



# Water Authority Response to the KAFB Bulk Fuels Facility Spill

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# The San Juan-Chama Drinking Water Project

The Albuquerque Metro Area's New – Sustainable – Drinking Water Source

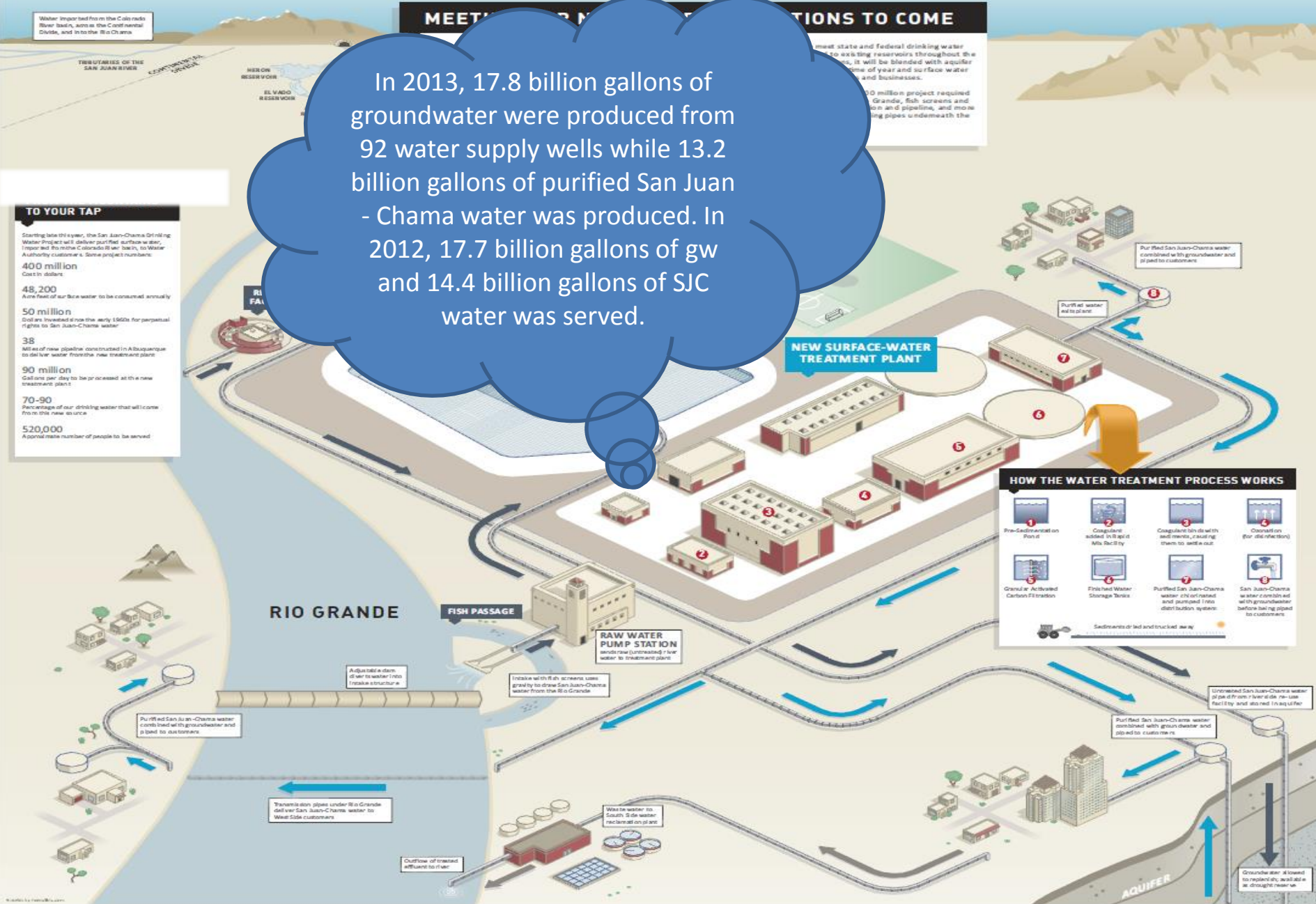
## MEETING THE DEMAND FOR WATER IN THE FUTURE

In 2013, 17.8 billion gallons of groundwater were produced from 92 water supply wells while 13.2 billion gallons of purified San Juan-Chama water was produced. In 2012, 17.7 billion gallons of gw and 14.4 billion gallons of SJC water was served.

