



**Transport**  
Roads & Maritime  
Services

# **BANORA POINT UPGRADE**

Proposed modification to the Project Approval -  
CoA 6.5 Operational Environmental Management  
Plan

**AUGUST 2012**

## Abbreviations

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<b>Abbreviation</b>	<b>Full Name</b>
BPUA	Banora Point Upgrade Alliance
CoA	Conditions of Approval
D-G	Director General
DPI	NSW Department of Primary Industries
DoPI	NSW Department of Planning and Infrastructure, formerly the Department of Planning
EA	Environmental Assessment
EMS	Environmental Management System
EPA	Environmental Protection Authority
OEH	Office of Environment and Heritage
OEMP	Operational Environmental Management plan
RFS	Road and Fleet Services
RMAP	Road Maintenance Annual Plan
RMS	Roads and Maritime Services
SoC	Statement of Commitments
SOP	Standard Operating Procedure
TSC	Tweed Shire Council

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# 1 Introduction

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## 1.1 The Approved Project

On behalf of the Australian and NSW governments, Roads and Maritime Services (RMS) is currently constructing the Banora Point Pacific Highway Upgrade, which extends over approximately 2.5 kilometres from the northern end of Barneys Point bridge to the southern end of the Tweed Heads bypass.

The Banora Point upgrade was an activity that was assessed and determined under the former Part 3A of the *Environmental Planning and Assessment Act 1979*. It is within the Tweed Shire local government area.

The then NSW Minister for the Department of Planning approved the Banora Point Upgrade on 26 February 2009, subject to a number of conditions of approval.

## 1.2 Proposed modification

RMS proposes that Condition of Approval 6.5 be modified to the following:

*“Prior to the commencement of operation, the Proponent shall incorporate the project into its existing management systems.”*

This condition relates to the requirement for an Operational Environmental Management Plan (OEMP). The proposed modification does not consider changes to environmental management during the operational stage; it focuses only on administrative and system-related aspects of the Minister’s approval. The text from Condition of Approval 6.5 is included in Appendix A.

## 1.3 Justification for the proposed modification

Roads and Maritime Services, Infrastructure Asset Management is responsible for managing the maintenance of the State road network, while Roads and Fleet Services (RFS) provide the maintenance services. Further details on how infrastructure asset management and RFS manage the road network are included in section 2.1 and 2.2. Once operational, it is proposed that the Banora Point Upgrade would be maintained under this system.

Contemporary project approvals generally do not require the preparation and implementation of an OEMP. Recent RMS project approvals have not required the development of an OEMP or, have successfully modified their approval to remove this condition. Such projects include:

- F3 to Branxton Highway Link (the Hunter Expressway).
- Pacific Highway Upgrade – Devils Pulpit Project.
- Pacific Highway Upgrade: Wells Crossing to Iluka Road – Glenugie Upgrade Project.
- Pacific Highway Upgrade – Tintenbar to Ewingsdale Project.
- Pacific Highway Upgrade – Warrell Creek to Urunga Project.
- Pacific Highway Upgrade – Oxley Highway to Kempsey Project

While this proposed modification seeks to remove the requirement to develop an OEMP, a suite of plans have been approved for the Banora Point upgrade that address environmental management measures during the operational phase. It is important to note that no changes are proposed to these plans or the commitments included within them. These plans include:

- *Pacific Highway Upgrade – Banora Point: Urban Design and Landscape Management Plan (2011).*
- *Pacific Highway Upgrade – Banora Point: Ecological Monitoring Strategy (2010)*
- *Pacific Highway Upgrade – Banora Point: Biodiversity Offset and Mitigation Strategy (2010)*

- *Pacific Highway Upgrade – Mangrove Compensation Plan (2011)*
- *Pacific Highway Upgrade – Banora Point: Operational Noise Management Report (2011)*
- *Pacific Highway Upgrade – Banora Point: Community Consultation Strategy (2010)*

Details of the operational management measures and activities to be undertaken during the operational phase are details in section 2 and Appendix C, respectively. Appendix C of this modification outlines all operational managements for the project and where these issues are addressed within existing plans or management systems. Where operational requirements are not included within existing approved plans for the project, the specific management requirements is outlined within this modification proposal report.

## **2 Proposed Management of Relevant Operational Issues**

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### **2.1 RMS Network Management**

The Banora Point upgrade would be monitored and managed in accordance with RMS specifications M1 – General Network Management Requirements and M30- Maintenance Intervention and Investigatory Requirements (Corridor).

Under RMS Specification M1 joint planning assessments of the road network are undertaken on an annual basis by RMS Northern Infrastructure Asset Management and the RFS (the Service Provider). Based on these inspections maintenance requirements would be prioritised and a Road Maintenance Annual Plan (RMAP) would be developed for the Northern region. If a defect at the Banora Point upgrade is identified during the operational stage, specification M30 is triggered, which identifies the requirements for intervention and investigation of the defected asset. Under this specification the defects would be assessed and a requirement for intervention would be provided based on the assessment.

### **2.2 Routine road maintenance activities**

Road and Fleet Services (RFS) is the service provider that delivers road and bridge construction and maintenance services for areas of the NSW road network managed by RMS. RFS manages routine road maintenance activities under the Road Services Management Plan (2012) and the RFS Environmental Management System (2008). These documents describe how RFS manages the environmental impacts for their activities. The RFS EMS has been developed to satisfy the ISO 14001:2004 requirements for environmental management systems. It includes the environmental policy, legal and other requirements, communicating and reporting structures, staff training, as well as environmental management of maintenance and construction activities.

