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31 Core study team

Details of the core study team for the assessment of the project have been included below.

Table 31.1 Core study team

Position	Organisation	Qualifications and technical expertise
Chris Webb		
Program Manager Approvals	ACTEW	<p>Qualifications Bachelor of Applied Science, University of Canberra.</p> <p>Experience Chris is a senior adviser on proposal planning and development, environmental management and government regulations with over 20 years experience. He joined ACTEW in 2004 as the Manager of the Planning Program for ACTEW's Future Water Options Study, before being appointed Policy and Planning Advisor in 2005. Chris is responsible for long term water supply planning, total water cycle management in urban planning and network protection.</p> <p>Chris has extensive experience working with the ACT Government in senior management, policy and planning positions, including as Project Director of the innovative Gungahlin Town Centre development from 1997-2004.</p> <p>Responsibilities Chris provided expert review of the EIS.</p>
Graham Costin		
Owners Project Manager	ACTEW	<p>Qualifications Bachelor of Engineering (Civil), Monash University. Graduate Diploma Municipal Engineering & Management, Deakin University. Master Engineering Science (Environmental), Melbourne University.</p> <p>Experience Graham is an experienced project manager with over 30 years experience in a broad range of municipal and water related projects. He has held numerous senior positions in local government and water utilities, including appointments to water utility boards. During 2000-01, he was appointed by the United Nations to manage the re-establishment of water and sanitation services throughout East Timor.</p> <p>In his more recent consulting work, Graham has led a number of multi-discipline teams to prepare, implement, monitor or evaluate numerous water related projects; including projects for water resource management, water sector investment strategies, infrastructure master planning and institutional development. Since 2004, Graham has had a significant, although intermittent, involvement in the preparation of ACTEW's Future Water Options Program, including the preparation of technical reports and management of the M2G Preliminary Design Study during 2007-08.</p> <p>Responsibilities Graham provided expert review of the EIS.</p>

Position	Organisation	Qualifications and technical expertise
Peter Woodrow		
Project Manager	John Holland Pty Ltd	<p>Qualifications</p> <p>Bachelor of Engineering (Civil), University Of Queensland. Member, Australian Institute of Project Management.</p> <p>Experience</p> <p>Peter has 38 years experience in the delivery of complex, major projects in the ACT. Significant projects include: Googong Dam, Telstra Tower, Defence Signals Directorate, Beijing Embassy, Geoscience Australia, New Delhi High Commission, HQJOC and the National Portrait Gallery. Peter was also Building Controller for the ACT from 1992 to 1995.</p> <p>Responsibilities</p> <p>Peter provided expert review of the EIS.</p>
Gavin Morrison		
Design Manager	GHD Pty Ltd	<p>Qualifications</p> <p>Bachelor of Engineering (Civil) (Hons), Queensland Institute of Technology. Corporate Member, The Institution of Engineers. Member Australian Water and Wastewater Association. Member College of Civil Engineers, NPER-3.</p> <p>Experience</p> <p>Gavin is a Principal Civil Engineer responsible for oversight of the GHD Canberra office's Civil Engineering Service Groups including Transportation, Urban Development and Water. He has an Honours degree in Civil Engineering and 24 years experience in a broad range of engineering projects.</p> <p>Gavin has extensive experience in the investigation, planning, concept development, design documentation, tendering and construction phase services for civil engineering infrastructure projects and land development. Gavin is the design manager for the Murrumbidgee to Googong Water Transfer.</p> <p>Responsibilities</p> <p>Gavin provided expert advice to inform the preparation of the EIS.</p>

