



Base Consulting Group Pty Ltd  
43 Browne Street  
New Farm, QLD, 4005

18<sup>th</sup> August 2019

Ben O'Hara: General Manager – Land and Environment  
Gainsdale Pty Ltd  
168 Knapp Street  
Fortitude Valley, QLD, 4006

Dear Ben,

**RE: Peer Review - Scenic Rim Trail Baseline Data Collection Plan**

In my capacity as a Principal Environmental Scientist at BASE Consulting Pty Ltd, I undertook an initial Peer Review of the Scenic Rim Trail (SRT) Baseline Data Collection Plan (BDCP) as required by Condition 4 of the Commonwealth Department of the Environment and Energy's (DoEE) *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) approval (EPBC: 2016/7847) dated 18 January 2019. I was requested to complete the Peer Review as a Suitably Qualified Independent Expert (CV enclosed) based on my 20+ years of experience as a fauna ecologist and in undertaking over 30 Environmental Impact Assessments and Statements in a range of capacities including project manager, lead ecological investigator, lead author and technical reviewer.

My initial review was undertaken on Version 1.3 of the SRTBDCP that was amended following comments from the DoEE on Version 1.2. As part of my initial review, I examined the responses from DoEE to Version 1.2 and responses provided by Harry Hines, a well-respected expert ecologist from Queensland's Department of Environment and Science (DES). I also took into consideration the matters potentially requiring monitoring, potential impacts to those matters and the survey methods required collect adequate baseline data to assess any potential impacts.

During the initial Peer review process, I made a number of requests for clarification and provided suggestions for modifications to the SRTBDCP in response to Condition 8 of the EPBC approval and in particular, to confirm adequate methods were outlined including survey methods, survey effort, timing of the surveys and frequency of the surveys were adequate for the collection of suitable and robust data to assess potential impacts to the matters outlined in Condition 8. These clarifications, comments and suggested modifications were outlined in the SRTBDCP version 1.3 and have not been reproduced here. I subsequently reviewed responses to these initial clarifications and modification requests and was generally satisfied the responses and amendments included in Version 2 (submitted to DoEE as per Condition 4 of the EPBC approval) were adequate.

It was my view that the revised version of the SRTBDCP and the survey methods therein were generally sufficient and adequate for the collection of baseline data for:

- The Hastings River Mouse in the vicinity of Woodcutters Camp;
- Fleay's Barred Frog and the Mountain Frog in the vicinity of new trails that cross Blackfellow Creek and Dalrymple Creek;

# BASE/

- Water Quality in the vicinity of new trails that cross Blackfellow Creek and Dalrymple Creek;
- Soils within the boundaries of Woodcutters Ecocamp and Amphitheatres View Wilderness Ecocamp; and
- Riparian Habitat Quality in the vicinity of new trails that cross Blackfellow Creek and Dalrymple Creek.

The initial survey methods proposed for the collection of baseline data for the Hastings River Mouse, Fleay's Barred Frog and Mountain Frog were adequate and consistent with recommended guidelines endorsed by the New South Wales and Queensland Government. The proposed water quality monitoring survey methods were adequate and consistent with baseline monitoring methods recognised by Queensland Legislation and the Australian and New Zealand Environment and Conservation Council (ANZECC) guidelines.

It was noted that the SRTBDCP did not propose survey methods for the collection of groundwater baseline data. Justification was been provided for this omission including the unlikelihood of wastewater intercepting groundwater due to the depth and confined nature of the groundwater aquifers, the logistical impracticalities of installing the groundwater infrastructure (i.e. groundwater bores) to monitor for potential impacts to groundwater and the impacts that would occur during the installation of the infrastructure. As an alternative, the SRTBDCP proposed monitoring of surface water where the catchment waterways are fed by groundwater. Sampling surface water in this instance would act as a surrogate for groundwater and the proposed surface water sampling appears adequate.

It was further noted that surveys have confirmed the absence of riparian vegetation or riparian habitat in drainages feeding from the two EcoCamps. Consequently, it was my opinion that it is not possible to meet Condition 8.g of the 18<sup>th</sup> January 2019 approval. (*sensu stricto*). A method has been proposed and undertaken to meet the intent of the condition (*sensu lato*), i.e. surveying the cover abundance of groundcover and shrub vegetation in and adjacent to outwash or drainage channel areas that could potentially receive a plume of contaminants from the wastewater irrigation areas. Changes in the cover abundance of vegetation in these areas, in conjunction with other water and wastewater monitoring, are adequate to detect whether treated wastewater will have an adverse environmental impact outside of the irrigation area.

