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# Regenerative Development through LENSES with a case study of Seacombe West

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Cover image. Seacombe West design workshop (Image: Authors)

# **Abstract**

Green building and sustainable development efforts are helping to reduce negative impacts associated with the built environment. Yet, current global challenges require societies to move beyond incremental improvements toward truly healthy ecosystems, communities and local economies. Regenerative development is a practice that seeks to build capacity and capability in people, communities and natural systems to renew, sustain and thrive. LENSES (Living Environments in Natural, Social and Economic Systems) is a guiding framework and process for regenerative development that aims to transform the way that people design, develop and live for the benefit of all.

This paper will outline regenerative development, describe the process of using the LENSES Framework, and highlight a project in Victoria, Australia, where regenerative development and LENSES have been used to guide the master planning process.

# Introduction

As the world confronts the 21st century challenges of urbanisation, economic disparity and opportunity, health and wellbeing, biodiversity loss and climate change, among others, the approach to solving complex environmental, social and economic problems will determine the future. While commendable, most of today's sustainability efforts tend to focus on reducing negative environmental and social impacts. As a society there is now the opportunity, if not a pressing need, to move beyond being 'less bad' and shift focus toward creating health and abundance (McDonough & Braungart 2002; Hes & du Plessis 2015; Mang & Reed 2012). Many leaders call for a larger, more holistic effort toward development that pushes beyond sustainability and into the realm of regeneration and regenerative development (Friedman 2008; Lyle 1994; Cole 2012).

Applying a mindset of regeneration to projects provides a way to envision and create ways for humans to enhance and contribute to thriving, living systems across the globe. This shift in perspective is the first, and most important, step (Meadows 1999) in creating a compelling vision for a future that we can all embrace and work toward together.

The LENSES (Living Environments in Natural, Social and Economic Systems) Framework provides an overarching process and specific activities that guide teams through identifying and realising the regenerative potential in a given place or community. The process of applying LENSES is most successful when facilitated by individuals who have developed the capacity for regenerative thinking and who have been trained in using the LENSES system. An overview of the theory, practice and process of regenerative development is outlined below, supported by a case study of the Seacombe West project in Victoria, Australia.

# From a mechanistic to an ecological worldview

There is a growing consensus that the global challenges faced by humanity may be attributed to the linear and often piecemeal approach to all aspects of civilization, from industry to economics, to health and well-being and our built environment. This approach has been attributed to the way in which humanity views the world and is termed a mechanistic worldview. The limitations of this worldview are becoming more apparent as the ecological and social capital of the planet erodes.

An alternative view that is gaining traction is comprised of a systems, or living systems, based outlook, known as an ecological worldview. The ecological worldview is one in which humanity sees the world as a complex, interrelated and interconnected whole. The shift in adopting an ecological worldview includes moving away from competition and individual wealth, and toward a more collaborative approach that generates holistic solutions. Fundamentally, this shift is comprised of a deep understanding that if everything is connected, then humanity only thrives if all elements of the system thrive (Goldsmith 1988; Capra 1997; Berry 1990, 1999; Wilber 2000; Lazlo 1987; Rees 1995; Sterling 2003; du Plessis 2009, 2011).

# Regenerative development

Regenerative development is the process of cultivating the capacity and capability in people, communities and natural systems to renew, sustain and thrive. It is not about maintaining what is, or restoring something to what it was. Rather, it is about co-creating systems and places that have the capacity to evolve toward increasing states of health and vitality. Such places and capabilities are referred to in this paper as *Living Environments*. Living Environments are settings that are thriving, healthy and resilient because their ecological, social and economic systems relate in ways that elevate individual and collective vitality.

### Living Environments' example

Interface's Net-Works program provides economic incentives for some of the world's poorest coastal communities to remove abandoned fishing nets from ocean habitats and then uses the reclaimed materials to produce commercial carpet tiles. The Net-Works program creates local economic opportunities focused on restoring ecological health, while reducing raw material needs for carpet manufacturing. See http://clearabundance.org/interface/

John T. Lyle (1994) was one of the first to envision a methodology of regenerative design that allows for continuous replacement, renewal and rebirth to promote positive outcomes. As early as 1999, Berkebile and McLennan called for a paradigm shift in the building industry to view buildings, developments and the activities within as promoters of healthy ecosystems, stable economies and equitable societies. Laszlo (2008) also stated that we need to find ways to live on earth without destroying ourselves and the natural world. Similarly, Janine Benyus, founder of biomimicry, claims, 'your building project should do at

least as well for ecosystem services as the ecosystem it replaced' (1997). Recently the work of Robinson and Cole (2014), Hes and du Plessis (2015), and Mang and Haggard (2016) has extended our understanding of regeneration, its potential for positive outcomes and methods for regenerative practice. The concept of regeneration extends to economics (Fullerton 2015) and business (Sanford 2011), indicating that the models are inclusive of, and extend beyond place.

