

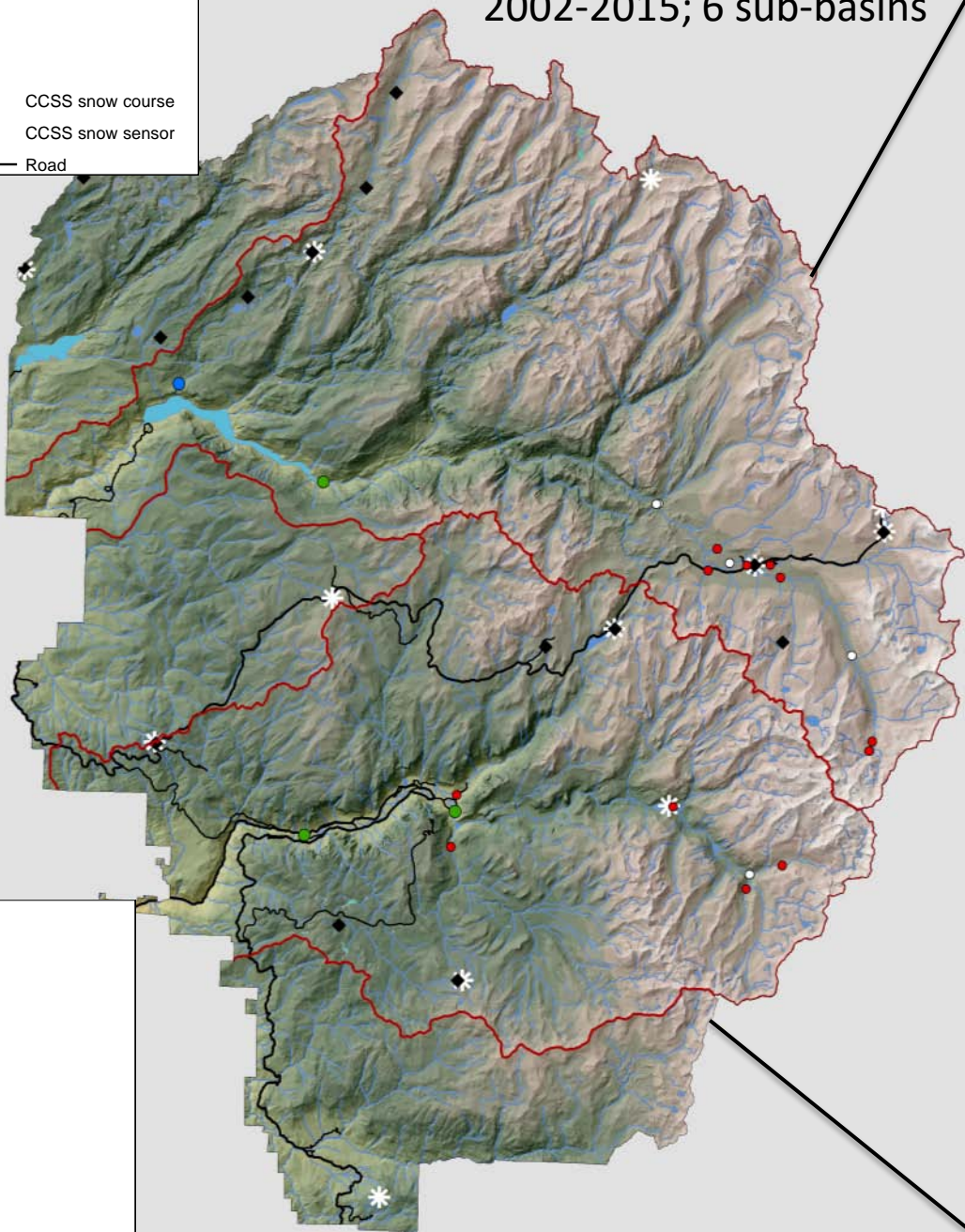
1st Annual Yosemite Hydroclimate Workshop, 2002



