - | - | - | - | - | - | - | - |
| 10. IDO No. 2 - City of Penrith | - | - | - | - | - | - | - | - | - |
| 11. IDO No. 93 – Penrith | - | - | - | - | - | - | - | - | - |
| 12. Penrith LEP No. 226 | - | - | - | - | - | - | - | - | - |
| 13. Wollondilly LEP 1991 | - | - | - | - | - | - | - | - | - |
| 14. Wingecarribee LEP 1989 | - | - | - | - | - | - | - | - | - |
| 15. Draft Wingecarribee LEP 2009 | - | - | - | - | - | - | - | - | - |
| 16. Sydney Metropolitan Plan | √ | n/a | n/a | n/a | n/a | n/a | n/a | n/a | √ |
| 17. Draft Subregional Metropolitan Plan: North-West Sector | √ | n/a | n/a | n/a | n/a | n/a | n/a | n/a | √ |
| TOTAL: | 5 | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 4 |

Table 2: Plan Content Analysis Criteria: Land Use Controls

| Land Use Plan | Criteria: Traditional Peoples & Community Participation | | | | | |
|--|---|------------------------|-----------------------|--------|-------|-------------------------|
| | Recognition local & international communities | Traditional/Indigenous | | | | Community participation |
| | | Comanagement | Traditional land uses | Access | Other | Referrals |
| 1. Blue Mountains LEP 1991 | - | - | - | - | - | - |
| 2. Blue Mountains LEP 2005 | - | - | - | - | - | - |
| 3. Gosford City Council IDO No. 122 | - | - | - | - | - | - |
| 4. Hawkesbury LEP 1989 | - | - | - | - | - | - |
| 5. Hornsby Shire LEP 1994 | - | - | - | - | - | - |
| 6. Draft Penrith LEP 2008 | - | - | - | - | - | - |
| 7. SREP No 13 - Mulgoa Valley | - | - | - | - | - | - |
| 8. Penrith LEP No 201 (Rural Lands) | - | - | - | - | - | - |
| 9. Penrith LEP 1998 (Urban Land) | - | - | - | - | - | - |
| 10. IDO No. 2 - City of Penrith | - | - | - | - | - | - |
| 11. IDO No. 93 – Penrith | - | - | - | - | - | - |
| 12. Penrith LEP No. 226 | - | - | - | - | - | - |
| 13. Wollondilly LEP 1991 | - | - | - | - | - | - |
| 14. Wingecarribee LEP 1989 | - | - | - | - | - | - |
| 15. Draft Wingecarribee LEP 2009 | - | - | - | - | - | - |
| 16. Sydney Metropolitan Plan | √ | - | - | - | - | - |
| 17. Draft Subregional Metropolitan Plan: North-West Sector | √ | - | - | - | - | - |
| Total: | 2 | 0 | 0 | 0 | 0 | 0 |

Table 3: Plan Content Analysis Criteria: Traditional Peoples & Community Participation & results

ⁱ Changes to the NSW *Environmental Planning & Assessment Act 1979* mean that SEPPS now include former Regional Environmental Plans. Also, standardization of LEPs across NSW is occurring with the aim of having a single LEP per local government area. Each new LEP is to be in a standard form, including standard zones and definitions.
