

65th Annual Meeting of the California Cooperative Snow Surveys Program



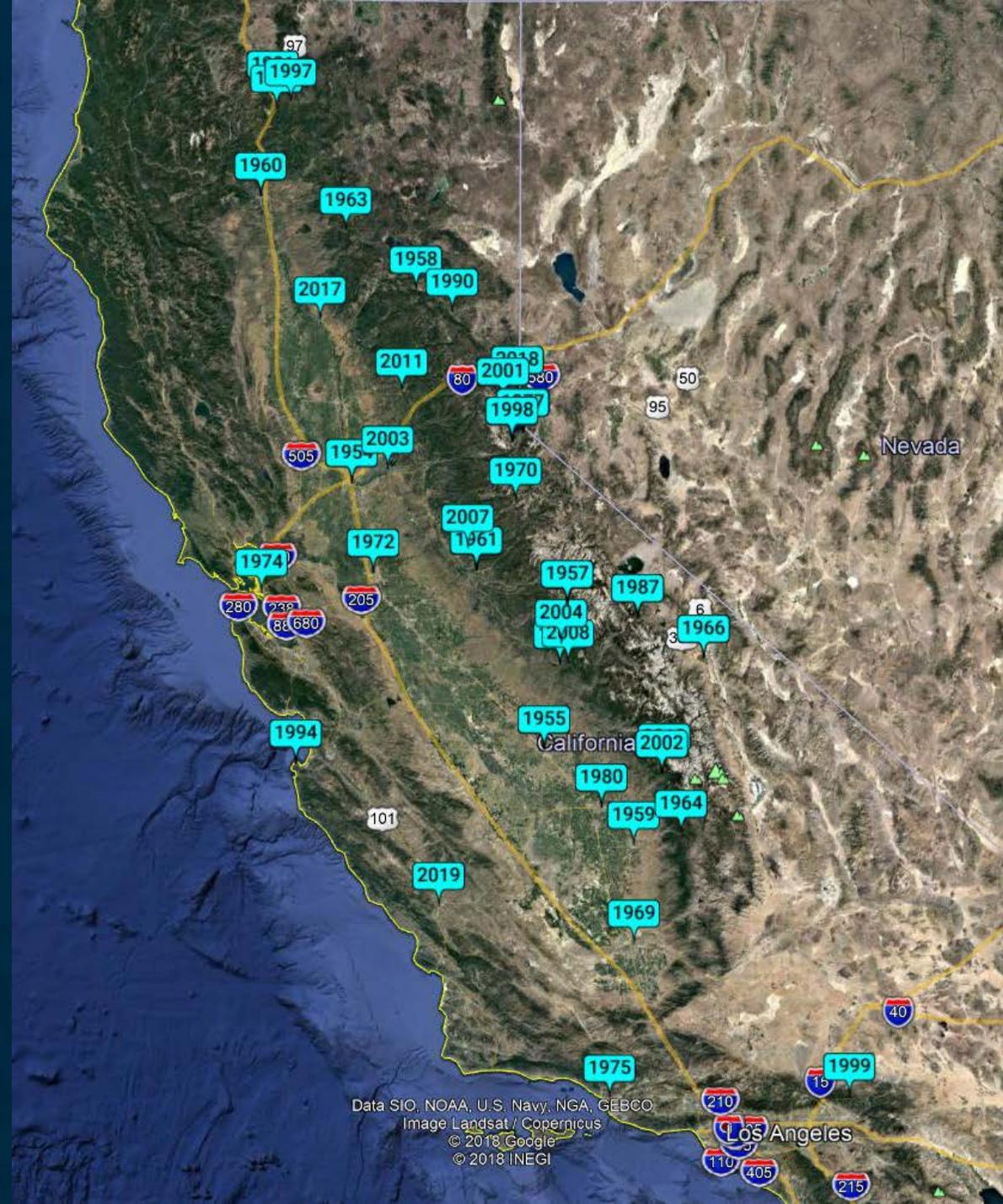
November 6-7, 2019
Paso Robles Event Center
Paso Robles, CA