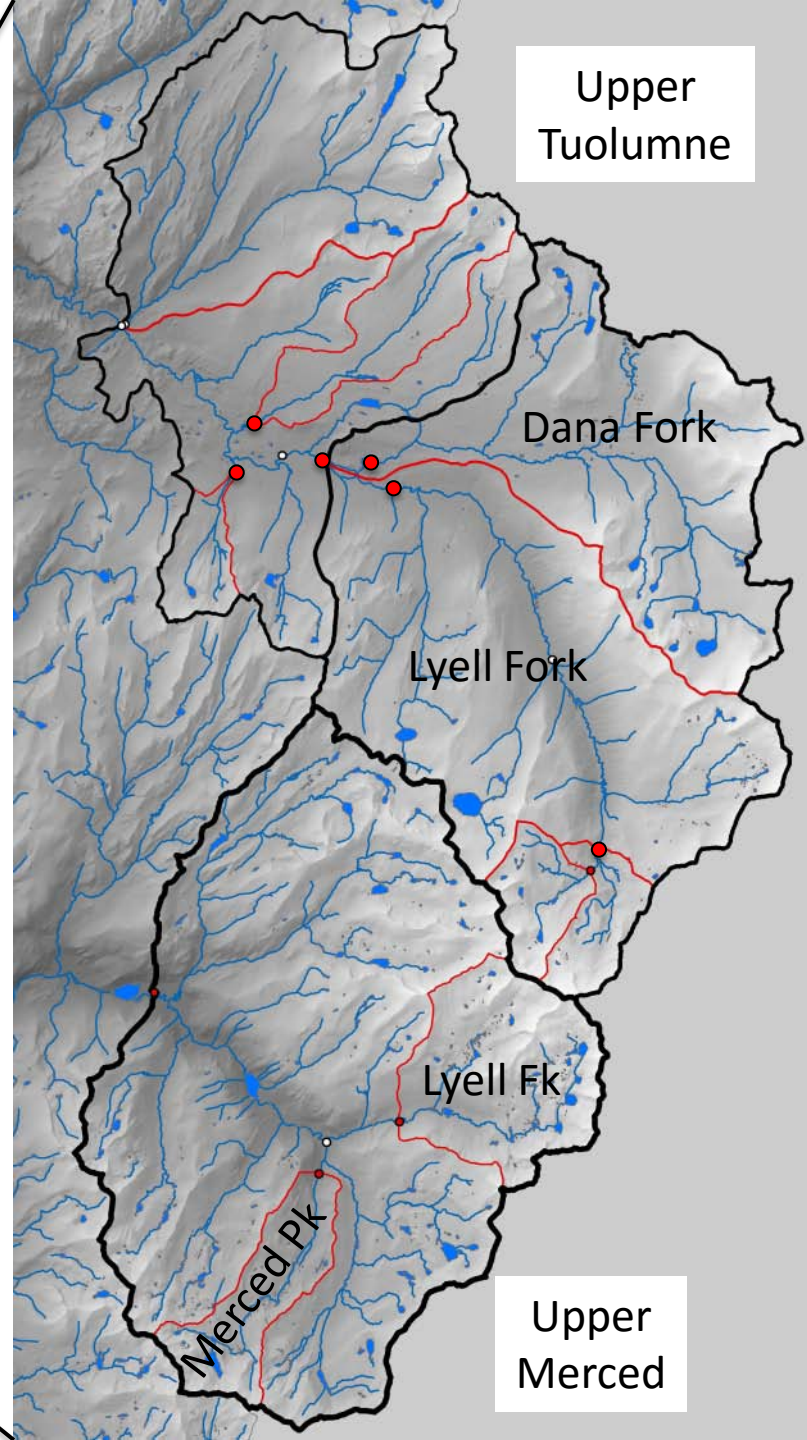
Richard Smith USGS Dave Peterson USGS Mike Dettinger USGS
Mark Butler NPS Greg McGurdy WRCC Frank Gehrke DWR
Jan VanWagtendonk Dan Cayan SIO Kelly Redmond DRI Brian Huggett NPS
Jessica Lundquist SIO Dave Clow USGS Joe Meyer NPS Katy Warner NPS

