

Regrowth Festival Environmental Management Plan

Prepared for REGEN

By David Le Breton

December 2015



Executive Summary

The purpose of the Regrowth Festival Environmental Management Plan (EMP) is to provide a plan of action for REGEN to significantly reduce the environmental impacts of the event by implementing best management practices in its own organization, and working with partners and the community to reduce their associated environmental impacts. This will ensure that the Regrowth Festival is an ecologically sustainable event for years to come.

Ecological sustainable development can be defined as “development which meets the needs of the present without compromising the needs of the future” (Brundtland 1987). It is generally accepted that this requires a balance between environmental, social and economic considerations. However, because the environment provides the services and resources on which human society depends, conservation of functioning ecological processes is essential for the maintenance of sustainable economic and social development. Therefore this document will play a vital role in establishing the framework for the management of the environment and the continued viability of the Regrowth Festival.

This EMP primarily focuses on the Regrowth Festival and its environmental impacts, as well as the associated activities carried out by REGEN in creating the event (such as office operations and marketing). The document also looks at the activities of the patrons attending the event. A number of actions are set out in order to best achieve sustainable development; they follow a set of eight criteria, outlined as follows:

1. Site Office and Event Management
2. Travel and Transport
3. CO₂ Emissions
4. Fair Trade and Environmental Campaigns
5. Waste Management, Reuse and Recycling
6. Water Management
7. The local environment, wildlife and land protection
8. Noise Pollution

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Introduction

REGEN (Random Evolution of Growth, Entertainment and Nature) is an environmental event organization. The mission of the organisation is to raise environmental awareness through music and arts events, primarily with the annual Regrowth Festival. REGEN is a collective of volunteers made up from a variety of backgrounds within the environment and events field. The core decision making body is made up of a panel of 5 directors. REGEN has experience with a number of previous events and since 2004 has worked with a variety of partners, including Greening Australia, local landcare groups and Planet Ark. Through these events, REGEN has gained considerable experience with working with councils and state and regional authorities to ensure that events are managed safely, sustainably, and professionally.

The Regrowth Festival is proposed to be held over four days at Lake Liddell Recreation Park near the Town of Muswellbrook. The site is located on remote land, within the Muswellbrook Shire. See the map in the appendix 1 for the regional context. It comprises of three music stages, three workshop spaces, cinema, art gallery, kids space, market area, camping grounds and tree planting zones. See the site plan in appendix 2 for the layout of the festival. REGEN has a core operations management team who is responsible for coordinating the various components of the event, however a number of key responsibilities will be managed by professional contractors (e.g. waste and security).

The event is divided into four key components (see site plan at Appendix 2 – each component has been colour-coded in the site plan for ease of reference):

- the entertainment area;
- revegetation areas (note that these are located mostly away from the main entertainment areas apart from the kids and disabilities planting areas);
- access, camping and carpark areas; and
- operations centre and supporting facilities.

Where required, a small number of temporary structures are erected to support the event. These consist of tents and marquees. No permanent structures are erected and no excavation or filling works are required to support the event. All temporary structures are erected in cleared areas of the site, avoiding areas with native vegetation.

At the time of writing this document the event is considered small in size for a festival, typically attracting between 1300-1800 paying participants. Whilst these numbers may grow in coming years, the nature of the event will ensure the environmental impact could be managed to secure positive outcomes.

Objectives

The Regrowth Festival Environmental Policy (see appendix 3) provides the framework for the development of the EMP by outlining the aim of what REGEN are committed to achieving in ecological sustainable development. This consists of both visionary and attainable objectives. These objectives fall in line with the eight sustainability criteria set out by the AGF. These criteria are seen as an excellent model for achieving a sustainable event and have been adopted by REGEN for the Regrowth Festival. The broad objectives in relation to these criteria are as follows:

1. To operate all site office and event management activities sustainably
2. To promote sustainable travel and transport options and reduce the environmental impact of traffic.
3. To use alternative energy options to reduce CO2 Emissions.
4. To operate fair trade and environmental campaigns.
5. Implement a Waste Management Plan to prioritise reusing and recycling and reduce waste as much as possible.
6. Operate water management on site sustainably
7. To protect and reduce impact on the local environment, wildlife and land.
8. Implement a Noise Abatement Management Plan to reduce noise pollution.

