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**West Van Buren (WVB) Water Quality Assurance Revolving Fund (WQARF) Site  
Community Advisory Board (CAB) Meeting**

Thursday, December 10, 2009

6:00 p.m.

Sunridge Elementary School

6244 W. Roosevelt Street, Phoenix, Arizona 85007

## MINUTES

### **CAB Members in Attendance:**

Peggy Eastburn  
Philip Lagas, Brown & Caldwell  
Jeff Littell  
John Saccoman

### **ADEQ Staff in Attendance:**

Jennifer Edwards Thies, Project Manager  
Kevin Snyder, Project Hydrologist  
Linda Mariner, Community Involvement Coordinator  
Julie Riemenschneider, Remedial Projects Section  
Manager  
Amanda Stone, Waste Programs Division (WPD)  
Director

### **Others in Attendance:**

Dr. Lawrence Moore, Lawrence Moore & Assoc.  
Stan Ashby, Roosevelt Irrigation District  
Dennis Shirley, Montgomery & Associates  
Greg Wallace, Montgomery & Associates  
Mary Moore

Gail Clement  
Liz Buaon, Luke AFB  
Ed Oyarzo, USAF  
Joshua Holmes, US Army Corps of Engineers  
Bruce Travers, AMEC Geomatrix  
Laurie LaPat-Polasko, AMEC Geomatrix  
A. Gordon, Terranext  
David Weed, ChemResearch Company  
P. Plato, Clear Creek Associates  
Tom Suriano, Clear Creek Associates  
Bob Frank, CH2MHill  
David Armstrong, Ballard Spahr  
Karen Gaylord, Salmon, Lewis & Weldon  
Scott Ames, Fennemore Craig  
Barbara Pashkowski, Gust Rosenfeld, P.L.C.  
Jerry Worsham, Gammage & Burnham  
John Holt, Western Area Power Administration  
Judy Heywood, APS  
Karol Wolf, Salt River Project  
Donn Stoltzfus, City of Phoenix

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Ref: OU #10-058

The following matters were discussed at the meeting:

### **1. Call to Order/Introductions**

Mr. Lagas, the co-chair, conducted the meeting after Ms. Mariner introduced herself as the new community involvement coordinator for the site.

### **2. Acceptance and/or Changes to February 19, 2009 Minutes**

Mr. Lagas asked if everyone read the minutes and had any changes. Mr. Littell moved to accept the minutes as written. The motion was seconded by Ms. Eastburn. All agreed to accept the motion, and the minutes were approved.

### **3. WQARF Process Update – Jennifer Edwards Thies, Project Manager**

Ms. Thies distributed slides of the WQARF process and explained that the WVB Site is currently at the end of the remedial investigation phase where remedial objectives (ROs) are solicited from interested parties. She stated that the Land and Water Use Report included in the RI Report has been completed. She then went through all the site activities that have occurred since the last CAB meeting.

**See presentation below**

Mr. Lagas asked about when the Draft RI Report would be ready to go out for public comment. Ms. Thies explained that the RO Report needed to be completed as part of the RI Report. After the current comment period to solicit ROs was done, ADEQ will generate a Draft RO Report with preliminary ROs for public comment. When that was finalized, the Draft RI Report would be ready for public comment in its entirety possibly within the next six months.

Mr. Lagas also asked whether the Air Liquide and Prudential Supply facilities would be proceeding with source control. Ms. Thies responded that their consent order needs to be amended with an updated work plan that is currently being negotiated.

### **4. Solicitation of Proposed Remedial Objectives (ROs) for the Site – Jennifer Edwards Thies**

Ms. Thies explained how proposed ROs are used in the Final RI Report. She then opened up the meeting to accept verbal proposed ROs or any comments. Mr. Lagas proposed that one objective might be to maintain existing groundwater uses within the WVB area. None of the other CAB members had any ROs to propose.

Mr. Worsham suggested that ROs should be cost effective and only treat water that had contamination and not over-treat from zones not impacted. No other ROs were proposed at the meeting. Comment forms were made available for anyone to mail in before the comment period deadline of 5:00 pm on January 4, 2010. Mr. Lagas asked for an extension on the comment period because of his holiday commitments. Ms. Riemenschneider confirmed that several days had already been included in the comment period for that reason.

### **5. Roosevelt Irrigation District (RID) and ADEQ – Amanda Stone, WPD Director**

Ms. Stone came on behalf of the ADEQ Director, Benjamin Grumbles, to say that the Director is very supportive of the merits of having interested stakeholders submit cleanup proposals for WQARF sites. ADEQ is currently reviewing all the documents that have been submitted by RID and all other comments. At this time ADEQ has made no decisions regarding the technical or legal merit of the RID project. Several options are being evaluated, and when a determination has been made, it will be publicized. Ms. Stone confirmed that the project was submitted as an early response action (ERA), but she could not comment on any of the other questions until Director Grumbles has made a final decision on the project.

