

**DRAFT – Prepared for ESHMC meeting 28 Sept 06
but never presented.**

Our Ability to Simulate Water Budgets Using Calibration-Period Data

26 September 2006

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Drought Scenario Data:

- Represent **synthetic** drought, followed by **synthetic** recovery.
- Synthetic data were (mostly) **extracted** from calibration-period data
- (Note that drought scenario was never completed nor reviewed by ESHMC)

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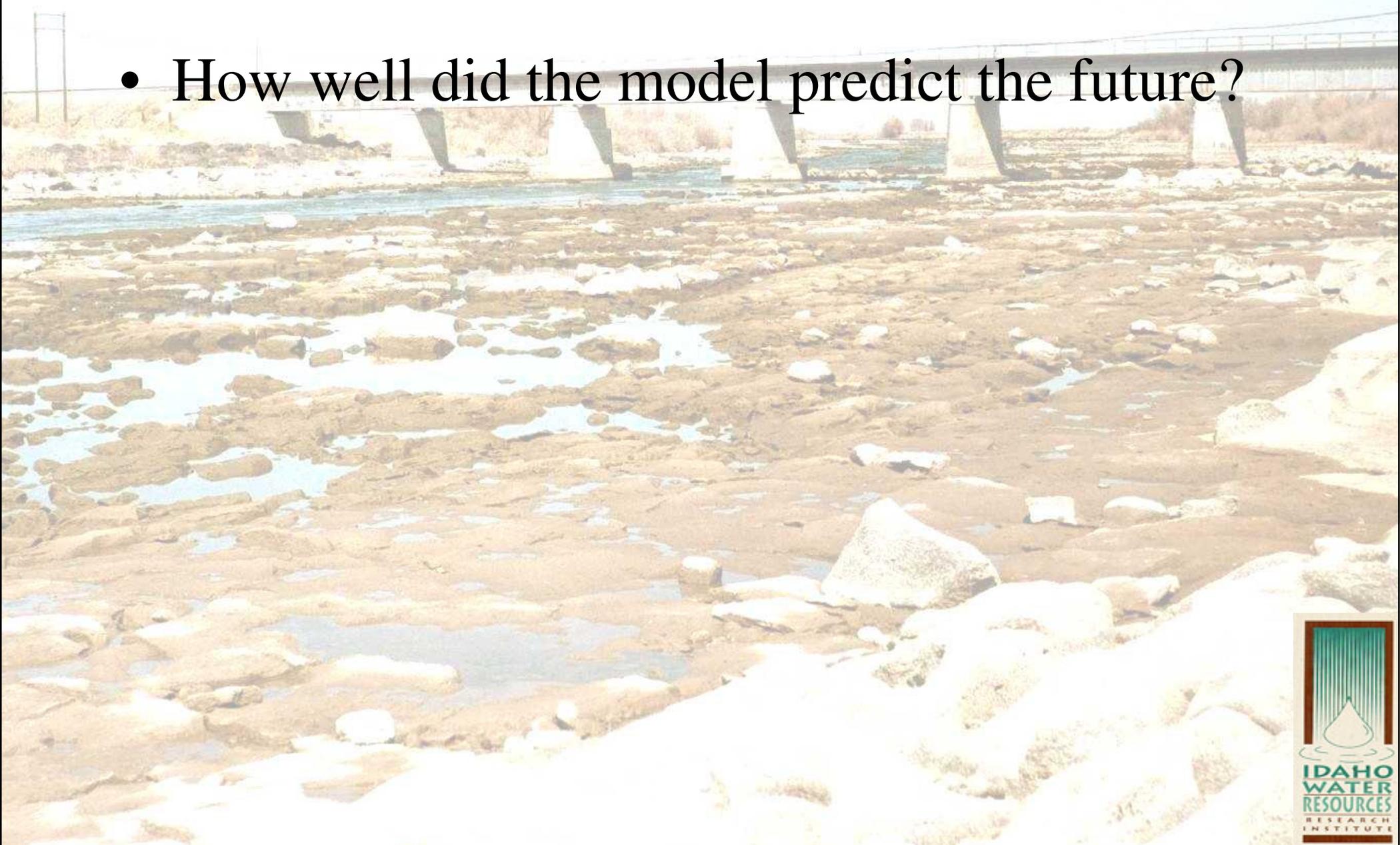
Drought Scenario Data Sources (preliminary)
but never presented.

