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

July 2, 2007

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



RECEIVED

JUL 0 5 2007

DEPARTMENT OF NATURAL RESOURCES

#### Dear Steve:

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

Sincerely,

Dick

Richard R. Luckey Senior Hydrologist

## Groundwater Modeling Support for the Nebraska Department of Natural Resources

### Status Report, June 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 continued to work on the differences between the Cooperative Hydrology Study (CO-HYST) models and the Republican River Compact Administration (RRCA) model in June. He compared recharge between the models by period. He then compared net stress (recharge minus pumpage) between the models for 1950-61, 1961-73, 1973-85, and 1985-98. He prepared maps and graphs of the differences between net stress by period and updated the documentation on net stress comparison. Dick prepared a PowerPoint presentation with the results to date.

Dick met DNR and McDonald-Morrissey staff in Lincoln on June 26 to show them what had been done in comparing the RRCA and COHYST models. This meeting resulted in some things being presented in more detail in the final report, but no major changes in work scope were made. There will be a comparison of evapotranspiration (ET) inputs as a result of this meeting. There was some discussion that some management scenario should be simulated using both models and the results should be compared. However, no real decisions were made on this.

#### Plans for next month:

The additional maps requested by McDonald-Morrissey staff will be prepared and added to the documentation. A backup copy of the documentation and maps will be made and sent to Jim Schneider for safe keeping.

Dick will see what other things need to be compared between the models. He has a fairly extensive list, but many things on the list are fairly trivial and won't require a lot of work.

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 #126 DATE: JULY 2, 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
June, 2007, Task 1-1 (see attached spreadsheet)	0.50	\$ 70.00	\$ 35.00
June, 2007, Task 1-2 (see attached spreadsheet)	43.00	70.00	3,010.00
EXPENSES DESCRIPTION	QUANTITY	UNIT PRICE	LINE TOTAL
Travel June 26-28, Task 1-2 (see attached worksheet)			904.84
TOTAL this Period			\$ 3,949.84
Previous balance			\$ 1,505.00
Payments received			\$ 1,505.00
		TOTAL	\$ 3,949.84

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!

## **High Plains Hydrology LLC**

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

Travel for DNR Task 1-2



# Travel Expenses

Dates of Travel: June 26-28, 2007

From Aurora, CO to Lincoln, NE to Aurora, CO

**Purpose of Travel:** Meet with McDonald-Morrisey staff about Republican-COHYST model comparison. Meet with DNR staff on various issues.

Transpiration	UNIT	RATE	AMOUNT
Air fare			\$ 399.29
Mileage to airport	47	\$0.485	22.80
Tolls			8.00
Parking at airport			24.00
Parking in Lincoln			16.00
Rental car			121.42
Gasoline			1.18
Food and Lodging	UNIT	RATE	AMOUNT
Meals			58.25
Lodging			253.90
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Miscellaneous	UNIT	RATE	AMOUNT
		TOTAL	\$ 904.84

Receipts for major expenses follow on separate sheets.

Thank you for your business!

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**AIRHOST** LINCOLN MUNICIPAL AIRPORT LINCOLN, NE.

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Lincoln, NE 68524

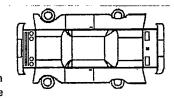
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			Confirmation # DJD94B						
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THIS ADDENDUM is intended to provide conspicuous notice to the Authorized Renter(s) of the following:

Paragraph 1 of the RA is amended by adding the following language: All authorized renters further warrant and represent that during the past three (3) years: (a) their drivers license has not been suspended, revoked or refused for any reason; (b) they have not been fined, convicted or forfeited bail for driving while under the influence of alcohol or drugs or cited for speeding in excess of 20 miles per hour over the speed limit or for more than two 'moving violations,' (c) they have not been involved in two or more motor vehicle accidents in which their insurance carrier was required to pay property or bodily injury damages; and (d) they have not been cited for failure to report an accident or failed to remain at the scene of an accident. All authorized renter(s) agree to grant to Thrifty the right, at any time to verify their motor vehicle driving record and



II. Paragraph 3 of this RA is amended by adding the following paragraph:

authorize the appropriate governmental department to release such information to Thrifty.

FOR PURPOSES OF THIS AGREEMENT, GROSSLY NEGLIGENT CONDUCT INCLUDES, BUT IS NOT LIMITED TO, PARKING THE CAR OR LEAVING THE CAR UNATTENDED AT A LOCATION IN THE U.S. THAT IS WITHIN 50 MILES OF THE BORDER BETWEEN THE U.S. AND MEXICO UNLESS THE CAR IS GARAGED AT A LOT THAT IS FENCED-IN, AND (ii) THE LOT HAS A PARKING ATTENDANT ON DUTY ON A 24-HOUR BASIS.

The Rental Agreement is between the undersigned and the company identified above (the "Company"). By signature below, the undersigned acknowledges and represents that they are legally authorized to operate the rental vehicle by valid driver's license, and that they have read and agreed to the terms, conditions and notices, both printed and written, including the Loss Damage Waiver information, that appear on the Rental Statement and on the separate rental jacket (the "Agreement"), which is incorporated herein. THE UNDERSIGNED AUTHORIZE THE COMPANY TO PROCESS A CHARGE TO THEIR CREDIT, DEBIT OR CHARGE CARD IN THE AMOUNT SPECIFIED ABOVE FOR THIS RENTAL UPON SIGNATURE BELOW AND FOR ALL ADDITIONAL CHARGES DUE UPON RETURN OF THE VEHICLE. ALL CHARGES ARE SUBJECT TO AUDIT. NO ADDITIONAL DRIVERS ARE PERMITTED WITHOUT THE COMPANY'S APPROVAL.

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Richard Luckey U S Geological Survey Box 25046 Mail Stop 406 Lakewood, CO 80225 A/R Number Group Code

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Holiday Inn Lincoln-Downtown 141 North 9th Street Lincoln, NE 68508-1311 Telephone: (402) 475-4011 Fax: (402) 475-9011

I have received the goods and / or services in the amount shown heron. I agree that my liability for this bill is not waived and agree to be held personally liable in the event that the indicated person, company, or association fails to pay for any part or the full amount of these charges. If a credit card charge, I further agree to perform the obligations set forth in the cardholder's agreement with the issuer.

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