

# Resilience NSW Grant Application for BCRRF - Stream 2 - Southern Region

# **Applicant Information**

Condition to proceed with the application:

I have read the program guidelines and can confirm the following

the organisation's eligibility to apply for the grant  $_{\mbox{Yes}}$ 

eligible lead organisations must be located within, operate within or intend to deliver the project to a NSW declared LGA(s) relating to bushfires from 31 August 2019 onwards.

Yes

this organisation acknowledges that this project must be completed no later than 30 June 2022  $_{\mbox{Yes}}$ 

the organisation agrees to participate in the evaluation of the Community Recovery and Resilience Fund program Yes

# the organisation acknowledges the upper and lower limits of funding for this program

Yes

## the organisation acknowledges the reporting requirements for this program

Yes

#### Company Name: Upper Deua Catchment Landcare Group

### Contact

48 464196 phhayman@pcug.org.au

| ABN         | Registered for<br>GST | Date Registered for GST |
|-------------|-----------------------|-------------------------|
| 78721547112 |                       |                         |
|             |                       |                         |

## **Primary Address**

6181 Araluen Road, Araluen, New South Wales, 2622, Australia

### Mailing Address

6181 Araluen Road, Araluen, New South Wales, 2622, Australia

### **Project Implementer**

Ms Penny Hayman

## Chief Executive Officer/Director

Tony Peters

### Bank Account

The Key contact for receipt of Ministerial correspondence

| Bank Account Name                      | Bank Account No.   | BSB                               |
|--|--|-----------------------------------|
| Upper Deua Catchment<br>Landcare Group | Sandhurst No<br>142336510 .General<br>Acct 121138788.Term<br>Dep.(water<br>users)126414839 | Bendigo Bank Braidwood<br>633 000 |

## **Project Overview**

### **Project Title**

Upper Deua Catchment Landcare Group BCRRF Stream 2

#### Start Date

01/11/2020

#### End Date

30/06/2022

### Total Funding Requested

290000.00000

### Project summary or description

The Upper Deua Catchment Landcare Group (UDCLG) seeks funding to rehabilitate the Araluen Creek, from the effect of the drought, bushfires and flooding that tore through the valley. Without remediation these communities remain compromised.

### **Project Background**

UDCLG has worked actively for 15 years to maintain the integrity of the Araluen Creek and its tributaries to ensure the ground water (2 acquifers) level is maintained and the previously worked landscape (gold field) is stabilised. Completed works include weed management, in-stream log-sills, erosion control and pollution management. Successful sill works have raised the water table by 1 meter thus supporting the farming and general community in the valley. UDCLG previously contracted Upper Shoalhaven Landcare Council for a 10year plan (2014-2024) to ensure any work undertaken contributes to the aims of the plan. The vision for the rehabilitation is good water quality, low levels of weed infestation, increased bank stability and maximising the retention of surface and groundwater for the benefit of the catchment, and Araluen and downstream water users. The drought, bushfires, floods have now created such levels of damage that only major efforts can be employed to stabilise the situation. Our partners Local Land Services, Soil Conservation Service and Upper Shoalhaven Landcare Council have assessed the damage and have prioritised 20 sites that require immediate attention to prevent further catastrophic outcomes for the Araluen Valley and those downstream who depend on good water quality. Clearly climate change and associated extreme weather events mean that remedial action is urgent and unavoidable now or future events will impact adversely the whole catchment of the Araluen Creek and Deua River compromising the whole area's viability for years to come.

Location Project Local Government area/s Queanbeyan-Palerang Regional Council Project State Electorates area/s South Coast Project Federal Electorates area/s

Eden-Monaro

This is the actual geographic location/s, region/s, place/s, waterway/s, etc. in which the project will be undertaken

Araluen Creek and its tributaries, Upper Deua River and its tributaries.

### Does this project support more than one local government area?

Yes

## Describe the geographical reach of the project

This project will be primarily carried out in the Queanbeyan-Palerang Regional Council area with significant beneficial outcomes for Eurobodalla improving the quality of the water supply and reducing pollution risks to the lower Deua and Moryua River in times of significant rain events. The Deua River is listed as a high conservation value aquatic ecosystem. The river arises in the previously heavily forested Deua National Park, and the Araluen Creek is the most significant creek in the catchment in terms of volume, and also risk of impact. The sediment load, as an outcome of the recent rain events, that

has flowed down from Araluen Creek has also caused the Deua Landcare and Council to seek to implement sediment control strategies. Thus the remedial work needed in the Araluen Creek will have a direct and positive effect downstream into Eurobodalla Shire. The increase in the ground water table will be of great benefit as the agricultural enterprises in the Valley and downstream are beginning to recover from the drought, fire damage and flooding damage. The livelihoods in all agricultural enterprises including crops, livestock, orchards and vegetable growing are all needing reliable pollution free water. Maintaining the groundwater and ensuring the landscape is hydrated is critical for the whole Deua Valley's agricultural enterprises. The Araluen aquifer is fragile and a critical resource to protect and manage to ensure the viability of the land into the future.

