Great American Desert

• Zebulon Pike 1810 – “these vast plains of the western hemisphere may become celebrated with the sandy deserts of Africa”

• Stephen Long 1820 - “this was a barren region unfit for the habitation of civilized man”

• Mark Twain 1861 – “we came to the shallow, yellow, muddy South Platte, with its low banks and its scattering flat sandbars and pygmy islands – a melancholy stream straggling through the center of the enormous flat plain, and only saved from being impossible to find with the naked eye by its sentinel rank of scattering trees standing on either bank. The Platte was up they said – which made me wish I could see it when it was down, if it could look any sicker and sorrier’
Desert Myth to Manifest Destiny

• 1859 Gold Rush

• Beginning of Irrigation – 60’s, 70’s, and 80’s

• By end of 19th Century, the South Platte River became a perennial stream flowing into Nebraska and the river was overappropriated in CO during much of the irrigation season
DENVER WATER WORKS 1880
Water Development Eras

• Reservoir Development
• Transmountain Diversions
• Wells
• Water Rights Transfers
• Artificial Recharge
• Water Conservation
South Platte River Compact

Important Dates

• 1859-1897 S. Platte in CO fully appropriated
• 6-14-1897 Western Canal -120 cfs
• 1911 Wyo. v. CO - Laramie River
• 1916 NE sues CO
• 1923 NE signs South Platte Compact
• 1923--- Interstate comity
South Platte River Compact
Highlights

• Creates upper and lower sections
• Flow of the river defined
• 10-15 thru 4-1 CO has full use* of waters
• 4-1 thru 10-15 No CO diversions in lower section junior to 6-14-1897 if stateline flow is under 120 cfs at interstate gaging station
• Lodgepole Creek
• Article VI
South Platte River Compact
Observations

• Highlights
  – Upper Section firewall at Balzac
  – No volumetric delivery obligations
  – No compact administrative body

• Things to consider
  – Wells
  – Diversion of waters outside of the state
  – ESA vs compact
Current Issues

• Historic development methods are increasingly difficult
• Environmental Constraints/Permitting
• Water Related Recreation/Healthy Streams
• Population Growth Continues
• SPRWOG
### Hydrology

**1989 - 2000**

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**Notes:**
- Years shown are water years.
- A water year spans October of the previous calendar year to September of the current year (all within the indicated water year).
- Annual values and statistics are computed only on non-missing data.
- NC indicates that a value is not computed because of missing data or the data value itself is missing.
COLORADO HISTORIC AVERAGE ANNUAL STREAM FLOWS
(acre feet)

408,900

PREPARED BY THE HYDROGRAPHIC BRANCH (2010 REVISION)
HISTORIC AVERAGES OBTAINED FROM USGS WATER DATA REPORT CO-98

OFFICE OF THE STATE ENGINEER
COLORADO DIVISION OF WATER RESOURCES

YR 1999