An Integrated Framework for Treatment and Management of Produced Water

Water Management Associated with Coalbed Methane and Gas Shale Production

Funding Agency:

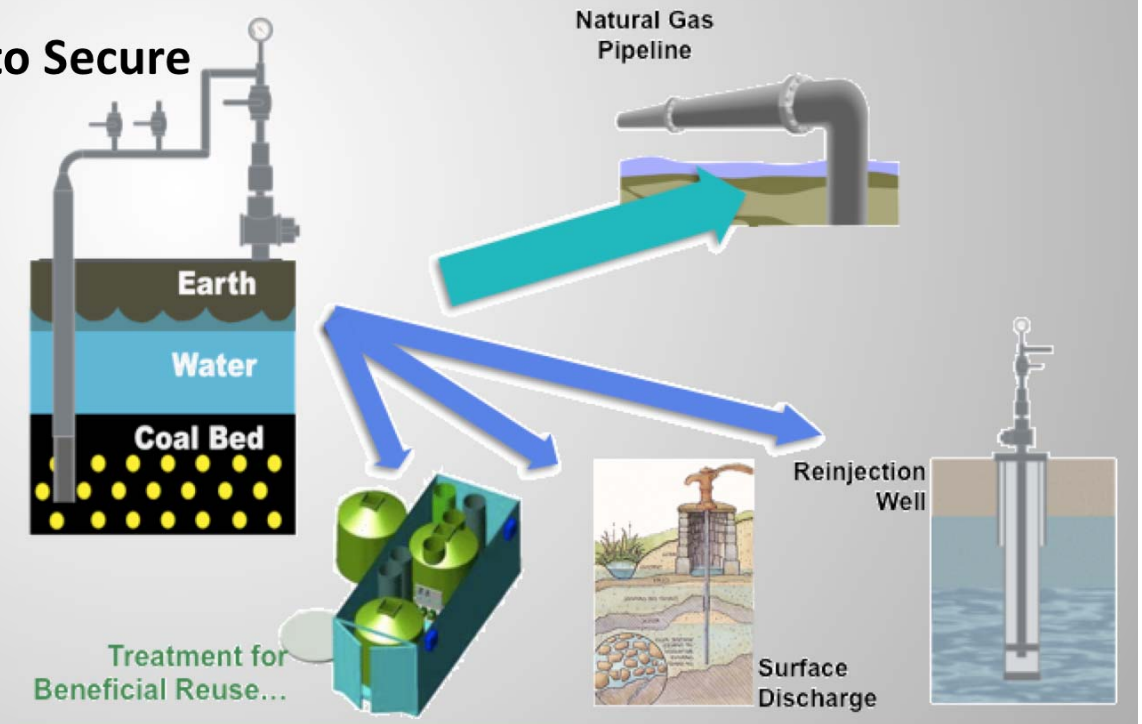
- **DOE – Research Partnership to Secure Energy for America (RPSEA)**

Principal Investigators:

- **Jörg Drewes**
- **Tzahi Cath**
- **Pei Xu**

Students Participating:

- **Katie Benko**
- **Katharine Dahm**
- **Nathan Hancock**



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Start date: 2008
End Date: 2010

AQWATEC
Advanced Water Technology Center

Project Objectives

- Collect data on quality and quantity of produced water associated with unconventional gas production
- Explore most appropriate and cost-efficient technologies for treatment of produced waters that allow for beneficial use
- Assess requirements to minimize environmental impacts and reduce institutional barriers for beneficial use
- Compile findings into integrative decision analysis framework for management of produced water leading to beneficial use

Methodology

- Collaboration with industry partners to obtain produced water quality and quantity data
- Produced water sampling and laboratory analysis of constituents of concern for treatment
- Literature and industry review to evaluate currently employed treatment technologies as well as applicable novel system to determine viable options for produced water treatment
- Lab, pilot, and on site testing and evaluation of potential treatment technologies
- Development of an integrated framework to manage produced water for beneficial use

Potential Beneficial Use of Produced Water in the CO River Watershed