## Explain how this project is not part of normal operations/ business as usual for your agency/organisation

The UDCLG is a relatively small group that works on a volunteer basis to assist landowners stabilise the Araluen Creek and tributaries to improve water quality and increase the water table level. This work is carried out within the group aided by grants where contractors can be engaged to provide technical advice and supervision to carry out in-stream works. This successful model has been in place for 15 years to great effect. We have received grants from Careing for Country, Land and Environment Court, NSW Water. Our partnership with LLS and Upper Shoalhaven Landcare Council means we progress with technical advice and planning with funded and/or volunteer interventions. We are currently engaged in completing the Araluen Creek bridge to bridge project that has been supported by a Land and Environment Court Grant which firstly rehabilitated sills in the creek and is now contracting weed management and control for the Creek's riparian zone. This submission seeks to start a new project adjacent and below the current focus of attention and is considerably larger and more acute in terms of importance. It has and will require the partnerships we have established between the LLS and the USLC to deliver. The UDCLG volunteers with landowner involvement will see post remedial work like re-vegetation completed to finalise the remedial work. UDCLG will establish landholder agreements relating to the remedial work on private land which will further ensure the success and longevity of the project.

### What disaster recovery outcome will your Event, Project or Activity be contributing towards?

The needs of vulnerable groups are addressed in disaster recovery, Community members are aware of the risks of future disasters, The community has improved capacity and capability to respond to future disasters, Business and not-for-profits have in place adequate mitigation practices for risks and threats, Government, private sector, civil society and organisations are engaged in plans for mitigation and management of the recovery

### How will you assess how well your Event, Project or Activity contributed to the disaster recovery outcomes?

The community within Araluen and downstream through the Deua is almost entirely dependent upon on groundwater for domestic, stock and agricultural water use. In 1998 the Araluen aquifer system was ranked the third most "at risk " aquifer in the Sydney South Coast Region. This report also identified water within the Araluen Creek as being primarily surface water run off and some groundwater. Major's Creek a main tributary along with others have caused such damage during the recent flood that without significant intervention any future rain events will continue to compound the destruction. The rehabilitation undertaken by UDCLG in the Araluen Creek to date has stood up well. The active attention to stream rehabilitation by this project will enable communities to regain their confidence in the stability of their water sources, the quality of their water and their reliance on their ground water supply to

ensure their livelihoods are protected, their community is able to re-build sustainable cropping, orchard and livestock enterprises. The partnerships with LLS and USLC and our previous work means we have assessments and plans available to guide our work. The success of the Bridge to Bridge remedial project during these recent events ensures confidence in this proposal's outcome. Established partnerships with landowners and agricultural enterprises will enable maximum participation and commitment from everyone to remedy the damage and further disaster proof the streams into the future. Landowners and a community that is clear about managing and maintaining the erosion structures, preventing any erosion activities in the riparian zone will further contribute to the communities sense of "we can". Our land management activities and techniques have worked for this part of the catchment and landowners are willing to make adjustments to their enterprises to improve the resilience of their properties and collectively the broader landscape.

# Project target population/s

Please specify which group/s your project targets.

Volunteers

No

```
Culturally & Linguistically Diverse (CALD)
```

No

Aboriginal & Torres Strait Islander (ATSI)

No

Disabled

No

Vulnerable & At Risk Communities

Yes

# **Collaboration and Partnerships**

Is this project a partnership or collaboration with another agency/agencies?

Yes

### Partnerships

| Organisation Name                    | Contact Name  | Contact Position                              | Contact Phone               | Contact Email              |
|--------------------------------------|---------------|---|-----------------------------|----------------------------|
| Local Land Services                  | Andrew Taylor | Senior Natural Resource<br>Management Advisor | 48 422594 (m)<br>0427750891 | andy.taylor@lls.nsw.gov.au |
| Upper Shoalhaven<br>Landcare Council | Rebecca Klomp | Network Co-ordinator                          | 48 422594                   | upper.shoalhaven@gmail.com |

# Describe how, through collaboration and partnerships developed in this project, mitigation and resilience can be built.

Both partnerships have been longstanding and UDCLG has worked with these organisations for 15 years to to stabilise the catchment area surrounding the Araluen creek and the upper Deua river. This area was subject to extensive mining thus the fragility of the creek beds and water courses mean they are constantly exposed to damage, changing courses and erosion which in turn pose challenges to the local agricultural enterprises. The valley depends upon good quality water for its livelihood. The partnerships mean we are able to work together and plan for remedial work and include and support the agricultural landowners. We have previously contracted LLS and USLC for a 10 year plan and a plan for the Araluen Creek Bridge to Bridge remedial sills and erosion control works. These have been successfully completed and we are now contracting for weed management in that stretch of the Creek. This proposal became immediately necessary post the drought, bushfires and flood as the exposed hills were subject to a major rain event and flooding and we began to plan what would be needed below our Bridge to Bridge project area as the damage there was considerable. Our previously worked areas stood up well. The landowners involved have suffered much during this period and the water course and erosion damage is of such significance that it immediately triggered LLS to begin prioritising the sites for attention. There are some 20 sites that are critical to stabilising the waterway and in collaboration with USLC, local landowners and LLS, UDCLG has examined the outcome of the assessment and agreed to seek significant funds to meet this critical need. The resilience of this community has been tested however by enabling this project to be implemented confidence can be returned to the agricultural and broader community that the underpinning of the community, reliable, quality water resources can be restored and indeed maintaining into the future.

