

WellsOnline

Internet Access to
Water Well Information
Central and West Coast Basins,
Los Angeles County, California

Water Quality

Construction

Water Levels

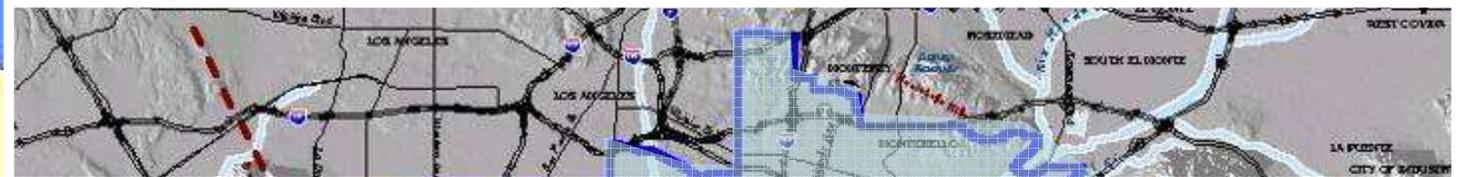
Pumping

Ted Johnson, Jason Weeks
Water Replenishment District of Southern California



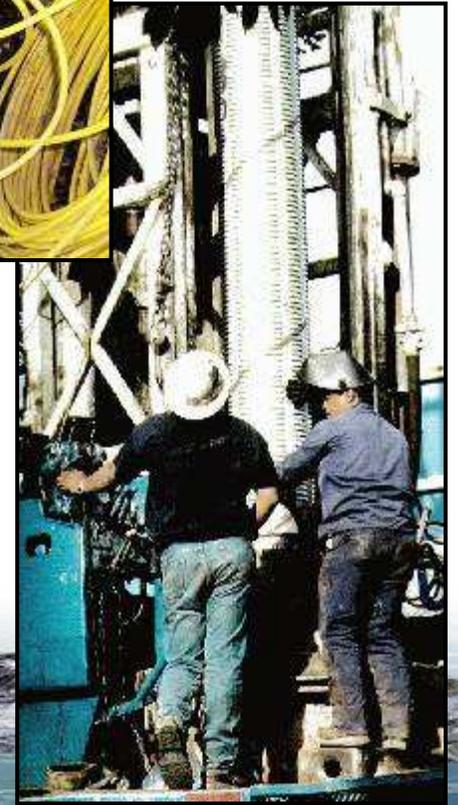
Central & West Coast Basins

**730,000 acre-feet of
water per year**
**43
1/3 G Groundwater
Cities**
2/3 Imported Water
(Colorado River & Northern California)



WRD Data Management

- Well Locations
- Water Quality
- Water Levels
- Well Construction
- Well Pumping



Background

- Tens of thousands data records generated per year.
- Staff, Pumpers, Agencies, Consultants, and the general public continually request this information
- GIS staff is small (one person), and overwhelmed by data continual requests
- Staff up or develop a “Do it Yourself” approach
- Developed the latter:
 - Improve access to WRD database for WRD staff and public
 - No GIS/database experience necessary to access geographic, tabular, or graphical data on internet platform
 - Improve efficiency in processing data requests
 - Frees up staff time for higher level GIS tasks

WRD's "WellsOnline"

Users are able to.....

- Type in an address or zoom to a map location
- See all wells within a specified distance
- General Well Locations (not Lat/Long)
- Some Construction Info
- Water Quality
- Water Levels
- Production (Acre Ft)
- Print Maps
- Print Reports
- Create Charts

The screenshot displays the WRD WellsOnline web application. The interface includes a map showing well locations, a table of well data, and various navigation and search options.

REPORT	WELL CODE	State Num	County Num	Well Name	Well Owner	Well Type
	1204567	98765	85464-875	Of Betsy	vllwr	Production
	85434567	27890875	7573-215	Tar	Spillite	Monitoring
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	85434567	27890875	7573-215	Tar	Spillite	Monitoring
	1204567	98765	85464-875	Of Betsy	vllwr	Production
	85434567	27890875	7573-215	Tar	Spillite	Monitoring

