Still no Fish Ladder around the Nymboida Weir

Recent findings of a study into the effects of water flows and barriers on fish stocks in the Clarence River system, will bring no joy to advocates for the reopening of Nymboida's Power Station. The negative impacts of that facility, on both the Nymboida and Orara systems, are well known, and the latest recommendations call for the construction of a 'fish ladder' at the Nymboida weir, and continued repairs to damage caused to creek banks along Blaxlands Creek to prevent the ongoing siltation of the Orara River.

The construction of a 'fish ladder' to allow fish migration upstream across the Nymboida weir, was a consent condition for the Shannon Creek dam, and should have been constructed a decade ago, but has been successfully postponed time and again by the proponents.

That delay in fulfilling their obligations focuses attention on all consent conditions, with project proponents only too happy to promise the earth in order to gain approval, but far less happy to carry through on those promises. Furthermore, there appears to be a total lack of any agency monitoring or enforcement to ensure those conditions are delivered.

In the case of the Shannon Creek dam, a raft of conditions were scrapped, with the relevant agency's blessing, within days of receiving their final approval. These included numerous requirements of a Phytophthora cinnamomi Plan of Management, and seed collection and propagation of a number of threatened plants prior to their being bulldozed. Other conditions, such as Koala feed tree planting along creek lines crossing their access road were ignored completely.

To the sceptics, it appears the imposition of consent conditions has more to do with mollifying the critics, than it has with ameliorating the massive environmental damage that results from these developments.

The Pacific Highway upgrade is another project that will be saddled with great numbers of consent conditions, but we will save that story for another day. In the mean time, if we are to save our threatened wildlife from inevitable extinction, governments across the board must take enforcement of those conditions seriously.

John Edwards
Peter Turland's Land for Wildlife projects

Following on from the “Emu Gully” re-vegetation project in the Pillar Valley, our Land for Wildlife representative, Pete Turland, has embarked on two more ambitious projects designed to enhance wildlife movement corridors and to help our embattled Coastal Emus and other wildlife.

Nine months after initial planting at “Emu Gully”, shrubs and young trees, some of which were planted by our volunteers, are now well over head high and revelling in the spring rains, but more significantly, the landowners reported sighting an emu with 5 chicks. With speculation that Emu numbers have dropped to well below the previous estimate of 100 birds, this is great news.

However we should not get too excited about sighting 5 chicks, knowing that these birds can lay upwards of 15 eggs, and there should be an expectation the at least 10 chicks should survive.

Our surveillance cameras, set up as part of the Upper Coldstream Biodiversity Project have picked up foxes at two sites, and these predators are very likely having a negative impact on the bird’s chances of surviving.

There has been some speculation that, with land-use changes that have occurred in the Pillar Valley over the past 30 years, Koalas could potentially be reintroduced to the area. Certainly there is a significant amount of suitable habitat across the landscape, with several sightings in relatively recent times near the Wants Lane travelling stock route. As a result, Pete's second project, dubbed “Koala Gully”, is focusing on re-establishing a forest corridor with plantings of Koala feed tree species such as Red Gums, Grey Gums and Tallowwoods.

Pete's third project, and probably the most ambitious, is to re-establish a Subtropical Coastal Floodplain Forest along river flats adjoining Chaffin Creek, which was totally cleared for agriculture years ago.

The area covers some 2 hectares and includes wetland sedge communities and slightly more elevated ground that currently supports a wide range of noxious and other introduced weeds, and while those weeds will have to be dealt with during the early stages of the project, it is envisioned that they will disappear from the landscape entirely once a forest canopy is established.

Well done Pete, keep up the great work. J.E.

“There is no sadder sight than a young pessimist.”
— Mark Twain

Voices for the Earth

At a time when our natural world is under threat, world-wide, as never before, the vision statement recently released by a coalition of peak environmental organisations in NSW gives us renewed hope for the future.
That statement signed by numerous organisations including the Nature Conservation Council, The National Parks Association, The Total Environment Centre, The Wilderness Society, and our regional North Coast Environment Council describes:

“a vision of a state in which our society lives sustainably, recognising the limits and services provided by nature and mobilising our capacity for innovation and investment in the future. A vision of a state where:

• Clean air and fresh water are valued more highly than the demands of powerful vested interests.
• Our leaders’ responsibility to protect the health of citizens is not compromised by heartless fiscal calculation and bureaucratic inaction.
• Our communities live within natural limits, using precious natural resources wisely and harnessing clean, renewable energy from the sun and wind.
• Healthy forests, rivers and oceans are populated by thriving populations of native plants and animals.
• Wild nature is valued for its own sake, and for the inspiration and solace that it provides for so many, from all walks of life. And:
• We don’t throw resources away after a single use but recycle and reuse”.

