



R9 Ranch Change Applications

- Purchased Water Rights in 1995
- Historic Irrigation Diversions over 8,000 AF
- Existing sources do not meet present needs
- Change Applications Filed – June 26th 2015
 - Change in Type – Irrigation to Municipal
 - Change in Place of Use – R9 to Hays/Russell
 - Change in Points of Diversion – 58 to 14
 - Consumptive Use Requested – 7,625 AF
- Change Application Process Lengthy
 - Draft Master Order and Draft Change Approvals conform with all Statutes and Regulations



Unique Change Application Details

- Unique due to subsequent transfer process
- Delayed effective date
- Deferred identification of final well locations
- Approval of the total quantity
- Usage based on demonstrated need

Sustainable Yield

- Cities are committed to sustainable operation
- Cities plan to agree to sustainable-yield limitation
 - Unique change application requirement
 - Unique in the State

Additional Change Application Details

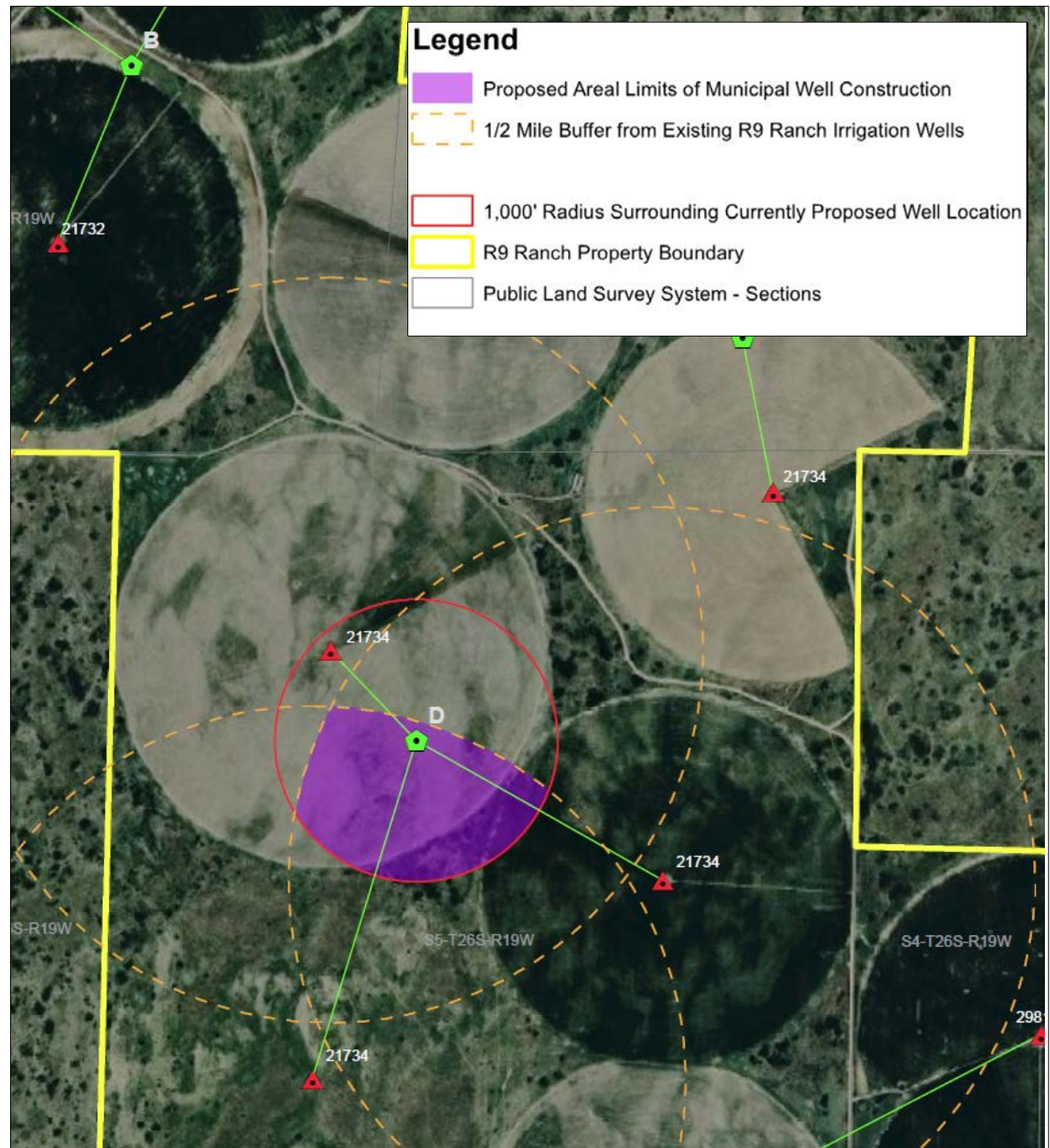
- The proposed changes present unique issues because of the Water Transfer Act
- The proposed changes conform to DWR and GMD regulations
- Quantities are reduced from the historic irrigation use based on:
 - Consumptive Use
 - Certified Quantities
 - 10-Year Rolling Average
 - Reasonable Need
- Phased Development of the Ranch
- Diversion Rates will be reduced to reasonable rates for municipal use