Component	2002	Drought	Recovery
EIR	2001 Data	2001 Data	Avg
RNI	2001 Data	2001 Data	Avg
PRI	2001 Data	2001 Data	Avg
SWV	2002 Data*	2003 Data*	Avg
off	2001 Data	2001 Data	Avg
fpt	2001 Data	2001 Data	Avg
pch	2001 Data	2001 Data	Avg
trb	2001 Data	2001 Data	Avg
cnl	Calc	Calc	Calc

*Diversions adjusted to prevent negative percolation on SW-only lands.

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- How well did the model predict the future?



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Simulated effects of drought (and recovery)

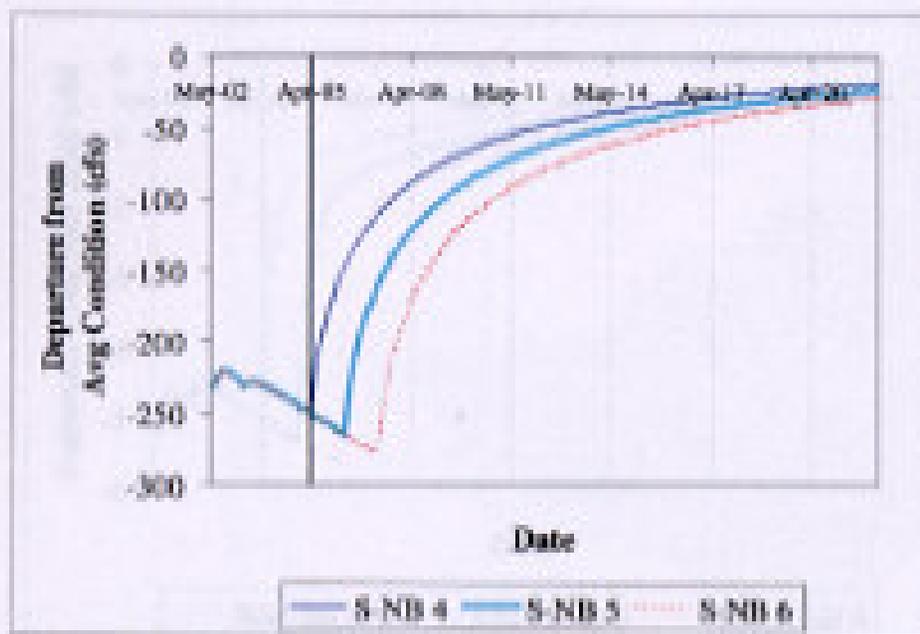


Figure 8. Shelley to Near-Blackfoot simulated drought impacts.

