




Water in the Mining Sector

Sub-Industry	Mineral Extraction	Gas	Petroleum	Quarry
Products	<ul style="list-style-type: none"> • Coal • Iron ore • Aluminum • Uranium • Copper 	<ul style="list-style-type: none"> • Coal Seam Gas • LNG • Shale Gas 	<ul style="list-style-type: none"> • Petroleum / Crude Oil • Oil Sands (not in Australia) 	<ul style="list-style-type: none"> • Stone • Gravel • Construction aggregate • Shale • Sand • Clean fill
Key Water Uses	<ul style="list-style-type: none"> • Raw material and waste transport • Separation of minerals • Separation of materials • Cooling • Suppression of dust • Washing equipment • Dewatering of mines • Manage waste tailings • Hydroelectricity 	<ul style="list-style-type: none"> • Raw material transport • Drilling fluid • Hydraulic fracturing • Produced discharges 	<ul style="list-style-type: none"> • Cooling • Produced discharges • Drilling fluids for wells • Processing • Transportation • Managing aqua-system pressure effects 	<ul style="list-style-type: none"> • Processing • Suppression of dust • Washing equipment • Dewatering of mines • Recreation (post closure) 
Key Water Management Issues	<ul style="list-style-type: none"> • Site water balance - including supply, demand, efficiency and reuse • Discharge compliance - with regards to water quality • Dependent Ecosystems 	<ul style="list-style-type: none"> • Reuse • Efficiency • Discharge Quality • Demand • Dependent Ecosystems 	<ul style="list-style-type: none"> • Discharge efficiency with regards to processing cost • Discharge compliance - with regards to water quality • Receiving ecosystem impacts from produced water 	<ul style="list-style-type: none"> • Reuse - potential water quality reduction overtime (TDS), which can reduce efficiency in treatment • Drainage - potential for increased erosion and/or sedimentation, and aquifer interception which can impact dependent ecosystems