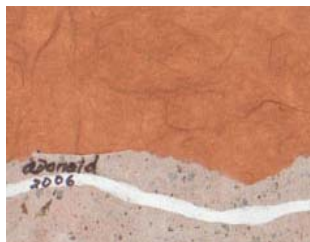


Living the Resources Boom: Towards Sustainable Rural Communities

ALCOA FOUNDATION'S CONSERVATION AND SUSTAINABILITY
FELLOWSHIP PROGRAM



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Contents

Community identity is a powerful and volatile locus for economic, environmental and social processes. It informs local policy, influences development, helps attract tourists and new residents; it can be both empowering and limiting, can be both cohesive and divisive, and is a central element of environmental and social sustainability. The overarching aim of this research component of the Sustaining Gondwana project is to improve our understanding of the strengths and limitations of community identity in order to facilitate sustainable communities able to negotiate economic, environmental and social changes in ways which will work for the long-term benefit of all members. Specifically, this research engages with the communities of the Shire of Ravensthorpe in Western Australia currently undergoing profound change brought about by the advent of large-scale mining in the area. The arrival of this new mining project has been accompanied by significant demographic, economic, social and environmental change. Through an emphasis on local experiences and perceptions this study seeks to address the lived complexities of this change, and the attendant construction and role of community identity.

This working paper touches on some of the predominant benefits, costs and tensions associated with the arrival of Ravensthorpe Nickel Operation as identified through in-depth interviews with over sixty 'pre-mine' Shire of Ravensthorpe residents. In doing so the fundamentally uneven nature of this change and its associated opportunities is brought to the fore along with three key challenges for the 'development' of sustainable rural communities.

Acknowledgements

Thank you to the many generous people in the Shire of Ravensthorpe who have made time to share their experiences and insights with me. You have taught me much. In particular I want to thank my Ravensthorpe friends for their wonderful hospitality and truly memorable visits.



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The mining boom and rural Australia

It is no secret that Western Australia is in the midst of a sustained 'resources boom.' Since 2000 the minerals sector's contribution to the Gross State Product has doubled, and indeed mining at present constitutes seventy percent of the state's export revenue (ABS 2008a). In addition, planned resource development in Western Australia recently passed the \$100 billion mark (Department of Industry and Resources 2007). A response to the demands of ongoing extensive development in China and India for example, this existing and proposed resources output is primarily located in regional and rural Australia, with 'projects extending beyond traditional mining provinces to areas like the Great Southern and South West' (Lawson 2008a).

Most importantly, the mining boom involves profound, forced economic, social and environmental change in regional and rural communities. The extent of this and the manner in which it occurs is closely linked to industry preferences for fly-in/fly-out (FIFO), residential, or hybrid workforces; and the various ways in which mining corporations, and specific mine sites, interpret and act upon corporate social responsibility agendas. Regional and rural benefits are often anticipated and measured (and sometimes assumed)ⁱ in terms of economic development while social aspects are often conflated with infrastructure gains. Economic and related infrastructure opportunities, however, cannot be understood in isolation from the broader social and cultural dimensions of local communities (Little 2002; Panelli 2001; Stayner 2005), just as 'development' must be interpreted and evaluated in the context of regional and rural sustainability.

Given the extent of the current and predicted resources boom, understanding the various and complex ways in which changes brought about by the mining industry are played out, negotiated and experienced in regional and rural communities is crucial. A rich understanding of this is central to 'environmental sustainability' where environmental refers to the totality of built and natural, social and cultural, public and private contexts in which we live our lives. This term is used in place of 'sustainable development,' extensively

critiqued as inherently contradictory, if not narrow in scope, in order to acknowledge sustainabilityⁱⁱ as necessarily inclusive and broadly conceived.

The contexts constituting the environment do not merely overlap; they are enmeshed and mutually constitutive, unfolding in complex dialogic relationships in turn requiring in-depth qualitative analysis. More specifically, as articulated in Jones and Tonts' (1995) model (adapted from Yiftachel & Hedgcock 1993), the three social components of 'sustainable rural systems' are equity, community and rurality. This working paper contributes to our understanding of the ways in which the resources boom is lived in rural communities in terms of the day-to-day experience of local residents, allowing consideration of the broader 'environment' and the place of equity, community and rurality. It presents findings from a larger two-year case-study of the Shire of Ravensthorpe, Western Australia, examining rural change, senses of place, and the production of inclusive, sustainable community identity. As will be seen below, Ravensthorpe is a highly relevant, but also highly specific, example of the ways in which the resources boom plays out in a rural community. Certainly, the specificities of the Ravensthorpe experience are attracting interest as a general 'test' case for upcoming mining projects (Lawson 2008b) and for developing regional infrastructure 'solutions' (Department of Industry and Resources 2008).

Introducing the Shire of Ravensthorpe

The Shire of Ravensthorpe, 550 kilometres south-east of the capital city of Western Australia, covers some 13 000 square kilometres, of which two-thirds has been set aside for National Parks and Nature Reserves (Shire of Ravensthorpe 2005). Of particular local (also national and international) importance is the Fitzgerald River National Park (see Figure 1, below) acknowledged as an area of especial botanical diversity (Department of Environment and Conservation 2008). The park is the heart of the Fitzgerald Biosphere sub-region encompassing the towns of Hopetoun and Ravensthorpe and recognised in 1978 for its diversity of flowering plants by UNESCO's Man and the Biosphere initiative (South Coast Regional Initiative Planning Team 2004).ⁱⁱⁱ Agriculture, primarily broad acre cropping and wool

production, and, at present, mining are the principal industries (Shire of Ravensthorpe 2007) along with an emergent tourism sector. The population is distributed in four geographically separate locations:

- the town of Ravensthorpe (seat of local government) and surrounding farming area;
- Hopetoun, a coastal community, fifty kilometres from Ravensthorpe with a pre-mine population in 2001 of 357 people (ABS 2001);
- Jerdacuttup, a small, second-generation broad acre farming community also approximately fifty kilometres from Ravensthorpe town—while not a town as such, Jerdacuttup has its own school, hall and sporting facilities; and
- Munglinup, a farming community which is co-located in the neighbouring Shire of Esperance.



Figure 1: Ravensthorpe Hopetoun District.

