

DOC # 0721116  
04/10/2008 10:43 AM Deputy: PK  
OFFICIAL RECORD  
Requested By:  
DC/COUNTY MANAGERS OFFICE

Assessor's Parcel Number: N/A

Date: APRIL 9, 2008

Recording Requested By:

Douglas County - NV  
Werner Christen - Recorder  
Page: 1 Of 16 Fee: 0.00  
BK-0408 PG- 2204 RPT: 0.00



Name: DEANNE, COUNTY MANAGER'S OFFICE

Address: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_

Real Property Transfer Tax: \$ N/A

CONTRACT #2008.076  
(Title of Document)

FILED

NO. 2008.076

CONTRACT #2008-1

2008 APR -8 PM 4:44

INTERLOCAL CONTRACT

BARBARA J. GRIFFIN  
CLERK

Addressing Funding From Subconservancy District  
to Douglas County for Work Performed by USGS  
on determining a groundwater nitrogen budget for Carson Valley

THIS CONTRACT dated this 3 day of APRIL, 2008, is entered into by  
and between DOUGLAS COUNTY, a political subdivision of the State of Nevada and  
the CARSON WATER SUBCONSERVANCY DISTRICT, a political subdivision of the  
State of Nevada (hereinafter "CWSD").

WITNESSETH:

WHEREAS, DOUGLAS COUNTY is a political subdivision of the State of  
Nevada; and

WHEREAS, CWSD is a water subconservancy district created and organized  
under the provisions of Chapter 541 of NRS; and

WHEREAS, this Contract is entered into under the provisions of the Nevada  
Revised Statutes which require approval by appropriate official action of the governing  
body of each party as a condition precedent to its entry into force; and

WHEREAS, DOUGLAS COUNTY has entered into a Joint Funding Agreement  
with U.S. GEOLOGICAL SURVEY (USGS) to determine a groundwater nitrogen budget  
for Carson Valley, more particularly described in Exhibit "A", attached hereto and  
incorporated herein by reference; and

WHEREAS, CWSD has agreed to set aside \$90,447.50 for a grant to DOUGLAS  
COUNTY beginning in FY 2007-08 and continuing to FY 2010-11 in the amount set  
forth in Exhibit "B"; and



WHEREAS, CWSD agrees to hire a person or persons who will work with the USGS to collect and process the field data; and

WHEREAS, the person or persons hired by CWSD will be considered by the USGS as "Direct Services" and be credited toward the overall cost of the study.

NOW THEREFORE, in consideration of the premises and of the mutual covenants herein contained, it is mutually agreed by and between the parties as follow:

1. CWSD hereby grants to DOUGLAS COUNTY up to \$90,447.50 for the costs to perform work with the USGS to determine a groundwater nitrogen budget for Carson Valley; and more particularly described in Exhibit "A".
2. DOUGLAS COUNTY agrees to submit requests for funding periodically over the next four (4) fiscal years in the amount set forth in Exhibit "B".

The request for funding shall be accompanied by a description of what the funds were used for and shall reference this Contract.

3. CWSD further agrees to pay the approved amount of the request to DOUGLAS COUNTY within four (4) weeks of said request.
4. CWSD shall have no responsibility for costs exceeding \$90,447.50.
5. DOUGLAS COUNTY further agrees to be responsible for all costs exceeding \$90,447.50.
6. CWSD shall hire a person or persons who will work with the USGS to collect and process field data.
7. This Contract shall terminate July 31, 2011, at which time DOUGLAS COUNTY shall have one (1) month thereafter to submit its final invoice to CWSD for payment related to work performed under this Contract.

8. The parties will not waive and intend to assert available NRS Chapter 41 liability limitations in all cases. Contract liability of both parties shall not be subject to punitive damages. To the extent applicable, actual contract damages for any breach shall be limited by NRS 353.260 and NRS 354.626.

9. Consistent with paragraph 8 of this Contract, each party shall indemnify, hold harmless and defend, not excluding the others right to participate, the other party from and against all liability, claims, actions, damages, losses, and expenses, including, but not limited to, reasonable attorneys fees and costs, arising out of any alleged negligent or willful acts or omissions of the indemnifying party, its officers, employees and agents. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party or person described in this paragraph.