For more detailed objectives see table 2 in the Action Plan chapter.

Impacts

The site was surveyed which included a walk-over of the proposed event site and surrounding areas, as well as a drive-through of the access routes. The key characteristics of the natural environment were noted which was used to assist with the assessment of environmental impacts.

The site of the event is located geographically between Singleton and Muswellbrook. The festival site is flat to undulating and joins to Bayswater Power plant to the south-west, and is surrounded by mining train links and coal mines further to the south-east and south-west. From satellite imagery and aerial photographs, it appears that the closest neighbours to the property lie to the north-west of the property along Hebden Road (approximately 2-3km from the event site).

Description of the Environment

The Lake Liddell Recreation Park on Hebden road is located on degraded grazing land within the Hunter Bioregion, between Singleton and Muswellbrook of NSW. The vegetation on the site consists of cleared exotic and native pasture grasslands and native tree plantings. The revegetated areas are primarily *Eucalyptus* species with a lack of fuel in the understorey and no history of bushfire ignitions.

The site has been modified from its original, pre-European state by a history of land-clearing and agricultural use, and as such regrowth woodlands lack floristic diversity and a number of exotic weed species have invaded the site. However, the site still retains habitat values for native fauna particularly

on the shores of the lake, that are currently inundated with *Juncus acutus* an indicator weed species of salinity issues. There is evidence of native fauna species inhabiting the site, including black swans, and other aquatic bird species.

The topography of the site is flat to undulating, and interfaces with a man made lake (Lake Liddell) along the complete southern boundary of the festival site.

The Lake provides important roosting and nesting habitat for some bird species, however these areas are external to the festival site and due to the date and nature of activities a species impact statement is not required.

No ephemeral creeks or rivers were sighted within the vicinity of the festival site.

Potential Environmental Impacts

A description of the event has been given previously in this document. This description was overlaid with the environmental values of the site in order to assess the potential environmental impacts.

Information and databases on the local environment were assessed in preparing this document.

The festival will not result in the removal of any native vegetation and will not require any excavation or filling. All temporary structures will be erected on cleared areas of exotic grassland. Given the temporary nature of the event, and the limited scale and extent of any potential impacts, it is not considered likely that the event will have any significant impacts on the biodiversity and natural environment of the area. Environmental specialists in collaboration with the Lake Liddell Trust have identified three areas to be targeted by REGEN for the Landcare component of the event. It is therefore considered that the event will have a net benefit to the local environment.

The key impacts of the event are limited in nature and are identified in the following table, along with proposed mitigation measures to manage these potential impacts. Further detail of these measures can be found in the Action Plan chapter of this EMP and the attached management plans.

Table 1 – Environmental Impacts of the Regrowth Festival

Key Impact	Mitigation Management Measures
Pollution from rubbish and waste	All rubbish from the event to be collected, sorted and removed from site by a qualified private contractor. Refer to the Waste Management Plan in the appendix for further detail.
Pollution from human effluent	100% composting toilets to be provided at the event by a qualified private contractor. Toilets will be provided in the correct ratio to festival patrons and placed in both the festival and camping areas. Refer to the Waste Management Plan in the appendix for further detail.
Noise pollution from amplified music affecting neighbouring properties.	The communities surrounding the event site are distant and few. A number of noise abatement measures to be adopted to ensure that noise from the event does not disturb these areas - refer to Noise Abatement and Management Strategy in the appendix. These measures have been adopted at previous events and have ensured compliance with strict EPA requirements.
Trampling and damage to native vegetation	The site of the entertainment area, camping and parking areas and access routes to be carefully

