#### MINUTES OF THE MEETING

Manasota Basin Board Southwest Florida Water Management District

Sarasota, Florida

May 9, 1979

The Manasota Basin Board of the Southwest Florida Water Management District met at 3:00 p.m. on Wednesday, May 9, 1979 at the Sarasota-Bradenton Airport. The following persons were present: Gordon D. Hartman, Vice Chairman; J. Lynn Harrison and Randolph Snell, Members; J. B. Butler, W. T. Allee, E. S. Hoyt, C. E. Palmer, R. V. McLean and K. H. McKinney, District Staff; Tom Drda, Florida Game and Fresh Water Fish Commission; Ken Anderson, Post, Buckley, Schuh and Jernigan; Bernice Sawyer, South Central Florida Health Systems Council; Larry L. Good, Florida Cities Water Company; Rod Otis, South Gate Water & Sewer Company; Loring Lovell, Sarasota County Utilities; Russell Klier, Sarasota County Pollution Control; Howard W. Harlow, Englewood Water District; Arthur Fischer, W. R. Grace & Company; Charles Carrington, Manatee County; Bob Molnar, City of Sarasota; Irving A. Snyder, Palmer Ranch; Joe C. Ginsberg, Save Our Bay Association; C. T. Zimmerman, Consultant; Allen Horton, Sarasota Herald-Tribune; Jeff Miller and Rick Drummond, Sarasota Planning Department; Horace Sutcliffe, U.S. Geological Survey; Charles Hunsicker, Manatee County Planning & Zoning; Dick Wilford and Harold Lee, Manatee County Utilities System; and others.

Vice Chairman Hartman called the meeting to order and noted a quorum was present.

Approval of Minutes

Following review by the Board, Mr. Snell moved, seconded by Mr. Harrison, to approve the Minutes of the Meeting of April 11, 1979 as published. Motion carried unanimously.

Climatic Conditions

Mr. Palmer stated that April was a dry month and rainfall to date for this water year measures approximately eighteen inches in the Basin.

Regional Comprehensive Water Management Program

"Hypothetical" Water Supply System Mr. McLean discussed the ongoing Manasota Water Management Program and a hypothetical regional water supply system for the Manasota and Lower Peace Basins. Projects already completed or underway include: 1) Manasota Literature Search, 2) Manasota Sources and Facilities Inventory, 3) Manasota Well Field Site Investigation, 4) Northeastern Manasota Hydrologic Investigation, 5) Feasibility of augmentation of Lake Manatee Reservoir from the Little Manatee River. The above projects are part of a search for more potable water in northern Manasota and the following are the same for the southern portion of the region: 1) Preliminary Lower Peace Regional Water Supply Plan and 2) the Preliminary Southeastern Manasota Hydrologic Investigation. He said the Highlands Ridge Hydrologic Investigation is being carried out by the Peace Basin Board in order to determine what has caused the lowering of lake levels in the Ridge area. Mr. McLean said projects planned for the remainder of this year include:

1) Myakkahatchee Creek Pump Test and Analysis, 2) McArthur Tract Pump
Test and Analysis, 2) McArthur Tract Pump Test and Analysis, 3) Cow Pen Slough Water Management Project, and 4) Preliminary Evaluation of the Potential for Recharge/Recovery Wells at Lake Manatee. Mr. McLean then described potential new sources for the hypothetical Regional Water Supply System including the following: 1) recharge at Lake Manatee, 2) a well field in Northeast Manatee County, 3) blending of water for reverse osmosis, 4) another well field near Verna in Northeast Sarasota County, 5) a pipeline extending up the coast to provide flexibility via interconnects, 6) a reservoir using Cow Pen



<u>Slough</u>, Phillipi Creek, and Myakka River as the source, 7) a municipal well field in the McArthur Tract, 8) enlargement of General Development Corporation's offstream reservoir from the Peace River and tieing that reservoir to the North Port canal system, 9) well fields proposed by the Water Resources Management Study in Polk and Hardee Counties, 10) connection to existing inland well fields at Wauchula and Arcadia, and 11) development of a well field in Telegraph Swamp which is outside the District's boundaries. Mr. McLean said, although these ideas are strictly hypothetical, the staff hopes to create interest in the idea of a truly regional supply system. Mr. Harrison suggested the staff explore the feasibility of building another reservoir on the Manatee River above Lake Manatee for a back up system. Mr. Butler said several phosphate companies have already made extensive studies on possible reservoirs in that area and there is good potential for another reservoir there. In response to Mr. Harrison's question, Mr. Butler said the staff is not investigating the same aquifer system used for agriculture due to the need for better quality water for human consumption. Mr. Harrison said the hypothetical approach appears to be good and recommended that the staff proceed to determine the quantity and quality of water available from the various sources discussed. Mr. Snyder, representing the Palmer Ranch in Sarasota County, said Geraghty and Miller, Inc. investigated and found the ranch property could yield 10-15 million gallons per day but this was not considered by the hypothetical plan. Mr. Butler said he had not seen the report by Geraghty and Miller but would like to review it for input to the staff's work. Chairman Hartman said the many investigations discussed above are enabling the Basin to overcome a long-term deficiency in hydrologic data and this program will continue to provide important information on the area's water resources.