Source: Shire of Ravensthorpe (<http://www.ravensthorpe.wa.gov.au/maps>)

In March 2004, after a lengthy and extensive feasibility process beginning in 1997, BHP Billiton approved commencement of the Ravensthorpe Nickel Project to be located 35 kilometres east of Ravensthorpe at Bandalup Hill in Jerdacuttup. Consisting of an open-cut mine and hydrometallurgical process plant and requiring an operational work force of 650 staff the venture has an expected ore reserve lifespan of twenty-five years (Ravensthorpe Nickel Operation 2008). Officially opened in May 2008 the Ravensthorpe Nickel Operation (RNO)^{iv}, at an estimated cost of A\$2 800 million (Department of Industry and Resources 2008, p28), is Australia's largest nickel laterite mine and processing plant (Clark 2007). Though the Shire has a long history of mining this project is the first modern, large-scale mine in the area. Annual contained nickel production capacity is estimated at up to 50 000 tonnes, with a further 14 000 tonnes of MHP (a mixed nickel cobalt hydroxide intermediate product) per annum (Ravensthorpe Nickel Operation 2008).

BHP Billiton has opted for a residential workforce as opposed to a FIFO system. Offering this choice is seen in the industry as a potential drawcard in a highly competitive labour market ('Chamber' 2008), while at the same time locally-based workforces are seen as 'more stable' (Ravensthorpe Nickel 2004). The residential workforce is, to some extent, a reversal of the 'extreme form of the separation of the place-of-work from both place-of-residence and place-of-spending' which disadvantages many rural resource communities' (Stayner 2005, p. 126). As such, it represents a significant opportunity, and challenge, for the region. In May 2008, upwards of 300 employees and their families were residing in the region^v (Ravensthorpe Nickel Operation 2008).

The current and expected influx of new residents has made Ravensthorpe Shire one of Australia's fastest-developing local government areas (Department of Industry and Resources 2008). To date, the majority of residential mine employees have opted to live in the Shire of Ravensthorpe, with Hopetoun by far the favoured place of residence, setting a clear trend upon which further estimates (and infrastructure development) are based.

Once the operational staff are fully residential the mine has the potential to double the population of the Shire of Ravensthorpe (Western Australian Technology and Industry Advisory Council 2004; Lloyd 2005;

Department of Industry and Resources 2008) and according to current estimates has already trebled that of Hopetoun.^{vi} Ravensthorpe Shire President Brenda Tilbrook (cited in Lawson 2008b), placed the Hopetoun population in May 2008 at around the 1000 mark (up from a pre-mine population, as noted above, of 357) with an expectation that this figure could again double in the next five years (as RNO consolidates its residential workforce through staged phasing out of FIFO options). Importantly, this increase has been rapid: in the space of one year the Hopetoun population rose from 586 (in 2006) to 1 100 people (in September 2007) (LandCorp).

The Australian mining industry has a long association with regional development—principally in providing jobs and contributing to infrastructure—and RNO is no exception particularly given the emphasis on establishing a residential workforce of this magnitude. An ‘infrastructure package’ negotiated between the Department of Industry and Resources and a range of other State Government agencies, Shire of Ravensthorpe, and BHP Billiton has seen the provision of, for example, an all-weather air port, a primary school in Hopetoun, and improvements to local and State roads (Western Australian Technology and Industry Council 2004). More recently, as the result of a ‘joint initiative between the State Government and BHP Billiton Iron Ore’, Ravensthorpe District High School is to receive a \$500 000 upgrade (McGowan 2007). Jointly funded by the State Government, Federal Government and BHP Billiton, other scheduled multi-user community infrastructure includes upgraded water and power supplies along with a new wastewater treatment plant for Hopetoun. Provision of infrastructure in support of RNO as residential project has involved a complex and often troublesome coordination of government and industry contributions, along with a fraught negotiation of private/corporate and state responsibility around unexpected contingencies, such as the doubling of the required operational workforce from 300 to 650 announced in September 2006 (BHP Billiton 2007c)^{vii}, the lack of formal childcare in the area, and difficulties providing an adequate and reasonably priced power supply for the expansion of the towns of Hopetoun and Ravensthorpe. Overall the project has been subject to a highly-publicised infrastructure ‘lag’ or ‘gap.’ For example, the delayed construction of an adequate sewerage/waste water plant to service the

population increase in Hopetoun^{viii} in turn prevented further housing and business construction necessitating an interim hybrid residential and FIFO workforce, and frustrating the much needed and highly anticipated expansion of local business.

While national and international forces and capital flows beyond the control of rural communities have long shaped local social and economic conditions (Stayner 2005), and though mining is itself a traditional rural industry, RNO—exemplifying the trends noted above—constitutes a dramatic, rapid, and ongoing externally-driven change to a rural shire. For the majority of pre-mine Shire of Ravensthorpe residents, including a substantial portion of those who do not work in the resources and allied industries, ‘the mine’ is a ubiquitous and ongoing feature of daily life. The term ‘pre-mine’ is used here to demarcate those residing in the area prior to the construction of RNO from those newer local residents who have arrived as a result of either the construction or operation phases, or as part of allied industries.^{ix} This articulation of ‘pre-mine’ as fundamentally different from ‘post-mine’ is part of local thinking, signalling the centrality of the mine—as watershed—in community life.

Crucially, the changes both directly and indirectly wrought by the arrival of the mine are differentially experienced across and within the three communities foregrounded here, namely Ravensthorpe, Hopetoun and Jerdacuttup.^x This working paper demonstrates aspects of this complexity touching on some of the predominant benefits, costs and tensions associated with the arrival of the mine as experienced by pre-mine local residents. In particular, employment, physical environments, population growth and community stand out as key focus areas for this group. Concentrating on the experiences of those living in the area before the arrival of the mine is not to suggest that the experiences and perceptions of post-mine residents are unimportant. Nor is it intended to suggest that this experience constitutes the full social field in which change of this nature is played out. At the same time, there are alternative equally valid and important ways of approaching lived experiences of the resources boom to reflect both the variety of subject positions informing (and produced by) the experience and the multiplicity of ways in which community can be constructed.

These would include, for example, the ways in which living the resources boom in Ravensthorpe, or elsewhere, is informed by class, gender, age, sexuality and ethnicity.^{xi} While some of these are implicated here, greater attention is required to elucidate the full depth of the experience.

At this point also, it is necessary to keep in mind the difficulties associated with theorisation and application of 'community' as analytical tool, and with 'identifying' specific communities. These difficulties emerge from the recognition that communities are ongoing, dynamic and normative constructions as opposed to stable, a-historical and a-political 'entities'. The problem of defining 'community' and in particular of identifying a given community is to some extent acknowledged in the scholarly literature on mining and corporate social responsibility (see, for example, Kapelus 2002; and Jenkins 2004). How one defines community has much to do with delineating who is included and who is left out, just as the act of identifying a community in many respects brings it into being. Territorial communities are far from homogenous; places, as the literature widely attests, can house more than a singular community (see for example Massey 1993). Though this working paper, given the above, cannot hope to offer a full analysis, this overview of selected issues from the perspective of the 'host' community, conceived broadly in territorial terms, is a valuable means by which we can enrich our understanding of the changes wrought by the minerals boom in rural Australia.

