

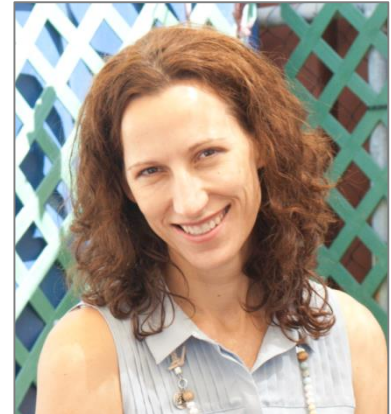
### PROFESSIONAL PROFILE

Karen is a co-founder of Phoenix Environmental Sciences, where she holds the position of Principal Environmental Advisor and General Manager. She has a strong environmental reporting and policy background with broad experience in environmental impact assessment, environmental management and sustainability.

Karen has held various roles with the EPA Services Unit, DEC (2001) and within environmental consulting. From 2001 to 2008, Karen worked primarily in the EPA Services Unit of the Department of Environment and Conservation, providing advice and services to the EPA. She has been involved in the development of EPA and State Government environmental policy including State of the Environment reporting, EPA guidance statements and greenhouse policy initiatives.

Karen has significant experience in project management, team leadership, systems development, technical reporting, EIA and quality assurance. Since moving to consulting in 2008, Karen has overseen the implementation of numerous biological survey projects and impact assessments. She has particular expertise in planning, coordinating and ensuring effective and quality delivery of multi-disciplinary assessments. She has authored numerous technical biological reports, proposal documents and management plans.

As General Manager, Karen has overseeing roles in policy development and enactment, business plan development and enactment, quality assurance, stakeholder liaison, team development and leadership, and company systems development.



### QUALIFICATIONS

Bachelor of Science (Environmental Biology), First Class Honours, Curtin University, Perth

### EMPLOYMENT HISTORY

2008 – present	Principal Environmental Advisor, General Manager at Phoenix Environmental Sciences
2001 – 2008	Environmental Officer, various roles at Department of Environment and Conservation

### TECHNICAL EXPERTISE

- Scoping of environmental survey requirements
- Design, coordination and management of biological survey programs to ensure quality and timely delivery of reports
- Development and review of technical and environmental reports
- Development and review of EPA and EPBC Act referral/proposal documentation
- Development and review of environmental management plans, including species management plans and conservation management plans
- Risk assessment, impact assessment
- Liaison and negotiation with stakeholders

### PROJECT EXPERIENCE

- Baseline studies, environmental approvals and compliance reporting for Clampton Gold Project, Clampton Mining Services, 2014–ongoing (Goldfields) – project oversight, co-ordination of baseline assessments, stakeholder consultation, EIA and document development

