



Buckman Direct Diversion

Progress Toward a
Sustainable Drinking Water
Supply





BDD Project: Why was it needed?

- Depleting sustainable drinking water sources
- The current groundwater pumping not able to be sustained long term
- Needed diversified sources (drought, fire, permit constraints)
- Our Santa Fe River reservoirs can supply:
 - about half of our needs in a good year
 - almost nothing in a bad year (highly variable)





Severe drought conditions motivated the city of Santa Fe, NM and Santa Fe county to develop a fourth source of water supply.



The Buckman Direct Diversion was designed to make direct use of city and county water rights in the Rio Grande river, provide additional capacity for future water demand, and allow the other sources of water to rest as needed.

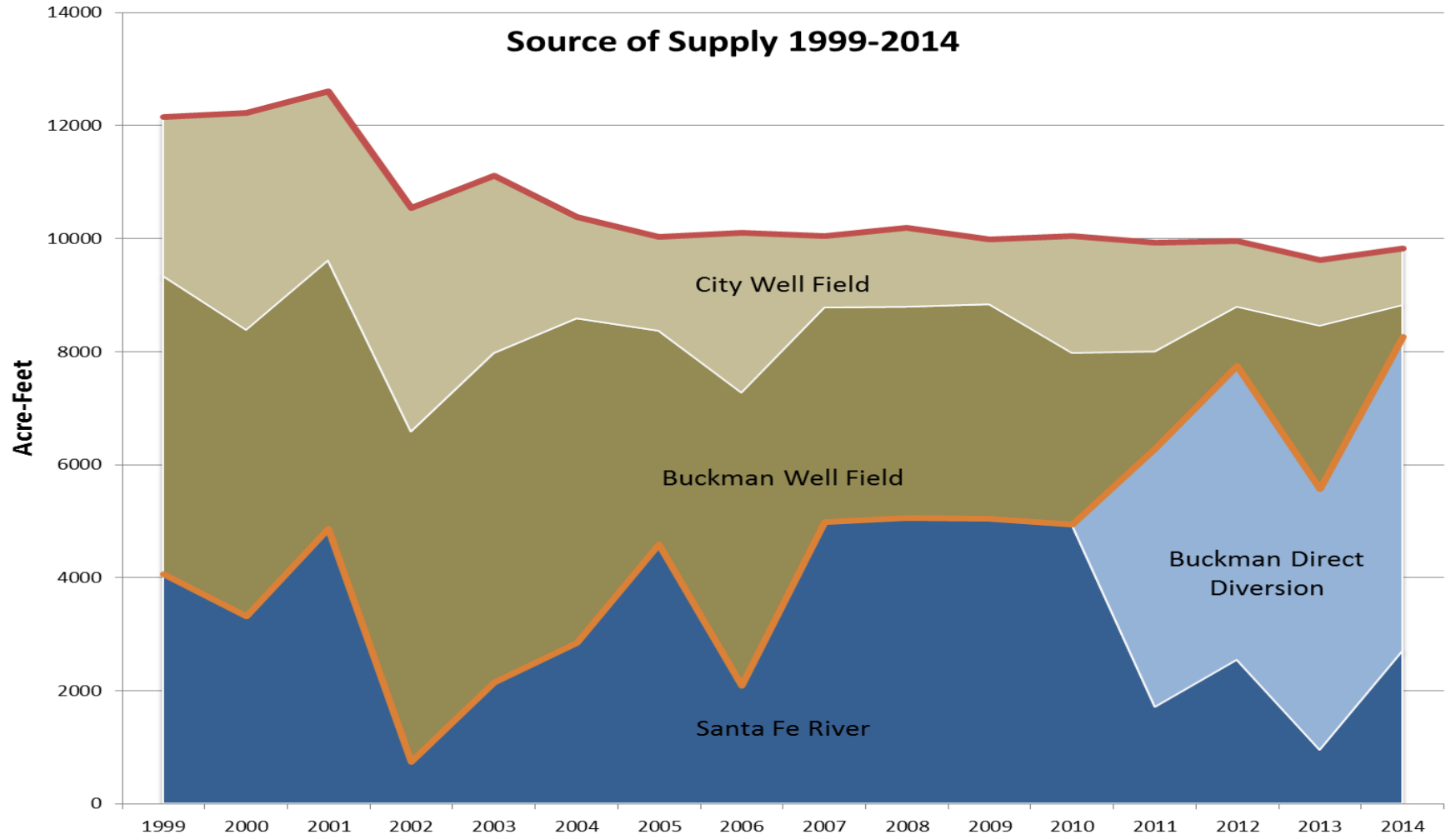


■ **Water Resources Planning – Diversification of Supply Portfolio**

- **Four Viable Sources of Water:**
 - **BDD Project (5,230AFY) – Surface Water**
 - **CRWTP (5,040) – Surface Water**
 - **Buckman WF (10,000 AFY) – Ground Water**
 - **City WF (3,507 AFY) – Ground Water**



