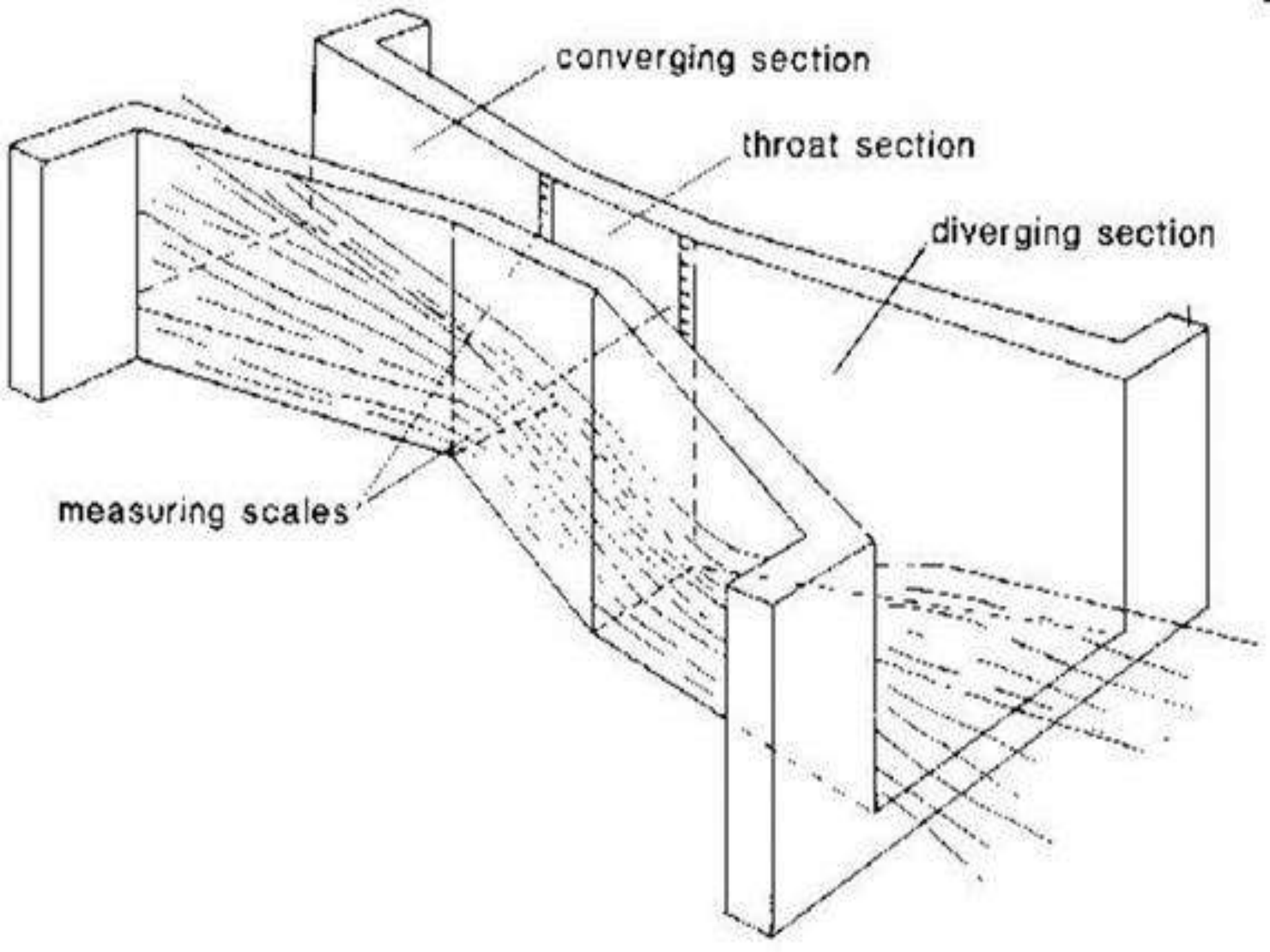

Inventor Ralph Parshall with early
Parshall Measuring Flume


HR PARKING
3 AM TO 6 PM


converging section
throat section
diverging section
measuring scales


Division 6 Water Resources
Erin Light, Division Engineer
Brian Romig, Water Commissioner
Andy Schaffner, Water Commissioner

# Section 5, Article XVI of the Colorado Constitution

The water of every natural stream, not heretofore appropriated, within the state of Colorado, is hereby declared to be the property of the public, and the same is dedicated to the use of the people of the state, subject to appropriation as hereinafter provided.

# CRS 37-92-103(3) and (4)

(3) Appropriation is the application of a specified portion of the waters of the state to a beneficial use pursuant to the procedures prescribed by law.

(4) Beneficial use is the use of that amount of water that is reasonable and appropriate under reasonably efficient practices to accomplish without waste the purpose for which the appropriation is lawfully made.

# Prior Appropriation Doctrine

- Prior Appropriation Doctrine means those that put the water to use first are entitled to get their water first during periods of water shortage – first in time, first in right.
- An appropriation is made when an individual physically takes water from a stream (or underground aquifer) and places that water to some type of beneficial use. The first person to ever appropriate water and apply it to use has the first right to use that water within a particular stream system. This person (after receiving a court decree verifying their priority status) then becomes the senior water right holder on the stream, and that water right must be satisfied before any other water rights can be fulfilled.

# CRS 37-92-103(10)

(10)Priority means the seniority by date as of which a water right is entitled to use water and the relative seniority of a water right in relation to other water rights deriving their supply of water from a common source.

# Priority

- In order to establish a priority in the water rights administration system one must first appropriate water and then receive a court decree verifying their “priority status”.
- The priority of a water right is based on when the appropriation was first made and when an application was filed with the court for recognition of the appropriation.

# Water Administration Number (aka Holt Number)

- The adjudication date, which now-a-days is the last day of the year in which an application is filed with the court, and the appropriation date are used in determining a water right's priority or its administration number.
- The administration number is used to prioritize water rights from senior to junior.
- The most senior water right is the water right with the lowest administration number.
- On the Yampa River, the most senior right has an administration number of 11616.00000 and is decreed to the Marshall Roberts Ditch and the Williams Irrigation Ditch.

# Water Rights Administration

- The process of allocating water to various water users is referred to as "Water Rights Administration”, and is the responsibility of the Division of Water Resources.

# CRS 37-92-501

The state and division engineers shall administer, distribute, and regulate the waters of the state in accordance with the constitution of the State of Colorado; the provisions of Title 37, Article 92 of the Colorado Revised Statutes (Water Right Determination and Administration Act of 1969); and other applicable laws.