Initial Login Screen

http://giswrd.org

ID	Date	Requester	Company	Access	Phone	Media
357	8/28/2001	Charles I. Buckley	CEGE	<input type="checkbox"/>	(619) 991-1642	WV
358	7/27/2001	Russell Kyle	Geoscience	<input type="checkbox"/>	(609) 820-0007	WV
359	9/4/2001	Ken DeGreene	Secor International	<input type="checkbox"/>	(605) 230-1266	WV
360	8/28/2001	Tom Kramer	Geokon's Dist. Center	<input type="checkbox"/>	(310) 761-4622	WV
361	7/17/2001	Alexis Hillman	Environ Corporation	<input type="checkbox"/>	(213) 843-6321	WV
362	7/11/2001	Steve Rowe	Vapor Extraction Technology	<input type="checkbox"/>	(949) 492-7730	WV
363	7/12/2001	Danny Monson	England Geosystems	<input type="checkbox"/>	(949) 450-7133	WV
364	7/20/2001	Ulf Richter	Brown and Caldwell	<input type="checkbox"/>	(650) 571-4330	WV
365	7/11/2001	Jody Gardner	Komex H2O Science	<input type="checkbox"/>	(714) 378-1167	WV
366	10/18/2001	Tracy Bellehumer	URS Corp.	<input type="checkbox"/>	(603) 298-7910	WV
367	10/17/2001	Jack Riley	All West Remediation, Inc	<input type="checkbox"/>	(714) 237-1201	WV
368	10/11/2001	Ryan Haughy	The IT group	<input type="checkbox"/>	(626) 536-9078	WV
369	8/28/2001	Peter Thoms	West Coast Enviro. And Engineer	<input type="checkbox"/>	(605) 844-7978	WV
370	10/8/2001	Wilbur Garrett	SECOR International Inc.	<input type="checkbox"/>	(714) 378-3066	WV
371	10/17/2001	Victoria Taylor	Alwest Remediation, Inc	<input type="checkbox"/>	(714) 237-1201	WV
372	8/18/2001	Laura Lee	grove person	<input type="checkbox"/>	(310) 468-5832	WV
373	8/13/2001	Charles Cole	Consulting Services	<input type="checkbox"/>	(609) 845-4818	WV
374	8/14/2001	Laura Long	SECOR International Inc.	<input type="checkbox"/>	(714) 378-3066	WV
375	10/4/2001	Adeline Young	WRD	<input type="checkbox"/>	(626) 407-1970	WV
376	10/12/2001	Aaron Epstein	AEI Consultants	<input type="checkbox"/>	(310) 796-4266	WV
377	10/6/2001	Kurt Lueneburger	IT Corporation	<input type="checkbox"/>	(408) 433-7300	WV
378	10/22/2001	Ros Prabhakarath	Camp Dresser & McKee	<input type="checkbox"/>	(862) 921-6101	WV
379	10/18/2001	Paul Owens	Rincon Consultants	<input type="checkbox"/>	(605) 841-1000	WV
380	10/28/2001	Carolyn Snyder	ENSR International	<input type="checkbox"/>	(949) 758-2867	WV
381	11/16/2001	David Meyer	HDR Engineering, Inc	<input type="checkbox"/>	(650) 712-6330	WV
382	11/13/2001	John Haberland	SECOR International, Inc	<input type="checkbox"/>	(714) 378-3066	WV
383	11/12/2001	Canaan Crouch	SECOR International, Inc	<input type="checkbox"/>	(862) 921-6621	WV
384	12/4/2001	Diane Becker	Advanced Geoenvironmental	<input type="checkbox"/>	(714) 998-6761	WV
385	11/20/2001	Chris L. Armstrong	Chris L. & Eileen Armstrong	<input type="checkbox"/>	(951) 928-0673	WV

GIS/DBMS Information Request Form
 Water Replenishment District of Southern California
 12621 E. 166th Street, Cerritos, CA 90703
 ph. (562) 921-5521 / fax (562) 921-6101 / http://www.wrd.org

Contact Information:
 Name: _____ Date: _____
 Agency/Firm: _____
 Address: _____
 City, State, Zip: _____
 Phone: _____ Fax: _____ Email: _____

Request:
 Specific records requested: _____
 Purpose of request (optional): _____
 Site location (address, nearest intersection, cross streets, Thomas Guide page number): _____
 Information wanted: _____

Data Availability and Fees: Any request for information is for existing maps, databases, GIS coverages, reports, or other public records that have already been created and require no compilation, extraction, mapping, querying, or programming to duplicate and will be provided at the actual cost of duplication, whether provided in writing or electronically. Any request for public records that require compilation, extracting, programming or any custom work to create shall be provided at the actual cost of duplication and at the hourly rate for staff time. Staff will provide an estimate that must be paid to WRD before the request can be processed.