Methodology

This working paper draws on a range of primary, public-domain documentary and cultural materials along with in-depth, semi-structured qualitative interviews with sixty pre-mine local community members, both male and female, hailing in particular from Ravensthorpe, Hopetoun and Jerdacuttup^{xii}, ranging in age from mid-twenties to mid-seventies and from a variety of backgrounds. It is important to keep in mind that many interviewees have affiliations and long-term connections with more than one territorial (or other) community in the Shire, thus demonstrating that communities are not tidily contained by reference to place. While some were conducted over the

telephone, the interviews were predominantly undertaken face-to-face during several visits to the Shire between February 2007 and May 2008.

During this time the construction phase was coming to a close (though there were large numbers of contractors in the area in the first half of 2007) and the mine was moving through a commissioning/start up process with production anticipated [in 2007] for early 2008 (2007a). Substantial housing development had occurred in Hopetoun with in-migration of mine and allied industry employees well underway as detailed above.

Interviewees were selected to capture diversity of experiences and subject positions and were asked open-ended questions in relation to community identity and the social and cultural changes occurring in the Shire. Particular attention was given to the inclusion of 'everyday' community members along with those with more visible community profiles and roles. This is in part to address an oversimplifying tendency in much community research and also, for example, in many CSR approaches, to privilege higher-profile community members as representative of the community at large. Targeted-sampling via direct invitation was used to achieve this broad range of perspectives together with a snow-balling technique where appropriate to this aim. Opportunities were also provided for local residents to self-nominate for interview (as did a small group all of whom were interviewed).

With interviewees' consent the interviews were taped and transcribed. Analysis involving interpretative strategies and analytic generalisation (Yin 2003; Miles & Huberman 1994) is ongoing; as indicated above the findings presented here are offered as a summary of common themes identified across these interviews. This research privileges 'lay' and 'personal' experience as providing important insights into the experience not only of living in a resource-affected community, but also as embodying broader social processes. At the same time, it is understood that experience itself is discursively constructed. Names and other identifying markers have been withheld in order to protect interviewees' privacy.

Broader perceptions, contexts, and transformations

The majority of interviewees from each of the communities engaged with here confirm a sense of generalised local benefit from the arrival of the mine for the Shire at large. These benefits are typically specified as improved local employment opportunities, infrastructure upgrades and increased potential for social vibrancy and local progress. In terms of personal experience, however, discussants are ambivalent in their appraisals. Across the Shire pre-mine residents express a complex and nuanced 'accounting' in terms of benefits and disadvantages, in the process mapping a highly geographically uneven social dynamic around the arrival of the mine and the attendant changes to the local environment, in the inclusive sense outlined above. In broad terms, this change is experienced as part of what appears to be a fundamental reconfiguration of these communities and their relationships to each other.

Hopetoun, as the residential locus for mine employees and families, is being transformed from retirement and seasonal holiday town into a place described in the media as, for example, 'yet another WA mining boom town' (Parker 2007, p.14). Pre-mine residents interviewed also describe a shift in Hopetoun's identity from 'sleepy,' 'peaceful' 'retirement' town to 'small mining town'.

Hopetoun is experiencing not only substantial and rapid population growth, but also an extensive cultural and environmental transformation as a result of (relatively) large-scale housing developments and significant demographic change (discussed in more detail below). While Hopetoun has received a massive population boost, Ravensthorpe is experiencing much less growth and is effectively being displaced as the population centre of the Shire. In 2006 Ravensthorpe town had a population of 438, while Hopetoun's population at that early stage of development had risen to 586 (ABS 2007c; ABS 2007a) and up to over 1000 by May 2008 as noted above. Ravensthorpe town's status as service centre is also under threat as retail shops, a primary school, police station, and substantial recreation centre, for example, are constructed in Hopetoun.

This emphasis on Hopetoun, also discussed in more detail below, is a source of considerable dissatisfaction on the part of Ravensthorpe residents, many of whom were looking forward not only to a sizeable addition to the

town's population but also to expansion of the town's role as service centre. Jerdacuttup, on the other hand, has experienced a reduction in an already small and declining population. As one farming resident pointed out, the construction of the mine has meant:

“four farms bought up, four less families, four less sets of kids, four less crops in”.

Though this comment, particularly in relation to families and children, is more about the potential of the farms to support families with children, it encapsulates a very real reduction in the viability of a small farming community. Reduced grain yields, for example, place the local grain bins at risk of closure. In the words of another local farmer:

“They've taken 10 000 acres of the best grain production country out of the delivery bin”.^{xiii}

Concurrently, Jerdacuttup is being reshaped around the mine site, which for many local residents is seen as usurping Jerdacuttup's identity as farming community. The Honorary President of the Jerdacuttup Community Association wrote, on behalf of 'We, of the Jerdacuttup community', in a letter with sixty-five supporting signatures sent to the Ravensthorpe Shire concerning the proposed renaming of Jerdacuttup Road: 'Jerdacuttup Road is an important aspect of the community's history and identity which is in danger of being forgotten completely with the influx of a new population who only associate this area and community as Ravensthorpe Nickel Operations' (Goldfinch 2007). Similarly, another Jerdacuttup resident in a separate letter to the editor made the point that 'No longer are we the community of Jerdacuttup, we are "That Place Next To The Mine"' (Mollet 2007). The mine site can be seen, smelled and heard from the surrounding farms (see Figure 5 page 19) just as the Jerdacuttup population (and in particular the primary school) is closest to the mine and at greatest risk of exposure to pollution.

Local Employment Opportunities

One of the key benefits associated with the arrival of RNO, as noted above, is opportunities for local employment which can take a variety of forms over the life of the project: for example, there is generally shorter-term

employment in construction, allied and service industries; direct employment with BHP Billiton; or employment with companies subcontracted to BHP Billiton for operations tasks (consistent with the trend toward outsourcing emerging in the mining industry in the 1990s). There are significant differences in benefits, remuneration, status and career paths associated with each of these forms of employment. In March 2008, BHP Billiton had ‘70 employees who were locals prior to the opening of the operation [...] employed in a range of roles from truck drivers to administrative positions’ (BHP Billiton pers comm 2008). Pre-mine residents thus make up just over ten percent of the operational workforce occupying predominantly less-senior positions.