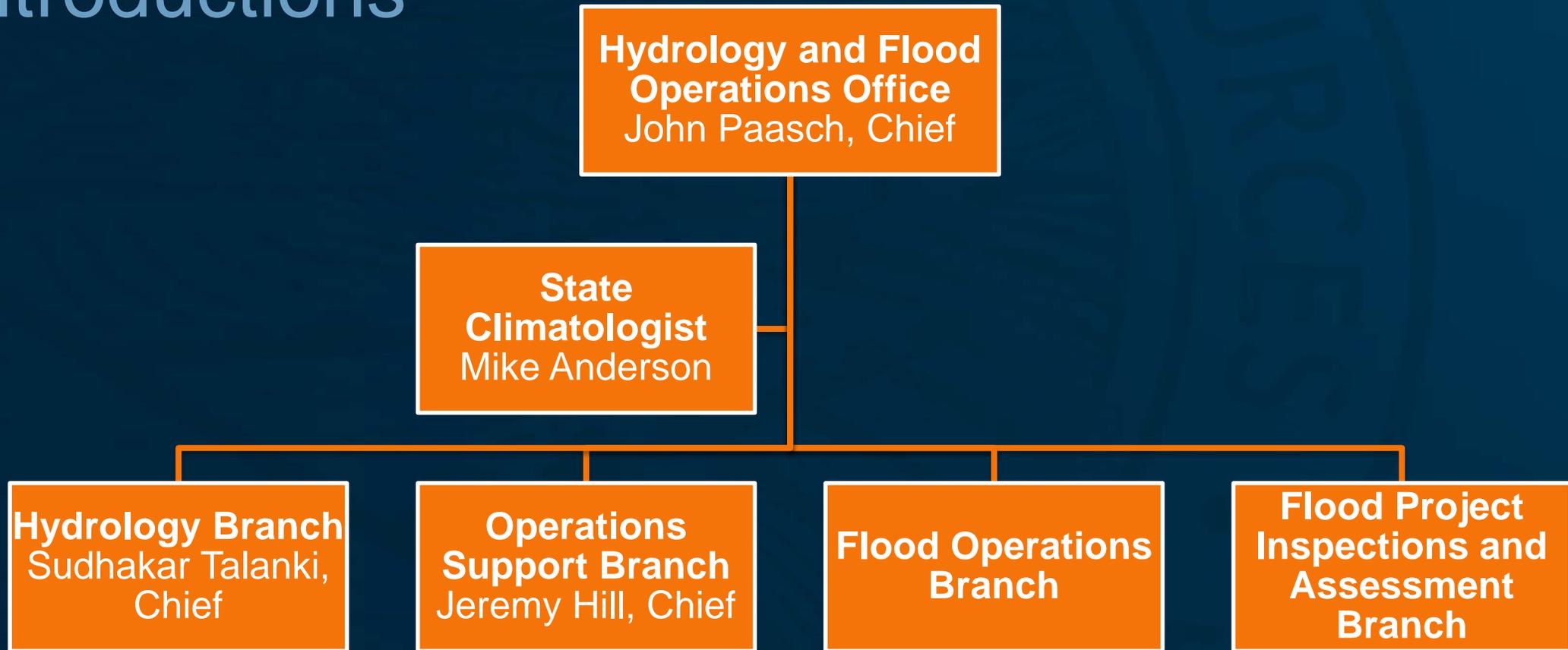
**90th Anniversary of
California Cooperative
Snow Surveys Program
1929-2019**



History of CCSS Meeting Locations



DWR Hydrology and Flood Operations Staff Introductions



**Hydrology and Flood
Operations Office**
John Paasch, Chief

Maury Roos (Retired Annuitant PT)

Hydrology Branch
Sudhakar Talanki, Chief
Ramesh Gautam, Chief CCSS

Operations Support Branch
Jeremy Hill, Chief
Boone Lek (Specialist)

River Forecasting
Mitch Russo, Chief
Michelle Campbell

**Reservoir Coordinated
Operations**
Cale Nasca, Chief
Nathan Burley
Rick Louie
Angelique Fabbiani-Leon

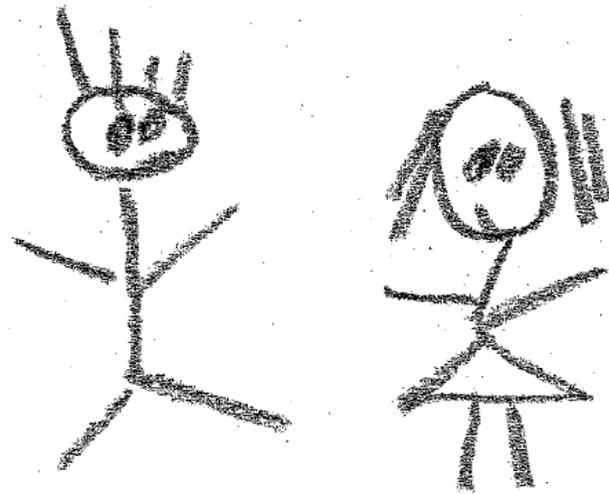
**Statewide Monitoring
Network**
Dion Abellon, Chief
Sam DeSarno
Bryan Prestel
Nick Ellis