Source of Supply 1999-2014





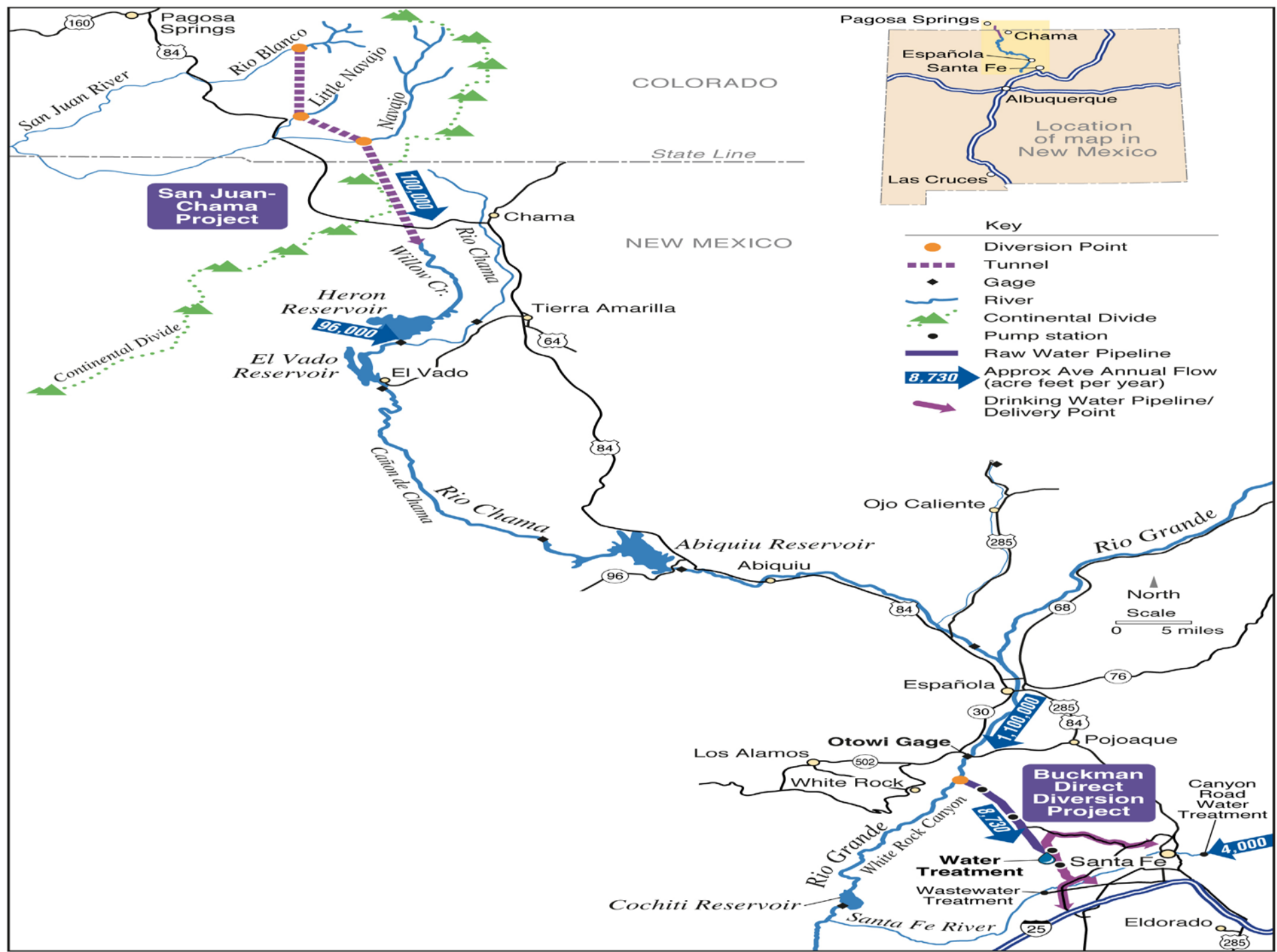
What it Does:

- **Increases diversity of supply portfolio**
- **Increases system reliability**
- **Increases system redundancy**
- **Increases operational flexibility of the system**