The indemnification obligation under this provision is conditioned upon receipt of written notice by the indemnifying party within thirty (30) days of the indemnified party's accrual notice of any actual or pending claim or cause of action. The indemnifying party shall not be liable to hold harmless any attorneys' fees and costs for the indemnified party's chosen right to participate with legal counsel.

10. For invoicing and notice purposes, the address of each party is as follows:

DOUGLAS COUNTY  
County Manager  
P. O. Box 218  
1594 Esmeralda Ave., Rm. #307  
Minden, NV 89423  
(775) 782-9821

CWSD  
General Manager  
777 E. William St., #110  
Carson City, NV 89706  
(775) 887-7456

11. This Contract shall be by and between the parties hereto and shall not be assignable or transferable.
12. Any dispute regarding this Contract shall be decided according to the laws of the State of Nevada, with venue for any dispute being Carson City District Court. If any part of this Contract is declared to be unlawful, any remaining obligations shall be deemed terminated.
13. This Contract may only be amended by consent of both parties. Any amendments must be written and executed with the same formality as this Contract.
14. This Contract constitutes the entire understanding between the parties and there are no representations, conditions, warranties or collateral agreements (expressed or implied), statutory or otherwise, with respect to the subject of this Contract.
15. Notwithstanding this Contract is initially executed by the DOUGLAS COUNTY Manager and General Manager of CWSD, this Contract becomes effective when ratified by appropriate official action of the governing body of each party, and shall be deemed dated as of the later date of said official action.

16. The parties hereto represent and warrant that the person executing this Contract on behalf of each party has full power and authority to enter into this Contract and that the parties are authorized by law to engage in cooperative action set forth herein.
17. This Contract shall be entered into with duplicate originals, realizing that each entity, by necessity, must approve and execute the subject document at different dates, times and places.

DATED: 3-21-08

DOUGLAS COUNTY

Dan Holler  
Dan Holler, County Manager

DATED: 3-21-08

DOUGLAS COUNTY

Kelly Kite  
Kelly Kite, Chairman

ATTEST:

Barbara J. Griffin  
Barbara J. Griffin, Clerk

Gay Carol McElloch  
DEPUTY

DATED: 3/19/08

CARSON WATER  
SUBCONSERVANCY DISTRICT

Edwin D. James  
Edwin D. James, General Manager

DATED: 3/19/08

CARSON WATER  
SUBCONSERVANCY DISTRICT

Gwen Washburn  
Gwen Washburn, Chairman

ATTEST:

Toni M. Leffler  
Toni M. Leffler  
Secretary to the Board

Exhibit "A"  
PROJECT PROPOSAL

GROUND WATER NITROGEN BUDGET FOR CARSON VALLEY, DOUGLAS COUNTY,  
NEVADA

NV07-0X

By

Michael R. Rosen

Douglas K. Maurer

Keith J. Halford

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U.S. Geological Survey  
Water Resources Division  
Nevada District Office

September 2007



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BK- 0408  
PG- 2210

# GROUND WATER NITROGEN BUDGET FOR CARSON VALLEY, DOUGLAS COUNTY, NEVADA

## EXECUTIVE SUMMARY

**PROBLEM:** Twenty-seven domestic water supply wells in Carson Valley have shown more than a 50 percent increase in nitrate concentrations from 1985 to 2001. Rosen (2003) concluded that nitrate increases were due to the increasing use of septic tank systems in the valley over this time. The locations of the wells with increasing trends are throughout the valley. Although the main source of increasing nitrate concentrations is now relatively well defined, it is not known how high nitrate concentrations will change in the future and if the increase will go higher than the maximum contaminant level (MCL) for nitrate set by the United States Environmental Protection Agency (USEPA). Examination of a subset of the 27 wells used in the Rosen (2003) study show continued increases in nitrate concentrations in some wells. In order to address these issues, an estimate of the amount of nitrate entering the system and a nitrogen budget to assess gains and losses from the aquifer system is needed. This study proposes to determine a nitrogen budget for Carson Valley by monitoring ground water nitrogen concentrations, estimating ground water travel times, using source term information from other studies and combining this information with a ground water flow that is being developed by another United States Geological Survey (USGS) study in Carson Valley and a new contaminant transport model. This nitrogen budget will be used to develop a management plan for the basin in order to determine what effect different water use scenarios will have on nitrogen concentrations over time in the basin. The study builds on the work accomplished in Phase I (Rosen, 2003) that determined trends in nitrate concentrations over time and determined the likely cause of increasing trends. This study also utilizes results of a water quantity investigation conducted by the USGS in Carson Valley for Douglas County.

