

Memorandum of Understanding

Nitrate Data Trend Analysis Nitrate Priority Areas

This agreement regarding the plan for the payment of costs associated with the trend analysis of nitrate concentration in ground water in areas designated as Nitrate Priority Areas is made by and between the Idaho Department of Water Resources (IDWR) and the Idaho Department of Environmental Quality (IDEQ). IDWR and IDEQ may hereinafter be collectively referred to as the "Parties."

Witnesseth: The IDEQ and the IDWR enter into this agreement pursuant to the authority granted to them in Title 39, Chapter 1, Idaho Code. The Parties hereby agree to undertake performance of this agreement under the terms and conditions set forth herein.

Background

The Idaho Department of Environmental Quality and the Idaho Department of Water Resources and other state and federal agencies collaborate on collection and evaluation of ground water quality data. Both agencies mutually agree that determining trends in nitrate concentration in ground water is a benefit to both agencies and the citizens of the State of Idaho. An understanding of nitrate trends provides information that can be used to make better land use decisions.

The IDEQ, in coordination with IDWR, Idaho State Department of Agriculture (ISDA), and other state and federal government agencies participating in the Ground Water Monitoring Technical Committee (GWMTC), has identified portions of aquifers with elevated levels of nitrate. These areas of degraded ground water quality are referred to as Nitrate Priority Areas.

The Nitrate Priority Area Ranking Process (Ranking Process), developed by DEQ in 2001 and refined in 2007, in consultation with the GWMTC, provides the rationale for numerically ranking areas in Idaho with identified ground water degradation from nitrates. The statewide priority list created through this process can be used to help prioritize the implementation protective management strategies or corrective action measures within Idaho by directing resources to those Nitrate Priority Areas with the most severe degradation.

The Nitrate Priority Area ranking process considers three weighted principal criteria: population, existing water quality, and water quality trends. A secondary criterion, impacts to beneficial uses other than potable water supply, is considered to a lesser extent because it is not directly related to public health.

Authorities.

Idaho Code 39-120 indicates the IDWR, IDEQ, and the ISDA are responsible for collecting, evaluating and disseminating ground water quality data and information. The IDEQ, IDWR, and ISDA should take actions necessary to promote and assure public confidence and public awareness of ground water quality protection. In pursuing this goal, the departments and public health districts should make public the results of investigations concerning ground water quality.

Agreement Conditions

This agreement is for IDEQ to provide funding in the amount of not more than \$15,000 for IDWR costs associated with analysis of nitrate concentration trends in ground water in nitrate priority areas designated in 2012. The objective of the analysis will be to determine if statistically significant time-period trends in nitrate concentrations in ground water have occurred since the last trend analysis was completed in 2007. The trend analysis will be conducted by IDWR using statistical methods used by the U.S. Geological Survey in Water Resources Investigation Report 02-4056 entitled “*Analysis of Nitrate (NO₃-N) Concentration Trends in 25 Ground-Water-Quality Management Areas, Idaho, 1961-2001*” and the IDWR WIB#50, Part 7, *Trend Analyses for Idaho’s Nitrate Priority Areas, 1994-2007*.

Proposed Scope of Work

Task 1: Coordination meeting

IDWR and IDEQ staff will initiate the project with a meeting to coordinate activities, discuss project schedule, and finalize the scope of work.

Task 2: Data Review

IDWR will review and organize the data into appropriate spatial and temporal categories in consultation with IDEQ. IDEQ will provide all data and GIS coverages necessary for the project to IDWR.

Task 3: Trend analysis

The nitrate concentrations in ground water samples will be analyzed using statistical methods identical or equivalent to those used by the USGS during the preparation of the USGS Water-Resources Investigation Report 02-4056 and by IDWR during the preparation of WIB#50, Part 7. Time-period trend analyses using the Mann-Whitney statistical method will be emphasized over time-series analyses. The trend for each Nitrate Priority Area will be indicated as increasing, decreasing, or stable.

Task 4: Prepare Report

A report documenting the methods used in the trend analysis will be provided to DEQ. The document will be suitable for public distribution via the internet. The report will contain results and summary statistics for each of the nitrate priority areas in a format similar to that used in USGS Water-Resources Investigation Report 02-4056 and IDWR WIB#50, Part 7.

Task 5: Presentation of results to GWMTTC

IDWR will provide a 20 to 30 minute summary of the results at a Ground Water Monitoring Technical Committee meeting upon completion.

Complete Statement of Terms

This agreement and related attachments constitute the entire agreement between the parties hereto and shall supersede all previous proposals, oral or written; negotiations; representations; commitments; and all other communications between the parties. It may not be released, discharged, changed, extended, modified, or assigned in whole or in part, and no claim for additional service not specifically provided herein will be allowed by the Parties except to the extent provided by an instrument in writing signed by a duly authorized representative of the IDWR and IDEQ.

Any Riders, Appendices, Attachments, and all other information attached to this agreement serve to supplement the terms and conditions of this agreement, and do not change or eliminate any provisions of this agreement.

Project Schedule

The anticipated completion date for the quantitative component of the trend analysis is November 1, 2012. An additional two to three months is estimated to be necessary to complete a written report documenting the analysis methods.

Compensation and Invoices

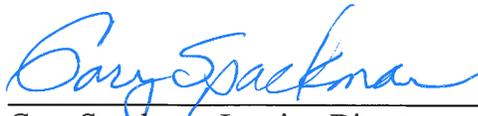
The parties agree that this instrument is a cost-reimbursement MOU, not to exceed Fifteen Thousand Dollars and No Cents (\$15,000.00). The IDEQ will pay IDWR the total amount of \$15,000.00 upon the completion of all of the tasks, and the presentation of an invoice. The invoice will show the date, amount, and list of tasks completed. The IDEQ shall make every effort to pay the invoice within 30 days.

IN WITNESS WHEREOF, the Parties have executed this agreement. Whereby, the Parties have caused this agreement to be effective as of July 1, 2012 and remain effective until March 31, 2013.



Curt Fransen, Director
Idaho Department of Environmental Quality

Date 5/9/12



Gary Spackman Interim, Director
Idaho Department of Water Resources

Date 5/2/2012