As detailed in Section 12.5 of the Environmental Assessment the existing Pacific Highway would revert to a local access road as part of the upgrade. In general RMS is responsible for maintenance of the highway section of the upgrade (as it forms part of the state road network) and Tweed Shire Council will be responsible for the sections of the upgrade within the local road network. RMS is currently in discussions with Tweed Shire Council about the maintenance and asset handover requirements of the project. Council will be provided with all relevant information about any particular project commitments that relate to areas proposed to be under Council control.

### **2.3 Specific operational environmental management measures**

#### **2.3.1 Mangrove compensation measures**

All ongoing management obligations in relation to mangrove compensation measures are detailed in the Kerosene Inlet Seagrass Monitoring Plan. This plan was developed to satisfy the mangrove compensation requirements of MCoA 2.3 and the related Tweed Shire Council approval (Reference PTV11/0003) under Part 5 of the *Environmental Planning and Assessment Act, 1979*. The Mangrove Compensation Plan for the project to satisfy CoA 2.3 was approved by the Director-General on 2 May 2011. Refer to Appendix C for details of specific activities required during the operational phase of project.

#### **2.3.2 Biodiversity offset and mitigation**

All operational management obligations in relation to biodiversity offsets required as part of the project approval are detailed in the Banora Point Upgrade – Biodiversity Offset Strategy (2010). This plan was approved by the Director-General on 14 April 2010. The Biodiversity Offset Package required as part of CoA 2.5 and the approved Biodiversity Offset Strategy is aimed to

be submitted to the Director- General for approval by the end of 2012. Refer to Appendix C for details of specific activities required during the operational phase of project.

### 2.3.3 Ecological monitoring

All ecological monitoring obligations to satisfy CoA 3.1 are addressed in the Ecological Monitoring Program submitted to the Director- General and agencies on 16 March 2010. Refer to Appendix C for details of specific activities required during the operational phase of project.

### 2.3.4 Traffic and access

There are no approved plans that address traffic monitoring during the operations phase. Details of the projects traffic monitoring commitments and the proposed to management method is included in Table 1 below. Refer to Appendix C for details of specific activities required during the operational phase of project.

Table 1 Traffic and access requirements.

Ref.	Management requirement	Management Method
CoA 2.7	Provide upgrade or maintain shared pedestrian and cycleway facilities between Barney's Point Bridge and Minjungbal Drive – within 12 months of upgrade being opened to traffic.	The Coastal Shared User Path (SUP) has been integrated into the constructed project. The SUP network is currently accessible to both pedestrians and cyclists and is anticipated to be in its final configuration and landscaping treatments within 3 months after opening to traffic.
SoC T1	Road dilapidation reports	The road dilapidation surveys have been completed for the preconstruction stage.  Operation reports will occur within 6 months after opening to traffic.
SoC T12	Ongoing consultation with the Tweed Shire Council to implement the Lower Tweed and Pacific Highway Traffic Master Plan (RTA and Tweed Shire Council 2006c).	RMS is committed to undertaking ongoing consultation with Tweed Shire Council to implement this plan.
SoC T13  SoC T14	Implement advisory signage to identify cyclist routes across upgrade.	Signage indicating locations of shared user path has been included as part of the design at both the northern and southern ends of the upgrade. As noted above provision for cyclists has also been included on the main carriageway through the viaduct.

### 2.3.5 Heritage management

Details of the projects traffic monitoring commitments and the proposed to management method is included in Table 2, below. Refer to Appendix C for details of specific activities required during the operational phase of project.

Table 2 Heritage management requirements.

Ref.	Management requirement	Management Method
CoA 2.20	Proponent shall not destroy, modify, or otherwise physically affect potential burial 04-2-00162.	This site is outside of the approved project boundary and will not be impacted during operation. RMS will ensure that the area is located on all relevant RMS plans for the area. Information will be provided to Tweed Shire Council for their records.
CoA 2.23 SoC NH5	Provide interpretive signage of the Aboriginal and non-Aboriginal heritage sites along the shared user pathway.	Interpretive signage for the terrace viewing platform is being developed in consultation with RMS, the Aboriginal Focus Group and Tweed Aboriginal Advisory Committee.  Signage will be installed within 6 months of opening the upgrade to operational traffic.
SoC IH7	Install temporary protective fencing for heritage sites and remove on completion of construction.	Temporary fencing currently in place will be removed on completion of construction activities.

### 2.3.6 Operational noise management

An Operational Noise Management Report (2011) was developed for the Banora Point upgrade and approved by the Director-General on 29 September 2011, in accordance with CoA 2.15. Additional operational noise requirements are outlined in Table 3 below. Refer to Appendix C for details of specific activities required during the operational phase of project.

**Table 3:** Operational noise management requirements and methods.

Ref.	Management requirement	Management Method
CoA 3.2 SoC	Undertake operational noise monitoring	A noise auditing program will be undertaken between six and twelve months of commencement of operation of the project.
CoA 3.3	Submit an operational noise report to the Director –General and the EPA (DECC)	An operational noise report would be submitted to the D-G and EPA (DECC) within 60 days of completing the operational noise monitoring program.