**OBJECTIVES AND SCOPE:** The objectives of this study are to determine a nitrogen budget for the Carson Valley ground water system. The nitrogen budget is crucial in providing an understanding for managers to be able to assess how changes in nitrogen inputs will affect water quality in the Carson Valley aquifer. The budget will enable the USGS to build a better flow and contaminant transport model and make estimates of the nitrogen fluxes within the ground water system in certain stressed areas of the aquifer. It will also allow managers to see what and where the important inputs are to control in order to maintain or even improve water quality in the basin.

**RELEVANCE AND BENEFITS:** Determining a nitrogen budget for Carson Valley will help Douglas County manage existing water-quality problems, plan development of sewer systems to maximize reductions of nitrate to the ground water, and help provide information for different management scenarios in the basin. The study will show the areas that are of greatest concern and will allow County officials to concentrate efforts on those areas where nitrate contamination is most likely and will have the greatest detrimental effect on the aquifer. These results of this study will be relevant on a statewide basis for managing aquifers systems that are under stress from nitrate contamination due to wastewater irrigation, agriculture or septic tank use. A similar study being conducted in the Spanish Springs basin will also assist in developing an accurate and useful nitrogen budget for the Carson Valley basin. It is relevant that the USGS conduct this study because evaluating the water quality of ground water is directly related to the mission and long-term plans of the Environment and Natural Resources goals in the USGS Strategic Plan (U. S. Geological Survey, 2000) and issue 2, Human Health, of the Nevada District Science Plan. This study also will help the National Water Quality Assessment (NAWQA) program meet its goals of describing trends in the quality of the Nation's water resources and describing factors related to those trends.



BK- 0408  
PG- 2211

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DRAFT

1/23/2008

CWnitrates\_prop08\_newbud



**APPROACH:** In order to determine a nitrogen budget for the Carson Valley aquifer, nitrogen concentrations from different locations and depths within the aquifer will be needed, source terms will need to be evaluated, flow paths and travel times of water in the aquifer needs to be determined, and evapotranspiration and hydrologic properties of the aquifer need to be estimated. These data will be collected by: (1) Sampling as many wells in Carson Valley as possible drawing water under different land uses (a minimum of 100 wells will be sampled each time) during two summer periods using field nitrate ion selective probes and comparing these results with selected analyses from the USGS National Water Quality Laboratory. (2) monitoring selected wells where nitrate concentrations are elevated for nitrogen isotopes, and tritium and CFC age determinations, (3) Incorporating geographic information system (GIS) analysis to determine land use within a 500 m buffer around each well using aerial photographs, (4) derive estimates of nitrogen source terms from other studies that will measure inputs from septic tanks, and estimates from natural background sources and other human sources, (5) estimate evapotranspiration from nearby ET measurements and other data to provide nitrogen budget input to different modeling scenarios, and (6) develop a model for nitrogen coupled to a proposed ground water flow model for the basin. These data will be combined to determine a nitrogen budget for all inputs and outputs to the basin. Those inputs and outputs that will not be measured directly will be estimated from the literature.

The nitrogen budget will be used to determine where the observed increases in nitrate are of most concern and whether the increases will go higher than the MCL for nitrate. In addition, management scenarios can be constructed so that different water use practices can be evaluated. Finally, the study can be used for locating new wells for municipal supply so that they will be less likely to be contaminated with nitrate in the foreseeable future.