Lundquist et al. 2016
2002-2015; 6 sub-basins

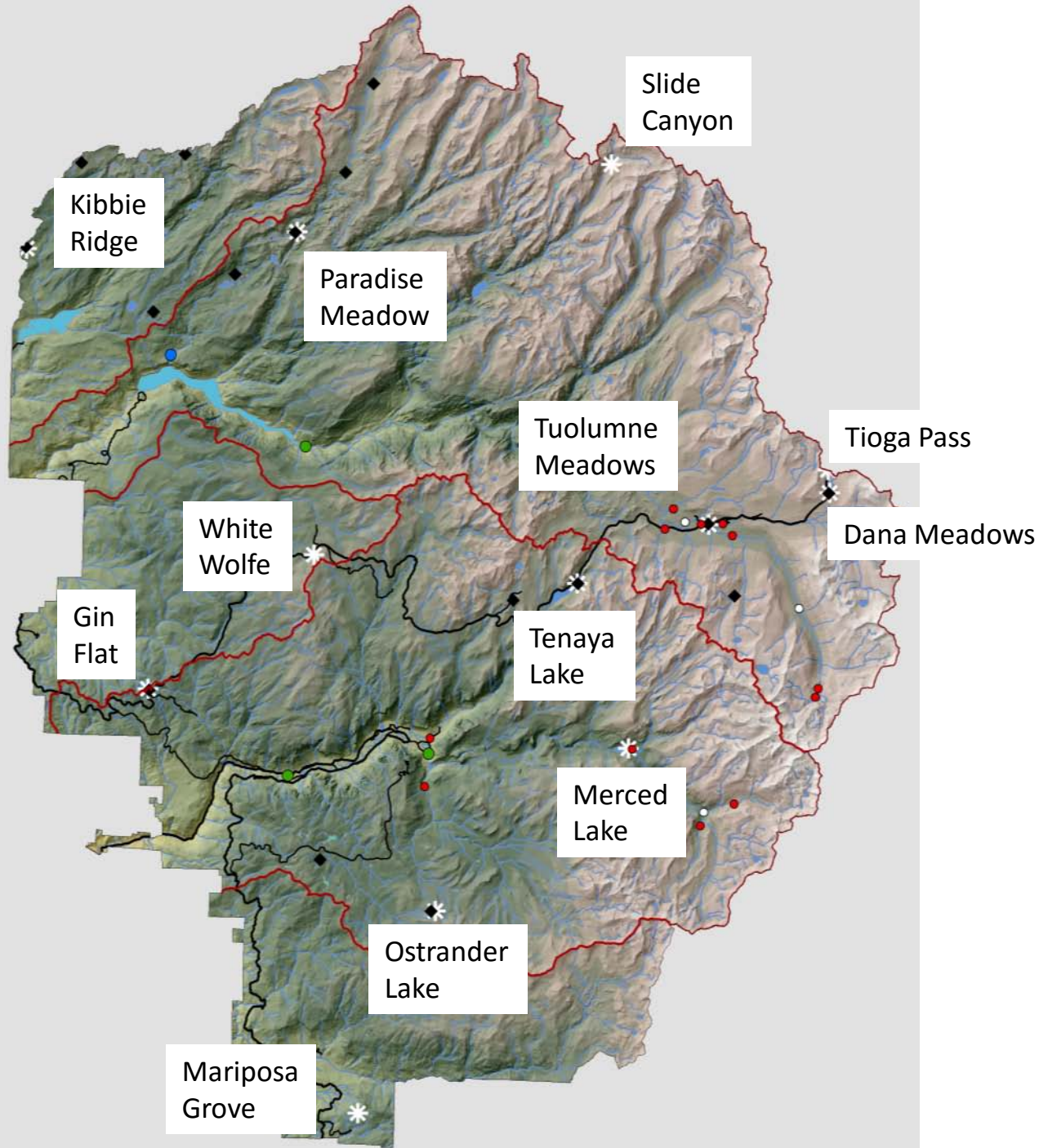
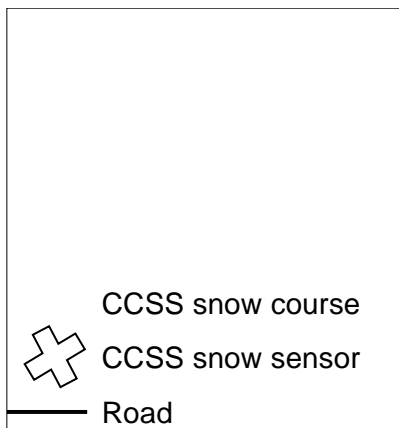
CCSS snow course
CCSS snow sensor
Road



