# BRUNSWICK HEADS TO YELGUN

# PACIFIC HIGHWAY UPGRADE PROJECT

# FOURTH AND FINAL SIX MONTHLY REPORT ON

# ENVIRONMENTAL PERFORMANCE

## JANUARY 2007 TO OCTOBER 2007

# Contents

# 1.0 Introduction

The Brunswick Heads to Yelgun Pacific Highway Upgrade is an 8.7 kilometre project awarded as a Design, Construct and Maintain (DCM) contract by the Roads and Traffic Authority (RTA) to Abigroup Contractors Pty Limited in February 2005.

Substantial construction commenced on 20 July 2005 and the Pacific Highway Upgrade component of the project was opened to traffic on 11 July 2007.

This is the fourth 6-monthly report, and covers the period from the end of January 2007 to end of October 2007. Appendix 1 contains summary monitoring reports for the calendar months of February 2007 until the last month of monitoring in August 2007. Appendix 2 contains verification tables for the planning approval conditions for the project (DIPNR, NPWS and Byron Shire Council). Where conditions of approval indicate consultation with relevant agencies, although not specifically highlighted, the RTA were always also consulted.

This report has been prepared to fulfil the requirements of the DIPNR (Department of Planning) Condition of Approval no. 14, which states: -

> *The Proponent shall submit to the Director-General, a report(s) in respect of the environmental performance of the construction works and compliance with the EMP (Construction Stage) and any other relevant conditions of this approval. The reports shall be prepared six months after the start of substantial construction and thereafter at six monthly intervals or at other such periods as requested by the Director-General to ensure adequate environmental performance over the duration of the construction works. The report(s) shall include, but not be limited to, information on:*
>
> *(i) applications for consents, licences and approvals, and responses from relevant authorities;*
>
> *(ii) implementation and effectiveness of environmental controls and conditions relating to the work undertaken;*
>
> *(iii) identification of construction impact predictions made in the EIS and any supplementary studies and details of the extent to which actual impacts reflected the predictions;*
>
> *(iv) details and analysis of results of environmental monitoring;*
>
> *(v) number and details of any complaints, including summary of main areas of complaint, action taken, response given and intended strategies to reduce complaints of a similar nature; and*
>
> *(vi) any other matter relating to the compliance by the Proponent with the conditions of this approval or as requested by the Director-General.*
>
> *The report(s) shall be provided to the EPA, NPWS, DLWC, NSW Fisheries and Byron Shire Council, and any other relevant government agency nominated by the Director-General. The report(s) shall also be made publicly available.*

# 2.0 Implementation of Controls and Monitoring of Environmental Impacts

## 2.1 Introduction

The following is a discussion of the major works undertaken during the reporting period and the major environmental aspects and mitigations measures adopted.

Information in this section addresses the following aspects of Condition 14: -

*(ii) implementation and effectiveness of environmental controls and conditions relating to the work undertaken;*

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*(iii) identification of construction impact predictions made in the EIS and any supplementary studies and details of the extent to which actual impacts reflected the predictions;*

*(iv) details and analysis of results of environmental monitoring;*

## 2.2 Flora and Fauna

Safeguards implemented to protect significant flora and fauna during the construction stage of the Brunswick Heads to Yelgun project were identified in the Flora and Fauna Management Plan.