The main characteristics of this new paradigm for transformed regenerative communities and places are:

- From separate to aligned with nature:
   A redefined relationship between humans and nature, where humans seek to become contributive, positive collaborators within natural systems, to follow natural laws, and to mimic nature's materials and processes (du Plessis 2003; Benyus 1997; Regenesis Group n.d.; Edwards 2015).
- From harm reduction to benefit creation:
   The goal is to reverse the negative impacts of development and strive for net-positive impacts on human and environmental health, rather than simply causing less damage (McDonough & Braungart 2002). Specifically, development that restores and maintains ecological capacity, ecosystem services and the social fabric of communities.
- Whole systems approach: Revising development processes to be in line with systems thinking, shifting the focus from objects in dynamic systems of the environment or society to a focus on underlying patterns and interdependent relationships between the objects (Regenesis Group n.d.; Senge et. al. 2008).
- Place-based potential: Every place, entity
  or society has its own unique qualities and
  patterns. Geographic, cultural, historic and other
  characteristics vary, as do the sum of their parts.
  Regenerative development seeks processes and
  solutions that reflect, celebrate and enhance the
  unique characteristics of a place (Alexander 1977,
  Mang & Reed 2012).
- Mindfulness and spirit: Fundamental to transforming the world we live in, is an inner shift (Scharmer 2009; Edwards 2015; Laszlo and Brown 2014) to a state of being that is, according to Edwards, 'conscious, creative, compassionate, and connected'.

Within the regenerative model, human development is integrated with natural systems and supports, enhances and celebrates the health and well-being of those living systems. At its core, supporting a thriving future depends on connecting people to the world in which they live. This connection is exemplified through, and builds upon, the Chinese proverb 'give a man a fish and he will eat for a day, teach him to fish and he will eat for a life time, teach him to love the ocean and they will both thrive'. Through this approach, the built environment is seen as another one of nature's biological systems that can generate beneficial relationships between ecological, economic and social dimensions.

# **LENSES Framework**

#### **Overview**

The LENSES Framework is designed to guide teams through the regenerative development process where facilitators guide individuals and groups through a series of activities to help understand context, identify regenerative potential, formulate a plan and implement initiatives. LENSES is not a checklist or a rating system, but rather a facilitated step-by-step process and management system for regenerative development. The process is strengthened by the visual framework that leads users through systems thinking in a way that is accessible, directly applicable and easily tailored to a project's needs.

The framework can be used at many scales – from individuals to organisations and from buildings to communities (Figures 1 and 2). Application of the framework works across a variety of project types including designing a new building, restoring a neighbourhood, revitalising an existing business and improving a floundering community program.



Figure 1. Rendering for Affordable Housing Solutions Demonstration Project, Sioux Falls, South Dakota, USA. The intent of this project, Pettigrew Manor, is to create a successful example of affordable housing that will set a precedent for similar project types. A LENSES Facilitator with Koch Hazard Architects used the framework during a schematic design meeting to introduce the concept of regenerative development, enable holistic thinking and develop guiding principles. The project broke ground in June 2016 (Source: Koch Hazard Architects, 2015).



Figure 2. The Festival Beach Food Forest, Austin, Texas, USA. A community coalition of neighbours, known as East Feast, worked to create this edible landscape amidst a public park. The coalition included two LENSES Facilitators who used the LENSES Framework to identify project stakeholders, communicate regenerative concepts and conduct a site assessment. A groundbreaking ceremony occurred in November 2015 [Source: Mitch Wright, Vista Planning, 2014].

Refer to Further Reading and Resources for more on the LENSES Stories behind these examples.

The chart below outlines key information about the LENSES Framework, based on the LENSES Overview Guide published by the Center for Living Environments and Regeneration (CLEAR, 2016).