	located to avoid any areas of native vegetation. Whilst some exotic pasture and grassland areas will be trampled and compacted by people walking and temporary structures, these areas are likely to rapidly recover following the conclusion of the event, particularly given the short-term nature and limited scale of impacts.
Disturbance of habitat for native fauna	As above, all areas of native vegetation to be avoided and as a result the event is unlikely to disrupt areas of habitat for native fauna. Any disruption from the presence of people and noise will be temporary in nature and is unlikely to significantly disturb native fauna. The existing black swan population have a very large range and the event will be outside of mating and breeding times.
Potential impacts on threatened species	No threatened species were identified on the site.
Traffic congestion	The event will generate more than usual traffic numbers to the area, particularly in the peak times of the beginning and end of the festival. Vehicle access and parking arrangements on-site are considered adequate for managing the volume of vehicles expected and will ensure there are no traffic congestion issues.
Increased CO2 emissions	The event is run on solar and bio-diesel and the large scale tree planting offsets much of the CO2 emissions created by vehicles. A carbon off-set option is also to be incorporated into the ticket purchasing to be rolled out by an official CO2 offset company.

Social and Economic Impacts

As outlined previously, the key potential social impact from the event relates to increased noise affecting local properties. This issue should be considered a priority for REGEN and should be managed in accordance with a strict abatement protocol. REGEN may be confident that the measures put in place will effectively manage this issue to the satisfaction of Council, neighbouring properties and the Police. This community event is also expected to have a number of potential benefits for the local community, including economic benefits through the purchase of fuel, ice, food and other supplies in local areas, as well as by supporting local artists and culture. This is an area that REGEN should further enhance, as set out in the Action Plan.

Legislation Register

This list is designed to give an overview of the environment related legislation that may affect the Regrowth Festival. It is important to consider all the environmental legal responsibilities of REGEN in running the event. This is the minimum requirement of most certified Environmental Management Systems. To ensure that REGEN continues to meet its legislative obligations this list should be reviewed and updated regularly.

- Protection of the Environment Act 1997
- Local Government Act 1993
- Environmental Planning and Assessment Act 1979 and regulations
- Waste Avoidance and Resource Recovery Act 2001
- Native Vegetation Conservation Act 1997
- Native Vegetation Act 2003
- Rural Fires Act 1997
- Threatened Species Conservation Act 1995
- National Parks and Wildlife Act 1974
- Rural Lands Protection Act 1998
- Roads Act 1993
- Ozone Protection Act 1989

Action Plan

Table 2 – Objectives and Action Plans

Criteria	Objective	Action
Office and Event Management	When buying products consider the environmental impact of the supply chain and use products from sustainable and/or recycled sources.	Use of reclaimed fabric and material for décor. Sustainable products such as bamboo for building structures. Second hand couches and reclaimed carpet for chill out areas. Take advantage of the freecycle network.
	Reduce Office Waste and energy use.	Keep paper printing to a minimum and only print on recycled paper. Recycle all paper, cardboard, printer cartridges and IT equipment. Use energy efficient lighting and implement a turn off and save policy (such as turn off unused equipment at the plug) in both on and off-site offices. Use 100% Green energy in off-site office.
	Reduce environmental impact of marketing and promotion.	Use electronic methods as a preference to reduce the amount of printed material. Print on 100% recycled paper using vegetable based inks. Choose a printer that has a good environmental policy.
Travel and Transport	Reduce the amount of cars to patrons ratio.	Offer bus services : Train Station - site. Identify public transport options. Promote car pooling through online social media pages, forums and 3rd party car pooling websites. Charge a vehicle levy and use funds for a carbon sequestrian project.
	Reduce traffic congestion at the event.	During peak times have car parking marshals and extra gate staff to ensure traffic is kept moving.
CO2 Emissions	Reduce CO2 emissions of the festival.	Use solar power and sustainable biodiesel to power the festival. Use energy saving LED lighting. Program music to enable sound systems and generators to be turned off for periods throughout the festival. Complete a Carbon Footprint Analysis of the event so improvements can be measured.
	Reduce CO2 emissions of the patrons, staff, presenters and artists attending the festival.	Offer a carbon offset option with ticket purchases which offsets travel emissions to and from the festival. Continue with the tree planting revegetation project on the festival site to significantly contribute to CO2 absorption.