The Buckman Direct Diversion






- **Total Project Cost is \$225 million**
- **Project completed December 2010**
- **Began operations in January 2011**
- **BDD staff took over operations in May 2011**
- **Largest design-build water project in the history of New Mexico to date (complex, costly)**



BDD Facilities

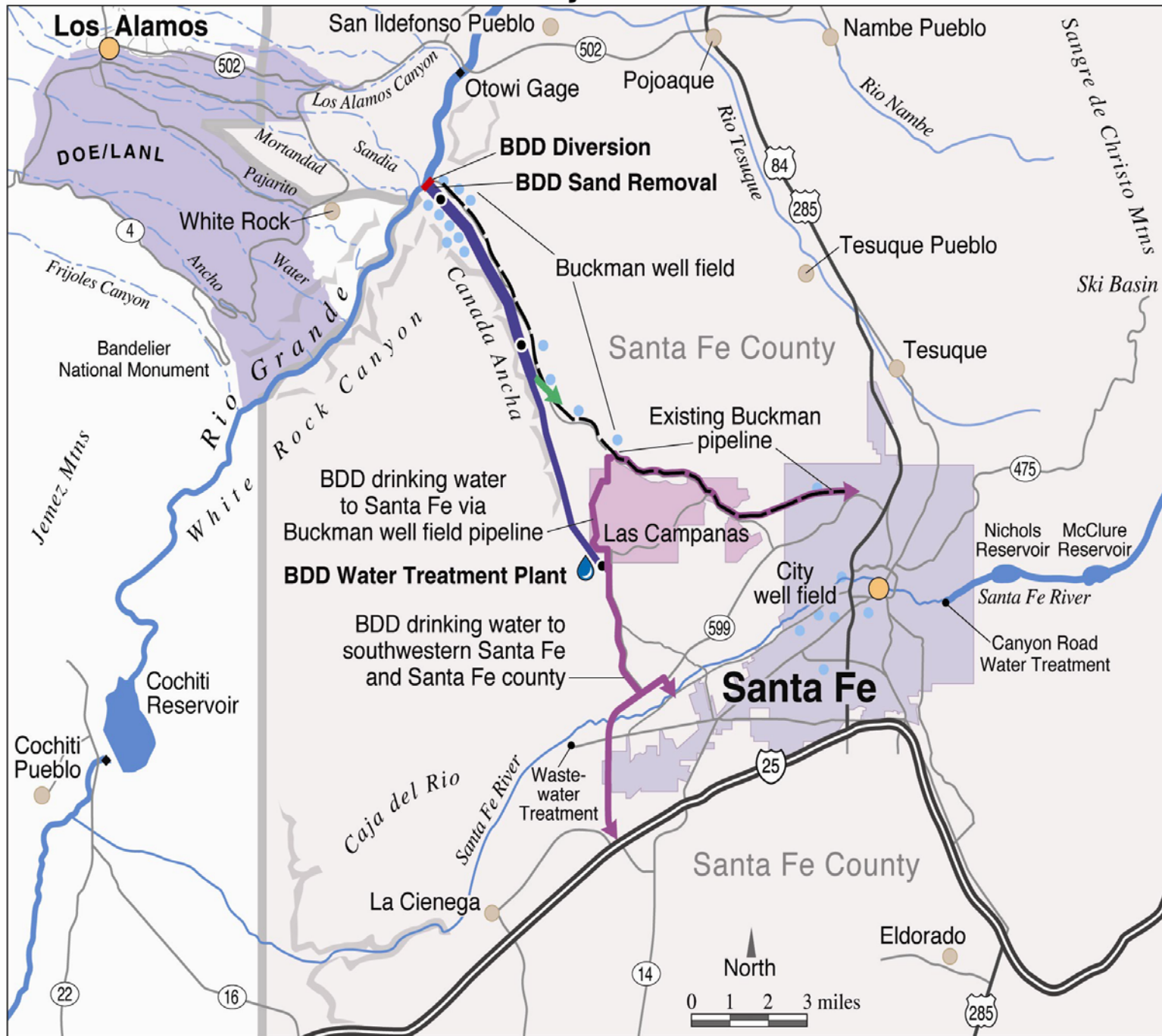
-  Shared City/County and Las Campanas Raw Water Pipeline
-  City/County Raw Water Pipeline
-  City/County Drinking Water Pipeline
-  Pump Station
-  BDD Water Treatment Plant
-  Entry Point to Drinking Water System
-  Raw Water Delivery to Las Campanas

Symbols

-  City
-  Town or Pueblo
-  City Well
-  Gage
-  Interstate Highway
-  Federal Highway
-  Other Paved Road
-  County Line
-  Rivers
-  Intermittent
-  Existing Pipeline from Buckman to Santa Fe