Overview	Step-by-step process to actualise regenerative development, non-prescriptive outcomes. LENSES strength lies in its focus on a holistic, systems-thinking process, guiding dialogue and redefining metrics of success.				
Origins	Initially developed in the United States by the Institute for the Built Environment at Colorado State University. Currently, management and ongoing development is through CLEAR.				
Themes	Regenerative development, systems-thinking, place-based design, activities-based process holistic, inclusive, shift away from doing less bad to doing more good, health, vitality.				
Tool format	LENSES Facilitator Manual (book and e-book) including activities and step-by-step instructions for application, additional support available through consultancy. Additional resources include LENSES Rubrics (digital publication) and physical LENSES Frameworks (small handheld, physical frameworks with three lenses that spin).				
Tool process	Three-phase process: Pre-Work, Workshops and Implementation.				
Project types	International application for individuals, organisations, buildings and communities. Application types to date include master plans, commercial and residential buildings, parks, land development, business development and strategy, university course curricula and additional special projects or initiatives.				
Timeframe	LENSES is best used at the conceptual through to design development phases of a project or at renewal stage. The timeframe will vary from project to project and is intended to integrate with a project's existing timeline. While timeframes can vary drastically depending on the size and scope of the endeavor, a typical timeframe* for each phase is as follows:  • Pre-Work: One day to a few weeks  • Workshops: Two days (plus planning and logistics) to six months  • Implementation: Six months to several years  *LENSES has generated positive outcomes for teams in as little as a few hours, while some projects have been utilising the framework for years.				
Eligibility Criteria	None				
Cost	Initial costs are typically associated with professional fees for hiring a LENSES Facilitator and sometimes other expertise, as needed and as determined by the team. Professional fees are subject to local pricing for professional services and depend on project type and duration. Implementation of initiatives varies by project.				
Assessment/ Certification	A project or organisation does not become LENSES certified, as there is no third-party assessment or certification process. Rather, the project team that is going through the LENSES process determines their own initiatives and metrics of success. As part of the LENSES Process, teams evaluate the outcomes of their initiatives and the project as a whole.				
Accreditation	Individuals may become LENSES Facilitators through a training program offered by CLEAR. LENSES Facilitator training, at time of publication, cost US\$1295 per person. Annual membership with ongoing education and access to updated materials is available to individuals who have completed the course. Trained LENSES Facilitators contribute a user fee to CLEAR based on a sliding scale, ranging from US\$100-\$2500 per project.				
Case Studies	Several case studies developed, for various project types, available at CLEAR's website.				
Website www.clearabundance.org					

#### The Three Lenses

The LENSES Framework (Figure 3) is a system made up of three interrelated lenses through which to view a project's context. Each lens has a unique function and serves as a visual aid to help ground concepts and activities. The Foundation and Flows Lenses each include a blank space to encourage users to insert project specific criteria. Additionally, users are encouraged to brainstorm what each term on the framework means in the context of their LENSES project.

The three lenses are described below with an accompanying example of how each lens was applied on the Seacombe West project. Seacombe West is a large residential and mixed-use eco-development in south eastern Australia that is using the LENSES Framework to regenerate this severely degraded site. While the examples below start to describe the outcomes of using LENSES, further information is provided in the detailed case study.

### **Vitality Lens**

The Vitality Lens (Figure 4) represents the degenerative to regenerative fulcrum model and is first used to introduce the concepts of regenerative development to users. It is later re-introduced for brainstorming and identifying regenerative development opportunities, and to lay the groundwork for management and evaluation.

The Seacombe West project team put the Vitality Lens to practice by exploring degenerative and regenerative approaches to money. Through dialogue, the team determined that a degenerative approach would be to invest money with the intent of maximising profit in as little time as possible. Their regenerative alternative was to retain as much money as possible within the site. This would be achieved by using a percentage of the investment as ongoing micro loans to support local innovation, business ideas, art and festivals.