### 2.3.7 Urban design and landscaping management

Operational management and maintenance obligations in relation to landscaping are detailed in the Urban Design and Landscape Management Plan (2011). This report was approved by the Director General on 6 September 2011. Additional landscaping management requirements are outlined in Table 4. Refer to Appendix C for details of specific activities required during the operational phase of project.

Table 4: Additional urban design and landscaping management requirements.

Ref	Management requirement	Management Method
V2	Landscaping of Wilson Park.	Wilson Park has been upgraded as part of the highway upgrade.  Ongoing consultation between RMS and Tweed Shire Council about options being developed by Council for further park upgrade.

### 2.3.8 Water Quality Management

Details of water quality management requirements and how RMS proposes to manage these requirements is outlined in Table 5. Refer to Appendix C for details of specific activities required during the operational phase of project.

Table 5: Water quality management requirements and methods.

Ref	Management requirement	Management Method
SoC W26	Groundwater monitoring	RMS does not intend to undertake routine groundwater monitoring at Sexton Hill cut however has retained monitoring bores in place and will monitor as required during operation.
SoC W10 SoC W11	Implement operational water quality treatment measures	Measures have been incorporated into design to meet these objectives. Temporary basins two and seven are being converted into operational basins.

## 2.4 Other operational approval obligations of the Banora Point upgrade

### 2.4.1 Environmental Impact Audit Report

Details of the projects commitments and how it is proposed to manage these commitments is included in Table 6, below. Refer to Appendix C for details of specific activities required during the operational phase of project.

Table 6: Environmental Impact Audit Report requirements and methods

Ref.	Management requirement	Management Method
CoA 4.1	Compliance tracking program includes commitment to development of Environmental Impact Audit Report, submitted 12 months after operation.	Prepare environmental impact audit report and submit to Director – General twelve months after operation.

## 2.4.2 Community consultation

A Community Consultation Strategy was developed to satisfy the requirements of CoA 5.5 (and CoA 5.1, 5.2 and 5.3) and was approved by the Director-General on 18 March 2010. Additional community consultation requirements are outlined in Table 7 below. Refer to Appendix C for details of specific activities required during the operational phase of project.

Table 7: Additional community consultation requirements.

Ref.	Management requirement	Management Method
SoC C6	RMS to consult with stakeholders throughout operational phase.	<p>Formal bi-monthly community information sessions will cease at the completion of construction.</p> <p>Contact details (email, 1800 number and mailbox) for project will be transferred to RMS once project has been completed.</p> <p>RMS remains committed to ongoing liaison with regulatory agencies and Tweed Shire Council.</p>

### **3 Consultation with agencies**

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An Environmental Review Group has been organised for the Banora Point upgrade and meeting invites are regularly sent to the following agencies representatives:

- Tweed Shire Council
- Environment Protection Authority
- DPI Fisheries
- NSW Land and Property Management Authority
- Project Environmental Representative
- NSW Office of Water
- RMS Pacific Highway Office
- Department of Planning and Infrastructure

The modification proposal was discussed with Department of Planning and Infrastructure in late 2011 who identified that RMS would be required to consult with ERG members on the proposed modification. The proposed modification was outlined to members of the Environmental Review Group via email on 14/12/2011 and the issue was discussed at ERG meetings on 20 March 2012, and again on 15 May 2012.

In general issues raised during discussions and correspondence related to seeking assurance that the proposed modification did not remove any pre-existing or agreed management actions or result in any reduced environmental outcomes as a result.

Formal feedback received from the ERG is attached in Appendix D.

## References

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NSW Department of Planning and Infrastructure 2009, *Project Approval – Banora Point Upgrade project*, project approval by K. Kineally MP, Minister for Planning, NSW Department of Planning, Sydney.

NSW Roads and Maritime Services 2010, *Pacific Highway Upgrade – Banora Point: Community Consultation Strategy*, Roads and Maritime Services.

NSW Roads and Maritime Services 2010, *Pacific Highway Upgrade – Banora Point: Ecological Monitoring Strategy*, Roads and Maritime Services.

NSW Roads and Maritime Services 2010, *Pacific Highway Upgrade – Biodiversity Offset and Mitigation Strategy*, Roads and Maritime Services.

NSW Roads and Maritime Services 2011, *Pacific Highway Upgrade – Mangrove Compensation Plan*, Roads and Maritime Services.

NSW Roads and Maritime Services 2011, *Pacific Highway Upgrade – Urban Design and Landscape Management Plan*, Roads and Maritime Services.

NSW Roads and Maritime Services 2011, *Pacific Highway Upgrade – Banora Point: Operational Noise Management Report*, Roads and Maritime Services.

Roads and Fleet Services 2008, *Environmental Management System*, Roads and Fleet Services.

Roads and Fleet Services 2012, *Road Services Management Plan*, Roads and Fleet Services.

Road Services 2004, *Standard Operating Procedure (Environmental Management) – Waste Management*. Road and Fleet Services.

