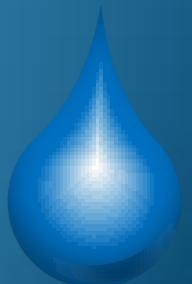


ORWP.NET

To protect and preserve Oklahoma's natural resources
Membership of over 12,000.



Excess & Surplus

The methodology to determine the availability of water in a basin for export to another basin. That which is available for permitting.



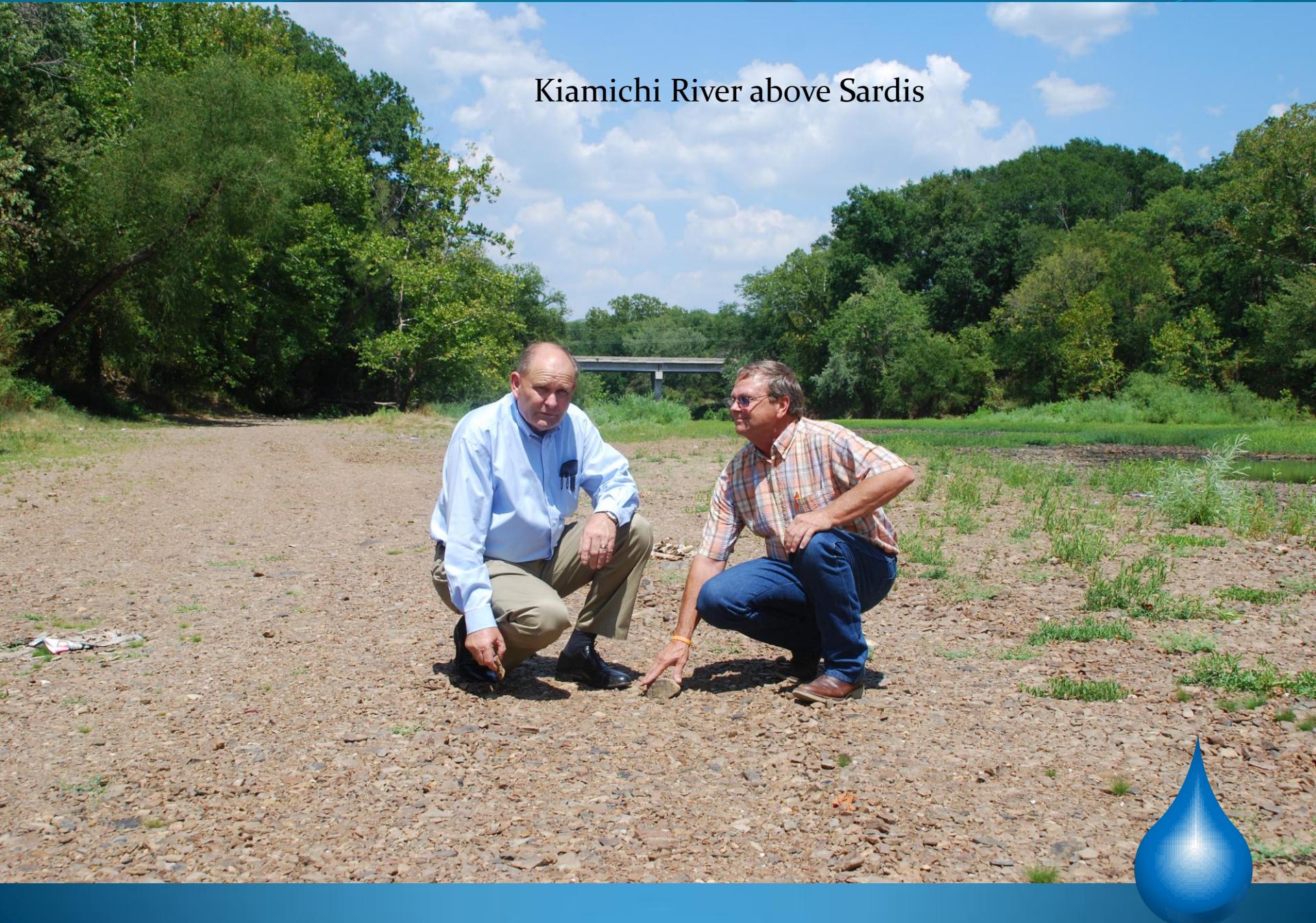
Oklahoma Permitting

- *Once a water use permit has been issued, the quantity authorized can never be reduced, even if the basin's needs are poorly understood at the time of issuance.*