Regional Comprehensive Water Management Program Potential Projects - Fiscal Year 1979-80

Mr. McLean outlined potential Fiscal Year 1979-80 projects as follows:

1) cost and feasibility study of connecting lower coastal well fields

1) cost and feasibility study of connecting lower coastal well fields to North Port facility and extending a canal to General Development Utilities' reservoir, 2) augmentation of Lake Manatee by fully investigating Lake Manatee recharge and recovery alternatives, 3) cost feasibility and preliminary design of Northeast Manasota well fields to tie in with Manatee County System and another to tie in with the City of Sarasota, 4) preliminary cost and design of two well fields in the Myakkahatchee area, 5) Cow Pen Slough Water Management Project - proposal for Sarasota County, Soil Conservation Service and SWFWMD to conduct detailed investigation of one or two alternatives for the best solution, 6) Charlotte Harbor Estuarine Project - committee being formed of local and regional governments in the area, along with the Division of State Planning in an overall effort for management of this estuarine system, 7) a staff effort to follow up on the potential for Florida Power and Light to use treated effluent from Hookers Point, and 8) Retainer Consultants for projects with a maximum expenditure of \$5,000.

Mr. Hunsicker, representing the Manatee County Commission, read a letter requesting a study of potential water sources in the Parrish area during the next fiscal year. Chairman Hartman instructed the staff to review this request in addition to the Bunker Hill area mentioned earlier by Mr. Harrison. Mr. Wilford, representing the Manatee County Utilities System, said he had discussed at the last meeting the need for gauging stations to be installed above Lake Manatee. Mr. Snell said he feels the role of the Basin in this regard should be that of technical assistance, not installation and operation. He asked the staff's opinion relative to the broad scope of utilization of the information other than for the primary purpose of operating the dam at Lake Manatee. Mr. Butler said information obtained from utilization of the gauging stations would be of primary benefit to Manatee County; however, some benefits would

accrue to the District in its planning and data collection efforts. Mr. Harrison recommended installation of the least sophisticated system that is adequate to do the job. No action was required by the Board at this time.

A ...

Regional Comprehensive Water Management Program
Proposed Cooperative Projects - Fiscal Year 1979-80
Mr. McLean briefed the Board relative to proposed IFAS projects for Fiscal Year 79-80 as well as U.S.G.S. projects. No action was required on this item.

Cow Pen Slough Water Management Program
Mr. McLean requested authority for two \$5,000 Retainer Consultant Work
Orders as follows: 1) a contract with Joint Venture (Smally, Welford &
Nalvin and Russel & Axon) to take advantage of their knowledge and
information on the project, and 2) to obtain an analysis of the potential
yield of Cow Pen Slough, Myakka River and Phillipi Creek. He said
implementation of the latter is questionable at this time. Following
consideration, Mr. Harrison moved, seconded by Mr. Snell, to approve two
work orders, each in an amount not to exceed \$5,000, as recommended by
the staff. Motion passed unanimously.

Myakkahatchee Creek Pump Test
Mr. McLean said, in connection with a pump test to be conducted in the
Myakkahatchee Creek area, the consultant, Geraghty and Miller, Inc., has
recommended certain additional work. He explained that, in addition to
the deep well testing previously planned, the consultant recommended a
secondary artesian aquifer, extending from approximately 75' - 415'
below land surface, be tested at various depths to quantify the movement
of water in that aquifer system. Mr. McLean said the contract amount
for the deep well testing originally planned in connection with construction
of two observation wells at the Myakkahatchee Creek site is \$128,443.50.
The additional testing recommended by the consultant is estimated to
cost an additional \$30,000. He said funds are available within the
current basin budget to accomplish this additional work and that the
Governing Board had approved this expenditure at its May 1st meeting,
subject to Basin Board approval. Following discussion, Mr. Harrison
moved, seconded by Mr. Snell, to approve additional well testing at ROMP
site #18 at a cost not to exceed \$30,000, as recommended. Motion carried
unanimously.

Myakka River Aquatic Weed Control Program - Game and Fresh Water Fish Commission Tom Drda, Regional Botanist for the Florida Game and Fresh Water Fish Commission, was introduced and gave a status report on the aquatic weed control on the Myakka River which is the current responsibility of the Florida Game and Fresh Water Fish Commission. He said the hydrilla and hyacinth growth in the river has in past years created dams next to the bridges and it is expected this will occur again during the rainy season. Some chemical treatment has been used on these growths and sometimes crews have to physically break up the jams. He said extensive growth of hydrilla has created the biggest problems. The Department of Natural Resources, the Park Commission and the Florida Game and Fresh Water Fish Commission have cooperated in controlling the weeds and have been fairly successful; however, Mr. Drda said the weeds in certain areas of the state park are inaccessible.