- Biological consultants for the Great Northern Highway Upgrades Project Muchea to Wubin, 2014–ongoing (Swan Coastal Plain) – project manager and client liaison, review and oversight of deliberables, EIA
- Biological studies and environmental approvals for sand quarry, Pinjar Metro Sands, 2014–ongoing (Perth Metropolitan Area) – project management, client and regulator liaison, preparation and submission of development applications
- Rehabilitation monitoring for Mount Gibson Gold Project site, Extension Hill, 2014 (Midwest) – project oversight, client liaison and review of technical report
- Development of environmental assessment framework for Bushfire Risk Management Strategy, Bushfire Prone Planning on behalf of the Water Corporation, 2014 (South-west and Great Southern) – Project manager, author
- Biological surveys (flora and fauna) for Extension Project, Australian Aboriginal Mining Corporation, 2013–14 (Pilbara) – project oversight, coordination and review of multiple technical reports, client and regulator liaison, EIA
- Vertebrate and SRE surveys for Balla Balla Rail Project, Rutila Resources, 1014 (Pilbara) – project scoping and oversight, client and regulator liaison
- Conservation management plan and flora and fauna survey for the Mt Andrew Project, Ashburton Minerals, 2013 (Goldfields) – project oversight, drafting and review of CMP, review of survey report, client and stakeholder liaison
- Biological surveys (flora and fauna) and environmental impact assessment for Bullabulling Gold Project, Bullabulling Gold, 2013 (Goldfields) – project oversight, environmental impact assessment, native vegetation clearing assessment, review of technical reports
- Fauna trapping and translocation for Roy Hill Rail Project, NRW, 2013–14 (Pilbara) – project oversight and administration
- Terrestrial invertebrate monitoring program of St Ives Gold Mine, St Ives Gold Mining Company, 2013–14 (Goldfields) – report review, client and stakeholder liaison
- Biological surveys (Level 2 flora and vegetation, Level 1 and targeted vertebrate fauna, SREs) and EIA for Pannawonica Project, Red Hill Iron, 2013–14 (Pilbara) – oversight of multi-disciplinary survey program, coordination and review of multiple technical reports, client and regulator liaison, ensuring project timelines met
- Environmental approvals, environmental scoping, biological surveys for Rocklea Project, Dragon Energy, 2011–14 (Pilbara) – drafting of approvals strategy, survey scoping, project oversight, coordination and review of multiple technical reports, EIA and development of mitigation measures for fauna, client and stakeholder liaison, guidance to client on project referrals, ensuring project timelines met
- Subterranean fauna survey plan for FerrAus Pilbara Project, Atlas Iron, 2013 (Pilbara) – drafting and review of plan
- Fauna surveys (Level 1, Level 2 and targeted vertebrate fauna – Northern Quoll, Pilbara Lead-nosed Bat, Pilbara Olive Python, Western Pebble-mound Mouse, Black-flanked Rock Wallaby, Ghost Bat and Lined Soil-crevice Skink – and SREs) and approvals for the Buckland Project (mine and haul road), Iron Ore Holdings, 2012–13 (Pilbara) – survey scoping, oversight of multi-disciplinary survey program, coordination and review of multiple technical reports, client and stakeholder liaison, impact assessment and development of mitigation and management strategies (particularly for Northern Quoll), review of referral documents, ensuring project timelines met
- Fauna surveys (Level 1 and 2 vertebrate fauna, SREs, migratory shorebirds) and approvals for Balla Balla Magnetite Project (barge loading facility), Forge Resources Ltd, 2012–13 (Pilbara) – survey scoping,

project oversight, coordination and review of multiple technical reports, impact assessment and development of mitigation and management measures, client and stakeholder liaison, ensuring project timelines met

- SRE survey and subterranean fauna desktop review for Lake Disappointment Potash Project, Reward Minerals, 2013 (Little Sandy Desert) – review of technical reports
- Level 2 SRE survey of East Pilbara Independent Rail Line, Aurizon Operations, 2013 (Pilbara) – review of technical report
- Fauna program (comprehensive suite of vertebrate, invertebrate and aquatic surveys) and approvals for Roe Highway Extension Project, South Metro Connect, 2010–2012 (Perth Metropolitan Area) – baseline survey scoping, project oversight, coordination and review of multiple technical reports, ensuring project timelines met, client and stakeholder liaison, impact assessment, drafting of PER and fauna management plan, ongoing support to lead consultant throughout the approvals process
- Level 2 and targeted vertebrate fauna survey (Mallefowl and Western Spiny-tailed Skink) for the Mummaloo Iron Ore Project, Top Iron, 2012 (Midwest) – project oversight, review of technical report, client and stakeholder liaison, impact assessment, ensuring project timelines met
- Level 2 SRE surveys of Western Hub, and Turner Syncline and Turee, Fortescue Metals Group, 2012–13 (Pilbara) – review of multiple technical reports
- Level 1 and targeted vertebrate fauna surveys (Northern Quoll, Pilbara Olive Python, Pilbara Leaf-nosed Bat) of Snake Prospect, Iron Ore Holdings, 2012 (Pilbara) – client and stakeholder liaison, coordination and review of technical reports
- Level 2 SRE survey, vertebrate and subterranean fauna desktop reviews for the Varanus Island Fill Project, Apache Energy, 2012 (Carnarvon) – review of technical reports
- Level 2 SRE survey of East Pilbara Independent Rail Line, QR National, 2012 (Pilbara) – report review
- Level 2 SRE survey for Kathleen Valley Project, Xstrata, 2012 (Goldfields) – report review
- Vertebrate and SRE invertebrate fauna surveys of the Yanneri and Bindi Bindi study areas, Montezuma Mining Company, 2012 (Gascoyne) – project oversight, report review, preliminary impact assessment
- Level 2 SRE survey for Bauxite Area Expansion Project, BHP Billiton Worsley Alumina, 2011–12 (Perth-Peel) – report review
- Subterranean fauna survey for the Mulga Downs Project, Hancock Prospecting, 2011–12 (Pilbara) – report review, client liaison, impact assessment
- Level 2 vertebrate, SRE and subterranean fauna surveys for Wonmunna Project, Rico Resources, 2011 (Pilbara) – survey scoping, project oversight, coordination and review of multiple technical reports, preliminary impact assessment and development of mitigation measures for fauna, client and stakeholder liaison, guidance to client on project referrals, ensuring project timelines met
- Level 2 vertebrate and SRE surveys and targeted fauna surveys for Roy Hill Bonney Downs rail alignment, Roy Hill Infrastructure, 2011 (Pilbara) – project oversight, coordination and review of multiple technical reports, impact assessment, client liaison, ensuring project timelines met
- Level 2 vertebrate and SRE surveys for Fitzgerald River National Park proposed walk trail, Department of Environment and Conservation, 2010–11 (Great Southern) – project oversight, coordination and review of two technical reports, impact assessment, client liaison, ensuring project timelines met
- Fauna program and approvals for the FerrAus Pilbara Project (mine and rail), FerrAus, 2009–11 (Pilbara) – survey scoping, coordination, drafting and review of multiple technical reports, client liaison, consolidation of biological datasets and preparation of consolidated reports, impact assessment,