# **Project Rationale**

## **Objectives**

List project key objectives

What will the project achieve.

1. Construction of in-stream erosion control structures will address the significant erosion points below the Neringla Bridge to the confluence with the Deua River and in the adjacent tributaries of Araluen Creek. 2. Delivering a more stable creek bed into the future, improves water quality and availability and will mean more reliable ground water levels and less pollution into the future. 3. Establishing agreements with landowners involved in these erosion control structures will ensure maintenance by them in addition to keeping the riparian zone free of stock and will provide water for stock away from the streams. Given the local devastation the contribution of landowners labour and the project's materials is a positive way to achieve a great result . 4. Consultation throughout the process will enable many other landowners to be encouraged with greater understanding of these strategies to work on smaller projects in rain event channels or high flood event channels. 5. Developing greater awareness of mitigation strategies in times of severe weather events will further enable the community "to be ready".

## Outputs

List outputs to be produced/delivered in the project (include numbers and the target cohort if applicable) Examples are manuals, videos, resource toolkits, training resources, new or updated Framework, policy, procedure and/or guidelines, delivery of courses/training, conducted workshops, undertook consultation, recruitment, research and evaluation reports, etc.

| Number | Description   | Target population  |
|--------|---|--|
| 1      | 20 erosion control structures in Araluen Creek<br>and main tributaries  | Landowners in agricultural enterprises and for<br>the broader community surface and ground<br>water quality and quantity upon which they rely  |
| 2      | 5kms fencing to exclude stock from riparian<br>zones to ensure erosion structures are<br>maintained   | Landowners who will provide labour and enter<br>into agreements re management of the riparian<br>zone on their land  |
| 3      | 4-6 new permanent off stream water<br>infrastructure to ensure no stock access to creek<br>to further damage the erosion structures or<br>riparian zone.  | Landowners to provide labour and enter into agreement re off stream watering for stock   |
| 4      | Assessment and management of weed/woody<br>growth in areas not covered by Bridge to Bridge<br>project and directly impacting on erosion sites.  | Landowners and general population with many<br>small holdings having stream access to<br>tributaries/high flow channels requiring<br>attention.  |
| 5      | Revegetation with native plants including use of guards (3 000 guards )   | Landowners and volunteers from broader<br>community to assist in the planting of<br>appropriate native re-vegetation.  |
| 6      | 5 Workshops focussing on soil erosion, riparian<br>zone management including weed and re-<br>vegetation strategies  | Broad community and those owners of smaller<br>holdings with access to small tributaries who<br>require assistance with information and support  |
| 7      | Development and production of the digital story<br>of the project. The visual depiction of the<br>damage and rehabilitation strategies will be<br>used to raise options for landowners and assist | General population and landowners who have<br>stream and ground water issues particularly<br>those in areas where previous degradation of<br>the terrain has occurred. The monitoring of the |

|    | other stream communities to consider stream rehabilitation strategies.   | controls after future rain events will also assist other communities.  |
|----|--|--|
| 8  | The purchase of soil erosion construction<br>materials \$100 000 will provide employment<br>and revive business activity within the<br>Queanbeyan-Palerang Regional council area.  | The provision of suitable logs, transportation<br>and possible granite rocks for some structures<br>will give a boost to local businesses.   |
| 9  | The engagement of Soil Conservation to perform<br>construction activities including design and<br>machinery time together with management of<br>such activity provides work within the local area.   | Soil Conservation and LLS are exempt<br>authorities thus the project can proceed quickly<br>without having to seek "controlled activity"<br>approval steps.  |
| 10 | Contract of an Environmental Expert to conduct<br>a "Review of Environment Factors". This will<br>precisely site the erosion control structures with<br>clear drawings and most suitable materials<br>selected to achieve the desired outcome. | The downstream erosion points (20) are very<br>critical and the preservation of the stream bed<br>and banks will have benefits immediately in the<br>local area and downstream into Eurobodalla<br>where water quality will maintained to a greater<br>degree. |

## How will the availability of outputs be communicated

The Araluen Star a monthly e-news link for the community and the Upper Shoalhaven Landcare Council and Eurobodalla Landcare Network will publicise the project. LLS will use their Facebook page and South East Circular newsletter. The Braidwood Bugle also.w

# List expected outcomes/benefits that will be achieved by the project for NSW communities, organisations and/or the emergency services sector.