Position	Organisation	Qualifications and technical expertise
Pieter van der Walt		
Approvals Advisor and EA/EIS document team leader	CBRE Pty Ltd (for ACTEW)	<p>Qualifications</p> <p>Bachelor of Town and Regional Planning, University of Pretoria, South Africa. Bachelor of Geographic Information Systems (Hons), University of Pretoria, South Africa.</p> <p>Experience</p> <p>Pieter is a town planner with over ten years experience in urban and regional planning, CAD design and Geographic Information Systems.</p> <p>Pieter has worked both in Australia (ACT and NSW) and overseas, applying his skills and experience to the following areas of specialisation:</p> <ul style="list-style-type: none"> • Strategic planning assessments and environmental impact assessments; • Statutory planning and development approvals; and • Planning assessments in support of major planning processes. <p>Responsibilities</p> <p>Pieter was responsible for the preparation of the EIS</p>
Ian Ross		
Environmental advisor	Manidis Roberts Pty Ltd (for ACTEW)	<p>Qualifications</p> <p>PhD, Cambridge University, UK. Masters Applied Science in Pollution Control, University of NSW. Bachelor Engineering (Hons) in Chemical Engineering, University of NSW.</p> <p>Experience</p> <p>Ian has more than 30 years' experience in environment, health and safety both in Australia and overseas. He began his career with the NSW Government negotiating environmental approvals for major industrial expansions in the mining, energy and aluminium industries.</p> <p>He then worked as the corporate EHS manager for Alcan Australia Limited and as regional consultant for Alcan Nikkei Asia, based in Kuala Lumpur. In these roles he was responsible for providing guidance on a wide range of EHS issues, including planning approvals, energy intensity of aluminium products, greenhouse and general air emissions, hazardous waste generation, storage and disposal, water discharges, EHS management systems, legal compliance reviews, behavioural safety, due diligence and land contamination.</p> <p>In his role with Manidis Roberts Ian has managed the environmental impact statement and approvals for a \$2 billion expansion of the Gove Alumina Refinery and was seconded as Operational Excellence Champion for Caltex Australia Oil Refineries. He also provided service to a wide range of multi national organisations including Caltex, BP, Raytheon, Sino Gold, Apple Computers, Akzo Nobel, Alcoa, Star Track Express, Tomago Aluminium and W R Grace.</p> <p>Responsibilities</p> <p>Ian was responsible for the preparation of the EIS.</p>

Position	Organisation	Qualifications and technical expertise
Cat Quigley		
Planning advisor	CBRE Pty Ltd (for ACTEW)	<p>Qualifications</p> <p>Masters (Hons) Town Planning, Heriot Watt University, .</p> <p>Member of Royal Town Planning Institute.</p> <p>Experience</p> <p>Cat is a fully accredited town planner with over eight years experience in environmental assessment, town planning and development applications in Australia, Scotland and Ireland.</p> <p>Cat has a sound knowledge of environmental planning legislation and her career highlights include the planning and assessment of 100 renewable energy projects in Scotland and the enlargement of the Cotter Reservoir in Canberra.</p> <p>Responsibilities</p> <p>Cat was responsible for the preparation of the EIS.</p>
Kathryn Baker		
Project Officer	CEENA Pty Ltd (for ACTEW)	<p>Qualifications</p> <p>Bachelor Industrial Design (Hons), University of Canberra.</p> <p>Graduate Certificate Environmental Engineering Management, University of Technology Sydney.</p> <p>Experience</p> <p>Kathryn has been employed within the water industry since 2006. During this time she has worked on the planning and approval of large scale water infrastructure, the preparation of environmental impact assessment documentation, management of specialist sub consultants and the development and staging of community engagement programs, and facilitated ongoing discussions between ACTEW, the ACT Government, other key stakeholders, industry and the community.</p> <p>Responsibilities</p> <p>Kathryn was responsible for the preparation of the EIS.</p>
Helen Leayr		
Community Engagement and Stakeholder Management Approvals Manager	Manidis Roberts Pty Ltd (for ACTEW)	<p>Qualifications</p> <p>Bachelor of Commerce, Australian National University.</p> <p>Experience</p> <p>Helen has over 15 years experience in communications and stakeholder management within the ACT region. She has worked previously as Executive Director of the Canberra Business Council and owns a Canberra based consultancy business, The Communication Link. Helen has managed a large number of community engagement programs, including community consultation for a range of ACT Government authorities including ACTPLA and TAMS.</p> <p>Helen has worked with Manidis Roberts and ACTEW Corporation on Water Security Major Projects since 2007 as the Community Engagement of Stakeholder Management Manger (Approvals).</p> <p>Responsibilities</p> <p>Helen was responsible for the preparation of the EIS.</p>

Position	Organisation	Qualifications and technical expertise
Adina Cirson		
Community Engagement and Stakeholder Management Leader	Manidis Roberts Pty Ltd (for ACTEW)	<p>Qualifications</p> <p>Bachelor of Communication (Public Relations) University of Canberra.</p> <p>Experience</p> <p>Adina has a solid background in public relations, community engagement and stakeholder management and the communication of environmental issues, shown through a range of key roles including:</p> <ul style="list-style-type: none"> • Senior Advisor Senator Kate Lundy - Senator for the ACT; • Senior Advisor on Environment, Climate Change, Energy and Water Advisor to ACT Chief Minister Jon Stanhope; • Community Liaison and Communications Manager for the Tradies Group; and • Community Engagement and Stakeholder Management Leader for the Murrumbidgee to Googong Water Transfer. <p>In her current role Adina is responsible for developing and implementing communication, consultation and community relations strategies for the Murrumbidgee to Googong Water Transfer. Adina facilitates the seamless flow of information from ACTEW to the community to ensure they are aware of potential risks of the preferred project and the management and mitigation measures proposed to minimise their impacts.</p> <p>Responsibilities</p> <p>Adina was responsible for the preparation of the EIS.</p>
Katrina Smallwood		
Environmental advisor	GHD Pty Ltd	<p>Qualifications</p> <p>Bachelor of Applied Science, University of Western Sydney.</p> <p>Experience</p> <p>Katrina is a Senior Environmental Scientist with GHD's Environmental Planning Group. Katrina has experience in environmental impact assessment for a range of projects including large scale infrastructure. She is experienced in project management, management of sub-consultants, consultation and preparation of environmental impact assessments including Statement of Environmental Effects (SEE), Review of Environmental Factors (REF) and Environmental Assessment Report's (under Part 3A of the Environmental Planning and Assessment Act 1979). Katrina has an understanding of environmental management issues and legislative requirements.</p> <p>Responsibilities</p> <p>Katrina was responsible for the preparation of the EIS.</p>

