

# Drought Of 2008

## Kendall County, Texas

### Update: 12 January 2009

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Director, Cow Creek Groundwater Conservation District

# Water Supplies

## Boerne City Lake

Level: Full 42' - Currently Level 36' ,1" (12 Jan 09)

Record Low: Approximately 30' (1989)

## Canyon Reservoir

Level: Full 909' – Current Level 897.82' (12 Jan 09)

Record Low: Current Level (Previous Record 899.84' ,1984)

## Cow Creek Groundwater Conservation District

Monitor Wells (31): Overall Trend Downward

## Rainfall

Total In 2008: 14.74"

Record Low: 10.29" (1954)

Average: 33.74" (1893-2008)

# Boerne

- “Most of the Boerne homes of the 1850’ s got their water from springs or the crystal-clear Cibolo Creek. A few homes had shallow-water wells that were between 30 to 35 feet in depth.”
  - Garland Perry, Historic Images of Boerne

# City Of Boerne

## TerraServer-USA Web Site (2005)



# Frederick Creek Upstream At South School Street Feb To Nov





# Frederick Creek Downstream At South School Street Feb To Nov





# Cibolo Creek River Road Dam Feb To Nov





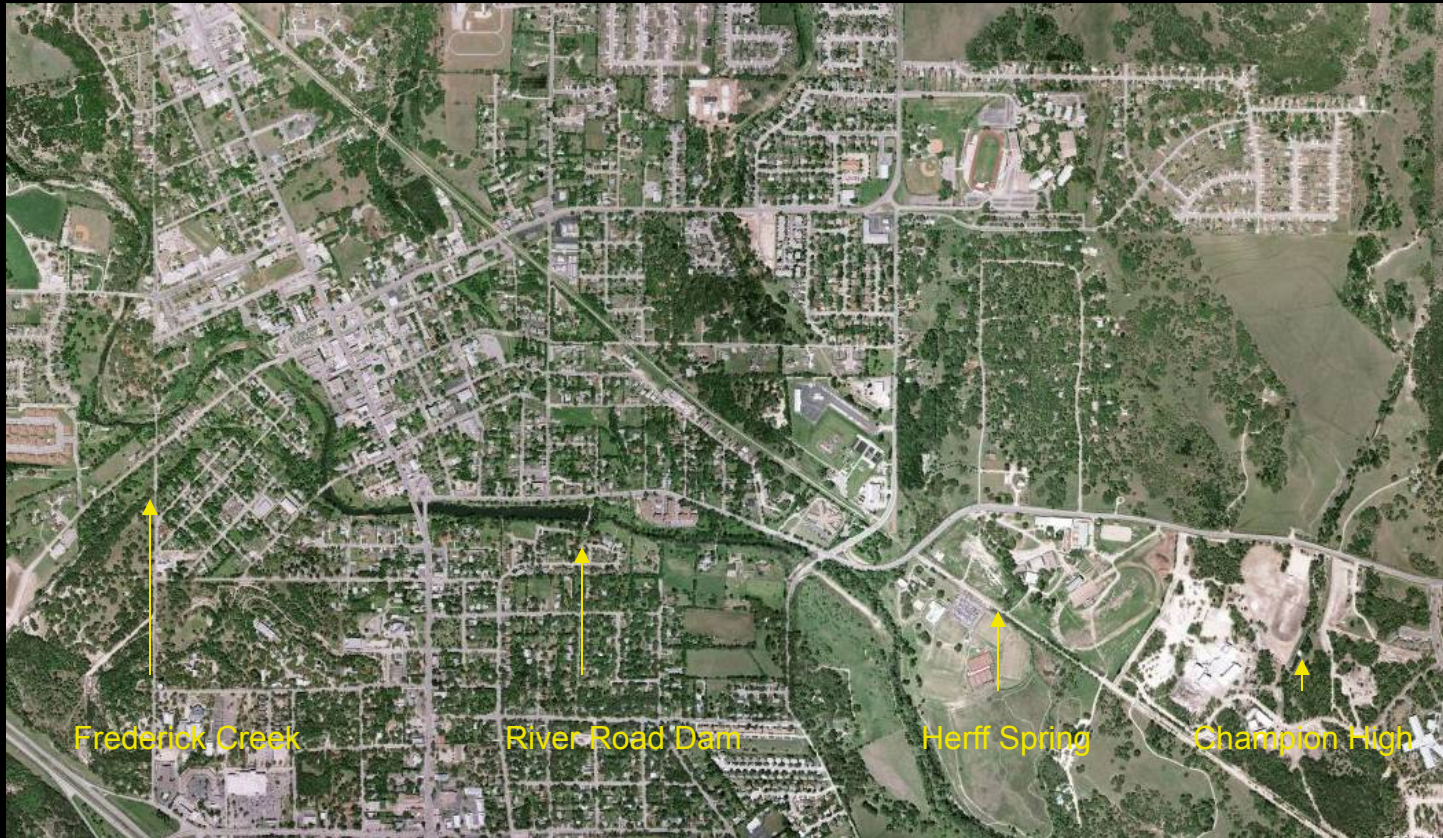
# Herff Spring City Park Road Aug To Dec





