Environmental Levy Grants Program 2019/2020 – successful applicants

Details of the 19 successful submissions are provided as follows:

1. *Bonville Public School Parents and Citizens Association – Planting for spray drift prevention – Stage 1*

   Bonville Public School is a historic institution, located in the same rural and farmland setting for over 100 years. In recent times, there has been an increase in intensive agriculture on the neighbouring properties to the school. This project seeks to plant approved trees to reduce spray drift at the adjoining boundary to these properties, and create an educational resource.

   The scheme will include plants recommended by the CHCC for this purpose for the main buffer and understorey, as well as a landscape design for the surrounding areas to create an educational resource. This educational resource will include elements of bush tucker and other Gumbaynggirr influences. This section is stage 1. Stage 2 is a negotiation with the farm on the opposite side of Glennifer Road to plant a vegetation buffer on their land.

   Requested amount: $15,510
   Panel recommended amount: $15,510

2. *Coffs Harbour Regional Landcare – Growing Our Future 2019/20*

   This project seeks to continue the employment of a dedicated Nursery Coordinator for eight hours per week at the Coffs Harbour Community Landcare Nursery at Woolgoolga. The Community Nursery and its volunteers have benefited greatly from having the support of an experienced and knowledgeable Coordinator. The second year of the 'Growing Our Future' project saw the nursery go from strength to strength. The Nursery Coordinator has worked hard improving nursery processes, diversity of species and raising the profile of the nursery in the local community. The continued funding of the Nursery Coordinator position will ensure that these positive outcomes continue.

   With a dedicated Nursery Coordinator, good quality native plants can be produced and used in restoration projects across the local area. These plants will improve the resilience and integrity of our local ecological communities and ensure our natural environment is sustained for the future.

   Requested amount: $24,640
   Panel recommended amount: $24,640

3. *Coffs Harbour and District Local Aboriginal Lands Council – Improving the waterways of Corindi Beach*

   This project will target the removal of several Weeds of National Significance (e.g. Asparagus Fern, Bitou Bush, Lantana and Madeira Vine) and various other localised high priority weeds that are impacting on project sites along the waterways of Corindi Beach.

   The project shall enhance riparian vegetation communities, wet sclerophyll forest and their associated threatened species with restoration works at two priority work sites. The funding will be utilised to allow an Aboriginal bush regeneration team to work 420 hours on 3.5 hectares alongside community groups in important environmental sites in the Coffs Harbour LGA.

The project shall provide opportunity for the Aboriginal bush regeneration team, volunteer groups and non-indigenous bush regenerators to enhance and protect cultural sites by participation in cultural awareness through working bees outlining cultural sensitivity and protocols. A major focus of the project is to engage and provide opportunities for connection between community and Aboriginal bush regenerators supporting each other in Natural Resource Management.

Requested amount: $23,130
Panel recommended amount: $23,130

4. *Envite – Koala habitat enhancement*

This project will rehabilitate Koala habitat and Endangered Ecological Communities (EECs). The Toormina-Boambee area has been identified as primary Koala habitat in the Local Government Area.

Weeds present themselves as a major threat to biodiversity and a barrier for Koala movement. Envite Environment has been restoring sites in the area on three reserves located along Dunlop Drive, Lindsays Road and Hogbin Drive. These sites will be followed up and maintained for re-infestation of weeds. Furthermore, bush regeneration work will be carried out across two new Council reserves at Platts Close and Sawtell/Armstrong Drive. These reserves are mapped as Primary and Secondary Koala habitat and Swamp Sclerophyll Forest on Coastal Floodplain, an identified EEC. The control of weeds will facilitate Koala movement across the highly fragmented landscape, improve water quality, and increase habitat values for other flora and fauna. The project will achieve improvements to condition and connectivity of native vegetation communities.

Community education will be delivered through the development of a flyer which will be distributed to local residents. Residents will have the opportunity to contact local bush regenerators to identify garden escapees that pose a threat to local reserves. Signs will be displayed on sites to raise awareness of the works in progress.

Requested amount: $24,640
Panel recommended amount: $24,640

5. *First Choice Organics – Sustainable profitable future food production along the Coffs Coast*

This project will involve a two-day conference in Coffs Harbour for local producers that detail the value of sustainable practice and introduce some new paradigms to gain community and market acceptance. Examples include organic, biological and regenerative agriculture that grows food that is sustainable and complies with or exceeds food safety standards using methods that preserve and enhance the natural environment for future use. These methods result in higher nutrient density, no harmful chemical residue in fruit and vegetables, a dramatic increase in farm biodiversity and fortification of the soil and farm ecology.

