

Glimpses of Sustainability in Perth, Western Australia: Capturing and Communicating the Adaptive Capacity of an Activist Group

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Abstract

Community-based activism has proven to be one of the most effective ways of addressing social and environmental injustice, the root causes of unsustainability. Today, millions of sustainability activist groups (SAGs) are actively engaged in various social and environmental initiatives around the world. To date, however, there have been few photographic narratives from SAGs depicting adaptive capacity—the ability to maintain various assets under changing circumstances in order to fulfill desired objectives. This paper responds to this gap and offers a glimpse of one of the longest running activist initiatives in Perth, the state capital of Western Australia.

Keywords: Adaptive Capacity, Digital Photography, Sustainability Activism, Wetlands

1. Introduction

Five decades ago, the renowned ecologist Garret J. Hardin predicted that unlimited population growth and human exploitation of the environment would inevitably bring about “the tragedy of the commons,” and that such a tragedy could only be avoided either through government intervention or privatisation (Hardin, 1968). Unfortunately, the continuous escalation of unsustainable development can be understood as an unfolding of Hardin’s prediction. However, what has also been made clear is that neither the state nor market actors have been fully able to, nor have the desire to, curtail environmental degradation.

Since the root causes of unsustainability—social and environmental injustice—are often associated with the failure of the government or the private sector, community-based activism has emerged as an alternative but profound way for societies to respond to issues of unsustainability. Hawken (2007) estimates that there are millions of sustainability activist groups (SAGs) around the world. In Australia, a conservative estimate indicates that there are more than five thousand SAGs in the country. Around five hundred such groups exist in Perth, the capital city of Western Australia (Dhakal, 2010).

SAGs are often formed when friends and neighbours who share a common interest decide to take on a local sustainability issue, ranging from managing local nature reserves to mounting public campaigns to save endangered flora and fauna. These groups generally operate in challenging circumstances where a lack of available resources limits what they can realistically achieve and how long they can continue. Thus, adaptive capacity—the ability to respond to changing circumstances in order to accomplish group objectives—is of paramount significance for successful sustainability activism.

Adaptive capacity is concerned with ensuring the flow of necessary resources—built, cultural, financial, human, natural, political and social—in order to fulfil the SAG’s objectives (Brown et al., 2010). Dhakal (2013) showed positive association between adaptive capacity and the diversity of various resources that are built, maintained, and utilised by SAGs. The descriptions and associated indicators of each of these resources are depicted in Table 1. The particular utility of such a view in the context of SAGs is that the state of the indicators serves as a measure of the group’s accomplishments.

Table 1: Multiple forms of resources relevant to adaptive capacity

<i>Resources</i>	<i>Descriptions</i>	<i>SAGs specific indicators</i>
Built	Manmade physical assets and infrastructure	• Fence, Signpost
Cultural	The worldview and the everyday practices of people in terms of social inclusion, equality and equity (or lack thereof)	• Gender inclusiveness • Democratically elected leadership
Financial	Money or wealth that facilitates productivity	• Funding
Human	Skills and competencies of people	• Skilled volunteers
Natural	Air, land, water, and organisms that abide in a particular location	• Ecosystem protected or restored
Political	Access and connection with power brokers in order to voice concerns and be heard	• Policy influence via ties with local government and politicians
Social	Connections within and outside the group	• Frequency of group meetings • Number of partner organisations

The assessment of resources, however, is often complex. Thus, meaningful visual representation of resources in action is one way to help bridge the theory-practice divide of adaptive capacity. While digital photography has been increasingly explored as a qualitative tool for enhancing sustainable initiatives (Bousé, 2003; Farnsworth, 2011; Hoerberlein, 2012), photographic narratives from an activists perspective that depict adaptation to changing circumstances remain scarce. This paper responds to this gap, and offers a glimpse of one of the longest running activist initiatives in Perth, the state capital of Western Australia.

2. Perth, Western Australia

The town of Perth (Figure 1) was inaugurated in 1829 by Captain James Stirling, who arrived in the vessel *Parmelia* on the shores of Australia (Kennewell & Shaw, 2008). Perth is the state capital of Western Australia (WA), and is now the fourth largest city in Australia. The Perth metropolitan area covers an area of 5,423 square kilometres and has a population of about 1.7 million (ABS, 2010).