Disclaimer: The information is provided on an "as-is" basis, and the Water Replenishment District of Southern California (WRD) makes no warranty as to the content, accuracy, or completeness of any of the data. Further, WRD, its agents and employees assume no liability for any errors, omissions, or inaccuracies in the information provided regardless of how caused, and assume no liability nor responsibility to any person or entity with respect to any loss or damages in connection with or rising from the information contained on the data, maps, reports, or other information provided. The user of the information acknowledges unconditional acceptance of the above Disclaimer.

Information Transfer: (please indicate preference; check all that apply)

Data file formats:	Map file formats:	Delivery:	Media type (if applicable):
<input type="checkbox"/> Access 97	<input type="checkbox"/> Jpeg	<input type="checkbox"/> Email	<input type="checkbox"/> Floppy disk
<input type="checkbox"/> Excel 97	<input type="checkbox"/> Bmp	<input type="checkbox"/> US Mail	<input type="checkbox"/> Zip disk
<input type="checkbox"/> ArcView shapefile	<input type="checkbox"/> Pdf	<input type="checkbox"/> Pick up	<input type="checkbox"/> CD Rom
<input type="checkbox"/> Other _____	<input type="checkbox"/> Post script (eps)	<input type="checkbox"/> UPS / Fed Ex	
	<input type="checkbox"/> Paper copy	<input type="checkbox"/> account# _____	

For WRD use only

Data processor: _____ File(s) location: _____
 Start date: _____ End date: _____ Time to complete: _____
 Comments: _____



'WellsOnline'

New Users

- Takes about 1-minute to fill out form
- Submitted to WRD staff for approval
- Email approval sent back in minutes
- Limited access

Returning Users

- Do not fill out form
- 2-weeks access
- Public limited access
- Staff have fuller access



Well Selection Options

Search by Well Name

Search by Location

Search by Browsing Map

SEARCH BY WELL NAME / OWNER

SEARCH BY LOCATION (Wells Within One Mile Radius or Within a City Limit)

Address:
Street # and Name *
(12621 E 166th st)
Zip *
(90703)
* both street address & zip required

Street Intersection:
Street Name 1 *
(artesia)
Street Name 2 *
(alameda st)
* both streets required

OR

City

Fwy Intersection

RESULTS BY TABLE **RESULTS BY MAP**

SEARCH BY BROWSING DISTRICT MAP

 Map Search

Three naming conventions for wells

Option to Search for Wells Based on Address, Street or Freeway Intersection or City Boundary

Particular Owner

Well Selection



Interactive Well Search 

NEW SEARCH

WRD HOME

HELP

LOGOUT

WRD WELL: 200329

Well Construction

Water Level

Well Production

Water Quality



New Search

SELECT THE TYPE OF REPORT YOU WOULD LIKE TO VIEW FROM THE RIGHT →

REPORT	WRD ID	State #	County #	Map Label	Common Name	Well Owner	Well Type	Well Status
<input type="radio"/>	200328	3S/12W-14F01S	1589S	14F1		Park Water Company	Production Well	Active
<input checked="" type="radio"/>	200329	3S/12W-14F02S	1589K	14F2		Peerless Water Company	Production Well	Active
<input type="radio"/>	200331	3S/12W-14P01S		14P1		Peerless Water Company	Production Well	Active
<input type="radio"/>	200334	3S/12W-15K02S	1579F	15K2		Peerless Water Company	Production Well	Active
<input type="radio"/>	200335	3S/12W-15K03S		15K3		St John Bosco School	Production Well	Active
<input type="radio"/>	200336	3S/12W-15L01S	1579E	15L1		Peerless Water Company	Production Well	Active



Well Construction



Interactive Well Search 

[NEW SEARCH](#) [WRD HOME](#) [HELP](#) [LOGO](#)



June 16, 2003

Well Construction Report for WRD ID: 100023
State ID : 3S/14W-13J08S

 [Print Table](#)