A summary of the safeguards implemented on this project included: -

- On-going protection of threatened flora species and median “glider trees” using highly visible plastic “parraweb” fencing around designated areas on site. These were supported by warning signage. Clean straw mulch was also applied to the base of individual threatened species individuals;
- Translocating threatened flora species in consultation with DECC (NPWS). As an added protective measure, RTA translocated all of the previously identified threatened plants within the proposed road footprint over a year before construction commenced in consultation with the project ecologist. A small number of additional plants have been translocated as part of construction;
- Induction of all site personnel in awareness of sensitive vegetation;
- Maintaining a 3-metre high barrier fencing with shade-cloth cover in areas adjacent to the Brunswick Heads Nature Reserve during the construction phase. In consultation with DECC this fence was removed when the adjacent retaining walls were erected and it was agreed there were no potential impacts on the adjacent Nature Reserve;
- Controlling weeds;
- Respreading stockpiled topsoil and mulch recovered from site for reuse. Only topsoil from areas other than the worst weed infested areas was reused to minimise the potential for the spread of weeds;
- Propagating and planting native plants from locally collected seed during clearing;
- Progressive revegetation of disturbed areas. Where new earthworks batters have been shaped they have been covered with topsoil and hydro-mulched with cover crop. The soils on the revegetated batters were analysed and soil amelioration was applied. This revegetation has been monitored and has achieved significant stabilisation.


Photo 1: Typical signage and fencing protection to a threatened tree species adjacent to the highway upgrade alignment. Weed-free mulching was applied in 2007.

Photo 2: Impacts on the adjacent SEPP14 Coastal Wetland No 62 was minimised with the field delineation of vegetation clearing lines and a 3-metre high barrier fence. Staged removal of the 3-metre high fence was undertaken in consultation with DECC as Retaining Wall 1 was erected.

Photo 3: Completed highway upgrade adjacent to the SEPP14 wetland. The limited vegetation clearing has minimised impacts to the adjacent Brunswick Heads Nature Reserve.

An unexpected roost of approximately 109 micro-bats (Myotis adversus) was discovered in March 2007 as part of a pre-demolition inspection on the old Brunswick River bridge.

Specialist bat ecologists engaged by the RTA assisted the project team with the translocation of the bat colony prior to bridge demolition. An independent specialist bat ecologist was also engaged to undertake a peer review of the translocation methodology. There have been a number of learnings from this exercise, and the RTA is now applying these to other projects.

Photo 4: Following the discovery of a roost of bats (*myopis adversus*) under the old Brunswick River bridge, a bat translocation program was developed and implemented in April 2007 by the RTA in consultation with DECC and specialists from Eco Logical Australia.

Photo 5: As part of the bat translocation plan, bat exclusion netting was placed over entire bridge spans that had been used by the bats, during staged demolition of the old bridge.

Table 2.1 Flora and Fauna predicted impacts

| Predicted Impacts (ref EIS 12.4) | Actual Impacts (as assessed at this construction stage) |
|---|---|
| Impacts on threatened flora species | Over two hundred individual Threatened Species plants sit in close proximity to the new upgrade alignment. These have been monitored, installed protective fencing has been retained, and they have had clean mulch spread on their bases. Successful completion of the translocation of selected threatened flora species following approval from DECC (NPWS). A site for the planting of Acacia bakeri has been established adjacent to the STP Access Road, and is also being maintained by the project ecologist. |

| Predicted Impacts (ref EIS 12.4) | Actual Impacts (as assessed at this construction stage) |
|---|---|
| Removal of (terrestrial) fauna habitat | A program of habitat box construction, installation and monitoring was initiated with the project Community Liaison Group, and will assist in offsetting the removal of habitat along the Upgrade alignment. Funding for this component of the project came from the Natural Resources Advisory Council and Forging Partnerships Program.<br><br>Specialist bat ecologists engaged by the RTA assisted the project team with the translocation of the bat colony prior to bridge demolition, including an independent specialist bat ecologist also engaged by the RTA to undertake a peer review of the translocation methodology. |
| Formation of barriers to animal movement and Wildlife mortality | Terrestrial fauna movement crossing locations identified in the environmental documents have been created on the project alignment. These consist of large size box culverts, and have been inspected following construction with representatives from DECC (NPWS). Furniture associated with these including fauna exclusion fences and refuge poles were discussed with DECC on 14 February 2007 and again with DECC on 7 August and 26 September 2007.<br><br>One of the new culverts (at chainage 47.31) has been designed and installed as a special fish crossing culvert in consultation with DPI Fisheries. |
| Disturbance and degradation of adjacent habitat | Disturbance to the adjacent vegetated areas was minimised with the delineation of clearing lines in the field. Regular site meetings and inspections were undertaken with the project ecologists to facilitate rehabilitation including weeding works. |
| Impact on Brunswick Heads Nature Reserve Impact on SEPP14 coastal wetland areas | In accordance with the NPWS concurrence conditions for the project all project areas adjacent to the Brunswick Heads Nature Reserve have had a 3-metre high barrier fence with shade-cloth cover at the clearing line plus a sediment fence installed at the base. This has protected the existing vegetation from the effects of wind, dust, sunlight and vehicular movement. As constructions works neared completion in this area, this barrier fence was progressively removed in consultation with DECC. |

