

PRMS Modeling Updates



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CCSS Annual Meeting – November 7, 2013

Updates

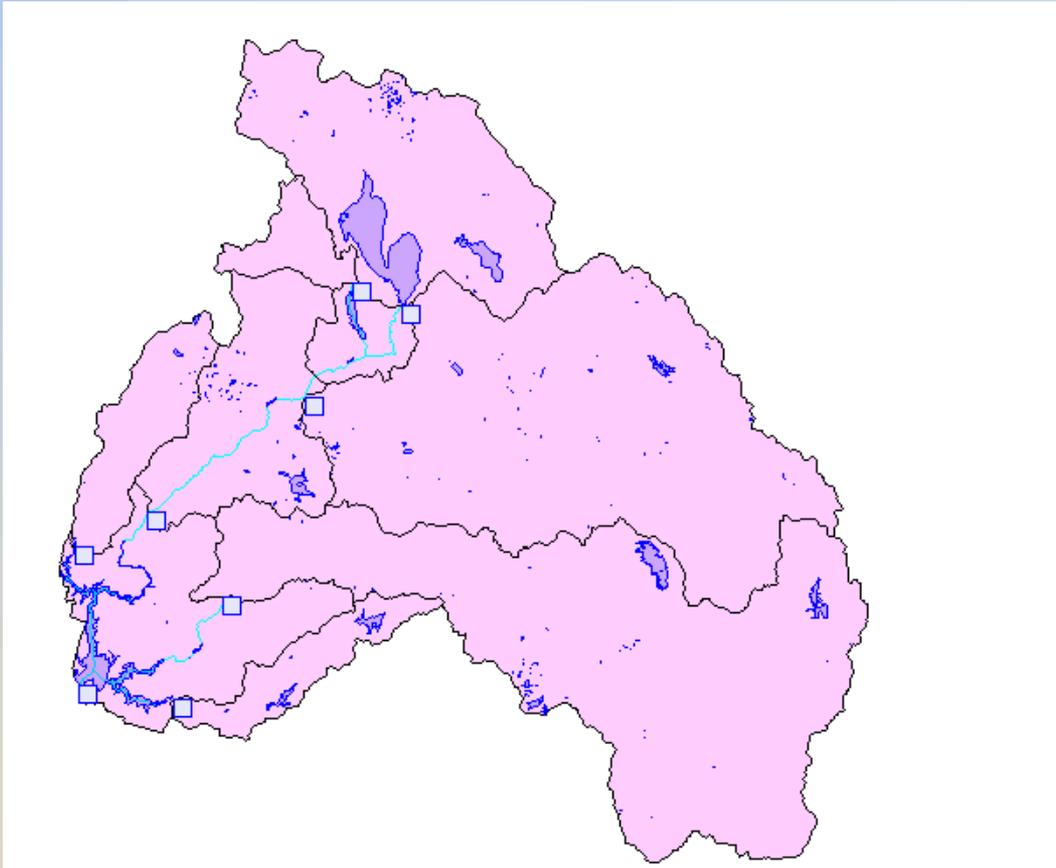
- **Feather River Model**
 - Data QA/QC Tool and Input File Builder
- **Merced and Yuba River Models**
- **Kings River Model**
- **Data Standardization Manual**
- **CCSS Watershed Modeling User's Group**
- **Future Models and Efforts**