Growers will be shown how using organic methods can not only reduce their expenses but increase the price received for their product. The conference will feature international Academics Dr Carlo Leifert and Dr Elaine Ingham as well as authors Charles Massey and Andre Liu, and representatives of finance and retail industries.

Due to funding limitations the panel recommends that the requested funding be reduced, see below.

Requested amount: $25,000
Panel recommended amount: $23,000

6. Jetty Dunecare – Pre-empting the sleeping invader – Glory Lily @ Boambee Beach

This project's major focus will be the effective management of Glory Lily behind Boambee Beach especially in areas where woody weeds have been and will be removed. These species have the capacity to undermine restoration efforts by intensifying proliferation in newly opened areas.

The project will capitalise on previous experience and achievements while focusing on areas which are yet to be managed. Continued restoration efforts will combine a strategic spray regime with manual follow up post woody weed control. This will improve connectivity of North and South Boambee and enhance integrity and resilience of the entire site (from Coffs Harbour to Sawtell).

Requested amount: $25,000
Panel recommended amount: $25,000

7. Jetty Dunecare – Restore and enhance the natural environment of the Jetty Foreshores

This project will restore, enhance and protect the biodiversity and visual amenity of the 18 hectares of native vegetation along the Coffs Harbour Jetty foreshores. This is an area that contains endangered ecological communities and threatened plant species. This will be achieved through bush regeneration works (including primary weeding in new areas and maintenance of existing areas) by both contractors and volunteers.

The volunteers of the Jetty Dunecare Group have worked to restore the foreshores area for 36 years, not only reducing the spread of invasive species, but also helping to engender community stewardship for the natural environment. The inclusive culture of the group provides opportunity for a wide range of individuals to improve their wellbeing while contributing to a worthwhile cause. Their efforts to improve the area benefit residents, sporting clubs, businesses, tourists and local wildlife.

Requested amount: $25,000
Panel recommended amount: $25,000

8. Nana Glen Landcare Group – Rehabilitating the Coldwater Creek Travelling Stock Reserve (TSR39744) – Phase 2

The Coldwater Creek Travelling Stock Reserve is situated on 5.4 hectares of wet sclerophyll forest at Nana Glen in the iconic Orara Valley.

During the first phase, the project focused on the top half of the property creating a car park location, completing the species inventory and assessing vegetation condition, clearing foreign weed species, removing hazards and establishing trails. This was actioned with the in-kind assistance of the Nana Glen Landcare Group volunteers.

It is evident that more effort and funding is needed for the thicker and wetter section of the block towards the eastern boundary, including on the boundary where more mature camphor laurel trees and small-leaf privet dominate.

The vegetation condition assessment and species inventory has found that the reserve contains two key vegetation types with significant and impressive old growth habitat trees throughout including lowland swamp box, ironbark, blue gums and tallowwood.

Phase 2 of rehabilitation for the TSR will focus on the eastern area of the reserve and include the formal establishment of the current roughly mapped walkway with installation of plaques to identify the old growth trees. Other grants will be sought to produce the educational signage for the history and natural values of the Reserve, whilst the Landcare Group will draft the sign content.

The eastern area of the reserve has mature camphor laurel trees which would pose a safety risk to visitors if poisoned, therefore professional arborist services will be employed to remove the larger trees on the eastern boundary, chipping the camphor laurel debris to use for walkway trail maintenance.

Requested amount: $25,000
Panel recommended amount: $25,000

9. *Nana Glen Landcare Group – The effects of nitrates on macro invertebrates and river health*

Intensive plant agriculture in the Bucca Bucca Creek catchment has resulted in excessive fertiliser entering the river systems in the run off from the farms as researched by Southern Cross University (SCU) in previous studies funded under Council's Environmental Levy. The health of any river depends on there not being a disruption in the food chain, and the excessive nitrates affect the macro invertebrate communities, which in turn affect the fish, reptiles, amphibians and the ecological balance of the river system.

Results of previous SCU studies on water quality have led to trials of various methods to mitigate the impacts of nitrate loads on the Bucca Bucca Creek area, including nutrient bioreactors, nutrient retention ponds and artificial wetlands. Using macro invertebrates as bio-indicators, the efficacy of these structures in mitigating nutrient loads and their impacts can be monitored.

Initial macro invertebrate studies were conducted in 2018 and early 2019 in a previous Environmental Levy Grants Program project. Generally, it requires 3 years of seasonal sampling to get valid results on changes to macro invertebrate assemblages. This application seeks a further 12 months of funding to allow a comprehensive study and comprehensive final report.