Brief status reports were distributed to the members at this time for their review.

It was announced that the next meeting will be held June 13, 1979 at which time the Tentative Budget will be discussed.

There being no further business or announcements to come before the Board, the meeting was adjourned at 4:55 p.m.



#### Continuost di dia Wotor Mamagement District

5060 U.S. HIGHWAY 41, SOUTH — BROOKSVILLE, FLORIDA 33512 PHONE (904) 796-7211

DERRILL MCATEER, Chairman, Brooksville ROBERT MARTINEZ, Vice Chairman, Tampa N. BROOKS JOHNS, Secretary, Lakeland RONALD B. LAMBERT, Treasurer, Wauchula NICK PENDER, Temps
HELEN THOMPSON, St. Petersburg
B. T. LONGINO, Serasota

CLIFF STEPHENS, Clearwater WM. O. STUBBS, Dade City

DONALD R. FEASTER, Executive Director

June 22, 1979 '

21-135-GOV-20-85

Mr. Dallas Dort, Chairman Sarasota Soil & Water Conservation District 2900 Ringling Boulevard Sarasota, FL 33577

Re: Sarasota West Coast Watershed Project - SWFWMD Participation

Dear Mr. Dort:

In reference to your letter of June 5, 1979 in which you asked that the Manasota Basin Board participate financially in repairs of the Sarasota West Coast Watershed Project on a one time basis; the Manasota Basin Board, after careful consideration at its meeting on June 13, 1979, voted not to participate in the repair work.

Sincerely,

DONALD R. FEASTER, P.E.

Executive Director

DRF:WFS:cca

cc: Manasota Basin Board Members Ed Hoyt, District Coordinator

#### **EMERGENCY ITEM**

June 13, 1979

**MEMORANDUM** 

TO:

Berryman T. Longino, Chairman Ex Officio, Manasota Basin Board

THRU:

D. R. Feaster, Executive Director

M.B. R. Laseter, Director, Department of Operations

C. H. Miller, Director, Resource Development Division

FROM:

W. F. Sietman, Assistant Director, Resource Development Division

RE:

Manasota Basin Board Meeting - June 13, 1979

EMERGENCY ITEM

#### SARASOTA WEST COAST WATERSHED PROJECT--SWFWMD PARTICIPATION

The Manasota Basin Board has received a request from the Board of County Commissioners of Sarasota County and the Sarasota Soil and Water Conservation District, the local sponsors for the Sarasota West Coast Watershed Project (Cow Pen Slough), formally requesting the Manasota Basin Board to participate financially in repairs of the West Coast Watershed Project on a one-time basis.

Specific requests include repair of the slough banks in areas where erosion has been worst, furnishing of fence materials (posts and barbed wire), and provision of watering facilities for cattle where the new fence eliminates the access to water previously available to the cattle in the slough.

The Staff recommendation approved by the Basin Board at its March 14, 1979 meeting was that the Manasota Basin Board not participate in the repair or maintenance of Cow Pen Slough. This is still the Staff's recommendation.

Should the Board desire to reconsider its previous decision, the following points should be considered:

- (a) Prior to participation in fencing, the original agreement between SCS and the local sponsors should be modified to accept fencing in lieu of bank maintenance. Agreement should be reached on identification of the worst areas which are to be repaired and specific areas to be fenced.
- (b) Some problems were caused by developers or home owners, with portions of the levee torn down or diverted to other use. Developers or property owners should be required to take the appropriate corrective action.
- (c) Agreement should be reached on method of performance and payment. The Staff would prefer to have the work accomplished and inspected prior to reimbursing the County for the work.

(d) The maximum amount of Basin financial assistance to the County for FY-80 should be \$50,000.

STAFF RECOMMENDATION:

SEE EXHIBIT

The Staff recommends that the Manasota Basin Board not participate in the maintenance and repair of Cow Pen Slough.

#### PRESENTATION BY:

W. F. Sietman

WFS:bh

cc: D. R. Feaster



#### COUNTY OF SARASOTA

FLORIDA

#### BOARD OF COMMISSIONERS

ANDREW SANDEGREN \* DISTRICT !

#EVERLY CLAY \* DISTRICT 2

JAMES D. NEVILLE \* DISTRICT 3

JOHN M. SABA. JR. \* DISTRICT 4

LARRY RHODES \* DISTRICT 5

ED MARONEY \* COUNTY ADMINISTRATOR

P.O. BOX 8 SARASOTA, FLA. 33578 PHONE: 813/365-1000

June 5, 1979

Mr. B. T. Longino, Chairman Manasota Basin Board 5060 U.S. Highway 41 South Brooksville, Florida 33512

Re: Sarasota West Coast Watershed Project -- SWFWMD Participation.