Discussions were held with the proponent regarding engaging the DoEE to assess the potential to have these conditions removed and/or amended due to the difficulties in complying. After discussions between the proponent and DoEE, it was agreed that a variation request would be submitted to amend the current EPBC approval conditions. This variation of conditions approval was granted on 2<sup>nd</sup> July 2019 and it was noted that the original conditions 8, 9, 14, 16, 21, 22, 26, 27, 28, 29 and 32 were amended and replaced with 8A and 15A.

The SRTBDCP was subsequently updated to reflect these amended approval conditions. I undertook a review of the amended SRTBDCP, and I am satisfied the most recent version of the SRTBDCP satisfies amended condition 8 of the variation of conditions and the survey methods therein are sufficient and adequate for the collection of baseline data for

- The Hastings River Mouse in the vicinity of Woodcutters Camp;

# BASE/

- Fleay's Barred Frog and the Mountain Frog in the vicinity of new trails that cross Blackfellow Creek and Dalrymple Creek;
- Water Quality in the vicinity of new trails that cross Blackfellow Creek and Dalrymple Creek; and
- Riparian Habitat Quality in the vicinity of new trails that cross Blackfellow Creek and Dalrymple Creek.

Please do not hesitate to contact me if you have any queries.

Yours Sincerely



Dr Craig Streatfeild

Enclosures. CV

### Training/Qualifications:

Erosion and Sediment Control IECA recognised training course, 2017

Lead Auditor- Integrated Management Systems: Quality, Environmental Management and Health and Safety, 2016

Post-doctoral Research Fellow, Miami University, Ohio, USA, 2004-2008 – Behavioural Ecology, Habitat Utilisation and Behavioural Genetics of Prairie Voles.

Doctor of Philosophy, (Ecology) Queensland University of Technology, 2009 – Population Biology, Habitat Utilisation and Population Genetics of the Giant White-tailed Rat

Bachelor of Science (1st Class Hons) (Environmental Science and Ecology), Griffith University, QLD, 2000 – Population Biology and Space Use of the Giant Barred Frog and Great Barred Frog.

Dr Craig Streatfeild is a Principal Environmental Scientist with over 20 years' experience in providing leadership and technical expertise in environmental impact assessments, environmental legislation, permitting and approvals, preparation of environmental management plans and environmental management, monitoring, compliance, fauna and flora assessments and mitigating impacts to fauna. Craig has been trained in quality, environmental management and health and safety systems auditing, erosion and sediment control and conflict resolution.

Although vertebrate population ecology (primarily for amphibians and small mammals/rodents), habitat utilisation and habitat fragmentation is Craig's initial area of expertise where he has extensive research experience with endangered species, particularly frogs and small mammal species, Craig has in recent years focused on delivering infrastructure, resource and development projects from early planning inception to final construction delivery including environmental impact assessments statements (EIA and EIS), post EIA/EIS tier 2 approvals, environmental offsets, environmental management plans and environmental compliance and ongoing post approval monitoring. Craig is also heavily involved in government liaison including negotiating approvals conditions as well as project management, project development and delivery, coordination and management of multidisciplinary environmental impact assessments and monitoring programs and post EIA/EIS project approval processes.

Craig has extensive experience with environmental approvals and permitting and has developed an understanding of the permitting requirements associated with a range of industries through his role as Environmental and Approvals Manager for the Rookwood Weir Project (Sunwater), Environmental Team Lead for the Road Relocations Design Phase of the Traveston Dam Project, Environmental Team Lead for the Goonyella to Abbott Point Rail Project, Environmental Approvals Advisor for various components of the QCLNG Project Stages, Project Manager for over 30 EIAs including advice on the likely tier 1 and 2 project approvals required. These projects also required liaising with numerous stakeholders (such as design teams and client representatives) and preparing and maintaining approvals and compliance management registers.

Craig has also undertaken numerous environmental assessments primarily ecological and fauna related but also for soils, surface water and sediment and groundwater.

## RECENT PROJECT EXPERIENCE

**Rookwood Weir Environmental Approvals and Compliance.** Environmental and approvals manager for the project. Works involved managing and coordinating the development of all tier 2 approvals, managing and coordinating the development of compliance documentation to address EIS approval conditions, liaising with State and Commonwealth government departments in relation to amending current EIS approval conditions including biodiversity offsets and preparing EIS change reports for the Coordinator General.

**Private Landowner Species Management Plans and Offset Management Plan.** Prepared and managed the species management plan (Cth), species management program (State) and offset management plan (Cth) to address an expansion of the current high-value agricultural practices as required by Commonwealth approval requirements.

**Stanmore Coal Isaac Plains East Species Management Plans and Offset Management Plan.** Prepared and managed the species management plan (Cth), species management program (State) and offset management plan (Cth) to address both State and Commonwealth approval conditions.

**Tier 2 approvals for private developments.** Prepared and managed the approval process for a range of tier 2 approvals for several private developments in and around Hervey Bay.