Photo 6: Furniture placed within the fauna underpass at C50.72.

Photo 7: Fauna nesting boxes were installed around the Brunswick River area, including within the adjacent Brunswick River Nature Reserve in consultation with the DECC.

Photo 8: Planting of rare and threatened tree species adjacent to the highway alignment was undertaken in September 2007, in accordance with the Threatened Species Translocation Plan and addenda.

The following is a summary of the local rare and threatened species planted on the upgraded highway alignment (over and above those planted in the designated translocation areas): Acacia bakeri (65), Archidendron hendersonii (3), Aristolochia praevenosa (145) Cryptocarya foetida (10), Davidsonia jerseyana (100), Eleocarpus eumundi (20), Endiandra floydii (18), Endiandra globosa (15), Euodia vitiflora (10), Flacons gigantea (20), Macadamia tetraphylla (5), Melicope vitifolia (5), Randia moorei (10), Sloanea austalis (10) and Syzygium moorei (10).

## 2.3 Heritage

The project Heritage Environmental Management Plan, details the safeguards implemented to protect indigenous and non-indigenous heritage areas.

In summary these measures included: -

- Protecting designated heritage items such as the 'Scar Tree' and the middens site beside the road footprint by the use of protective fencing;
- Inviting an archaeologist and representatives of the Tweed Byron Local Aboriginal Land Council when initial site disturbance works was proposed;
- Inclusion of heritage awareness in the project Site Induction program; and
- Salvaging found material on site, and where necessary undertaking archaeological reports on the significance of unexpectedly found objects.

Table 2.2 Predicted Heritage Impacts

| Predicted Impacts (ref EIS 12.4) | Actual Impacts (as assessed at this construction stage) and Heritage Monitoring |
|---|---|
| Seven "Potential Archaeological Deposit" PAD sites were identified as being impacted by road alignment. | Disturbance to these sites was permitted under the Consent to Destroy provisions provided by DECC (NPWS) in 2005. Representatives of the Tweed Byron Local Aboriginal Land Council (TBLALC) were invited to be present at times of initial disturbance. The dates of the initial works, attendance and close out by representatives of the TBLALC were included in reports provided to DECC (NPWS) in March 2006, with supplementary reports on 23 August and again on 28 November 2006. |
| Disturbance or potential disturbance to other sites of heritage significance | During the initial site disturbance activity in 2005, representatives of the TBLALC were invited and were present. This was undertaken in consultation with DECC and detailed in reports to DECC in March, August and November 2006. |

## 2.4 Water Management

Safeguards implemented to protect the quality of receiving waters during the construction stage of the Brunswick Heads to Yelgun project have been identified in the Soil and Water Management Plan.