Criteria	Objective	Action
Fair Trade and Environmental Campaigns	Ensure the market space follows best fair trade and environmental practices	Give priority to environmentally friendly, ethical and organic traders in the marketplace such as supply of fair trade coffee. Give local suppliers priority for trade pitches / stalls. Ensure all caterers use, local, organic and free range products.
	Increase environmental awareness through education.	Encourage environmental charities and awareness raising groups to provide information stalls at the festival and assist with infrastructure where possible. Conduct environmental education workshops. Encourage patrons to participate in the tree planting activities and learn about the restoration of the degraded land that is taking place at the festival site. Show environmental documentaries. Put in place informative signage.
Waste Management, re-use and recycling	Reduce the amount of waste sent to landfill	Implement a four bin system to compost food scraps and recycle paper, glass, plastic and metal. Use compost on site to improve the land. Require all caterers onsite to use bio-degradable and/or reusable food utensils and containers. Provide free drinking water to enable patrons to refill containers. Have a team of volunteers to collect and sort waste, as well as educate patrons.
	Eliminate sewerage waste.	Use 100% composting toilets and use compost on site to improve the land.
Water Management	Protect local waterways from pollution.	Capture and re use grey water run-off through recreation park system. Market stall holders must use biodegradable detergents. A trenching system to be put in place to facilitate storm water run-off.
	Conserve Water	Showers are not supplied for the event. Toilets and urinals do not use water.
Local Environment, Wildlife and Land Protection	Eliminate or reduce impact on wildlife	Identify potential impacts. Position music and camping to ensure minimal impact on biodiversity. Instruct patrons to look out for wildlife on roads when entering and exiting the site. Contact local wildlife rescue groups to assist any animals injured by traffic. Program silent periods on stages.
	Eliminate or reduce any impact on land and	Identify potential impacts. Position music and camping to ensure minimal impact on biodiversity.

	improve local environment.	<p>Continue working with the local landcare group with the restoration of degraded land on the festival site through revegetation to enhance biodiversity and remediate erosion and salinity issues.</p> <p>Thoroughly clean the festival site and monitor post festival to ensure no contamination.</p> <p>Donate a portion of ticket revenue to local environment groups.</p> <p>Ban open fires in the campsite to eliminate bushfire risk.</p>
Noise and Noise Pollution	Minimise noise pollution and potential hearing damage.	<p>Implement the noise abatement strategy and management plan.</p> <p>Take decibel readings throughout the festival to monitor noise levels both within the festival site and in the surrounding areas.</p> <p>Erect noise barriers around music stages to prevent sound spillage, and use mono directional sound systems.</p> <p>Schedule music to incorporate breaks.</p> <p>Provide a quiet family camping area as well as quiet chill-out spaces within the festival.</p> <p>Provide earplugs for all patrons and staff.</p> <p>Educate parents and guardians about the potential for hearing damage to children from large sound systems and provide adequate hearing protection for purchase.</p>