WRD ID:	100023	Well Owner:	Water Replenishment District
State Number:	3S/14W-13J08S	Owner's Well Name:	Gardena1_4

Well Type:	MW	Latitude:		Year Drilled	1995
Well Status:		Longitude:		Year Destroyed:	

Well Depth:	140	Top of Perforation:	120	Mult. Perf. Intervals?:	1
Well Diameter:	2	Base of Perforation:	140	Aquifer(s) Perforated:	

Log Available?:	Y
Casing Type:	PVC80
Drilling Method:	ROT
Data Source:	USGS

WRD WELL: 200329

[Well Construction](#)

[Water Level](#)

[Well Production](#)

[Water Quality](#)



[New Search](#)

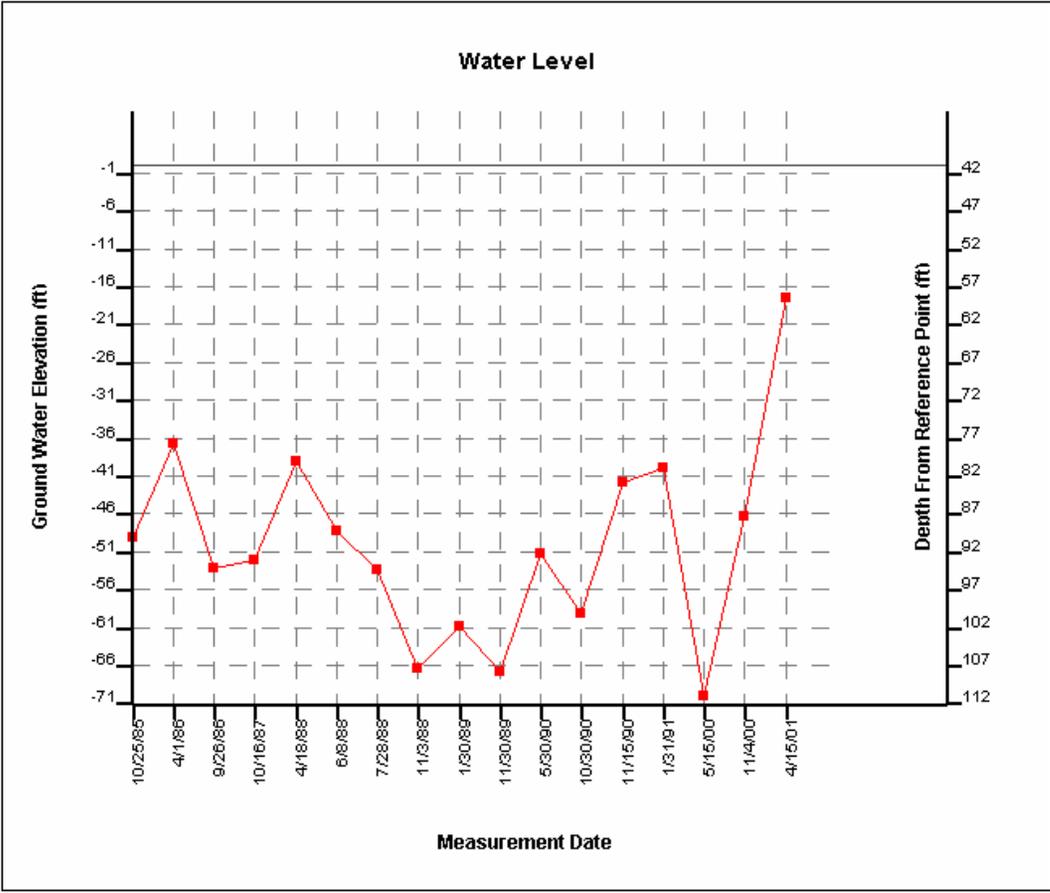
<input type="radio"/>	WRD ID	State ID	Well ID	Well Name	Well Type	Well Status
<input type="radio"/>	200334	3S/12W-15K02S	1579F	15K2	Peerless Water Company	Production Well Active
<input type="radio"/>	200335	3S/12W-15K03S		15K3	St John Bosco School	Production Well Active
<input type="radio"/>	200336	3S/12W-15L01S	1579E	15L1	Peerless Water Company	Production Well Active



