



Partners in Hydraulics

Bureau of Reclamation

and

Colorado State University

Neil S. Grigg
Bureau 75th Anniversary
August 18, 2005



Before Settlement



Water and the West—the Early Days



Time Lines

- 1803—Lewis and Clark
- 1840s—Oregon/Santa Fe Trails
- 1876—Colorado Constitution
- 1880s—Elwood Mead at CSU
- 1903—Reclamation Act
- 1920—Early hydraulic research
- 1930—Lab at CSU

Frontier—John Wesley Powell



Rouse's History

**HYDRAULICS, FLUID MECHANICS,
AND HYDROLOGY AT
COLORADO STATE UNIVERSITY**

**EDITED BY
HUNTER ROUSE**



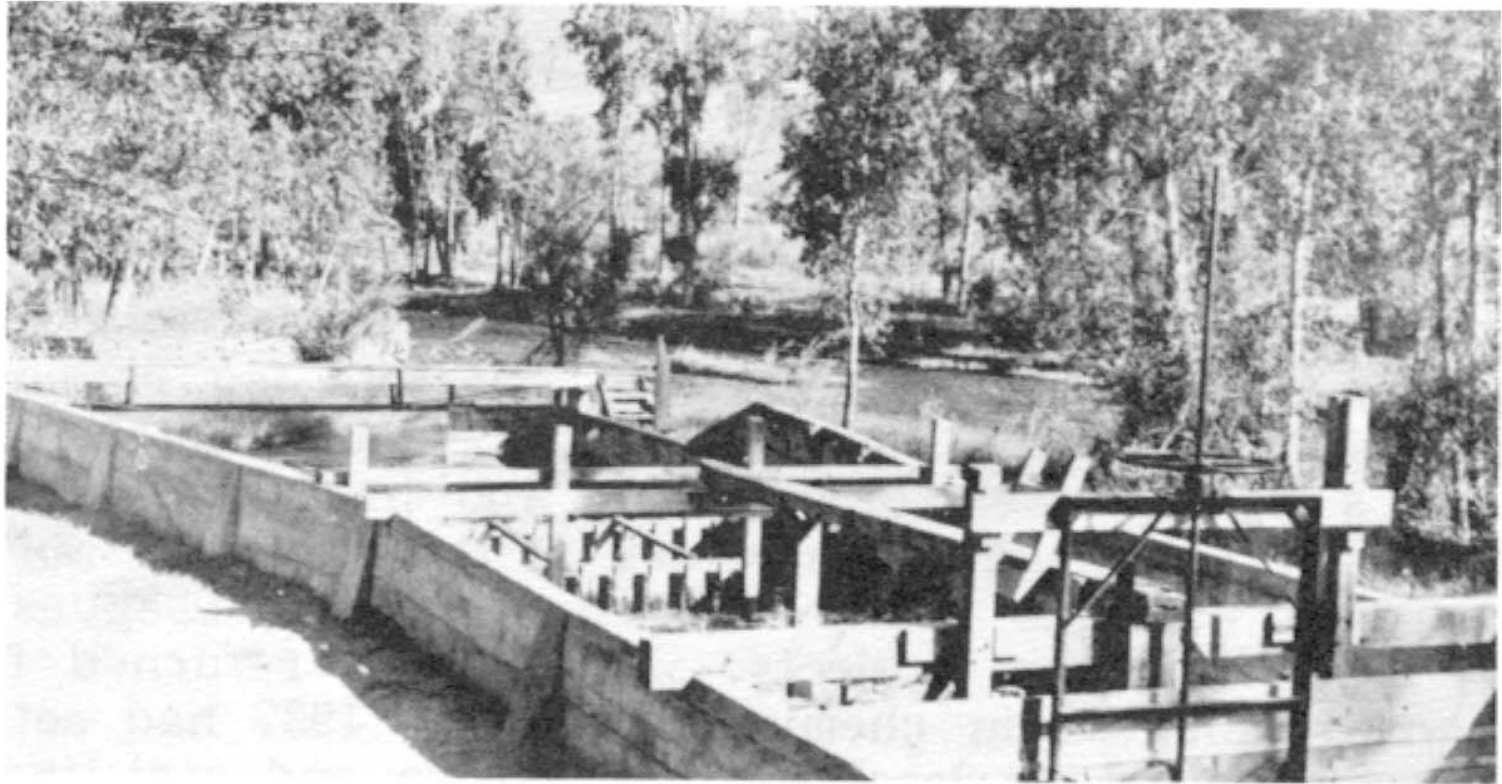
**Engineering Research Center
Colorado State University
Fort Collins**