### TO YOUR TAP

Starting late this year, the San Juan-Chama Drinking Water Project will deliver purified surface water imported from the Colorado River basin, to Water Authority customers. Some project numbers:

- 400 million Cost in dollars
- 48,200 Acre feet of surface water to be consumed annually
- 50 million Dollars invested since the early 1960s for perpetual rights to San Juan-Chama water
- 38 Miles of new pipeline constructed in Albuquerque to deliver water from the new treatment plant
- 90 million Gallons per day to be processed at the new treatment plant
- 70-90 Percentage of our drinking water that will come from this new source
- 520,000 Approximate number of people to be served



# Distribution Area 3

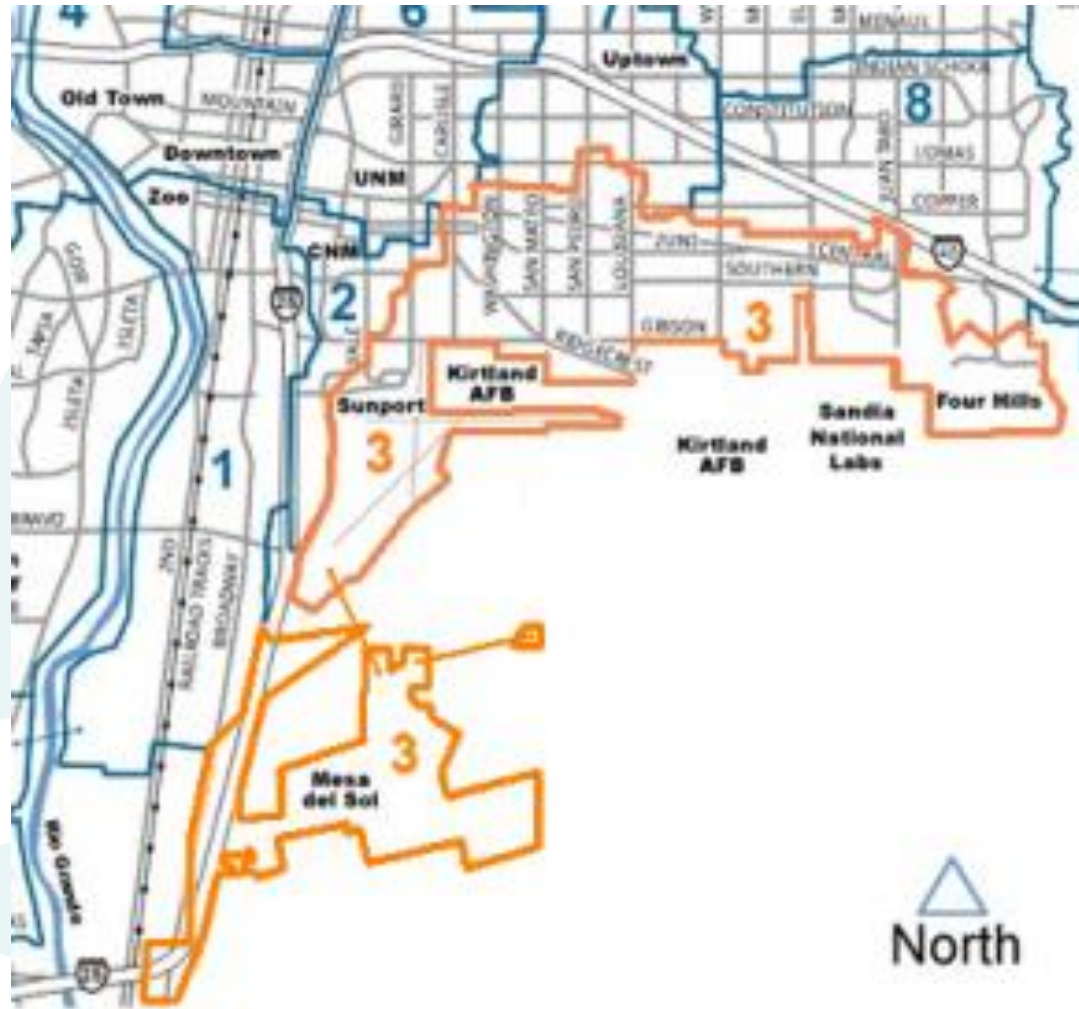
Distribution Area 3, which encompasses the fuel spill, serves ~75,000 people in southeast Albuquerque.