There is an irony in the words of our Federal Treasurer, Joe Hockey, who repeatedly asserts that “Australia must live within its means”, while all the time supporting an unsustainable economic growth model dependent on non-renewable resources, while at the same time destroying the very environment that provides us with the vital “means” of clean air and water absolutely free.

As the environmental vision statement explains, adoption of its principles: “will not destroy the economy and jobs, as some out of touch with reality and community aspiration might claim. It can create a new economy, that is not reliant on ‘short-termism’ and backroom deals; and which produces many thousands of sustainable jobs for the future”.

All governments need to re-evaluate our long-term needs and objectives. They need to change the corrupt culture that is destroying public confidence in the political system, and truly embrace sustainability for the sake of our children and our children’s children. J.E.

Food for thought for the Greens

The Centre recently received an appeal from NSW Greens MLC member, Mehreen Faruqi, seeking support for their campaign to oppose the Shooters and Fishers Party proposals to change aspects of the Native Vegetation Act, particularly the “maintain or improve bio-diversity” clause which apply to landowners seeking permission to clear native vegetation through a Property Vegetation Plan (PVP) which has to show that their action will not diminish the level of biodiversity on their property.

While supporting the Greens’ campaign I felt it was important to impress on Mehreen that, abhorrent as the Shooters’ proposed changes are, it has to be recognised that the “maintain or improve” clause is little more than a sick joke, merely being a promise to protect or enhance other areas of the property in question, something that is never policed by the regulating authority, and generally ignored by landowners.

A neighbour of mine with about 80 hectares of land recently logged his place. There wasn’t much merchantable timber there, but they took it all. I could see nowhere that had not been logged, and although the logging rate was low, it had the effect of removing all candidate habitat trees, i.e. trees that might form hollows if left for another fifty years or so.

That has been happening in our area since the 1850s, longer in Mehreen’s neck of the woods, in the Sydney Basin, leaving a 150 year gap in the forest growth cycle, which currently sees forests with hardly any old-growth trees left, and those that have survived nearing the end of their natural life. I pointed out that with every bushfire, or violent storm, we see that number reduced and we are
I believe that any land that is suitable for the growing of food has long since been cleared, with little to justify further land clearing. Therefore the sooner landowners with forests can make money by letting their forests recover the better, and what better way than to introduce a carbon trading scheme which could provide an income stream for landowners.

Just some food for thought  

I n 2013 the Clarence Environment Centre (CEC) received a grant of $1,000 from the Nature Conservation Council, to assist in the landscaping and revegetation of an eroded gully on Land for Wildlife property in the Pillar Valley region of the Clarence Valley local government area.

Ultimate aim of project

The aim of the project was to restore a relatively steep-sided gully on a Land for Wildlife property, 692 Firth Heinz Road, Pillar Valley, which for many years had suffered from clearing, cattle grazing, a high fire regime, and eventual regular slashing, ensuring a very low potential for seed-bank retention and a considerably long-term prospect of natural regeneration. At the time of making the decision to restore the gully, it was also showing early signs of erosion, which would have quickly become serious if not addressed.

A more pressing incentive for undertaking the project was the property's position within an identified movement corridor for the endangered Coastal Emu population. The degraded gully afforded an ideal opportunity to reconnect the fragmented landscape with appropriate local species to enhance the emu's habitat. With emu numbers dwindling annually this opportunity to offer an additional source of food, water and safe refuge seemed imperative.

For these reasons it was decided the restoration plan should include a chain of small waterholes, with one slightly larger for temporary seedling irrigation purposes, and each pond planted as created with locally sourced ground, shrub and canopy species previously identified as endemic to the site.

Actions

1) In October 2013 permission to carry out water-containment works within the catchment was sought by the landowner, the project manager and the CEC through the Senior Water Regulation Officer and of the North Coast region of the Department of Primary Industries (DPI), Office of Water.