### **6. Roosevelt Irrigation District Presentation – Dr. Lawrence Moore and Dennis Shirley**

Dr. Moore introduced himself and the other RID team members and then presented their proposed strategic regional approach to groundwater remediation. He explained that RID

operates more than 100 water wells in western Maricopa County. Over thirty of the wells are located in the WVB WQARF Site. Over twenty of RID's wells in the WVB WQARF Site have been impacted by a 15-mile plume of contaminated groundwater. RID has developed a plan for a comprehensive cleanup program that utilizes existing infrastructure that includes an Early Response Action to remove industrial pollutants from approximately 30,000 acre feet of groundwater per year, making this valuable resource safe and available for public use. Dr. Moore also gave out their Web site ([www.wvgroundwater.org](http://www.wvgroundwater.org)) where more questions can be submitted and addressed.

Mr. Shirley then showed slides that detailed the preliminary plan for RID's cleanup of the groundwater.

**See presentation below**

Mr. Lagas asked if RID was going to provide technical information to demonstrate the cost-effectiveness of their plan. Mr. Shirley responded that only the conceptual plan has been submitted to ADEQ as a first step in the proposal. RID is currently in the process of preparing an Engineering Evaluation Cost Analysis (EECA) Report. RID intends to complete a feasibility study on a parallel path with the ERA to compare to their plan to other alternatives. Mr. Shirley and Mr. Lagas participated in a detailed discussion regarding the pumping of the RID wells in the implementation plan.

## **7. Call to the Public**

Ms. Heywood asked about what had changed in the area that has prompted this ERA. Mr. Shirley responded that the information in the Draft RI Report last year showed how widespread the contamination was and that its impact to RID might require a faster action for cleanup.

A gentleman referred to the presentation map and asked Mr. Shirley to identify what 10 wells that RID will start remediating, and which 4 of the 21 wells do not exceed the regulatory limit. Mr. Shirley pointed out the wells on the map in the slides. And when asked about what certain symbols on the map represented, Mr. Shirley responded that these represented PRP facilities identified by RID. Mr. Lagas clarified that many of these facilities were currently performing or already had completed some remedial activities for their facilities.

Ms. Moore referred to Well 1A and Well 1B in the work plan and asked about the difference between the two wells. Mr. Shirley explained that Well 1A is looking at tying in existing wells to the Salt Canal and Well 1B would tie four new wells to the canal.

Mr. Stoltzfus commented that the City of Phoenix also had wells in that area. He asked what the timeframe was that RID is using (past 2026) for the ERA to be in place in their cost-effectiveness study. Mr. Stoltzfus also asked if RID was looking at possible alternates for the treated water like recharge to the basin. Mr. Shirley said that RID would have to replace that water if it wasn't used for RID purposes. Mr. Shirley also said that RID is doing a cost analysis of the operation and maintenance. A gentleman asked if we did nothing from now to 2026, is there anything that would stop RID pumping to the irrigation end users like they are today. Mr. Shirley responded that RID needs to plan to supply water for not only current, but also reasonable foreseeable uses.

Ms. LaPat-Polasko asked if any of the water that RID is pumping for irrigation use has contaminants above regulatory standards. Mr. Shirley responded that RID has widespread contamination of volatile organic compounds (VOCs) in their wells, and they want to address the impact of the contamination to their wells.

Ms. Clement commented that the concern of many present at the meeting is that an ERA process provides for almost no stakeholder or community input. An ERA does not require a detailed analysis of feasibility or cost effectiveness even though the WVB Site is one of the largest sites in Arizona. These wells have been contaminated for about 25 years, and she did not understand why there is this unnecessary speed taken for this project when it impacts many other stakeholders. Ms. Clement asked what was causing this fast track effort to remediate the site after all this time. Mr. Shirley replied that RID has been talking with ADEQ for over a year to promote a way for RID to utilize their well system as an effective cleanup tool to get started on remediating some of the contamination that is impacting their wells.

At this time more technical questions were asked and several attendees took part in that discussion with Mr. Shirley (ADEQ's recorder was not able to pick up all the comments).

Ms. Heywood asked what the criteria were that is used to determine if an ERA should be used. Ms. Riemenschneider responded that the requirements for an ERA are in the A.A.C. R18-16-405, which is used in all of ADEQ's evaluations of the validity of ERAs.

Dr. Moore responded to a question that RID is in support of feedback from stakeholder groups regarding the RID plan.

Ms. Moore asked why the solicitation for the ROs was postponed so long. Ms. Riemenschneider explained that due to budget constraints, ADEQ was not able to go forward with the RO process earlier as required by rule. The rule provides for an exception in unusual circumstances. ADEQ now has enough funding to continue the RO process.

Ms. Gaylord asked about why ADEQ wouldn't require RID to cover oversight costs. Ms. Stone responded that RID will be reimbursing ADEQ's costs for oversight and that the agreement allowed them up to \$100,000 or two years before they had to pay. As a member of the WQARF Board, Ms. Gaylord expressed concern at the prospect of maybe having to shut down existing drinking water treatment systems because of budget cuts while \$100,000 of oversight money for the RID evaluation was being allowed.