10 active production wells in Area 3:

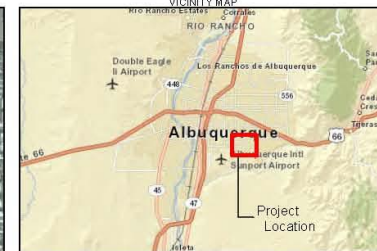
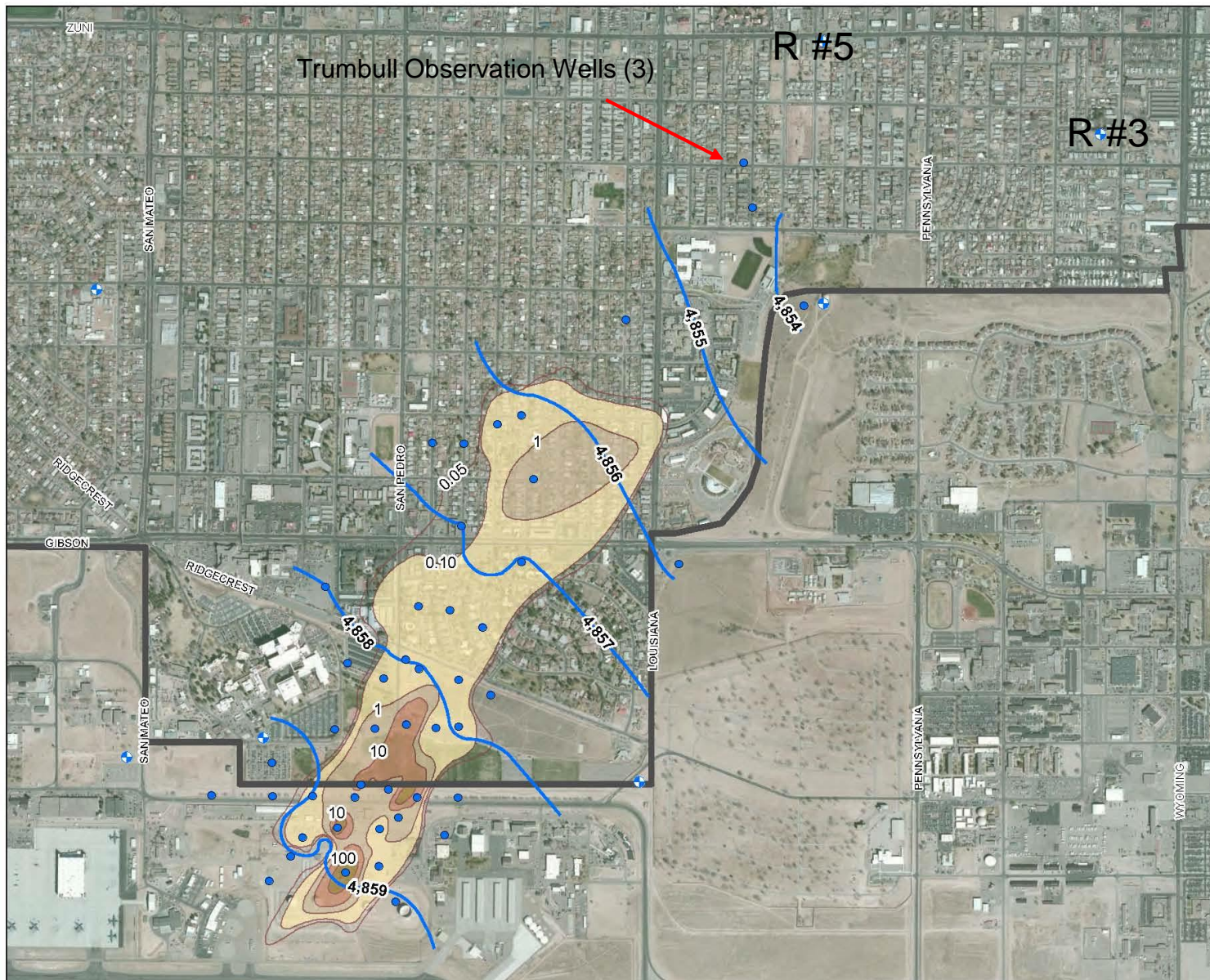
- Burton Well Field (5)
- Ridgecrest Well Field (5)
- \* San Juan Chama Water also distributed in Area 3