The study would survey the same sites as previously on a seasonal basis, but would include sites upstream and downstream of the newly-installed mitigation structures.

Due to funding limitations the panel recommends that the requested funding be reduced, see below.

Requested amount: $25,000
Panel recommended amount: $23,000

10. *New Earth Regeneration – Halls Road Koala Corridor – engaging the community in habitat restoration*

Halls Road Council Reserve forms part of a recognised Koala corridor that has attracted past work projects to create a connective and expanded area of Koala habitat. There are two areas where revegetation plantings have been undertaken that require maintenance to ensure continued growth and vigour of plantings.

If works are undertaken within the next six months, it will dramatically reduce the risk of the site regressing and ensure the continued survival of all revegetation plantings. The proposed project will complement Council's bush regeneration programs.

There is also a degraded area of community land that residents from Santorini Close have for some time expressed an interest in rehabilitating, as residents frequently observe Koalas in this area. This project will also seek to engage and encourage residents to be custodians of this Koala corridor. This would be achieved by reducing weed levels to a manageable level on the community land and encourage the residents to form a Landcare group to maintain the site into the future with the provision of a workshop day on site with a Koala Ecologist and Gumbaynggirr elder.

Requested amount: $4,800
Panel recommended amount: $4,800

11. *New Earth Regeneration – Roberts Hill Koala Corridor – protecting the connection*

Roberts Hill Council Reserve forms part of a recognised Koala corridor that has attracted past work projects to create a connective and expanded area of Koala habitat.

This area would benefit from follow-up maintenance works to ensure the growth of revegetation plantings is not impeded by woody and vine weeds. This will reduce the chance of previously worked areas becoming degraded by weed growth.

If works are undertaken within the next 6-12 months, it will dramatically reduce the risk of the site regressing and ensure the continued survival of all revegetation plantings. The proposed project will complement Council's bush regeneration programs.

Requested amount: $4,200
Panel recommended amount: $4,200

12. *New Earth Regeneration – Tree Fern Creek Habitat Corridor – targeting high priority vine weeds*

The Council reserve system along the western tributaries of Coffs Creek forms part of a recognised Koala corridor where high priority vine weeds are present, including Weeds of National Significance (WoNS).

This project would assist in the final eradication phase of these priority vine weeds from this section of creek by allowing regular and systematic control to be undertaken over a 12 month period, thereby maintaining the investment that has been made in the restoration of this reserve complex. The proposed project will complement Council's bush regeneration programs.

Requested amount: $4,200

Panel recommended amount: $4,200

13. New Earth Regeneration – Newport's Creek – riparian rainforest restoration

The Isles Estate Newport's Creek reserve is becoming degraded by increasing weed infestations. A significant amount of revegetation was undertaken over the entire area (7,400 trees) but survival rates have been minimal due to a lack of maintenance. The reserve is located on the southern side of Newport's Creek opposite the restoration project being undertaken by Bishop Druitt College on the northern creek buffer.

The area has significant remnant vegetation including areas adjacent to Newport's Creek classified as Lowland Rainforest on Floodplain, an Endangered Ecological Community. This area has been identified as Koala habitat and the endangered Giant Barred Frog has been located in rainforest vegetation within the Bishop Druitt College restoration area.

This project seeks to support a collaborative approach to restoration of this riparian area, encouraging restoration of both the northern side of Newport's creek (owned by Bishop Druitt College) and the southern side (managed by Council). This would ensure maximum ecological benefits are obtained within this creek system and habitat corridor and build upon previous works at both of the sites. The proposed project will complement Council's bush regeneration programs.

Requested amount: $4,975
Panel recommended amount: $4,975

14. OzGREEN (Global Rivers Environmental Education Network Australia) – MyRiver Coffs Harbour

Students from Coffs Harbour schools will undertake two days of field work to investigate the health of the Coffs Harbour catchment. Field work will involve water quality testing and habitat assessments at Bonville and Pine Creek, Boambee and Newports Creek, Coffs Creek, Moonee Creek, Hearnes Lake, Woolgoolga Lake, Darkum Creek, Arrawarra Creek, Corindi and Saltwater Creek. The field work will also involve students interviewing local community members using survey questions developed by the Australian Government Department of Industry and Science to assess water attitudes and water literacy.

Following the two field days, the forty students will come together as a group for a two-day environmental congress at Coffs Harbour Cavanbah Centre. At the congress they will analyse and interpret their data, create a collective vision for a healthy Coffs Harbour Catchment and develop catchment action plans that include budgets, timeframes, tasks and resources required for delivery. The students will then present their action plans at a youth led community forum. After the forum, OzGREEN will support the students to implement and deliver their plans.