# City Of Boerne

## Microsoft Virtual Earth (2008)





# Champion High School

## Browns Creek Downstream At Hwy 46

### Aug 08 To Jan 09



# Facts And Observations

- Watersheds Of Hill Country
  - Baseflow Maintained By Discharge Of Springs
- Cibolo Creek Watershed
  - Numerous Spring Fed Creeks
- Discharge From Springs
  - Indicator Of An Aquifer System In Balance
    - Discharge Evidence Of Adequate Recharge
  - Indicator Of Stress On An Aquifer System
    - Discharge From Wells Is A Multiplier



# Way Ahead

- Increase Public Awareness
  - Encourage Aggressive Conservation Of Ground And Surface Water Supplies
  - Trinity Aquifer Is Not Just A Groundwater Resource – It Is A Surface Water Source
    - In Time Of Drought, Both Are Affected
  - Advocate For Improved Water Resources Management Strategy
    - Reduce Demand, Increase Supply, Change The Culture

# Water Conservation Strategy

- Recommend Year-Round Voluntary Conservation Measures
  - Minimize Water Use For Non-Essential Purposes
  - Typical Landscape Can Account For 60% Of Peak Usage
- Follow Rules Established By Water Supplier
  - Reflected In “Stages”
  - Enforced By Rules, Ordinance or Guideline
  - Can Prescribe Frequency. Example: Once A Week Watering
  - Can Prescribe Time Of Day. Example: Prohibit Landscape Watering By Hose End Sprinkler During 10:00 AM And 8:00 PM Year Round
  - Can Prescribe Method: Example: Sprinkler/Bucket/Hand-Held Hose
  - Can Restrict Or Prohibit Use. Example: Washing Cars and Boats
- Reduce Water Waste
  - Waste Is Always Prohibited
  - Water Running Into Street, Gutter, Or Parking Lot Is Waste
  - Violation Of Rules During Time Of Restricted Use Is Waste

# Current Drought Stages

- Cow Creek Groundwater District
  - Applicable To All Groundwater Users and Suppliers
  - [www.ccgcd.org](http://www.ccgcd.org)
- City of Boerne
  - Applicable To City Residents
  - [www.ci.boerne.tx.us](http://www.ci.boerne.tx.us)
- Guadalupe-Blanco River Authority
  - Applicable to Cordillera Ranch
  - [www.gbra.org](http://www.gbra.org)
- Public Water Supplier
  - Applicable to Aqua Texas
  - Newsletter Or Flyer In Bill



# Closing Thought

- Reduce Demand, Increase Supply,  
Change The Culture