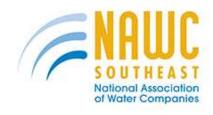
ABENGOA WATER

A Role for the Private Sector In Water Infrastructure





Overview

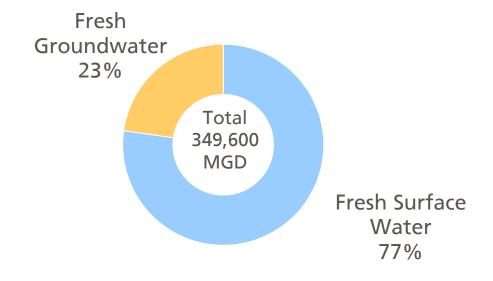
- Water Supply 101
- Vista Ridge Case Study

Water Supply 101

- Predominance of surface water
- Historical perspective

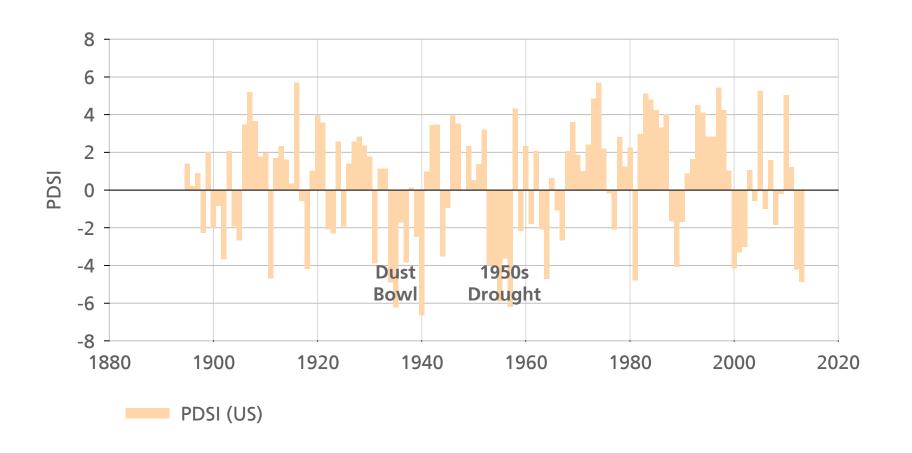


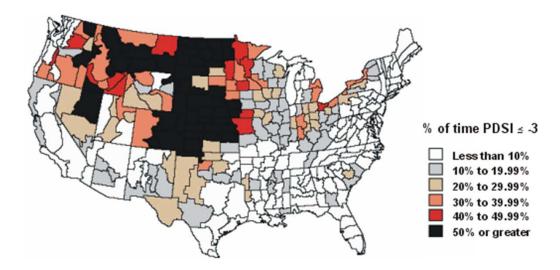
Source: US Bureau of Reclamation (1940)