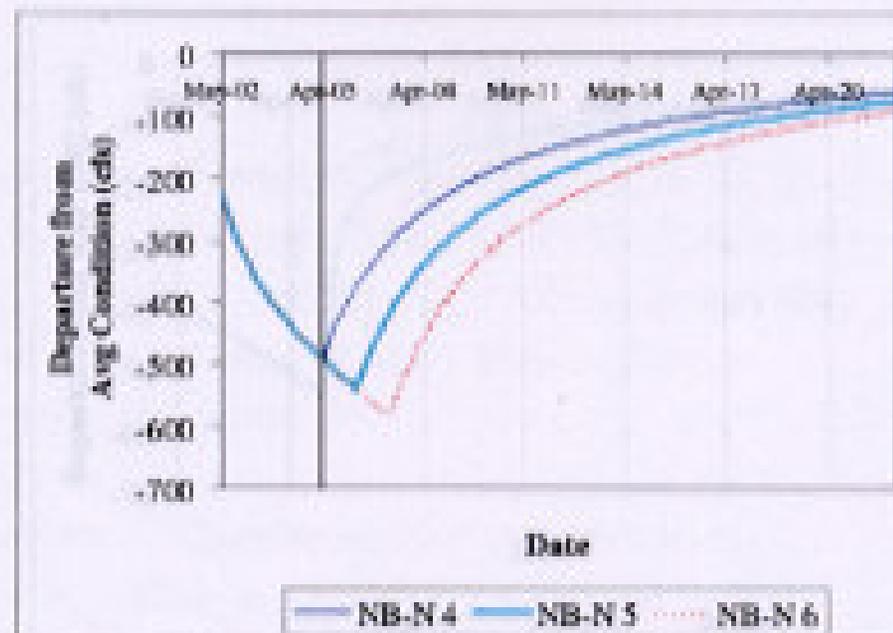


Figure 9. Near-Blackfoot to Neeley simulated drought impacts.

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Observed changes (effects of drought & ?)