Elwood Mead at CSU



Elwood Mead

Bellvue Lab



Bellvue laboratory channel

Lab setup at Bellvue

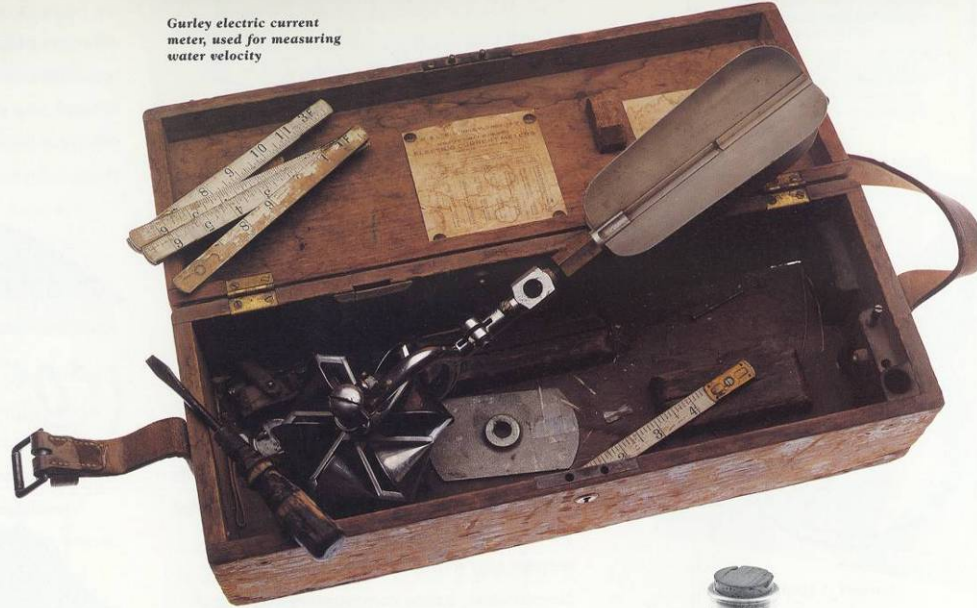


ing tank with recording instrumentation

Early research

5 EARLY RESEARCH: THE DUTY OF WATER

Gurley electric current
meter, used for measuring
water velocity



While faculty primarily concentrated on building the undergraduate curricula during the Lory years, research activity remained confined to the Agricultural Experiment Station. Agricultural research had been initiated by Ainsworth Blount as early as 1879, and engineering faculty were conducting experiments in irrigation by 1884. After the Experiment Station was