Work Towards Operational PRMS Models



Status of Feather Model



Model is operational

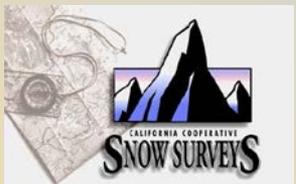
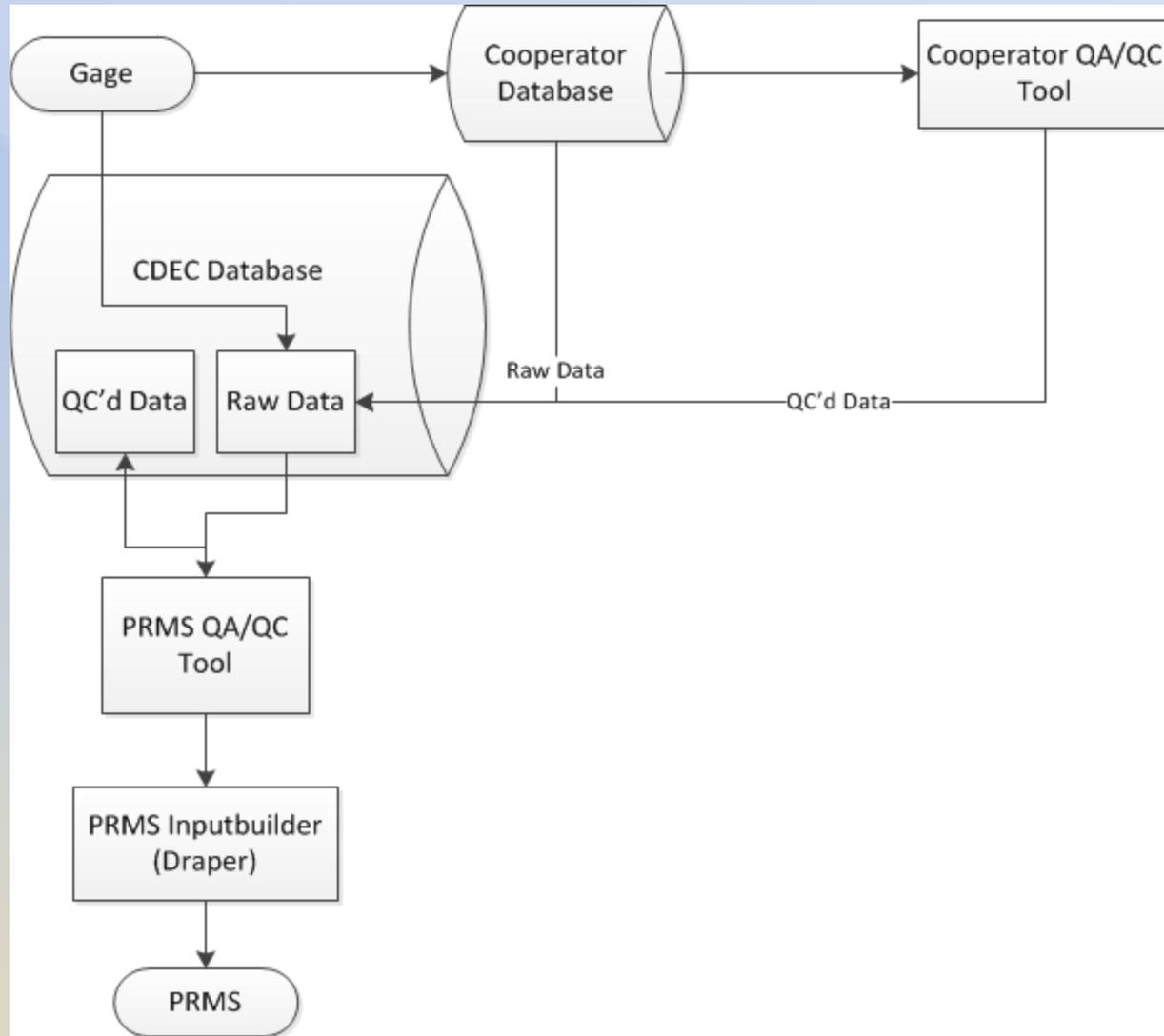
Climate QA/QC Tool near complete

Cooperators can access QA/QC Tool

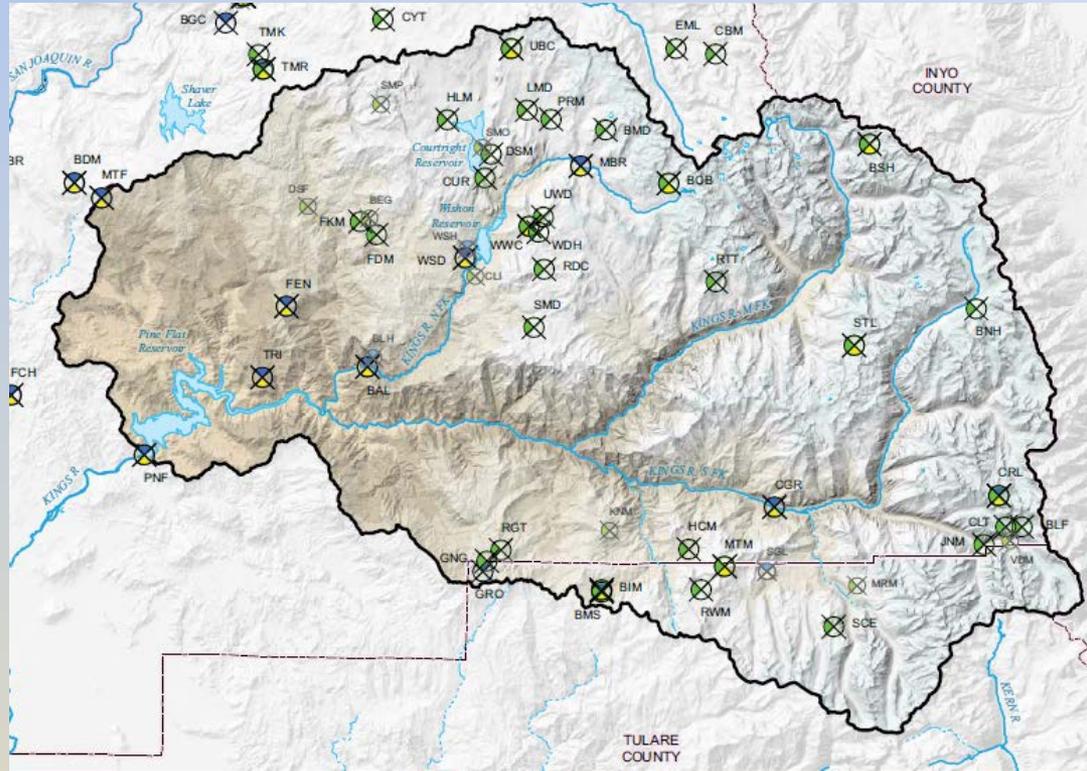
Cooperators can build input files as needed