Dr. Moore ended the discussion by announcing that they would be able to answer any unanswered questions after the meeting or by sending in questions to the RID Web site.

## **8. Next meeting date and Agenda discussion**

It was agreed that the next meeting would be scheduled after ADEQ has prepared a Draft RO Report for public comment with Proposed ROs. The next CAB meeting would include a presentation on the proposed ROs and any comments received in the solicitation period.

## **9. Adjournment**

Mr. Saccoman motioned to adjourn. Mr. Littell seconded. All agreed, and the meeting adjourned.



WEST VALLEY  
Groundwater  
CLEANUP COALITION

PROPOSED REGIONAL  
GROUNDWATER REMEDIAL ACTION

Roosevelt Irrigation District

**December 10, 2009**



# AGENDA

- Introduction of RID Project Team
- Overview of RID Remediation Project
- Communications/Web Site
- Question & Answer

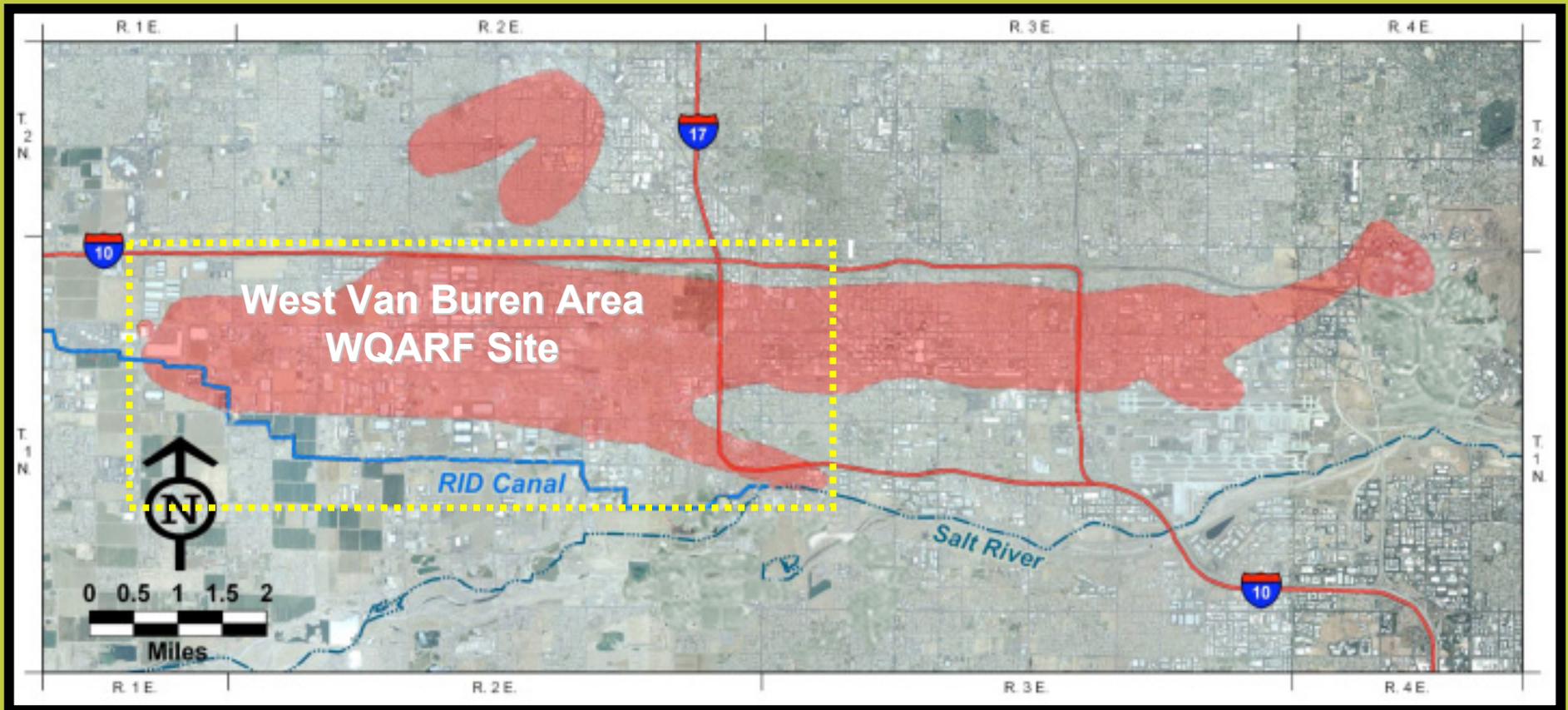
# Roosevelt Irrigation District RESPONSE ACTION TEAM