CSU and Bureau Lab Activity



Emory Lane



James Ball

Bureau Lab



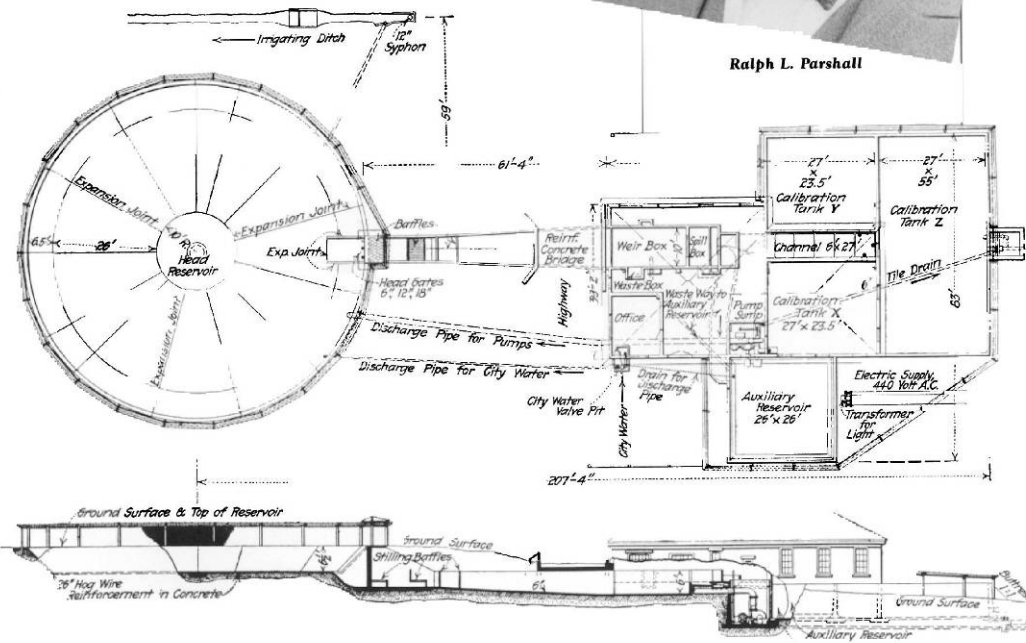
Parshall and his flume

within the original Land
 on. Under these cir-
 standable that even
 drawing five times
 students as agricul-
 field granted the vast
 egress.
 graduate engineering
 AC were further im-
 location in an agricul-
 addition, the state's
 mining, was already
 utable School of Mines.
 g work of Mead and
 ng the field of irrigation
 doubtful that engineer-
 re started as soon as it

flume. In 1910 Victor M. Cone arrived to head
 the USDA's local Irrigation Investigations
 Office. With the help of a young civil and
 irrigation engineering instructor, Ralph L.
 Parshall, Cone designed a laboratory con-
 structed west of the main campus in an area
 now occupied by the Lory Student Center.
 The lab featured a reservoir, approximately
 85 feet in diameter and 7 feet deep, with a
 flow channel that travelled downhill into sev-
 eral concrete tanks housed in the laboratory
 building.



Ralph L. Parshall



Plan and elevation of
 USDA Hydraulics
 Laboratory designed by
 Victor M. Cone and Ralph
 Parshall, 1912

