

Abstract

Constructed Wetlands and Other Produced Water Treatment Technology Opinions from Stakeholders in Oil and Gas Impacted Communities

Allocation of billions of gallons of water for hydraulic fracturing spurs controversy among stakeholders of the oil and gas industry. To reduce this freshwater consumption, industry professionals are investing in technologies for produced water treatment, such as constructed wetland cells for biological contaminant attenuation. Yet for this technology to be feasible, it must also be socially acceptable to the communities where it will be placed. Characterization of social perceptions, concerns, and knowledge base about these technologies remains nonexistent. However, the continued development and implementation of produced water reclamation strategies relies on the social implications expressed by community stakeholders. ArcGIS analyses of collected parameters from Colorado communities unveiled three appropriate communities where ethnographic methods will be used to understand existing opinions about novel treatment techniques.