As the proposed pond construction complied with all relevant criteria set by DPI

- Soil erosion prevention
- Environmental management purposes
- Non-commercial use
- Non domestic use (pumping / reticulation etc)
- No adverse impact on neighbouring properties
- Minimum (and maximum) size necessary for its required function (i.e. will not need to be enlarged/disturbed at a later date)

and also because the project would deliver a number of important environmental outcomes, it was duly endorsed by the DPI.

2) In November and December 2013 the project manager and landowner drew up a planting plan for Pond #1, sourced materials and undertook excavation works, sand layering and initial erosion mitigation plantings.

3) Following the holiday period and a useful spell of rainfall, a team of 6 people, including
the project manager and the landowner, planted >150 mid-storey seedling species in an approximate 50m x 100m strip along the gully around the pond site. At this stage the pond, although in its early stages, was already holding water from the recent rains.

4) An irrigation system was set in place and further strategic plantings were continued by the project manager in liaison with the landowner. By June 2014, despite the winter months and a drought, the irrigation system was proving its value by a healthy rapid growth around the Pond 1 site, and an already demonstration of early linkage between scattered regrowth tea-tree shrubs and the more distant natural bushland.

5) At this time, with warmer weather after winter, work began on Pond #2 along a similar plan and design to Pond #1, only on a smaller scale. The project manager and landowner have so far continued to work together at this site, without need at this stage for further help from a CEC team. Further tree guard palings have been sourced free of charge from Bunnings warehouse, Grafton, and many Lomandras are in the ground to hold the banks and prevent erosion. A number of mid-storey plants, mainly rapidly establishing species such as Acacias, are also planted and growing well around the site.

Work remains ongoing for this project and is expected to continue through at least the most part of 2015, with some expected further financial support from the CEC under its Land for Wildlife program The project to this point has been delivered somewhat over budget, but still satisfyingly consistent with the projected budget presented in the initial funding application.

The CEC and the Land for Wildlife movement is extremely grateful for the contribution the NCC has made in helping to create this exciting new project, which we are confident is, and will remain, consistent with NCC's own purposes of nature conservation, environment protection, and the attainment of an ecologically sustainable society.

Written by Patricia Edwards
CEC, Land for Wildlife regional coordinator

Now we may have to pay for water we don't even use

The Regional Water Supply Scheme, particularly the Shannon Creek dam, has always been controversial. A recent Clarence Valley Review article referring to “Clarence Valley Council's secret water deal” raises some interesting questions, which we will come to later, but first some background.

The region's drinking water, is mainly sourced from the Nymboida River, and Grafton, has been using that water for over 100 years when the first tunnel was cut through the Nymboida range, allowing water to flow downhill from a weir, all the way to the city.

In November 1924, the dream of engineer Bill Mulligan, to use the same diversion method to generate electricity, was realised with the opening of the Nymboida Power Station by then Premier, Sir George Fuller.

First operated by the Clarence River County Council (CRCC), an agency set up for that purpose, the power station developed far beyond the modest generating plant with its wood stave delivery pipe, into a modern automated hydroelectric facility. However, it had two limitations, the diversion of water from one river system to the other wrecked environmental havoc on both river systems, and in times of drought, there simply was never enough water to run the facility at full capacity.

At some stage, the CRCC was required to take out a water licence, and this is where things became complicated. When the Regional Water Supply was developed in the 1990s, the then water authority, Lower Clarence County Council, had to acquire part of the CRCC's licence, the financial details of which are apparently “secret”.

The current licence holder, Essential Energy, one of numerous 'entities' that have morphed over the years at the whim of various government restructures and council amalgamations, recently decided to close the plant following a major pipe “blow-out”, but it seems it still has the right to sell the water, which brings us to the question. When the
State Government sells off its electricity retailers, are Coffs – Clarence residents going to have to buy their water from a private company?

However, it's not just water for consumption, the Shannon Creek dam needs regular topping up to replace evaporation and seepage. Under its approval conditions, any inflow into the dam must be released downstream of the dam, so evaporation is relatively easy to calculate, approximately one metre a year, which runs into the thousands of megalitres annually.

Water will only be taken from the dam when flows in the Nymboida drop below 220Ml a day, a situation that could last for a decade at a time, so even though not a single drop is consumed by ratepayers we may still be expected to pay for it.