The Mighty Glover 3 Miles N of Hwy 3



Kiamichi River above Sardis



Upper Mt. Fork River



Stream Gauges

1. How many gauges do you need in a large basin to adequately determine how much water is in there?
2. How can you be sure you have adequate flow information so you can tell which streams and rivers are drying up, when flows are going to be low, etc.?
3. Yes, we can look at a river and say “that’s dried up,” but do we have in place mechanisms for correctly measuring low flow? For a fish, the difference between 1 cfs and 0 cfs is actually pretty important.



Glover / Battiest area



And... How many gauges
do we need in a river
basin like the Kiamichi or
the Mt. Fork Rivers
?????????????????

Kiamichi Basin Gauges

Currently

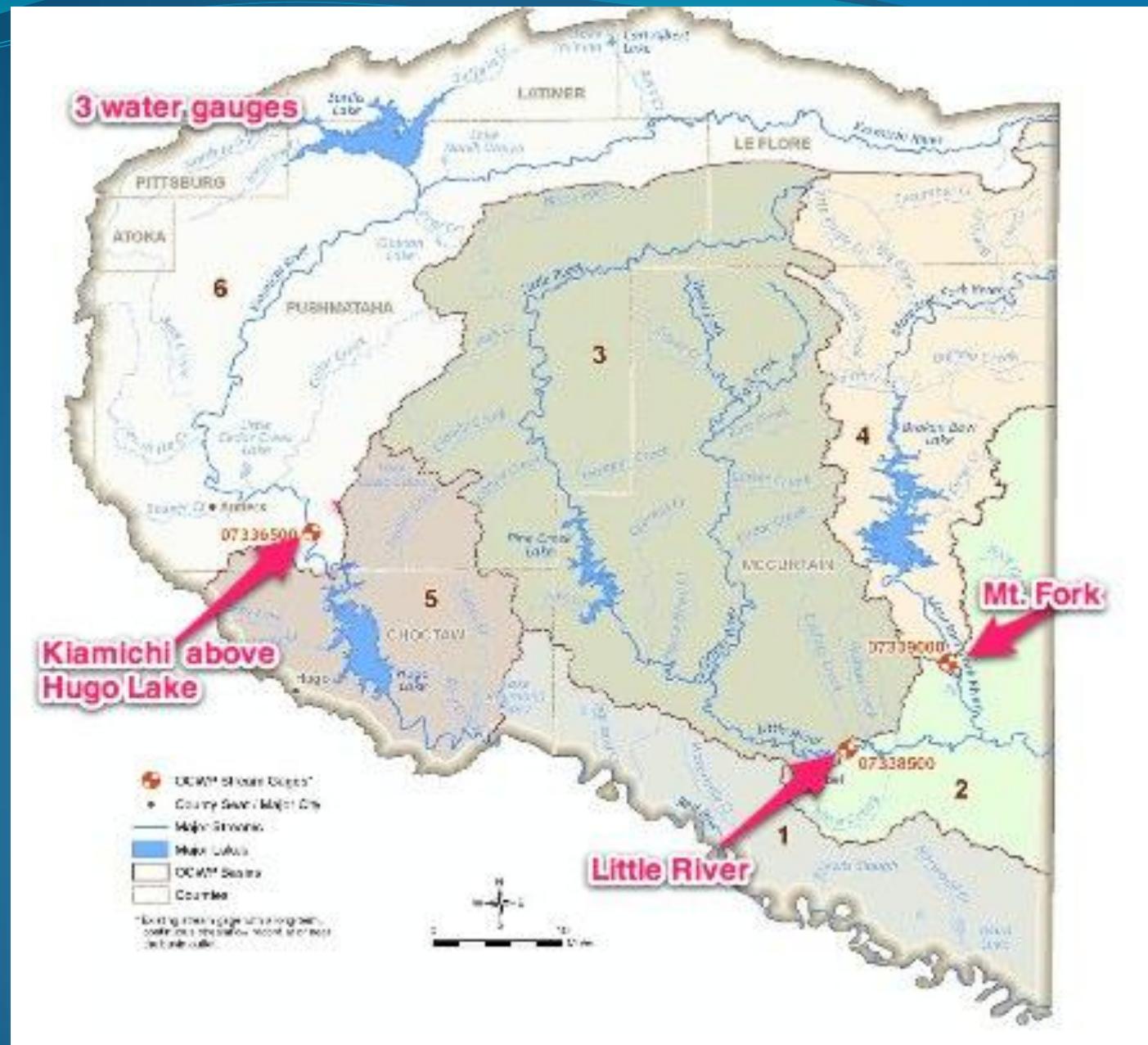
3

Needs

6

Data
gathered

20
yrs



Gauge Function

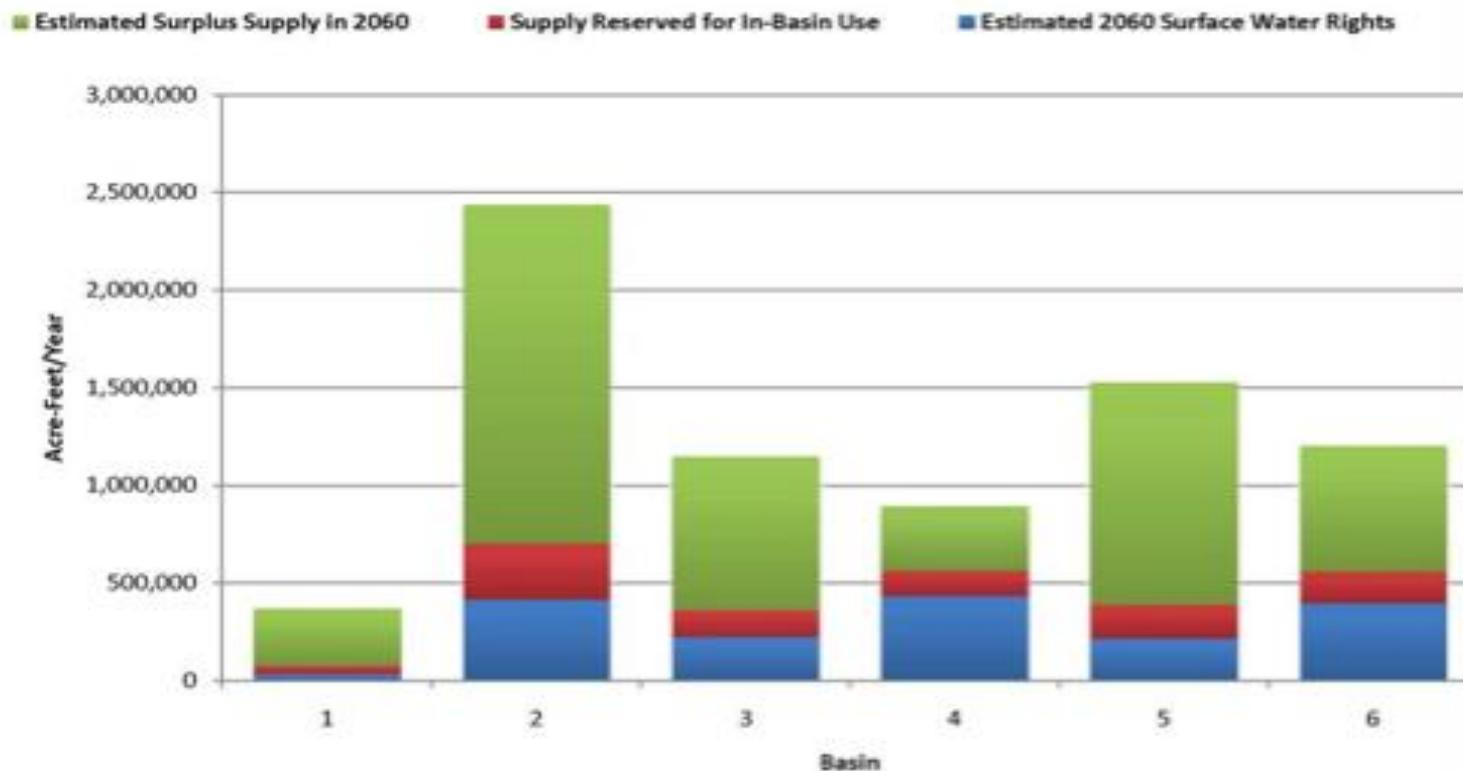
CHARACTERIZE
FLOW



Determine how much water
can safely
Responsibly be removed from
that basin.