Of course, pre-mine residents are also employed in allied industries so that the overall number of mining-related jobs taken up by this cohort is greater than seventy. In some cases these local employment opportunities have meant that young people from each of these communities—the minimum employment age at the mine site is 18 years—have been able to remain in the community at least for the near future, just as others see possibilities. As one interviewee put it:

“My older children are eyeing that mine off and thinking: ‘oh great, there might be a job there for us’ “.

As another interviewee noted, this has benefits for the broader community:

“There’s an opportunity for our kids to value add to the community that brought them up”.

Operational staff, undertaking long shifts of ten and twelve hour days,^{xiv} are relatively well paid and seen as in secure employment, in particular when working directly for BHP Billiton. As one interviewee pointed out, her partner was able to move out of seasonal shearing work into mine employment, which not only provides regular work but is also less physically demanding and attracts a much higher rate of pay:

“It will be a different lifestyle and I think it’ll be good for my partner, the lifestyle he will be leading”.

An expected benefit for the local farming community is the opportunity for ‘off-farm employment,’ identified by Smailes (1995) as central to the future of rural communities. While a number of local farmers have been able to take

advantage of this opportunity doing so requires broader enabling circumstances, such as an ability to reduce or re-allocate existing (often fulltime) farm commitments.

At the present time, local farm labour shortages—a product not only of RNO in particular but also of the resources boom in general and attendant national skills shortages—make it difficult for many farmers to take advantage of this opportunity.

This shortage of (experienced) farm labour is a source of real hardship in the community with farming families (wives and children) shouldering increasing workloads, and in some cases has encouraged changes in farming practice to reduce reliance on seasonal labour. Particularly when involving ongoing other commitments as it often does for farming communities, this off-farm employment can be very wearing. As one farming resident reported:

“A lot of the wives, when it first started, did a bit of cleaning and things which has been beneficial financially to each family. But it’s been particularly draining. You know they do 12 hour shifts and cleaning is physical, really physical work. They’re just totally buggered and then they can’t become involved in community because they’re too tired”.

As this description indicates, and as confirmed by several interviewees, local employment on the mine, even at this potentially reduced rate, has resulted in lower participation rates in volunteer community work in Jerdacuttup, in turn, as one farming interviewee described it, ‘reducing the quality of community.’ This is a significant loss (Haslam McKenzie 1999), particularly in small rural communities in which community tasks are not only undertaken by a small pool of volunteers but also are essential to maintaining quality of life.

The shortage of local workers is felt also by local council (Shire of Ravensthorpe 2007) and local businesses. In addition, the arrival of the mine created a substantial workload increase for local council.^{xv} Interviewees from each of the communities commented on this aspect. One interviewee succinctly summarised the situation as follows:

“The mine opened up employment opportunities but against that, trying to find workers, trying to compete with wages, is near impossible”.

Aside from making it difficult for local businesses to take advantage of the increased custom in the area by expanding services, the shortage of labour for many important local jobs, such as cleaning the schools, has led to an increased burden on the local communities with women taking on these roles simply because they cannot remain undone.

Though increased local employment is cited as one of the overall benefits, there is at the same time, specifically in relation to BHP Billiton employment, which offers the security and remuneration benefits noted above, widespread disappointment over the number of jobs available to pre-mine residents and dissatisfaction with recruitment practices which are seen as disadvantaging local applicants. The following encapsulates concerns expressed by many interviewees:

“BHP are saying they’re going to employ locals, and in actual fact the figures look good for locals but it’s new locals, not old locals”.

Again, many interviewees commented unfavourably on the online application system which, they point out:

“puts local applicants in with the rest of the world”.

As another interviewee explained:

“I put in a job application. It was overlooked. It was one of the thousands that didn’t even get a flicker. [...] I felt as if I had worked for years for them as a community member, as a volunteer you know doing things and when it came to the crunch they wouldn’t even read my resume”.

On the other hand, being local and ‘on the spot’ has been a key advantage in other experiences of gaining employment, just as some positions are available only to residents in the area. For many interviewees who had sought employment, local networks (as a means to circumvent or more successfully operate within the online process) figured as an important aspect of securing work. From BHP Billiton’s perspective, this local difficulty in securing work arises from a ‘poor fit of skills of the applicant to the available role on site’ (BHP Billiton pers comm 2008). At the same time, this poor fit means that successful pre-mine residents are likely to hold less-skilled and lower-paid jobs.

The lack of formal childcare services along with RNO's generally inflexible and long working hours has made it difficult for local women with dependent children to take up employment opportunities. This is part of a broader phenomenon: as recent ABS (2008a) statistics show, 'many of the new jobs created by the resources boom are full-time, male positions'. Receiving wide media coverage, this lack of formal childcare has been a particularly vexed issue with significant consequences for local women's access to employment.

While a temporary childcare centre—operated by the Young Men's Christian Association (YMCA) assisted by BHP Billiton (Shire of Ravensthorpe October 2007)—opened in early 2008 this centre gave priority to BHP Billiton employees. Though a permanent centre, also operated by the YMCA, offering substantially more places, in some estimations up to 90, and potentially addressing the needs of the broader cohort of Hopetoun women is set to open in September 2008 (YMCA 2008), this service is geographically too distant for farming women to benefit from unless they find work in Hopetoun itself. Similarly, Ravensthorpe women require a childcare centre in Ravensthorpe if they are to avoid a one hundred kilometre round trip to make use of the Hopetoun facility which is not only prohibitively expensive but would extend the already very long working day for mothers and children.

As this brief overview suggests, the opportunities for local employment are unevenly distributed in terms, for example, of geographical location and gender, just as the opportunities come at a community and individual cost.

Built Environment

As indicated earlier, accommodating the significant and rapid population increase has led to dramatic changes in Hopetoun where the great majority of local mine staff reside. This influx has required a substantial addition to local housing stock—as at March 2008, 180 new properties had been completed with a further 27 under construction (BHP Billiton, pers comm. 2008). The predicted overall RNO demand is for 370 homes in Hopetoun (LandCorp). Mary Ann Waters estate is expected, over five stages, to provide 500 lots (MacTiernan 2007); with 273 sold in three stages by late

2007, 173 going to BHP Billiton (including a 54-unit site) and the remainder to the public (often on a ballot system) and various government agencies such as the Department of Housing and Works (LandCorp). The estate includes Seaview Village, an 'eco-village' of chalets and apartments (all of which are the property of BHP Billiton) along the ocean edge of the estate. The majority of the mine housing, however, is traditional 4x2 and 3x2 homes (BHP Billiton 2007b) (see Figure 4 page 19). In addition, one lot in this estate has been rezoned to enable a small set of shops (MacTiernan 2007).