**Confidential Industrial Land Investigation for a Queensland State Government Department.** Reviewed and provided input into the required approvals associated with project.

**Confidential Impact Assessment Investigation for a Privately-Owned Quarry.** Undertook detailed assessment for the presence of the Endangered Giant Barred Frog and habitat assessments for the species as part of presumed illegal destruction.

**Confidential Infrastructure Corridor for Investigation for a Queensland State Government Department.** Technical review of the advice documentation, including likely approvals for a multi-user linear infrastructure corridor for the co-location of water, power and rail.

**Abbot Point Strategic Port Land Use Planning and Statutory Approvals.** Technical review of the post EIS approvals required including operational works applications and the requisite assessments required to support approval documentation.

**Metro Mining Bauxite Hills Bauxite EIS.** Projected managed and co-authored the EIS for submission to Queensland's EHP and the Commonwealth's DoEE for a bauxite mining operation in north Queensland. Works involved assessing and addressing impacts to a range of environmental factors as well as determining the scope of the post EIS approvals that were likely to be required. The project also involved submission of an EPBC referral to the DoEE for both marine and terrestrial MNES and the development of an overarching environmental offsets advice statement.

**Metro Mining Skardon River Bauxite Project.** Authored and reviewed management plans as required by the project's approvals conditions including the overarching environmental management plan and an offsets delivery plan advice statement.

**Shandong Energy Hillalong Coal Mine EIS.** EIS lead author and project manager for the project that involved an open cut and underground mine, haul road and train load out facility. Responsibilities also included Government liaison with both State and Commonwealth Departments and identification of post EIS tier 2 approvals and likely management plans.

**Metro Mining Bauxite Hill Bauxite Mine Site Specific Environmentally Relevant Activity Impact Assessment.** Project Managed and co-authored the environmental assessment which involved

submission to EHP of a Site-Specific EA application for a bauxite mining operation in north Queensland. EHP subsequently decided that an EIS was required for this project.

**Bandanna Energy's EIA Projects.** Lead author, EIS coordinator and project manager for the Springsure Creek Coal Mine project that involved several Site-Specific EAs, an EIS under the *Environmental Protection Act 1994* and a Commonwealth EIS. Works also involved assessment of likely post EIS approvals and management plans associated with a water offtake pipeline.

**Adani T0 Abbot Point Port Expansion.** This project involved a Commonwealth EIS for the development of a new port berth at the existing Abbot Point in north Queensland. Craig was the lead technical reviewer of several technical reports and associate chapters including marine ecology, terrestrial ecology and coastal processes.

**MetroCoal Bundi EIS Project.** Lead author, EIS coordinator and project manager for the Bundi Underground Coal Mine project. Part of Craig's involvement also included submission of an EPBC referral to the then SEWPaC and advice on the likely post EIS approvals and management plan required.

**QCLNG Project.** Approvals and environmental team lead for the consultant engaged by the principal contractor involved in delivering the Narrows component of the gas export pipeline. The role involved coordination of permits and approvals downstream of the EIS and EA, coordination of environmental issues including relating to the preparation of environmental management plans, preparation of environmental approvals and liaison with assessment officers within various state government agencies.

**CoalConnect Northern Missing Link Rail Project.** This project involved connecting the current Goonyella and Newlands rail lines and upgrading the existing Newlands to Abbot Point section. Craig's involvement initially included ecological environmental assessments and which later progressed the Environmental Team Leader for the design phase of the project This entailed coordinating all environmental related issues including undertaking environmental assessments, technically reviewing environmental assessment reports under QRs EPPM process (PEPAs, EPSs, EMPs, DRs), preparation of environmental approvals and liaison with QR's environmental and approvals managers and assessment officers within various state government agencies.

**Road infrastructure for the Traveston Crossing Dam, Queensland.** This multifaceted project involved the upgrade, realignment and construction of numerous roads that would be inundated during Stage 1 of the dam. Craig was lead author for two several REFs and management plans as well as numerous approvals/permits under Queensland State Legislation.

## **EMPLOYMENT HISTORY**

AUGUST 2017 TO PRESENT – SECONDMENT TO SUNWATER – Environment and Approvals Manager for the Rookwood Weir.

JUNE 2017 TO CURRENT – BASE CONSULTING GROUP PTY LTD, BRISBANE – Principal Environmental Scientist.

MAY 2011 TO MAY 2017 – CDM SMITH AUSTRALIA PTY LTD, BRISBANE – Associate Environmental Scientist in the Environment and Approvals Team.

MAY 2007 TO MAY 2011 – KELLOGG BROWN & ROOT PTY LTD, BRISBANE – Senior Environmental Scientist in the Environment, Planning and Water Resources Group.

2004 TO 2007 – MIAMI UNIVERSITY, OXFORD, OHIO, USA – Postdoctoral Reserch Fellow.