Requested amount: $24,354
Panel recommended amount: $24,354

15. Sandy Beach Action Group – Revegetation of Sandy Beach Reserve Stage 2

This project will focus on an 800 m2 section of the Sandy Beach Reserve from the east side of the shared path to the fence. The area will be rehabilitated through the

engagement of the community in the removal of weeds and revegetation of the area with native plant species. The project seeks to educate the local community on the importance of removing weeds and planting native vegetation.

Requested amount: $2,800
Panel recommended amount: $2,800

16. *Southern Cross University – The runoff carrying capacity of Coffs Coast estuaries*

Recent studies conducted by Southern Cross University on nutrient loads in the Bucca Creek catchment and in Hearnes Lake identified water quality issues that were linked to land use. The study identified some of the highest nitrate loads reported on the east coast of Australia. Nutrient loads were suggested to come from upstream fertiliser-intensive land uses.

In this project, PhD students Praktan Wadnerkar and Shane White, and Honours student Luke Andrews will investigate nutrient loads in multiple creeks from Pine Creek in the south to Corindi Creek in the north, expanding on previous site-specific investigations. The sites chosen will have a range of dominant land uses including forest, urban and horticulture. It is likely that sites with more upstream intensive horticulture will have higher levels of dissolved nitrogen. The study will allow researchers to examine how land use impacts nutrients as they move through a waterway, and investigate how the waterway deals with these nutrient loads. The results of the study will then be used to provide science-based recommendations for the management of multiple nutrient sources related to different land-uses.

Requested amount: $25,000
Panel recommended amount: $25,000

17. *Southern Cross University – Further soil chemistry investigations on intensive horticulture sites and in associated sediments*

This project will determine the extent and type of contaminants in soils and farm dams on lands currently used for intensive plant agriculture.

There is currently a lack of information on possible pesticide contamination from intensive horticulture activities which are potentially harmful pollutants that may be released directly into the soil to which the local population could be exposed.

Furthermore, trace metal and pesticide pollution can cause environmental problems, including loss of biodiversity and toxic health effects for humans. This project will conduct trace pesticide analyses in current and historical soils in areas of intensive horticulture activities of the Coffs Harbour area. The samples would be analysed and used to determine whether there are any long-term impacts in soils and sediments from current intensive plant agriculture, and guide the management of lands rezoned from rural use (RU2) to large lot residential (R5).

The properties selected for sampling would include both long-established intensive horticulture operations on former banana plantation sites, as well as more recent intensive horticulture operations ideally with on-site dams. The soil core dating, and general soils analyses such as grain size and metal content, would be measured at Southern Cross University, National Marine Science Centre.

Requested amount: $25,000
Panel recommended amount: $25,000

18. *Southern Cross University – Improving water quality downstream of protected cropping operations (hothouses)*

Recent studies on nutrient loads in the Bucca Creek catchment and in Double Crossing Creek at Hearnes Lake identified water quality issues that can be linked to land use. These previous studies reported some of the highest nitrate and nitrite loads reported on the east coast of Australia. Nutrient loads were suggested to come from upstream fertiliser-intensive land uses. One potential source of this nutrient input to streams is protected (hothouse) horticulture operations.

Here, a small scale experimental trial will be deployed by North Coast Local Land Services on a property in the Coffs Harbour LGA to prevent nitrogen runoff from a hothouse horticulture operation. In this project, Southern Cross University researchers Praktan Wadnerkar and Shane White, as part of their PhD, will collaboratively work with hothouse owners and operators, North Coast Local Land Services, and Council staff to investigate the effectiveness of miniaturised woodchip bioreactors. This will provide a science-based recommendation of the management approach most suitable to the local conditions. To achieve this aim, Southern Cross University will perform a series of water quality observations upstream and downstream of a miniaturised woodchip bioreactor associated with a hothouse operation.

Due to funding limitations the panel recommends that the requested funding be reduced, see below.

Requested amount: $25,000
Panel recommended amount: $20,000

19. *Woolgoolga Regional Community Gardens – Let the sun shine in*

This project seeks to install a solar system to provide power supply for effective operation to support educational and community interaction programs. Examples include workshops around sustainability, healthy nutrition, waste education and reuse, efficient water management, self-sufficiency in food production using organic practices and community events.

This is a shared vision with neighbouring Community Gardens for community capacity building. Upon expert advice the system will be connected to the grid with an ultimate aim of moving to a hybrid system.

Requested amount: $14,987
Panel recommended amount: $14,987