collaboration with lead consultant on preparation of API proposal and supporting documents, drafting of subterranean fauna survey strategy

- *Idiosoma nigrum* research program and monitoring program at Jack Hills, Crosslands Resources, 2009–12 (Midwest) – input to research and monitoring program design, project oversight and report review.
- *Idiosoma nigrum* monitoring program for the Weld Range Project, Sinosteel Midwest Corporation, 2010–11 (Midwest)
- SRE survey for Solomon Project (Valley of the Kings, Valley of the Queens and Zion deposits) for Fortescue Metals Group, 2010 (Pilbara) – report drafting and review
- Level 2 vertebrate, SRE surveys and targeted species surveys (*Lerista neviniae*, targeted SREs) and approvals for Anketell Point port and rail project, Australian Premium Iron, 2009–10 (Pilbara) – survey scoping, project oversight, coordination, drafting and review of multiple technical reports, ensuring project timelines met, client and stakeholder liaison, impact assessment, drafting of PER and coastal habitat management plan (for *Lerista neviniae*), ongoing support to client throughout the approvals process
- Vertebrate and SRE surveys at Cape Preston for Maunsell AECOM / Mineralogy, 2008 (Pilbara) – project oversight, report development and review
- SRE survey for Quantum Goldsworthy Project for ENV / BHP Billiton, 2008 (Pilbara) – report review

**Government projects include:**

- State of the Environment Report 2007, Department of Environment and Conservation – co-manager of the program, principal author, coordinator of several working groups for the development of the report
- Development and review of draft EPA Guidance Statement 19: Environmental Offsets, Department of Environment and Conservation
- Coordination of preliminary investigation into the potential for a biodiversity banking scheme in Western Australia
- Review of policy development processes within the Department of Environment and Conservation
- Development of sustainability measures to support State of the Environment and sustainability reporting
- Establishment of the Energy Smart Government reporting framework for the Department of Environment and Conservation
- Coordinator of workshop for the third International Sustainability Conference of the Regional Government Network for Sustainable Development.
- Undertook a review of State direction on greenhouse gas emissions reporting and State position on related national developments
- Contributed to the development of a reporting framework for greenhouse gas emissions
- Coordinated a consultancy to investigate the development of a greenhouse registry for WA
- Planned and coordinated a two-day high level workshop on resource efficiency to support objectives in the Western Australian State Sustainability Strategy

**PROFESSIONAL TRAINING AND CERTIFICATIONS**

Environmental Assessment Training for Practitioners, ECA / OEPA

Cert IV OHS

Inside Government: The Legislative Framework, IPAA

Effective Facilitation Training, DEC

Mine Closure Planning for the Western Australian Resources Sector, SMI

**AFFILIATIONS**

Member, Environmental Consultants Association