



IWA QUARTERLY

October, 1983

E.D. Upgrading--A Major Turning Point

For its first eight years of existence IWA got its water supply from mainland wells. The water was treated by the Greater Pine Island Water Association and piped underwater across Pine Island Sound.

IWA's first move away from dependence on mainland water was taken just ten years ago when it started treating brackish water from Sanibel wells in an electrodi-alysis (E.D.) plant. This process, older but less known than reverse osmosis (R.O.), uses direct electrical current to draw sodium and chloride ions through special membranes to produce potable water. (IWA's R.O. plant, which started in 1980, uses an entirely different process to remove salt.)

Only two years ago it looked as if the E.D. plant might be abandoned because of rising electrical costs. But when an improved E.D. membrane was developed IWA decided to give the plant a new lease on life. The new membrane uses less energy, produces better water at higher flows, and lasts much longer than the original membranes.

About forty percent of the old style membranes have already been replaced, and a fifteen year IWA plan calls for changing all of them. Under the plan IWA can keep up with the predicted growth of water demand by upgrading the E.D. plant at only about one-fifth the cost of expanding the R.O. plant. Also, the E.D. plant can be expanded in smaller "chunks" than the R.O. (about \$35,000 per operating unit at the E.D. plant; \$710,000 per unit at the R.O.).

IWA's dual process desalination system, using both electrodi-alysis and reverse osmosis, is probably unique among world water supplies. It permits your Association to take advantage of different kinds of new technology in a rapidly developing field.

Honored IWA Employee

The Chief Operator of IWA's R.O. plant, Mike Humphreys, has received two important awards in 1983. Mike traveled to Florence, Italy this spring to receive an award from the international "Water Supply Improvement Association". Then, on October 27, 1983, Mike was named the Florida Operator of the Year by the Florida Section of the American Water Works Association in ceremonies at Miami Beach. Good work Mike!

Well Lining Program

Three of the six steel cased Hawthorn aquifer wells along San-Cap Road have been lined with plastic to prevent salt water contamination. The balance of the wells will be done one at a time so that the results of each relining can be evaluated before another is begun.

Hurricane "Alicia" Inspection

Four IWA officials visited Galveston Island, Texas last month to inspect the damage done to its water system by Hurricane Alicia. Several significant changes and additions were incorporated in IWA's Disaster Preparedness Plan as a result of this study.

Well Plugging Program

The City of Sanibel, South Florida Water Management District and IWA plan to plug several abandoned agricultural wells on Sanibel Island next year. The cost and duties will be shared by the three agencies. Wells threatening IWA's water supply with salt water contamination will be plugged first. No well will be plugged without the owner's permission.

IWA in a Small Group

Levels of the cancer-causing chemical trihalomethane have never been a problem in IWA-produced water. Regular tests for this contaminant have shown this fact for years. But it was surprising to learn from an October 20th news article that Cape Coral's water supply is the only one other than IWA's in Lee, Collier or Charlotte county with acceptable trihalomethane levels.

FINANCIAL: These figures represent the unaudited accounts as of Sept. 30, 1983.

<u>RECEIPTS</u>	<u>NINE MONTHS OF</u>	
	<u>1983 Budget</u>	<u>Actual Receipts</u>
Water Sales	\$1,892,250	\$1,910,090
Interest	30,000	41,733
Other Receipts	15,000	9,692
Connection Fees	270,000	334,578
<u>TOTAL RECEIPTS</u>	<u>\$2,207,250</u>	<u>\$2,296,093</u>
Carryover (less required reserve)	310,650	310,650
<u>TOTAL FUNDS</u>	<u>\$2,517,900</u>	<u>\$2,606,743</u>
<u>DISBURSEMENTS</u>	<u>NINE MONTHS OF</u>	
	<u>1983 Budget</u>	<u>Actual Disbursements</u>
Wages and Benefits	\$ 510,000	\$ 464,114
Professional Fees	56,250	57,234
Electricity	410,250	367,986
Telephone	8,850	10,674
O&M Service and Supply	334,050	294,132
Motor Fuels	8,775	9,079
Water Purchase	75,000	92,347
Insurance	29,550	13,910
Postal Charges	9,600	8,333
Travel, Training, Conferences	17,325	14,455
Debt Repayments (Farmers Home Admin.)	225,375	225,351
Capital Expenditures	792,450	644,036
<u>TOTAL DISBURSEMENTS</u>	<u>\$2,477,475</u>	<u>\$2,201,651</u>
<u>EXCESS OF FUNDS OVER DISBURSEMENTS</u>	<u>\$ 40,425</u>	<u>\$ 405,092</u>
<u>R.O. MEMBRANE REPLACEMENT FUND</u>		<u>\$ 241,224</u>
<u>NET AVAILABLE FUNDS</u>		<u>\$ 163,868</u>

THE ISLAND WATER ASSOCIATION, INC.


Milton A. Schellert, President