The identified sites are still actively eroding with potential for mass movement of sediment, which can cover riparian vegetation downstream and destroy aquatic habitats. The placement of these structures in 20 critical areas will halt this process and ensure water quality is maintained. Stream bed erosion causes the lowering of the stream channel which can speed up the drying of the landscape, and a dryer landscape reduces the resilience of natural habitats and agricultural environments to natural disasters. The stabilisation of the water ways in this previously degraded landscape provides the best opportunity to assist the agricultural industries to stabilise their businesses, given the future outlook of extreme and unusual weather events being predicted. The degradation of the waterways is of major concern for many Araluen landowners and can impact their mental health when placed on top of other natural disasters. The landscape scale nature of this project will help remove the fears of large scale erosion when major weather events are forecast as landowners and the broader community will have confidence in the renewed resilience of the treated waterways. Seeing a whole community supporting the project encourages landowners on the fringe to participate and volunteer activities will help to remove the feeling that its too much work. The project has the power to help rehabilitate the community's resilience.

# How will the outcomes and outputs be sustained and integrated into current business and maintained in the long term

The agreements between landowners and the UDCLG will ensure erosion control structures and exclusion fences are monitored and maintained to protect the riparian zones in these fragile areas. LLS will assist with technical advice in the event any structures are damaged during future floods. Additionally the provision of water infrastructure off-stream removes landowners necessity to allow stock to access streams. Mustering will become easier in many situations which will further assist mental and physical recovery. The protection of the riparian zone is a paramount strategy to maintain good water quality, hydrated land and limited mobilised sediment. As landowners witness the recovery and resilience of the waterways they will be encouraged to maintain the new land management protocols into the future. Further work by landowners on this model of remediation can and will be used on small tributaries and high flow channels to ensure the broader catchment area increases in stability during extreme events. This will be supported by on site workshops and the digital record of the project. The management of erosion along tributaries and high-flow channels, outside the project area, can be managed by landowners into the future as the overall knowledge and understanding of erosion strategies increased. In addition the 10 year plan also enables those with smaller streams and channels to contribute and benefit by assisting reduce sediment mobilisation.

## Detail the need and level of community support for the delivery of the project

The needs are significant with the vegetation lining the waterways stripped from both drought, fire and extreme rain events. The sites are still actively eroding with potential for mass movement of sediment which will be devastating downstream. The need to halt the potential for any more sediment damage is critical it will also be important to encourage re-hydration of the landscape by stopping any more lowering of the stream beds. The agricultural enterprises are slowly recovering however the water issues are paramount not only the quality and the ground water level but also the urgent need to slow any future rain events from further eroding the landscape. The community was shocked by the damage done in the rain event and as this followed both the drought and the fires this project represents something that can be done to mitigate the after effects. The "get ready" concept is now an awareness within the community that preparation and active preparation is the way of the future for the businesses dependent on water. The success of the Bridge to Bridge project and its capacity to withstand this latest event has bolstered the community's confidence in this remediation strategy. The downstream communities are also aware of any remediation done upstream assists them especially in water quality and weed/woody growth management. Letters of support from Deua River Care and the Landcare Council attest to this . The community well understands how extreme weather events, fire, drought and rain impact on the valley. The whole area was disturbed through the gold dredging days and thus this valley is very susceptible to erosion and being so dependent upon water for its survival the community is ready to embrace any help it can garner to stabilise the stream and groundwater resources.

## Detail the reach of the project within the bushfire recovery region/s

The reach will be along the Araluen creek to its confluence with the Deua River and the major Tributaries associated with this part of the landscape. However the benefits extend down the Deua and onto Moryua with water quality improved, weed management under control and aquatic habitats restored. Certain elements of recovery will be slow however this project goes a long way to providing some certainty that water quality and landscape hydration can be improved. The fire damage down the Araluen Creek and its main tributaries has resulted in not only homes destroyed but such a lot of infrastructure that the project offers a proven way to begin to recover with water being such a critical component of the landscape and the success of the various agricultural enterprises. The volume of water flowing through the Araluen Creek downstream is such that the Deua is critically dependent upon this flow being well managed to support the Deua communities and onto the Moryua River and the Eurobodalla water supply.

### Detail how the project supports the region's social, community and broader recovery

While the area has a well known and valued history in gold mining not so well known or understood is the continuing effect this has had on the landscape. The whole Valley floor was up to some 70 years ago fairly denuded of trees with flooded streams changing course and gouging the landscape. As the vegetation grew back agricultural activities expanded and stock, orchards and vegetable industries have flourished. However the management of water and its fair distribution has been contentious and difficult. The UDCLG and the community have worked hard since 1998 to understand this landscape and with several studies completed by NSW Water in the early 2000 the community came to appreciate the landscape and the water issues. In recent years along with NSW Water UDCLG has been involved in managing this scarce resource to ensure "cease to pump" regime fairly managed the stream and ground water resources available for domestic and agricultural usage. This negotiation and agreements have brought the community together and this project will also be a vehicle for community recovery. Thus this community is well versed in the characteristics of this landscape and in the original and continuing Bridge to Bridge project raised the water table by some 1.2 metres by the use of sills and river bank erosions strategies. We have in place peizeimeters and are currently seeking to automate them to ensure the community is aware of the ground water availability. Thus this community is well versed in water management and working together to implement this project will further support this well informed community and ensure that erosion management will be picked up by all in the smaller holdings providing clear practical strategies for improving water management. There will be future droughts, fires and rain events and while water proofing completely is unlikely there is much this will achieve to stabilise and manage water and streams well.