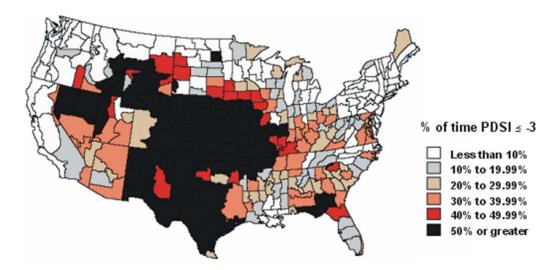
Total U.S. Water Withdrawals

Source: USGS 2009



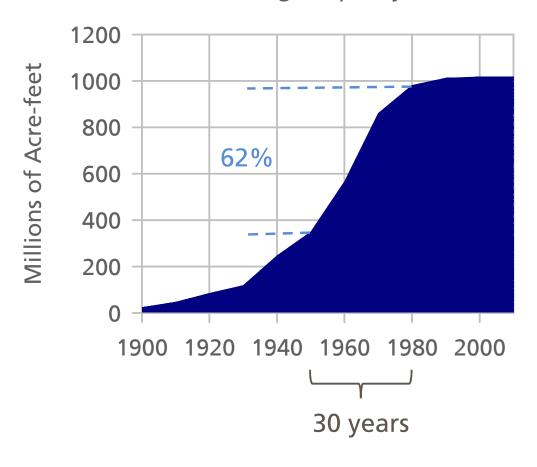


1934 to 1939

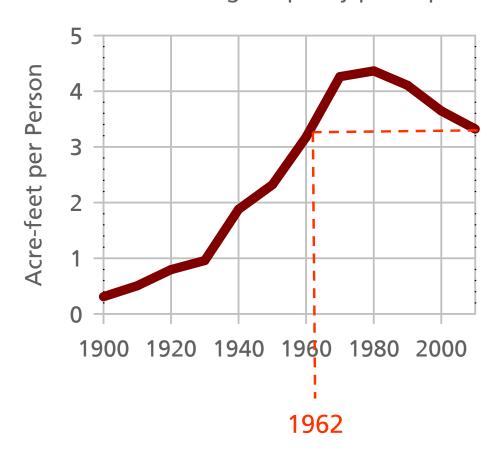


1954 to 1956

U.S. Reservoir Storage Capacity



U.S. Reservoir Storage Capacity per Capita



Water Supply 101

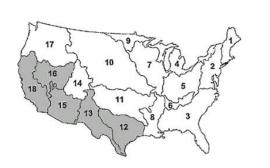
Total Water Withdrawals:

Southwest U.S.

Southwest

Major River Basins

- 12 Texas-Gulf
- 13 Rio Grande
- 15 Lower Colorado
- 16 Great Basin
- 18 California

