Exchanges of Water Between the Upper Floridan Aquifer and the Lower Suwannee And Santa Fe Rivers

> J.W. Grubbs C.A. Crandall U.S. Geological Survey



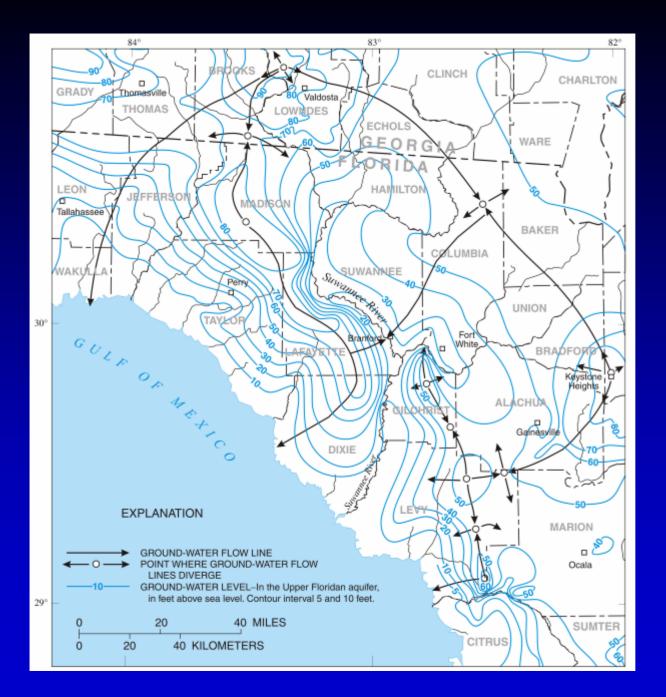
Acknowledgments

Suwannee River Water Management District:

John GoodRon CeryakNumerous others

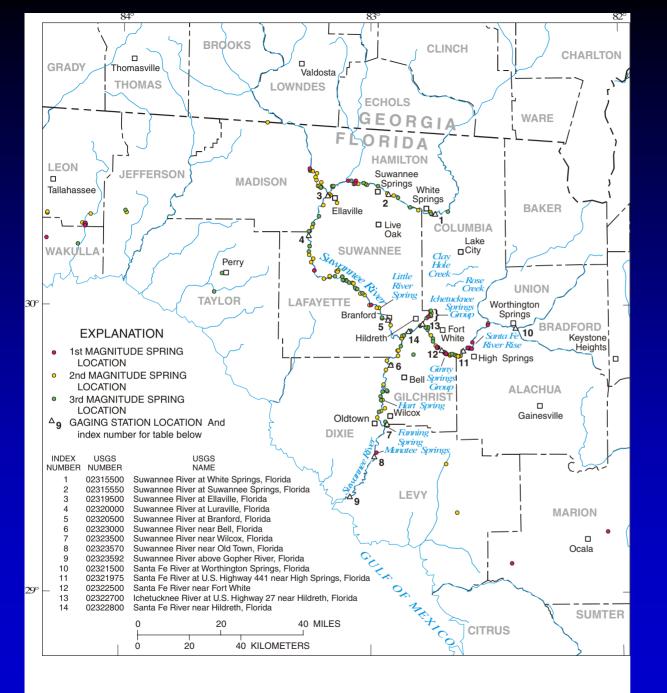
U.S. Geological Survey:•Richard Marella•Alejandro Sepulveda