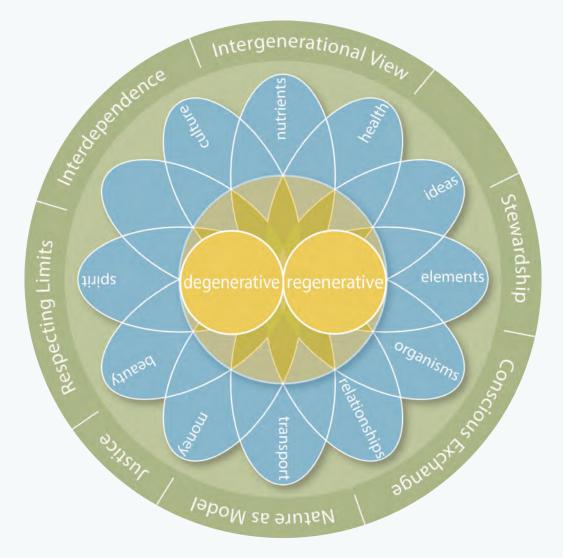


Figure 3. The LENSES Framework (Source: CLEAR, 2016)



Figure 4. The Vitality Lens (Source: CLEAR, 2016)

#### Flows Lens

The Flows Lens (Figure 5) graphically represents interrelated aspects of a system that make up the whole. After reviewing the Vitality Lens, teams will explore how each of the identified flows move in, through, and out of themselves, a place or an organisation. Assessing how these flows move and have changed over time, with a focus on key patterns and relationships, cultivates a deeper understanding of context compared to a business as usual approach.

The LENSES Facilitator for the Seacombe West project led a series of workshops with community members, local government, land owners and indigenous elders to explore the Flows Lens. The facilitator led an activity, guiding participants to consider how each flow moves in, through and out of the project site. Using a series of guided questions and interactive participant voting to distill and refine the outcomes, workshop participants gained a deeper understanding of each flow, as well as ones they created themselves (Figure 6 and 8), in relation to the project.

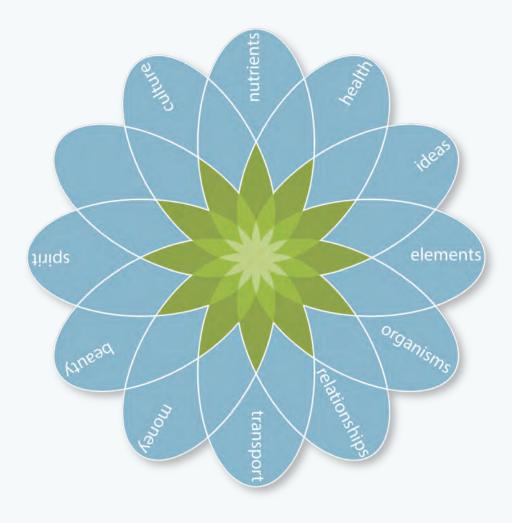


Figure 5. The Flows Lens (Source: CLEAR, 2016)



Figure 6. An activity from workshop two that focused on the patterns and relationships between two Flows over time: Salt and Sand/Soil (Image: Authors)

#### **Foundation Lens**

The Foundation Lens (Figure 7) graphic and activities are designed to engage users in creating a shared sense of commitment. This lens is used after the introduction to the Vitality Lens, building on insights gained from the Flows Lens. Applying this lens, teams explore how the guiding principles and triple bottom line depicted on the lens relate to themselves, their project or organisation. The results are a unique set of values and commitments that serve as a foundation of understanding – a place to return to – for inspiration and guidance on decision making through the ongoing design and construction process.

The guiding principles on the Foundation Lens are adapted from the meta-analysis performed by Andres Edwards in 'The Sustainability Revolution' (2005).

At Seacombe West, the Foundations Lens was explored first with the current owners of the land, followed by workshops with the design team. Project stakeholders were asked to consider how each of the guiding principles, including any they developed on their own using the blank space, related to the project and the triple bottom line. As a result, the team developed the following guiding principles (Figure 8), which have served as non-negotiable values throughout the decision making process:

- Environment: design with and for nature
- Connectivity: transport and electronic
- Building as form: buildings as catalyst and nodes for beneficial intersections of flows
- Culture and community: benefit to culture and community
- Economy/land use: place-based abundant economy
- Interdependence: recognise relationships and connections
- Transparency and education: demonstrate how project can benefit nature.



Figure 7. The Foundation Lens (Source: CLEAR, 2016)



Figure 8. Project-specific artefact of Vitality, Foundation and Flows Lenses, that includes the names of the guiding principles and flows determined by the team to be most relevant for Seacombe West (Image: Authors).

# The LENSES Process

The process of applying the LENSES Framework (Figure 9) to a project consists of three primary phases: Pre-Work, Workshops and Implementation. Together, these phases constitute a comprehensive system for ongoing regenerative development. Each phase is scalable, depending on the scope of a project. The process follows general principles and the flow of design thinking, starting with context-setting activities and leading to ideation and testing. As such, the LENSES Framework is most effective when integrated during the early conceptual and design phases of a project. Activities within LENSES use divergent and convergent thinking processes to expand thinking and recognise patterns and trends.