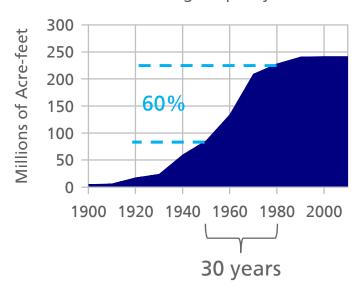


Fresh Groundwater 35%



Fresh Surface Water 65%

U.S. Reservoir Storage Capacity

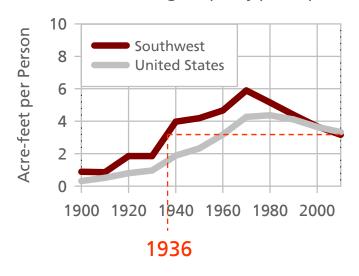


U.S. Reservoir Storage Capacity per Capita

Total

73,293

MGD



Water Supply 101

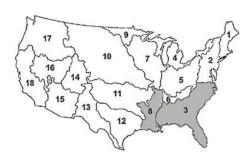
Southeast

Total 55,593 MGD Total Water Withdrawals: Southeast U.S. Fresh Surface Water 81%

Fresh Groundwater

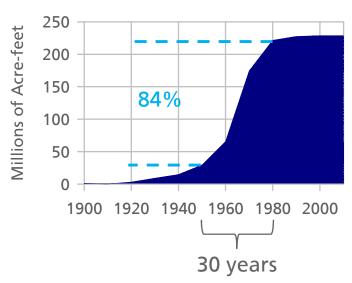
Major River Basins

- 3 South Atlantic-Gulf
- 8 Lower Mississippi

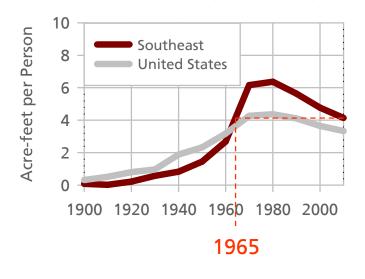


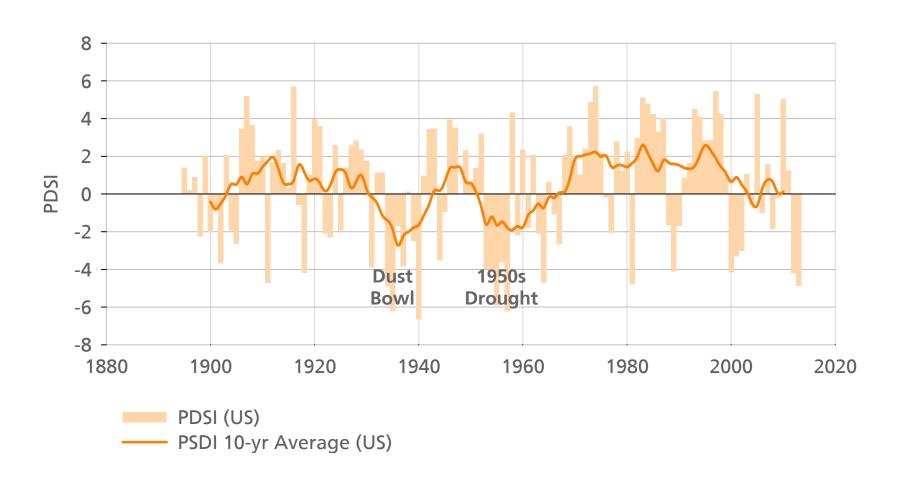


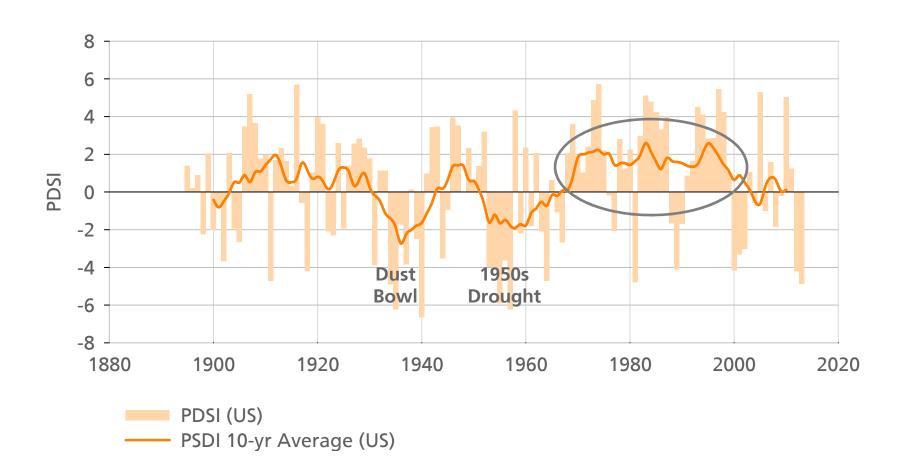
U.S. Reservoir Storage Capacity

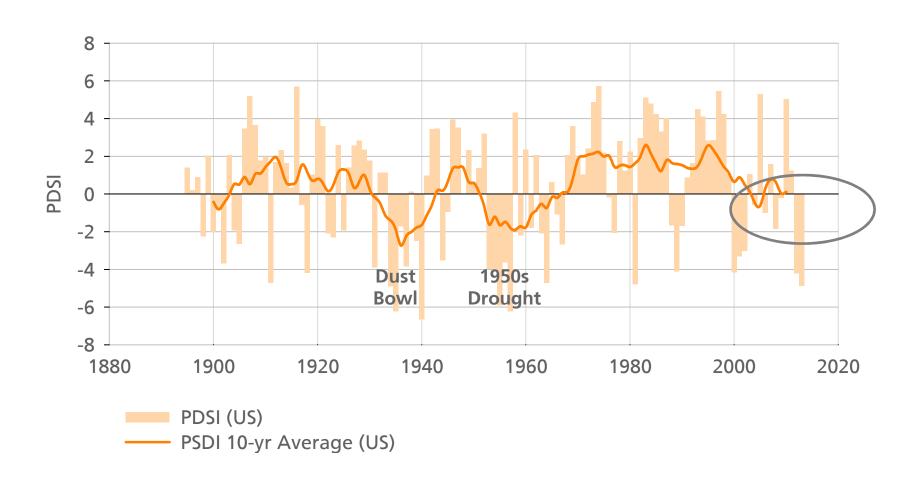


U.S. Reservoir Storage Capacity per Capita









Case Study

- Public vs. Private perspective (funding ≠ financing)
- Vista Ridge:The Solution for San Antonio





Vista Ridge Case Study



Public Funding

- Permitting and Compliance
- Design and Construction
- Operations and Maintenance

Vista Ridge Case Study



Public Funding

- Permitting and Compliance
- Design and Construction
- Operations and Maintenance

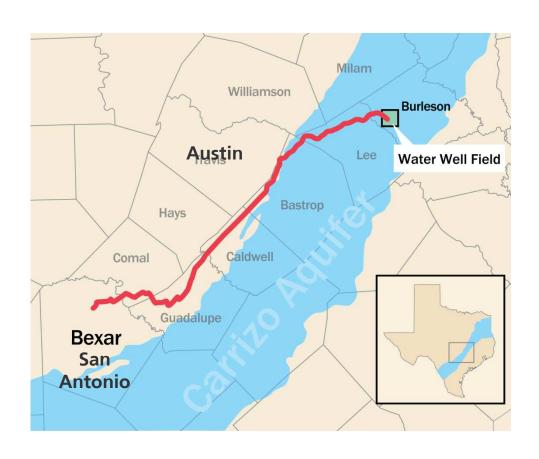
Private Financing

- Hydrology
- Water Rights (ownership)
- Permits (production and transport)
- Permitting and Compliance
- Design and Construction
- Operations and Maintenance
- Track-record of project developer

- Client's Credit Rating
- ContractPerformanceMeasures

Vista Ridge Project

- 45 MGD of private groundwater
- 18 production wells and 143-mile pipeline
- Turn-key private delivery (DBFOOT)
- \$844 M total investment



Vista Ridge Project

- 60-year contract term
- Customized risk allocation
- Unanimous approval of final contract by SAWS Board and City Council