A summary of the safeguards undertaken included: -

- A system of weekly environmental field inspections during construction of the upgrade, with inspection sheets signed off by the Leading Hand in the field when completed; On many of these inspections the project EMR was present, and on other occasions representatives of the state government agencies were also present;
- The preparation and updating of Progressive Erosion and Sediment Control Plans for the entire upgrade alignment;
- The on-going maintenance of soil erosion and sediment control devices;
- The management of construction stage sediment basins, including liaison with DECC (EPA) for variations to the Environment Protection licence;
- The implementation of progressive revegetation and landscaping throughout the project;
- Site spill containment guidelines, including the management of emergency spill kits at key locations;
- Regular water quality monitoring, with samples taken upstream and downstream of the site.

The demolition of the former Brunswick River bridge was undertaken using floating barges to capture and retain concrete fragments from the bridge deck structure. Due to unforeseen constraints, such as bat roosting and old timber piles, the work method statement was revised as the demolition process progressed, in an adaptive management approach. State agency representatives and the EMR were kept informed of the developments with the work method statement.

Photo 9: A catch barge located under the old bridge deck during demolition of the old Brunswick River bridge.

Photo 10: Old bridge pile being removed.

Photo 11: Environmental inspection on 2 May 2007 with representatives of the RTA, DECC and other state government agencies present. An assessment of the site stabilisation was undertaken to support an application to remove some sediment basins from the Environmental

Protection Licence with DECC. Progressive revegetation in basin catchment areas was considered generally successful.

Photo 12: Detail of a typical water quality basin, used during construction as a sediment basin and in post-construction as a permanent spill basin. Photo shows an oil baffle system and low flow outlet.

Table 2.3 Predicted Water Management Impacts

| Potential Impacts (ref EIS 10.2.3) | Actual Impacts (as assessed at this construction stage) |
|---|---|
| Soil erosion causing deterioration in water quality, damage to aquatic ecosystems and siltation of waterways. | During construction a comprehensive system of soil erosion and sediment control management system was planned, installed and maintained. This management system included weekly field maintenance inspections with site inspection reports signed off by site Leading Hands when actions were completed.<br><br>The soil erosion and sediment control management system included 23 formal construction sediment basins, over 45 km of sediment fencing, over 100,000 sand bags, over 1 kilometre of silt curtains, over 400,000 square metres of geotextile fabric and over 5 tonnes of hand seeding. There were many erosion and sedimentation control innovations undertaken during the project including the use of mulch windrows in lieu of sediment fencing, using temporary berms on the edges of fill embankments to direct runoff to designated batter chutes, the use of alternative materials such as geogrid and loose rock as check dams, the use of geotextile together with plastic to convey clean water across the site, using clean water hoses to wash off vehicles tyres prior to entering public roads in wet weather, and the use of polymers and temporary geotextiles to cover exposed soil areas.<br><br>On 3 August 2007 the DECC issued Abigroup Contractors Pty Limited with a Tier 2 fine for a breach of the POEO Act. |
| Acidic drainage due to disturbance of acid sulphate soils. | There has been no reduction in pH levels in receiving waters during construction. All ASS/PASS materials were neutralised and incorporated into the fills. |

Photo 13: Brunswick River Bridge work site during February 2007.

The Brunswick River and Marshall's Creek water quality monitoring program was undertaken at sites identified in the project EIS documentation, with results being recorded in the Monthly Monitoring Reports (refer to Appendix 1).

Meetings were held with the golf club at Ocean Shores in May 2007 regarding their concern about sediment entering the golf course. Machinery was subsequently provided to the club to desilt one of their lakes.

### 2.5 Noise and Vibration

A project Noise and Vibration Management Plan, detailed the safeguards implemented to manage noise and vibration during the construction stage in the surrounding environment.