## Detail how the social benefits of this project will be realised and how the community will be engaged in this process

The community awareness is high regarding the damage which occurred recently and is clear how many landowners are struggling. The whole community has come together for various events as part of the recovery and this project provides a very practical approach that everyone can be involved in for everyone's benefit. Volunteers for weed management and re-vegetation will bring everyone out with workshops used to explain and demonstrate the erosion control strategies. Small landowners will implement as they can and the community will willingly aid on the replanting etc etc as they have done before. The provision of the digital diary of the project will not only be used in the Valley to celebrate the project but will enable the broader community to appreciate that recovery from disasters can be achieved when all parties come together with State, local and community support contributing. The community depends upon the ground water and stream water and is very well aware of the need to stabilise the damaged landscape as much as possible. Many community consultations over the years have been held to agree upon management and sharing of this scarce resource and projects that aim to improve and stabilise will be supported wholeheartedly.

### Detail how the project will improve the community resilience to future natural disasters

The stabilisation of the stream beds will prevent further lowering of the stream bed thus maintaining hydration in the landscape. The management of these significant actively eroding sites will provide practical examples for the future that the community can continue to solve these issues and as examples of remedial work that hold up under major weather events will enable future work to be planned for more of the tributaries within the catchment. The combination of this grant, local partners and contracted experts supported by community volunteers is a proven combination and fosters community learnings, new connections and a huge sense of pride in overcoming adversity. The success of this project will enable the community to have "their story" of how they solved the problem become part of the Valley's history and cement within the community the belief in community, local structures and government involvement as the perfect model for recovery.

### Detail how the project meets a local recovery need not covered by existing programs

While the assistance for the actual fire damage has helped the community the subsequent flood that tore through the valley deposited such high levels of sand, silt gravel and debris and caused such levels of erosion that the community is devastated again with the water courses in disarray. The denuded hills have been badly effected by the deluge and the subsequent volume of water and pollution on the valley floor has caused enormous disruption to all farming activity. Fencing was washed away, stock isolated and high flow areas disrupted. To recover confidence in the farming community's capacity to deal with this damage and build and manage the waterways into the future will require expertise, considerable financial assistance and a community united in being prepared for future events. While the previous erosion control and stream bed strategies have been successful over a long period. These were erected from the Bridge to Bridge over several years and have stood the test of time with some relatively smaller adjustments 2 years ago. The piecemeal approach cannot work this time as the damage is great, the threat of future weather events very real. However this damage is urgent and of such significance that the work will be required to be completed in total to ensure a successful outcome into the future. The threat of future weather events would mean "a catch up" approach would never actually catch up. Future extreme weather events would indicate that unless we can stabilise the landscape now in this significant stretch of water the Araluen Valley and the Upper Deua communities will undoubtedly suffer greatly with more agricultural enterprises adversely effected after every event. This is a small community and grants like this allow us to compete with other communities with greater numbers, more enterprises and more influence as we demonstrate this need to do the job well and asap.

### Detail how the project aligns with existing government commitments and priorities

The project supports sustained community recovery and improved community resilience by remediating the devastated Araluen Creek which has suffered severe erosion, mobilised sediment impact and negative impacts on the agricultural enterprises in the Valley. The significant rain events post bushfire events have meant the reliability of. both stream and ground water for domestic, stock and orchards and vegetable growers has been badly effected by the sediment laden streams, the erosion damage and the de-stabilisation of the stream banks. This project will support local businesses by providing for local employment, purchasing capacity locally will also assist in contributing to economic recovery. The previous success of erosion works proves the value of the project and given the enormous damage done the community is now well aware of the damage such disasters can bring. To cover in one project the major erosion sites will demonstrate to the community that partnerships and implementation of proven strategies can mitigate future threats to the Valley's water resources. This project also demonstrates this community's commitment to remedy the water quality issue but also signals their acute awareness of their responsibilities to downstream communities. While the Araluen Creek remains vulnerable to major rain events, in particular the community is also aware that the downstream impact of uncorrected erosion sites and sediment mobilisation further degrades stream and landscape health for downstream communities.

