

Environmental Net Effects Assessment of Saline Water vs Fresh Water

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The objective of this project is to examine, at a higher level than an assessment tool, the environmental net effects (ENE) of saline and fresh water use. The study should assess the ENE from source extraction to disposal after being used for hydraulic fracturing operations. The study should consider, but not be limited to: water chemistry, water availability, potential treatment requirements, storage options, cost, footprint requirements, GHG emissions and potential and energy consumption required for use. The objective of a high level assessment of saline water use would be to inform policy discussions with regulatory bodies and to help inform a future Water Source Evaluation Tool.

Policy Issue

Assessment of alternate sources of water for unconventional oil and gas development considering the entire life cycle.

Knowledge Gap

Upcoming amendments to the Water Conservation and

Allocation Policy/Guideline for Oilfield Injection will likely include additional requirements for proponents to consider when applying for licenses to use non-saline water. One of these requirements is likely to complete an environmental net effects assessment of the various water source alternatives. There are no assessment tools developed to complete this evaluation. Supports CAPP Hydraulic Fracturing Operating Practice #5: Water Sourcing, Measurement and Reuse.

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