Municipal Well Siting Flexibility

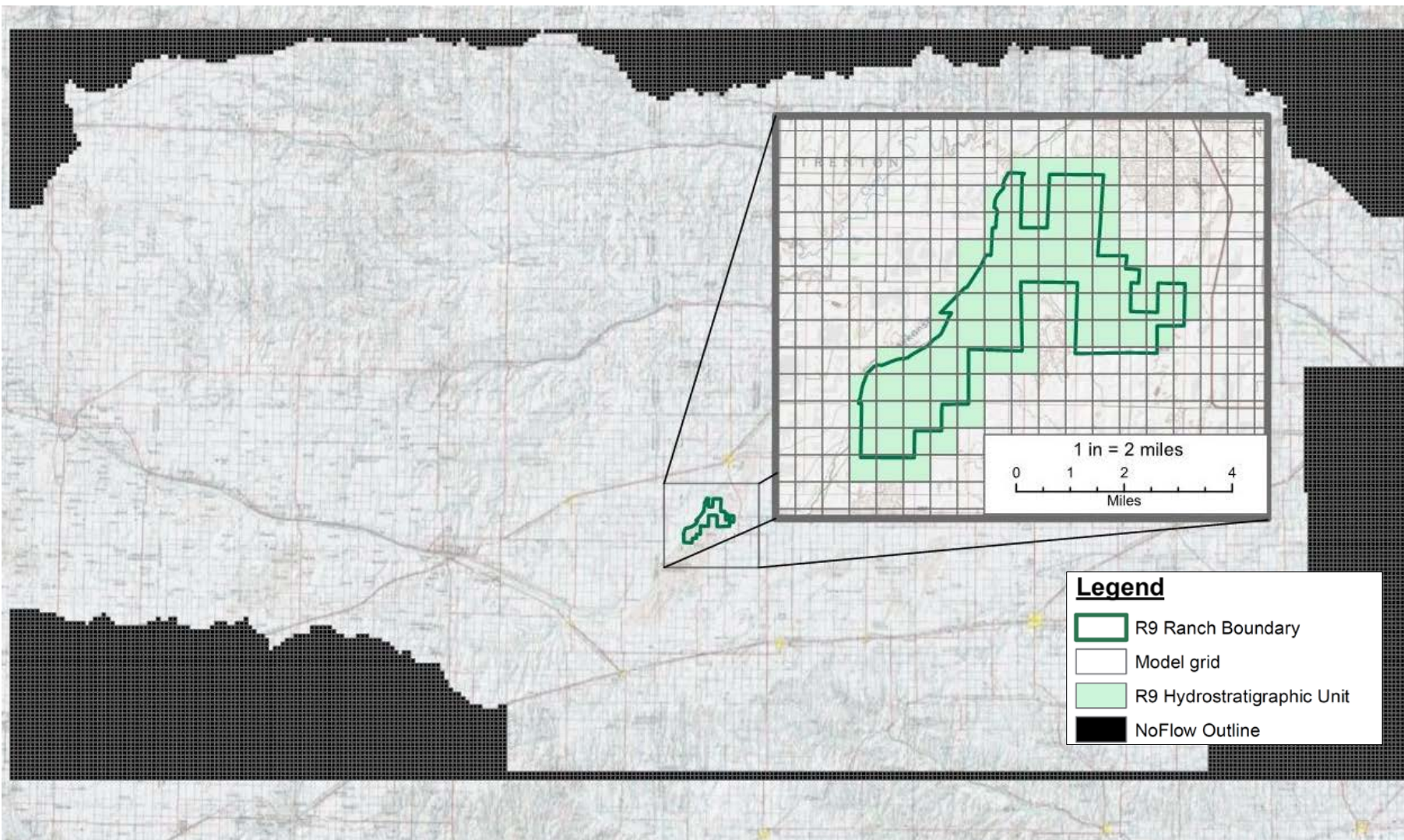
Wells will be placed within 1,000 feet of the conceptual location at the best geologic location.