Position	Organisation	Qualifications and technical expertise
Michael Mackintosh		
Project Manager Construction M2G	John Holland Pty Ltd	<p>Qualifications Bachelor of Engineering (Civil), Queensland Institute of Technology. Post Graduate Diploma of (Building) Project Management.</p> <p>Experience Michael has over 30 years experience in major projects associated highway construction, canal development , coal and gold mine infrastructure, coal unloading facilities, railway construction projects Queensland and Western Australia and large bore water pipelines for the Western Corridor Pipeline Alliance Queensland. Recently Michael was engaged as Alliance Manager for the Western Pipeline Alliance which delivered re used water from Bundamba Water Treatment Plant to Wivenhoe Dam and Tarong Power Station in total 120Km of large bore water pipe</p> <p>Responsibilities Michael provided expert advice to inform the preparation of the EIS.</p>
Mike Rodd		
Lead Pipeline Design Engineer	GHD Pty Ltd	<p>Qualifications BE Eng (Hons) MIEAust, AWA, MICE (USA)</p> <p>Experience 35 years of engineering design in water supply works including pipelines, pumping stations and pipeline hydraulics, for the public and private sectors in Australia and overseas.</p> <p>Responsibilities Mike provided expert advice to inform the preparation of the EIS.</p>
Clinton Furman		
Senior project engineer	John Holland Pty Ltd	<p>Qualifications Diploma Mechanical Engineering (WITS Technikon). Master Of Environmental Engineering Management, University of Technology Sydney.</p> <p>Experience. Clinton has had 14 years experience working in the mining, petrochemical and water treatment industry. He has had various engineering and management roles working in all facets of the construction industry. Some of the major projects he has successfully completed are The Liverpool to Ashfield Pipeline, Caltex Refinery \$300m upgrade, Cape flats (Cape Town) sewage treatment plant upgrade and Amandelbult Platinum Mine 300 million tonne per month expansion project (South Africa).</p> <p>Responsibilities Clinton provided expert advice to inform the preparation of the EIS.</p>

32 Specialist study team

The specialists named in Table 32.2 are the lead advisors responsible for assessment of the preferred project.

Table 32.1 Qualifications of lead advisors for responsible for assessment of the project (EIS/EA documentation input, management and preparation).¹

Position	Organisation	Qualifications and technical expertise
Tim Purves		
Water Resources Engineer	ActewAGL Pty Ltd.	<p>Qualifications</p> <p>Bachelor of Engineering (Civil), University of Newcastle.</p> <p>Bachelor of Arts, University of Newcastle.</p> <p>Experience</p> <p>Tim is a senior planning engineer with six years experience in water and sewer planning roles at ActewAGL. During this time he has worked on the Future Water Options studies and was ActewAGL's lead water resources modeller during the Future Water Planning program. Other projects Tim has worked on include a review of Canberra's water restrictions scheme and assessments of the impact that environmental flow changes will have on ACT water security. He has also worked on a number of sewer modelling and odour analysis studies at ActewAGL.</p> <p>Responsibilities</p> <p>Tim provided advice on the impact of the project on flow in the Murrumbidgee River and Burra Creek (Appendix C).</p>
Guy Lampert		
Fluvial Geomorphologist	GHD Pty Ltd	<p>Qualifications</p> <p>Bachelor of Science, Macquarie University.</p> <p>Experience</p> <p>Guy Lampert is a geomorphologist with over ten years experience in the assessment, rehabilitation and management of fluvial and coastal landscapes. He has formal training in geomorphology, GIS, catchment management and river rehabilitation techniques. Guy has significant experience in the assessment of river form and function over a range of environments both within Australia and internationally. This has provided Guy with a practical understanding of form process associations and the variables that control fluvial systems over various spatial and temporal scales. Guy has applied this understanding to projects concerned with impact prediction and assessment, multi-disciplinary river rehabilitation planning and design, setting river management priorities and the development of monitoring programs.</p> <p>Responsibilities</p> <p>Guy was responsible for the preparation of the fluvial geomorphology component of the EA/EIS document (Appendix D).</p>

¹ The lead advisors listed were responsible for assessment of each specialist study as listed and may have required contributions of other members of their team. Details of other contributors may be found in the relevant appendices listed in Table 3.1.