Some of the noise and vibration management measures included: -

- 'At residence' noise measures implemented prior to the commencement of construction, implemented by the RTA, in consultation with the property owners;
- The erection of the noise barrier along the boundary in the Rajah Road area. Because of the complexity of the construction of an adjacent retaining wall, the timing of this noise barrier was staged in consultation the DECC (EPA) due to engineering, design development and practical implementation issues which were encountered during the process;
- Using temporary noise shields. An example of this occurred when, for practical reasons, the permanent noise wall at Rajah Road was delayed, and so a temporary noise shield was erected along the boundary;
- Providing quiet respite periods during noisy activities. An example is the natural respite period that occurs when the concrete hammering on the bridge demolition stoped in order to load and unload the concrete material from the barge;
- Adjusting the selection of equipment or process, so that less noise is generated. An example is pre-drilling the holes for the guardrail posts as an alternative to hammering the posts into existing hard ground;
- Having temporary noise curtains on stand-by, ready for erection in the case when noise levels become a nuisance. An example of this occurred during the Brunswick River Bridge demolition works, and the temporary noise curtain remained on stand-by for the nearby caravan park residents;

- Providing reminder toolbox training sessions to staff and field crews about the approved working hours for the project;
- Locating the temporary concrete batching plant at the Rest Area site, away from residential areas;
- Regularly maintaining plant and machinery on site. A fully equipped workshop was established on site with a number of qualified mechanics based full time on the project. The workshop regularly undertook repairs and preventative maintenance works to plant and machinery;
- Regular noise monitoring at designated sites along the length of the project alignment.

Following completion of construction of the upgrade, 80 community complaints were received in relation to noise and vibration from 42 separate contacts between July 11 and the end of October 2007. A post-operation noise monitoring program has been prepared for the project and commenced on 22 October 2007.

Photo 14: The permanent noise barrier wall (left hand side) near Rajah Noise is visible in this photo, and provided some noise protection while the highway traffic temporarily travelled on the new Service Road (Brunswick Valley Way).

Table 2.4 Predicted Noise and Vibration Impacts

| Potential Impacts (ref EIS 8.3) | Actual Impacts (as assessed at this construction stage) |
|---|---|
| Residences near sections which require extensive fill or cut operations may be exposed to construction noise levels for extended periods. | The installation of a permanent noise wall near the Rajah Road area was scheduled as early as possible in the construction program. Where, for practical reasons, the permanent wall erection was delayed, a temporary noise shield was installed.<br><br>Noise mitigation treatments at 56 neighbouring residents were completed by the RTA prior to the commencement of construction, typically consisting of reglazing, ducted air conditioning, industrial air conditioning units, the construction of courtyard walls, and enclosure of balconies.<br><br>Noise complaints were received from the project, and these are listed in section 4 of this report. |
| The predicted noise levels exceed the DEC/EPA goals and construction noise levels would be clearly audible. | There were occasions when the monitored noise levels were above the DECC / EPA noise goals. This was predicted in the EIS (section 8.3.3). However many of these exceedences occurred even when project construction activity was not evident at the time of the monitoring. Some examples in this period include NCA 8 (24 Binya, in Feb and March 2007) and NCA 13 (2 Ulpira in March 2007). In these and other cases the existing Pacific Highway or other local noise sources were the main contributors to the |

| Potential Impacts (ref EIS 8.3) | Actual Impacts (as assessed at this construction stage) |
|---|---|
| | noise levels experienced. , |

There has been no blasting on the project.

### 2.6 Dust

The management measures undertaken to manage dust on the project included: -

- Planning ahead ensured that there were sufficient water and water-cart resources ahead of the construction program;
- Water carts were used within the project site to manage the generation of dust from unsealed surfaces;
- An area specific Work Method Statement was prepared for the construction phase adjacent to the Billinudgel area in order to manage dust and vibration. This had been prepared with input from some of the Billinudgel stakeholders, and helped to guide the timing and scheduling of activities in consultation with neighbouring receivers;
- Suction street sweepers worked full time on the project. The operators of the street sweepers were contactable by mobile phone and this allowed the Site Foreman to direct the sweeping operations to areas of need at relatively short notice. (Following concern expressed from businesses in Billinudgel, the street sweeper kept away from Bonanza Drive and Lucky Lane);
- Implementation of soil stabilisation techniques on finished batters including the spreading of topsoil, and a combination of seeding and hydro-mulching early as early as possible in the construction program. In some areas follow-up watering of landscaped areas occurred to assist in revegetation establishment.