For reasons beyond the scope of this paper, the development of Mary Ann Waters Estate has involved complete clearing of the land (see Figure 3 page 18). Though interviewees apportion responsibility for this in a range of ways, the fact of this clearing has received extensive criticism as 'out of character' for the town (see Figure 2 page 18 for a sense of 'Old' Hopetoun) and as an example of blatant disregard for local input garnered throughout the consultation process. As one interviewee summarised the situation:

"The various bodies, like the various contractors, whether they'd be government departments or just construction contractors have a chore to do and whether it's to lay a pipeline or put up an electric line or whether it's to clear land for housing, the community keeps on saying only clear the minimum and retain as much vegetation as you can. ... But they don't seem to grasp that concept".

RNO residential staff live predominantly in this new estate, dominated by BHP Billiton housing in a limited range of repeated styles interspersed with a small number of private residences. This area is referred to by numerous pre-mine residents, among other appellations, as 'BHP Billiton town'. The design of the estate, in addition to clearing noted above, is the cause of much concern and dissatisfaction. Overall, interviewees from across the Shire talked of the new housing as 'alien' to the local landscape. The following captures just some aspects of local disapprobation:

"We're not the city. There's room for a rural area. They just have to build like rural rather than like a city suburb".

"Like we all have water tanks. Why haven't the new town put in water tanks to all those houses?"

“We don’t want all those blasted great limestone walls all over and around the countryside”.

“It looks like a suburb of Perth, which it was not supposed to be like”.

These concerns emphasise a sense of loss of rurality, of becoming like the city, like ‘somewhere else’. There is also widespread negative comment regarding the development of the small shopping area in this new estate, seen as a means to replace the existing main street shopping area and as evidence of an ongoing spatial separation of the communities.

This population increase is accompanied not only by increased housing stock but also by associated infrastructure such as roundabouts for traffic control, a new (fully-automated) petrol station, and police station. These additions, especially in a community the size of Hopetoun, constitute major alterations to the built environment and, as a consequence, to senses of place.

A substantial number of residents, both young and old, see in this infrastructure a loss of the very characteristics that drew them to the town:

“But the reason why everyone came here was because it was the town it was. We didn’t come for the hustle and bustle. Telling us we’re going to bring all this new good stuff to you: we didn’t want that stuff. We didn’t want their schools and community big flash halls. We just love the old world of Hopetoun”.

According to several interviewees, this release of public residential lots meets a pre-existing, largely frustrated pre-mine demand for land. This has occurred, however, in a climate of substantially inflated local land and house prices. In addition, as described above, the land release has occurred within an estate many pre-mine residents interviewed here find highly unsatisfactory, just as some interviewees have expressed concern that lots in the release closest to the ocean were all pre-sold to RNO.

Pre-mine residents with holiday homes in Hopetoun have taken the opportunity to rent them and thus profit from the increased rents. As a result many previously empty houses are occupied. This has also led to changes in

the ways non-Hopetoun residents interact with the Hopetoun population with, for example, a reduction in traditional holiday-season get-togethers.

One interviewee, used to holidaying with other local friends each year in Hopetoun, commented that:

“It’s really changed Hopetoun for us too. Everyone (with a holiday house) has rented their houses out because the rent’s good. Over summer time it was just dead for our group of friends”.

At the same time, interviewees from Hopetoun and further a field have pointed out that the rent increases have made it difficult for some pre-mine residents—particularly those not on a ‘mine’ wage—to rent in the area. Some have been forced to move in with relatives while others have been forced out of the area altogether. This necessarily brief overview of changes to the built environment indicates a range of significant social consequences in terms of residents’ experiences and usages of place.



Figure 2: ‘Old’ Hopetoun, January 2007.
Photograph: R.Mayes



Figure 3: Development of Mary Ann Waters estate, September 2007.
Photograph: R. Mayes



Figure 4: BHP Billiton 'Traditional Housing Stock' in Mary Ann Waters, September 2007.
Photograph R. Mayes



Figure 5: View of the mine at Bandalup Hill in Jerdacuttup from adjoining farm November 2007.

Photograph R. Mayes

Natural Environment

Impacts on the natural environment also feature strongly in discussions of changes in the area. While this concern is expressed by residents in each of the communities, these concerns are, again, geographically specific. Broadly, there is widespread concern about (potential and actual) damage to the Fitzgerald River National Park and Hopetoun beaches as a result not only of increased but also inappropriate usage of these fragile environments by newcomers perceived to be unaware of, or unconcerned for, this fragility. Environmental concerns for Jerdacuttup centre around the proximity of the mine to site and its relationship to the quality / potential contamination of farming land and impacts on local health. As one farming interviewee explained, many are:

“worried about things like pollution for their children and nasty things in the wind, and also for their farms; things being wind borne and landing in paddocks on crops or sheep”.

These concerns present a custodial burden. Numerous interviewees talk about having to keep an eye on the mine particularly in the face of ongoing

disputes and queries, of trying to take responsibility for keeping track of changes to the environment, and of the debilitating level of emotional, social and economic resources this requires:

“We can’t just ignore what’s going on. But I mean it’s pretty difficult you know? We’ve got our own lives to run”.

As the above comments suggest, community change in the Shire is also about coming to terms with a fundamentally different kind of neighbour. The mine and the surrounding farms, for example, are entirely different kinds of businesses not least in terms of their relationships to the land. In the words of a farming resident:

“Just learning to deal with it is something. It’s so far removed from what we’re normally dealing with. We don’t get each other”.

Another farming resident describes the differences as follows:

“We speak different languages and have different problems”.

Exacerbating this is a widespread perception that the relationship is dominated on the part of RNO by a public relations agenda. For example, in the experience of one interviewee:

“They talk the talk but don’t deliver action down the line”.

Population changes

Importantly, the population growth, driven by the needs of RNO, has, as noted briefly above, highly specific consequences for Hopetoun, Ravensthorpe and Jerdacuttup not least of which is displacement/marginalisation of pre-mine senses of community and place. Within this overall reconfiguration, Hopetoun arguably is experiencing the most dramatic changes in terms of not only increased population but also shifts in demographical features. In 2006, according to census data, 46% of the Hopetoun population was aged between 24 and 54 years of age, up from 41.5% in 2001 (ABS 2001; ABS 2007a). At the same time, the percentage of residents in the 15-24 age-bracket had risen from 3.4% to 6.8%, while the percentage of residents 65 years of age and over had fallen from 21% to 14.2%. Substantial additions to the local population have occurred since 2006

as demonstrated above; however, this increase can be reasonably expected to continue if not intensify this trend toward a younger population.