Position	Organisation	Qualifications and technical expertise
Andy Spate		
Manager	Optimal Karst Management	<p>Qualifications</p> <p>Bachelor of Applied Science, University of Canberra.</p> <p>Experience</p> <p>Self-employed environmental consultant specialising in cave and karst, landscape rehabilitation and protected area management. Has carried out consultancy projects in Vietnam, South Korea, Papua New Guinea, New Zealand, Malaysia and in all Australian states and territories (including Antarctica).</p> <p>Responsibilities</p> <p>Andy was responsible for the assessment of London Bridge and karst (Appendix E).</p>
Timothy Martin		
Aquatic Ecologist	Biosis Research Pty Ltd.	<p>Qualifications</p> <p>Bachelor of Science, University of Canberra.</p> <p>Experience</p> <p>Timothy Martin is an aquatic ecologist with the Sydney Resource Group of Biosis Research with two years experience in marine and freshwater ecology in south-eastern Australia. He has experience in conducting aquatic impact assessments, biological monitoring programs, and general aquatic and riparian zone surveys across New South Wales in a wide range of freshwater and estuarine environments.</p> <p>Timothy has been involved recently in several projects related to environmental impact assessments of dams and weirs and environmental flow requirements within NSW and ACT. He has a strong background in river health assessment and monitoring (AUSRIVAS and SIGNAL2) and has several years experience in sampling and identifying macroinvertebrates from a range of catchments across New South Wales. He has worked as the laboratory manager for the University of Technology Sydney's Rapid Bioassessment Facility, in which he assisted with in-situ and ex-situ aquatic and terrestrial research studies. In this role he gained experience in liaison with external contractors and clients.</p> <p>Timothy also has experience in terrestrial invertebrate biodiversity assessments, sampling methodologies, data analysis and report writing. Timothy has worked as a volunteer for the ichthyology section at the Australian Museum where he undertook identification of fish sample collections and catalogued the collection.</p> <p>Responsibilities</p> <p>Timothy was responsible for the assessment of aquatic ecology issues (Appendix G).</p>

Position	Organisation	Qualifications and technical expertise
Aaron Troy		
Aquatic Ecologist	Biosis Research Pty Ltd.	<p>Qualifications</p> <p>Bachelor of Science, Environmental Management and Ecology (Hons).</p> <p>Experience</p> <p>Aaron Troy is an aquatic ecologist with the Sydney Resource Group of Biosis Research with over seven years experience in aquatic ecology and related fields. He has a sound understanding and knowledge of aquatic environmental issues, management and legislation in Victoria and NSW.</p> <p>Aaron is experienced in aquatic assessments, surveys, monitoring, research and management. Aaron's field experience covers freshwater lotic and lentic environments throughout catchments of NSW and Victoria, with a particular focus on fish, crayfish, macroinvertebrates and water quality, but also broadly encompasses other aquatic fauna.</p> <p>Aaron is widely experienced in investigating the current values (e.g. habitats, threatened species and communities) and condition of aquatic ecosystems, particularly wetlands, together with assessing the existing and potential impacts of anthropogenic sources of disturbance.</p> <p>Responsibilities</p> <p>Aaron was responsible for the aquatic ecology assessment addendum to Appendix G).</p>
Tom O'Sullivan		
Terrestrial Ecologist	Biosis Research Pty Ltd	<p>Qualifications</p> <p>Bachelor of Zoology/Physical Geography, University of New England.</p> <p>Master of Wildlife Management, Macquarie University (ongoing).</p> <p>Certificate of Environmental Management, NSW TAFE.</p> <p>Experience</p> <p>Tom is the Manager of the Canberra Resource Group of Biosis Research. Tom is also an Ecologist with over 15 years experience in the identification of terrestrial flora and fauna in a range of locations across NSW with considerable experience in NSW Southern Tablelands and ACT, Sydney Basin and South Coast regions. He has worked both as a project manager/project officer on a wide variety of consulting projects. Tom has specialist skills in fauna survey techniques applied to terrestrial and arboreal mammals, bats, birds and herpetofauna (frogs and reptiles) and mark-recapture and radio-tracking studies of arboreal mammals. He has undertaken a number of studies in the NSW Southern Tablelands and ACT, including targeted surveys for Grassland species, including the Grassland Earless Dragon, Pink-tailed Worm Lizard, Golden Sun Moth and woodland birds. Tom also has considerable botanical skills and has a good understanding of vegetation of south-eastern NSW, including ACT and NSW Southern Tablelands.</p> <p>Responsibilities</p> <p>Tom was responsible for the undertaking of terrestrial field surveys and compilation reports for the EA/EIS (Appendix H).</p>