BK- 0408  
PG- 2212  
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## PROBLEM

Twenty-seven domestic water supply wells in Carson Valley have shown more than a 50 percent increase in nitrate concentrations from 1985 to 2001. Rosen (2003) and Shipley and Rosen (2005) concluded that nitrate increases were due to the increasing use of septic tank systems in the valley over this time. The locations of the wells with increasing trends are throughout the valley. Although the main source of increasing nitrate concentrations is now relatively well defined, it is not known how high nitrate concentrations will change in the future and if the increase will go higher than the maximum contaminant level (MCL) for nitrate set by the United States Environmental Protection Agency (USEPA). Examination of a subset of the 27 wells used in the Rosen (2003) study show continued increases in nitrate concentrations in some wells. In order to address these issues, an estimate of the amount of nitrate entering the system and a nitrogen budget to assess gains and losses from the aquifer system is needed. This study proposes to determine a nitrogen budget for Carson Valley by monitoring ground water nitrogen concentrations, estimating ground water travel times, using source term information from other studies and combining this information with a ground water flow that is being developed by another United States Geological Survey (USGS) study in Carson Valley and a new contaminant transport model. This nitrogen budget will be used to develop a management plan for the basin in order to determine what effect different water use scenarios will have on nitrogen concentrations over time in the basin. The study builds on a previous study (Rosen, 2003) that determined trends in nitrate concentrations over time and determined the likely cause of increasing trends. This study will utilize results of a water quantity investigation being conducted by the USGS in Carson Valley for Douglas County and a similar nitrogen budget being researched in Spanish Springs Valley for Washoe County.

## OBJECTIVES AND SCOPE

The objectives of this study are to determine a nitrogen budget for the Carson Valley ground water system. The nitrogen budget is crucial in providing an understanding for managers to be able to assess how changes in nitrogen inputs will affect water quality in the Carson Valley aquifer. The budget will enable the USGS to build a better flow and contaminant transport model and make estimates of the nitrogen fluxes within the ground water system in certain stressed areas of the aquifer. It will also allow managers to see what and where the important inputs are to control in order to maintain or even improve water quality in the basin.

## RELEVANCE AND BENEFITS

Determining a nitrogen budget for Carson Valley (Fig. 1) will help Douglas County manage existing water-quality problems, plan development of sewer systems to maximize reductions of nitrate to the ground water, and help provide information for different management scenarios in the basin. The study will show the areas that are of greatest concern and will allow County officials to concentrate efforts on those areas where nitrate contamination is most likely and will have the greatest detrimental effect on the aquifer. These results of this study will be relevant on a statewide basis for managing aquifers systems that are under stress from nitrate contamination due to wastewater irrigation, agriculture or septic tank use. A similar study being conducted in the Spanish Springs basin will also assist in developing an accurate and useful nitrogen budget for the Carson Valley basin. It is relevant that the USGS conduct this study because evaluating the water quality of ground water is directly related to the



mission and long-term plans of the Environment and Natural Resources goals in the USGS Strategic Plan (USGS, 2000) and issue 2, Human Health, of the Nevada District Science Plan. This study also will help the NAWQA program meet its goals of describe Nation's water resources and describing factors related to those trends.

## APPROACH

In order to determine a nitrogen budget for the Carson Valley aquifer, nitrogen concentrations from different locations and depths within the aquifer will be needed (Fig. 1), source terms will need to be

