



## Mapping Community Values

*The Landscapes and Policy Hub assessed community values towards conservation and development in the Lower Hunter Region of NSW using a research approach that provides spatial information for use in the regional planning process.*

*This independent research is contributing to the regional sustainability planning for the Lower Hunter, jointly undertaken by the Australian Government and the Government of NSW. The research was funded by the Australian Government through the Sustainable Regional Development Program and National Environmental Research Program (NERP), which supports science that informs environmental policy and decision making.*

### Key Research Outcomes

- The study demonstrated a robust, statistically valid method for spatially representing values communities assign to a landscape or region, including their conservation values and development preferences.
- Areas of high and medium matters of national environmental significance were highly valued by survey respondents for conservation and considered highly inappropriate for residential or industrial development.
- Biodiversity conservation was generally rated as an important issue of concern by survey respondents in the Lower Hunter. However, community preferences for the implementation of biodiversity offsets differed in a number of areas.
- Sixty one percent of respondents disagreed that coal seam gas mining was an acceptable form of land use in the region.
- The most frequently cited threats to regional sustainability planning were constraints on landuse, lack of a standardised approach to biodiversity offsets, and lack of a coordinated approach.

### 1. What did we do?

We demonstrated a technique for collecting information about what the community thinks and values about biodiversity conservation in a way that can be spatially represented and included in the regional planning process.

The study had three key objectives:

1. To identify and map the values assigned by the community to natural and built features. Community values broadly refer to the values that individuals assign to places in the landscape (for example, aesthetic, recreation, biodiversity), as well as the development preferences that individuals assign to places in the landscape (for example, residential, industrial, tourism).
2. To demonstrate a robust methodology for capturing community values for natural and built features, which can be applied in multiple regional planning contexts.
3. To provide information and a series of policy recommendations to inform the Lower Hunter Regional Growth and Conservation Plans, including a reliability check of sites considered for conservation and regional development.

## 2. Why did we do this study?

The purpose of the study was to develop a robust, replicable method for mapping community values for regional sustainability planning, using the Lower Hunter Region of New South Wales as a case study area. Comparatively few spatially explicit tools exist for understanding and mapping community values for regional sustainability planning. Mapping community values is useful as it provides a spatial understanding of community values with ability to overlay them with other mapped layers. The survey results and maps are scientifically defensible and socially acceptable, and therefore can support the development of policy options and planning strategies.

## 3. How did we collect the data/information?

To map community values there were two key steps:

1. A community appraisal (qualitative) to identify key issues and opportunities with respect to regional sustainability planning. This consisted of one-hour semi-structured interviews with regional planning practitioners identified as key stakeholders.
2. A mail-based survey (quantitative) of urban and rural residents to understand community values and attitudes toward conservation and development planning.

The research approach is based on a widely accepted Public Participation Geographic Information System methodology for mapping community values for natural and built landscape feature. We achieved a survey response rate of 39.3% (393 completed surveys returned from the sample of 1,001).

## 4. What have we found?

Of the 25 issues listed in the survey, those of concern to the highest proportions of survey respondents were:

1. Insufficient coordination between land-use, conservation, transport and infrastructure planning;
2. Lack of accessible public transport in regional centres;
3. Lack of integrated transport planning; and
4. Biodiversity (the variety of native plants and animals) decline as a result of development.

The issues of least concern out of those listed were:

1. Negative impacts from the construction of new roads such as the Hunter Expressway;
2. Establishment of new corridors for biodiversity conservation;
3. Rezoning of private land for biodiversity conservation; and
4. Laws that exist to limit native vegetation clearance.

