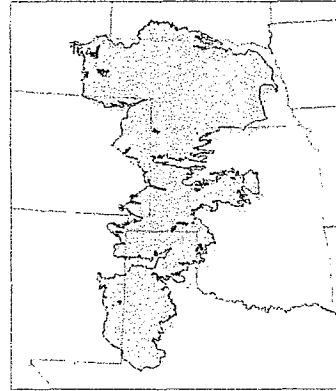


High Plains Hydrology LLC
7956 S. Shawnee St.
Aurora, CO 80016-7206
(303) 693-0299



August 1, 2008

Steve Gaul
Supervisor, Planning and Assistance Division
Nebraska Department of Natural Resources
P.O. Box 94676
Lincoln, NE 68509-4676

RECEIVED

AUG 04 2008

DEPARTMENT OF
NATURAL RESOURCES

Dear Steve:

Enclosed please find my monthly report for July, an invoice for the time and expenses for work with the Department of Natural Resource, and a spreadsheet supporting the time. If you have any questions, please give me a call. Thank you.

Sincerely,

A handwritten signature in cursive script that reads "Richard".

Richard R. Luckey
Senior Hydrologist

Groundwater Modeling Support for the Nebraska Department of Natural Resources

Status Report, July 31, 2008

- Objectives:** 1. Provide modeling support as requested; and
2. Compare COHYST and RRCA models in area of overlap, with emphasis on the groundwater mound area.

Status:

Dick prepared a list of all files used to generate the figures for the report Comparison of Republican River Compact Administration and Cooperative Hydrology Study Groundwater Flow Models. This spreadsheet contains the figure number, file or files used, and field name for shapefiles.

Dick checked the projection information for all shapefiles used to generate the above report. He corrected or defined the projection where that was required.

Dick wrote metadata for the shapefile net_stress_070612 and sent it to Doug Hallum for review on July 9. Dick particularly wanted concurrence on the Constraints on Accessing and Using the Data sections. Dick had written that the dataset contained proprietary information for internal use only by the Department and it could not be released without the Director's permission. Doug accepted the metadata and Dick used it as a pattern for creating metadata for other shapefiles.

Dick completed a draft archival disk of shapefiles and spreadsheets used to generate all figures in the above report. He sent a copy of it to Doug on July 17 for review. The review has not yet been completed.

Dick worked on a plan to look at water budgets and evapotranspiration (ET) in RRCA and COHYST models. He sent a revised plan to Doug, but the plan has not yet been finalized.

Plans for next month:

Dick will complete the archive of all the shapefiles, spreadsheets, and other files used in the comparison of the COHYST and RRCA models.

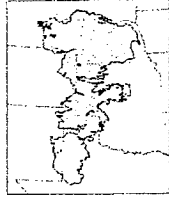
Dick may start work on a PowerPoint presentation of the comparison of the COHYST and RRCA models. He will give the presentation to the Department sometime in the fall.

Dick will start work on water budgets and ET in the area of overlap between the COHYST and RRCA models after the scope work is finalized.

Dick will do other tasks as requested by DNR.

High Plains Hydrology LLC

7956 S. Shawnee St.
Aurora, CO 80016-7206
Phone (303) 693-0299 Cell (303) 916-5973



INVOICE

INVOICE #153
DATE: AUGUST 1, 2008

TO:
Nebraska Department of Natural Resources
301 Centennial Mall South
P.O. Box 94676
Lincoln, NE 68509-4676

FOR:
Services of Senior Groundwater Modeler

LABOR DESCRIPTION	HOURS	RATE	AMOUNT
July, 2008, Task 1-1 (see attached spreadsheet)	0.00	\$ 75.00	\$ 0.00
July, 2008, Task 1-2 (see attached spreadsheet)	22.50	75.00	1,687.50
EXPENSES DESCRIPTION	QUANTITY	UNIT PRICE	LINE TOTAL
TOTAL this Period			\$ 1,687.50
Previous balance			\$ 10,238.63
Payments received			\$ 10,238.63
TOTAL			\$ 1,687.50

Make all checks payable to **High Plains Hydrology LLC**
Total due in 30 days. Overdue accounts subject to a service charge of 1% per month.

Thank you for your business!