# Example

Imagine a stream system with three water rights on it. The user with the earliest priority (lowest administration number) water right is for 2 cfs, the second priority water right is for 2 cfs, and the third priority water right is for 1 cfs of water. If the stream is carrying 5 cfs of water or more, all of the rights on this stream can be fulfilled. However, if the stream is carrying only 3 cfs of water the water right with the third priority will not receive any water, the second priority right will receive 1 cfs and the earliest priority right will receive its full 2 cfs.

# What is a call?

- However in this example, the allocation of water to the earliest priority and second priority rights will only occur if a call is placed on the stream system by one of these two priority water right owners or users.
- A call can be placed by any water right owner or user when it is discovered that their water right is not being satisfied.

# How does one place a call for their water right?

- In order to place a call (and more importantly for the water commissioner to honor a call) several requirements must be met:
  - The water diverted must be measured (i.e. there must be an **operable measuring device**) and the amount of water being diverted must be less than that amount decreed to the water right for which the call is being placed.
  - There must be a water tight dam at the point of diversion (unless there is reservoir water that must be delivered by the water commissioner past this point – in which case an **operable headgate is required**).
  - There must be junior water rights being diverted upstream to curtail.
  - The water right being called for must be applied to its decreed beneficial use and place of use.
  - The water diverted must be applied to beneficial use without waste.

# Who can divert water when a call is in place?

- An owner or user of a senior water right to the one being called for whose structure is equipped with an **operable headgate and measuring device**.
- Once the call is satisfied by curtailing the most junior diversions (including undecreed diversions) and diversions by structures with no **operable headgate and/or measuring device** (regardless of the priority of the diversion), the next most senior rights, yet junior to the calling right may, continue to divert.

# Do you see a theme?

In order to place a call and in order to divert water in priority when a call is in place, an owner or user of a water right must have an operable headgate and measuring device.

# The Value of a Measuring Device

- The value of a measuring device goes far beyond water administration.
- With a suitable measuring device, accurate records of diversions being made under a water right can be obtained by both the water right owner or user and the water commissioner.
- Absent a measuring device the amount of water being diverted is a guess.
- How good is your guess at how much water is being diverted at any given time?
- How good is the water commissioner's?

# CRS 37-84-112

The owners of any ditch, canal, flume or reservoir in this state, taking water from any stream shall erect where necessary and maintain in good repair, at the point of intake of such ditch, canal, flume or reservoir, a suitable and proper headgate AND suitable and proper measuring flumes, weirs and devices.

# The Value of a Water Right

- The value of a water right is based on its beneficial use.
- Absent a measuring device that allows for accurate measurement of the diversion of a water right, the value of the water right is as good as your guess or the water commissioner's guess.
- Absent records of diversion of water under a water right, the water right has no value.

# The Value of Record Keeping

- Each water commissioner in Division 6 has upwards of 200 active structures, if not more, that they must visit, ideally multiple times, in a season. When the water commissioners are administering calls their visits to structures on systems not on call are greatly reduced.
- In order to maintain the value of a water right, water right owners should maintain their own records.
- And because the Division of Water Resources' records are the official records, these records should be provided to the water commissioner and division engineer annually.

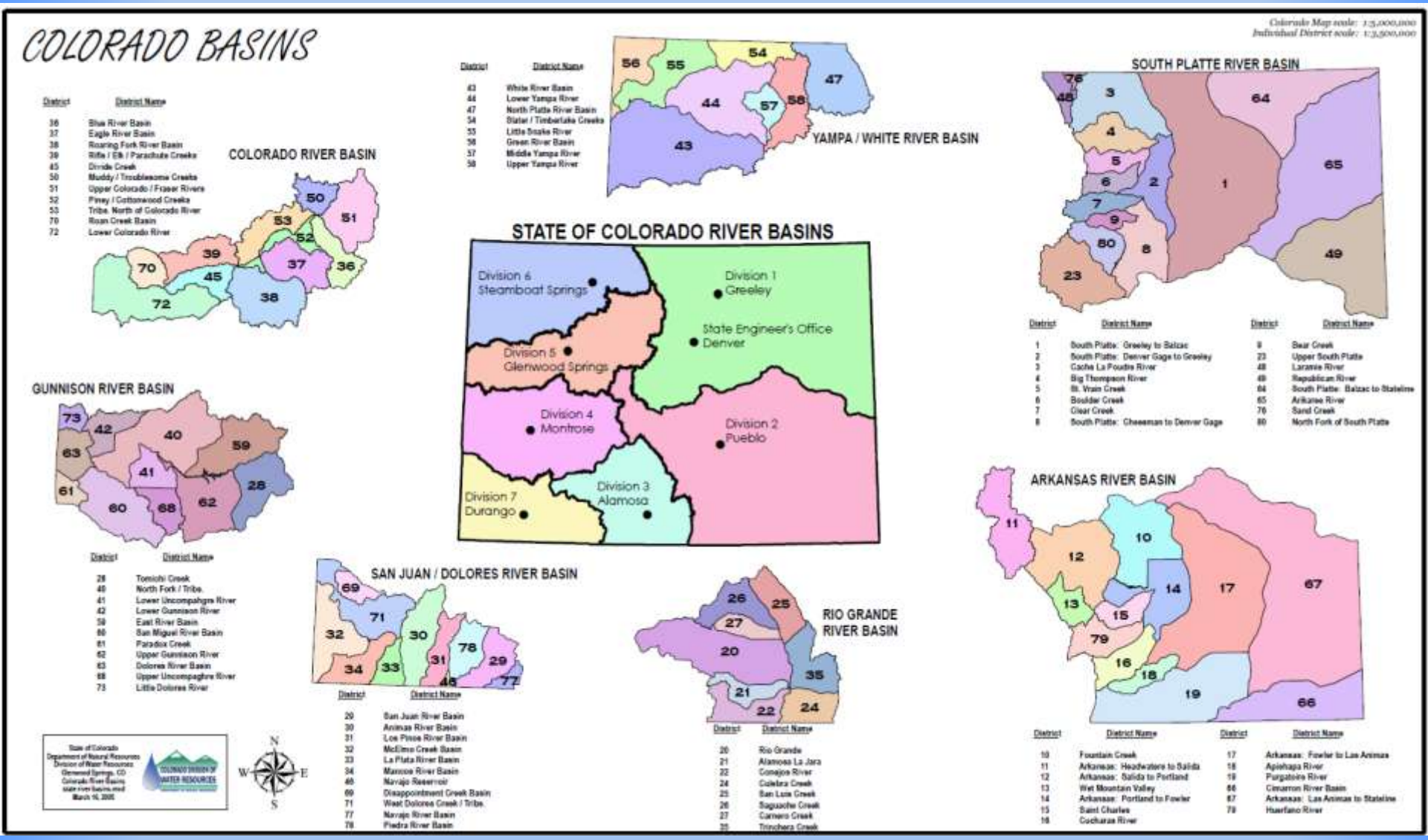
# CRS 37-92-502(5)(a)

The state engineer and division engineers have the authority to order any owner or user of a water right to install and maintain at such owner's or user's expense necessary meters, gauges, or other measuring devices and to report at reasonable times to the appropriate division engineer the readings of such meters, gauges, or other measuring devices.

