AFFIDAVIT OF

HERBERT H. SCHUMANN

STATE OF ARIZONA)
) ss.
County of Maricopa)

I, Herbert H. Schumann, upon first being duly sworn upon my oath do say:

1. Your affiant is a former Senior Groundwater Specialist for the U.S. Geological Survey -Water Resources Division and has been practicing a researcher and consultant in hydrology in the State of Arizona for more than 35 years.

2. Your affiant has visited the Central Arizona Water Conservation District's (CAWCD) Agua Fria Recharge Project facility. He has reviewed the 1998 model report submitted by CAWCD to the Arizona Department of Water Resources (ADWR) to evaluate the impact of the recharge facility on the surrounding area. The model study indicated that recharging 100,000 acre-feet of water per year for 20 years would cause water levels in wells in the Sun City area to rise only about 1 foot. Even after 20 years of recharging large volumes of water at the recharge facility, the model indicates that there will be little impact on water levels in wells in the Sun City area.

3. Your affiant suggests that the water-level rises reported in wells near the Agua Fria recharge basins, constructed about along the Agua Fria River about 7 miles north of Sun City, can be expected during

recharge operations. If the measured water level rises are large and rapid -- that would indicate that the rates of recharge are excessive for the site.

4. Your affiant has also reviewed the October of 2001 model report submitted to ADWR to evaluate the impact of recharging 100,000 acre-feet of water per year at the recharge facility being developed by the Salt River Project (SRP). The facility is located at the confluence of the Agua Fria and New Rivers -- about 7 miles south and downstream from Sun City. This model was built upon the 1998 model for the study of the effects of the Agua Fria Recharge Project facility. The model was used to evaluate the possible impacts of the proposed SRP recharge operation.

5. Your affiant has documented that groundwater depletion has caused the aquifer system to compact, and aquifer compaction has produced large areas of land subsidence in the west Salt River Valley. Land subsidence and resultant earth fissures present serious environmental and geologic hazards that have caused many millions of dollars of damage to property and to engineering structures. Continued groundwater depletion will result in continued land subsidence in the west Salt River Valley.

6. Your affiant states that discontinuing pumping of groundwater for golf course watering in Sun City area will help reduce the local groundwater depletion and thereby begin to reduce the land subsidence and earth-fissure hazards.

7. **Your affiant estimates that the hydrologic benefits of the direct local utilization of CAP water would be nearly immediate as opposed to remote recharge projects that may not provide benefits for decades.**

Further Affiant sayeth not.

Dated this 5 **Day of** ~~August~~ Sept. **2002.**

Herbert H. Schumann

Herbert H. Schumann

SUBSCRIBED AND SWORN TO BEFORE ME this 5th **day of** Sept. ~~August~~ **2002 by Herbert H. Schumann.**

Tina M. Johnson

Notary Public

6-5-4

My Commission Expires:

OFFICIAL SEAL
TINA M. JOHNSON
NOTARY PUBLIC - ARIZONA
MARICOPA COUNTY
My Comm. Expires 6-5-2004