Will meet regulatory requirements

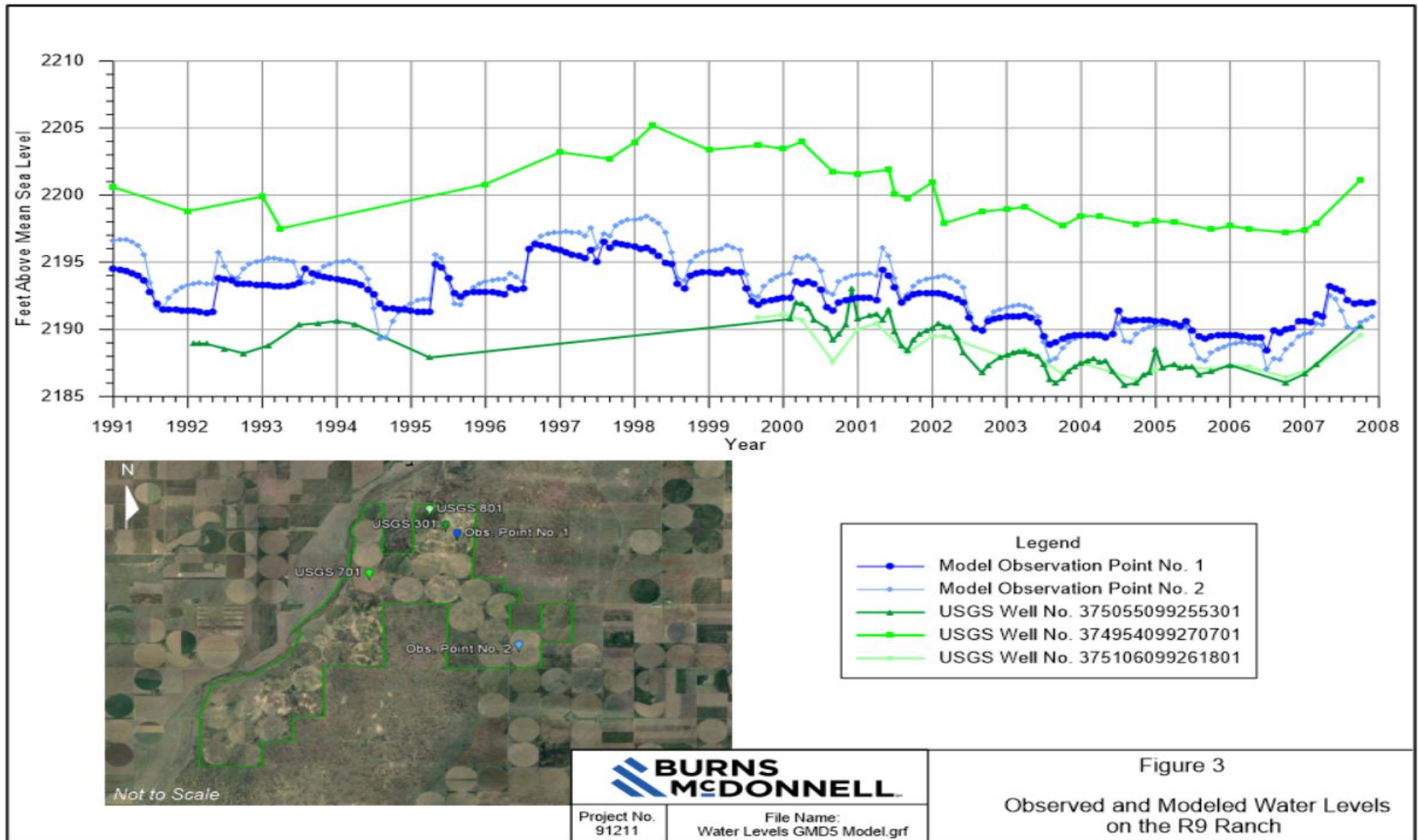
- Within ½ mile of current points of diversion.
- More than ½ mile from surrounding users.
- Within the same source of supply.