## **Appendix A – Text of Condition of Approval 6.5**

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### **Operational Environment Management Plan**

6.5 *The Proponent shall prepare and implement an Operational Environment Management Plan for the project that details the environmental management framework, practices and procedures to be followed during its operation. The Plan shall be consistent with the Department's Guideline for the Preparation of Environmental Management Plans (DIPNR 2004) to provide a clear environmental management framework. The Plan shall be prepared in consultation with the relevant government agencies and shall include, but not necessarily be limited to:*

- a) *a description of all relevant activities to be undertaken during operation of the project including an indication , where relevant, of stages of operation;*
- b) *statutory and other obligations that the Proponent is required to fulfil during operation including all approvals, consultations and agreements required from authorities and other stakeholders, and key legislation and policies;*
- c) *details of how the performance of the upgrade, in relation to the traffic performance (level of service), identified in the Environmental Assessment, will be monitored. In particular the following traffic performance issues shall be addressed in the plan:*
  - i) *identify the methodology that will be used to measure and monitor performance;*
  - ii) *the timing of the monitoring and reporting;*
  - iii) *details of the long term monitoring process.*
- d) *details of how the project's environmental performance will be monitored and what actions will be taken to address identified adverse environmental impacts. In particular, the following environmental performance issues shall be addressed in the Plan:*
  - i) *measures to monitor and manage ecological factors, including effectiveness and maintenance of fauna crossings and rehabilitation measures, with reference to Condition 2.4;*
  - ii) *measures to monitor and manage heritage sites within the road reserve with reference to Conditions 2.20 - 2.23;*
  - iii) *measures to monitor and manage noise impacts with reference to Condition 2.15;*
  - iv) *measures to monitor and minimise soil erosion and the discharge of sediment and other pollutants to surrounding lands and/or waters;*
  - v) *measures to monitor and maintain landscaping undertaken along the project corridor until the vegetation has sufficiently been established.*
- e) *a description and contact details of the roles and responsibilities for all relevant employees involved in the operation of the project; and*
- f) *complaints handling procedures during operation.*

*The Plan shall be submitted for the Director-General's approval no later than one month prior to the commencement of operation, or within such period as otherwise agreed by the Director-General. Operation of the project shall not commence until written approval has been received from the Director-General.*

## Appendix B – Summary of outcomes to CoA from the proposed modification

Requirement of Condition of Approval 6.5	Outcome from proposed modification
<p><i>a). a description of all relevant activities to be undertaken during operation of the project including an indication , where relevant, of stages of operation</i></p>	<p>A description of all activities to be undertaken during the operational phase is included in appendix C of this proposed modification.</p>
<p><i>b). Statutory and other obligations that the Proponent is required to fulfil during operation including all approvals, consultation and agreements required from authorities and other stakeholders, and key legislation and policies;</i></p>	<p>A description of statutory obligations are included within the RFS Environmental management System (2008). In additional all management plans developed under the Project Approval (07_0059) will be fulfilled.</p>
<p><i>c) details of how the performance of the upgrade, in relation to the traffic performance (level of service), identified in the Environmental Assessment, will be monitored. In particular the following traffic performance issues shall be addressed in the plan:</i></p> <ul style="list-style-type: none"> <li><i>i. identify the methodology that will be used to measure and monitor performance;</i></li> <li><i>ii. the timing of the monitoring and reporting</i></li> <li><i>iii. details of the long term monitoring process</i></li> </ul>	<p>There are a number of routine traffic monitoring locations within the immediate vicinity of the upgrade including one located north of Barney’s Point Bridge. The short and long term traffic performance of the upgrade will be subject to ongoing monitoring by RMS during operation as part of routine traffic monitoring across the NSW road network.</p> <p>Specific traffic monitoring will be undertaken in conjunction with the operational noise monitoring activities detailed in Section 2.3.6 of this report. This monitoring will be undertaken to compare recorded traffic levels against noise monitoring data and will be reported in the Operational Noise Report provided to the Director-General to satisfy CoA 3.3. This monitoring will be undertaken within 12 months of operation.</p> <p>The details of the overall performance of the upgrade in relation to traffic performance (level of service) will be assessed in the Environmental Impact Audit Report (EIAR) detailed in Section 2.4.1 of this report. In particular this report will assess the key impact predictions made in the EA and any supplementary studies and detail the extent to which actual impacts reflect the predictions. The suitability of implemented mitigation measures and safeguards will also be assessed. The report will also provide any details of recommended works or other actions as a result of the audit process. The EIAR will be submitted to the Director-General 12 months after commencement of operation.</p>

<p>d) details of how the project's environmental performance will be monitored and what actions will be taken to address identified adverse environmental impacts. In particular, the following environmental performance issues shall be addressed in the Plan:</p>	
<p>i. measures to monitor and manage ecological factors, including effectiveness and maintenance of fauna crossings and rehabilitation measures, with reference to Condition 2.4;</p>	<p>Measures to monitor and manage ecological factors would be undertaken in accordance with the Biodiversity Offset and Mitigation Strategy approved in accordance with CoA 2.4.</p>
<p>ii. measures to monitor and manage heritage sites within the road reserve with reference to Conditions 2.20 - 2.23;</p>	<p>Heritage site identified in CoA 20 are outside the project boundary and have not been impacted by the upgrade construction. The specific heritage site is within an area currently managed by Tweed Shire Council.</p> <p>No ancillary sites were required that impacted on CoA 2.21 therefore no further action is required.</p> <p>The upgrade design mitigated impacts to the agricultural heritage terraces and impacts were managed through the Construction Heritage Management Plan. Interpretive signage is currently being developed for the terrace viewing platform in consultation with RMS, the Aboriginal Focus Group and Tweed Aboriginal Advisory Committee.</p> <p>Signage will be installed within 6 months of opening the upgrade to operational traffic.</p>
<p>iii. measures to monitor and manage noise impacts with reference to Condition 2.15;</p>	<p>Noise impacts would be monitored and managed through the noise auditing process, which is required under conditions of approval 3.2 and 3.3.</p>
<p>iv. measures to monitor and minimise soil erosion and the discharge of sediment and other pollutants to surrounding lands and/or waters;</p>	<p>Measures to minimise soil erosion would be managed through the Urban Design and Landscape Management Plan. All exposed areas would be landscaped prior to the completion of works which will assist to minimise and risk of soil erosion and discharge of sediment to surrounding lands and/ or waters. In addition the project Environmental Protection Licence will be enforced by EPA until the project can demonstrate that it has rehabilitated all exposed areas to a suitable level to reduce the risk of erosion or sedimentation and any related impacts to surrounding lands and/or waters.</p>