Dear Mr. Longino:

This letter is in regard to a letter received by the Chairman of the Board of County Commissioners and the Chairman of the Sarasota Soil and Water Conservation District from Mr. Don Feaster, dated March 27, 1979, in which recommendations were explored concerning SWFWMD's participation in the West Coast Watershed Project.

This letter is also a formal request to the Manasota Basin Board to participate financially in repairs of the Sarasota West Coast Watershed Project on a one time basis only.

Repairs that need to be addressed are: erosion, fencing, livestock watering facilities, aquatic weed control and repair and maintenance of water level control structures.

Erosion - Intermittently along the slopes of Cow Pen Slough erosion has occurred due to the livestock traversing the slopes in order to obtain water. Fencing along the slough would solve some of the problems associated with this; however, certain areas will require physical replacement of the slope. We are requesting that the Manasota Basin Board undertake this effort with the details of letting the necessary contracts to be worked out between the Basin Board and the Sponsors. The Sponsors will be willing to undertake supervision of the erosion repair work.

Fencing - We are requesting the Manasota Basin Board supply fencing materials (posts and barbwire) to fence off livestock,

to prevent future erosion, and watering facilities for livestock. The Assistant County Attorney, Dick Smith, has advised the Sponsors that the County has a right to take measures against cattle damaging the banks, and we believe that the erection of such a fence with the cooperation of the landlords will prevent such damage. The Sponsors have requested a recommendation from the Soil Conservation Service in regard to the type and installation of watering facilities that should be used. The Sponsors will also request adjacent land owners to keep livestock off the slopes once they have been fenced and watering facilities installed.

The County will continue to undertake aquatic weed control for hyacinths and hydrilla in the slough. The County will also undertake repair and maintenance of the gates on Structures #1 and #2.

The Soil Conservation Service has indicated they will correct the deficiencies in Structure #3 and take whatever steps are necessary to reduce the effects of the silting that has resulted from the by-pass of that structure.

Included in the County's commitment will be the maintenance of the pumping station at Bee Ridge Road until such time as a viable use for that facility can be found.

The Sponsors feel that, with this one time financial commitment on the part of the Manasota Basin Board, they will be able to maintain Cow Pen Slough in a viable manner with minimal cost to the taxpayers.

Thank you for any assistance you can give us in this regard.

Respectfully submitted,

Chairman

Dallas Dort, Chairman

Board of County Commissioners Sarasota Soil & Water Conser-

vation District

Minum.

## Basin Board Declines To Help In Slough Repair

LLAN HORTON Tribune Reporter

Masota Basin Board Wednesday to help i i maintain the banks on Slough eroded by coming in pastures , the slough.

: ; a request from the County Commission menty Soil and Water on District, members an board questioned may of spending public

federal funds channeled through the drainage project never was completed due to complaints from Venice-area residents of the canal's adverse impacts on Dona and Roberts bays.

A subsequent study in 1975 by Dr. Jeffrey L. Lincer, county

Constructed in the 1960s with system not be completed.

Lincer recommended among reservoir. the local conservation district, other remedies for the canal's erosion that cattle be fenced off from the stream, noting that in places where fencing had been erected, regrowth of vegetation banks.

Since then, the county had basin.

funds on what they said environmental specialist who requested the Southwest Florida essentially has become then was environmental health Water Management District essentially a private drainage scientist at Mote Marine repair and maintain crumbling Laboratory, recommended the flood control structures and study the slough's potential as a

> The district, parent agency for the basin board, declined to repair and assume control of the structures, but has begun the study as part of a series of had significantly stabilized the regional water resource studies being conducted within the

Tony Polizos, district con- board supply fence posts and soil and water conservation cattle. district, said ranchers along the for their cattle.

sponsor had requested the basin management district.

servationist from the U.S. barbed wire and provide access Conservation Service for the points to the canal for watering basin not participate in

The initial agreement between slough agree it should be fenced the Soil Conservation Service to protect it, but only if some and the project sponsors (the provision is made to provide county), however, required the alternative watering facilities county to maintain the banks and would have to be changed The conservation district to accept fencing in lieu of representing the ranchers and maintenance, according to staff the county as local project members of the water

The district staff recommended as it had in March the renovation of the slough.

Furthermore, according to an opinion from Assistant County Attorney Richard L. Smith. although the county can require fencing of the slough, it cannot deny the cattlemen access to the waterway for watering their cattle without providing relief.

Smith's research proves that contrary to popular belief, the cattlemen own the slough, having granted the county use and access only by easement.

Conservation district board member Gene Engman said it would be logical for the basin board to participate in fencing the slough since it has authorized study of the system as a potential flood control and water storage facility.

Basin Board Chairman B. T. Longino, however, questioned the propriety of spending the board's public funds for a "private watering system" and member J. Lynn Harrison, saving he could not sympathize with the cattlemen, moved not to approve participation,

Harrison and Longino are local cattlemen.