Buckman Direct Diversion Project





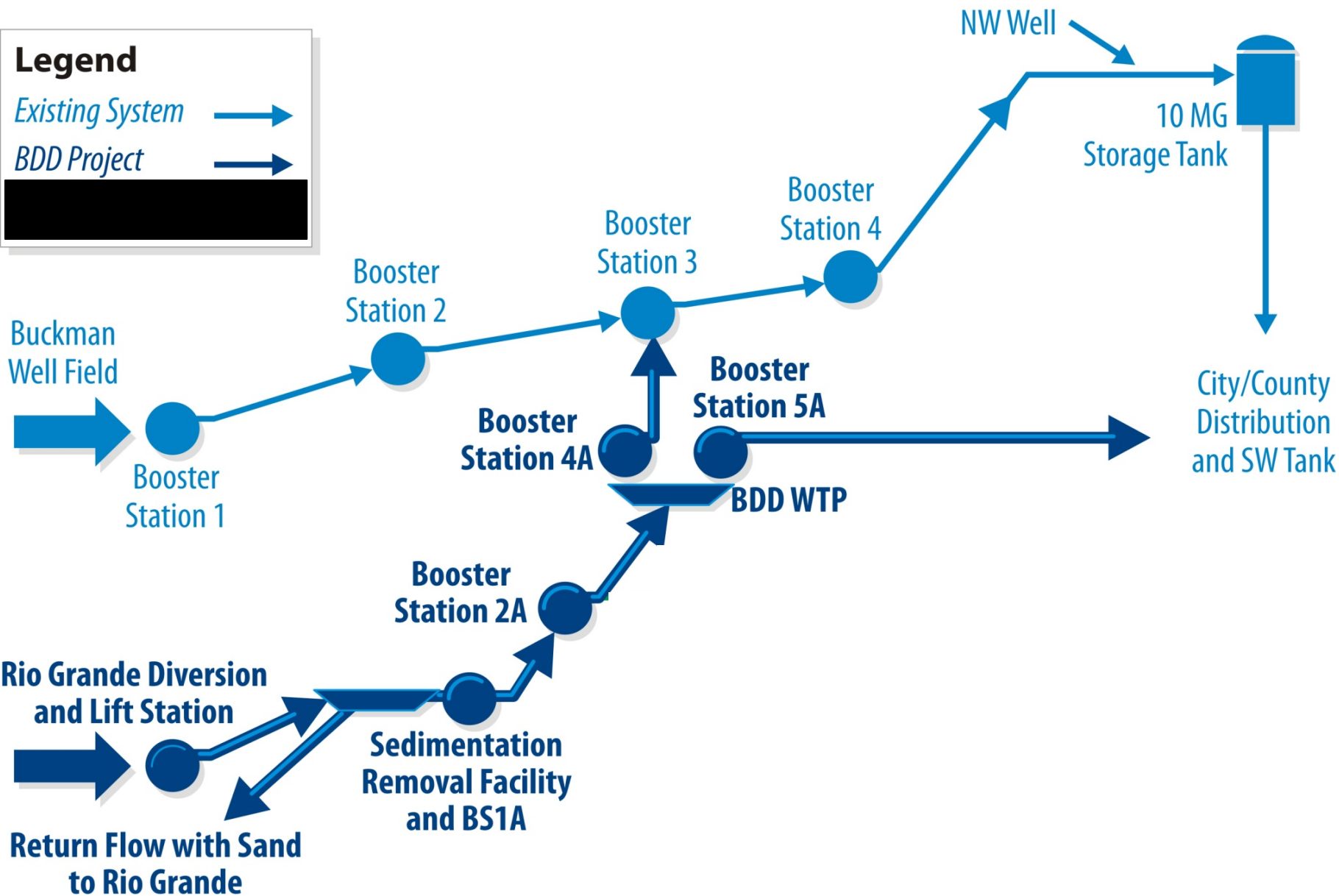
BDD Components

- 1. Diversion structure, Raw Water Pump Station, electrical, and sand return outfall at the river**
- 2. Raw water pump stations 1A and 2A, sand separation facility, and 11 miles of 30" diameter ductile iron pipe (1,100' vertical lift)**
- 3. State-of-the-art 15 MGD water treatment plant, 8 MG raw water storage, 4 MG treated water storage, 2 pump stations, solids processing, maintenance and repair shop, and administrative/lab/control room building – 24 acres**
- 4. Treated drinking water pumped to the City and the County via 20+ miles of new pipelines**
- 5. 2.5 MW solar at 2 facilities**