<p>v. <i>measures to monitor and maintain landscaping undertaken along the project corridor until the vegetation has sufficiently been established.</i></p>	<p>Monitoring and maintenance of landscaping along the upgrade will be undertaken in accordance with the approved Urban Design and Landscape Management Plan. The Banora Point Upgrade Alliance are required to undertake specific maintenance of the landscaping areas for one year after date of completion.</p> <p>Ongoing long-term monitoring of these measures would be undertaken in accordance with RMS Specifications M 321 - Landscape Maintenance and M30 – Maintenance Intervention &amp; Investigatory Requirements (Corridor).</p>
<p>e). <i>A description and contact details of the roles and responsibilities for all relevant employees involved in the operation of the project;; and</i></p>	<p>A description of the roles and responsibilities for all relevant employees involved in the operation of the project is included in Appendix A of the RFS Environmental Management System.</p> <p>In addition, (as detailed below) the project contact details will be transferred back to RMS from the Banora Point Upgrade Alliance once the project is operational. This includes the project 1800 (toll free) number, postal address, and project email contact.</p> <p>Staff from the RMS Pacific Highway Office in Grafton are also involved in any ongoing management or environmental issues that arise during the operational phase of the project.</p>
<p>e). <i>Complaints handling procedures during operation.</i></p>	<p>The Project Hotline will be operational for up to 12 months after the commencement of operation and RMS Environmental Hotline for the entire operation period.</p> <p>Once the Banora Point Upgrade Alliance has ceased to have a presence on site the relevant contact details (email, 1800 number and mailbox) for the project will be transferred to RMS.</p>

## Appendix C – Description of activities required to be undertaken in the operational phase

Activity	Responsibility	Timing	Required Under	Where Addressed
<b>Mangrove and seagrass monitoring</b>				
Post baseline monitoring 3 years of monitoring.	RMS and TSC	Physical works undertaken in August 2011. Monitoring: 2012 Year 1 – Spring / Summer 2013 Year 2 – Spring / Summer 2014 Year 3 – late Winter.  Annual reports to be provided to TSC Council, DPI Fisheries, Tweed Byron LALC and RMS.	CoA 2.3 (TSC approval conditions)	Seagrass Monitoring Program - Kerosene Inlet
<b>Ecological monitoring</b>				
Threatened Bush Hen	RMS (and Project Ecologist)	Monitoring three times / year for period of minimum 3 years and maximum of 10 years after commencement of operation.*	CoA 3.1	Ecological Monitoring Strategy (2010)
Threatened Micropteran Bats	RMS (and Project Ecologist)	Monitoring two times / year for period of minimum 3 years and maximum 10 years after commencement of operation.*	CoA 3.1	Ecological Monitoring Strategy (2010)
Threatened Mitchell's Rainforest Snail	RMS (and Project Ecologist)	Survey and monitoring twice a year for a minimum period of 3 three years and maximum 10 years after commencement of operation.*	CoA 3.1	Ecological Monitoring Strategy (2010)
EECs (other than early regrowth rainforest)	RMS (and Project Ecologist)	Annual survey for period of rehabilitation works.*	CoA 3.1	Ecological Monitoring Strategy (2010)
Early Regrowth Rainforest (EEC Lowland Rainforest)	RMS (and Project Ecologist)	Annual survey for period of rehabilitation works.*	CoA 3.1	Ecological Monitoring Strategy (2010)

Activity	Responsibility	Timing	Required Under	Where Addressed
In-situ threatened flora	RMS ( Project Ecologist)	Monitoring three times / year for period of minimum three years after commencement of operation.*	CoA 3.1	Ecological Monitoring Strategy (2010)
Provide annual reports to stakeholders	RMS	Monitoring results will be reported in Annual Ecological Monitoring Report provided to Department of Planning and Infrastructure and EPA.	CoA 3.1	Ecological Monitoring Strategy (2010)
<p>*Note: Should the objectives and targets of the ecological monitoring strategy be reached earlier than the 10 year maintenance period (eg after four years of monitoring / maintenance), RMS will consult with EPA and DP&amp;I to determine whether further monitoring is required.</p>				
<p><b>Biodiversity Offset and Mitigation</b></p>				
Yearly monitoring of rehabilitation works against objectives of offset strategy.	RMS (and Project ecologist)	<p>Details of the rehabilitation activities and measurement of progress against the offset package objectives will be incorporated into the Annual monitoring reports prepared as part of the Ecological Monitoring Strategy prepared for the project.</p> <p>Monitoring will be undertaken for a period of at least 3 years once rehabilitated areas have been established.</p> <p>Annual progress report following establishment of rehabilitated areas provided to:</p> <ul style="list-style-type: none"> <li>• Department of Planning and Infrastructure</li> <li>• NSW Land and Property Management Authority</li> <li>• Environmental Protection Authority</li> </ul> <p>Final report to be prepared at end of maintenance period before area is transferred to ownership of Department of Lands.</p>	CoA 2.4 CoA 2.5	<p>Biodiversity Offset and Mitigation Strategy</p> <p>Biodiversity Offset Package (to be submitted)</p> <p>(Ecological Monitoring Strategy (2010))</p>

