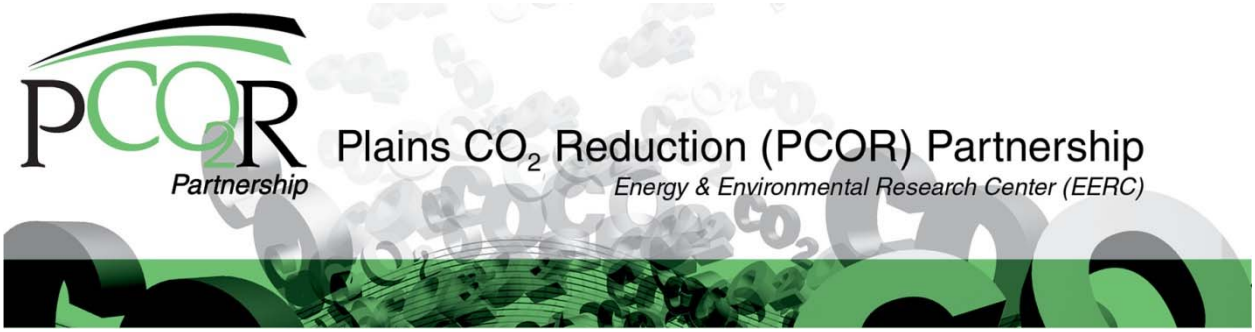

WATER WORKING GROUP WEB SITE CONTENT UPDATE

Plains CO_2 Reduction (PCOR) Partnership Phase III
Task 14 – Deliverable D101

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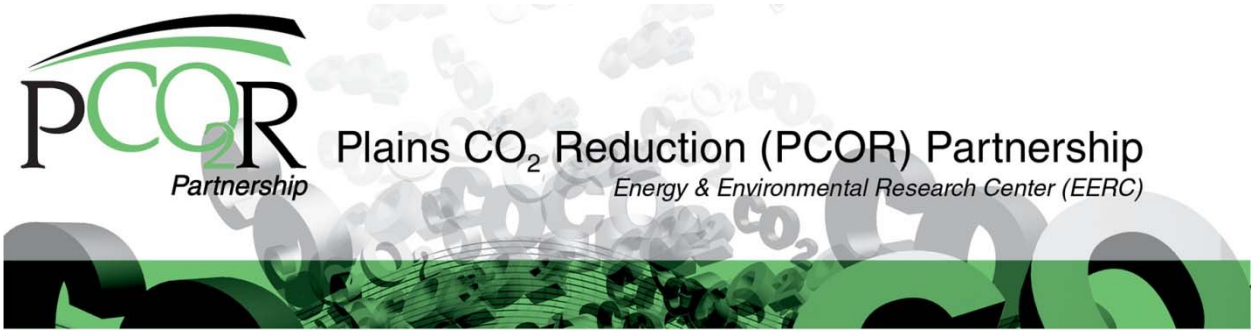

WATER WORKING GROUP WEB SITE CONTENT UPDATE

INTRODUCTION

The mission of the Regional Carbon Sequestration Partnership (RCSP) Water Working Group (WWG) is to address stakeholder concerns regarding emerging carbon capture and storage (CCS) technology and potential interactions with local and regional water resources. In order to more effectively engage stakeholder groups and address stakeholder concerns, the WWG has developed a Web site that is hosted on the U.S. Department of Energy National Energy Technology Laboratory's (NETL's) Web site as part of the Carbon Dioxide Storage Program description.

WWG WEB SITE CONTENT UPDATE

The following updates have been sent to NETL site support for inclusion in the WWG Web site:

- Text was developed to represent the effort to produce the Virtual Special Issue: Nexus of Water and CCS in conjunction with the *International Journal of Greenhouse Gas Control*. A link to the journal was also provided. This text will be included on the "Products" page and is included below. The issue's papers are listed in Table 1.
- The presentation from the August 2016 WWG Annual Meeting was uploaded.
- Minor edits were made across the site to improve readability.

Section Text on Virtual Special Issue

"In 2016, members of the Water Working Group worked with the International Journal of Greenhouse Gas Control (IJGGC) to develop a 'virtual special issue,' or online publication, of research on subjects related to the nexus of water and CCS. These peer-reviewed papers discuss a variety of issues important to understanding the challenges and opportunities related to water that are likely to come with implementation of CCS methodologies. Subjects covered included enhancement of CO_2 storage volumes through water extraction, water extraction designs for enhanced CO_2 storage, treatment technologies applicable to extracted water, economic analysis of CCS water extraction, and analysis of regulatory regimes related to water extraction for CCS. The entire virtual issue is available from IJGGC on its Web site." [NOTE: Hyperlink to the virtual special issue, www.sciencedirect.com/science/journal/17505836/vsi/101VWKM4QT4].

Table 1. Research Articles in Virtual Special Issue: Nexus of Water and CCS

Buscheck, T.A., Bielicki, J.M., White, J.A., Sun, Y., Hao, Y., Bourcier, W.L., Carroll, S.A., Aines, R.A., 2016, Pre-injection brine production in CO_2 storage reservoirs: An approach to augment the development, operation, and performance of CCS while generating water. Volume 54, Part 2, November, Pages 499–512.
Dastgheib, S.A., Knutson, C., Yang, Y., Salih., H.H., 2016, Treatment of produced water from an oilfield and selected coal mines in the Illinois Basin. Volume 54, Part 2, November, Pages 513–523.
Pan, F., McPherson, B., Esser, R., Xiao, T., Appold, M.S., Jia, W., Moodie., N., 2016, Forecasting evolution of formation water chemistry and long-term mineral alteration for GCS in a typical clastic reservoir of the Southwestern United. Volume 54, Part 2, November, Pages 524–537.
Ziemkiewicz, P., Stauffer, P.H., Sullivan-Graham, J., Chu, S.P., Bourcier, W.L., Buscheck, T.A., Carr, T., Donovan, J., Jiao, Z., Lin, L., Song, L., Wagoner J.L., 2016, Opportunities for increasing CO_2 storage in deep, saline formations by active reservoir management and treatment of extracted formation water: Case study at the GreenGen IGCC facility, Tianjin, PR China. Volume 54, Part 2, November, Pages 538–556.
Martin, C.L., Folkedahl, B.C., Dunham, D.J., Kay, J.P., 2016, Application of liquid desiccant dehumidification to amine-based carbon capture systems. Volume 54, Part 2, November, Pages 557–565.
Schroeder, J.N., Harto, C.B., Clark, C.E., 2016, Analysis of state and federal regulatory regimes potentially governing the extraction of water from carbon storage reservoirs in the United States. Volume 54, Part 2, November 2016, Pages 566–573.
Kobos, P.H., Klise, G.T., Malczynski, L.A., Walker, L.N., 2016, Parametric analysis of technology costs for CO_2 storage in saline formations. Volume 54, Part 2, November, Pages 574–587.

FUTURE WORK

As new works are produced or made available by the WWG or its members, said material will be added to the Web site. In addition, previous WWG documents that are not currently on the Web site will be reviewed for their potential inclusion. There are no additional formal update documents planned for the Web site, but any future updates made will be noted in the updates provided by the Plains CO_2 Reduction (PCOR) Partnership. Likewise, any revisions to the current content will be noted in these updates as well.

Currently the WWG is working on a summary paper, “Major Research Focuses for Water and CCS,” which will summarize the work of the WWG and discuss potential paths forward for these research topics. Once this document is completed, it will be posted to the WWG Web site.