QA/QC Tool and Input File Builder



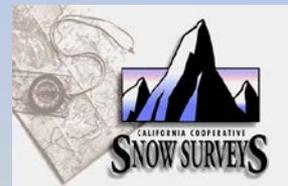
Status of Kings Model



All climate data QA/QC

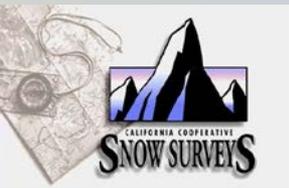
Flow data being QA/QC

Model soon to be calibrated.....



Lesson Learned from Model Development

- Finalizing Standards for QA/QC data. These standards include:
 - All data needs to be housed in CDEC.
 - Data should be recorded automatically.
 - Accurate station metadata is needed.
 - DWR should be consulted when data issues occur.
 - A long-term, continuous period of record at a station should be available.
 - Abundant, accurate readily-available precipitation and temperature is required.
 - A collaborative effort among watershed cooperators ensures smooth implementation.



Watershed Modeling User's Group

Goals:

- ◆ Use collective knowledge of CCSS program to improve hydrologic modeling and runoff forecasting
- ◆ Support development and implementation of PRMS models in most watersheds
- ◆ Improve communication and understanding of hydrologic conditions especially during extreme events
- ◆ Conduct Quarterly (?) Meetings
- ◆ Facilitate PRMS Training and Exercises

Future Work

Regional Approach

“Regional” / “Nested” California model

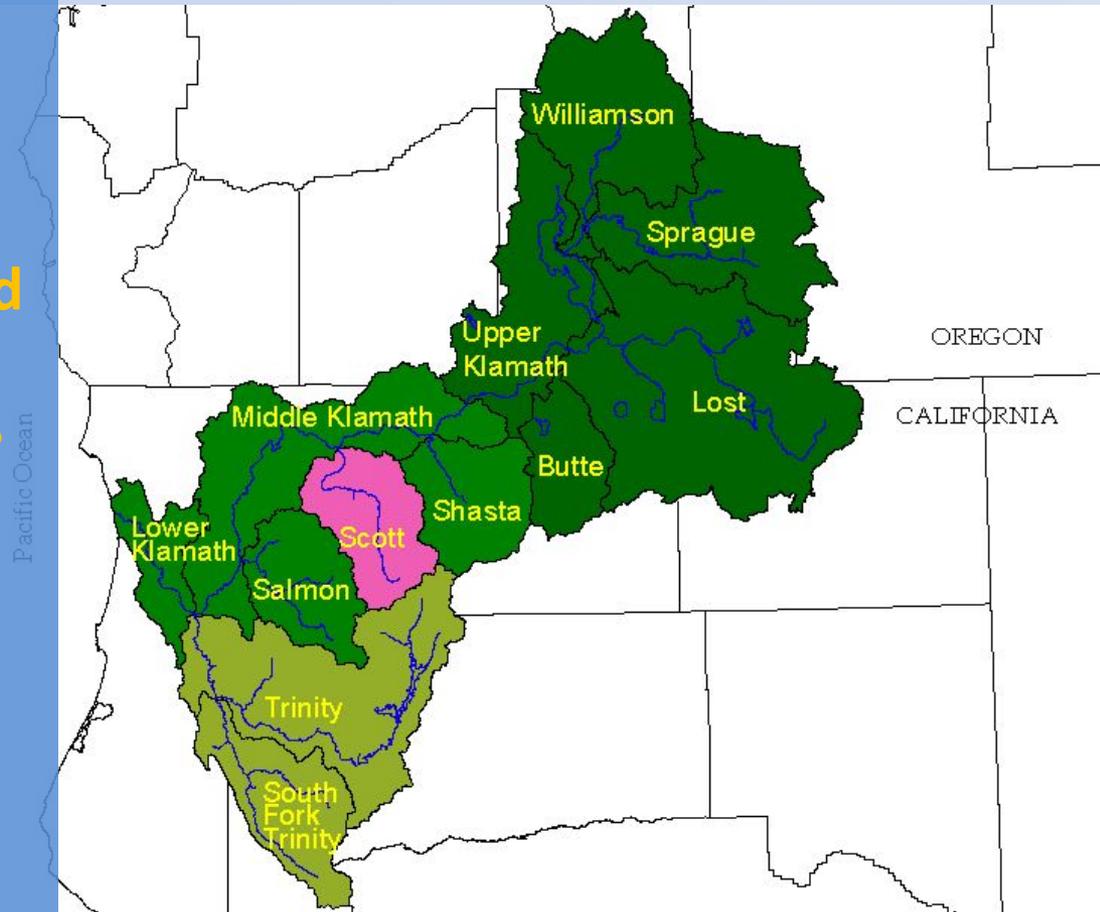
- Lower resolution PRMS models for B120 watersheds
- Quicker deployment
- Can backfill with higher resolution models when ready
- May be sufficient for some watersheds
- Provides access and training to PRMS models for more cooperators

