Dear NAWQA Liaison Participants,

Please join us for a meeting to learn about the USGS National Water-Quality Assessment (NAWQA) Project's accomplishments on monitoring, modeling, mapping and predicting groundwater quality. Key topics to be covered include:

- Assessing groundwater quality in water-supply aquifers at the depths used for drinking-water supply, including contaminants of emerging concern and groundwater corrosivity;

- Opportunity to test and provide feedback on the soon-to-be released Groundwater Quality Trends Mapper;

- Model-based extrapolation of aquifer geochemical conditions being used by NAWQA to map and predict groundwater quality;

- Where and how NAWQA is evaluating potential effects of unconventional oil and gas (UOG) production on groundwater quality.

What: NAWQA Liaison Meeting—The Quality of Our Nation's Groundwater—A Comprehensive Assessment

When: 10 am till noon on April 8, 2016

Where: Washington Court Hotel, 525 New Jersey Ave. N.W., Washington, D.C.

RSVP Form

About 140 million people--almost half of the Nation's population-- rely on groundwater for drinking water. Understanding the natural and human factors that affect contaminant occurrence in the Nation's groundwater is of utmost importance for the sustainability of this vital resource. At the April 8th Liaison meeting, you will learn about the following activities that are an integral part of NAWQA's comprehensive assessment of the Nation's groundwater quality:

The Quality of Deep Groundwater—Over the past three years, 1000 deep public-supply wells have been sampled and analyzed for a large number of regulated and unregulated contaminants, selected emerging contaminants, geochemical indicators, and tracers of groundwater age. You will learn about the proportions of selected aquifers that contain groundwater with low, moderate or high concentrations of various water-quality constituents.

Maps of Groundwater Corrosivity—By evaluating water-quality data from more than 20,000 sampling locations, we have created the first nationwide maps indicative of where groundwater is potentially corrosive. You will learn how to obtain these data and maps and what additional analyses on the corrosivity of natural waters are planned.

Groundwater-Quality Trends Mapper—Determining whether the quality of the Nation's groundwater has become better, worse, or stayed the same during a 10-year time period has been an important activity of the NAWQA project. An online mapper has been developed to facilitate interactive exploration of groundwater-quality trends nationwide. You will have the opportunity to test the Groundwater Trends Mapper prior to the meeting and to provide feedback on its use and functionality at the meeting.

Geochemical Conditions for Predicting Contaminants—Reduction/Oxidation (redox) processes affect the chemical quality of groundwater in all aquifer systems. Understanding the spatial distribution (horizontal and vertical) of redox conditions in aquifers is essential when assessing groundwater quality. You will hear about recent efforts to model and map aquifer geochemical conditions in support of contaminant prediction.

Effects of UOG Production on Groundwater Quality—The potential effects of unconventional oil and gas (UOG) production on groundwater quality used for drinking-water supply are being evaluated in three focus areas: The Haynesville Shale (LA and TX), Fayetteville Shale (AK), and Eagle Ford Shale (TX); and will be evaluated in two additional areas: Bakken Formation (ND, MT) and Marcellus Shale (NY, PA, WV, OH). You will learn about these studies to compare the quality of groundwater in areas that are proximal to UOG production (< 1 km from shale gas wells) to the quality of groundwater in areas that are distal from UOG production(> 1 km from shale gas wells).

Please RSVP to Carise Barbour (cbarbour@usgs.gov) or by clicking the link below, by **March 31, 2016**.

RSVP Form

We look forward to seeing you next month.

Stephen R. Moulton II, USGS National Water Quality Program Coordinator