

FLORIDA AGRICULTURAL EXTENSION SERVICE
UNIVERSITY OF FLORIDA
INSTITUTE OF FOOD AND AGRICULTURAL SCIENCES

COLLEGE OF AGRICULTURE AGRICULTURAL EXTENSION SERVICE AGRICULTURAL EXPERIMENT STATIONS SCHOOL OF FORESTRY

REPLY TO: Orange County Agricultural Center
2350 E. Michigan Avenue
Orlando, Florida 32806

January 21, 1966

Dear "Ag Friend":

Since water is the very cornerstone to Orange County's future growth and prosperity, it behooves each of us to be thoroughly familiar with our local hydrologic cycle.

Once the public becomes familiar with these hydrological facts, we then must formulate the necessary policies which will create the programs to meet tomorrow's needs by avoiding costly mistakes and resulting confusion.

The Honorable Tom Adams, Secretary of State, put the problem in proper perspective when he stated, "Water is like a crop in that it must be harvested and used with care and foresight."

Water, like crops, is the product of the land. Therefore, good land use automatically becomes the key to what type of water harvest we will reap.

Since all of Orange County's water harvest is derived from the atmosphere, we need to study the yield (rainfall) records to determine what our harvest might be over a period of years.

Our average rainfall is approximately 52 inches annually. Periods of above average rainfall are usually followed by several consecutive years of below average rainfall.

Over a long period of time, for every year of above average rainfall, we have two years of below average rainfall. This 1:2 ratio makes it imperative that we store up excess rainfall to offset the lean years.

Designing a county-wide master land-use plan to capitalize on these hydrologic facts, falls into four distinct management areas: (1) West Orange County, (2) East Orange County, (3) Recharge and drainage wells, and (4) Land-locked lakes.

West Orange County, because of its porous soil types and topography can be figuratively referred to as the soak and storage management area or the "blotter" area.

In this area the excess rainfall percolates into the underground aquifer and moves from west to east. This water crop is later "harvested" through wells by agriculture, industry, and the cities of Orlando, Winter Park,

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Maitland, South Seminole County, Cocoa and Cape Kennedy.

Special policies of taxation and zoning must be developed to protect this area from mismanagement (destroying the recharge principle) through excessive urban development into these water recharge soils.

East Orange County must be managed entirely different because of its soil types and topography. This area might be figuratively referred to as the splash and spread management area.

When water crop surplus occurs in East Orange County, they become readily apparent to the laymen because of poor drainage conditions, this water collects as surface water.

It is here a new concept of storing water surplus should be undertaken jointly by Orange and Brevard Counties. Instead of building costly drainage works, and inefficient above ground water storage areas, excess surface water should be purified and discharged down special water recharge wells in East Orange County.

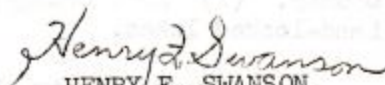
This underground storage technique would: (1) Reduce salt water intrusion into the water supplies of East Orange County, (2) Reduce the need for costly and inefficient above ground storage areas and canals, (3) Open up these "managed areas" to urbanization, and (4) Reduce urbanization "pressure" on our vital soak and storage area of West Orange County.

Orange County's over 500 drainage wells present another management concept because of their pollution danger. Many of these wells need to be filled and closed out. Others need special settling basins and screening devices to purify excess water that is presently being allowed to go down them.

Orange County's approximately 1,100 lakes and ponds are problems within themselves. Many of these lakes are receiving surface runoff from urban developments and are becoming more and more polluted. Sometime a program will have to be evolved to prevent these lakes from becoming literally dead bodies of water by improving the quality of water which presently is being diverted into them.

Since water is one of our resource crops, we must so manage it that our yields will always meet our anticipated demands.

Sincerely,


HENRY F. SWANSON
County Agent
Orange County

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Enclosure