When integrated into a planning or design project, LENSES provides a reliable framework that prompts a team to enact the actions required to develop a regenerative project. While an integrative process such as LENSES requires more upfront involvement and effort, the quality results and ultimate time savings are well researched (Cross, 2015; Reed, 2009).

#### Pre-Work

The Pre-Work phase is carried out early to develop contextual understanding, reveal key patterns and trends, and serve as a means to identify diverse and representative stakeholders - particularly those that may otherwise be overlooked. Typically a small team conducts the Pre-Work and will use a variety of methods and approaches to gain perspective or insight, including interviews with local subject matter experts and community members, nature walks, visiting museums, drawing from historic photos, collecting economic data, site assessments and soil reports. Topics for Pre-Work span natural history, ecology, culture and economy, with a particular focus on cross-system concepts and patterns. The outcomes of these activities position the team to move into the collaborative Workshops phase with greater clarity and a systems thinking mindset.

As successful regenerative development involves identifying, analysing and creating an array of healthy, vital flows, a project will benefit from diverse perspectives beyond the traditional planning and design disciplines. A core project group using LENSES should seek to include wide-ranging disciplines such as biology, economics, health, horticulture, social sciences, and other appropriate perspectives to proactively offer input and ideas. The greatest regenerative potential is often discovered through these diverse perspectives, particularly in relation to overlooked or degraded human, social and natural systems.



Figure 9. LENSES Process Overview (Source: CLEAR, 2016)

#### Workshops

After the Pre-Work is complete, participants work together to apply the LENSES Framework. Workshops typically last for one to three days, although the number and length may vary depending on the scale and scope of the work. Workshops can be run iteratively as more information is collected. It may be appropriate to discuss different content or dive deeper into a topic with different audiences involved at each iteration. For example, workshops held with core project team members may differ from workshops involving community members. The objectives, however, are consistent. During workshops participants collaborate on various activities designed to set goals, derive guiding principles, consider project issues, brainstorm regenerative strategies and identify potential for positive change (Figures 10 and 11 show project team and community members working through the LENSES process for Seacombe West).

#### **Implementation**

The concepts and strategies created through the LENSES process are carried forward during the Implementation phase. Ideas and plans are tested and adjusted accordingly. The guiding principles and commitments identified in the prior phases serve as the basis for decision-making and evaluation. The Implementation phase ends when significant progress or new developments reveal the need for major changes, to go back to the drawing board, or to renew original plans. Project teams may choose to work through the entire LENSES process again or focus on a select number of activities.



Figure 10. During workshop two, Seacombe West, project team members consider how each Flow (listed on individual pieces of flip chart paper) links to each other, with the intention of eliciting a systems-thinking mindset (Image: Authors).



Figure 11. During workshop three, Seacombe West, community members visit the site to learn about past and current conditions and generate a deeper understanding of place [Image: Authors].

# The LENSES Rubrics

The LENSES Rubrics support the process by providing qualitative metrics to help identify where a project outcome falls on the scale of degenerative to regenerative. The Rubrics are composed of twelve charts and accompanying worksheets. The Rubrics were developed by the Institute for the Built Environment at Colorado State University with input from an extensive group of scientists, economists, researchers, built environment professionals and community members.

The Rubrics are useful at various times throughout the LENSES process. They aid teams in:

- Establishing an understanding of the characteristics and qualities that define degenerative, sustaining and regenerative outcomes
- Pose thought provoking questions to spur inquiry and brainstorming
- Guide teams in setting forward-thinking and holistic goals
- · Identify strategies to achieve those goals
- Evaluate the potential impact of decisions
- Acknowledge areas for improvement in existing projects, programs or other endeavours.

The LENSES Rubrics can be downloaded on the CLEAR website: www.clearabundance.org.

# LENSES and Green Building Rating Systems

Most current green building tools are product-based (i.e. focus on measuring the performance of an end result or product). Due to the on-going emphasis on collaboration, goal-setting and results, tools focused on process have significant opportunities to be effective in promoting a shift in mindset. The process embedded in LENSES allows the framework to become a companion guide for built environment teams seeking to earn certifications such as LEED, Green Globes, Living Building Challenge, BREEAM, EcoDistricts and Green Star. Refer EDG 84 SJ 'A summary of urban assessment tools for application in Australia' for more information on these tools.