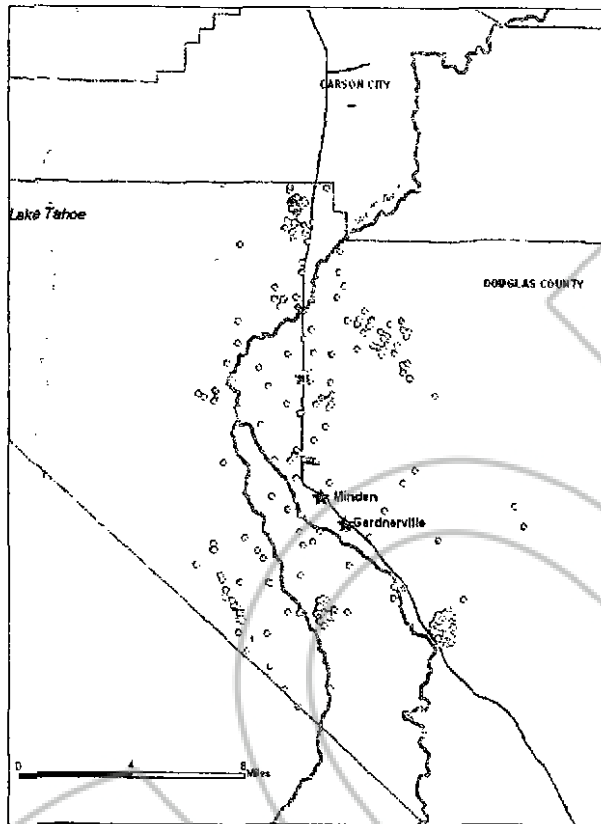


Figure 1. Map of Carson Valley showing wells in the USGS database that could be sampled for this study. There are 240 wells available for sampling

evaluated, flow paths and travel times of water in the aquifer need to be determined, and evapotranspiration and hydrologic properties of the aquifer need to be estimated. These data will be collected by: (1) Sampling as many wells in Carson Valley as possible drawing water under different land uses (a minimum of 100 wells will be sampled each time) during two summer periods using field nitrate ion selective probes and comparing these results with selected analyses from the USGS National Water Quality Laboratory. (2) monitoring selected wells where nitrate concentrations are elevated for nitrogen isotopes, and tritium and CFC age determinations, (3) Incorporating geographic information system (GIS) analysis to determine land use within a 500 m buffer around each well using aerial photographs, (4) derive estimates of nitrogen source terms from other studies that will measure inputs from septic tanks, and estimates from natural background sources and other human sources, (5) estimate evapotranspiration from nearby ET measurements and other data to provide nitrogen budget input to different modeling scenarios, and (6) develop a nitrogen budget model based on the ground water flow model being developed in another project for the Carson Water Subconservancy District (CWSD). These data will be combined to determine a nitrogen budget for all inputs and outputs to the basin.

Those inputs and outputs that will not be measured directly will be estimated from the literature.

The nitrogen budget will be used to determine where the observed increases in nitrate are of most concern and whether the increases will go higher than the MCL for nitrate. In addition, management scenarios can be constructed so that different water use practices can be evaluated. Finally, the study can be used for locating new wells for municipal supply so that they will be unlikely to be contaminated with nitrate in the foreseeable future.

The six elements of the nitrogen budget outlined above, plus report writing, are presented in more

detail below and in Table 1.

Table 1. Program items schedule for the study.

Program Item	FY08		FY09				FY10				FY11	
	3	4	1	2	3	4	1	2	3	4	1	2
1. Sample wells using ion selective probes	X				X							
2. Conduct isotope and age date sampling			X	X		X	X					
3. GIS analysis	X	X	X	X	X	X	X	X				
4. Derive nitrogen source estimates						X	X	X	X	X		
5. Estimate evapotranspiration, nitrogen budget, and provide input to modeling scenarios	X	X	X	X	X	X	X	X				
6. Simulate potential changes in nitrogen distribution									X	X	X	X
7. Reports and deliverables												
• Quarterly progress reports	X	X	X	X	X	X	X	X	X	X	X	X
• Report writing, reviews, publication			X	X			X	X	X	X	X	X

Program Item 1. Sample wells using ion selective probes.