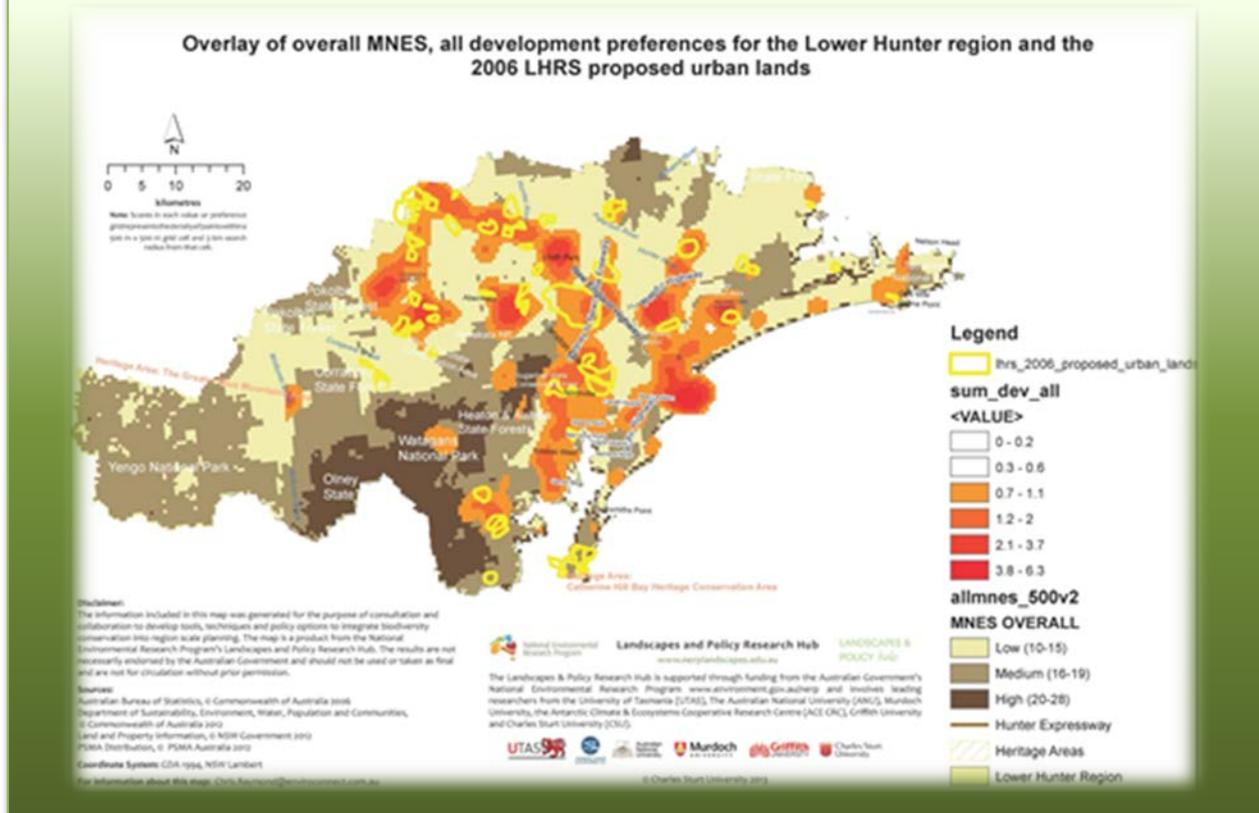
Survey respondents valued areas with matters of national environmental significance for conservation and considered such areas highly inappropriate for development. Conservation of these areas is likely to have community support. Conversely, development that threatens those values will be contested. This was evident in the Catherine Hill Bay area where urban development is proposed under the 2006 Lower Hunter Strategy.

To address potential land use conflicts, we recommend:

1. Identifying conflict areas in relevant planning documents.
2. Developing and publicising a policy that demonstrates how areas of identified conflict will be systematically considered at key stages of the planning and approval processes.
3. Understanding and documenting the nature of the land-use requirements and conflicts to ensure areas of matters of national environmental significance are appropriately conserved.



## Example of Spatial Output



An example of a spatial output – an overlay of hotspots of matters of national environmental significance and acceptable development preferences.

### 5. Policy recommendations and future directions

Respondents support further research and co-ordinated approaches to regional sustainability planning, including:

1. Liaison between local, state and federal governments to identify and evaluate the impacts, including cumulative, of development on matters of national environmental significance.
2. Collaborative government funding of research to forecast demand for residential development over the next 20 years and different options to accommodate growth including increased urban density, rehabilitated mine sites and greenfield areas that avoid impacts on matters of national environmental significance.
3. Understand the economic and social factors that drive the 'suburban dream' and preferences for large suburban and peri-urban blocks, including effective management responses and identify effective policies to manage this preference into the future.
4. Investigating into the need and utility of whole of catchment scale assessments of development impacts including socio-economic and environmental considerations.



## 6. Where to from here?

In June 2013, we completed the study and presented the final report to the Department of the Environment. The report, including the maps showing the social value and development preference hotspots (Appendix D), is available on-line at: [www.nerlandscapes.edu.au/publication/mapping-community-values-regional-sustainability-lower-hunter-region](http://www.nerlandscapes.edu.au/publication/mapping-community-values-regional-sustainability-lower-hunter-region)

In September 2013, almost 100 planners and local government officers attended the Hunter and Central Coast Regional Environmental Management Strategy Seminar, where the mapping community values study was explained and the results presented. The NSW Government is incorporating the results into the Lower Hunter Regional Conservation Plan and the Lower Hunter Regional Growth Plan.

## 7. Who are the researchers involved?

### Dr Christopher Raymond

(Charles Sturt University) Dr Christopher Raymond is a Research Fellow in the Institute for Water, Land and Society at Charles Sturt University and Director of Enviroconnect Pty Ltd.



### Professor Allan Curtis

(Charles Sturt University) Professor Allan Curtis is the Professor of Integrated Environmental Management at the Institute for Land, Water and Society, Charles Sturt University.

### Where can I find out more?

**Dr Christopher Raymond**

☎ 0423 299 986

[Chris.Raymond@enviroconnect.com.au](mailto:Chris.Raymond@enviroconnect.com.au)

**Professor Allan Curtis**

☎ 02 6051 9730

[ACurtis@csu.edu.au](mailto:ACurtis@csu.edu.au)

### Further Reading:

Raymond C & Curtis (2013) *Mapping community values for regional sustainability in the Lower Hunter*, University of Tasmania, Hobart Tasmania.

Available from: <http://www.nerlandscapes.edu.au/publication/mapping-community-values-regional-sustainability-lower-hunter-region>

### About the NERP Landscapes and Policy Hub

The Landscapes and Policy Hub is a research collaboration that focuses on integrating ecology and social science to provide guidance for policy makers on planning and management of biodiversity at a regional scale. The research hub is developing tools, techniques and policy options to integrate biodiversity into regional scale planning.

The University of Tasmania hosts the multi-disciplinary research collaboration that is one of five research hubs funded to study biodiversity conservation by the [National Environmental Research Program](#) (NERP) for four years (2011-2014).

[www.nerlandscapes.edu.au](http://www.nerlandscapes.edu.au)