Evaluation

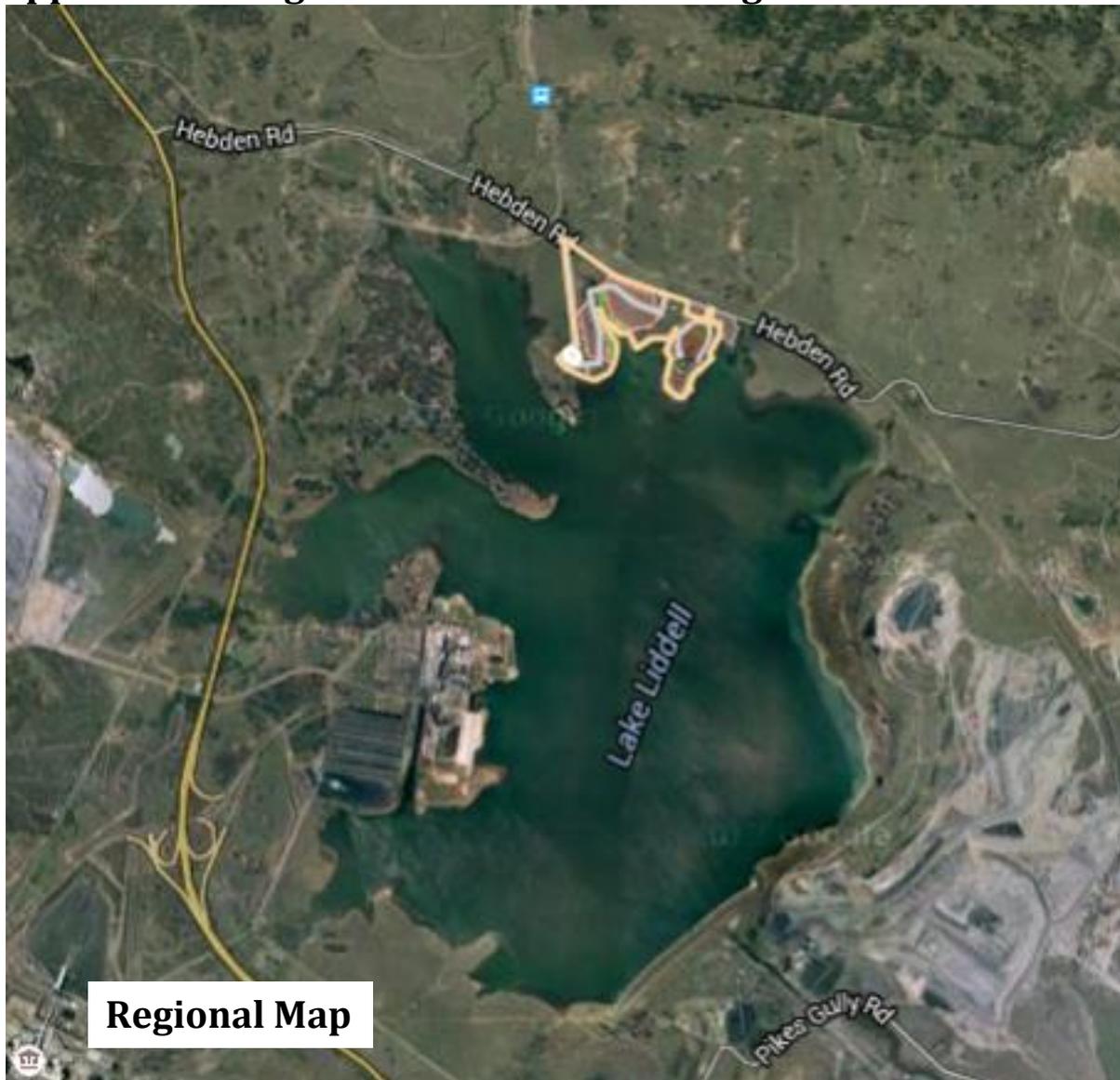
In order to achieve the desired outcome of the ecologically sustainable development of the Regrowth Festival it is vital to evaluate the performance of REGEN in implementing the actions of this EMP. This should take place after each festival with a full performance review to determine which actions were met and to ensure that the actions recommended by this document are effective and achieving their desired aims. An environmental audit should also be incorporated into this process to accurately measure the events environmental impact and monitor improvement.

The Regrowth Festival EMP should also be annually reviewed in the lead up to the event to make certain that it still applies to the planned configuration of the festival for that year and that all legal obligations are being met. It is recommended to formulate a new EMP after a maximum of five years.

References

A Greener Festival (2011), retrieved December 2011 from <http://www.agreenerfestival.com/index.html>
Brundtland Report (1987), retrieved November 2011 from <http://www.mosman.nsw.gov.au/environment/sustainability/definition>
Department of Infrastructure, Planning and Natural Resources, EMP guideline publication (2011), retrieved November 2011 from http://www.planning.nsw.gov.au/rdaguidelines/documents/emp_guideline_publication_october.pdf
Peats Ridge Festival Sustainability (2011), retrieved December 2011 from <http://www.peatsridgefestival.com.au/sustainability/water-management>
Splendour in the Grass (2011), retrieved December 2011 from <http://splendourinthegrass.com>

Appendix 1 - Regrowth Site Location – Regional Context





Regrowth Festival Site Plan



Regrowth Festival Environmental Policy



The Regrowth Festival is an annual music, environment, arts and youth culture event. The festival is run by the incorporated not for profit organization REGEN. Each year thousands of trees are planted at the festival site by patrons to help restore areas of degraded land, this is a central focus of the event and coupled with educational workshops forms the basis of the mission of REGEN to raise environmental awareness amongst youth culture.