Position	Organisation	Qualifications and technical expertise
Kelvin Officer		
Cultural Heritage Team Leader	Navin Officer Heritage Consultants Pty Ltd.	<p>Qualifications</p> <p>Bachelor of Arts (Hons) Australian National University. PhD Australian National University.</p> <p>Experience</p> <p>Kelvin is a Senior Cultural Heritage Specialist and Director of Navin Officer Heritage Consultants Pty Ltd. Kelvin has been active within the discipline of Australian archaeology for 25 years and has worked in the field of consulting archaeology for 22 years. During this time he has been involved in over 800 projects, acting as principal consultant and/or project manager.</p> <p>Kelvin has a broad range of cultural heritage experience and archaeological skills in both indigenous and historical fields. His experience includes field survey, excavation, site recording, Aboriginal and stakeholder liaison, and cultural significance assessment.</p> <p>Kelvin has recently project-managed the cultural heritage components of the Enlarged Cotter Dam EIS, Priority One indigenous heritage works, and Priority One- Four historical heritage works.</p> <p>Responsibilities</p> <p>Kelvin was responsible for the undertaking of cultural heritage surveys and compilation reports for the EA/EIS (Appendix I).</p>
Lindsay Smith		
Cultural Heritage Historical Specialist	Navin Officer Heritage Consultants Pty Ltd.	<p>Qualifications</p> <p>Bachelor of Arts, University of New England. Graduate Diploma in Arts (Prehistory), Australian National University. PhD, Australian National University. Visiting Fellow: School of Archaeology and Anthropology Faculty of Arts, College of Arts and Social Sciences Australian National University.</p> <p>Experience</p> <p>Lindsay is a Senior Cultural Heritage Specialist with Navin Officer Heritage Consultants Pty Ltd and a Visiting Fellow at the School of Archaeology and Anthropology, Faculty of Arts, College of Arts and Social Sciences, Australian National University.</p> <p>His role includes oversighting of and participation in all aspects of both indigenous Australian and historical archaeology heritage projects undertaken for a range of Federal and State government agencies, private companies and individuals throughout NSW and the ACT.</p> <p>Lindsay has recently been involved in Enlarged Cotter Dam and Murrumbidgee to Googong heritage assessments.</p> <p>Responsibilities</p> <p>Lindsay was responsible for the undertaking of cultural heritage surveys and compilation reports for the EA/EIS (Appendix I).</p>

Position	Organisation	Qualifications and technical expertise
James Earle		
Principal Environmental Scientist	GHD Pty Ltd	<p>Qualifications</p> <p>Master of Environmental Management, University of NSW Bachelor of Geological Engineering, Royal Melbourne Institute of Technology.</p> <p>Experience</p> <p>James is an Environmental Engineer with over eight years of experience in performing multi-disciplinary environmental management projects. He has solid experience in the areas of environmental impact assessment, waste management, environmental management systems and plans, contaminated land investigations, soil and water assessments and Hazardous substance audits. James has held positions with consulting services organisations and government departments in Australia and the UK.</p> <p>Responsibilities</p> <p>James was responsible for providing technical advice, overseeing, and reviewing the soil, contamination and groundwater assessment.</p>
Ruthy Hudson		
Environmental Scientist	GHD Pty Ltd	<p>Qualifications</p> <p>Bachelor of Environmental Science (Advanced) (Hons), University of Wollongong.</p> <p>Experience</p> <p>Ruthy is an Environmental Scientist with has 2 years experience in the preparation of environmental impact assessments, including Review of Environmental Factors and Environmental Assessments, and assessments of soils, surface water, groundwater, contaminated land and visual impacts. She also has experience in ecological constraint mapping, weed mapping, field data collection and GIS.</p> <p>Responsibilities</p> <p>Ruthy was responsible for the preparation of the soil, contamination and groundwater assessment.</p>