## Detail how the project will result in ongoing and sustainable benefit to the community

Araluen Creek stream health and increased community understanding of the effect of weather events (particularly rain) on the fragile landscape will assist in continued volunteer engagement in planting, weed control, understanding of landscape hydration and its importance will support future good practice. The use of digital recording of the project, workshops to demonstrate strategies and outcomes to be provided throughout the project and continued community engagement in all aspects will ensure good understanding of how this landscape needs continued management. The UDCLG's agreement with landowners and their contribution of labour to fence off the sites, provide stock watering in paddock demonstrate the importance of maintaining stream health by exclusion of stock. The agreements ensure the erosion controls erected are sustainable into the future and provide examples of good practice that the digital record can demonstrate for the future. It is clear that future weather events are likely and the valley is at high risk of more damage of considerable significance. The understanding gained form this project outcomes can be use there and in other places when're fragile water ways suffer significant erosion.

# Risk

What risks are there to the successful completion of this project and how will you address these risks?

| Description   | Likelihood | Consequence   | Severity | Risk Status | Mitigation  | Comment   |
|---|------------|---------------|----------|-------------|---|---|
| Landowners labour<br>contribution to the<br>agreement difficult<br>to obtain due to<br>other farm<br>responsibilities | Unlikely   | Insignificant | Moderate | Resolved    | Negotiation re time<br>lines for both<br>labour<br>requirements of<br>fencing and<br>paddock water<br>supply. Negotiation<br>re options for<br>farmers to contract<br>their own labour<br>contribution. | Given the severe<br>damage and the<br>erosion control<br>structures being<br>planned and their<br>long term benefit<br>for the landowners<br>negotiated time<br>lines depending on<br>work plans for each<br>landowners will<br>resolve labour<br>issues. |
| Review of<br>Environmental<br>Factors Contractor<br>not timely  | Possible   | Moderate      | Moderate | Resolved    | Once funding<br>approved<br>commence<br>contracting for REF<br>contractor for<br>immediate start.   | REF can be<br>dovetailed with<br>procurement<br>activity and LLS in<br>final assessments<br>and design work<br>and thus unlikely<br>to hold up any<br>implementation<br>activities.   |
| Difficulty in<br>accessing sufficient<br>volunteers for re-<br>vegetation planting                                    | Possible   | Minor         | Moderate | Resolved    | Community<br>preparation with<br>recruitment of<br>volunteers through<br>workshops<br>delivered re issues<br>and remedies<br>being implemented<br>for the erosion<br>damage.                            |   |

## Evaluation

All projects must have an embedded quality evaluation plan - from inception to completion - from planning, execution, close, outcome, outputs and key findings/recommendation. Please consider the project objectives and goals when designing your evaluation plan.

Briefly outline the project evaluation plan and methodology (includes date collection and analysis) that will be utilised.

### **Evaluation**

Ongoing evaluation of the milestones and steps will be undertaken by the Executive of the UDCLG. Direct reporting from LLS or Landcare Council Project co-ordinator, submitted REF report weighed against initial assessments and proposals. Report from Soil Con concerning materials sought and reports concerning any material availability issues, weather impacts and timetable for construction compliance. UDCLG Executive to maintain open dialogue with landowners, community and partners to ensure information on progress is available to all. Conduct of public meeting on finalisation of construction for feedback on project management, timing, information sharing and volunteer engagement. The final evaluation will be conducted post a rain event to consider the outcome of the control measures, the progress of the re-vegetation and the state of the banks without stock. This will be included in a final report that should enable recommendations to be made re outcome for the stream, suitability of the controls employed and the engagement of the community via workshops and volunteering.

### How will outputs and outcomes be assessed?

The state of the Araluen Creek post a significant rain event post treatment. The level of mobilised sediment and bank disintegration. This evaluation will be included in the digital record to ensure the whole project is covered and any structures that failed are reviewed and recommendations made for future treatment of such sites. Each workshop's participants feedback will be collated and provided in the final report as will feedback from the first public showing of the digital record. Landowners and the agreement process will be examined to ensure that landowners were able to meet their obligations as negotiated and any issues raised and considered for future agreements. Additionally downstream communities will be encouraged to report via Rivercare and Eurobodalla Landcare on outcomes of any major rain even post completion of the project.

### How will your organisation implement recommendations and lessons from the evaluation of the project?

Clearly the lessons learnt will be transferred to the next project which will be the smaller tributaries and channels in the Creek catchment. There may also be further work that may appear given the degradation of the Valley floor and the likelihood of many more significant rain events. The co-ordination of partners, contractors volunteers and landowners will be examined and any issues arising used to refine our approach to future management of such projects. Landowners agreements will be considered and improved if found wanting. The recruitment of volunteers and their co-ordination and

management will also be viewed as a critical aspect of the project and feedback from volunteers on their involvement assist in future recruitment type projects.

# Additional Information

### If necessary, add further comments to support your application

This very small community has always been productive and very aware of the water resources available and the dire straits the valley enters when drought is in place. So to the rain and storm events that combine with a frail valley floor that mean constant erosion is likely unless structural changes are made to control erosion. To manage 20 sites at once will assist greatly and stop the piecemeal approach for which we will always being playing catch up as the erosion continues downstream ahead of our work.