Figure 1: Location Map of Perth [URL:
<http://go.grolier.com/map?id=mgoc015&pid=go>]

The state of WA has enjoyed more or less continuous economic growth after the World War II due to unprecedented mining opportunities in the northwest. This has attracted thousands of migrants to WA from within Australia and around the world. The growth of industry as well as the residential, transport and lifestyle needs of the increasing population pose serious threats to city's sustainability (DEC, 2007). At the same time, because of the globally significant floral diversity, the broader Perth region is listed as one of 25 significant biodiversity hotspots of the world (SCC, 2004). Consequently, while the state and private sector have been fixated on the resource boom, the protection of environmentally significant natural habitats has become one of the main issues for sustainability activists. Thus, the contributions of SAGs have been particularly imperative in Western Australia, as government priorities have mostly remained under the shadow of a growing appetite for mining development. For instance, the iconic Kings Park (Figure 2)—one of the largest inner-city botanical gardens in the world—exists today only because of an enormous activist initiative opposing the conversion of the park area into a sporting events venue in the 1960s.



Figure 2: Perth skyline as seen from the Kings Park

3. Hydropolis City

Perth can be considered a hydropolis—a city of wetlands. Wetlands are transitional ecosystems between land and water that support organisms uniquely adapted to the wet environment. The natural functioning of the wetlands supports rich biodiversity as well as provides services such as groundwater recharge, flood protection, and detoxification that become a valuable benefit to the residents of Perth.

Approximately one-quarter of the Perth region is classified as wetlands. While twenty-nine have been deemed nationally important, three have been deemed globally significant and listed as Ramsar sites (Environment Australia, 2001). However, two-thirds of the wetlands in and around Perth have already been lost in the past one and a half centuries, and remaining wetlands are under continual threat from unsustainable development (Dhakal, 2010).

The North and Bibra Lakes in south Perth, for example, are currently under threat because of proposed highway development. In 2000, a government agency announced plans to extend the Roe highway right through the middle of these wetlands (Fig 3). Since then, an activist group has persisted in increasing community awareness about the values of wetlands, and organised street protests and online petitions to stop the unwanted development (Dhakal, 2010). While the activism has certainly been able to delay the construction for more than a decade, the future of these wetlands remains uncertain.



Figure 3: Proposed highway development between the two lakes
[URL: <http://www.savenorthlake.com.au>]

4. A Case of Brixton Street Wetlands

The Brixton Street Wetlands (BSW) are located within a nature reserve about 14 kilometres southwest of Perth's central business district (Figure 4). The BSW has been identified as one of the six high-priority conservation wetlands (Payne, 1993).



Figure 4: Location map of the BSW [URL: http://www.staywa.net.au/img/maps/map_perth_suburbs.gif]

The BSW (Figure 5) is spread over 0.19 square kilometres and is of outstanding botanical significance. As a seasonal wetland, BSW has higher species richness compared to permanent wetlands in Perth. It is home to more than 300 species of plants—equivalent to more than 20% of Perth's flora in only 0.005% of its total area (Phillimore, 2003).



Figure 5: Brixton Street Wetlands in winter

5. The Friends of Brixton Street Wetlands

The Friends of BSW is one of the hundreds of SAGs in Perth that has been actively caring for the environment since 1989. The group initially lobbied for the appropriate assessment and recognition of the wetland's significance by the state environmental agencies. At the time, the wetlands area was under the ownership of Homeswest, a government-housing agency. Homeswest considered the wetlands to be a wasteland and wanted to convert it into a medium-density residential complex.

Thus, the original purpose of the group was to stop the proposed land reclamation of BSW. Because of the mounting pressure from the Friends of BSW, the Homeswest proposal was subjected to an environmental impact assessment (EIA). Recognising the values of the wetlands, the EIA report recommended opposition towards the development, and supported the establishment of a nature reserve to include the BSW (Keighery, 1995).



Figure 6: Celebrating sustainability activism: Brixton style

The persistent activism of the group—enabled by the ability of its leaders to harness connections within the local community and with other SAGs—persuaded the government agency to recognise the BSW as one of the nationally significant ecosystems in Perth. This achievement is often celebrated with annual community events (Figure 6) where wetlands enthusiasts from all walks of life come together to learn about the wetlands and exchange ideas and information.



Figure 7: Convenor of the group: Mrs Regina Drummond

Since being incorporated in 1993, the group has maintained an executive committee comprising of convenor, vice convenor, treasurer, secretary, and three

other executive members. The group's executive committee is democratically elected on an annual basis during the annual general meeting.