**California Data Exchange
Center**
David Parker, Chief

**Snow Surveys and Water
Supply Forecasting**
Sean de Guzman, Chief
John King
Andy Reising
Ashok Bathulla
Lauren Miller
Steve Nemeth (Retired
Annuitant PT)



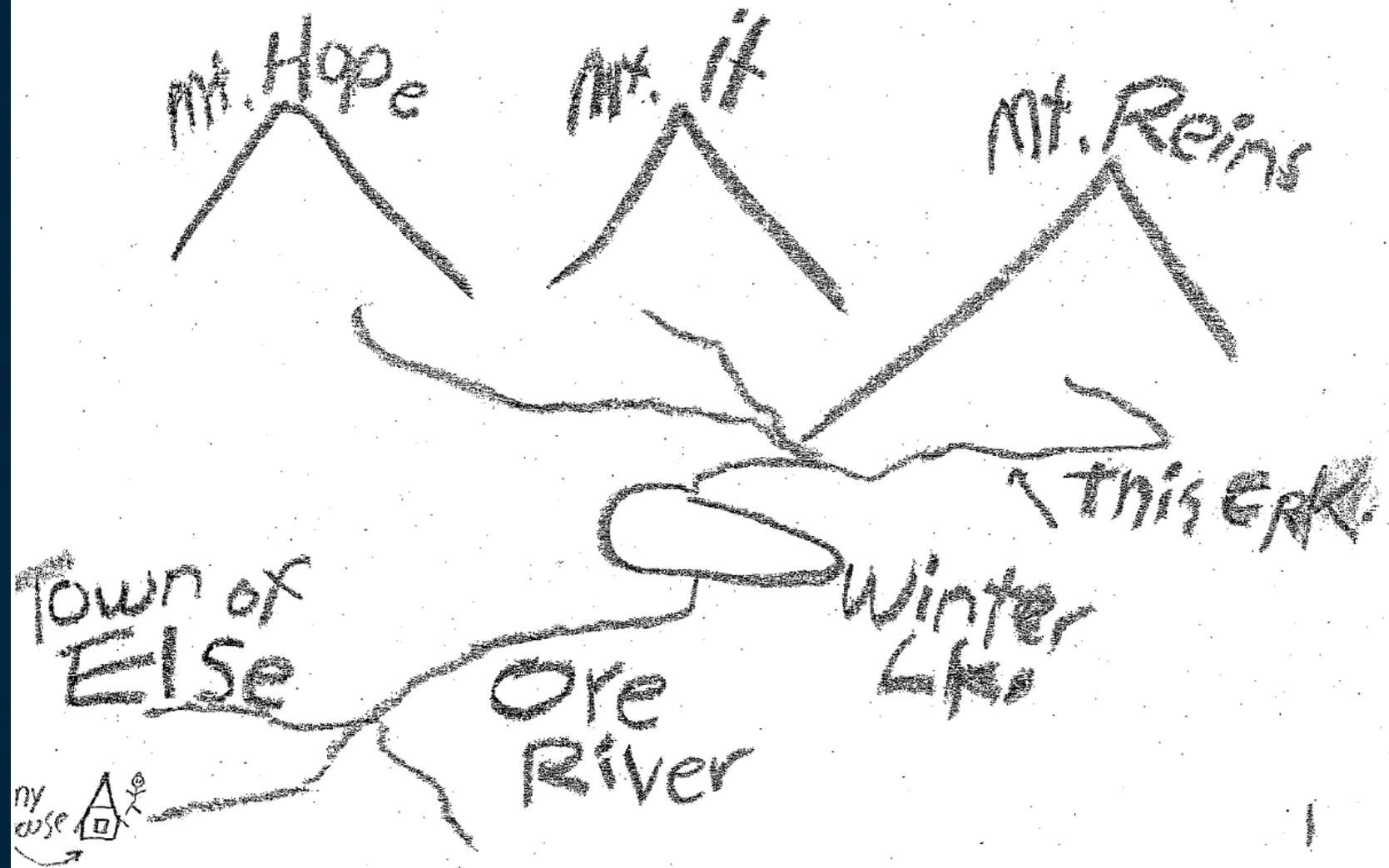
A Child's guide to forecasting



by
Steve Lafond



Know your River good



Put snow pillows in good spots

Mt. Hope



Mt. Hope



Mt. Reins



My Dog
Spot

Figure out Averages for Snow and Water

this is
the hard
part

Mt. Hope

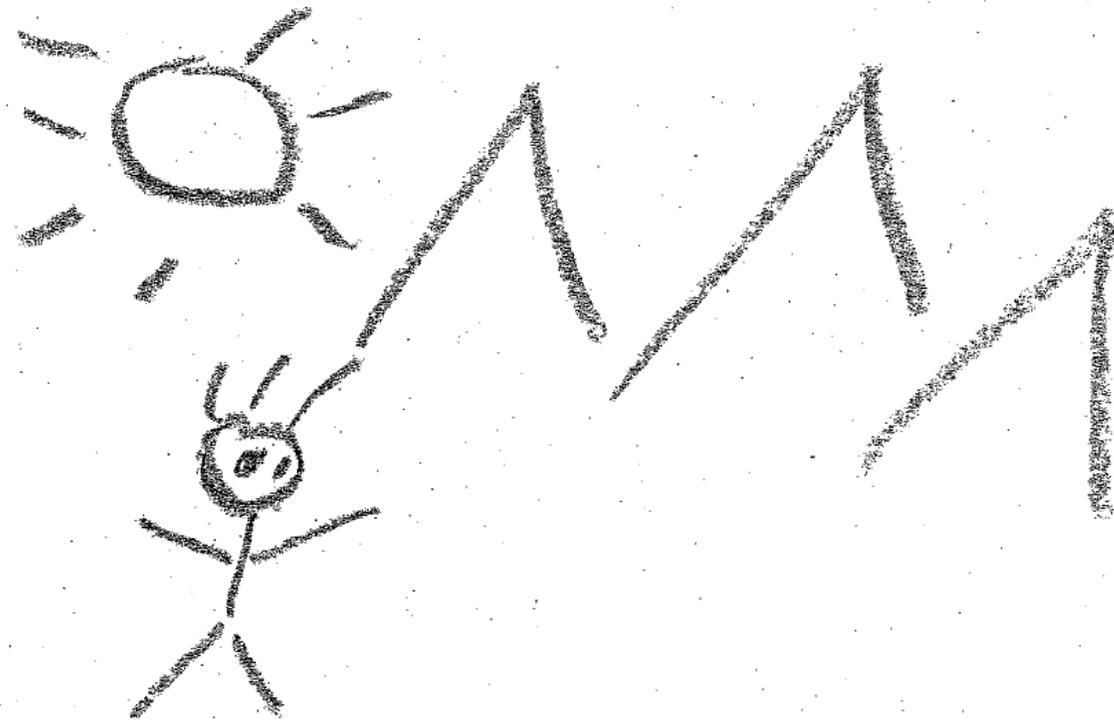
Ore River

Dec	0.0
Jan.	0.0
Feb	0.0

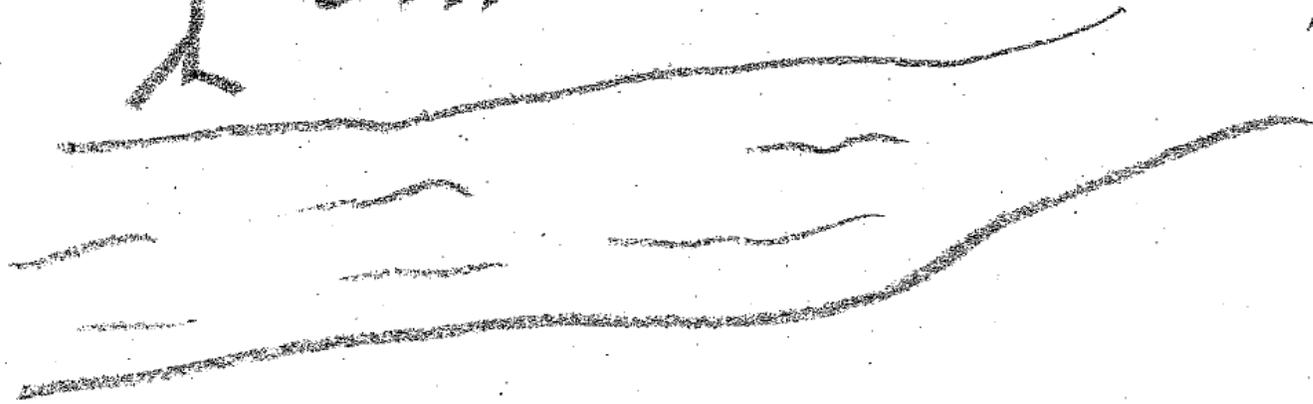
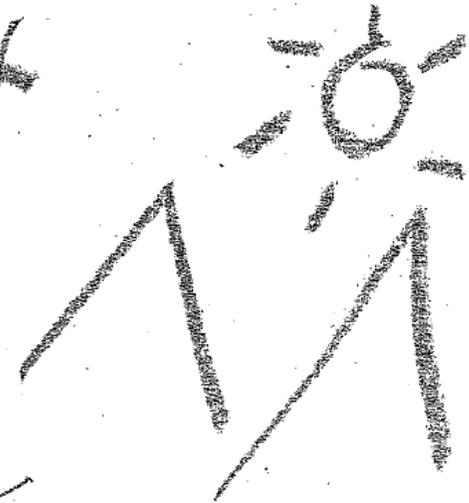
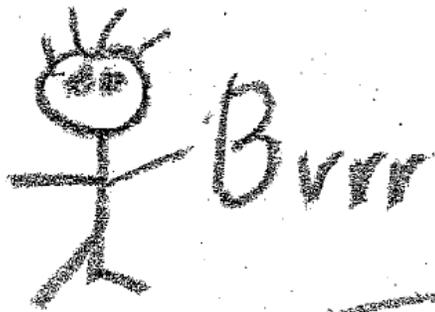
Apr.	1000
May	1000
JUNE	1000
July	1000

3

Watch to see if it
rains or snows, alot



Then guess how much water
you will get



CCSSP HISTORY



- Dr. James Church:
 - Born in Wisconsin, joined University of Nevada, Reno in 1895.
 - Established first weather station on Mt. Rose in 1906.
