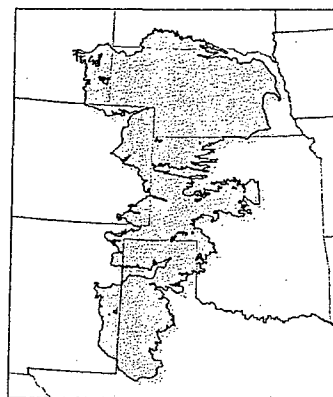


High Plains Hydrology LLC
7956 S. Shawnee St.
Aurora, CO 80016-7206
(303) 693-0299



December 3, 2007

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

RECEIVED

DEC 05 2007

DEPARTMENT OF
NATURAL RESOURCES

Dear Steve:

Enclosed please find my monthly report for November, 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,

Richard R. Luckey
Senior Hydrologist

Groundwater Modeling Support for the Nebraska Department of Natural Resources

Status Report, November 30, 2007

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 returned to work on comparison of the COHYST and Republican models in the last week of November. He had previously gotten the COHYST central model simulated water levels from Clint Carney. He combined them with the simulated water levels from the eastern model to produce a single COHYST simulated water level map for 1895, 1950, and 1980. He computed water-level changes and made some datasets to look at the groundwater mound. He sent email to Paul Koester requesting simulated water levels for the calibration period for the RRCA model. If Paul can provide them, that will save Dick a lot of time.

Dick worked on the documentation of the comparison between the COHYST and Republican models. He integrated maps and graphs into the Word document for the comparison of aquifer parameters. Previously, he had only paper maps and graphs showing the comparison. He also created maps of COHYST parameters as suggested when results were presented to DNR on June 26. This is a clear improvement to the report.

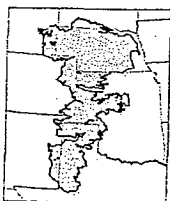
Plans for next month:

Dick will continue to work on comparisons of COHYST and Republican models in December. He hopes to spend at least two weeks on it. He will bring maps and graphs of the comparison of aquifer stresses into the Word documentation. If Paul Koester can provide simulation results of the RRCA model for the calibration period, Dick will work on comparisons of the size and shape of the groundwater mound. If Paul cannot provide the results, Dick will work on building the RRCA calibration model and will run it to get the results. If time permits, he will work on comparison of evapotranspiration parameters.

Dick will do other tasks as requested by DNR.

High Plains Hydrology LLC

100 S. Shawnee St.
 Fort Collins, CO 80016-7206
 Phone (303) 693-0299 Cell (303) 916-5973



INVOICE

INVOICE #136
 DATE: NOVEMBER 1, 2007

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
November, 2007, Task 1-1 (see attached spreadsheet)	0.25	\$ 70.00	\$ 17.50
November, 2007, Task 1-2 (see attached spreadsheet)	22.00	70.00	1,540.00
EXPENSES DESCRIPTION	QUANTITY	UNIT PRICE	LINE TOTAL
TOTAL this Period			\$ 1,557.50
Previous balance			\$ 577.75
Payments received			\$ 577.75
TOTAL			\$ 1,557.50

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	Start	Stop	Hours	Task 1	Task 2	Task 3	Task 4	DNR 1-1	DNR 1-2	Notes
11/01/2007	1:30 PM	5:00 PM							3.50							
11/05/2007	7:15 AM	11:00 AM	11:30 AM	12:00 PM	1:00 PM	2:00 PM			5.25	3.50						Help Kevin with Cycle Tending to CycleWell.
11/06/2007	8:45 AM	12:30 PM	2:15 PM	5:15 PM					6.75	5.25			6.75			Started QC checks on
11/07/2007	1:15 PM	5:15 PM							4.00	1.50			2.50			Helped Kevin with Cycle
11/08/2007	9:00 AM	12:30 PM	3:30 PM	5:30 PM					5.50				5.50			Worked on change in
11/12/2007																Travel to Lincoln for T
11/13/2007	7:15 AM	3:45 PM							8.50	8.50						previous work, so this
11/14/2007	9:00 AM	12:30 PM	1:45 PM	5:45 PM					7.50	7.50						and variability stuff. All
11/15/2007	1:30 PM	2:30 PM							1.00	0.50			0.50			Technical Committee
11/16/2007	7:00 AM	12:15 PM	1:15 PM	5:00 PM					9.00							Call to Julie about Ger
11/16/2007	7:00 AM	11:45 AM	1:30 PM	4:45 PM					8.00	0.50			9.00			NDbyNRD recharge of
11/19/2007	8:00 AM	12:30 PM	1:00 PM	5:00 PM					8.50	1.00			7.50			Rebuilt delta_rehg_98
11/20/2007	6:45 AM	12:30 PM	1:30 PM	5:15 PM					9.50				9.50			Processed WMU All F
11/21/2007	7:00 AM	11:00 AM	1:45 PM	4:00 PM					6.25				6.25			WMU OA by NRD. Sta
11/26/2007	7:00 AM	12:30 PM	1:30 PM	5:00 PM					9.00	2.50			6.50			Built NDbyNRD rechar
11/27/2007	7:45 AM	12:15 PM	2:15 PM	5:00 PM					7.25	1.75			0.50			CPNRD, and TBNRD,
11/28/2007	7:00 AM	12:30 PM	2:30 PM	4:45 PM					7.75							CMU build/run OtherN
11/29/2007	8:45 AM	12:30 PM	1:30 PM	5:15 PM					7.50							Running NDbyNRD for
11/30/2007	8:30 AM	10:30 AM							2.00							Running EMU NDbyNI
																only affected WMU.
																Backup CycleWell stuff
																problems. Checking NI
																Checking Julie's Gerin
															5.00	Join of CMU and EMU \
															7.75	levels in RRCA area.
															7.25	Computed COHYST wi
														0.25	2.00	Print simulated COHY
																RRCA/COHYST comp
																Working on average Sy
									116.75	32.50			62.00	0.25	22.00	November total and tr