The group is led by a dynamic and well-respected female convenor (Figure 7), who has been actively involved with several other SAGs in the region. She firmly believes that even one determined person can make a big difference in the community, and remains driven by the feeling that Perth residents need to re-think how they live every day to save the environment for the future. She received the Western Australian Environment Award 2011 for Rivers, Estuaries and Wetlands for her outstanding contributions in the community for the protection, sustainable use or enhancement of wetland environments.



Figure 8: Member of the State Legislative Assembly: Mr. Chris Tallentire participating in the group activity

Nearly 25 years of continuous activism and presence in the community means the group's activities and events are always in the radar of local politicians. For instance, the minister for the environment has acknowledged the group's contributions at the state level. Several members of parliament who are involved with environmental interests have visited the wetlands and interacted with the volunteers. The office of local politicians is also supportive of the group, and provides colour-photocopying services for free when needed. More importantly, local politicians are keen to be involved in the group's activities and never want to miss a photo opportunity (Figure 8). These collective political resources have wide policy implications for sustainability activism. For instance, a federal sitting Member of Parliament recently visited the BSW and made the announcement to fund the Green Army Project in order to help ecological restoration activities in BSW and other ecologically significant sites (Templeton, 2013).



Figure 9: The aftermath of the 2009 bushfire

Although the group is mainly focused on restoration activities, bushfires (natural or human lit) remain one of the prominent challenges for the group. Since the BSW is a seasonal wetland, areas that are inundated in the winter (Figure 5) dry out completely during the hot summer, which increases fire risk. There have been two major incidents in a past decade (Figure 9) alone, despite collaboration with state agencies in implementing bushfire risk reduction measures. The group is heavily dependent on community members living adjacent to the wetlands to contact the local fire brigade during an emergency.



Figure 10: Volunteers killing invasive weeds with organic pesticide and geo-tagging its location



Figure 11: Community event held in the local library

The group has tried hard to maintain strong relationships with key stakeholders in relation to funding opportunities. It has received grants from a wide variety of sources in the past two decades, including local, state, and federal governments. Non-governmental organisations and educational institutions have also continuously supported the group. Regional environmental networks have been instrumental in helping the group to apply for grants, host a webpage, and organise community events. These events (Figure 11) provide unique opportunities for the group to promote its cause and collect donations by selling informative materials like calendars and greeting cards. However, funding shortages have consistently hindered or delayed many large-scale projects.

Apart from community members who live next to the wetlands, the group also relies on wide a variety of volunteers who bring unique skills and capacities that benefit the overall goal of the group (Figure 10). For instance, some volunteers help out in weeding and geo-tagging the weed's location, while others help out in mending fences, documenting activities or producing newsletters. These volunteers have contributed in the management of wetlands through various activities—collecting seeds, planting trees, surveying flora and fauna, removing invasive weeds, and cleaning up rubbish. The group has had about a dozen regular volunteers at any given time since the 1990s. However, attracting and retaining younger dedicated people who turn up every morning has been particularly challenging for the group in recent years.

Since the BSW is no longer threatened from the future development, the group has embraced education, management and restoration of wetlands as its primary objectives. The group actively engages with local schools to raise awareness about value of the wetlands. It has also adopted many passive wetlands-oriented recreational activities, such as bush walking, bird watching, nature photography, and scientific studies as a way to educate the community about the wetlands. The guided bush-walk with a renowned botanist (Figure 12) has been particularly popular with the community in recent years.



Figure 12: Guided bush-walk with a renowned Botanist Greg Keighery

Since the early 2000s, the group has lobbied hard to find funds to fence the BSW and safeguard management and restoration efforts from unauthorised quad bike riders. The entire wetland is now fenced (Figure 13) and paths have been maintained to minimize the trampling of bush walkers. The wetland is now listed on the Register of the National Estate of the Australian Heritage Commission and the Directory of Important Wetlands in Australia. And finally, BSW is one of the 287 Bush Forever sites, a classification designated for patches with regionally significant vegetation, within the Perth region.



Figure 13: New fence in the southwest corner of the BSW

It is clear that the group has been able to acquire, maintain and utilise various forms of resources effectively for nearly a quarter of a century. In doing so, the group has developed the adaptive capacity required to become a successful advocate of sustainability, and preserve the BSW (Figure 14) for current and future generations.



Figure 14: Signpost, information hut & a lookout as seen from the main entrance

6. Discussion and Conclusion

The intent of this paper was to capture and communicate the contributions of an activist group in Perth towards sustainability goals. We have seen that the Friends of Brixton Street Wetlands has generally operated in challenging circumstances where the availability of essential financial and human resources has been scarce. This scarcity can be attributed to two broad causes.