In other business, the basin board:

- Approved a preliminary budget for Fiscal Year of \$1,009,892, up \$75,218 from last year's budget of \$934,674. District finance director Norm Stoker said the anticipated millage levied by the district for the basin would increase from 0.10 to 0.13 mills, based on 1978 property valuations.

- Presented a plaque to former board member Betty Rushton for her service from 1975 to 1978 as a representative from Sarasota County on the two-county panel.

- Deferred approval of regional comprehensive water management project plans totaling about \$240,000 in costs until local governments could be consulted.

#### MINUTES OF THE MEETING

Manasota Basin Board Southwest Florida Water Management District

Sarasota, Florida

June 13, 1979

The Manasota Basin Board of the Southwest Florida Water Management District met at 3:00 p.m. on Wednesday, June 13, 1979, at the Sarasota-Bradenton Airport. The following persons were present: B. T. Longino, Chairman Ex Officio; Gordon D. Hartman, J. Lynn Harrison, and Randolph Snell, Members; Donald R. Feaster, Executive Director; Norman P. Stoker, William T. Allee, Gary Coates, T. J. Fox, E. S. Hoyt, K. H. McKinney, R. V. McLean, T. T. Mullin, C. E. Palmer, and W. F. Sietman, District Staff; Betty Rushton, former Board member; Russel Klier, Sarasota County; Dave Cobb, Florida Power and Light; Gene Engman, Soil and Water Conservation District; Tony Polizos, Soil Conservation Service; Charles Hunsicker, Manatee County Planning and Zoning; Arthur Fischer, Jr., W. R. Grace and Company; Horace Sutcliffe, U. S. Geological Survey; Allan Horton, Sarasota Herald-Tribune; Frank Proctor, Venice; and others.

Chairman Longino called the meeting to order and noted a quorum was present.

Approval of Minutes
Following review by the Board, Mr. Hartman moved, seconded by Mr. Snell, to approve the Minutes of the Meeting of May 9, 1979 as published.
Unanimously approved.

Climatic Conditions

Mr. Palmer reported areas in the northern and southeastern portions of the Basin received approximately six inches of rainfall during May with only about two inches recorded along the coast. He said a major storm centered over the Tampa Bay area May 7-8 produced record amounts of rainfall for that area. Mr. Palmer referred to the graph on the last page of the monthly precipitation report which reflected the Basin's cumulative rainfall for the water year and said the Manasota Basin is in relatively good condition at this time.

Regional Comprehensive Water Management Program
Mr. McLean discussed in detail a recommendation for a cost feasibility
study of a water transmission system proposed for the southern portion
of the Basin. He said the study will include determining the best
location for connector lines, pumping stations, and interconnects,
including an estimated cost of construction. The Board agreed this type
plan will be necessary in the future but suggested securing the endorsement
of this concept by the counties and exploring additional sources of
water supply before proceeding with the project.

Mr. McLean then discussed proposed FY 79-80 projects within the Regional Comprehensive Water Management Program as follows: (1) cost feasibility study for a well field in the southern portion of the Basin; (2) cost feasibility for a well field in eastern Manatee County; (3) cost feasibility study for the southern distribution system; (4) augmentation of Lake Manatee; and (5) Cow Pen Slough Water Management Project. Mr. Harrison said he felt the Board needs the Counties' direction regarding the priority of the projects. Mr. Feaster suggested that the same dollar amount as budgeted this fiscal year, approximately \$200,000, be included in the FY 79-80 Tentative Budget, and that the staff and Board work toward obtaining direction and support from the counties on the individual projects. Mr. McLean then continued the review of the projects including: (6) Charlotte Harbor Estuarine Project; (7) Bunker Hill investigation; (8) Parrish investigation (requested by Manatee County); (9) Lake Manatee Flood Warning System; (10) North Manatee Well Field; and (11) South Manatee Well Field. Chairman Longino said the Board will consider these projects and discuss them with the various county agencies prior to

consideration of the final budget in August. Mr. Hunsicker, representing the Manatee County Planning and Zoning Department, advised the Board that the County's request for a hydrologic investigation of the Parrish area should not be considered a commitment by the County Commission to develop any available water resources in that area. He also said it is his understanding that the County Utility System has decided to fund the flood warning system for Lake Manatee that was discussed at previous meetings.

Service Recognition At this time Chairman Longino presented a plaque to Betty Rushton in appreciation for her service as a member of the Manasota Basin Board from January 1975 through September 1978. Mrs. Rushton thanked the Board and staff and said serving as a Board Member had been a valuable experience for her.

QWIP Policy Revision

Mr. McKinney presented the staff recommendation to delete section two of the policy guidelines for the Quality of Water Improvement Program (QWIP) which reads as follows:

2. Well Plugging related to development and/or construction shall be the responsibility of the developer and/or the builder. The District staff may give technical assistance to the developer/builder in formulating plugging procedures.