Position	Organisation	Qualifications and technical expertise
Scott Graham		
Lead Landscape Architect	GHD Pty Ltd.	<p>Qualifications</p> <p>Bachelor Of Applied Science Landscape Architecture, University Of Canberra.</p> <p>Bachelor Of Applied Science Environmental Design, University Of Canberra.</p> <p>Experience</p> <p>Scott Graham leads GHD's landscape architectural team and is an experienced professional with wide ranging skills in Landscape Architecture, Environmental Planning and Urban Design gained over the past 20 years. Scott has extensive experience in multi-disciplinary teams that provides him with skills to undertake complex design projects.</p> <p>Scott has lead the project scope definition and resource planning as well as the scheduling and management of workload for the landscape architectural team in a variety of complex infrastructure projects. Scott is motivated to establish the early involvement of the Landscape Architectural team to be effective in driving the environmental planning and design outcomes that are ultimately the fundamental legacy of large infrastructure projects</p> <p>Responsibilities</p> <p>Scott was responsible for leading the Landscape and Visual Impact assessment (Appendix K).</p>
Kate Milburn		
Senior Landscape Architect - Landscape and Visual Impact	GHD Pty Ltd.	<p>Qualifications</p> <p>Postgraduate Diploma in Planning and Design, University of Melbourne.</p> <p>Master of Landscape Architecture, University of Melbourne.</p> <p>Graduate Diploma in Environmental Science (Conservation Biology & Biodiversity), University of Melbourne.</p> <p>Experience</p> <p>Kate is a Registered Landscape Architect with over eleven years project experience gained in Australia, the United Kingdom and China. Her focus is in the environmental planning & design process and application with experience in both managing and forming part of large multidisciplinary teams on transport infrastructure projects (road, rail & tram). Kate is trained in water sensitive road design (WSRD) techniques through her project experience, post-graduate qualifications in Landscape Architecture and Environmental Science, and through her professional registrations with AILA, IEMA & EIANZ.</p> <p>Responsibilities</p> <p>Kate was responsible for preparation of the Landscape and Visual Impact assessment (Appendix K).</p>

Position	Organisation	Qualifications and technical expertise
Tim Hyland		
Landscape and Visual Assessment Consultant.	GHD Pty Ltd.	<p>Qualifications</p> <p>Bachelor Of Applied Science Multimedia Cartography, Royal Melbourne Institute of Technology.</p> <p>Experience</p> <p>Tim is a Landscape and Visual Assessment Consultant and Graphic Designer with the Landscape Architecture and Urban Design group. He is also a Lecturer in Multimedia Cartography and Geographic Visualisation at RMIT University and has extensive experience in the fields of spatial science, graphic design and as a professional photographer.</p> <p>Tim has worked on a range of Landscape and Visual Impact Assessment (LVIA) projects, producing LVIA reports, 3D models, detailed maps and interpretive diagrams, photographic work and photomontage images.</p> <p>Responsibilities</p> <p>Tim was responsible for the Landscape and Visual Impact Addendum assessment (Appendix K).</p>
Evan Milton		
Senior Noise and Vibration Consultant	GHD Pty Ltd	<p>Qualifications</p> <p>Bachelor of Engineering (Aerospace), University of New South Wales.</p> <p>Experience</p> <p>Evan has over 5 years experience in the fields of air, noise & vibration. Evan has extensive experience in static & dynamic finite element analysis (FEA) applications as well as computational fluid dynamics (CFD). Evan has experience in mining vehicle design & attenuation, industrial noise, vibration assessments & building acoustic design. He has extensive experience Cadna-A & SoundPLAN environmental noise modelling softwares.</p> <p>Responsibilities</p> <p>Evan was responsible for the Noise and Vibration impact assessment (Appendix L).</p>
Craig Evenden		
Senior Noise and Vibration Consultant	GHD Pty Ltd	<p>Qualifications</p> <p>Bachelor of Science (Physics Major), University of Newcastle.</p> <p>Member of Australian Institute of Physics (No. 8352).</p> <p>Experience</p> <p>Craig has over 8 years experience in acoustics and vibration engineering. He has gained extensive experience in environmental noise monitoring and modelling, occupational health and safety noise exposure, mobile plant and aircraft noise emission testing and control, noise control design, industrial noise, whole body vibration, blast monitoring and architectural acoustics.</p> <p>Responsibilities</p> <p>Craig was responsible for the Noise and Vibration impact assessment Addendum (Appendix L).</p>