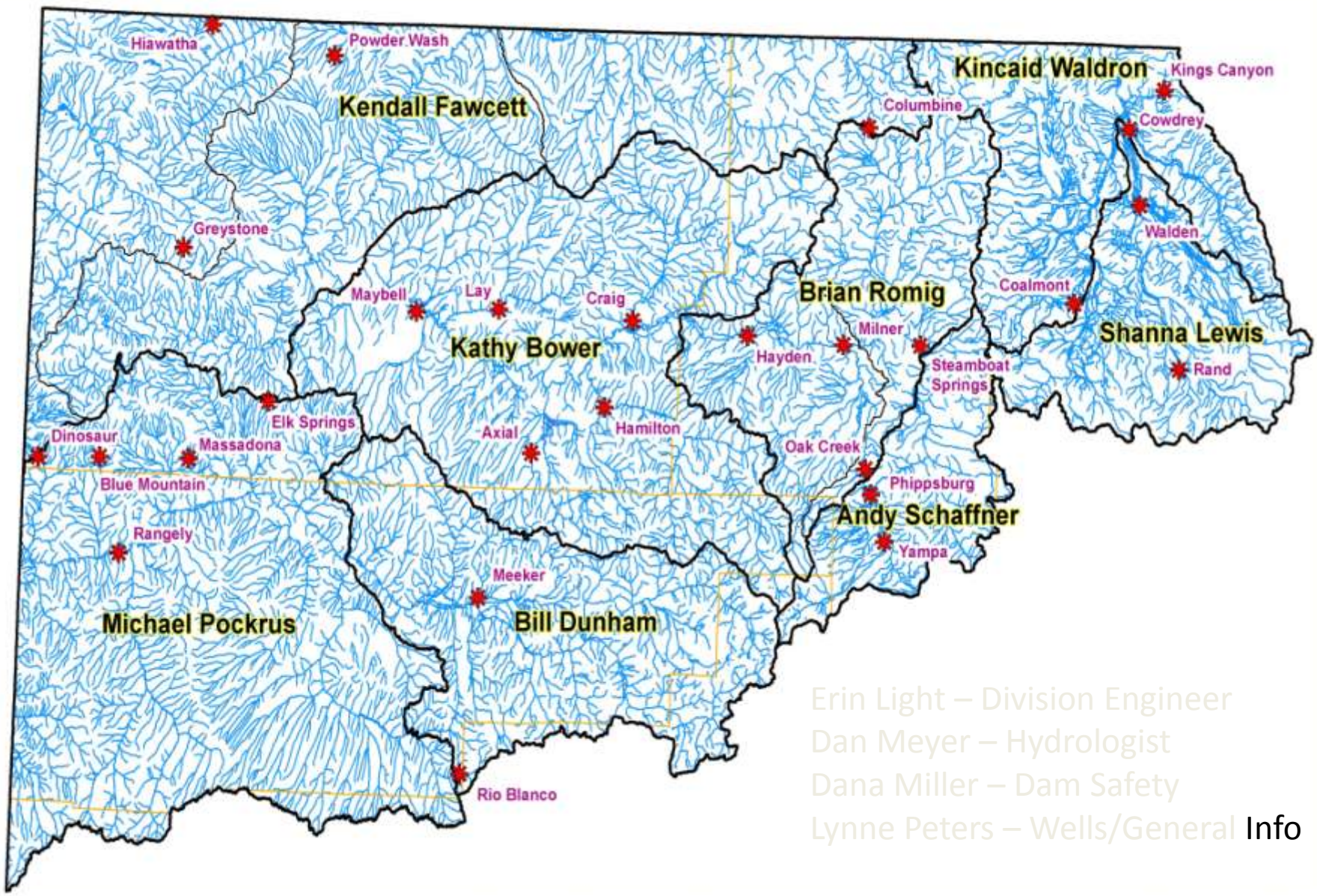
# WATER MEASUREMENTS

WATER COMMISSIONERS IN THE FIELD

# Water Commissioners in the State



# DIVISION SIX




Erin Light – Division Engineer
Dan Meyer – Hydrologist
Dana Miller – Dam Safety
Lynne Peters – Wells/General Info

# Water Commissioner Responsibilities

- Day to Day Administration
  - Setting the Call on the Stream Based on Supply and Demand
  - Assuring Diversions in Priority for Decreed Uses Without Waste
  - Assuring Diversions Are Measured/Data Recorded
  - Delivery of Augmentation and Other Water After Assessing Transit Losses
  - Operating Exchanges
  - Assuring Other Decree Conditions in Augmentation and Change Cases Are Complied With
  - Court Cases/Field Inspections

- Review of Accounting and Maintenance of Diversion Records

# What Data Do Water Commissioners Collect and Measure?

- Ditches – a direct diversion from the stream
- Wells
- Reservoirs
- Springs/Seeps/Mines/Pipelines/Powerplants
- Measuring Points
- Minimum Flow Reaches/Reaches
- Recharge Areas
- Well Fields

# Why do we collect measurements?

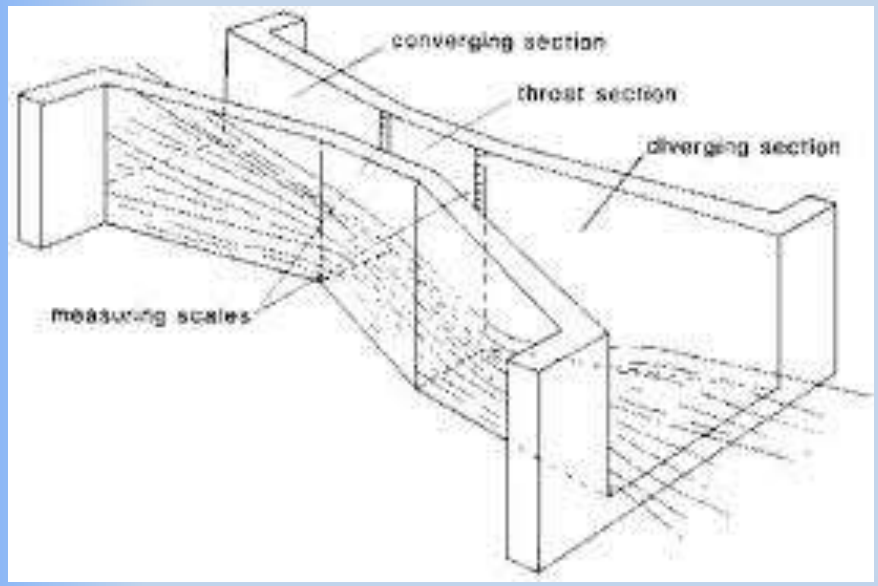
We are required by law to record water usage as best we can.