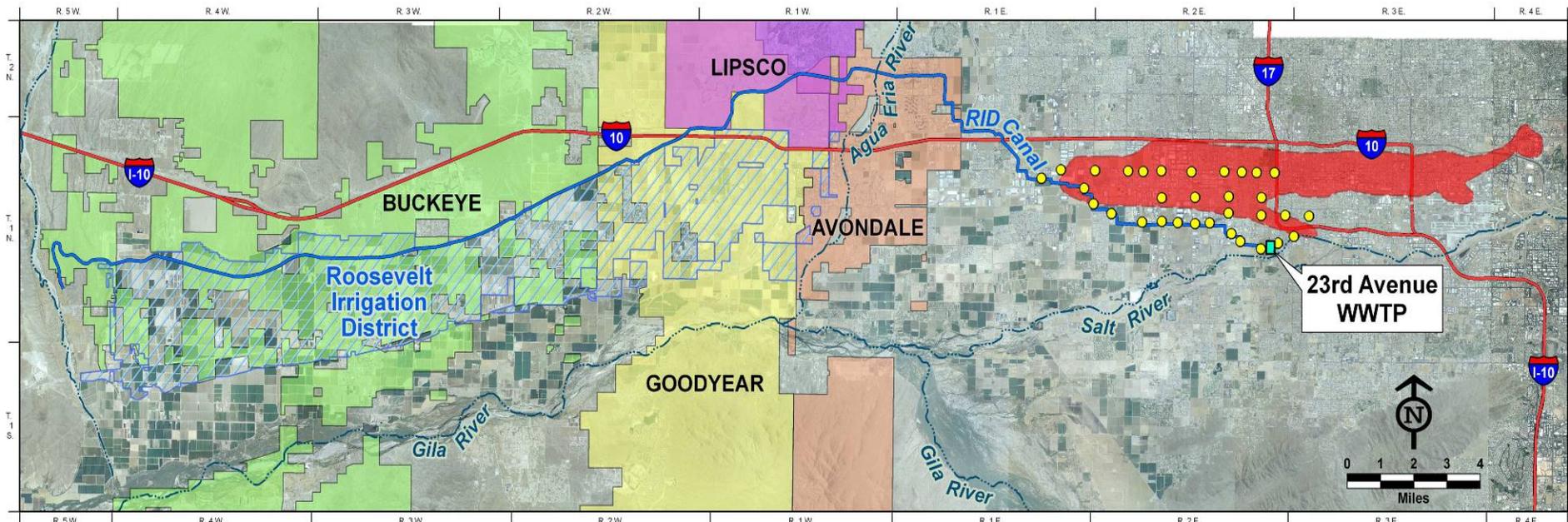
- Stan Ashby – RID Superintendent
- Montgomery & Associates –  
Technical Team
- Lawrence Moore – Public Outreach Team
- Gallagher & Kennedy– Legal Team

# West Van Buren Remediation Investigation

## Draft report genesis of RID remediation project

- One of the largest plumes of contaminated groundwater in U.S.
- Multiple sources of volatile organic compounds (VOCs) from numerous Potentially Responsible Parties are principal problem





## ROOSEVELT IRRIGATION DISTRICT

- RID formed in 1927 to serve customers in west valley
- RID operates 104 wells and 50 miles of main canals to deliver ~ 150,000 AF/year of water to customers for irrigation and municipal supply
- RID relies principally on groundwater but also uses reclaimed wastewater

# ROOSEVELT IRRIGATION DISTRICT

## PLANNED EARLY RESPONSE ACTION

Dennis Shirley, P.G.



# RID OBJECTIVES

- Mitigate VOC impacts at RID Wells to allow unrestricted operations and maximize beneficial use of water supply
- Protect human health and the environment by reducing exposure to VOCs
- Prevent further groundwater quality degradation
- Begin restoration of groundwater
- Maximize use of existing infrastructure to fast track response actions