REGEN recognises that running the Regrowth Festival has a direct impact (both positive and negative) on the environment. We believe that we have a responsibility to care for and protect the environment in which we operate and are committed to enhancing it through our operations wherever possible, and minimising any negative impact. We are fully committed to improving environmental performance across all of our activities, and will encourage our partners and members of the wider community to join us in this effort.

REGEN is very passionate about running a sustainable event and providing a framework for how the greater community can reduce their environmental footprint. We have endeavoured to cover all areas in our commitment to sustainable practices, as set out below:

- **Power:** The Regrowth Festival is powered through a combination of solar power and sustainable biodiesel. Energy saving LED lighting is used as a priority. Music is programmed to enable sound systems and generators to be turned off for periods throughout the festival.
- **Waste Management:** Avoiding rubbish going to landfill is an extremely high priority and all plastics, metal paper and glass are recycled. All food waste is composted on site with the compost later used for the revegetation area. An extensive team of volunteers are in place to collect and sort waste, as well as educate patrons. All caterers onsite are required to use bio-degradable and/or reusable food utensils and containers. 100% composting toilets are used with composted waste again used on site.
- **Transport:** Bus shuttle services are provided from Muswellbrook train station. Patrons using public transport receive a discounted ticket for the following festival. Patrons are encouraged to buy the carbon offset option with their ticket which offsets their travel emissions to and from the festival. The large tree planting revegetation project on the festival site also significantly contributes to CO2 absorption. Car pooling is strongly encouraged and facilitated through online social media pages, forums and 3rd party car pooling websites.
- **Water Management:** Free drinking water is supplied and patrons encouraged to bring re-usable containers. A trenching system is set in place to facilitate storm water drainage and prevent flooding. Market stall holders must use biodegradable detergents and all grey water runoff is channeled to appropriate areas or re-used where possible. Toilets are dry composting. Male and Female urinals are provided and are best positioned to prevent any contamination of water courses as stipulated by a soil scientist analysis of the site.

- **Fair Trade:** REGEN works with all suppliers and caterers to use fair trade/organic/free range products where possible. Environmentally friendly ethical and organic traders are given priority. Local suppliers are also given priority.
- **Community Education:** Environmental charities and awareness raising groups are encouraged to provide information stalls at the festival and are assisted with infrastructure where possible. Environmental education workshops are conducted throughout the weekend on a wide range of topics. Patrons are encouraged to participate in the tree planting activities and learn about the restoration of the degraded land that is taking place at the festival site. Environmental documentaries are screened at the festival followed by discussion. Informative signage is located throughout the festival.
- **Wildlife and Land Protection:** REGEN has undertaken a site survey and compiled a statement of environmental effects to ensure there are no threatened species or sensitive wildlife areas. Music and camping is positioned to ensure minimal impact on biodiversity. Patrons are instructed to look out for wildlife on roads when entering and exiting the site. The local wildlife rescue group (WIRES) is liaised with to assist any animals injured by traffic. The local landcare group is consulted with and assists with the restoration of degraded land on the festival site through revegetation, which enhances biodiversity and remediates erosion and salinity issues. The festival site is thoroughly cleaned and monitored post festival to ensure no contamination. A portion of ticket revenue is donated to local environment groups.
- **Office and Event Management:** All printing of promotional material is done on recycled paper using vegetable based inks. Paper printing is kept to a minimum. All offices run on green energy and implement strict recycling policies on paper, printer cartridges and IT equipment. Décor and other building materials are sourced from recycled/re-used sources. Sustainable products such as bamboo are used where possible.
- **Noise and Noise Pollution:** A noise abatement strategy and management plan has been developed and implemented. An acoustic report has also been undertaken. Decibel readings are taken throughout the festival to monitor noise levels both within the festival site and in the surrounding areas. Noise barriers are created around music stages to prevent sound spillage, mono directional sound systems are also used. Earplugs are provided for all patrons and staff. A quiet family camping area is set aside as well as quiet chill-out spaces within the festival. Music is scheduled to incorporate breaks to reduce stress on local wildlife and local communities and also to save energy and increase the efficiency of energy use at the event.