Groundwater Elevations/Depths


June 16, 2003

Water Level Report for WRD ID: 200576
State ID : 4S/12W-15B03S



Water Level

Measurement Date	Ground Water Elevation (ft)	Depth From Reference Point (ft)
10/25/85	-51	107
4/1/86	-36	77
9/26/86	-53	102
10/16/87	-52	103
4/18/88	-38	79
6/8/88	-47	90
7/28/88	-53	102
11/3/88	-66	112
1/30/89	-61	107
11/30/89	-66	112
5/30/90	-51	102
10/30/90	-58	105
11/15/90	-42	85
1/31/91	-39	82
5/15/00	-71	119
11/4/00	-46	90
4/15/01	-17	62

WRD WELL: 200329

Well Construction

Water Level

Well Production

Water Quality

Map Search

New Search

	Well Type	Well Status
Company	Production Well	Active
Company	Production Well	Active
Company	Production Well	Active
er Company	Production Well	Active
St John Bosco School	Production Well	Active
Peerless Water Company	Production Well	Active

<input type="radio"/> 200335 3S/12W-15K03S 15K3 St John Bosco School	Production Well	Active
<input type="radio"/> 200336 3S/12W-15L01S 1579E 15L1 Peerless Water Company	Production Well	Active



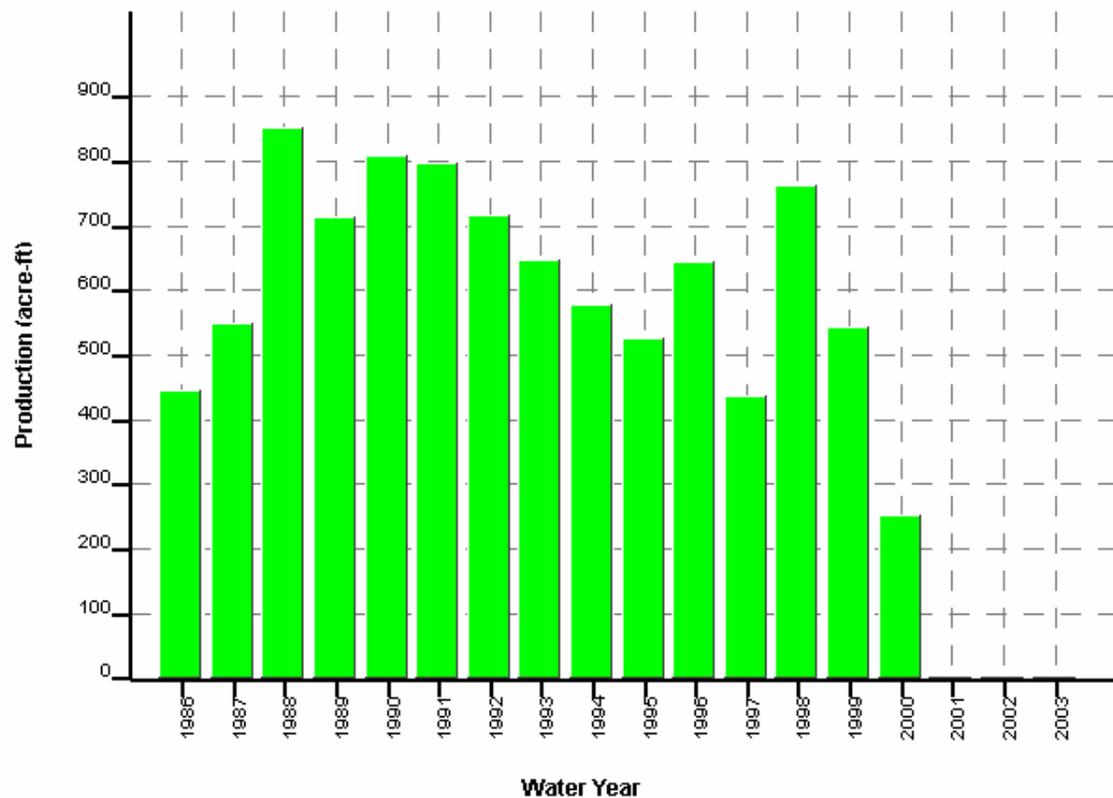
Groundwater Production



June 16, 2003

Well Production Report for WRD ID: 200486
State ID : 3S/14W-03K02S

Well Production



NEW SEARCH WRD HOME HELP LOGG

WRD WELL: 200329

Well Construction

Water Level

Well Production

Water Quality



New Search

Well Type	Well Status
Production Well	Active



Groundwater Quality



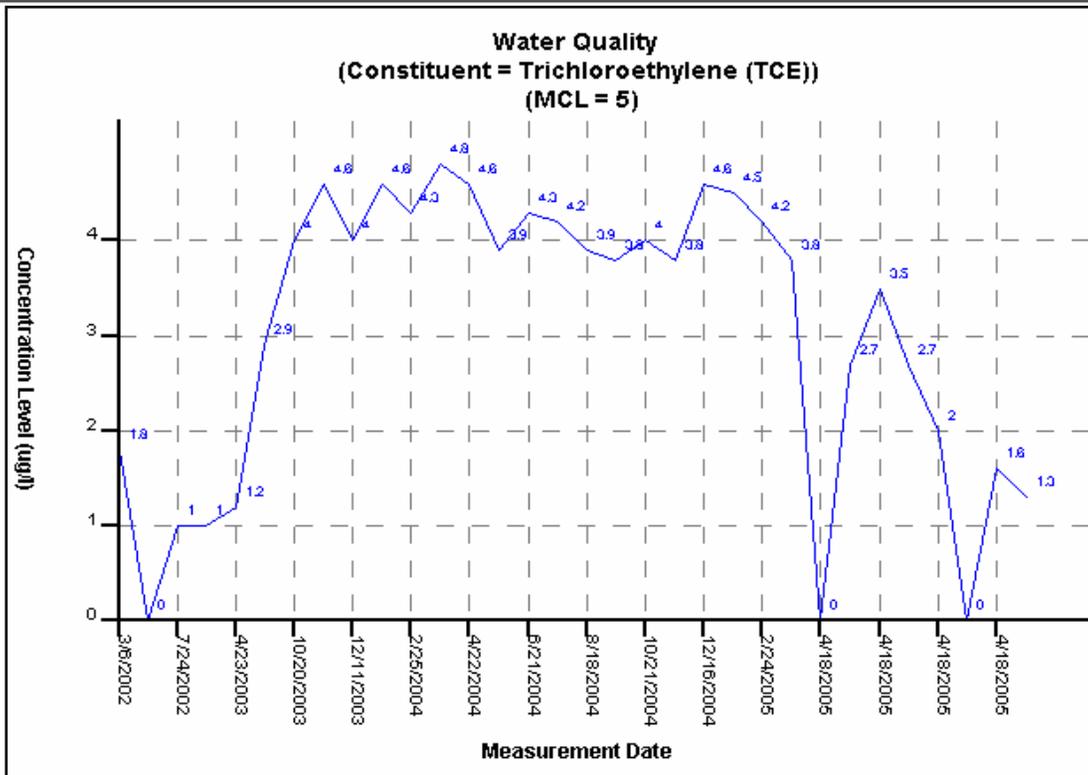
Interactive Well Search Well Reports

NEW SEARCH

WRD HOME

HELP

LOGO