Activity	Responsibility	Timing	Required Under	Where Addressed
		Should the objectives and targets of the offset package be reached earlier than the five year maintenance period (eg after three years of monitoring / maintenance), RMS will consult with LPMA to negotiate formal transfer of ownership to take place earlier than previously anticipated.		
<b>Traffic and Access</b>				
Road dilapidation reports	RMS	Operation reports will occur within 6 months after upgrade opening to traffic.	SoC T1	Addressed in Section 2.3.4 of this modification.
Provide upgrade or maintain shared pedestrian and cycleway facilities between Barney's Point Bridge and Minjungbal Drive	RMS (and BPUA)  TSC	The Coastal Shared User Path (SUP) has been integrated into the constructed project. The SUP network is currently accessible to both pedestrians and cyclists and is anticipated to be in its final configuration and landscaping treatments within 3 months after opening to traffic.	CoA 2.7	Addressed in Section 2.3.4 of this modification.
Ongoing consultation with the Tweed Shire Council to implement the Lower Tweed and Pacific Highway Traffic Master Plan (RTA and Tweed Shire Council 2006c).	RMS	This plan is currently being implemented and RMS is committed to undertaking ongoing consultation with Tweed Shire Council to implement this plan.	SoC T12	Addressed in Section 2.3.4 of this modification.
Implement advisory signage to identify cyclist routes across upgrade.	RMS (and BPUA)	Signage indicating locations of shared user path has been included as part of the design at both the northern and southern ends of the upgrade. As noted above provision for cyclists has also been included on the main carriageway through the viaduct.  All signage will be installed within 12 months of commencement of operation.	SoC T13 SoC T14	Addressed in Section 2.3.4 of this modification.

Activity	Responsibility	Timing	Required Under	Where Addressed
<b>Heritage management</b>				
Proponent shall not destroy, modify, or otherwise physically affect potential burial 04-2-00162.	RMS	<p>This site is outside of the approved project boundary and will not be impacted during operation.</p> <p>RMS will ensure that the area is located on all relevant RMS plans for the area. Information on location of potential burial will be provided to Tweed Shire Council for their records.</p>	CoA 2.20	This commitment is addressed in section 2.3.5 of this proposed modification.
Provide interpretive signage of the Aboriginal and non-Aboriginal heritage sites along the shared user pathway.	RMS	<p>Interpretive signage for the terrace viewing platform is being developed in consultation with RMS, the Aboriginal Focus Group and Tweed Aboriginal Advisory Committee.</p> <p>Signage will be installed within 6 months of opening the upgrade to operational traffic.</p>	CoA 2.23 SoC NH5	This commitment is addressed in section 2.3.5 of this proposed modification.
Install temporary protective fencing for heritage sites and remove on completion of construction.	RMS	Temporary fencing currently in place will be removed on completion of construction activities.	SoC IH7	This commitment is addressed in section 2.3.5 of this proposed modification.
<b>Operational noise</b>				
Undertake operational noise monitoring	RMS	A noise auditing program will be undertaken between six and twelve months of commencement of operation of the project.	CoA 3.2 SoC ON3	These commitments are addressed in section 2.3.4 of this proposed modification.
Submit an operational noise report to the Director –General and the EPA (DECC)	RMS	An operational noise report would be submitted to the D-G and EPA (DECC) within 60 days of completing the operational noise monitoring program.	CoA 3.3	

Activity	Responsibility	Timing	Required Under	Where Addressed
<b>Landscaping</b>				
Monitor and maintenance of landscape or rehabilitation works by a landscape specialist	RMS (and BPUA for year 1)	<p>Short term – maintenance inspections by qualified contractors for one year after commencement of operation in accordance with RMS specifications.</p> <p>Ongoing - Inspected yearly, based on these inspections maintenance requirements will be prioritised and a RMAP established.</p>	CoA 6.2	Urban Design and Landscape Management Plan
Landscaping at Wilson Park	TSC and RMS	<p>Wilson Park has been upgraded as part of the highway upgrade.</p> <p>Ongoing consultation between RMS and Tweed Shire Council about options being developed by Council for further park upgrade.</p> <p>TSC to progress options during late 2012 / early 2013.</p>	V2 CoA 6.2	Urban Design and Landscape Management Plan
<b>Incident management</b>				
Incident management	RMS (BPUA)	An incident management plan is currently being prepared by BPUA in consultation with TSC and local emergency providers. This plan will be formally in place within three months of commencement of operation.	SoC HR4 SoC HR5	
<b>Water quality monitoring</b>				
Surface and Groundwater monitoring	RMS	<p>Routine construction phase water quality monitoring for both surface and groundwater will be undertaken until operation commences.</p> <p>RMS does not intend to undertake routine groundwater monitoring at Sexton Hill cut however has retained monitoring bores in place and will monitor as required during operation.</p>	SoC W1 SoC W26	These commitments are addressed in section 2.3.8 of this proposed modification