Ground-Water Flow System Boundaries

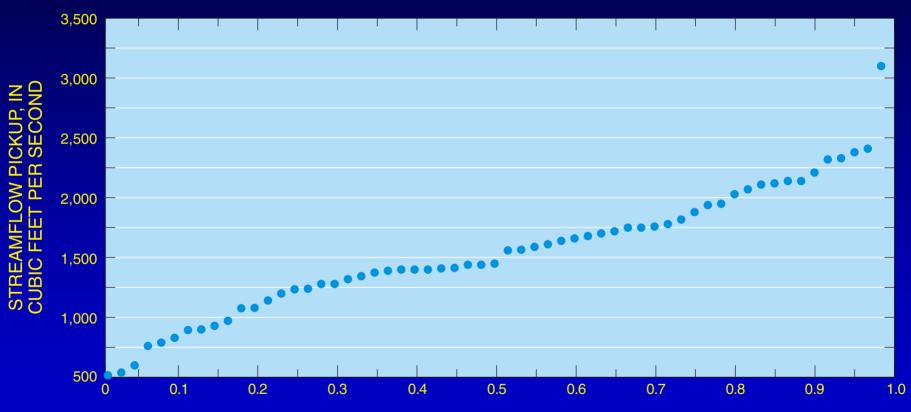




Spring Locations



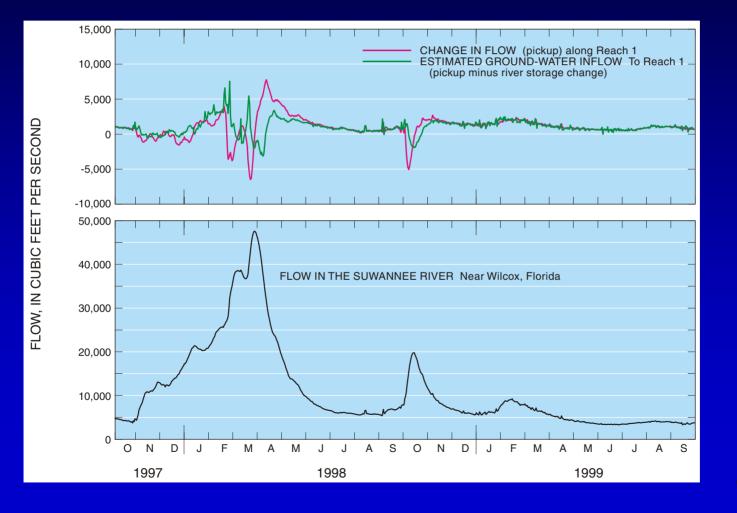
Annual Variability in Streamflow Pickup



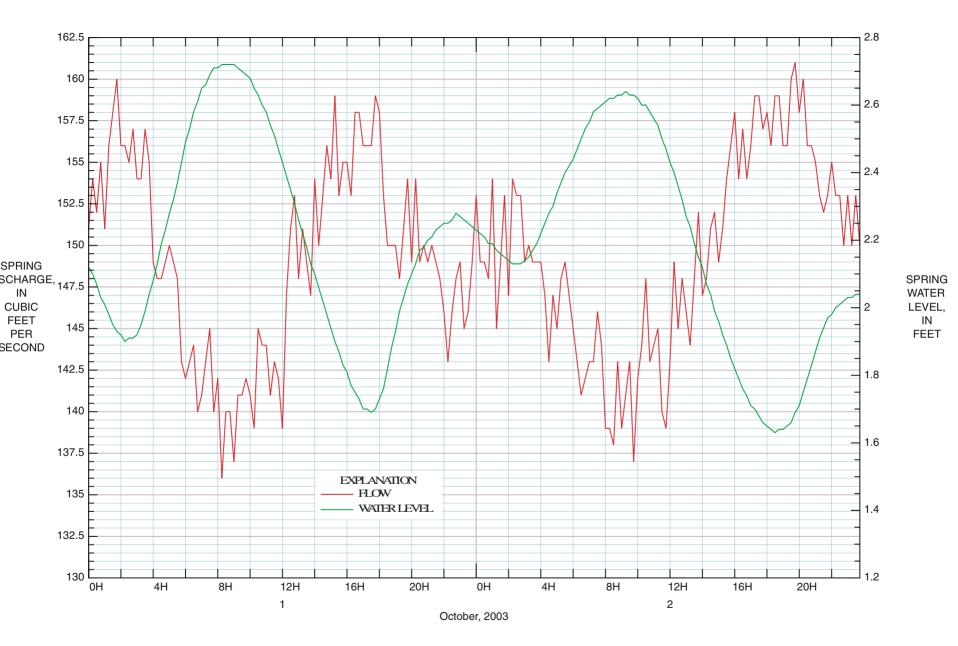
PROBABILITY OF EXCEEDING A GIVEN LEVEL OF STREAMFLOW PICKUP



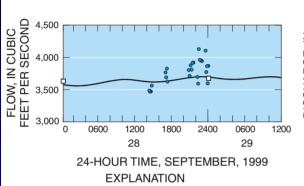
River-Aquifer Exchanges During Water Years 1998-1999







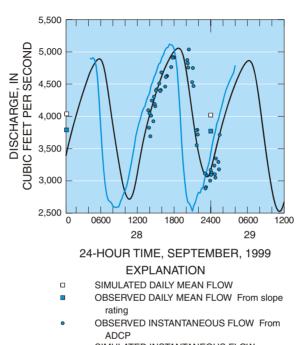
idally-Induced Spring-Flow Variability at Manatee Springs



SIMULATED DAILY MEAN FLOW

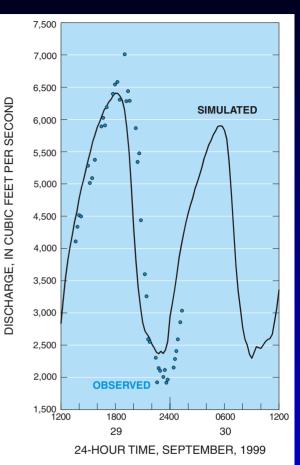
OBSERVED INSTANTANEOUS FLOW From ADCP
SIMULATED INSTANTANEOUS FLOW

Simulated and observed flow in the Suwannee River near Bell, Florida, during September 28-29, 1999.



SIMULATED INSTANTANEOUS FLOW
OBSERVED INSTANTANEOUS FLOW From slope rating

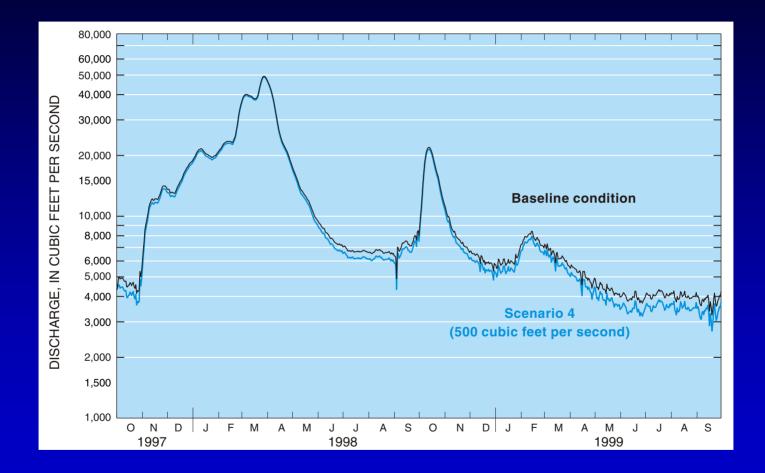
Simulated and observed flow in the Suwannee River near Wilcox, Florida, during September 28-29, 1999.



Simulated and observed flow in the Suwannee River upstream from the mouth of Manatee Springs Run during September 29-30, 1999.



Understanding Changing Conditions





Understanding Changing Conditions