# Case Study

Seacombe West is a 680ha residential and mixed-use eco-community being planned on the shores of Lake Wellington, south eastern Australia, three hours from Melbourne. The location was chosen for its potential to revitalise the ecology, create a local economy and engage people with the area. The site had been degrading since the late 1800s due to human-induced activities that allowed salt water to enter the Gippsland Lakes system. While previous conservation efforts have had limited success, the process of regenerative development has been considered for its potential to revitalise the area.

The LENSES Framework was applied through a grant from Carlton Connect for Dr. Hes and Professor Dunbar to facilitate a series of three workshops to define the guiding principles and develop the flows, history and relationships to support the ecosystems and surrounding community in regaining their vitality and vibrancy. This work forms part of Dr. Hes's research into the pragmatic approaches to operationalising regenerative development. Dr. Hes was the LENSES Facilitator throughout the application process. An overview of the LENSES process, timeline and activities are outlined in figure 14.

# **Key Learnings & Initiatives**

Based on the Pre-Work, Workshops and additional research, the team identified critical relationships that needed to be strengthened and key initiatives for design and beyond with a focus on the question:

'What are the critical ideas that could make this place vital, thriving and contributing to Victoria?'

#### Relationship between water, salt and land:

The degeneration over time of the quality of the relationships between water, salt and land was contributing to the degradation of the economic and ecological aspects of the site. In response, the team began examining opportunities to evolve and restore these relationships for the ongoing benefit and revitalisation of the community. Key concepts for design distilled from this analysis were to:

- Establish a more stable environment for ecosystems by elevating the land as a means to introduce waterways and islands to create ecosystem refuges, and using the hydrostatic properties of water to build stable saltwater ways and freshwater lakes.
- Integrate sea grasses and fish stock into new waterways for recreational fishing, carbon sequestration, water quality and soil enhancement, and to stabilise the bottom of the waterway.

History of land and culture: Foster connections between the history of the land and the culture by integrating stories, communication, interpretive displays, community aspirations, innovation and governance, into the design, construction and fabric of the project. The key concept from this analysis was to:

 Develop a strong story of place to serve as a foundation for greater integration and celebration of the history of the land and culture into the project.

**Community development:** Connect and consider the potential for the project to enhance local economic activity around tourism, innovation, education and climate change adaptation. Key concepts translated from this principle were to:

 Develop housing product to be a kit of prefabricated parts for minimal footprint on the land; provide a variety of housing types to meet all demographics and income needs to ensure diversity in the community; create local jobs.

- Use money as a facilitating flow for the development and utilise innovative investment models that ensure there are stable sources of funding for local innovation, festivals, management of water, waste and energy, and for ongoing support of ecosystems. Develop a funding approach where affordability is protected.
- Integrated learning, education, research and community engagement process in collaboration with vocational and higher education institutions.
- Link with educational providers, leading edge information technology companies, and thought leaders to work together for the benefit of the site and the region. Challenge the way things are done through continued collaborative co-design with community, experts, industry, government and residents.
- Demonstrate excellence in integrated energy, waste and water systems in ways that transform the human relationships with these systems; serve as a model and a beacon for others.

**Natural beauty:** Underlying the entire project is the potential to celebrate and enhance the natural beauty of the place.

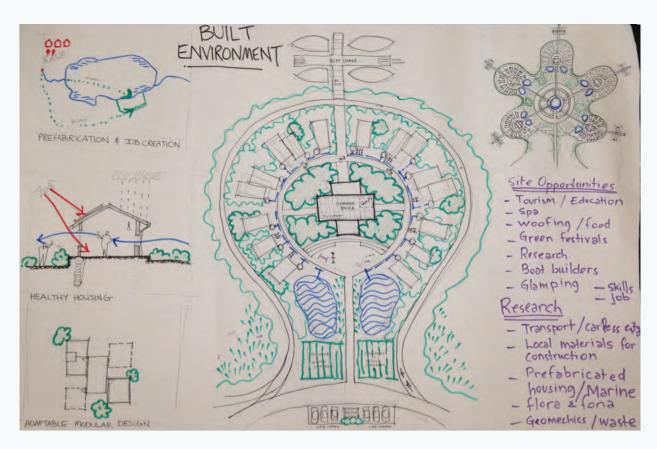


Figure 12. Key outcomes from workshop three, including vignettes of three future on-site activities (top left down - prefabrication and job creation, healthy housing and affordable modular housing). The central image starts to outline a potential commons area, while the upper right hand image is a bird's eye view of the larger development design. The image includes fingers, or nodes, as a critical design aspect to allow for the renewal of healthy land and waterways. The right hand side of the image summarises the site and research opportunities that will benefit the social, environmental and economic facets of the development (Image: Authors).