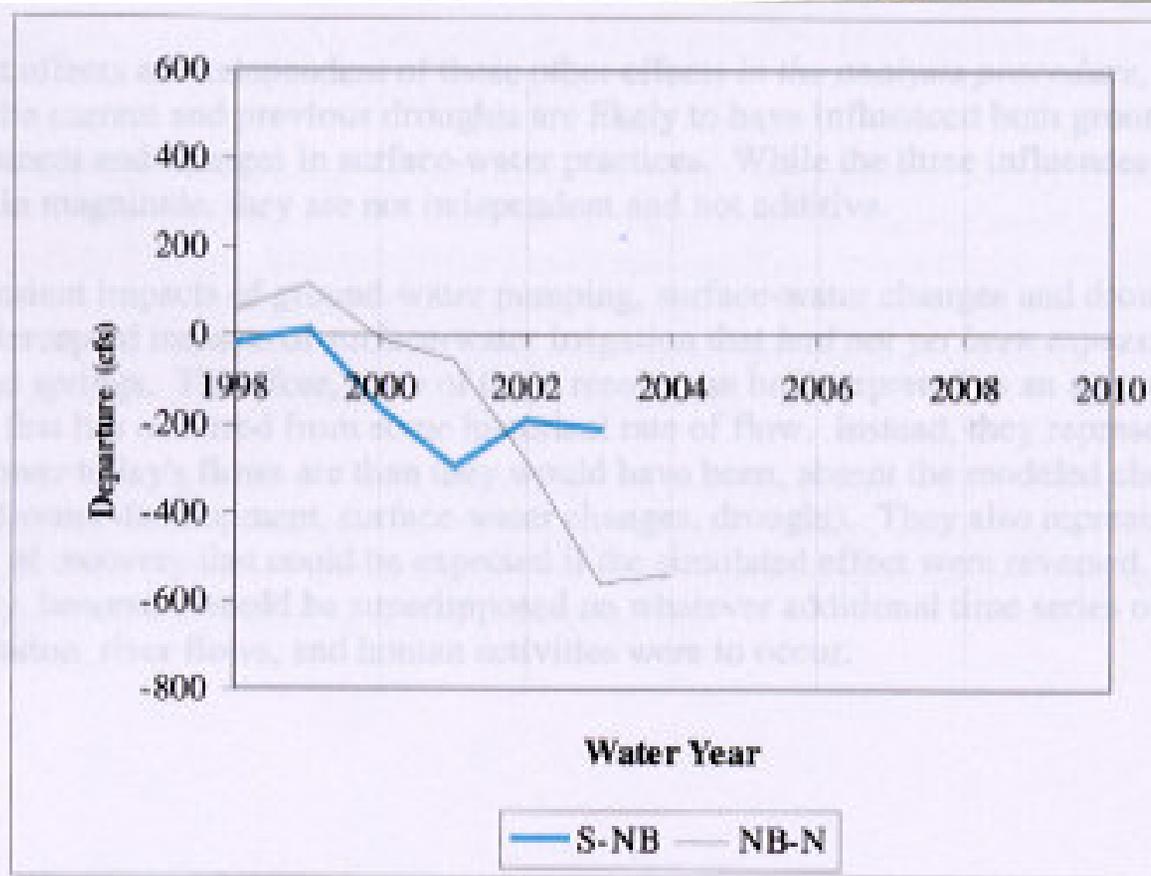


Figure 18. Reach gains departure from calibration period average, Shelley to Near-Blackfoot reach and Near-Blackfoot to Neeley reach. The base period for calculations was water years 1980 through 2001.

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Hand trace of S-NB prediction overlaid on observed changes