Activity	Responsibility	Timing	Required Under	Where Addressed
Implement operational water quality treatment measures	RMS	Measures have been incorporated into design to meet these objectives. Temporary basins two and seven are being converted into operational basins.	SoC W10 SoC W11	
<b>Environmental audit</b>				
Submit an Environmental Impact Audit Report – Operations to the Director General	RMS (BPUA to arrange preparation of EIAR)	12 months after commencement of operation.	NA	This commitment is addressed in section 2.4.1 of this proposed modification
<b>Community consultation</b>				
Consult with stakeholders throughout operational phase.	RMS	<p>Formal bi-monthly community information sessions will cease at the completion of construction.</p> <p>Contact details (email, 1800 number and mailbox) for project will be transferred to RMS once project has been completed.</p> <p>RMS remains committed to ongoing liaison with regulatory agencies and Tweed Shire Council.</p> <p>Note: BPUA / RMS committed at August Community Information Session to hold a follow up session to discuss Operational Noise Report outcomes once monitoring undertaken.</p>	SoC C6	These commitments are addressed in section 2.4.2 of this proposed modification



## WOODS Mark

---

**From:** WOODS Mark  
**Sent:** Wednesday, 14 December 2011 12:36 PM  
**To:** Bill Gardyne; OEH - Craig Dunk ; james.sakker@industry.nsw.gov.au; David Hannah; Frank.McLeod@lpma.nsw.gov.au  
**Cc:** Jenny Butler; BORRELLI Peter; PRIEST Peter; LAWRENCE Scott B  
**Subject:** Banora Point upgrade - proposed OEMP modification (for information)  
**Follow Up Flag:** Follow up  
**Due By:** Sunday, 1 April 2012 12:00 AM  
**Flag Status:** Red  
**Attachments:** Pages from DoP Consolidated Approval\_MOD4 .pdf

Good afternoon all,

Roads and Maritime Services (RMS) are proposing to request a modification to the conditions of approval for the Banora Point upgrade project to allow for project-specific operational environmental management practices and procedures to be incorporated into existing RMS environmental management systems.

Ministers Condition of Approval (MCoA) 6.5 of the Project Approval outlines the requirements for the preparation of an Operation Environmental Management Plan. The requirements involve the preparation of a plan detailing the description of activities, statutory and other obligations, monitoring of environmental performance during operation, roles and responsibilities and complaints handling. The more recent Pacific Highway Upgrade project approvals, eg Tintenbar to Ewingsdale (07\_0051) and Warrell Creek to Urunga (07\_0112), allow a more streamlined approval process for operational environmental management by incorporating the project into existing RMS environmental management systems.

The Road and Fleet Services division of RMS are responsible for the maintenance services under an existing Environmental Management System (EMS) prepared in accordance with ISO 14001:2004. The RFS specific EMS has been developed to be consistent with the broad environmental objectives and policies set out in the RTA Corporate EMS. It is proposed that the proposed that the operational environmental management requirements are incorporated into the existing EMS used by RFS. Incorporating these requirements into the existing EMS would be consistent with recent best practice, in addition to reducing unnecessary duplication of documentation and management processes.

Banora Point MCoA 6.5 details the requirements on how the environmental performance of the operation of the project would be monitored (see attached excerpt from MCoAs). How these requirements are proposed to be managed is summarised below.

- MCoA 6.5 (a), (b) and (c) - measures to manage these requirements will be incorporated into the existing EMS prior to the operation of the project.
- MCoA 6.5(d)(i) - is addressed through both the Ecological Monitoring Program required under MCoA 3.1, and Offset Strategy and Package required under MCoA 2.4.
- MCoA 6.5(d)(ii) – measures to manage heritage sites within the road reserve will be incorporated into the existing EMS prior to the operation of the project.
- MCoA 6.5(d)(iii) – Operational noise monitoring will be undertaken in accordance with the requirements of MCoA 2.15.
- MCoA 6.5(d)(iv) and (v) – measures to monitor and maintain landscaping undertaken along the project corridor will be incorporated into the existing EMS prior to the operation of the project.
- MCoA 6.5 (e) and (f) - measures to manage these requirements will be incorporated into the existing EMS prior to the operation of the project.

As part of the proposed OEMP modification, RMS would like to consult with the ERG members to seek feedback on the proposal. The modification will be included on the agenda for the next ERG for discussion in more detail.

**Actions required:** This email notification is to advise you all of our proposal to submit the OEMP modification. As mentioned above we will be discussing the OEMP requirements and seeking feedback at the January ERG. Given the xmas / new year shutdown period we would like to get any formal feedback from stakeholders by **27 January 2012**.

If you have any queries, please feel free to contact me to discuss.

Regards,

**Mark Woods**

Environmental Advisor

Pacific Highway

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Roads and Maritime Services

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**From:** marcus.riches@dpi.nsw.gov.au  
**Sent:** Friday, 13 April 2012 11:43 AM  
**To:** WOODS Mark  
**Cc:** Brett Nudd; chris.sheen@dpi.nsw.gov.au; LAWRENCE Scott B  
**Subject:** RE: FW: Banora Point upgrade - proposed OEMP modification (for information)

**Follow Up Flag:** Follow up

**Flag Status:** Red

Thanks Mark,

no issues to raise from our end.