Total production from DA 3 wells for 2013 was 3.35 billion gallons

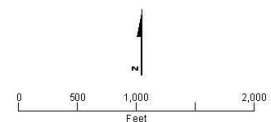
- Ridgecrest #3 = 213 mil gals
- Ridgecrest #5 = 593 mil gals







- LEGEND**
- Water Supply Well
  - Groundwater Monitoring Well
  - Groundwater Elevation Contour (ft msl)
  - Kirtland AFB Boundary
- EDB Concentration (µg/L) (USAF, 2013)**
- 0.014 - 0.1
  - 0.11 - 1
  - 1.1 - 10
  - 11 - 100
  - 110 - 280



**Ethylene Dibromide (EDB)**  
Shallow Groundwater Plume and Water Supply  
Wells near the Kirtland Air Force Base  
Bulk Fuels Facility

Since late 2008, voluntary monthly sampling/testing of nearby production wells – Burton and Ridgecrest Well Field.

- Monthly sampling for ethylene dibromide (EDB) and aviation gas / jet fuel constituents. (Safe Drinking Water Act only requires one sample every two years).
- No detections of contaminants related to fuel spill to date.



Water Authority Board has passed three resolutions relating to KAFB BFF Spill:

- M-10-1 (2010): Authorizes Water Authority to hire independent environmental consultant to evaluate the remediation planning and groundwater resources in the vicinity of the plume.
- R-12-13 (2012): Authorizes an agreement with KAFB for Contingency Plan coordination, working with USGS on early warning wells, and requests that KAFB speed implementation of final remedy.
- R-12-14 (2013): Authorizes negotiations with KAFB for emergency measures to save Albuquerque's drinking water, placement of monitoring wells near the Ridgecrest wells, containment of the light nonaqueous phase liquid plume, and implementation of remediation technology to address the long-term contamination of the soils and aquifer.

Water Authority hired independent contractor and staff to perform:

- Review KAFB work plans, quarterly reports, and other RCRA Corrective Action / Interim Measure documents.
- Prepare technical memos to Water Authority staff, NMED and KAFB.
- Attend public and technical meetings and consult staff, senior management and decision makers.



## Early warning observation well installation and aquifer studies in the area of the plume:

- Water Authority/USGS installation of monitoring well cluster located 1,400 ft. upgradient of Ridgecrest Well #5.
- USGS will revise existing basin model in the area of the plume for particle tracking simulations based on projected pumping rates.
- No jet fuel spill contamination detected during first round of sampling.



Joint KAFB / MOA Contingency Plan is still being prepared, but some options may include...

- Short-term, immediate response: Shut-down affected well(s), shift demand burden to other wells / SJC Drinking Water Treatment Plant.
- Replacing affected well(s) with wells in new location.
- Acquire additional surface water rights, increase capacity at SJC Drinking Water Treatment Plant.



Thank you!

Any questions?