Table 2.5 Predicted Dust Impacts

| Potential Impacts (ref EIS 9.5.4) | Actual Impacts (as assessed at this construction stage) |
|---|---|
| Dust would be generated from earthworks associated with the construction. | Five separate dust complaints were received from businesses in Billinudgel during the reporting period. Although the water-cart remained operational throughout, dust generation was reduced considerably during this reporting period due to the sealing of pavements and the progressive revegetation of batters. |
| On a hot, dry windy day the amount of dust from wind erosion could be much higher. It is possible that under some extreme wind conditions, construction activities would be stopped. | During this reporting period, the generation of dust was minimised by the use of water carts, the sealing of pavement areas and by revegetation measures. |

Depositional dust gauges were installed along the alignment in accordance with the Air Quality Management Plan. Dust sample bottles have been collected from the gauges by Environmental Analysis Laboratory and analysed at Lismore throughout the duration of the project. The monthly dust depositional results are detailed in the monthly reports, in Appendix

1. The reduction in generation of dust can be attributable to the sealing of pavements and the staged revegetation of batters.

## 2.7 Contaminated Sites

Two contaminated sites were identified prior to construction commencing on the highway project, being a former cattle tick dip site (Hainsville) and a former service station site (Ocean Shores). These sites were investigated and detailed Remediation Action Plans were prepared.

The remediation of the cattle tick dip site was undertaken in the previous reporting period and the Ocean Shores service station site was remediated during this reporting period. Five disused underground storage tanks were exposed, and removed from the site. The surrounding soil was excavated and rehabilitated by a “landfarming” method. A Validation Report and a final Site Assessment Report documenting this activity is being prepared by an external consultant and will be forwarded to DECC.

Table 2.6 Predicted Contaminated Site Impacts

| Potential Impacts (ref EIS 13.7.3) | Actual Impacts (as assessed at this construction stage) |
|---|---|
| Further investigation and assessment of these areas would be required during the detailed design stage. | Investigation and assessment was undertaken by Responsive Environmental Solutions (Northern Rivers) during the development of the Remediation Action Plans(2006).<br><br>Contaminated soil from the tank excavation site was removed and stockpiled within a designated bunded area nearby. The soil was “landfarmed”, and when monitoring indicated that the soil was remediated the soil was topsoiled and revegetated insitu. A Validation Report is being prepared for the activity. |

Photo 15 and 16: Disused underground storage tanks exposed, and removed from site.

# 3.0 Agency contact, consents, licenses and approvals

## 3.1 Licenses, Permits and Consents

Several of the original approvals, licences and permits have been renewed.
Table 3.1 summarises the consents, licences and approvals obtained, held or renewed during this reporting period (end of January 2007 to October 2007).

Table 3.1

| License/Permit/Consent | Authority | Date Initially Issued | Status |
|---|---|---|---|
| Environmental Protection Licence | DECC/EPA | 6 June 2005 | The licence has been renewed annually. An application to surrender the licence was made to DECC on 25 July 2007 |
| Consent to Destroy and Salvage Aboriginal site | DECC/NPWS | 15 July and 14 December 2005 | A final report was sent to DECC on 21 March 2006, with supplementary reports forwarded in September and December 2006. |
| Excavate in Sensitive Area – Hainsville Area | Heritage Office | 19 July 2005 | No heritage items were uncovered or discovered in this area. |
| Permit to Harm Marine Vegetation– Transplant Seagrass | DPI | 22 June 2005 | The seagrass transplanting was undertaken in June 2005, and subsequent discussions have been held concerning the nature of follow up work. |
| Permit to Harm Marine Vegetation– North and South Banks of the Brunswick River | DPI | 4 July 2005 | Mangroves have been cut and trimmed in accordance with the renewed permit, valid until March 2008. |
| Bore Licenses | DWE(formerly DNR and DIPNR) | 30 May and 23 June 2005 | A letter to relinquish the water licences was sent to DWE on 25 September 2007. |