John Edwards

The burning question

It is interesting to read about a current Queensland monitoring program, recording the response of a very rare plant species to bushfire. The Cooneana Olive (Notelaea ipsviciensis) is represented by less than 20 living specimens in three small populations, struggling to survive in a mine and clay pit scarred landscape in the State's southeast.

The article’s conclusion that, “both plants and animals can have specific and varying responses to fire regimes”, is not surprising to those that have observed bushland recovery after burning, as is the observation that hazard reduction burning: “can be an exacting process to get it right for both asset protection and conservation of our unique biodiversity”.

The Beadle’s Grevillea, growing on an exposed sandstone cliff-top in the Clarence Valley, is a typical example of the complex relationship between plants and fire. The shrubs were discovered some 20 years ago, and have yet to be properly examined, but are believed to be a sub-species of the endangered Grevillea beadleana that occur near Torrington.

Following a severe fire in 2001, all but 5 of the 15 identified plants were killed, but following good rainfall a few weeks later, some 60 seedlings were recorded, most of which subsequently died in the 2002 drought. So it appears that, while fire will kill that plant, the seed needs to be exposed to burning in order to germinate. This is something that is not uncommon among Australian native plants, and has led to the popular claim, usually by those whose motives do not include biodiversity protection, that the Australian bush needs fire, and is used to justify regular burning off. However, it is critical that those plants be allowed time to flower and produce seed, which for trees could be 20 years or more.
These differing needs were recognised in the Northern Rivers biodiversity management strategy, particularly species growing in restricted sandstone communities, with one of its recommendations specifically calling for research into the effects of fire in those communities. However, like so many reports it, and its recommendations, are likely to remain gathering dust while species like the Beadles Grevillea fade into extinction. J.E.

John Edwards' deputation to Council on the rezoning of parts of Harwood Island as an industrial area.

“The Clarence Environment Centre has serious concerns about Council’s persistence in attempting to rezone parts of Harwood Island as an industrial precinct. This proposal is not consistent with the Mid North Coast Regional Strategy, or The Mid North Coast Farmland Mapping Project. It fails at least 3 points of the NSW Government’s Marine-Based Industry Policy, and it is inconsistent with Council’s River Way Master-plan, which identifies tourism potential as the region’s greatest asset, something not enhanced by riverside industrial estates.

We are particularly concerned that this proposal is being advanced without any assessment of the need for a marine-based industrial estate, or the appropriateness of the site for such a proposal.

Everyone knows that the site is regularly inundated by floods, up to 1.5m deep, which would see industrial pollutants washed across currently productive farmland. Also that those floods will dump huge quantities of mud onto the contaminated ground which, as we have recently learned, causes major disposal problems. There has been no consideration of the acid sulphate soil impacts, or of the impacts to endangered mangrove communities. There has been no consideration of soil stability issues, or the impacts to neighbours from the diversion of flood waters around the 10 planned raised factory pads. There has been no assessment of access problems associated with heavy vehicles, no assessment of impacts on environment and heritage matters, and no consideration of the impacts of sea-level rise. As well, the fact that some of the land in question is public land, currently under a native title claim, has been totally ignored.

When the State’s Planning Department suggested these measures should be addressed in consultation with the Office of Environment and Heritage before rezoning occurs, Council planners simply removed a small part of the more contentious land from the proposal, claiming: and I quote, “Should Council support the request to remove ... (said land), “the need for any further environmental assessment and flora and fauna assessment (and consultation with OEH) is considered unnecessary...”.

Harwood marine precinct site during flood. The Palmers Island residential area is in the foreground, and the proposed industrial zone is on the opposite side of the river, roughly bounded by the red line, and includes the existing Slipway site and the three toxic waste holding ponds.
Further environmental assessment?? There has been no environmental assessment to date whatsoever. And why is there so much pressure to get this rezoning through without any real scrutiny, or resorting to sensible investigations?

For all of the above reasons, the Clarence Environment Centre strongly believes that the proposed rezoning should be rejected”.

Our appeal, and two other deputations, along with numerous submissions opposing the rezoning, had no effect on our Councillors who voted to approve the rezoning, which will now go back to the Department of Planning.

However, we have been told that officers within Planning are not at all happy with the way Council has acted, and will insist on another “Gateway application”.