 - Pioneered a tool to measure snow depth and estimate corresponding SWE.



CCSSP HISTORY CONTD..

- Annual snow survey measurement began on 1908.
- California & Nevada used to measure snow together until 1917.
- In 1917 California State Engineering Department initiated statewide measurement of snow (pre-CCSSP era).
- PG&E began measuring snow in San Joaquin Watershed around 1921.
- LADWP-started in Cottonwood creek Lake and Mammoth Lake Basin-around 1926.



CCSSP HISTORY CONTD..

- Statewide Snow Survey Program was established in 1929-CCSSP was born.
- **Harlow Stafford**-Frist Chief of California Snow Surveys Program.
- Hired local ranchers and cowboys-trained how to measure snow.
- Used to measure snow once each winter-around in the first week of April.
- **Bob Miller**-Second Chief was appointed-around early 1940's.
- **Fred Paget** -Third Chief was appointed-around late 1940's.



CCSSP HISTORY CONTD..

- **Fred**-Expanded the program, installed many snow courses, sheds and cabins throughout Sierra-Nevada mountains.
- Established custom to measure snow once every month from January to April, each year.
- **Fred Strauss** appointed as acting chief around in mid 1950's.
- **Strauss**-built additional cabins, designed stoves, ensured sufficient food supplies in each cabin.
- State, Corps and PG&E initiated installing snow pillows in late 1960's.



CCSSP HISTORY CONTD..

- **Gene Brown** was appointed after Fred Strauss in mid 1960's.
- Continued expansion of the program with the addition of more snow pillows.
- **Jack Pardee** took over the job in mid 1970's. Continued the effort.
- **Frank Gehrke and Dave Hart** continued after mid 1980's. Dave Hart retired in late 2000's.
- **Frank and David Rizzardo** continued until 2018.



Enjoy the meeting and let us know how we can improve and expand CCSSP.

We welcome Ideas, thoughts, suggestions, and comments.