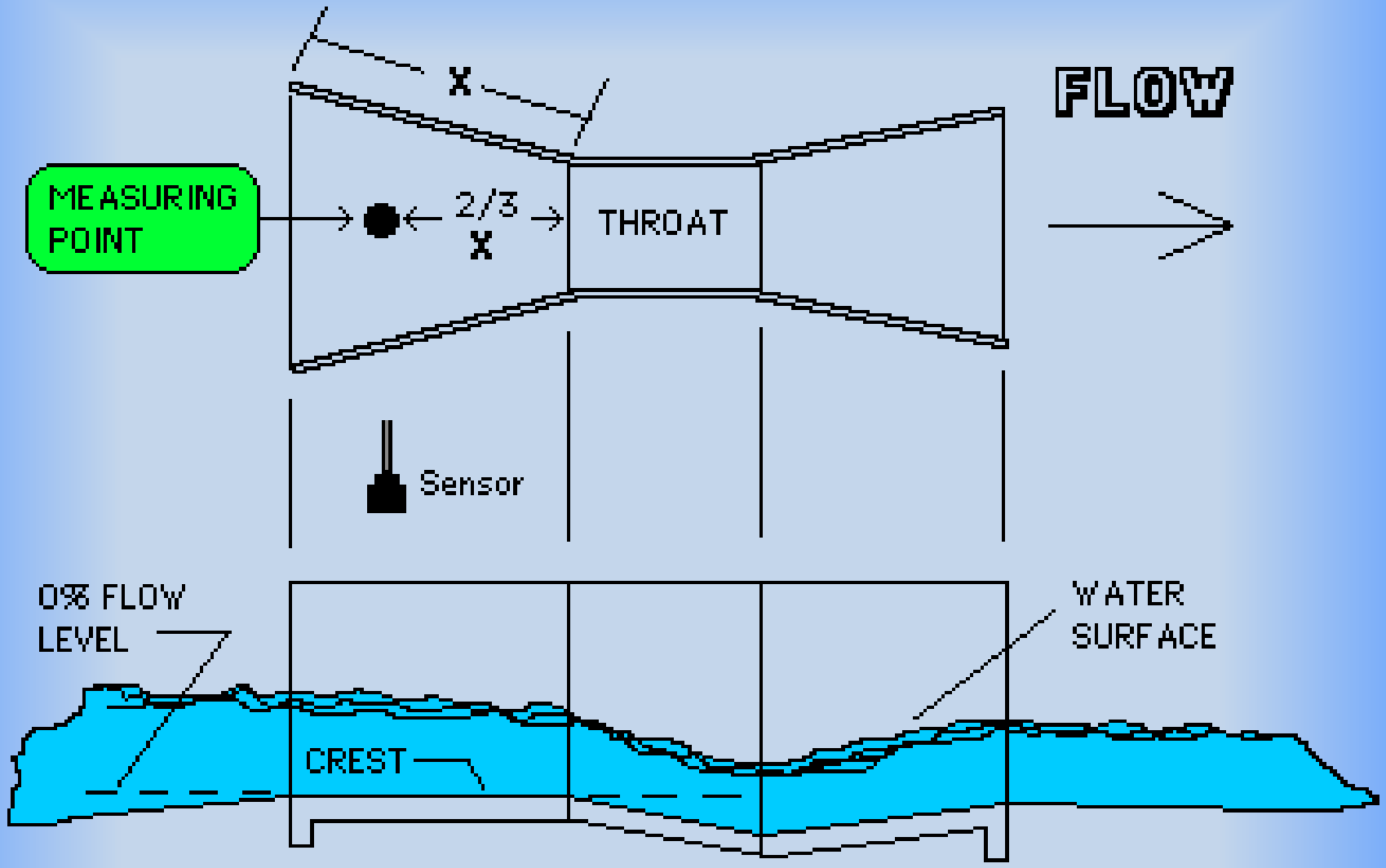
Your water right is only as valuable as what you use, measuring the water, helps determine that use.

For “call” type situations, you are limited to your decreed uses and water right amount.

# Measuring Stream Diversions
# The Parshall Flume

The Parshall Measuring Flume



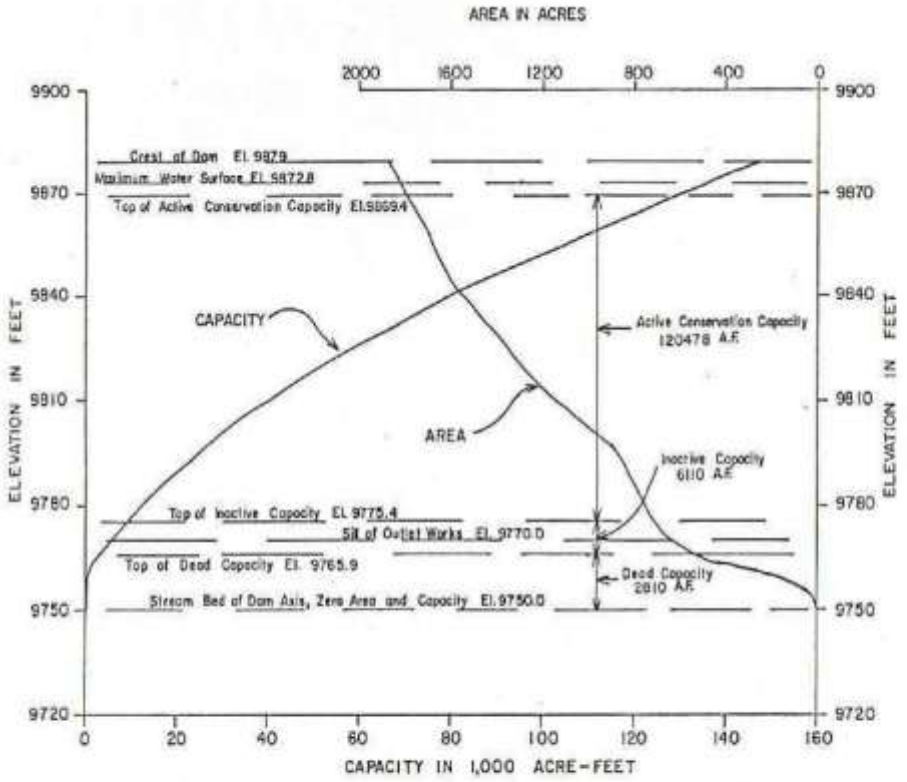

PARSHALL FLUME


09/30/2012


500
1000
1500
2000
2500
3000
3500
4000
GALLONS PER MINUTE
000000
GALLONS X 1000
HEMET, CALIFORNIA

# Measuring Storage in Reservoirs

Area Capacity Table for Reservoirs (Jurisdiction Dams Required)