Parshall Lab



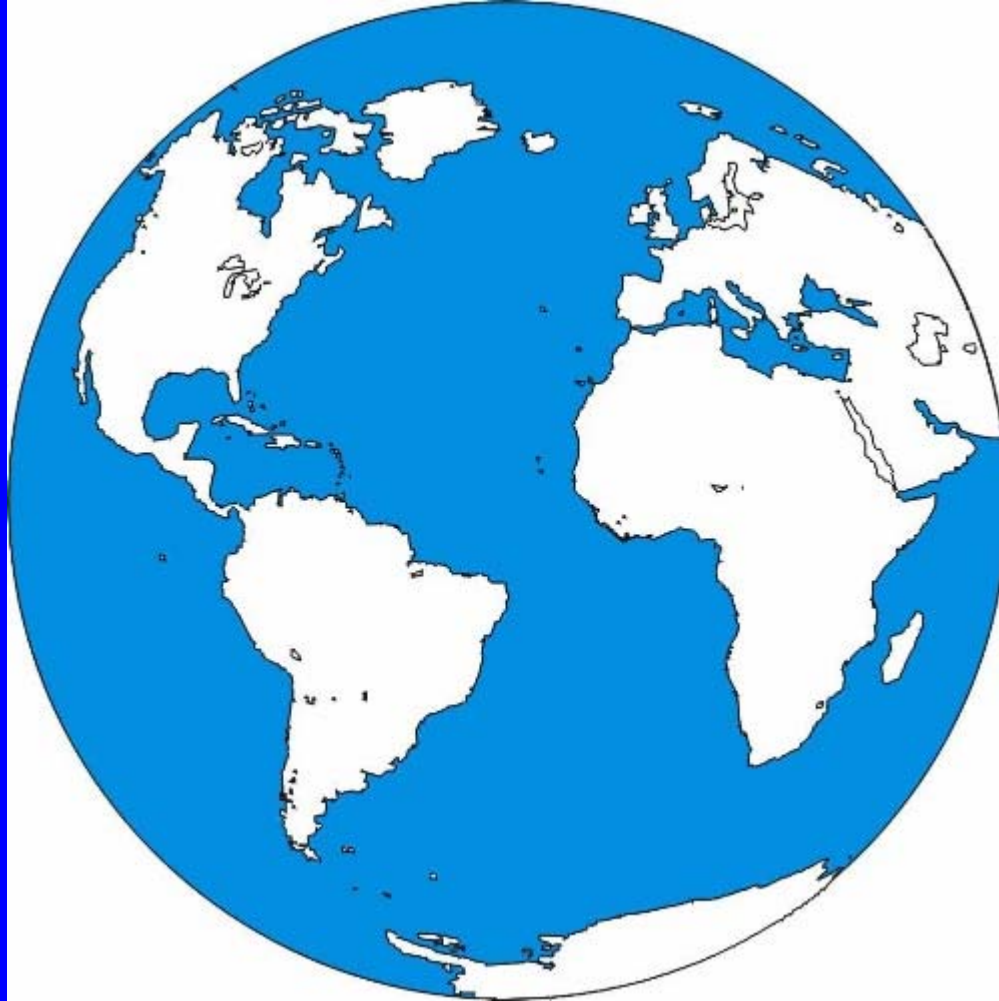
CSU Lab about 1950



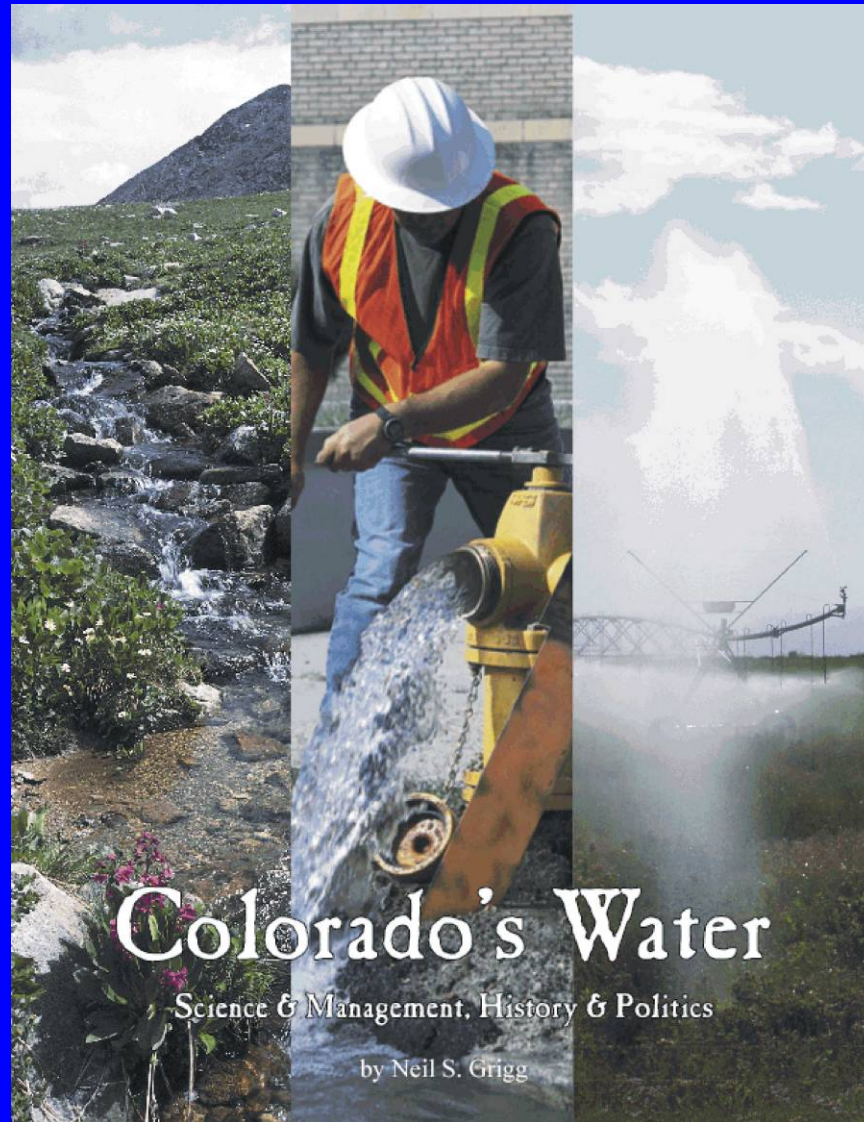
Adams Tunnel



CSU Water Outreach



Colorado's Water



Colorado's Water

Science & Management, History & Politics

by Neil S. Grigg



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