A minimum of 100 wells will be analyzed in the field using ion selective probes during each summer sampling period. Analytes include: nitrate and ammonium and field parameters such as dissolved oxygen, specific conductance and pH. Field blanks, spikes, and equipment blanks will be conducted on appropriate numbers of samples. Duplicate samples will be taken from the 27 long-term monitoring sites used for data analysis in Rosen (2003) and sent to the USGS National Laboratories and a detailed quality assurance plan will be developed to ensure that the results from the ion selective probe analysis are consistent and accurate. Water samples analyzed by ion selective probes will be adjusted to the same specific conductance as standards to ensure that differences in the matrix will not affect results. All necessary precautions to eliminate interferences will be taken. Samples sent to the laboratory will be analyzed for the same parameters as the ion selective probe samples. Samples will be filtered to represent only the dissolved fraction of nitrogen in the water. USGS sampling protocols will be used to ensure high quality results (U. S. Geological Survey, 1997 to present). All duplicate samples that are not analyzed in the field will be analyzed at the USGS National Water Quality Laboratory in Lakewood, CO.

Program Item 2. Conduct isotope and age date sampling.

A total of 30 samples will be collected from selected wells for nitrogen isotopes, CFC, and tritium measurements including dissolved gases at selected to determine recharge temperature. This sampling will include 2 replicates. Field blanks, spikes, and equipment blanks are not needed for isotope analysis. Standard U.S. Geological Survey (USGS) sampling protocols will be used to ensure high quality results (U. S. Geological Survey, 1997 to present). All isotope samples will be analyzed at the USGS labs in Reston, VA and Menlo Park, CA.

Program Item 3. GIS analysis

Geographic Information System analysis will be conducted on all wells sampled in this study. Shipley and Rosen (2005) has demonstrated that GIS analysis is essential for providing explanatory power for observed increases in nitrate concentrations over time. The Protocols outlined in Koterba (1998) will be utilized to provide information on land use within a 500 m

circle (radius) around each well. The “circle method” which uses a 500 m radius from the well location was selected to delineate well buffers for this study as it has been identified by Koterba (1998) as the best overall method for defining contributing land-uses in many studies of wells with a range of hydrogeologic features. In a similar study, land use classification using an alternative, sector method, did not measure land use as precisely as the circle method (Lorenz and others, 2003). The land use information will be used to determine the most important land uses that correlate with high nitrate concentrations.

Program Item 4. Derive nitrogen source estimates.

Quantification of the sources of nitrogen to the ground water will be estimated for septic tanks (derived from a separate project being conducted by the USGS), agriculture, industry, natural sources (including atmospheric deposition) and other sources of irrigation (such as home irrigation). Values for these different sources will be derived from the literature, measurements from other studies, and from a compilation of data obtained from Douglas County.

Program Item 5. Estimate ET, nitrogen budget and provide input to modeling scenarios.

Evapotranspiration will be estimated from existing work by Berger and others (1997) in Washoe County and ET measurements in Carson Valley (Maurer and others, 2006). These values should be applicable in the Carson Valley area and can be applied to a land use – land cover map that was published by Maurer and Berger (2006). Other water and nitrogen losses will be estimated from the literature as well as information derived from a lysimeter study in Spanish Springs Valley (Rosen and others, 2006).

Water quality analyses and age dates derived from the sampling conducted in Program Items 1 and 2 will be used to estimate the amount of nitrogen present in the ground water and the amount of time it takes for the nitrogen to pass through the system. These data also will be combined with the evapotranspiration estimates and ground water model results (see Program Item 6) to provide a nitrogen budget for the basin. This budget can then be included in the ground water flow and transport modeling so that management scenarios to determine the most effective way to manage nitrogen in the basin can be tested.

Program Item 6. Simulate potential changes in nitrogen distribution

Potential changes in nitrogen distribution will be estimated with a numerical ground-water model of Carson Valley. A ground-water flow model of Carson Valley is being constructed and will be completed in 2008 to assess potential changes from scattered municipal wells to three major well fields. Relocating all municipal wells to well fields will change markedly ground-water flow patterns in Carson Valley. Likewise, current dissolved nitrogen distributions also can change as a result of pumpage and land use changes.

Changes in nitrogen concentrations will be simulated with particle tracking and solute-transport approaches. Particle tracking is a preferable approach compared to solute-transport because it is easier to implement and requires less data. Results from particle tracking will be compared to solute-transport results to test if management decisions can be made with just particle tracking. Dissolved nitrogen will be assumed to behave conservatively in all simulations because



historic dissolved oxygen measurements conducted on wells in the aquifer generally indicate that the aquifer is oxidized. Ground-water flow will be simulated with MODFLOW (Harbaugh and McDonald, 1996), particle-tracking will be simulated with MODPATH (Pollock, 1994), and solute transport will be simulated with MT3DMS (Zheng and others, 2001).