| ELEVATION (FEET) | AREA (ACRES) | CAPACITY (ACRE-FEET) |
|---|---|---|
| 9750 | 0 | 0 |
| 9755 | 5 | 12 |
| 9760 | 202 | 530 |
| 9765 | 519 | 2332 |
| 9765.9 | 542 | 2810 |
| 9770 | 649 | 5252 |
| 9775 | 705 | 8637 |
| 9775.4 | 709 | 8920 |
| 9780 | 756 | 12290 |
| 9785 | 798 | 16175 |
| 9790 | 834 | 20255 |
| 9795 | 866 | 24505 |
| 9800 | 947 | 29037 |
| 9805 | 1051 | 34032 |
| 9810 | 1140 | 39510 |
| 9815 | 1225 | 45422 |
| 9820 | 1286 | 51700 |
| 9825 | 1355 | 58302 |
| 9830 | 1417 | 65232 |
| 9835 | 1492 | 72505 |
| 9840 | 1551 | 80112 |
| 9845 | 1601 | 87992 |
| 9850 | 1645 | 96107 |
| 9855 | 1681 | 104422 |
| 9860 | 1718 | 112920 |
| 9865 | 1755 | 121602 |
| 9869.4 | 1789 | 129398 |
| 9870 | 1794 | 130472 |
| 9872.8 | 1816 | 135525 |
| 9875 | 1833 | 139539 |
| 9879 | 1876 | 146960 |

NOTES

Data from U.S.B.R. Drawing Nos. 382-706-1017, 382-706-1018 and 382-706-1020; scale 1"=400'; topography by Air Photo Surveys Incorporated, Invitation No. DS-6005, Contract No. 14-06-D-4921, Schedule I; and U.S.B.R. lake bottom soundings made January 29, 1964 to March 20, 1964.

Storage capacities indicated as available are for 1964 survey conditions of sediment and may ultimately be encroached upon by sediment accumulation.

Original topography adjusted for dam location and borrow areas. Electronic computer compiled area and capacity data at one-foot intervals (from a smooth curve through all control points) by least squares method.

TURQUOISE LAKE
FRYINGPAN-ARKANSAS PROJECT


| Flume Measurement | FLUME SIZE IN INCHES | | | | |
|---|---|---|---|---|---|
| | 3 | 6 | 9 | 12 | 18 |
| **0.00** | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| **0.01** | 0.001 | 0.001 | 0.003 | 0.004 | 0.005 |
| **0.02** | 0.002 | 0.004 | 0.008 | 0.010 | 0.015 |
| **0.03** | 0.004 | 0.008 | 0.014 | 0.019 | 0.027 |
| **0.04** | 0.007 | 0.013 | 0.022 | 0.030 | 0.042 |
| **0.05** | 0.010 | 0.018 | 0.031 | 0.042 | 0.060 |
| **0.06** | 0.013 | 0.024 | 0.041 | 0.055 | 0.079 |
| **0.07** | 0.016 | 0.031 | 0.052 | 0.070 | 0.100 |
| **0.08** | 0.020 | 0.038 | 0.064 | 0.086 | 0.123 |
| **0.09** | 0.024 | 0.046 | 0.077 | 0.102 | 0.148 |
| **0.10** | 0.028 | 0.054 | 0.091 | 0.120 | 0.174 |
| **0.11** | 0.033 | 0.063 | 0.105 | 0.139 | 0.201 |
| **0.12** | 0.037 | 0.072 | 0.120 | 0.159 | 0.230 |
| **0.13** | 0.042 | 0.082 | 0.135 | 0.179 | 0.260 |
| **0.14** | 0.047 | 0.092 | 0.152 | 0.201 | 0.292 |
| **0.15** | 0.053 | 0.103 | 0.168 | 0.223 | 0.324 |
| **0.16** | 0.058 | 0.114 | 0.186 | 0.246 | 0.358 |
| **0.17** | 0.064 | 0.125 | 0.204 | 0.270 | 0.393 |
| **0.18** | 0.070 | 0.137 | 0.223 | 0.294 | 0.429 |
| **0.19** | 0.076 | 0.149 | 0.242 | 0.319 | 0.466 |
| **0.20** | 0.082 | 0.162 | 0.262 | 0.345 | 0.505 |
| **0.21** | 0.089 | 0.175 | 0.282 | 0.372 | 0.544 |
| **0.22** | 0.095 | 0.188 | 0.303 | 0.399 | 0.584 |
| **0.23** | 0.102 | 0.202 | 0.324 | 0.427 | 0.626 |
| **0.24** | 0.109 | 0.216 | 0.346 | 0.456 | 0.668 |
| **0.25** | 0.116 | 0.230 | 0.368 | 0.485 | 0.711 |
| **0.26** | 0.123 | 0.245 | 0.391 | 0.515 | 0.756 |
| **0.27** | 0.131 | 0.260 | 0.414 | 0.545 | 0.801 |
| **0.28** | 0.138 | 0.276 | 0.438 | 0.576 | 0.847 |
| **0.29** | 0.146 | 0.291 | 0.462 | 0.608 | 0.894 |
| **0.30** | 0.154 | 0.307 | 0.487 | 0.640 | 0.942 |
| **0.31** | 0.162 | 0.324 | 0.512 | 0.673 | 0.990 |
| **0.32** | 0.170 | 0.340 | 0.537 | 0.706 | 1.040 |
| **0.33** | 0.179 | 0.357 | 0.563 | 0.740 | 1.090 |
| **0.34** | 0.187 | 0.375 | 0.589 | 0.774 | 1.142 |
| **0.35** | 0.196 | 0.392 | 0.616 | 0.809 | 1.194 |
| **0.36** | 0.204 | 0.410 | 0.643 | 0.845 | 1.246 |
| **0.37** | 0.213 | 0.428 | 0.671 | 0.881 | 1.300 |

