Earth Systems specialises in water quality management and treatment, including the provision of water management advice, water treatment equipment and contract treatment services. Our integrated water treatment solutions cover a range of water quality issues at mine, industrial, agricultural and municipal sites.

Earth Systems has a dedicated Water Management Team that has been providing cost-effective and innovative solutions for water quality issues for over 20 years. Our experienced specialists deal with a broad range of water quality problems, from nutrient pollution and stormwater, to acid sulfate soil drainage, landfill leachate, water storage contamination and minesite acid and metal pollution. Earth Systems specialises in developing effective solutions for complex water quality issues.

SERVICES PROVIDED
• Evaluation of site water quality issues and development of integrated water management and treatment strategies.
• Treatment strategies and advice for stormwater, groundwater, waste water, sewage and process water issues.
• Routine and emergency response water and waste water treatment.
• Design and implementation of comprehensive water quality management, remediation and rehabilitation strategies for active mines, orphan sites and acid sulfate soil settings.
• Design and construction of site-specific portable and fixed plant water treatment systems based on patented Neutra-Mill technology.
• In-situ water treatment strategies for mine pit lakes, water storages and other contaminated water bodies.
• One-off and routine contract water treatment services.
• Rapid and effective total, supplementary and pre-treatment technologies.

EXPERIENCE
• Comprehensive review of domestic and wastewater treatment across the Lake Tai basin in China, technical optimisation trials at three pilot waste water treatment plants; knowledge exchange between Australian and Chinese plant managers and the development of governance mechanisms for lake restoration.
• Cleaner Production in the Ganga River Basin – Tannery Waste Management Program, including a rapid technical, environmental and social assessment of the Jajmua tannery cluster, consultations with key stakeholders and the development of a Roadmap for Sustainable Waste Management of the Cluster.
• Development of a comprehensive surface water and leachate management strategy for a municipal landfill in Tasmania, Australia.
• Development of a water management strategy for control of water quality and water supply to achieve ‘zero discharge’ of impacted water for a prospective iron mine in Southeast Australia.
• Concept and detailed design of large capacity, low- and high-density sludge lime neutralisation plants for multiple clients.
• Development and implementation of contract water treatment services to neutralise a 2,500 ML reservoir of acidic process water at a coal mine in Australia to preserve piping and pumping infrastructure.
• Design and commissioning of multiple automated water treatment systems for acid neutralisation, metal removal and turbidity control for a multinational company in a remote part of the Peruvian Andes.
• Development and implementation of a strategy and provision of equipment to lower the manganese content of surface run off water entering the local environment at a Southeast Asian gold mine.
• Design and commissioning of portable water treatment equipment to control acid mine drainage and turbidity issues for several coal mines in Indonesia.
• Multiple in situ treatment tasks for mining operation and manufacturers, including routine treatment and emergency response.
• Design and construction of turbidity control for a multinational company in a remote part of the Peruvian Andes.
• Design and construction of turbidity control for a multinational company in a remote part of the Peruvian Andes.
• Multiple in situ treatment tasks for mining operation and manufacturers, including routine treatment and emergency response.
• Design and construction of turbidity control for a multinational company in a remote part of the Peruvian Andes.
• Multiple in situ treatment tasks for mining operation and manufacturers, including routine treatment and emergency response.