Upper
Tuolumne



Upper
Merced



Slide Canyon Snow Sensor 2016 field work









Instruments

- CRI000 datalogger
- TX320 GOES transmitter
- YAGI Antenna
- Judd snow depth
- CSI 456 pressure transducer
- CSI Temp/RH
- Vaisala 2-D ultrasonic wind
- Kipp&Zonnen net radiation
- Li200 Pyronometer
- CSI 455 soil moisture
 - 5 cm
 - 10 cm
 - 25 cm



Tuolumne Meadows snow sensor/stream gage 2016 field work



Instruments

- CRI000 datalogger
- TX320 GOES transmitter
- YAGI Antenna
- Judd snow depth
- Water Log shaft-encoder (SWE)
- Water Log shaft-encoder (Precip)
- CSI Temp/RH
- Vaisala 2-D ultrasonic wind
- Kipp&Zonnen net radiation
- Li200 Pyronometer
- CSI 455 soil moisture
 - 5 cm
 - 10 cm
 - 25 cm





Paradise Meadow

Site survey notes: 6/2/2015; HF, NE, Chris Graham

Pole height: 16.6 ft

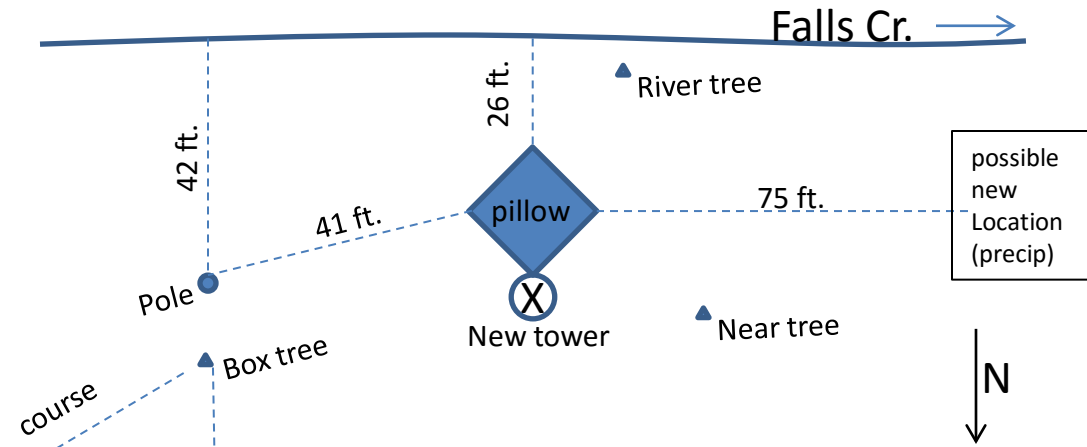
Pinger height: 13.6 ft

Box height: 15.2 ft

Box tree -> pole distance: 15 ft

Pole->near corner pillows distance: 41 ft

Box tree->near corner pillow distance: 47ft



New tower location tree angles
from 6ft above grade:

Box tree: 55°

River tree: 55°

Near tree: 60°

Instruments: Wants / Needs?

- Precipitation
 - Bulk collector
 - Heated tipping bucket (Tioga Pass has AC power)
 - Overflow tipping bucket
- Wind (sampling frequency; hourly 1-min average; hourly sample)
- Soil moisture, depths?
- Snow pillow alternatives?