June 2, 2013


| Flume Measurement | FLUME SIZE IN INCHES | | | | |
|---|---|---|---|---|---|
| | 3 | 6 | 9 | 12 | 18 |
| **0.00** | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| **0.01** | 0.001 | 0.001 | 0.003 | 0.004 | 0.005 |
| **0.02** | 0.002 | 0.004 | 0.008 | 0.010 | 0.015 |
| **0.03** | 0.004 | 0.008 | 0.014 | 0.019 | 0.027 |
| **0.04** | 0.007 | 0.013 | 0.022 | 0.030 | 0.042 |
| **0.05** | 0.010 | 0.018 | 0.031 | 0.042 | 0.060 |
| **0.06** | 0.013 | 0.024 | 0.041 | 0.055 | 0.079 |
| **0.07** | 0.016 | 0.031 | 0.052 | 0.070 | 0.100 |
| **0.08** | 0.020 | 0.038 | 0.064 | 0.086 | 0.123 |
| **0.09** | 0.024 | 0.046 | 0.077 | 0.102 | 0.148 |
| **0.10** | 0.028 | 0.054 | 0.091 | 0.120 | 0.174 |
| **0.11** | 0.033 | 0.063 | 0.105 | 0.139 | 0.201 |
| **0.12** | 0.037 | 0.072 | 0.120 | 0.159 | 0.230 |
| **0.13** | 0.042 | 0.082 | 0.135 | 0.179 | 0.260 |
| **0.14** | 0.047 | 0.092 | 0.152 | 0.201 | 0.292 |
| **0.15** | 0.053 | 0.103 | 0.168 | 0.223 | 0.324 |
| **0.16** | 0.058 | 0.114 | 0.186 | 0.246 | 0.358 |
| **0.17** | 0.064 | 0.125 | 0.204 | 0.270 | 0.393 |
| **0.18** | 0.070 | 0.137 | 0.223 | 0.294 | 0.429 |
| **0.19** | 0.076 | 0.149 | 0.242 | 0.319 | 0.466 |
| **0.20** | 0.082 | 0.162 | 0.262 | 0.345 | 0.505 |
| **0.21** | 0.089 | 0.175 | 0.282 | 0.372 | 0.544 |
| **0.22** | 0.095 | 0.188 | 0.303 | 0.399 | 0.584 |
| **0.23** | 0.102 | 0.202 | 0.324 | 0.427 | 0.626 |
| **0.24** | 0.109 | 0.216 | 0.346 | 0.456 | 0.668 |
| **0.25** | 0.116 | 0.230 | 0.368 | 0.485 | 0.711 |
| **0.26** | 0.123 | 0.245 | 0.391 | 0.515 | 0.756 |
| **0.27** | 0.131 | 0.260 | 0.414 | 0.545 | 0.801 |
| **0.28** | 0.138 | 0.276 | 0.438 | 0.576 | 0.847 |
| **0.29** | 0.146 | 0.291 | 0.462 | 0.608 | 0.894 |
| **0.30** | 0.154 | 0.307 | 0.487 | 0.640 | 0.942 |
| **0.31** | 0.162 | 0.324 | 0.512 | 0.673 | 0.990 |
| **0.32** | 0.170 | 0.340 | 0.537 | 0.706 | 1.040 |
| **0.33** | 0.179 | 0.357 | 0.563 | 0.740 | 1.090 |
| **0.34** | 0.187 | 0.375 | 0.589 | 0.774 | 1.142 |
| **0.35** | 0.196 | 0.392 | 0.616 | 0.809 | 1.194 |
| **0.36** | 0.204 | 0.410 | 0.643 | 0.845 | 1.246 |
| **0.37** | 0.213 | 0.428 | 0.671 | 0.881 | 1.300 |

July 8, 2013


| Flume Measurement | FLUME SIZE IN INCHES | | | | |
|---|---|---|---|---|---|
| | 3 | 6 | 9 | 12 | 18 |
| **0.00** | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| **0.01** | 0.001 | 0.001 | 0.003 | 0.004 | 0.005 |
| **0.02** | 0.002 | 0.004 | 0.008 | 0.010 | 0.015 |
| **0.03** | 0.004 | 0.008 | 0.014 | 0.019 | 0.027 |
| **0.04** | 0.007 | 0.013 | 0.022 | 0.030 | 0.042 |
| **0.05** | 0.010 | 0.018 | 0.031 | 0.042 | 0.060 |
| **0.06** | 0.013 | 0.024 | 0.041 | 0.055 | 0.079 |
| **0.07** | 0.016 | 0.031 | 0.052 | 0.070 | 0.100 |
| **0.08** | 0.020 | 0.038 | 0.064 | 0.086 | 0.123 |
| **0.09** | 0.024 | 0.046 | 0.077 | 0.102 | 0.148 |
| **0.10** | 0.028 | 0.054 | 0.091 | 0.120 | 0.174 |
| **0.11** | 0.033 | 0.063 | 0.105 | 0.139 | 0.201 |
| **0.12** | 0.037 | 0.072 | 0.120 | 0.159 | 0.230 |
| **0.13** | 0.042 | 0.082 | 0.135 | 0.179 | 0.260 |
| **0.14** | 0.047 | 0.092 | 0.152 | 0.201 | 0.292 |
| **0.15** | 0.053 | 0.103 | 0.168 | 0.223 | 0.324 |
| **0.16** | 0.058 | 0.114 | 0.186 | 0.246 | 0.358 |
| **0.17** | 0.064 | 0.125 | 0.204 | 0.270 | 0.393 |
| **0.18** | 0.070 | 0.137 | 0.223 | 0.294 | |
| **0.19** | 0.076 | 0.149 | 0.242 | 0.319 | |
| **0.20** | 0.082 | 0.162 | 0.262 | 0.345 | |
| **0.21** | 0.089 | 0.175 | 0.282 | 0.373 | |
| **0.22** | 0.095 | 0.188 | 0.303 | 0.399 | 0.584 |
| **0.23** | 0.102 | 0.202 | 0.324 | 0.427 | 0.626 |
| **0.24** | 0.109 | 0.216 | 0.346 | 0.456 | 0.668 |
| **0.25** | 0.116 | 0.230 | 0.368 | 0.485 | 0.711 |
| **0.26** | 0.123 | 0.245 | 0.391 | 0.515 | 0.756 |
| **0.27** | 0.131 | 0.260 | 0.414 | 0.545 | 0.801 |
| **0.28** | 0.138 | 0.276 | 0.438 | 0.576 | 0.847 |
| **0.29** | 0.146 | 0.291 | 0.462 | 0.608 | 0.894 |
| **0.30** | 0.154 | 0.307 | 0.487 | 0.640 | 0.942 |
| **0.31** | 0.162 | 0.324 | 0.512 | 0.673 | 0.990 |
| **0.32** | 0.170 | 0.340 | 0.537 | 0.706 | 1.040 |
| **0.33** | 0.179 | 0.357 | 0.563 | 0.740 | 1.090 |
| **0.34** | 0.187 | 0.375 | 0.589 | 0.774 | 1.142 |
| **0.35** | 0.196 | 0.392 | 0.616 | 0.809 | 1.194 |
| **0.36** | 0.204 | 0.410 | 0.643 | 0.845 | 1.246 |
| **0.37** | 0.213 | 0.428 | 0.671 | 0.881 | 1.300 |