WRD WELL: 200329

Well Construction

Water Level

Well Production

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Map Search

New Search

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<input type="radio"/>	200331	3S/12W-14P01S		14P1		Peerless Water Company	Production Well	Active
<input type="radio"/>	200334	3S/12W-15K02S	1579F	15K2		Peerless Water Company	Production Well	Active
<input type="radio"/>	200335	3S/12W-15K03S		15K3		St John Bosco School	Production Well	Active
<input type="radio"/>	200336	3S/12W-15L01S	1579E	15L1		Peerless Water Company	Production Well	Active



Recent Issues

- Some groundwater pumpers want the information removed from the site, and only allow its release if people come in to our office to request it
- Question of "How available do you make public information?"
- Agency by agency decision for now. Some have removed info, some have hidden well names, some have more open access

Conclusions

- WRD's "Wells Online" site has proven to provide easy, intuitive, and rapid access to public information on groundwater resources in the LA region.
- Has provided tremendous efficiencies for a "Do it Yourself" approach to public requests for information instead of spending Staff time.
- Still facing uneasiness about the open access from some in the groundwater pumping community.
- WRD Board is weighing the benefits over the real or perceived security or other risks

QUESTIONS or COMMENTS?

tjohnson@wrd.org

Wells Online site:
<http://gis.wrd.org>