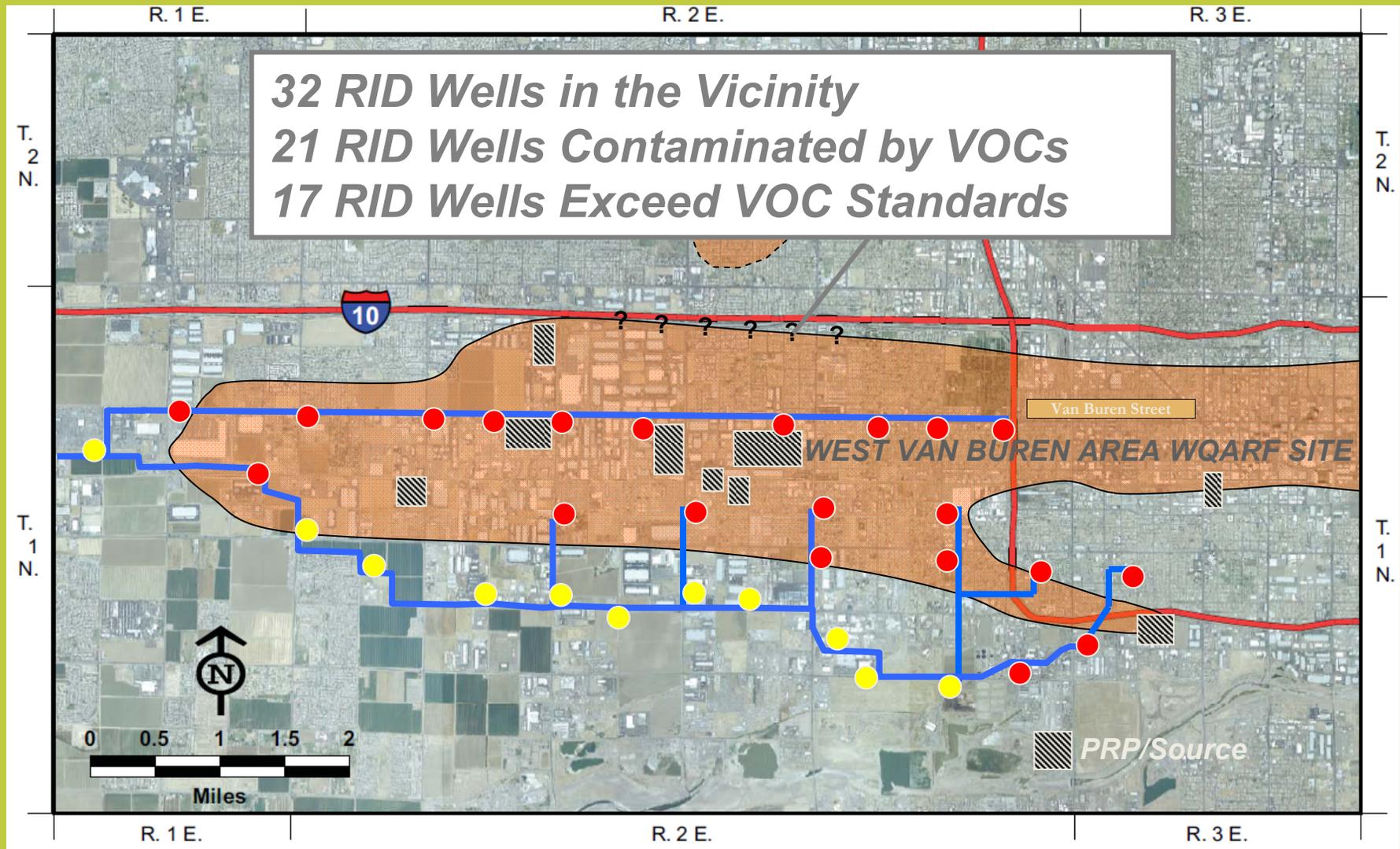
# RID's TWO-PHASE REMEDY

## Cost-Effective Response Action

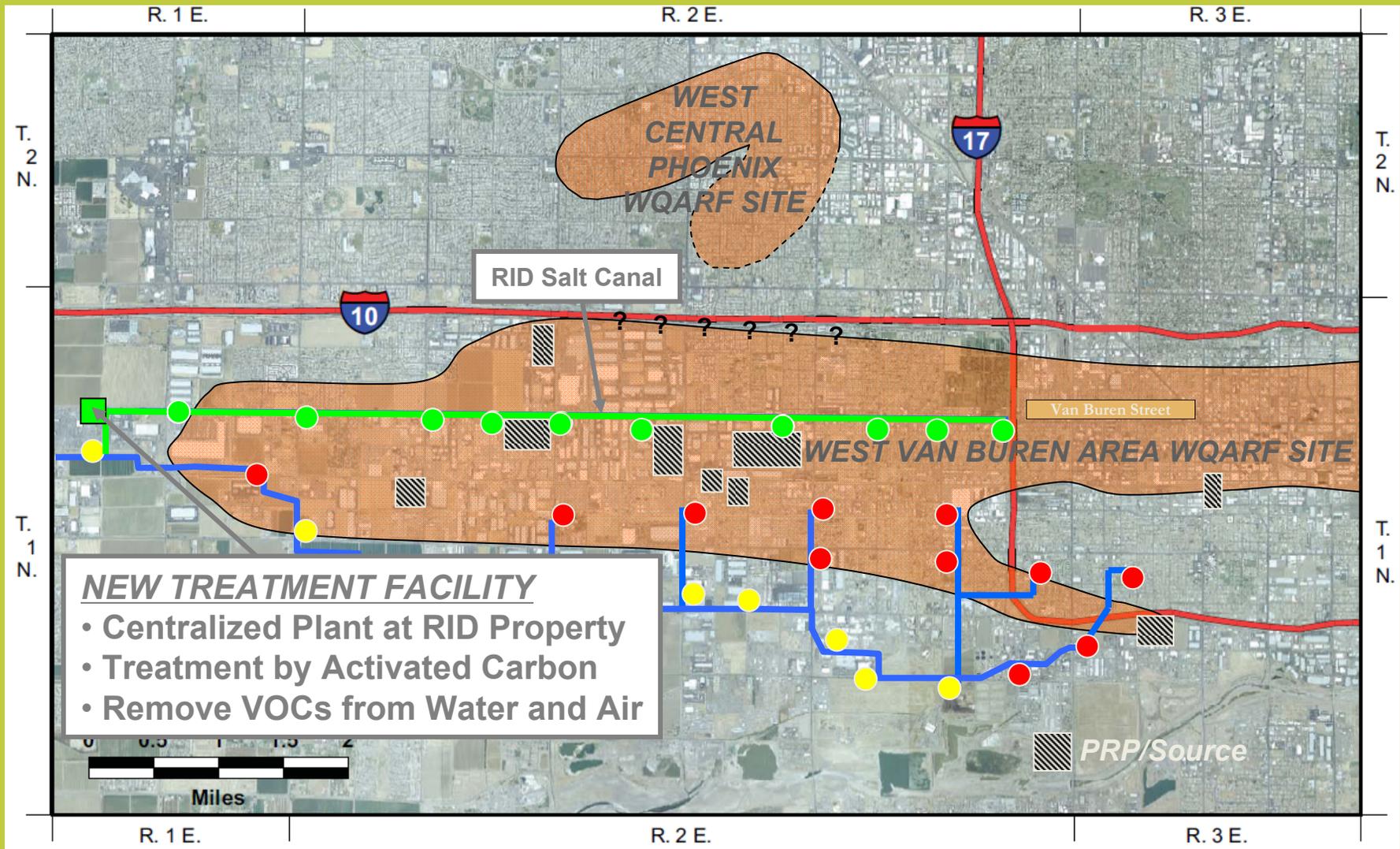
- Provides a comprehensive and effective regional pump and treat remedy that maximizes existing RID infrastructure
- Restores ~ 40,000 gallons per minute of impacted water supply
  - Early Response Action: pump and treat 10 most highly contaminated wells
  - Supplemental Response Action: identify best approach to address peripheral wells