Table 3.2 summarises the results of other approvals within the monitoring period.

| License/Permit/Consent | Authority | Holder | Date Issued |
|---|---|---|---|
| REF Determination for Trimming Overhead Branches at Brunswick Heads Nature Reserve | DECC | Abigroup | 12 June 2007 |

## 3.2 Compliance with Planning Ministers Conditions of Approval Register

The project used an electronic compliance management system to assist in the collation and reporting against the conditions of consent for the project. This is an Abigroup Quality

Environment Safety and Engineering (QESE) system. The Roads and Traffic Authority also has it's own electronic compliance management system for the management of all conditions of approval and project commitments.

The advantage of this system is that it allowed flexibility in reporting, it hyperlinked associated documentation to a central database, it linked and standardised safety, environmental and quality management components and provided multiple live access to nominated users of the system. A print of the compliance register is included in Appendix 2.

# 4.0 COMMUNITY CONSULTATION AND COMPLAINTS

### 4.1 Introduction

The Abigroup Contractors Pty Limited (Abigroup) team for the Brunswick Heads to Yelgun Pacific Highway Upgrade project used a purpose built 'Access' database for the recording and management of all representations, including complaints, made to the project team, called QESE.

For the purposes of this project, all representations that required a remedial action by Abigroup, whether validated or not, are classified as a complaint in the QESE register.

### 4.2 Community Records

There were a number of ways people could make representations -

- Freecall number 1800 07 11 44.
- Email,
- Mail,
- Facsimile,
- Personal visit to the Community Display Centre on site, or
- Raised through Community Liaison Group (CLG) members.

- All representations are logged in QESE- as one of the following forms for representation: -
- Complaint;
- Appreciation;
- Concern;
- Notification;
- Comment; or
- Inquiry.

If it was an environmental issue the team would email the call log directly from QESE to the Environment Manager and the RTA's Representative.

### 4.3 Complaints received

The following table provides an overall summary of complaints received within the reporting period. More detail can be located in the individual monthly reporting sheets in Appendix 1.

- The following table provides a summary of community environmental complaints between end of January and end of October 2007. .
- Some of these are not related to the construction project but all have been recorded.

Table 4.1 Summary of Community Complaints in this Reporting Period

| **Complaint X Number** | **Area** | **Interim responses** | **Implications for work practises** |
|---|---|---|---|
| Dust x 5 | Billinudgel | Each complaint was checked with the Site Foreman. Although water carts were working in the general area, they were promptly despatched to the area of the complainant. | Water carts continued to work in the area to minimise nuisance dust. There was a steady decrease in this issue as pavements were sealed. |
| Vibration[1] x 4 | Billinudgel | Each vibration complaint was investigated to confirm machinery type working in the area. Site Foreman was reminded of the need to use smaller compaction equipment or turn vibration mode off when next to sensitive receivers. | Site Foreman used alternative compaction methods when working near sensitive receivers. |
| Construction Noise x 13 | Ocean Shores | Many of these were repeat complaints from the same complainant. Each instance was investigated. Many of these related to trucks and deliveries arriving prior to 7am. Reminders of the Working Hours were given to all personnel on site. Where specific workers or machinery operators were identified direct Toolbox Sessions were held. Two complaints related to formal after hours works that the complainant had previously already been notified about. | Reminder toolbox training was delivered to different field crews about approved working hours times. The site engineers and superintendents reminded their crews of the early morning start requirements. Field monitoring was also undertaken regularly. The use of public roads for after hours deliveries was treated sensitively. Barricades were installed in some areas to ensure that early morning deliveries could not come on site. |
| Operational Noise x 80 (includes repeat complaints) | Ocean Shores | Many of these were repeat complaints from the same complainant. These are recorded and addresses forwarded to the specialist noise consultant for review as part of the Operational Noise study. | These addresses were considered when developing the operational noise monitoring program. Many are repeat complainants. |
| Water Quality x 1 | Marshalls creek | The field conditions were investigated. | The stagnant water in upper reaches of Marshalls Creek were due to dry weather and negligible runoff events rather than specifically relating to the project. |
| Waste x 2 | Salad Bowl | The site conditions were investigated and litter cleaned | Reminders were given to the field crews to clean up |