First, a policy shift towards regional rather than local environmental approach has substantially reduced the availability of funding opportunities and other support for locally operating ECOs in recent years. It is hard to maintain enthusiasm and motivation within a volunteer-dependent organisation without adequate financial resources. A second related cause is that the voluntary contributions of community organisations are generally under-appreciated by state agencies. When volunteers feel that they are the only ones looking after the wetlands, with little appreciation from the government, it becomes difficult to recruit and retain volunteers (Dhakal, 2013).

While the exploratory nature of this paper was limited in scope, we hope it effectively used visualisation as a qualitative method for highlighting the importance of SAGs for urban sustainability, and more importantly, told an intimate story about how these groups adapt in challenging circumstances. This photo essay is also a reminder that while SAGs in Perth have made significant contributions, they could still benefit from the institutionalised support of state, private and community sectors.

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Bibliography

- ABS (2010). *Tight Fit Will Perth Feel the Squeeze?* Stats Talk WA. Canberra, ACT: Australian Bureau of Statistics [ABS].
- Bousé, D. (2003). False intimacy: close-ups and viewer involvement in wildlife films. *Visual Studies*, 18(2), 123-132.
- Brown, P. R., R. Nelson, B. Jacobs, P. Kokic, J. Tracey, M. Ahmed, and P. DeVoil (2010). Enabling natural resource managers to self-assess their adaptive capacity. *Agricultural Systems*, 103, 562-568.
- DEC (2007). *State of the environment report: Western Australia*. Perth WA: Department of Environment and Conservation [DEC].
- DoC (2009). Association Fees. Perth, WA: Department of Commerce [DoC] [URL: <http://www.commerce.wa.gov.au/ConsumerProtection/Content/Business/Associations/Fees.html>]
- Dhakal, S. P. (2010). *Strengthening environmental stewardship in Perth, Western Australia: An investigation of linkages between organisational social capital and information and communication technologies in environmental community organisations*. Unpublished PhD Thesis. Perth, WA: Murdoch University.
- Dhakal, S. P. (2011). Five capitals framework for exploring the state of friends' groups in Perth, Western Australia: Implications for urban environmental stewardship. *The International Journal of Environmental, Economic, Cultural and Social Sustainability*, 7(2), 135-147.
- Dhakal, S. P. (2012). Regional sustainable development and the viability of environmental community organisations: Why inter-organisational social capital matters? *Third Sector Review*, 17(1):7-28.
- Dhakal, S. P. (2013). Fragile environment in need of resilient carers? A case of regional natural resources management in Perth, Western Australia. *Local Environment*, DOI- <http://dx.doi.org/10.1080/13549839.2013.818952>.
- Environment Australia (2001). *A Directory of Important Wetlands in Australia*. 3rd ed. Canberra, ACT: Commonwealth of Australia.
- Farnsworth, B. E. (2011). Conservation photography as an environmental education: focus on the pedagogues. *Environmental Education Research*, 17(6), 769-787.
- Hardin, G. (1968). The tragedy of the commons. *Science*, 168, 1243-1248.
- Hawken, P. (2007). *Blessed unrest: how the largest movement in the world came into being and why no one saw it coming*. New York, NY: Penguin Books.

- Hoeberlein, C. (2012). A photo essay on Senegal: advancing development and a pull backwards by tradition. *Consilience: The Journal of Sustainable Development*, 9 (1), 172 – 180.
- Keighery, B. (1995). *Knowing and managing the Brixton Street Wetlands*. Perth, WA: The Friends of Brixton Street Wetlands and the Perth Branch of the Wildflower Society of WA (Inc.)
- Kennewell, C. and B. J. Shaw (2008). Perth, Western Australia, *Cities* 25: 243-255.
- Payne, J. (1993). *Wetlands in the city of Gosnells*. Report No. WP 160. Leederville, WA: Water Authority of Western Australia.
- Phillimore, R. (2003). Volunteers give wetlands a helping hand. *LANDSCOPE*, 18 (4):45-47.
- SCC (2004). *The swan region natural resources management strategy*. Midland, WA, Australia: Swan Catchment Council [SCC].
- Templeton, A. (2013). Brixton St Wetlands, Forrestfield and Wattle Grove to benefit from Coalition's Green Army. [URL: <http://www.kenwyatt.com.au/brixton-st-wetlands-forrestfield-and-wattle-grove-to-benefit-from-coalitions-green-army/>]