Figure 13. Final Seacombe West Masterplan. Note that the design idea of the fingers/nodes from workshop three was transferred into the final masterplan. This design elevates the land resulting in much needed waterways, which can benefit soil improvements, wetlands and biodiversity. Approximately 800 housing units are included throughout the development. A community park, shops, business centre, marina, hotel, conference centre and restaurants are located along the central corridor. The development was designed to specifically encourage a social and boating community as well as opportunities for economic viability (Image: Authors).

Timeline	LENSES phase	Lenses used	Activity	Description	Facilitated by
2015	Phase 1: Pre-Work	Vitality Foundation	Introductory workshop	Introduced land owners to key concepts and developed initial understanding of regenerative development principles	LENSES Facilitator
		Foundation Flows	Team formation	Formed a group of researchers in the built environment, social and ecological fields	LENSES Facilitator
		Foundation	Cultural awareness training	The design team was taken through Indigenous history and design; and the way to be sensitive and effective communicators to the Indigenous community	An Indigenous designer and the design team
February 2016	Phase 2: Workshops	Vitality Flows	Workshop one	Regenerative development basics with the design team – approximately three hours to introduce regeneration (Vitality Lens) and the LENSES process, and started the Flows Analysis through a history timeline activity (Flows Lens)	LENSES Facilitator and design team
		Flows	Site visit	Researchers and design team visited the site together	Land owners and LENSES Facilitator
		All lenses	Design team meeting two	Synthesis of input to date, planning for upcoming workshops – included Dr Hes	Project architect and other consultants
March 2016		Flows	Workshop two	Invited members from the community, started with a site visit, followed by a two-and-a-half-hour workshop focused on the question of 'What is important to the community?' An additional three hour workshop, including local government, focused on 'What are the critical flows and relationships we need to develop to ensure the place has the potential to thrive?'	LENSES Facilitator with help from a facilitation and conflict resolution expert
March and April 2016		All lenses	Design team meetings three and four	Develop design concepts and finalising principles and flows – included Dr Hes	Planner, landscape and design architects
April 2016		Vitality	Workshop three	Gathered over 40 researchers, project stakeholders and industry for two days to identify regenerative opportunities for Seacombe West across building,	LENSES Facilitator and an additional visiting LENSES
		TOWS		infrastructure, ecosystem, water, land, governance, community and innovation. Participants identified opportunities and gaps in knowledge to further inform the project (Figure 12)	Facilitator
June 2016	Phase 3: Implemen- tation	All lenses	Ongoing design meetings	Incorporating the integrated ideas into a phased, living master plan for the project (Figure 13)	Planner, landscape and design architects

Figure 14. Seacombe West process

# Conclusion

Community development and green building leaders insist that the time has come for large-scale change toward built environments with positive impacts, rather than isolated examples of buildings that 'cause less harm'. While the green building movement has demonstrated that built environments can significantly lessen their negative impacts on communities and nature, Living Environments offer greater hope for the health and ongoing renewal of the world's natural, social and economic systems. Living Environments are created with the understanding that economic systems cannot be healthy if the social system is not healthy and the social system cannot be fully healthy if the natural systems are not healthy. All major systems are connected - the environments that we live and work in should integrate with and support the natural world.

The LENSES Framework helps project teams and community groups set goals and policies that extend beyond sustainability into the realm of regenerative, regionally appropriate decisions. The LENSES Framework provides insights into what regenerative design is with a structured process to guide groups toward the creation of developments that respect and enhance the surrounding social and natural conditions and encourage healthy and prosperous economic growth for neighbourhoods and communities.



Figure 15. Seacombe West harbour concept (Image: Alfano PTY LTD)

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# Further Reading and Resources

The LENSES Rubrics, Overview Guide and case studies can be downloaded for free on CLEAR's website: www.clearabundance.org.

Learn more about becoming a LENSES Facilitator at http://clearabundance.org/about-lenses/facilitator-training/

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