Position	Organisation	Qualifications and technical expertise
Greg Collins		
Principal Noise and Vibration Consultant	GHD Pty Ltd	<p>Qualifications</p> <p>Bachelor of Science (Environmental Science) Washington State University. MBA, Newcastle University.</p> <p>Experience</p> <p>Greg is a principal environmental scientist with GHD who is primarily involved in projects in the fields of acoustics and air quality. Greg is the Air & Noise Service Line Leader for GHD.</p> <p>Greg has over 15 years of experience in noise assessments for environmental impact statements, development and rezoning applications, industry, road traffic noise, machinery noise testing and environmental noise monitoring.</p> <p>Responsibilities</p> <p>Greg was responsible for the peer review and project direction of the Noise and Vibration impact assessment and addendum (Appendix L).</p>
Stella Whittaker		
Principal Consultant - Sustainability	GHD Pty Ltd	<p>Qualifications</p> <p>Master of Science, European Environmental Policy & Regulation, Lancaster University.</p> <p>Bachelor of Environmental Science (Hons - 2:1), Bradford University.</p> <p>Experience</p> <p>Stella is a sustainability specialist with over 27 years experience in the United Kingdom, Europe and Australia. Throughout her career she has had extensive experience in climate change.</p> <p>At GHD Stella is the Global Service Line Leader for Sustainability and the lead Principal Consultant responsible for GHD's climate change impacts and adaptation work globally. During her time at GHD she has facilitated climate change risk assessment and adaptation planning processes for a large number of clients.</p> <p>Responsibilities</p> <p>Stella was responsible for the technical review of the climate change risk assessment (Appendix M).</p>

Position	Organisation	Qualifications and technical expertise
Andrew Rode		
Environmental Engineer	GHD Pty Ltd	<p>Qualifications</p> <p>Bachelor of Environmental Engineering (Hons).</p> <p>Experience</p> <p>Andrew is an Environmental Engineer and is working in GHD's Sustainability and Climate Change Group. Andrew has over three years of professional experience. His core experience has been in water supply system planning/modelling, and wastewater treatment and reuse for projects within NSW. Andrew also has over one year of experience in life cycle and greenhouse assessments, water utility and greenhouse audits, environmental & site management, climate change risk & adaptation, and coordinating infrastructure sustainability programs.</p> <p>Responsibilities</p> <p>Andrew was responsible for the preparation of the climate change risk assessment (Appendix M).</p>
Sue Trahair		
Principal Engineer	GHD Pty Ltd	<p>Qualifications</p> <p>Bachelor of Engineering (Chemical) (Hons), University of Sydney.</p> <p>Experience</p> <p>Sue is a principal engineer with GHD. She has over 25 years experience in environmental and greenhouse auditing and verification, wastewater treatment, solid waste management, odour control and hazardous waste treatment. Sue has been actively involved in conducting environmental audits since 1990. She has conducted over 400 environmental, compliance and due diligence audits, over 150 greenhouse gas audits and been project manager/peer reviewer for an additional 320 audits.</p> <p>Sue has conducted greenhouse gas audits for electricity generators and distributors, major utilities, large scale industries and manufacturing including AGL, Energy Australia, Country Energy, International Power, TXU, Energex, Energy Impact, BHP Billiton, Commonwealth Bank, Kimberley-Clark Australia, Coca-Cola Amatil.</p> <p>Sue has been accredited as a Lead Environmental Auditor from RABQSA for over 12 years. She is approved as a Lead Auditor under the NSW Greenhouse Gas Abatement Scheme, a Lead Verifier under the Department of Climate Change Greenhouse Challenge Plus, Greenhouse Friendly and Generator Efficiency Standards programs and lead verifier under the AGL and Origin Energy carbon programs.</p> <p>Responsibilities</p> <p>Sue was responsible for the technical review of the greenhouse gas assessment (Appendix N).</p>

Position	Organisation	Qualifications and technical expertise
Andrew Maddocks		
Senior Consultant	GHD Pty Ltd	<p>Qualifications</p> <p>Doctor of Philosophy, University of Sydney.</p> <p>Bachelor of Engineering (Chemical) (Hons), University of Newcastle.</p> <p>Bachelor of Science, University of Newcastle.</p> <p>Experience</p> <p>Andrew is a senior consultant within GHD's multidisciplinary Sustainable Development group and has experience in life cycle assessments, greenhouse gas auditing, emerging renewable energy and sustainable technologies, materials selection and life cycle sustainability issues related to major infrastructure.</p> <p>Andrew has worked with stakeholders across property, mining, transport, civil infrastructure and manufacturing sectors to understand Australia's domestic greenhouse gas reporting requirements of National Greenhouse and Energy Reporting Act 2007 and to assist in the planning approval of new projects.</p> <p>Andrew has provided strategic advice on greenhouse gas reduction mechanisms, sustainability initiatives and the implications and opportunities of the Australian Government's proposed Carbon Pollution Reduction Scheme.</p> <p>Responsibilities</p> <p>Andrew was responsible for the preparation of the greenhouse gas assessment (Appendix N).</p>
Jill Hannaford		
Manager Community Consultation and Social Planning	GHD Pty Ltd.	<p>Qualifications</p> <p>Bachelor of Applied Science (Applied Economic Geography) (Hons), University of NSW.</p> <p>Master of Urban and Regional Planning, University of Sydney.</p> <p>Experience</p> <p>Jill is a planner with over 20 years experience in the fields of social and community planning. Jill has worked for both the public and private sectors and has always had an interest in social planning. Throughout her career she has undertaken a very wide range of social planning projects from independent social impact assessments, community development projects, community involvement strategies and socio economic assessment for large infrastructure projects. Her experience has also included the incorporation of social planning principles in strategic planning studies. Jill's understanding of social planning principles and her training in economic geography and town planning have lead to her being a social planner with a broad grasp of the issues affecting communities and in particular the planning for communities. Jill leads a team of community planning specialist and is an active member of the Social Planning Chapter of the Planning Institute of Australia.</p> <p>Responsibilities</p> <p>Jill was the peer reviewer of the social impact assessment (Appendix O).</p>