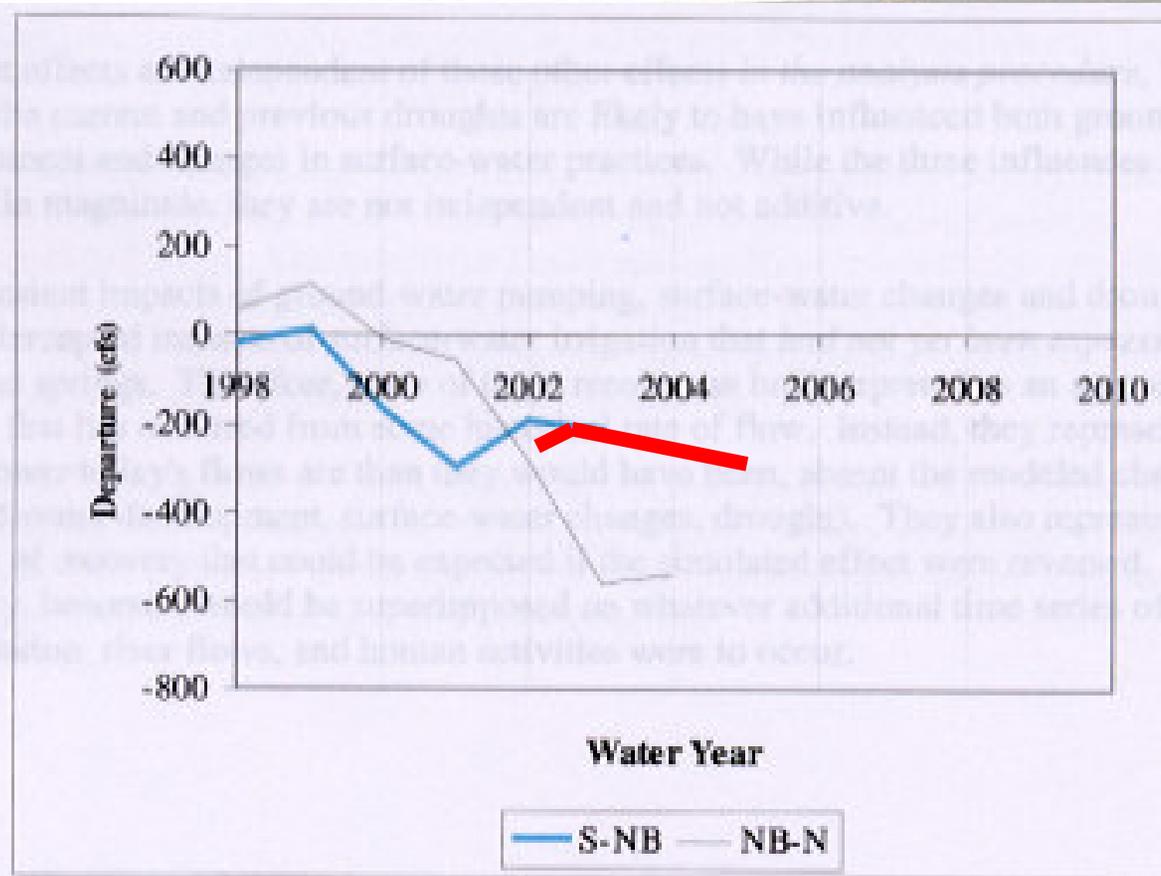


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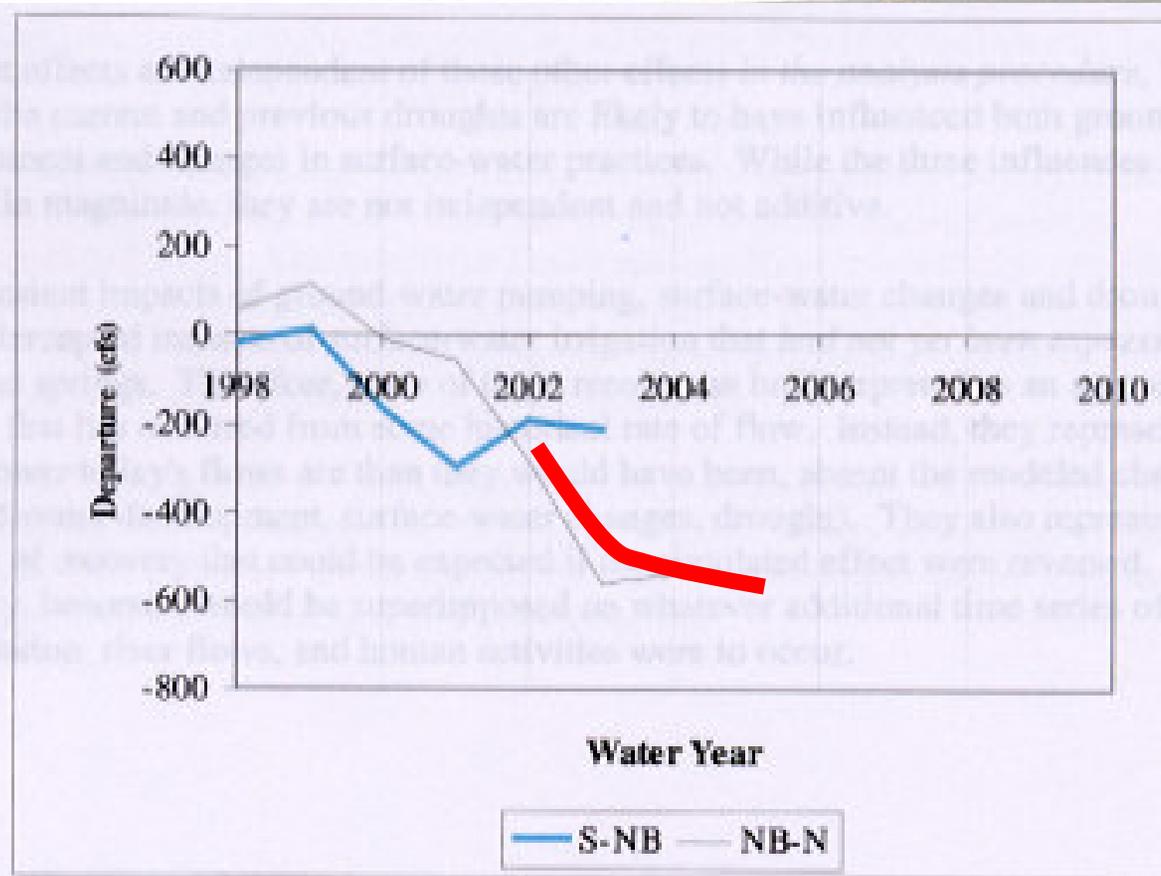


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- **The simulated data** appear to have predicted the future

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Questions and Discussion