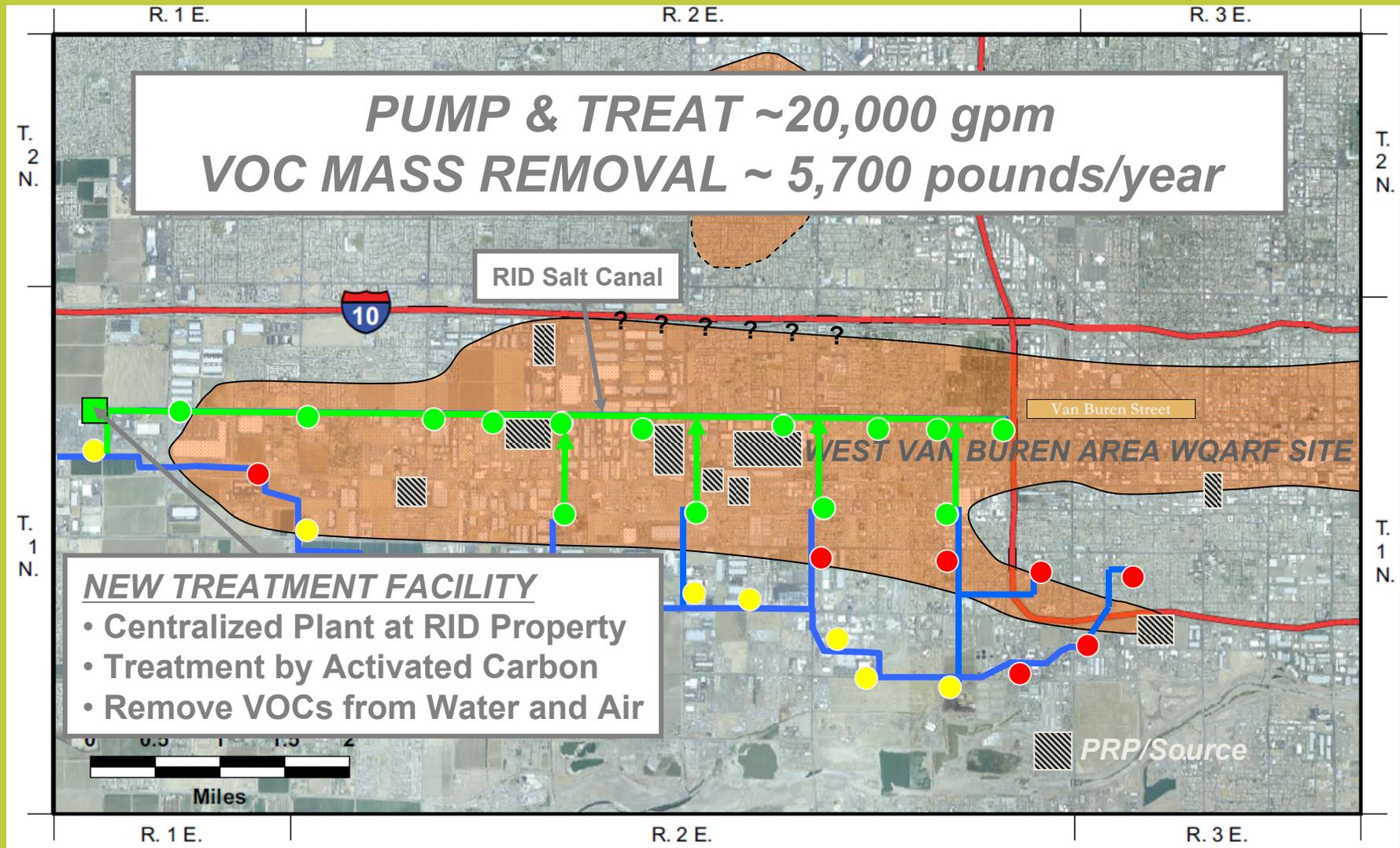
# PLANNED EARLY RESPONSE ACTION



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# ROOSEVELT IRRIGATION DISTRICT