Legend

Existing System →

BDD Project →





Highly Variable Water Quality





LANL Effects on Rio Grande Water Quality

**LANL-origin legacy contaminants
are absent from Rio Grande
Water at Buckman**

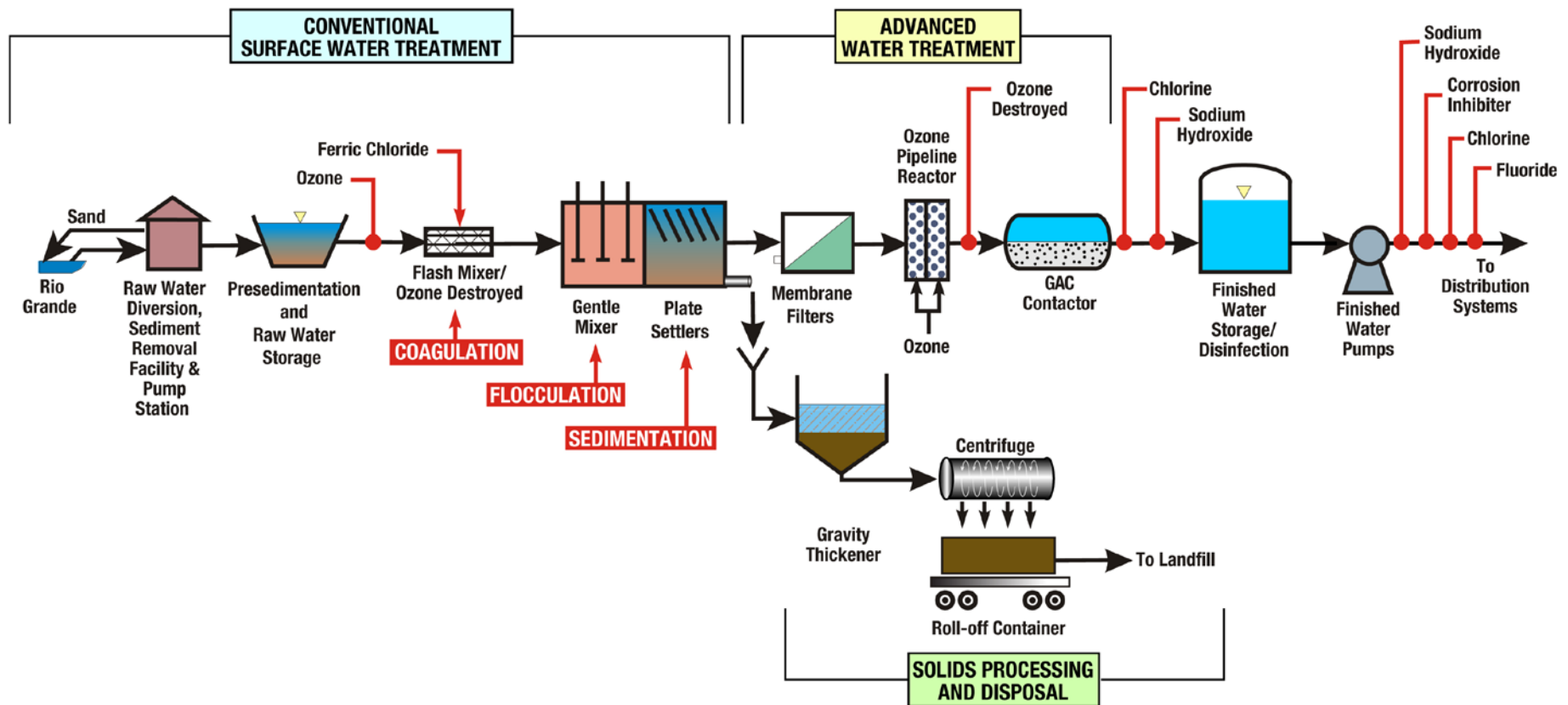
Except during Los Alamos
Canyon heavy rain events







Robust Water Treatment Processes





The BDD is governed by the BDD Board:

- **The BDD is owned by the City of Santa Fe and Santa Fe County (50% - 50% \$\$\$)**
- **City and County delegated authority and oversight to the BDD Board**
 - **Las Campanas is a non-voting limited partner (wholesale customer of SF County)**



City of Santa Fe Water Division is the BDD Manager and Fiscal Agent

- **The City of Santa Fe is under contract to the BDD Board**
 - **Support Entity to provide Fiscal oversight, HR services, Legal services, Fleet services. This contract is reviewed every 5 years.**



















For more information, contact:

Buckman Direct Diversion

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www.bddproject.org