Mr. McKinney said after actively working with this policy in the Manasota Basin for six months, during which time a well plugging contract has been prepared, the staff has determined that for the QWIP program to be effective to the maximum degree possible and to be fully equitable, paragraph two of the present policy should be deleted. Following discussion, Mr. Snell moved, seconded by Mr. Hartman, to approve the staff recommendation as presented. Motion carried unanimously.

Chairman Longino said if there were no objections, two items not appearing on the published agenda would be presented at this time. There were no objections.

Update on USGS and IFAS Programs
Mr. Palmer presented an overview of the current (FY 79) and projected (FY 80) U.S. Geological Survey (USGS) and the Institute of Food and Agricultural Sciences (IFAS) programs. He reviewed the various projects being funded by the Basin and explained the basis of funding for those projects funded by two or more basins. He pointed out the increased costs in the USGS program due to several new investigations. He pointed out the cost of the IFAS program for this Basin will be down next year because of a more equitable distribution of costs to the participating Basins.

Request for Assistance - Cow Pen Slough Operation and Maintenance

Mr. Sietman advised that the Board of County Commissioners of Sarasota County and the Sarasota Soil and Water Conservation District, (local sponsors for the Sarasota West Coast Watershed Project - Cow Pen Slough), have formally requested the Manasota Basin Board to participate financially in repairs of the project. At the March 14, 1979 meeting, the Board voted not to participate in the repair or maintenance of Cow Pen Slough. Mr. Sietman said the staff did not recommend participation but listed several points to be considered by the Board should the Board wish to rescind its previous decision. Mr. Engman, representing the Soil and Water Conservation District, and Mr. Polizos, representing the Soil Water Conservation District, and Mr. Polizos, representing the Soil Conservation Service, briefly discussed the needs of the project and the possible participation of the Basin Board. Following a thorough discussion and review, Mr. Harrison moved, seconded by Mr. Hartman, to approve the staff recommendation that the Manasota Basin Board not participate in the maintenance and repair of Cow Pen Slough. Motion carried unanimously.

Tentative Budget - FY 79-80

Mr. Stoker presented the FY 79-80 Tentative Budget for the Manasota Basin. He reviewed the proposed Basin projects and pointed out that projects may be added or deleted prior to consideration of the final budget at the August 15 meeting. Following thorough discussion and review, Mr. Harrison moved, seconded by Mr. Hartman, to approve the Tentative Budget in the amount of \$1,009,892 as recommended by the staff. Motion carried unanimously. The staff was instructed to mail budget information and a list of the proposed projects discussed in connection with the Regional Comprehensive Water Management Program to Board Members for review prior to the August meeting.

Status Reports

Mr. Feaster said a status report of ongoing projects within the Basin was in the Board folders. Relative to the Charlotte Harbor Resource Management Study, Mr. Feaster reported that Governor Graham has appointed a task force to address Charlotte Harbor and the problems of the area and the first meeting was held in Fort Myers today. He said reports will be presented to the Board at future meetings.

It was announced that the next meeting is scheduled for August 15, 1979.

There being no further business or announcements to come before the Board at this time, the meeting was adjourned at 5:35 p.m.

#### UNITED STATES DEPARTMENT OF AGRICULTURE

#### SOIL CONSERVATION SERVICE

2900 Ringling Blvd. Sarasota, FL 33577

April 23, 1981

Subject:

- 1. Cow Pen Slough Report
- 2. Erosion & Sediment Control Act

To: All Supervisors

Southwest Florida Water Management District's Report on Cow Pen Slough is enclosed for your files. I got them in the mail this week.

Enclosed is the Erosion & Sediment Control Act which Ed Maroney asked the District to respond to. It would give the District control over new subdivisions in the county. It will be proposed as a new law in the next state legislature. Please review it and give me your comments on it.

Anthony Polizos

District Conservationist





Subject:

Status of the Sarasota Westcoast Watershed Project

Date: February 3, 1982

To: Gene Engman Supervisor, Sarasota S.W.C.D.

As per our telephone conversation, I am enclosing a copy of the Annual Inspection of the Sarasota Westcoast Watershed Project (Cow Pen Slough) dated June 19, 1981. The 1982 Annual Inspection will probably be carried out during March. Please note in this report that my recommendations have not been carried out except for aquatic plant control.

However, on November 10th, a meeting was held with Ed Maroney on the repair and replacement of the gates and gears in structures nos. 1 and 2. According to the recommendations from a report on structures nos. 1, 2, and 3 by Kunde, Driver, Simpson, and Associates, Inc., it will cost approximately \$95,000 to bring structures nos. 1 and 2 in good working condition. Structure no. 3 was not examined in detail since the Soil Conservation Service was re-evaluating it.

In brief, here is a break-down of the repair work needed and cost estimate for structures nos. 1 and 2.

Structure	no	٠	7

3	4'X 14' radial gates operating unites steel walkway	\$ 14,400 8,500 4,000	
	Structure no. 2		
3	4' X 12' radial gates Installation costs	13,500 <u>45,000</u> 85,450	

10% for contingencies  $\frac{8,545}{$93,995}$ 

say \$95,000.