| | | | |
|---|---|---|---|
| | | up. | litter. Removal and replenishment of rubbish bins was also regularly undertaken. |
| Odour x 3 | Ocean Shores | The site conditions were investigated. | Recent spreading of mulch for revegetation caused temporary odour. |

Notes:

1. Although all not from this reporting period the project has received 12 complaints from nearby premises concerning property damage allegedly due to construction activities. These are all being assessed on a case by case basis by insurance company representatives.

In all cases the responses to the complaints have been managed in accordance with the Community Information Plan in terms of timeliness and responsiveness.

Photo 17: Students from Mullumbimby High School assembling the nest boxes, June 2007. This was part of the CLG community nesting boxes program.

### 4.5 Community Relations Initiatives

Compensatory Environmental Outcomes:

- Donations of surplus mulch were made to Landcare, Byron Shire Council and to local community members;
- Ongoing organisation, support and meetings for the community based habitat nest box project;
- CLG Nest Box Habitat Project is substantially complete and has involved two local primary schools in building the next boxes with templates, design ideas etc supplied by the project.

Support for Community/Events:

- Stakes and plastic guards for re-planting programs were provided to two local groups within Brunswick Valley Landcare and to the Wilsons Creek Restoration Group (April 2007).
- A memento from the old Brunswick River Bridge was given to the Brunswick Valley Historical Society (a piece of the original concrete with a commemorative plaque) plus a framed brass plate (original 1934 bridge name plates) from old Brunswick River

Bridge was presented to the Historical Society at the opening of the new road (July 2007).

- BilliLids Pre-school was given regular donations of office supplies and stationery, including 3 archive boxes of re-cycled materials for craft work with the children. A specially large donation of recycled paper was provided in August 2007.
- Abigroup Contractors Pty Limited donated $3,000 worth of goods to the community auction held at the Family Fun Day to mark the opening of the project in July 2007. This raised funds for the Brunswick Valley Volunteer Rescue Association and the Brunswick Surf Life Saving Club.
- Abigroup Contractors Pty Limited was a major sponsor of the Ocean Shores Art and History Expo for a second year in a row in August 2007. This included printing all applications, publicity posters and programmes.
- All CLG members were presented with a commemorative coffee mug and set of construction progress photographs as mementos and with thanks for their involvement with the project (June 2007).
- Project presentations / tours were held for: - The Institute of Engineers Australia and U3A Ballina/Byron, (March and May 2007 respectively).
- The whole of the Brunswick Heads to Yelgun project team contributed towards National Hard Hat Day (fundraiser of the construction industry) (May).
- Participated in Australia's Biggest Morning Tea cancer fundraiser (May).
- Recycled A3 paper was given to ABC Children's Centre, Ocean Shores for drawing and painting.
- Photocopying maps and diagrams, EIS pages etc for local residents;
- Steel was provided for a local Scout Troop to weld campfire equipment;

Photo 18: Members of the local Lions Club assiting in preparing the nesting boxes, June 2007. This was part of the CLG community nesting boxes program.

# Appendix 1 Monthly Environmental Monitoring Results

This appendix contains the monthly environmental monitoring results that are reported monthly to the DECC/EPA and RTA.

# Appendix 2 Status Review of Conditions of Approval

This appendix contains a status review of the planning conditions.