Cheers

Marcus

Marcus Riches | Senior Fisheries Conservation Manager, North Region|  
 Aquaculture, Conservation & Marine Parks | Department of Primary Industries  
 | 1243 Bruxner Hwy | Wollongbar NSW 2477 |  
 T: 02 6626 1370 | F: 02 6626 1377 | M: 0419 253819 | E: Marcus.Riches@industry.nsw.gov.au  
 W: [www.industry.nsw.gov.au](http://www.industry.nsw.gov.au) | [www.dpi.nsw.gov.au](http://www.dpi.nsw.gov.au)

From: WOODS Mark <Mark.WOODS@rms.nsw.gov.au>  
 To: "marcus.riches@dpi.nsw.gov.au" <marcus.riches@dpi.nsw.gov.au>  
 Cc: "chris.sheen@dpi.nsw.gov.au" <chris.sheen@dpi.nsw.gov.au>, Brett Nudd <Brett.Nudd@environment.nsw.gov.au>, LAWRENCE Scott B <Scott.LAWRENCE@rms.nsw.gov.au>  
 Date: 04/04/2012 12:58 PM  
 Subject: RE: FW: Banora Point upgrade - proposed OEMP modification (for information)

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Hi Marcus,

I can confirm that RMS is seeking to modify the requirement to prepare an OEMP for the Banora Point Upgrade project. There is no intention to modify the requirements of any other MCoAs as part of this modification. I can also confirm that all the existing management plans required and approved under the MCoAs (such as CEMP, Offset Packages, Ecological Monitoring Program, Mangrove Offset Strategy etc) still apply. It is the responsibility of RMS as the Proponent to manage these MCoA requirements from approval until the end of the relevant monitoring and reporting periods. This includes undertaking monitoring and issuing reports for stakeholders as required under these approved plans.

The RMS EMS is a completely separate management system that relates to all RMS activities as a roads authority throughout NSW. It has been developed to ensure that planning, implementation, reporting and review mechanisms are in place to promote continual improvement in environmental performance across RMS.

As stated in the EMS - the objectives of the RMS EMS are:

- To ensure continuous improvement in RMS's overall environmental performance.
- To ensure staff are aware of their environmental responsibilities.
- To provide a framework for environmental management throughout the RMS.

I am not aware of any formal provision for ERG review or approval of the RMS EMS as it has been developed to address the broader RMS activities across NSW rather than being targeted at the Banora Point project.

The EMS and all RMS environmental policies and guidelines reflect and refer to other environmental best practice documents and government agency guidelines where available - such as Blue Book, and Why do fish cross the road.

I would like to stress that the ERG and relevant agencies and stakeholders have been provided opportunity to review and comment on each of the management plans developed to satisfy the relevant MCoAs for the Banora Point Upgrade project. As mentioned above, these plans still stand.

The modification to the OEMP requirements would allow a more streamlined approval process for operational environmental management by incorporating the project into existing RMS environmental management systems. It would also reduce unnecessary duplication of documentation and management processes as we do not wish to have an OEMP that only addresses a 2.5km section of highway in addition to an EMS and numerous existing systems to manage the remaining road network throughout NSW.

I hope this clarifies some of your concerns. Should you have any other queries, please feel free to contact me discuss.

Regards  
Mark

---

**From:** marcus.riches@dpi.nsw.gov.au [<mailto:marcus.riches@dpi.nsw.gov.au>]  
**Sent:** Wednesday, 4 April 2012 12:11 PM  
**To:** WOODS Mark  
**Cc:** chris.sheen@dpi.nsw.gov.au; Brett Nudd  
**Subject:** Re: FW: Banora Point upgrade - proposed OEMP modification (for information)

Thanks Mark,

could you clarify that the proposed amendment only relates to OEMPs and not other specific plans of management (eg sed/erosion, construction EMPs for bridges etc ). And can you also confirm that the RMS EMS are consistent with the OEMP as set out with the MCoA. Further, what provision within the RMS EMS provide for ERG review/approval of these plans?

Cheers  
Marcus

Marcus Riches | Senior Fisheries Conservation Manager, North Region|  
 Aquaculture, Conservation & Marine Parks | Department of Primary Industries  
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---

From: WOODS Mark <Mark.WOODS@rms.nsw.gov.au>  
 To: "marcus.riches@industry.nsw.gov.au" <marcus.riches@industry.nsw.gov.au>  
 Cc: "chris.sheen@dpi.nsw.gov.au" <chris.sheen@dpi.nsw.gov.au>  
 Date: 04/04/2012 11:32 AM  
 Subject: FW: Banora Point upgrade - proposed OEMP modification (for information)

---

Hi Marcus,

As discussed here is the original email and information sent to the Banora ERG last year in relation to the proposed OEMP modification. Once you have a look at the proposal please feel free to contact me to discuss any concerns you may have.

I will be on leave next week but back in the office on the 16th April.

Regards

**Mark Woods**

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**To:** 'Bill Gardyne'; OEH - Craig Dunk ; 'james.sakker@industry.nsw.gov.au'; 'David Hannah'; 'Frank.McLeod@lpma.nsw.gov.au'

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Regards,

**Mark Woods**

Environmental Advisor

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