Date	Start	Stop	Start	Stop	Start	Stop	Hours	COHYST 1	Task 2	Task 3	COHYST 4	DNR 1-1	DNR 1-2	NPNRD-1	Notes
07/02/2008	12:45 PM	5:15 PM					4.50	4.50							Review CMU documentation. Mailed comments to Clint.
07/03/2008	1:30 PM	2:00 PM	3:00 PM	4:30 PM			2.00	1.00		1.00					Phone call from Duane. Looked at future COHYST work. Prepared New Depletions by NRD (NRbyNRD) Adobe PDF after correcting Kearney County in Table 3.
07/07/2008	9:00 AM	9:30 AM	1:00 PM	5:00 PM	5:30 PM	6:30 PM	5.50	0.50							Got updated NDbvNRD documentation to Rich to post. Printing final report for binding. Took to OfficeMax. Returned various phone calls related to COHYST. Worked on Gering well field report. Sent to Ron C. at 2:00. Call from Eric Saenger at HDR Water. (15 min). Plan RRCA water budget work. Compile list of files to be prepared for DNR.
07/08/2008	8:15 AM	12:45 PM	1:30 PM	2:00 PM	2:30 PM	5:15 PM	7.75						2.50		Prepare RRCA-COHYST files for DNR. Finished spreadsheet of file names and field names. Checked and corrected projections of shapfiles. Wrote metadata for net. stress. 07/09/07 ship. Sent to Doug H. for review.
07/09/2008	7:30 AM	12:00 PM	1:00 PM	5:00 PM			8.50						8.50		Worked on metadata template. Wrote metadata for 2D_051205b.shp.
07/10/2008	2:45 PM	4:15 PM					1.50						1.50		Prepared for COHYST workshop. Rewrote 1998-2005 model assessment task. Added recalibration to task. Sent to Technical Committee and at Jesse Bradley baselaw estimates.
07/11/2008	7:30 AM	8:15 AM	9:30 AM	1:15 PM	1:45 PM	4:15 PM	7.00	7.00							Sponsors to review before workshop. Call to Clint about status (30 min). Call to Kevin about status (15 min). Reviewed Workshop agenda. Locked travel to Grand Island for COHYST meeting. No time charged.
07/13/2008															COHYST meeting in Grand Island.
07/14/2008	9:00 AM	1:00 PM	1:45 PM	4:45 PM			7.00	7.00							COHYST meeting in Grand Island. Travel home. Limited day to 8 hours.
07/15/2008	8:00 AM	11:45 AM	12:30 PM	4:45 PM			8.00	8.00							COHYST meeting in Grand Island. Travel home. Limited day to 8 hours.
07/16/2008	10:30 AM	12:30 PM	1:00 PM	3:00 PM	4:00 PM	5:00 PM	5.00	0.25					4.75		Summarize stuff from COHYST Technical Committee meeting. RRCA metadata for various files.
07/17/2008	8:00 AM	12:00 PM	2:45 PM	5:15 PM			6.50	1.00			1.25				Check NDbvNRD archival disks. Made new archival disk 1 and mailed to Doug and Duane. Metadata for RRCA-COHYST compare shapfiles. Mailed shapfiles and spreadsheets to Doug Hallum. Proofing metadata - done. Minor changes to metadata. Clean up old COHYST stuff.
07/18/2008	8:15 AM	11:15 AM					2.00	1.00							Clean up and organize COHYST stuff. Planning DNR water budget stuff.
07/22/2008	3:00 PM	4:30 PM					1.50	1.50							Looking at CycleWell test PowerPoint. Adding notes. Working on making graphs better.
07/23/2008	8:15 AM	10:45 AM	11:15 AM	5:00 PM			8.25	8.25							Working on CycleWell tests. Working on PowerPoint. Call from Clint on future of COHYST.
07/24/2008	3:00 PM	5:15 PM					2.25	2.25							CycleWell compare for Pump-8000 versus Inject-8000.
07/28/2008	1:00 PM	4:30 PM					3.50	3.50							Working on CycleWell 1 stress period conclusions. Trying to figure out how to compare 1 stress period versus 100 stress periods.
07/29/2008	1:30 AM	12:30 PM	2:30 PM	4:45 PM			3.25	3.25							Note to Julie Gogol about databases. Call to Steve. Working on CycleWell compare Pump-4000 and Inject-4000. Fixed CycleWell_080728.shp so Julie's and my stuff are comparable.
07/30/2008	9:45 AM	12:00 PM	12:30 PM	3:30 PM			5.25	5.25							Comparing CycleWell 1 stress period versus 100 stress periods. Looking at substitution using Inject-8000 when Pump-8000 goes dry.
07/31/2008	8:30 AM	12:30 PM					3.00	3.00							Reviewed and modified CycleWell PowerPoint. Completed it and sent it to Duane for review.
							92.25	87.25		3.25			22.50	8.25	July total and total by task number