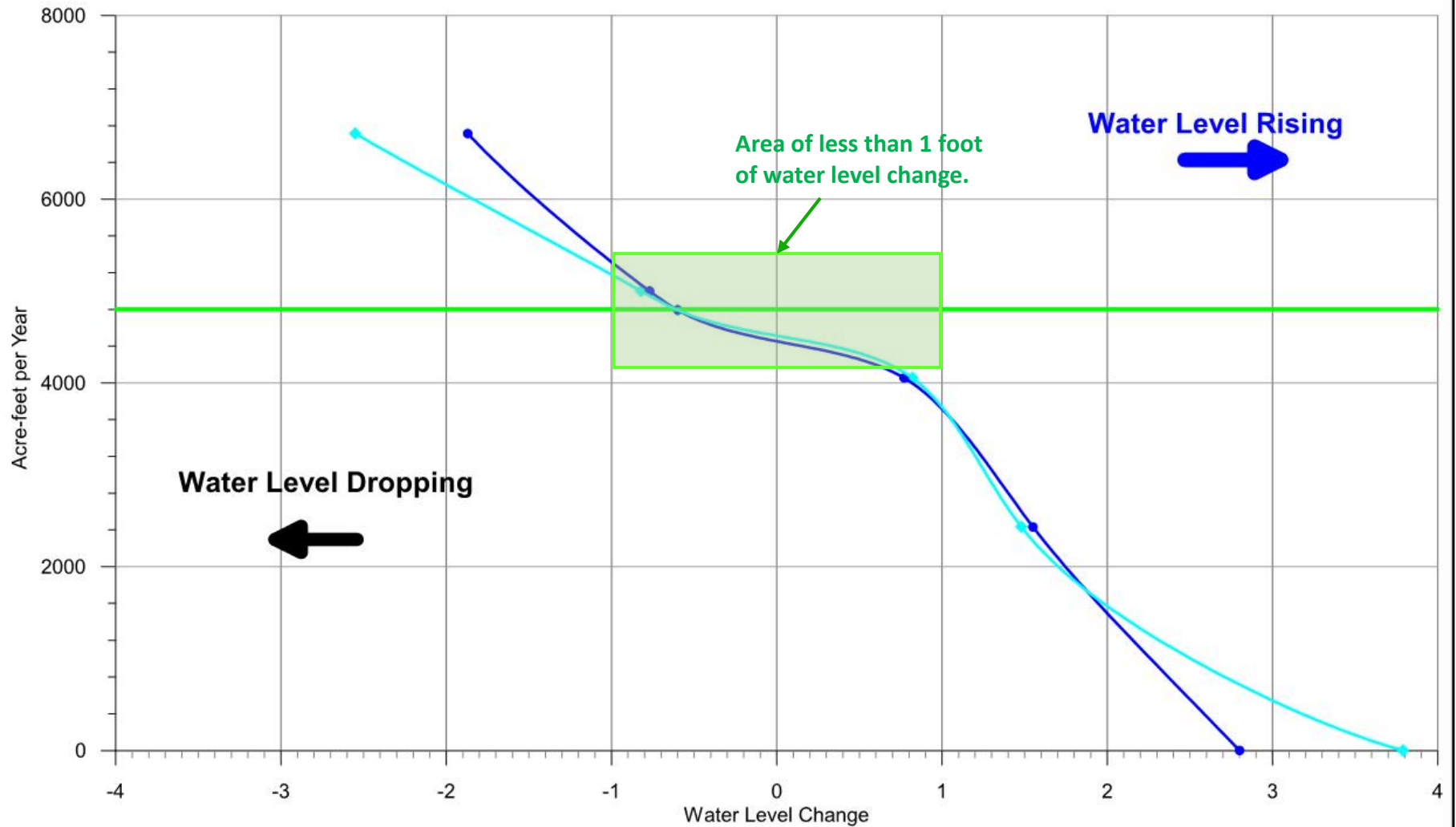
The existing GMD5 groundwater model fully encompasses the R9 Ranch, so Hays & Russell used the model to evaluate the sustainable yield of the R9 Ranch.



The GMD5 Model reproduces historic water level changes on the R9 Ranch.



Sustainable Yield Evaluation



Water Level Dropping



Water Level Rising



Area of less than 1 foot of water level change.



Project No.
91211

File Name:
Fig 04 - Sus Yield Regression.grf

Figure 4
Sustainable Pumping Range
with Reasonable Water Level Change
1991 - 2007 Simulation

Legend

- Observation Point No. 1
- ◆ Observation Point No. 2
- 4800 Acre-feet per year



Sustainable Operation of the R9 Ranch Municipal Well Field

The Draft Master Order and the Draft
Change Application Approvals:

- 6,756 acre-foot per year maximum
further limited to:
 - 4,800 acre-foot per year average
 - 10-year rolling average