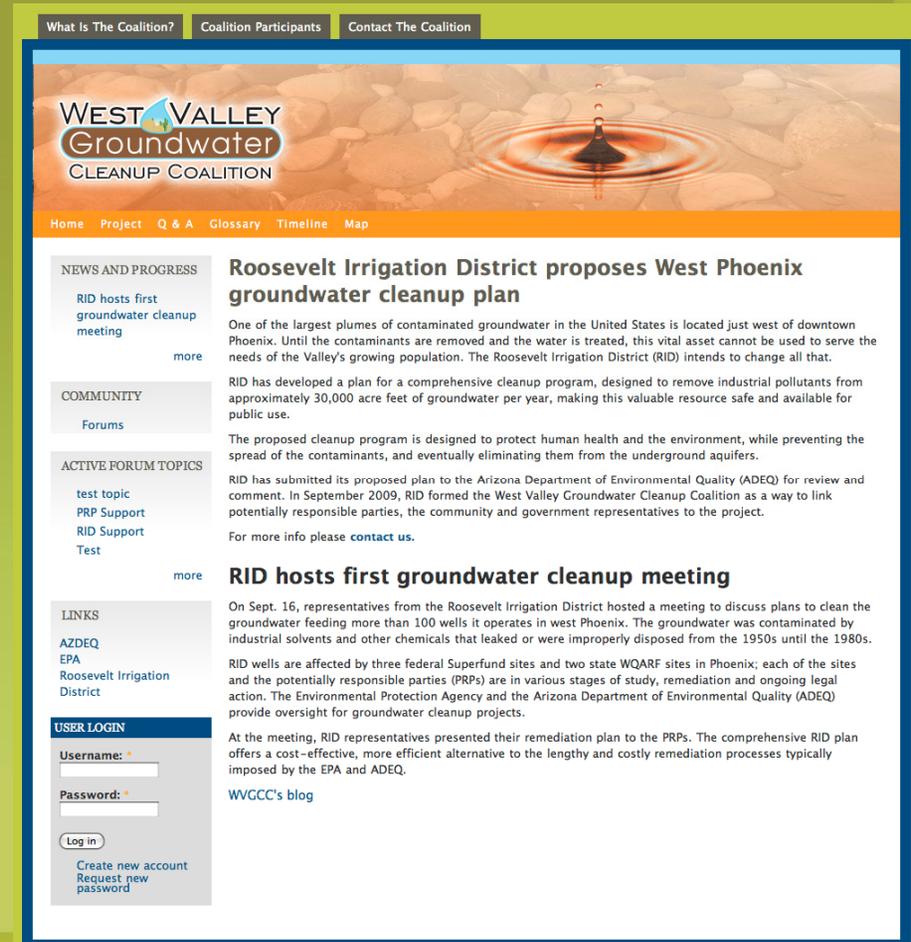
## PROJECT COMMUNICATIONS

Lawrence E. Moore, Ph.D.



# Stakeholder/Constituency Focus

- Media Relations
- Community Relations
- Public Outreach



What Is The Coalition? Coalition Participants Contact The Coalition

**WEST VALLEY Groundwater CLEANUP COALITION**

Home Project Q & A Glossary Timeline Map

**NEWS AND PROGRESS**

RID hosts first groundwater cleanup meeting [more](#)

**COMMUNITY**

Forums

**ACTIVE FORUM TOPICS**

test topic  
PRP Support  
RID Support  
Test [more](#)

**LINKS**

AZDEQ  
EPA  
Roosevelt Irrigation District

**USER LOGIN**

Username: \*

Password: \*

[Create new account](#)  
[Request new password](#)

**Roosevelt Irrigation District proposes West Phoenix groundwater cleanup plan**

One of the largest plumes of contaminated groundwater in the United States is located just west of downtown Phoenix. Until the contaminants are removed and the water is treated, this vital asset cannot be used to serve the needs of the Valley's growing population. The Roosevelt Irrigation District (RID) intends to change all that.

RID has developed a plan for a comprehensive cleanup program, designed to remove industrial pollutants from approximately 30,000 acre feet of groundwater per year, making this valuable resource safe and available for public use.

The proposed cleanup program is designed to protect human health and the environment, while preventing the spread of the contaminants, and eventually eliminating them from the underground aquifers.

RID has submitted its proposed plan to the Arizona Department of Environmental Quality (ADEQ) for review and comment. In September 2009, RID formed the West Valley Groundwater Cleanup Coalition as a way to link potentially responsible parties, the community and government representatives to the project.