DRAFT PROVISIONAL

DRAFT Provisional Estimated Surface Water Surplus in 2060 for the Southeast Region



The 10 % Factor

10% Basin Reserve for any miscalculation

24"/ac/ft for Aquifers

Actual Maximum Annual Yield = 2" not 24"

Arbuckle Simpson
Barren Fork River

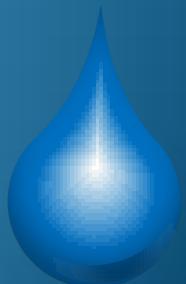
INSTREAM FLOW

STUDY TOSSED OUT

2015

Instream flows are basically non-consumptive

- **Consumptive**
 - Permitted water
 - Water for land owners
- **Non-Consumptive**
 - Tourism
 - Recreation
 - Fish and Wildlife
 - Socio-economic value
 - Farming & Ranching
 - Tree Growing



Contemplates potential establishment of in-stream flows for recreation, tourism, ranchers, farmers, trees fish and wildlife and Economic growth.

Tribal Rights – Where are they??
Where is their claim to water provided for?

ORWP Resolve

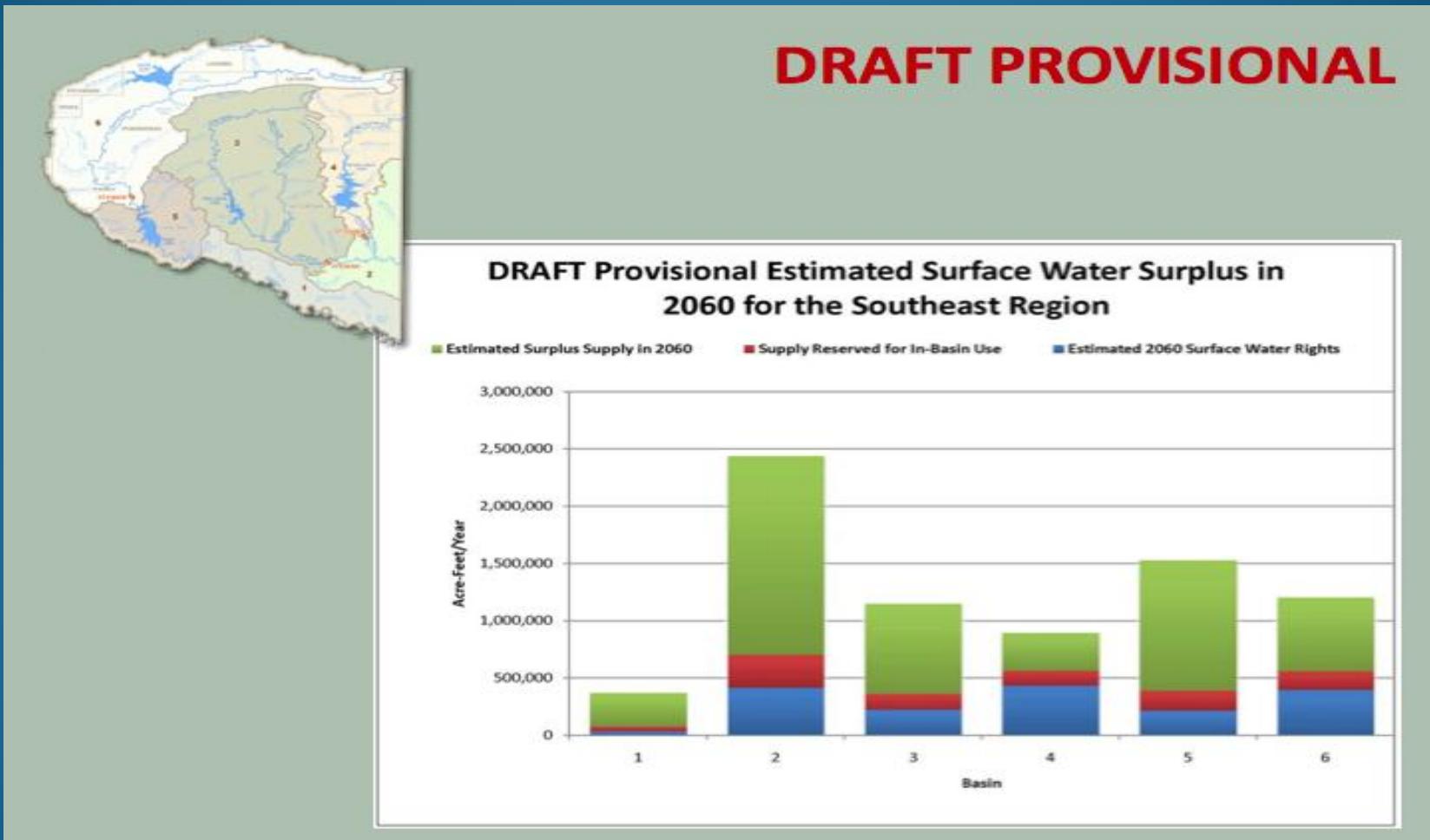
– Availability of Excess and surplus
to be **non-existent** until an
instream flow study has been
conducted, using proper scientific
methodology and thoroughly
vetted.