### **BUDGET**

Funding for this project is \$528,900 over a four-year period (five CWSD/Douglas County fiscal years). The first two fiscal years will mostly involve collecting samples for chemical and isotope analyses. The last two years will mostly involve constructing the contaminant transport model and writing the reports. We project that up to 45 percent Federal Matching Funds may be available from the USGS for the duration of this project, however, this is not guaranteed.

Table 2. Budget itemized by cost categories (gross funds) adjusted for inflation.

Cost Category	FY08	FY09	FY10	FY11
Labor	\$65,500	\$93,400	\$104,300	\$103,200
Supplies	\$8,000	\$5,600	-0-	-0-
Chemical analyses	\$35,500	\$10,000	-0-	-0-
Equipment	\$6,000	-0-	-0-	-0-
Vehicles	\$8,400	\$8,000	-0-	-0-
Report processing	-0-	-0-	\$10,000	\$16,000
Student funded by CWSD	\$27,000	\$28,000	-0-	-0-
<b>Total</b>	<b>\$150,400</b>	<b>\$145,000</b>	<b>\$114,300</b>	<b>\$119,200</b>
Douglas County	\$55,720	\$51,750	\$62,865	\$65,560
USGS Direct Service Match	\$22,000	\$22,900		
USGS Federal Matching funds	\$45,680	\$42,350	\$51,435	\$53,640

### **PERSONNEL**

This three year study will require three hydrologists, a modeler, a GIS specialist and technical field personnel for sample collection and analysis. The personnel required are currently employed by the USGS.



## REPORTS

Data will be published in journal articles that will document the methods and results of the analyses and a final short Scientific Investigations Report tentatively titled "Evaluation of Nitrogen Budget Terms for Carson Valley, Douglas County, Nevada" will be published at the end of the study that is intended for managers and the public to obtain the highlights of the study in an easily understood format. A Draft of the report will be finished in September of 2010. The report will be published in March of 2011. A U.S. Geological Survey fact sheet will be produced at the end of the project on the major published results. This will be distributed to the public and managers in Douglas County.

Some preliminary results may also be presented at the Nevada Water Resources Association annual conferences. Quarterly reports will describe the status of the project. Meetings and presentations to discuss the study and preliminary results will be scheduled as necessary.

DRAFT



DRAFT

Exhibit "B"

Addressing Funding From Subconservancy District  
to Douglas County for Work Performed by USGS  
on determining a groundwater nitrogen budget for Carson Valley

FUNDING SOURCE	FY08	FY09	FY10	FY11	TOTAL
CWSD (cash)	\$ 14,360	\$ 11,875	\$ 31,432.50	\$ 32,780	\$ 90,447.50
CWSD (est.) (direct services)	<u>\$ 27,000</u>	<u>\$ 28,000</u>	<u>0.00</u>	<u>0</u>	<u>\$ 55,000.00</u>
CWSD Total	\$ 41,360	\$ 39,875	\$ 31,432.50	\$ 32,780	\$ 145,447.50
Douglas County (cash)	\$ 41,360	\$ 39,875	\$ 31,432.50	\$ 32,780	\$ 145,447.50
USGS	<u>\$ 67,680</u>	<u>\$ 65,250</u>	<u>\$ 51,435.00</u>	<u>\$ 53,640</u>	<u>\$ 238,005.00</u>
TOTAL	\$ 150,400	\$ 145,000	\$ 114,300.00	\$ 119,200	\$ 528,900.00

SEAL

CERTIFIED COPY

The document to which this certificate is attached is a full, true and correct copy of the original on file and on record in my office.

DATE: April 9, 2008  
Clerk of the 9th Judicial District Court  
of the State of Nevada in and for the County of Douglas.  
By Charles J. [Signature] Deputy