# **Project Work Plan**

Outline key tasks/activities and milestones of the project.

The tasks and activities must be robust and achievable within the project timeframes, and the work plan should demonstrate appropriate allocation and utilisation of resources.

Project manager are required to report periodically on project progress against this work. A final report on project completion is also required.

## **Milestones**

| Name  | Description  | Start Date | Due Date   |
|---|--|------------|------------|
| Engagement of REF contractor<br>and project co-ordinator LLS or<br>Landcare Council | <ul> <li>REF contractor<br/>to commence<br/>asap re 20<br/>assessed urgent<br/>sites</li> <li>co-ordinator for<br/>whole project<br/>engaged LLS or</li> </ul> | 19/11/2020 | 19/02/2021 |

|  | Landcare<br>Council<br>Landowners<br>informed of REF<br>contractor and<br>co-ordinator<br>details for<br>agreement<br>development<br>Soil<br>Conservation<br>engaged for<br>construction<br>activity and<br>construction co-<br>ordination  |            |            |
|--|---|------------|------------|
| Purchase of erosion control<br>materials     | <ul> <li>Fencing<br/>materials</li> <li>Paddock<br/>watering system<br/>materials</li> <li>Weed control<br/>materials for<br/>sites</li> <li>Native plant<br/>guards</li> <li>Order native<br/>plants for re-<br/>vegetation</li> <li>Erosion<br/>structural<br/>requirements<br/>(logs, pins)</li> </ul> | 19/02/2021 | 19/03/2021 |
| Publicity for project (local and regionally) | <ul> <li>access<br/>newspaper, local<br/>radio, facebook<br/>etc</li> <li>promotion of 5<br/>workshops on<br/>erosion control</li> </ul>  | 09/03/2021 | 20/04/2021 |

|  | and project<br>details<br>• beginning of the<br>digital story<br>including local<br>business<br>involvement and<br>community<br>commitment   |            |            |
|--|--|------------|------------|
| Construction plan timeline<br>developed with contractors<br>and landowners for 20 sites  | <ul> <li>Landowners<br/>agreements<br/>signed with<br/>UDCLG</li> <li>Project officer to<br/>co-ordinate<br/>construction<br/>plan including<br/>materials to<br/>sites</li> <li>Soil con staff to<br/>sign off on<br/>construction<br/>timeline</li> <li>Digital recording<br/>of erosion sites<br/>prior to 1st<br/>construction<br/>activity</li> <li>1st workshop at<br/>selected site for<br/>field awareness<br/>raising</li> <li>Preparations<br/>finalised with all<br/>parties</li> </ul> | 30/04/2021 | 05/05/2021 |
| Construction on sites<br>completed and on farm<br>fencing and water systems<br>completed | <ul> <li>Sites remediated</li> <li>fencing and in<br/>paddock<br/>watering<br/>completed</li> </ul>  | 05/05/2021 | 15/06/2021 |

|  | <ul> <li>re-vegetation<br/>plants available<br/>and planting<br/>commenced<br/>with volunteer<br/>and landowners<br/>labour</li> <li>2 workshops<br/>delivered one to<br/>review<br/>construction and<br/>2nd to illustrate<br/>re-vegetation<br/>principles, both<br/>on site</li> <li>digital record to<br/>include<br/>landowners<br/>comments on<br/>process and<br/>project<br/>outcomes,</li> </ul> |            |            |
|--|---|------------|------------|
| Project completed final sites<br>inspection by UDCLG,LLS and<br>Landcare council | <ul> <li>All sites<br/>inspected and<br/>initial outcomes<br/>assessed<br/>dependent on<br/>rain events</li> <li>Landowners<br/>satisfaction<br/>measured</li> <li>Creek banks<br/>being stabilised,<br/>no stock access<br/>to stream,</li> <li>Re-vegetation in<br/>place</li> <li>UDCLG and<br/>landowners<br/>agreements in</li> </ul>  | 30/06/2021 | 30/07/2021 |

| <ul> <li>LLS to inspect<br/>sites post major<br/>rain events</li> <li>Sites numbered<br/>permanently for<br/>future follow up</li> </ul> |  | sites post major<br>rain events<br>• Sites numbered<br>permanently for |  |
|--|--|--|--|
|--|--|--|--|