Using this approach: protect water resources until it can be determined how much should remain to satisfy all consumptive and non-consumptive needs in the basin.

Sustainability

Regional Planning

One size doesn't fit all!

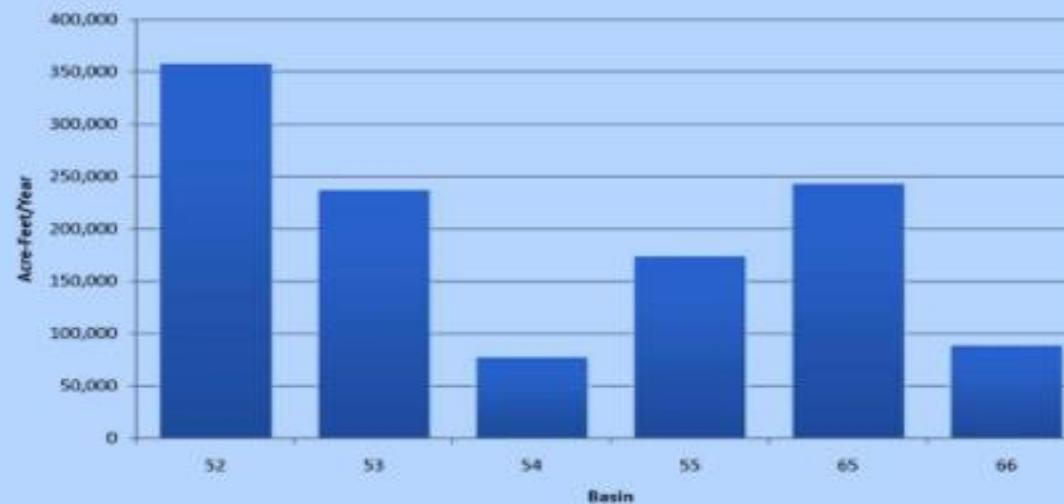


DRAFT PROVISIONAL



DRAFT Provisional Estimated Surface Water Surplus in 2060 for the Panhandle Region

■ Estimated Surplus Supply in 2060 ■ Supply Reserved for In-Basin Use ■ Estimated 2060 Surface Water Rights



Paradigm shift to
Rural Growth

Conservation!!
50 Year Horizon

Modern technology to
Increase availability within
one's own basin.

ITB'S TEXAS TECH LAW REVIEW OF SENATE BILL ONE

When water is removed from a basin so goes economic development, tourism and recreation. With the donor basin being left with environmental degradation.



01/24/2009

Transfers in Other States

Heavily Scrutinizes

- Availability of Water in a basin does not mean that water is allowed to be exported.

Basins of origin needs are considered, compensated or mitigated if permitted.

- Readily admit that Tourism, Recreation, and Economic Growth GO with the Water..

Recommend that Texas and
New Mexico Basin Transfer
Language is adopted as part of
Oklahoma law

We know so little about the
water under our feet!! The
Aquifers were not included
in this “Comprehensive” Study....

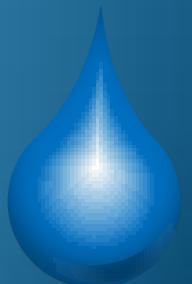


Aquifers

Sustainability

RECHARGE
RATE

CONTINUED
MONITORING





**WATER QUALITY
MANY STREAMS
IMPAIRED**

Atoka Lake Disaster



Fish habitat