Position	Organisation	Qualifications and technical expertise
Anne Mithieux		
Senior Social Planner	GHD Pty Ltd.	<p>Qualifications</p> <p>Bachelor of Science (Hons), University of NSW.</p> <p>Master of International and Community Development, Deakin University.</p> <p>Experience</p> <p>Anne is a senior social planner with over 12 years experience in social impact assessment, social planning, community development and public participation across Australasia. Anne has experience with large infrastructure including oils and gas, transport, industrial and energy projects which have commonly involved linear or corridor impact scenarios. Anne is adept at community profiling, community needs assessment, and has specific skills in survey development, questionnaire design, and qualitative and quantitative data analysis. Anne has been responsible for the design and implementation of communications and consultation programs for diverse stakeholders, including for minority and vulnerable stakeholder groups, and building effective social plans on these foundations.</p> <p>Responsibilities</p> <p>Anne was responsible for the preparation of the social impact assessment and addendum (Appendix O).</p>
Dan Deere		
Water Quality Scientist	Water Futures Pty Ltd.	<p>Qualifications</p> <p>Bachelor of Science (Hons) in Biotechnology, Leeds University.</p> <p>MBA in Technology Management, La Trobe University.</p> <p>PhD in Waterborne Pathogen Fate and Transport, Liverpool University.</p> <p>Experience</p> <p>Dan Deere is a water quality scientist with Water Futures Pty Ltd, specialising in quantitative and water cycle risk assessment and risk management planning. He has worked in scientific roles in the UK, Sydney and Melbourne as an academic research fellow and consultant, specialising in microbial water quality monitoring and process validation. More recently, he has worked in technical management roles in water utilities in Melbourne (South East Water) and Sydney (Sydney Catchment Authority) and was the part-time CRC for Water Quality and Treatment Catchments Research Program Leader for 7 years.</p> <p>Dan has provided training in the ADWG Framework, Water Safety Plans (WHO), the Australian Guidelines for Water Recycling Framework and Hazard Analysis and Critical Control Points (HACCP) across Australia, Asia and Europe.</p> <p>Responsibilities</p> <p>Dan was responsible for the preparation of Quantitative Risk Assessment for drinking Water (Appendix P).</p>

Position	Organisation	Qualifications and technical expertise
Dr Laslo Nagy		
Principal Consultant	Atech Group (for ActewAGL Pty Ltd)	<p>Qualifications</p> <p>Bachelor of Science (Hons), Australian National University.</p> <p>PhD (emphasis on environmental management, water management and statistically assessment), Australian National University..</p> <p>Experience</p> <p>Laslo has over 20 years experience in the Water Industry, as a consultant with the Atech Grop for ActewAGL. He has worked on numerous large environmental and water management projects for a range of clients including Sydney Water, ACTEW, ActewAGL, Murray-Darling Basin Commission, Department of Environment (Commonwealth), Department of Health (Commonwealth).</p> <p>He has worked on the Future water options study for ACTEW, and ActewAGL (during 2004-05), and then on the Future Water Planning Program for ACTEW and ActewAGL (during 2007-08). Laslo has had a key involvement in a range of consultancy reports and journal publications in the areas of:</p> <ul style="list-style-type: none"> • Water management; • Water recycling; • Environmental management; • Threatened species and biodiversity; • Greenhouse gas emissions; • Risk assessment; and • Statistical assessment of environmental data. <p>Responsibilities</p> <p>Laslo was responsible for preparing ActewAGL response to Murrumbidgee to Googong Water Transfer Public Comments (Appendix C2).</p>
Mick Lyons		
Civil Engineer	GHD Pty Ltd	<p>Qualifications</p> <p>Civil Engineering Diploma, Sydney Technical College.</p> <p>Experience</p> <p>Mick has over 35 years experience in the road engineering field, with over 20 years traffic engineering and transport planning experience. He is an accredited road safety auditor.</p> <p>Responsibilities</p> <p>Mick was responsible for the preparation of construction traffic assessment and addendum (Appendix Q).</p>