New Practical Tools for You and Your Family

Determine an AJ Forecast equation for a specific set of conditions

- Process = Search record for years with a similar set of indexes.

Example: Kings River, Feb 1, 2009 indexes

General Scenario:

	Index value	Search Criteria
Prior Yr AJ FNF	435	+/- 30
High Snow	110	+/- 10
Low Snow	120	+/- 10
Oct-Mar Precip	85	+/- 5

- EX: Kings River, Feb 1 indexes with median future conditions

Dry Scenario:

High Snow Index
Low Snow Index
Oct-Mar Precip
Prior Yr AJ Runoff

} Assume all are below the average

- EX: Apr 1 AJ Forecast for the Kings R

Criteria 1:

High Snow Index
Low Snow Index
Oct-Mar Precip
Prior Yr AJ Runoff

Assume all are below average

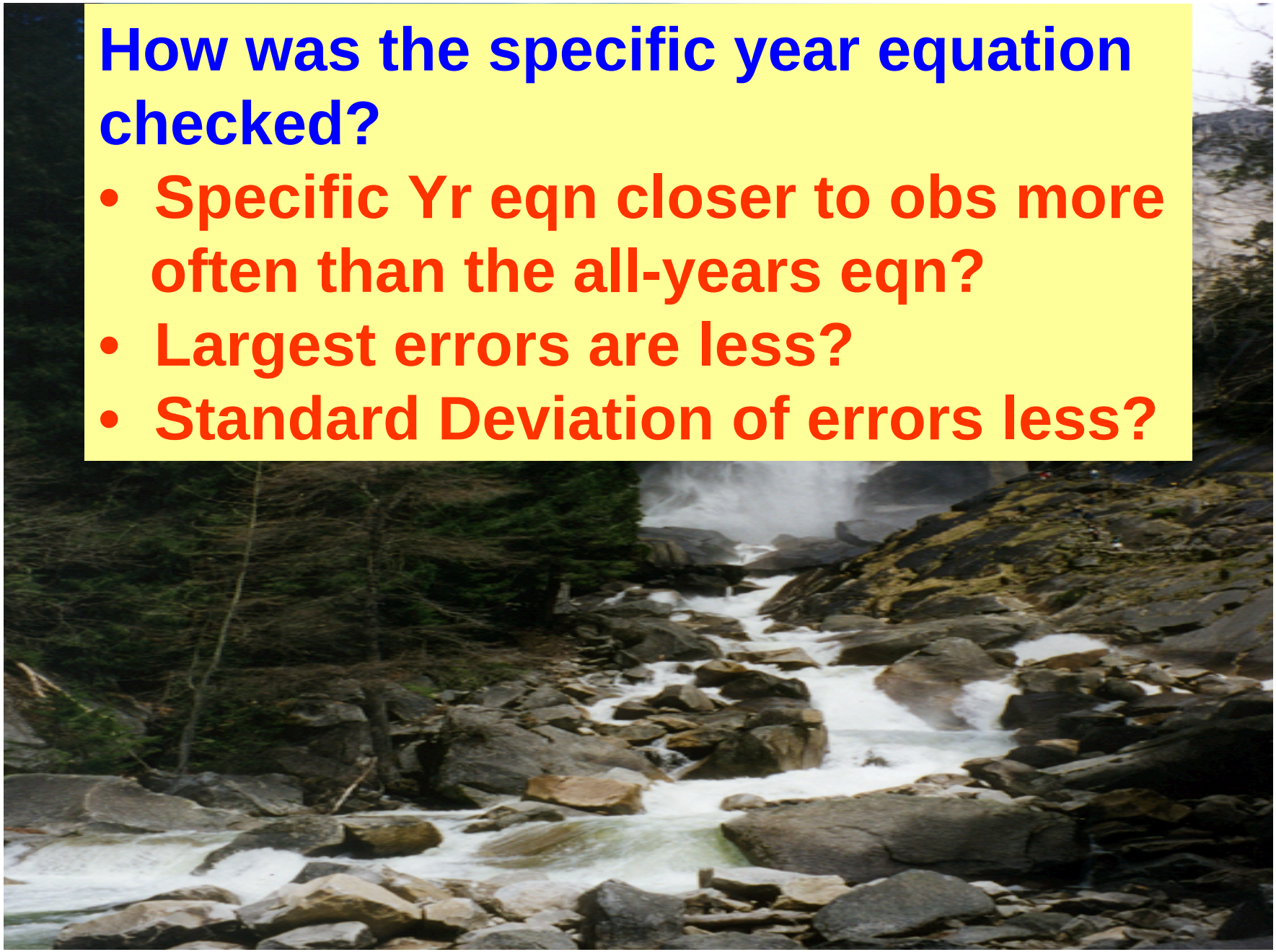
OR

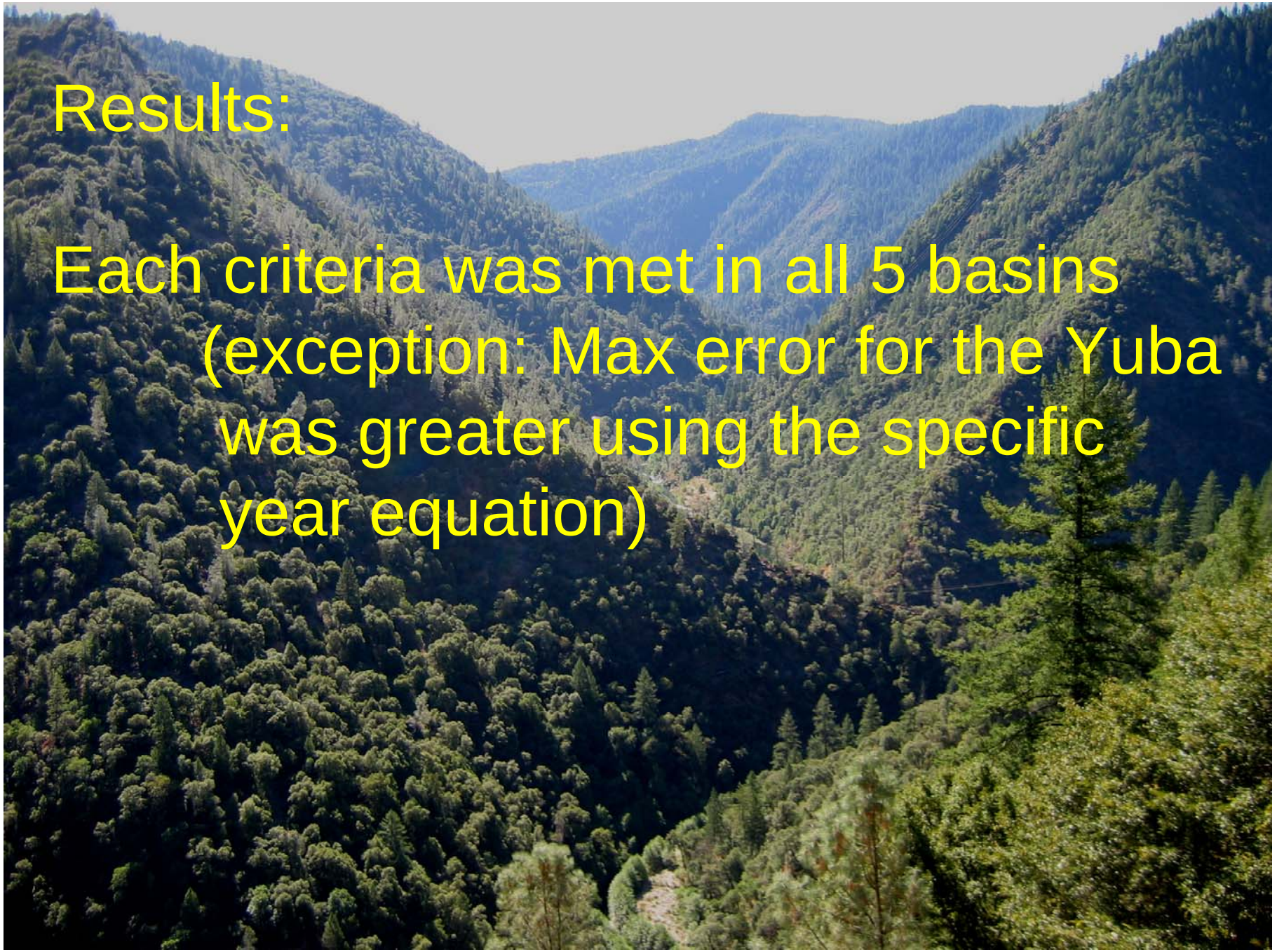
Criteria 2:

Snow Indexes and Oct-Mar Precip are < 75% Avg

How was the specific year equation checked?

- Specific Yr eqn closer to obs more often than the all-years eqn?
- Largest errors are less?
- Standard Deviation of errors less?





Results:

Each criteria was met in all 5 basins (exception: Max error for the Yuba was greater using the specific year equation)

Yet another tool…

- How is a drought defined?

  There is not a statewide definition.

  End-of-year reservoir storage is one measure.


Reservoir Storages: How often is your favorite reservoir real empty.

Example of Exceedence table for Reservoir Storage

PNF, units = taf, values are end-of-month

56% avg for Jan 2008 = 269

	Jan	Feb	Mar	Apr	May
70%	353	448	484	547	614
80%	284	352	431	493	580
90%	239	283	292	339	400
95%	116	156	192	283	373
98%	81	100	167	236	357

- Summary:

  A tool is available to choose years from the record that have a set of indexes similar those used on the forecast date.

  Reservoir storage can be described in terms of exceedence levels…how **often,** on a given date**,** has the storage been greater than the current level?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