.413

August 20, 2013

Name of Structure XYZ Ditch Used for Irrigation IRRIGATION YEAR: 2013

| Month | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | 0 | |
| 2 | | | | | | | | .608 | | | | |
| 3 | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | |
| 8 | | | | | | | | | .515 | | | |
| 9 | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | |
| 20 | | | | | | | | | | .413 | | |
| 21 | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | |
| 25 | | | | | | | | | | | | |
| 26 | | | | | | | | | | | | |
| 27 | | | | | | | | | | | | |
| 28 | | | | | | | | | | | | |
| 29 | | | | | | | | | | | | |
| 30 | | | | | | | | | | | | |
| 31 | | | | | | | | | | | | |
| DSF | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| AF | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

Numbers indicate (please circle one) Measurement on flume Conversion from Flume to CFS Estimate Chip test

# TRACKING PUMPS, WELLS, AND OTHER METER DEVICES

# TRACKING RESERVOIR DATA

# Examples of data that is vague but can be helpful, may or may not be entered depending on what other info I have on the structure

"I turned the ditch on June 2nd and shut it off July 5th and back on July 30th and shut off for good August 8th"

"I used my pond for cattle only and I have 30 head of cattle, my pond was dry by mid-August"

"Couldn't get water into my ditch at all therefore I couldn't use it this year"

# Examples of data that will not be entered

"Same as last year"

"1 cfs for the entire irrigation season"

"Full ditch from spring til creek was dry"

"I used whatever my water right is"

"What should I put down? You're the water commissioner you should know"

# Water Commissioner Data Entry

# STATS

# ADMINISTRATION OF A CALL

What is required to place a call?

Water Right

Operable Headgate

Ability to Sweep Entire Creek/Diversion Dam

Using Water for Decree Purposes Without Waste

Accurate Measuring Device

# How Does the Commissioner Set a Valid Call for a Portion of the River?

- Determines river conditions (supply) from stream gaging stations and/or records
- Determines the demand (calls) by various water right holders – which structures are using the water for the decreed purposes
- Sets the valid call based on a comparison of river conditions (supply) and demand (calls) and knowledge of water gains or losses and water travel times between points on the river

# Elk River – Seniority List

AI6

| | C | D | H | J | K | M | N | O | Q | R | T | Y | AA | AD | AF | A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | ID | WRNAME | WRSTRNAME | QQ | QQ | Sec | Twn | Rng | Use | Amt | ADJTYPE | ADMINNO | Case# | Alter_WDID | COMMENT | |
| 2 | 907 | TRULL DITCH | TRULL CK | SE | NE | 30 | 7 N | 85 W | 1 | 1.66 | O | 12566.00000 | 09/22/1 | | | |
| 3 | 714 | KELLER DITCH | ELK RIVER | SE | NW | 17 | 8 N | 85 W | 1 | 2.66 | O | 13058.00000 | 09/22/1 | | | |
| 4 | 829 | PRICE DITCH | ELK RIVER | SW | NE | 6 | 6 N | 85 W | 1 | 3.75 | O | 13271.00000 | 09/22/1 | | ALT PT FOR | |
| 5 | 1962 | PRICE DITCH ALT PT | ELK RIVER | SW | SW | 7 | 6 N | 85 W | 1 | 0.625 | O,AP | 13271.00000 | 01CW00 | 5800829 | AP FOR PRICE | |
| 6 | 623 | EKHART DITCH | ELK RIVER | NE | SE | 28 | 9 N | 85 W | 1 | 4.7 | O | 13284.00000 | 09/22/1 | | SIX AP FOR 2.0 | |
| 7 | 623 | EKHART DITCH | ELK RIVER | NE | SE | 28 | 9 N | 85 W | 1 | 2 | O,TF | 13284.00000 | W1056- | 5800623 | CHANGE OF | |
| 8 | 623 | EKHART DITCH | ELK RIVER | NE | SE | 28 | 9 N | 85 W | 01* | 2 | O,TT | 13284.00000 | W1056- | 5800623 | CHANGE OF | |
| 9 | 2103 | RED CREEK DIVERSION | RED CK | NW | NW | 6 | 9 N | 85 W | 01* | 2 | O,AP | 13284.00000 | W1056 | 5800623 | AP FOR | |
| 10 | 2116 | STEAMBOAT LAKE DIV AP#1 | WILLOW CK | NE | SE | 4 | 9 N | 85 W | 01* | 2 | O,AP | 13284.00000 | W1056 | 5800623 | AP FOR | |
| 11 | 1967 | STEAMBOAT LAKE DIV AP#2 | ELK RIVER | | | 27 | 9 N | 85 W | 01* | 2 | O,AP | 13284.00000 | W1056 | 5800623 | AP FOR | |
| 12 | 2115 | STEAMBOAT LAKE DIV AP#3 | WILLOW CK | SW | SE | 3 | 9 N | 85 W | 01* | 2 | O,AP | 13284.00000 | W1056 | 5800623 | AP FOR | |
| 13 | 6087 | STEAMBOAT LK WD WELL 1 | WILLOW CK | SE | SE | 4 | 9 N | 85 W | 01* | 2 | O,AP | 13284.00000 | W1056 | 5800623 | AP FOR | |
| 14 | 6088 | STEAMBOAT LK WD WELL 13 | WILLOW CK | NW | SE | 10 | 9 N | 85 W | 01* | 2 | O,AP | 13284.00000 | W1056 | 5800623 | AP FOR | |
| 15 | 632 | FARNSWORTH DITCH | FARNESWORTH CK | SW | NW | 31 | 7 N | 85 W | 1 | 2.66 | O,TF | 13314.00000 | 90CW01 | 5800783 | TT MORIN D | |
| 16 | 632 | FARNSWORTH DITCH | FARNESWORTH CK | SW | NW | 31 | 7 N | 85 W | 1 | 2.66 | O | 13314.00000 | 09/22/1 | | | |
| 17 | 783 | MORIN DITCH | FARNESWORTH CK | SW | SE | 31 | 7 N | 85 W | 1 | 2.66 | O,TT | 13314.00000 | 90CW01 | 5800632 | TF | |
| 18 | 577 | CAMPBELL DITCH | ELK RIVER | SE | NW | 8 | 8 N | 85 W | 1 | 4.6 | O | 13442.00000 | 09/22/1 | | | |
| 19 | 649 | FRANZ DITCH | ELK RIVER | SW | NW | 33 | 9 N | 85 W | 1 | 6 | O | 13696.00000 | 09/22/1 | | | |
| 20 | 649 | FRANZ DITCH | ELK RIVER | SW | NW | 33 | 9 N | 85 W | 1 | 6 | O,TF | 13696.00000 | W0381 | 5800649 | | |
| 21 | 649 | FRANZ DITCH | ELK RIVER | SW | NW | 33 | 9 N | 85 W | 12* | 6 | O,TT | 13696.00000 | W0381 | 5800649 | ADDED USES | |
| 22 | 694 | HOOVER JACQUES DITCH | ELK RIVER | NE | SW | 23 | 9 N | 85 W | 1 | 3.75 | O | 13696.00000 | 09/22/1 | | | |
| 23 | 2016 | ELK RIVER PIPELINE | ELK RIVER | NE | SW | 17 | 8 N | 85 W | 12* | 1.73 | O,TF | 13799.00000 | W0533 | 5802016 | | |
| 24 | 2016 | ELK RIVER PIPELINE | ELK RIVER | NE | SW | 17 | 8 N | 85 W | 12* | 1.73 | O,TT | 13799.00000 | W0533 | 5802016 | | |
| 25 | 2016 | ELK RIVER PIPELINE | ELK RIVER | NE | SW | 17 | 8 N | 85 W | 12* | 1.73 | O,AB | 13799.00000 | 91CW01 | | | |
| 26 | 2016 | ELK RIVER PIPELINE | ELK RIVER | NE | SW | 17 | 8 N | 85 W | 12* | 1.73 | O,TT | 13799.00000 | W0533 | 5800626 | TF ELK VALLEY | |
| 27 | 626 | ELK VALLEY DITCH CO. D. | ELK RIVER | SW | SW | 22 | 7 N | 85 W | 12* | 1.73 | O,TF | 13799.00000 | W0533 | 5802016 | TT ELK RIVER | |
| 28 | 626 | ELK VALLEY DITCH CO. D. | ELK RIVER | SW | SW | 22 | 7 N | 85 W | 1 | 11 | O | 13799.00000 | 09/22/1 | | | |
| 29 | 626 | ELK VALLEY DITCH CO. D. | ELK RIVER | SW | SW | 22 | 7 N | 85 W | 1 | 11 | O,TF | 13799.00000 | W0365 | 5800626 | ADD NEW USES | |
| 30 | 626 | ELK VALLEY DITCH CO. D. | ELK RIVER | SW | SW | 22 | 7 N | 85 W | 12* | 11 | O,TT | 13799.00000 | W0365 | 5800626 | ADD NEW USES | |