The Harwood Island resident’s case is not being helped by separate marine precinct proposal, this time for Palmers Island. This second proposal is being vigorously opposed by Palmers Island residents who, unfortunately, are arguing that their island is an inappropriate site, and that Harwood Island is much more appropriate!

While I have always supported NIMBYism, I see this as the darker side, and the attempt to undermine another group to achieve ones’ aims is disappointing. Palmers Island residents not asked for the Centre’s support – yet.

Another Private Native Forest logging nightmare

Back in early October, the CEC received a letter, via Valley Watch, from a Moonee group appealing for help to stop a highly damaging logging proposal, and possible follow-up clearing of high conservation value forest at the same Moonee site, to plant blueberries.

We contacted Ashley Love, a Coffs Harbour conservationist and he and I brought up the issue at the North Coast Environment Council’s (NCEC) AGM in 12th October. That meeting resolved that Ashley and I investigate the logging proposal, which had been approved by Grafton's Private Native Forestry (PNF) Unit. I contacted a member of the group of concerned citizens, Sharon Tan, and was invited to attend a meeting at Moonee.

There I met with about 8 others including several highly qualified persons that strongly believed the logging should not be allowed to go ahead but, as we are all aware, under the letter of the law things like mapped wildlife corridors and threatened species do not stop logging, and as usual the PNF Unit's assessment of the forest varies from other mapping that has been done.

I have not yet had the opportunity to visit the subject property, but hope to do that in the near future.

The rapidly expanding blueberry industry is currently a real worry in our region, with the head honcho recently reported in the media as saying the native vegetation act needs to be changed to allow them to clear ‘regrowth forests’ (i.e. anything that's been logged previously), and the property owner has told locals that he plans to clear much of his forest to grow blueberries after logging.

The NCEC asked me to draft a letter to be sent to the relevant Ministers, which I did, drawing on points made previously by highly experienced ecologist, Dave Scotts, in a letter he had sent to the PNF Unit, and which highlighted the following environmental problems associated with the proposal.

1 The subject land supports national core habitat for the endangered Moonee Quassia;
2 The subject land supports old growth forest and High Value Arboreal habitat (Fisher 2014);
3 The subject land falls entirely within an important mapped habitat corridor with potential connectivity conservation benefits for a suite of threatened species (e.g. Koala, Giant Barred Frog, Swift Parrot, Squirrel Glider, threatened insectivorous bats) and migratory species;  
4 The impacts of the proposal on protected values will be both direct (habitat loss, degradation and fragmentation) and indirect (e.g. elevated pest species incursion, pollution and spray drift);  
5 The wider impacts of the proposal on values protected within the soon to be gazetted new national park or nature reserve at South Moonee Forest.

The proposed logging site does have records of Koala sightings

That NCEC letter was approved by the Executive and reads as follows:

“The North Coast Environment Council has learned that a logging PVP has been granted for high conservation value forest at 9 Maccues Road, Moonee (Lot 2 - DP 238651), part of one of the most significant areas of extant remnant vegetation remaining on the Coffs Coast, and part of a critical wildlife corridor joining the coastal strip to forests on the tablelands.

Our concern is further enhanced by reports that the landowner intends to follow the logging with an application to clear the then degraded property to plant blueberries.

The importance of the wildlife corridor has already been established (Scotts, D. (2003). “Key Habitats and Corridors for Forest Fauna”), with the RMS acquiring the South Moonee forest, (soon to be gazetted as National Park) as compensatory habitat, specifically to maintain the link with the existing vegetation that is now under threat. To facilitate the safe movement of wildlife such as the iconic Koalas across the recently upgraded Pacific Highway, the RMS has expended a significant amount of money and resources constructing funnel fencing, with under and over passes for wildlife, to connect with the vegetated corridor that is now facing destruction.

The subject property also supports the core population of the rare and endangered Quasia sp. Moonee Creek, a highly restricted species known only to occur immediately north of Coffs Harbour and east of Grafton. While there are thousands of stems growing on the subject land, those more northern populations are few and scattered, mostly occurring in small isolated groups, often numbering less than 100 plants. Also, as far as we are aware, the Quasia is not represented in any reserve, clearly demonstrating the importance of the subject site for the survival of the species.