For more info please [contact us](#).

**RID hosts first groundwater cleanup meeting**

On Sept. 16, representatives from the Roosevelt Irrigation District hosted a meeting to discuss plans to clean the groundwater feeding more than 100 wells it operates in west Phoenix. The groundwater was contaminated by industrial solvents and other chemicals that leaked or were improperly disposed from the 1950s until the 1980s.

RID wells are affected by three federal Superfund sites and two state WQARF sites in Phoenix; each of the sites and the potentially responsible parties (PRPs) are in various stages of study, remediation and ongoing legal action. The Environmental Protection Agency and the Arizona Department of Environmental Quality (ADEQ) provide oversight for groundwater cleanup projects.

At the meeting, RID representatives presented their remediation plan to the PRPs. The comprehensive RID plan offers a cost-effective, more efficient alternative to the lengthy and costly remediation processes typically imposed by the EPA and ADEQ.

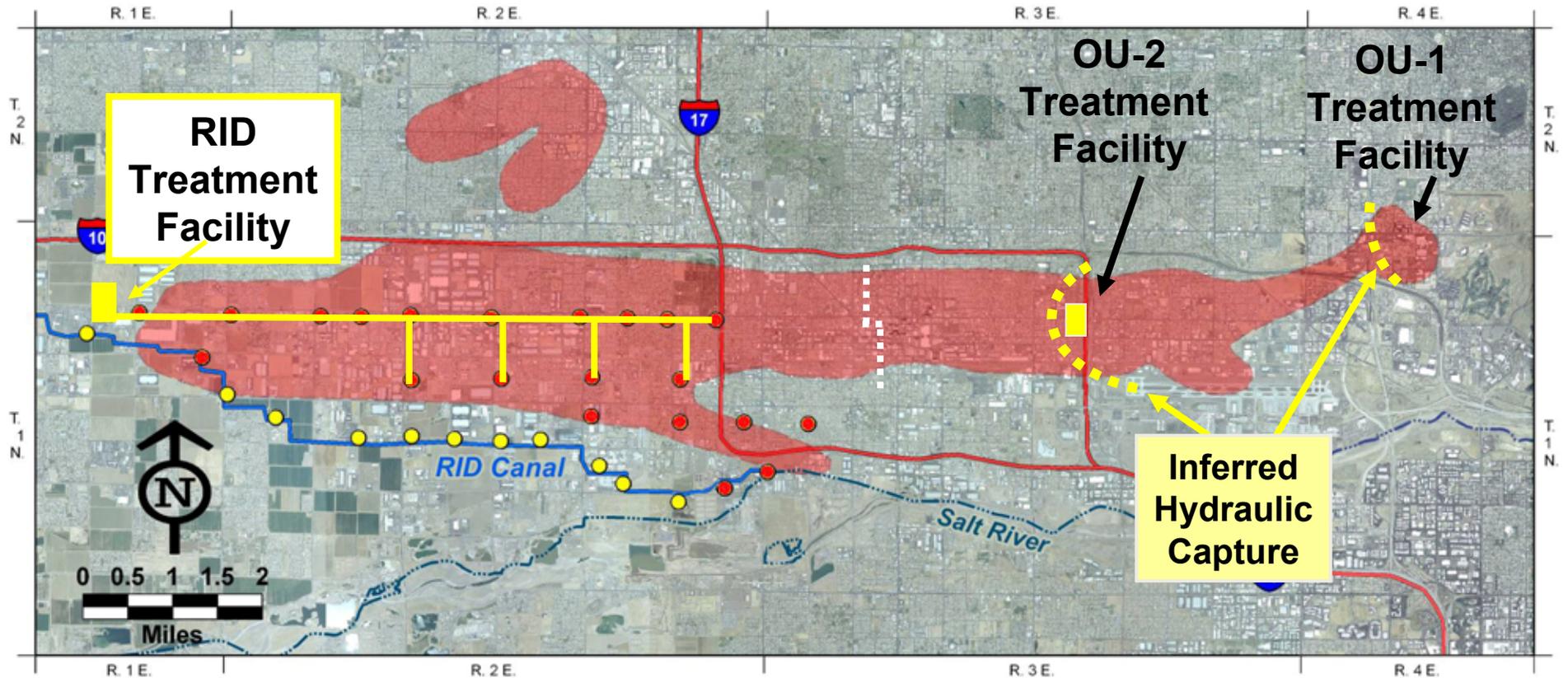
[WGCC's blog](#)

# Questions?

[WWW.WVGROUNWATER.ORG](http://WWW.WVGROUNWATER.ORG)

WEST VALLEY  
Groundwater  
CLEANUP COALITION

# Estimated VOC Mass Removal



- RID Response Action (1<sup>st</sup> Stage) to Remove ~ 3,500 lbs/year
- RID Response Action (2<sup>nd</sup> Stage) to Remove ~ 2,200 lbs/year
- OU-1 and OU-2 Interim Remedy Removes ~ 1,800 lbs/year