# Future Administration

**Elk River will most likely be on call consistently**

***Water must be going to Decreed Uses***
***Waste Issues***
***Better communication (mainly via email)***
***Illegal Wells, Ponds, etc***

***More seminars – what would you like to know?***

***brian.romig@state.co.us, 970-846-0036***


Division of Water Resources website at

**http://water.state.co.us**


Colorado Foundation for Water Education website at

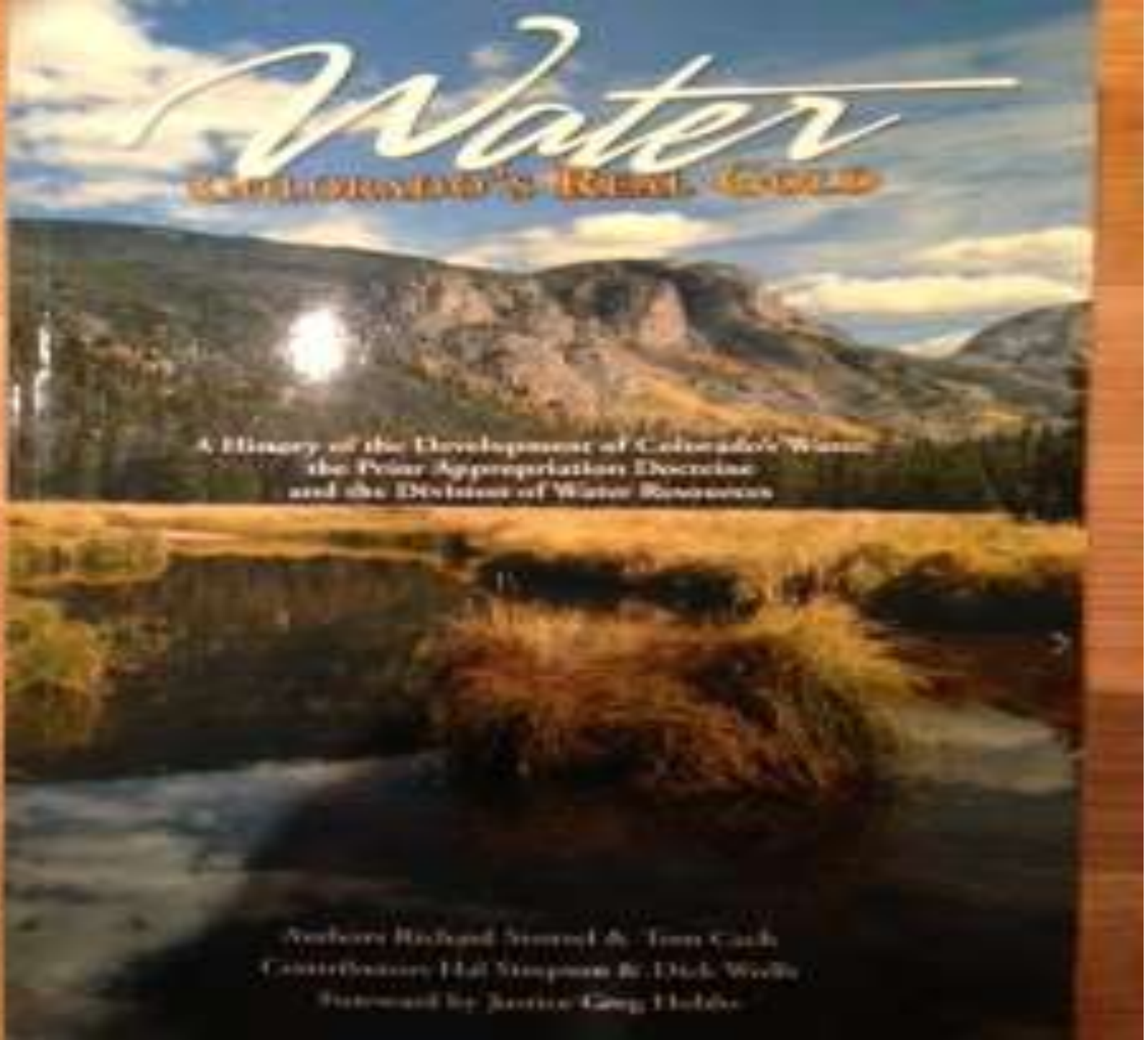
**www.cfwe.org**


CSU Water Institute website at

**www.cwi.colostate.edu**


The Water Report website at

**www.thewaterreport.com**


Water
Colorado's Real Gold
A History of the Development of Colorado's Water,
the Prior Appropriation Doctrine
and the Division of Water Resources