That importance was further confirmed in July 2006, when WetlandCare Australia (Mark Graham) prepared the “Moonee Quasia (Quassia sp. Moonee) Habitat Restoration Plan for the then Northern Rivers Catchment Management Authority.
Subsequently, extensive revegetation was undertaken on several properties with three separate funding grants that saw between $7,000 and $10,000 spent on bush regeneration works on the subject property itself. To contribute public money on the one hand to enhance biodiversity, while on the other hand providing a PVP to destroy it suggests the left hand of government has no idea what the right hand is doing, and is, we believe, completely unacceptable.

The NSW Scientific Committee’s findings of the main threats to the Quasia’s survival, are significant:

- Destruction, degradation, and fragmentation of forest habitat in coastal areas through clearing, urban development and repeated disturbance.
- Timber harvesting and associated roadworks (it is our understanding that plants have already been destroyed by road works on the property).
- Invasion of weeds, particularly Lantana (something that invariably occurs following logging) and,
- Risk of local extinction because populations are small.

If these potential threats had been taken seriously by the PNF unit, this logging PVP would never have been granted.

The subject land also contains high quality Lowland Rainforest, listed as an Endangered Ecological Community under the TSC Act, and Critically Endangered under the Federal EPBC Act. While that rainforest will not be logged, it will be placed under increased threat in both the short and long term from fire and edge effects resulting from the weed invasion that invariably follows logging. The EPA’s investigations of logging operations in the nearby Wedding Bells State Forest just 2 years ago, identified these very problems.

Also, the assessment of vegetation status on the property, undertaken by the PNF unit, is in stark contrast to that undertaken on behalf of Coffs Harbour City Council which identified the land as containing “old-growth and High Value Arboreal Habitat”. As a result, we strongly believe there needs to be an independent reassessment of the entire proposal.

Other local history is concerning, with reports that high conservation value forest, to the immediate south of the property in question, was illegally cleared to build a dam. The guilty party was let off with a ‘slap on the wrist’ penalty after pleading he was unaware of the rules. However, anecdotal reports suggest that the clearing was undertaken with full knowledge of the law and potential penalties, which the proponent treated as a tax-deductible cost of doing business.

We therefore call on you, as Environment Minister, to ensure the protection of this vital corridor with its high conservation value vegetation, along with the wide range of threatened species it supports, from the proposed logging.

Yours sincerely

In the mean time however, I had contacted the Grafton office of Local Land Services, which incorporates what used to be the Catchment Management Authority, the agency that administered the grants that had been used to undertake Quasia habitat regeneration work on the property. The officer I spoke to was clearly concerned, and was not aware of the proposed logging, but offered to investigate.

Soon after he rang me to say he had contacted the PNF officer that had approved the PVP, who explained that, subsequent to the approval of the PVP, he had met with Department of Environment officers, the landowner, and the logging contractor on site, and together they had determined that, because of the high number of Quasia present, and the stipulated buffer that had to be protected around all plants, there was no scope left to log the property.

This was great news, but leaves us wondering why the PVP was approved in the first instance, and with that approval still in effect, locals are determined to remain vigilant.

John Edwards
Lights burning too brightly

One of our most active volunteers, Steve Fletcher, is also a member of the local astronomical society, and has a passion for all things stellar. One of his greatest concerns, and one shared by all astronomers, is light pollution, and he has fought for years to have street lighting in Grafton modified to focus the light downward rather than polluting the heavens as it currently does.

Anyone who has spent a night in the country, away from city lights, can attest to the glow that occurs in the sky above all townships, that can be seen from considerable distances, and this wasted light not only causes light pollution, but is costing us money. And that cost is about to escalate significantly.

The issue is complex so, under the CEC banner, Steve embarked on a campaign which involved petitions, and letters to Council, lobbying councillors and community groups, and finally combining with another of our volunteers, experienced journalist Michael Porteus, to put out a media release to local newspapers, explaining the potential impact of rising prices on ratepayers, and some of the solutions.

John Edwards

MEDIA RELEASE

“ENVIRONMENT and community groups are asking Clarence Valley Council to control light pollution to save money and reduce the environmental damage caused by wasted light.

The Clarence Environment Centre and ten other community groups want the council to champion the use of LED bulbs and full cut-off light fixtures which public works engineering experts say could halve the cost of street lighting.