Mr. Maroney said that the money is available and that we agreed the best time to replace the gates and components would be the beginning of the rainy season or June.

As you know, the Sarasota Soil and Water Conservation District Board of Supervisors in May 1981, requested that the Soil Conservation Service carry out a flood plain management study of Cow Pen Slough. According to an agreement signed by the

District, S.C.S., and the Florida Dept. of Veteran and Community Affairs the study will analyse a 10, 50, 100, and 500 year frequency flood event. Below is a schedule for major items to be accomplished:

	Work Item	Completion Date
1.	Gather available basic data	Dec. 1981
2.	Surveys	April 1982
3.	Perform hydrologic and hydraulic studies	Aug. 1982
4.	Perpare data for report	Oct. 1982
5.	Prepare report	Feb. 1983
6.	Follow up assistance	March - Aug. 1983

According to my hydrologist, Jim Woodfin, all work items are on or ahead of schedule. I will keep you and the other supervisors aware of our progress on this project. A copy of the plan of work is included for your records.

There has been no news about any recommendations on structure no. 3 and the pump plant, which are currently being evaluated by my state office. I believe, however, that we will be hearing from them in the near future.

If I can be of further assistance, please contact me.

Tony Anthony Polizos District Conservationist

#### Kunde-Driver-Simpson & Associates, Inc.

Engineers / Architects / Planners / Surveyors

PLEASE REPLY TO: Bradenton

November 5, 1981

Mr. Charles L. Goode, P.E. Transportation Director Sarasota County 1301 Cattleman Road Sarasota, Florida 33577

Re: Sarasota West Coast Watershed Cow Pen Slough, Project #8122

Dear Mr. Goode:

We are pleased to submit the attached report on the Cow Pen Slough water control structures.

The recommended replacements for control gates at Structures #1 and #2 should be accomplished on a priority basis due to the advanced state of deterioration of metal components. In the event that it becomes necessary to raise these gates prior to their replacement, your personnel should be advised to exercise extreme care to avoid further damage to the gates.

We wish to acknowledge and thank you for the assistance of Les McKinney and Lew Coles who accompanied us on our inspection trips.

Very truly yours,

Ben C. Simpson, P.E.

Vice President

BCS: vah Encl.

PROJECT: . SARASOTA WEST COAST WATERSHED - COW PEN SLOUGH

The Sarasota West Coast Watershed - Cow Pen Slough Project - was undertaken by the U. S. Department of Agriculture, Soil Conservation Service in cooperation with Sarasota County beginning in 1963 and was completed in 1966. The project consists of several miles of canal systems providing for drainage and water table elevation control throughout a major portion of Sarasota County.

The water elevations are controlled by three structures:
Structure #1 located near the King's Gate community; Structure
#2 located on the Dallas Dort ranch property; and Structure #3
located east of the Sarasota land-fill on Bee Ridge Road. The
structures are concrete dams having radial sluice gates which
allow for the impoundment of water during normal or low flow
periods and which are designed to be raised to increase the discharge of water during periods of high storm water run-off.

In the fifteen years of operation, various organization units within the Sarasota County government have been assigned the responsibility for operation and maintenance of the system with the result that maintenance has been deferred throughout most of the life of the structures. The present condition of the gates and operating mechanism at Structures #1 and #2 is in an extremely deteriorated condition, while Structure #3 is by-passed entirely

by the water flow.

The purpose of this report is to describe the condition of the sluice gates and operating mechanisms and to recommend the repair or replacement of various components which should be accomlished to return the structures to operating condition. documents and plans will be prepared in a subsequent contract to receive bids for the rehabilitation work.

Following is a series of photographs taken during an inspection on October 13, 1981, provided to illustrate the deteriorated condition of the gates.

#### Structure No. 1:

and No. 1-2

Refer to plate 4 for direction and location from which photographs were taken.

Photo No. 1-1 - left end of Gate "A." Note deteriorated condition of metal arms to the point of potential collapse, which occurred at Structure #2, Gate "B." (See Photo No. 1-13 and 1-25. Photos Nos. 2-13, 2-14, 2-15, and 2-16 for an example of the metal arms with full section and minimal deterioration.) Note the distortion around the point where the cable is connected which is not the designed connection point. The loss of section is approximately 80% on the radial arms. Note heavy buildup of rust on arc of metal which provides a seal surface at the end of the gates.

- Photo No. 1-3 Right end of Gate "A" showing extensive

  deterioration of the radial arms and dis
  tortion near cable connection. Cables shown

  at each end of Gate "A" are jury rigged to

  lift gate when required.
- Photo No. 1-4 Gear driven lifting mechanism for Gate "A."