Future Work

“Test” Watersheds

Scott River

- Smaller basin
- No upstream SW diversions
- No FNF Record / Good Climate Record
- GW Pumping impacts SW
- Stringent Aug-Sept flow requirements (fish)
- Test for GS-Flow implementation in McCloud & Pit Rivers

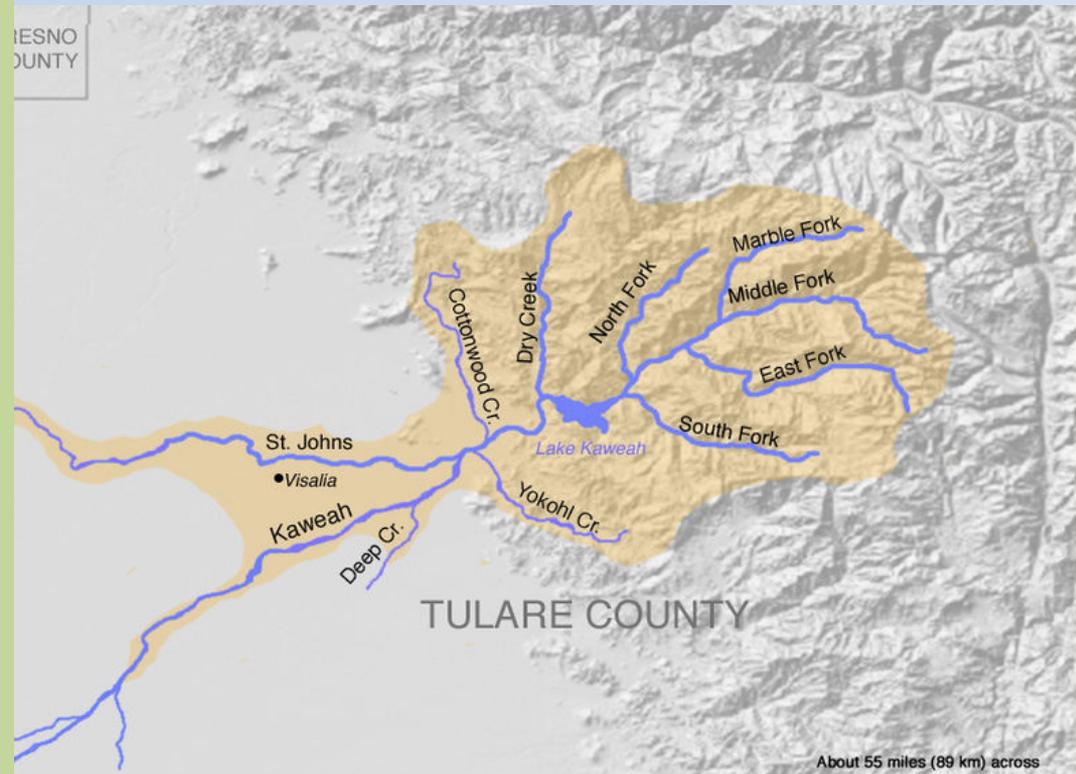


Future Work

“Test” Watersheds

Kaweah River

- High elevation/
snowmelt basin
- Good FNF record
- Limited climate
data
- Limited upstream
diversions
- Similarities to other
smaller watersheds



Questions?