The environment and community groups made their request in a letter in September after electricity providers began seeking to end the traditional discounts on electricity bills for public lighting. Some North Coast councils fear their bills for outdoor lights will rise by more than 70 per cent. Clarence Valley Council’s bill could rise by $150,000 a year.

The groups’ letter says the glow in the night sky over the city of Grafton is caused by inefficient outdoor lighting which sends 20 to 30 per cent of its energy up into the sky instead of down on to streets.

As well as saving money, the groups say improving outdoor lighting would:
- reduce greenhouse gas emissions,
- improve road safety by reducing glare,
- enhance street security,
- lessen human-health problems caused by lighting that disturbs sleep,
- enable native animals to live in more natural conditions, and
- improve nighttime views of the skies for all members of the community.

The campaign to improve public lighting in the Clarence has been advocated by Steve Fletcher, the Clarence Environment Centre member who is also the secretary of the Clarence Valley Astronomical Society and a member of the Clarence Valley Council Climate Change Advisory Committee. Steve says the Clarence could join a small number of locations around the world with ‘dark parks’ which could attract international tourists to ‘festivals of the stars’.

Astronomers worldwide decry urban light pollution which they say can blot out up to 80 per cent of the stars in the skies for hundreds of kilometres around cities. “Darkness is fragile,” say people from the International Dark Sky Association. “Some children today will grow up never knowing the wonders of the skies.”

Astronomers also cite studies from around the world showing that too much light does not improve safety or security, and can harm human and animal health by interfering with natural rhythms of light and darkness. They point to many examples around the world – including Copenhagen, Los Angeles and Sydney – where technology including LEDs
and computer sensing are improving the efficiency of outdoor lighting.

But threats to views of the stars are also increasing. Reports in October said Australia’s leading observatory at Siding Springs near Narrabri could be forced to shut down by light pollution from nearby coal seam gas mine developments. The observatory is already affected by light pollution from cities including Sydney 400km away, but there are fears that the night-time flaring associated gas mines within 50km of its SkyMapper telescope could end work which this year detected the oldest-known star in the universe.

On the North Coast, community awareness about street-lighting costs rose this year after energy providers informed councils that they had applied to the Australian Energy Regulator to approve rises of more than 70 per cent in the prices they would charge for electricity used in public lighting. Mayor Jenny Dowell says Lismore faces an annual increase of $143,000 from next July, which she describes as “night-time robbery”.

Clarence Valley conservationists cite research by the Institute of Public Works Engineering Australia which says 90 per cent of Australia’s streetlights are owned and maintained by utility companies. They say these companies are being prepared for privatisation and have no incentive to improve outdoor lighting efficiency as they make money by selling electricity.

The issue was discussed at the Clarence Environment Centre meeting in September, which decided to write to local councilors and public officials asking them to look into providing more efficient lighting.

The letter was co-signed by representatives of groups including the Clarence Valley Conservation Coalition, the Clarence branch of the National Parks Association, Valley Watch, the Clarence branch of Climate Change Australia, the Clarence Valley Council Climate Change Advisory Committee, Clarence Valley Wires, the Clarence Valley Astronomical Society, the Knitting Nannas, and the Yarrawarra Aboriginal Corporation.

The letter asks Clarence Valley Council to:
- join other councils to pressure electricity providers to upgrade bulbs and fixtures,
- urge the NSW government to delay electricity price rises until more efficient outdoor lighting is installed,
- ask the Australian Energy Regulator to make price increases depend on upgrading street lighting to fully-shielded LEDs, and
- have an outdoor lighting code in its development application process”.

Lending a hand in our Parks and Reserves

Collectively, our members have spent many thousands of hours volunteering in our national parks, nature reserves and parks, undertaking all manner of tasks from weed control to monitoring wildlife.

In Early November, several of our volunteers assisted with a fauna survey in the Chambigne Nature Reserve, which further enhanced its reputation as a biodiversity hotspot. The survey was undertaken on two portions of land, that were acquired some 5 years ago, and which adjoin the original nature reserve some 20km south west of Grafton.

Typical of the wind and water eroded sandstone formations found in the Chambigne Nature Reserve

The combined lots added about 750 hectares to the original reserve, consisting primarily of dry sclerophyll forested land on sandstone, rising from 30 metres to 160 metres above sea level, and crossed by a number of creeks including Shannon Creek, with Chambigne
Creek running along the northern boundary, all of which feed into the Orara River.