# Budget

# Cost Calculator

| Priority Area<br>of Focus | Description  | Estimated<br>Delivery | Main Disaster Recovery Outcome   | Estimated Cost |
|---------------------------|--|-----------------------|--|----------------|
|                           | Erection of ten (10) erosion control<br>structures with a mixture of 3,6,9<br>logs 300-400mm centre diameter, 2-<br>6 timber pins 3metres long.  | 30/06/2021            | The community has improved capacity and capability to respond to future disasters                    | 50,000.00      |
|                           | Erection of ten (10) erosion control<br>structures with a mixture of 3,6,9<br>logs 300-400mm centre diameter, 2-<br>6 timber pins 3metres long   | 30/06/2021            | The community has improved capacity and capability to respond to future disasters                    | 50,000.00      |
|                           | Review of Environmental Factors by expert contractor.  | 19/02/2021            | Community members are aware of the risks of future disasters   | 5,000.00       |
|                           | Project officer (6months work) from<br>either LLS or Upper Shoalhaven<br>Landcare to coordinate purchasing<br>arrangement allocation of materials<br>and coordinate with UDCLG,<br>landowners, Soil Conservation . | 19/02/2021            | The needs of vulnerable groups are addressed in disaster recovery                                    | 40,000.00      |
|                           | Fencing material to fence off stream<br>for stock (5km) \$6/metre =\$30 000.<br>Landowners to provide labour.  | 30/07/2021            | Business and not-for-profits have in place<br>adequate mitigation practices for risks and<br>threats | 30,000.00      |

| Purchase of 3 tanks,4 troughs and<br>3km piping to keep stock off stream<br>banks. Landowners to provide labour.  | 30/04/2021 | Government, private sector, civil society and<br>organisations are engaged in plans for mitigation<br>and management of the recovery | 20,000.00 |
|---|------------|--|-----------|
| Five field workshops for the broader<br>community to assist in awareness<br>raising and readiness approaches for<br>all landowners on waterways. High<br>flow channels or tributaries.                      | 30/07/2021 | The community is aware of the disaster recovery processes  | 5,000.00  |
| Engagement of Soil Conservation as<br>contractor and manager of<br>construction including 20t excavator<br>and personnel required. Fee to cover<br>insurance and oversight.                                 | 30/07/2021 | Business and not-for-profits have in place<br>adequate mitigation practices for risks and<br>threats                                 | 10,000.00 |
| Purchase and deployment of weed<br>control strategies as required prior to<br>re-vegetation activities on stream<br>banks and eroded areas.   | 30/04/2021 | The community has improved capacity and capability to respond to future disasters  | 10,000.00 |
| Re-vegetation with 3 000 native<br>plants including use of 3 000 tree<br>guards. Guards \$5each   | 30/05/2021 | The community has improved capacity and capability to respond to future disasters  | 15,000.00 |
| Promotional video of project aimed at<br>highlighting the partnerships<br>involved the breadth of the work<br>including the joining of Gov, Council,<br>Landcare, landowners and other local<br>volunteers. | 20/08/2021 | The community is aware of the disaster recovery processes  | 5,000.00  |
| Soil Conservation construction of<br>erosion structures using 20t<br>excavator 1-2 days per structure<br>depending on complexity @\$2 500<br>per structure  | 30/07/2021 | The community is aware of the disaster recovery processes  | 50,000.00 |

# Total Funding Requested

290000.00000

### List how you have achieved value for money

The purchasing of bulk goods by the appointed Co-ordinator NSW Gov (LLS) or not for profit, Upper Shoalhaven Landcare Co-ordinator will assist reach local suppliers and access multiple quotes to ensure value for money. The use of landowners labour for 5km fencing, 3km pipe laying and delivery and sitting of tanks and troughs will save considerable money. This to be set out in formal agreements with UDCLG that also includes future oversight of structures means significant labour costs are non-existent and ongoing monitoring available. Volunteer planting of 3 000 native trees and shrubs will add significant value. Using free local knowledge of best species and locations also adds value beyond a monetary point of view. Engagement of an expert to conduct a Review of Environment Factors will ensure every site is closely examined and structural recommendations provided in great detail. Additionally the actual construction being proposed is to be managed by LLS and Soil Conservation Service, thus avoiding costs associated with meeting "controlled activity " steps as both organisations are exempt. UDCLG has used this approach previously with erosion structures further upstream with great success. The provision of field workshops as the project progresses and the final digital story will enable others to initiate erosion control approaches in stream/tributaries prior to major weather events and to begin work on smaller sites now.

## Declaration

I declare that the information provided in this form and attachments is, to the best of my knowledge, true and correct and I understand that any omission or false statement may result in the rejection of the application or withholding of any funds already approved.

I understand that the New South Wales Government, or its agent, may check any of our statements for the purpose of assessing this application and agree to provide any additional information they may request.

I consent to the release of information in this application for non-commercial public information purposes.

I understand that this is an application only and may not necessarily result in funding approval.

Should this application be successful, I confirm that the project will not commence until after the funding agreement has been approved and an agreement with the State of NSW has been signed.

## Project Sponsor/Endorser

Name: Mr Tony Peters

Position: President Upper Deua Catchment Landcare Group. (UDCLG)

Phone: (02) 48464079

Email: antipeters@gmail.com

## Project Manager/Implementer

I have the authority, on behalf of the Project Sponsor/Endorser to submit this application.

I accept this declaration

Yes

Name: Penny Hayman

Position: Secretary Upper Deua Catchment Landcare group

Business Name: Upper Deua Catchment Landcare Group

Date: 03/12/2020