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### **Energy development water needs assessment and water supply alternatives analysis**

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Development of oil from oil shale will require water directly for extraction and processing, and indirectly to support increased population, electrical generation and related economic activity. Under current policy any development of oil shale will be done by the private sector and information about industry plans for water supply for shale oil development is not publicly available, at least with any degree of specificity. In 2005, through House Bill HB 05-1177, Colorado initiated a water planning process that involved nine Basin Roundtables, each representing a specified basin or geographic area. Through the HB 1177 process the Colorado Basin Roundtable and the Yampa/White Basin Roundtable initiated the Energy Development Water Needs Assessment and Water Supply Alternatives Analysis. In early 2008 work began on Phase I of the assessment, which included a comprehensive estimate of water demands for natural gas, coal, uranium, and oil shale energy development. In addition to these direct demands, the study also estimated the indirect demands brought about by population growth related to energy development and electrical generation needed to serve the energy development. Phase I also included a listing of water rights owned by energy companies. The Phase I Final Draft report was released on September 28, 2008. Phase II of the Energy Water Needs Assessment began in June 2009. This phase of the study will investigate possible sources and locations of water to satisfy the water requirements of the industry, including tributary and non-tributary groundwater, direct-flow surface water, and storage water. This task requires that the system of water rights, water resources, and demands for water – existing and future – be modelled using the Colorado Decision Support System (CDSS), developed by the Colorado Water Conservation Board.