Not only is the current population younger in general, it is also more diverse. The RNO operational workforce has been recruited from around the globe, a practice supported by changes to migrant quotas and immigration policy intended to address the shortage of skilled workers (ABS 2008b). Again, a comparison of 2001 and 2006 Hopetoun census data demonstrates this shift: in 2001 overseas-born residents constituted 15.1% of the Hopetoun population rising to 19.5% in 2006. Again this trend is likely to have continued in the population growth since 2006.

This increase in the number of overseas-born residents also reflects changes more broadly experienced Australia-wide as a result of the mining boom not only in terms of overall increase but also in relation to country of origin. Current highly-represented countries of origin are, in Western Australia for example, England, New Zealand, South Africa, Malaysia, and Singapore rather than European countries such as Italy which dominated previous periods (ABS 2007b). This shift is reflected in the Hopetoun statistics which show South Africa as the third-highest country of origin for overseas-born residents following England and New Zealand. Importantly, these migrants are more likely than Australian-born residents to have higher levels of education, be married and have children (ABS 2007b). Other changes to the rural demographic include, as a result of the mining boom, a shift from self-employed (agriculture) to wage and salary employees (mining) along with potentially higher levels of disposable income for the latter (this would depend on the type of farming and the ways in which income is reported). Of relevance also is the higher level of mobility associated with mining populations (ABS 2008b).

Many pre-mine residents express a positive attitude about the shift towards a younger population, seeing it as a desirable injection of life. As one Hopetoun resident describes the influx:

“It’s just wonderful [to have] new young families. Before, we were a very aged community. Businesses no longer have to struggle because there are not enough people. We have more

infrastructure that everyone enjoys such as bitumen footpaths and the new school”.

Similarly, another Hopetoun interviewee endorsed the change in this manner:

“Hopetoun before the mine was 60% over the age of 60: bowls, CWA. Now [there are] prams, kids, noise, laughing and joking. All to the good though hard pressed to get a parking spot in front of the store”.

The changed demographic is also viewed positively in terms of providing:

“a better cultural mix. We can learn from their cultures. So there’s a really good opportunity to grow”.

A commonly-mentioned benefit of this larger and younger population is its impact on the range and viability of sporting teams. This is a significant benefit given the social significance of organised sport in rural communities. While organised sport in Hopetoun has received a boost, the new Hopetoun Primary School has meant that children who would in the past have attended Ravensthorpe Primary School are no longer part of after-school Ravensthorpe teams some of which have experienced a decline in numbers. Similarly, Jerdacuttup children are no longer as central to the viability of Hopetoun after-school sports, and according to several interviewees the training times were reorganised to best suit the Hopetoun participants effectively disadvantaging Jerdacuttup children. Members of other sporting and recreation groups have noted a welcome increase in members but also have expressed frustration over the transience of these members.

Community changes

Importantly, this rapid, externally-driven changing demographic, along with the specificities of changes to the built environment, is perceived by a large number of interviewees as instrumental in creating a new and very separate community, as opposed to extending the existing community. Exemplifying this perception, one Hopetoun interviewee described the situation as a ‘Tale of Two Hopetouns’:

“There’s old Hopetoun and new Hopetoun and both are mutually exclusive. There doesn’t seem to be any common

ground between old Hopetoun and new Hopetoun and I'm talking about everything from how it looks to how the older longer-standing parts of the community are interacting with the newer parts of the community. There seems to be very different spheres".

Similarly, another Hopetoun interviewee commented that:

"This side of town has been called Hopetoun and that new subdivision has been called Capetoun".

A substantial number of interviewees from Ravensthorpe and Jerdacuttup also refer to this division in Hopetoun, along with exacerbated inter-place rivalry. While rivalry has long existed in the area especially it would seem between Ravensthorpe town and Hopetoun, the uneven distribution of benefits and costs creates new grounds for animosity. Many Ravensthorpe interviewees, for example, commented on this particularly in relation to a scheme advanced by RNO to address the 'expectation that new services would be able to keep pace with the increased demand from what will become a different mix of population within Hopetoun' by encouraging 'the establishment within Hopetoun of new businesses that are relevant to a fast growing community' via 'a financial incentive' (Ravensthorpe Nickel encourages new businesses in Hopetoun 2006). As interviewees understand the situation:

"BHP are making a major commitment to Hopetoun towards infrastructure and Ravensthorpe are feeling left out of that".

"I have really noticed a sense of frustration by the Ravensthorpe community [around] the fact that BHP has so clearly and so publicly acknowledged that they will push Hopetoun and their spending towards Hopetoun for the next 25 years. [...] We need power and we need infrastructure just as much".

"I think the mine's probably put a bit of a wedge in the community more so than anything and I don't blame the mine. It's only human nature when you see everything going to one spot and Ravensthorpe just keeps getting kicked in the arse, yeah".

These views cover the range of responses evinced by the larger cohort, from a sense of being left out to a perception of being damaged by the emphasis on Hopetoun. Infrastructure development is seen as consolidating Hopetoun as residential locus, just as the financial incentive for businesses is not just about privileging Hopetoun but is also a mechanism by which Ravensthorpe businesses are potentially lured to Hopetoun. There is also a pronounced awareness of an ongoing marginalisation of the broader pre-mine community.

Overall, a strong sense of difference, of 'us' and 'them', comes through in the experiences and perceptions of pre-mine residents, in particular around issues of wealth, opportunity, and cultural norms. The following comments not only typify this perception but also indicate a range of sites of difference:

"There's a lot of miners versus locals, miners^{xvi} get this but the locals don't".

"There's obviously community dividing, creating a community of us and the mine".

"They're [miners are] having their \$100 night [at the pub] compared to us that sits back and has a quiet beer "

"At last school holidays there were a lot of BHP workers all went on overseas holidays. Our kids here don't go on holiday. If they go on holiday they go to Busselton or Perth or Esperance or, you know, rarely out of WA let alone overseas".

In a similar vein discussions with interviewees from each community elicited numerous anecdotes highlighting perceived and experienced differences in relation to, again for example, the desires, expectations and cultural norms of new residents as a unified cohort and also in relation to specific racial groupings. Though organised sport may provide an opportunity for wider community interaction, it can also operate as a site of difference.

For example, a number of interviewees have pointed out that after-school sport is not as much of a social occasion for newer residents as it has been, and continues to be, for many pre-mine residents whose understanding of this is predicated on a familiarity with rural, small-town living. For these interviewees, the experienced non-participation of newer residents in training sessions is itself a significant marker of cultural and racial difference.