In late 2010, soon after the acquisition of that additional land, the Clarence Environment Centre was contracted by the then NSW Department of Environment, Climate Change and Water to undertake a comprehensive flora survey of the new reserve. That survey identified more than 350 plant species including 7 threatened species, 2 endangered ecological communities, several range extensions, and another dozen or more species considered to be “significant” for one reason or another.

The wider Chambigne – Shannon Creek area, which measures only about 15km by 5km, is now known to support more than 900 native plant species, some of which are unique to the area, and grow nowhere else in the world, and at least 20 of which are listed as threatened.

When funding allows, the Office of Environment and Heritage formally assesses its holdings to determine what species occur there, and how best to manage the reserve to protect those species. For this latest survey, CEC volunteers were again invited to participate by assisting the scientific team led by local ecologist Dr Greg Clancy who, coincidentally, is also a long-time Centre member.

The survey methodology consisted of trapping using cage, Elliott, pit, and harp traps; along with pit traps, call play-back; night spot-lighting, targeted reptile searches, and opportunistic observations. The traps were set at three sites on both blocks, targeting species expected to occur near riparian zones, mid slopes, and ridge tops.

Arriving at the campsite in the early morning, our volunteers joined with the survey team who had been camping there for the past three nights, and were just in time to do the rounds to check the traps. The weather was cool and overcast, providing ideal conditions for the work at hand, and also for any animals that might have been trapped.

Excitement levels were soon raised by finding an endangered Spotted-tailed Quoll in one of the cage traps. It was a male, and the second Quoll to be trapped in the same spot during the survey, the previous animal, a female, assumed to be this one’s mate.
Pit traps are simply large buckets buried in the ground, their rims level with the surface, designed to capture unwary skinks, small snakes, frogs and other small mammals, as well as invertebrates. The small skink pictured at right was, however, caught while sunning itself on a sandstone boulder. It was examined to determine the species, which will then be recorded in Dr Clancy’s final report to the Department.

Other animals captured that night were a Sand Monitor (Goanna), and a threatened Brush-tailed Phascogale. Yellow-bellied Gliders, were also heard, but not captured, as were other threatened species such as the Little Lorikeet, and Brown Treecreeper. J Edwards

A threatened Squirrel Glider was also captured in an Elliott trap. It too was examined to determine its gender, while also having to suffer the indignity of having it’s tail measured to differentiate it from its more common cousin, the Sugar Glider.

If the politicians aren't listening, then they must be stone deaf, because on 1st November, despite competition from the Murwillumbah Show and the Jacaranda Festival parade, a crowd variously estimated to be between 8 and 10 thousand, gathered to march in Lismore in protest against unconventional gas mining, and to demand a gas field-free Northern Rivers.

The march column, some 10 people abreast, stretched almost completely around 2 city blocks in an impressive show of “people power”. Mind you there were no government members present, Thomas George had to rush
off to attend the Murwillumbah Show, and the other local member, Chris Gullaptis, the man who has three times called in riot police to break up protests by members of his electorate (don't forget the Grafton Jail), was also nowhere to be seen.

There is some evidence that the Pollies are beginning to listen. The Labor opposition, those responsible for inviting this toxic industry into the state in the first place, have now declared that the Northern Rivers, including the Clarence Valley, will be declared off limits to gas mining if they are re-elected to government next March. The electorate however, is unlikely to forgive or forget the corruption and scandal that led to Labor being thrown out at the last election. This is despite recent ICAC revelations that the Coalition is equally corrupt, and are now claiming to be redrafting its own policy on gas mining, but are in no hurry to release details. We eagerly await their announcement.

Congratulations to all the Clarence Valley residents who attended.

Q: What did the environmentalist get when he sat down for too long on an iceberg?
A: Polaroids!

Q: What do you get when you cross an environmentalist with direct action?
A: Arrested!

“Go to Heaven for the climate, Hell for the company.” - Mark Twain
Progress: the continuing effort to make things to be as good as they used to be.

Whenever you find yourself on the side of the majority, it is time to pause and reflect. – Mark Twain

Whenever he thought about the environment he felt absolutely terrible. So he came to a fateful decision. He decided not to think about it.