The experience of living the boom in the Shire of Ravensthorpe, for a large proportion of pre-mine residents interviewed, is characterised by a pervasive, sense of loss of control and marginalisation, succinctly encapsulated as follows by local residents talking about Hopetoun:

“I think it will pan out because the locals will just come to terms with the fact that it’s not their town anymore”.

“Hopetoun is not our dear little Hopetoun anymore”.

This sense of being overwhelmed is understandable given that the pre-mine population is outnumbered three to one by newcomers with further growth expected. However, this sense of dealing with a greater force is prevalent throughout the Shire, and variously nuanced, as the following comments from a range of interviewees suggest:

“You know they will do it the BHP way regardless [of local opinions or advice] I think. So it’s bigger than all of us”.

“Once BHP bought into this thing, I think most people realised that one way or the other they were going to do what they needed to do”.

“I mean obviously everywhere needs to progress, but there has been a sense of forced change I think for all the communities”.

“I don’t think they care at all about the community feeling, you know the people who actually live here. I don’t think that they actually care about that”.

The issue of powerlessness is in part a response to the large numbers of government departments involved in regulating and monitoring a mining project, just as BHP Billiton—the ‘world’s largest natural resources company’ as a result of the merger between BHP and Billiton in August 2001 (Ravensthorpe Nickel Operation 2008, p. i)—is a global company of many levels. As one resident said, there is an overall sense of dealing with a ‘faceless hydra.’ Similarly, this experience reproduces what Jenkins (2004, p.26), for instance, refers to as a ‘predominant world-view of the mining industry’ as “free-market capitalism” or “neo-liberalism” on a global scale, where no collectives or structures such as government or community can

impede the free development of mining operations or the pure market logic that everyone must benefit from such activities’.

Community is always in process (Singer 1991) and the communities represented here are far from passive recipients or victims of these changes. Interviewees from each community articulate a clear sense that there is a need for, and (potential) benefit from, proactive engagement with the various manifestations and agents of change. A further important aspect of this community dynamic will thus be local re-imaginings of community identity both internally and in relation to the broader Shire community. For example, recent local fundraising by the Jerdacuttup Community Association involving the auctioning of ‘Jerdy’ numberplates can be read as an assertion of local identity in the face of these changes, as of course can the resistance to the proposed re-naming of Jerdacuttup Road. Similarly, residents, among other approaches, participate in public meetings, publish articles and letters to the editor in the local newspaper and make submissions to local council and other governing bodies. The arrival of RNO thus brings into existence and consolidates the pre-mine community as a distinct group, though at the same time there is evidence of intra-community fragmentation around individual members’ relationships to RNO.

Broadly, the community tensions touched on here, and the experiences of marginalisation, draw attention to the inherent contradictions in the notion of a (erroneously singular) ‘host’ community. On the one hand, ‘host’ connotes a freely-extended invitation to a ‘guest’ with the balance of power residing with the host. On the other hand, ‘host’ also readily connotes a more symbiotic, if not parasitic, relationship.

Conclusion

The ways in which the boom is experienced in the Shire of Ravensthorpe are more complex and nuanced than there is space to recount here. This necessarily brief discussion, however, offers clear confirmation of highly specific social and cultural consequences for each of the identified territorial communities and for the relationships among them, following the arrival of RNO. The benefits and costs are far from absolute in that a benefit

for one group is often a cost for another, and vice versa. Moreover, any given community experiences both benefits and costs, which are not easy to (pre)determine and just as difficult to weigh-up. The above demonstrates this in terms of 'concrete' aspects of change such as increased local opportunities for employment. Most importantly, however, the experiences documented here demonstrate changing community identities and senses of place along with shifts in local balances of power. Equity, community and rurality stand out as key, closely interrelated elements of the changes experienced. 'Community' itself is confirmed as a highly relevant notion for rural residents, as has also been found in other studies (see, for example, Liepins 2000). Concurrently, the above overview confirms the environmental totality of built and natural, social and cultural, public and private contexts, providing some indication of their interconnections in the day-to-day experiences of local residents living the boom.

In the same way that 'inappropriate policy responses' are recognised as a product of centralised decision-making by those 'unaware of local variations and conditions' (Tonts & Jones, 1997), evaluations of rural development must take account of local variations and conditions at a micro-level. After all, what some might refer to as 'minor' or 'personal' irritants might be best understood as symptomatic of deeper restructurings and shifts in the balance of power, embodying systemic inequalities and attendant conflicts. In the same way, the tendency to explain and delimit local inequalities and criticisms as 'teething problems' which will disappear of their own accord underestimate the importance of community and place while overestimating the curative powers of infrastructure.^{xvii} It is thus crucial that the relationships between economic change and social and cultural contexts and responses are considered in terms of highly local and ongoing articulations. However, while the specificities of the engagement with a global mining giant, the particularities of negotiating and experiencing rural change, are a product of local contexts, broader issues such as challenges to pre-existing identities, loss of local control, shifts in power relationships, may be seen as components of this experience in many locations/instances. Moreover, while RNO is somewhat unusual to date in its usage of a hybrid residential/ fifo (and bus-in, bus-out) workforce, this mode may well be taken

up widely by the industry, particularly given the dynamics of a tight labour supply.

Clearly, successfully negotiating the resources boom for local communities is about more than access to multi-user infrastructure and community amenities. It is fundamentally about 'community', both as abstract value and as lived construction. The profound changes summarised here represent a significant challenge to traditional rural senses of community (and our understanding of rural community) widely believed to underpin proactive and adaptive regions offering quality lifestyles for all residents (see, for example, *Regional Western Australia: A Better Place to Live*). Regional development policy as encoded in *Regional Western Australia: A Better Place to Live* (2003) foregrounds 'cohesive communities' as a key outcome.

The Ravensthorpe experience draws attention to the necessity of approaching this goal in terms of not only levels of volunteer work, the role of carers, support for families and children, the needs of indigenous populations, seniors and those with disabilities, along with the development of an 'enhanced lifestyle' for youth as foregrounded in this policy. While each of the above are certainly important, the Ravensthorpe experiences also demonstrate the importance of an holistic approach which takes into account present and future senses and manifestations of community as shaped—that is, created, transformed, fragmented, erased—by regional development. Doing so must 'simultaneously involve material concerns and studies of culture and power' (Liepins 2000, p 339). Similarly, there is a pressing imperative to examine and acknowledge the ways in which these senses and manifestations of community in turn shape regional development. As noted above, far from a static or 'natural' condition, sense of community is dynamic and responsive; understanding how senses of community, and constructions of communities, are challenged, deployed and recreated is a fundamental component of understanding rural change motivated by the mining industry / external change.

As Davison (2008, p. 191) reminds us, questions of power are central to environmental sustainability. Addressing uneven power relations is a crucial aspect of identifying the parameters and substance of environmental sustainability, just as distributions of power underpin its enactment as 'always

in process' goal. Consequently it is important not only to recognise the shifts in power, as identified here for example, and to acknowledge the uneven distribution of benefits and costs, but also to include them in the 'story' of change. This story needs to be not only inclusive of everybody's experience but also needs to confront the tensions and inequalities played out in these experiences. In this way, perhaps, questions at the heart of sustainability—namely 'what should, can, will be sustained?' and 'whose interests will this serve?'—can be brought to the table. After all, the political function of 'sustainability,' as an 'essentially contested' concept, lies in its ability to 'hold antagonists in dialogue' (Davison 2008, p. 191).

It is crucial that we firstly acknowledge the structural tensions and imbalances and, secondly, persist in dialogue in order to find a way forward so that living the resources boom not only benefits all residents in resource-affected communities, but also so that the costs are properly taken into, if not brought, to account. The current resources boom undoubtedly has the *potential* to bring substantial, and long-term, benefits to rural Australia. The Ravensthorpe experience suggests three pivotal challenges for resource-affected rural communities, along with planners and policy makers, if this is indeed to come about. These far from simple challenges can be summarised as:

- achieving effective ongoing accounting of the social and cultural benefits and costs;
- understanding the politics of community (difference, integration and cohesion); and
- mitigating losses of local control.

Meeting these interrelated challenges is central to 'developing' sustainable rural communities.

ⁱ Benefits to local communities as a result of mining activity are far from guaranteed, just as social and environmental damage has often been shown to outweigh economic benefits (Kapelus 2002). CSR is precisely a 'pragmatic response' to criticism of this nature (Jenkins 2004).

ⁱⁱ It is also the case that 'sustainable' is itself a slippery concept with diminishing critical power (see Davison 2008). Also, for a discussion of conceptual issues and social trends problematising the sustainability of rural communities in general see Black, 2005).

ⁱⁱⁱ This group has since been renamed as South Coast Natural Resource Management. For an overview of the Biosphere Reserve program see Buckley (2007) Sustaining Gondwana Working Paper Series, Issue 4.

^{iv} According to BHP Billiton Community Newsletters, Ravensthorpe Nickel Project (RNP) is distinct from Ravensthorpe Nickel Operations Pty Ltd (RNO) described as a 100% owned BHP Billiton company that is managing development of RNP. From 2007, as the commissioning and start-up phase gained momentum, newsletters refer simply to Ravensthorpe Nickel. Documents produced for the official opening of the mine, however, refer to the opening of Ravensthorpe Nickel Operation. In the interests of concision and consistency, RNO is used here to signal the operational mine.

^v The 'region' incorporates the Shires of Ravensthorpe and Esperance.

^{vi} The expectations for population growth made in 2004 and 2005 were based on an original estimated work force of 300-350 (updated in 2006 to 650). Population increases are difficult to predict given that residential employees have the choice of living in either the Shire of Ravensthorpe or the Shire of Esperance, just as there is some movement between these sites as staff and families re-evaluate their options. Similarly, the number of family members accompanying employees is difficult to determine.

^{vii} The operational workforce is comprised of both BHP Billiton employees and contractors directly involved in mine operation (BHP Billiton 2007b).

^{viii} The Hopetoun wastewater facility was given approval in September 2007 with commissioning expected towards the end of 2008 (Kobelke & Ravlich 2007).

^{ix} As one newly-arrived interviewee commented this means that some very recent arrivals by virtue of preceding the mine are more 'local' than those who came after.

^x Though Munglinup is also affected by the arrival of the mine and attendant changes it has received much less attention in this research than the other three areas largely due to project time and organisational constraints.

^{xi} These social categories are not discrete nor are they necessarily mutually compatible or of equal importance for a given individual, just as the weightings may change with varying contexts. For example, as the findings presented here suggest, gender informs the experience of local employment just as it informs one's sense of territorial community.

^{xii} To date, interview numbers in the Munglinup community are considerably smaller than those for the other communities.

^{xiii} The land area of the four farms comes in fact to a total of 13,556 acres (pers. comm).

^{xiv} Working hours are subject to change and often depend on the specific area of employment, and whether or not one is a 'day' or 'shift' worker.

^{xv} In recognition of the additional workload, the positions of Manager Planning and Development Services, and Manager of Community Services were funded for a set period by the Department of Industry and Resources as part of the MoU, The Western Australian government also funded a two-year project development officer position ('Ravensthorpe Seeks Officer' 2003; 'Council Appoints' 2004).

^{xvi} The category of 'miner' is problematical in that many of those working at the mine, particularly those who work in processing and corporate roles, do not see themselves as 'miners.'

^{xvii} See, for example, 'Mining town teething problems to be expected, minister says', ABC News, 2006, <http://www.abc.net.au/news/stories/2006/06/23/1670113.htm> accessed August 2008.

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Sustaining Gondwana is a strategic initiative of Curtin University of Technology that has been funded by the Alcoa Foundation's Conservation and Sustainability Fellowship Program and by the University. Its aim is to research conservation and sustainability issues along the south coast of Western Australia, from Walpole to just east of Esperance. The vegetation and fauna of this area is so diverse that it is considered to be one of the world's bio-diversity hotspots. The five year program, which is connected internationally with other Universities and Sustainability Institutes, was launched in November 2005.

The initiative is co-ordinated by three cabinet members, Professors Daniela Stehlik, Jonathan Majer and Fiona Haslam McKenzie. Six postdoctoral fellows are being appointed to work on issues related to this region, and their research will be augmented by activities of the cabinet members themselves as well as their graduate students. It is anticipated that the findings will be published in journals, conference proceedings and books. However, there is a need to communicate early findings, data sets and activities of group members in a timely manner so that stakeholders can benefit from outputs as soon as they become available. This is the aim of the *Sustaining Gondwana Working Papers Series*, which will be produced on an occasional basis over the life of the initiative.

The papers are not subject to peer review, but are edited by cabinet members in order to maintain standards and accuracy. Contributions from researchers and practitioners who are active in the region of focus can also be considered for publication in this series.

For further information about Sustaining Gondwana or the program Working Paper Series, please contact: strongercommunities@curtin.edu.au or visit <http://strongercommunities.curtin.edu.au>

For the global program see:

http://www.alcoa.com/global/en/community/info_page/Foundation.asp

ISSN: 1834-6278