  Gear has been broken for some time attempts

  were made by maintenance crew to braze the

  gear with no success. Note pitted condition

  of shaft.
- Photo No. 1-5 Right end of shaft for Gate "A" and gear driven

  mechanism for Gate "B." Identical situation

  as Gate "A."
- Photo No. 1-6 Left and right ends of Gate "B." Radial arms and No. 1-7

  show same extensive deterioration as evidenced at Gate "A." Note heavy rust and pitted condition of remaining metal (20" channel section across top of gate).
- Photo No. 1-8 Left end of Gate "C." Same comments as Gates
  "A" and "B."
- Photo No. 1-9 Right end of Gate "C" looking straight down.

  Note layers of rust and deformation of member.

  All metal components of Gates "A," "B," and

  "C" show extensive deterioration and are

  rusted completely through in numerous locations.

Photo No. 1-10 - Overview of operating mechanism for Gate

"C." Chains attached were used to raise

gate with crane during recent heavy rain run
off.

Photo No. 1-11 - Trunion pin at left end of Gate "C."

Photo No. 1-12 - Right end of metal handrail on catwalk. Rust removed to show holes through handrail. The least damaged parts are the catwalk handrail.

#### Summary and Recommendations:

Failure to exercise the gates periodically allows rust to build up on the metal embedded in the side walls of each sluice-way. This greatly increased the force necessary to lift the gate. Failure to replace the cable connections at the lower corners of the gates and utilizing any handy point on the radial arms reduces the lifting moment arm by over 50% and practically dictates the failure of the gears and lifting mechanism. The pinion gears on Gates "A" and "B" failed due to overstressing. The lubricating fittings for the trunion pins were plugged in some cases and missing entirely in others.

The deterioration of the gates and lifting mechanism is so extensive as to preclude a recommendation for repair. There is very little unoxidized metal left in the gates and replacing the gears as presently designed and fabricated will result in similar problems in the future. It is, therefore, recommended that the gates and operating mechanisms for Structure #1 be replaced with new equipment.

It is recommended that an operating and maintenance schedule be implemented to prevent a recurrence of this situation.

As previously noted, the structural support for the catwalk is extensively damaged, the failure of which could result in serious injury to maintenance personnel or others. It is recommended that the structural support, grating, and handrail for the catwalk be replaced.

The metal arcs imbedded in the face of the walls and along the channel of the sluice-way are for the purpose of providing a water-tight seal along the bottom and at the ends of the gates. Failure to exercise the gates periodically and clean the metal strips has resulted in a heavy build-up of rust and pitting of the surface which negates the usefulness of the seals. The metal end strips should be rebuilt with weld metal and ground to reestablish a suitable surface for the seal.

#### Structure No. 2:

and 1-14

Refer to Plate 8 for direction and location from which photographs were taken at structure. Photographs of Gate "B" were taken near house on ranch property.

Photos. Nos. 1-13 - shows remaining pieces of Gate "B" which collapsed probably due to a combination of the effects of extensive deterioration of the radial arms and the long term addition of excess water pressure created by the placement of sand bags on the top of the gate as shown in Photos 2-6 and 2-8. All of the gates at Structure #1 and #2

are in similar condition with respect to metal deterioration.

Photo No. 1-15 - Trunion pin and remains of hinge assembly

Gate "B."

Photo No. 1-16 - Trunion Pin, Gate "B." pin is in good condition.

Photos. No. 1-17 - Showing metal edge of Gate "B." Rust and 1-18

damage is extensive.

Phtos No. 1-19 - General view of Structure #2. Gates "A" and 1-20 and "C" are down. Gate "B" has been replaced with timber dam.

Photo No. 1-21 - View of left end of Gate "C" showing sandbags used to increase water level retained.

Photos. Nos. 1-22, Series showing timber replacement for Gate 1-23, 1-24, and 1-25 "B." Opening at sluice-way is 12 feet wide. Head being retained is approximately

5 feet from flow line of sluice-way.

4" x 6" timber bracing placed to shore up broken timber stringers near bottom of dam.

Photo No. 1-26 - Left end of Gate "A" showing sandbags used to increase the water level retained.

Photo No. 1-27 - Right end of Gate "A" showing remainder of sandbags. Note leak through hole in center of Gate "A."

Photo No. 1-28 - Left end of Gate "B" showing metal track embedded in concrete to provide seal surface.

Inspection of the hoisting mechanism at Structure #2 indicates that it is in satisfactory condition and can be repaired and placed back in operation. Bearings supporting the shafts should be disassembled, cleaned, lubricant passages cleared, lubricated and reassembled. Rust should be removed and the entire hoisting mechanism repainted.

The metal surfaces which provide the seal at the ends and along the bottom of the gates should be cleaned of rust deposits and refinished as required to provide a suitable surface seal.

It is apparent that the design water level retained at Structure #2 is not satisfactory in the opinion of the rancher at Dallas Dort Ranch. Conversion of Structure #2 to a breastwall type opening instead of the present overflow type would allow an increase in water level. However, a structural and foundation analysis of Structure #2 should be completed along with a re-evaluation of the desirable water level contour prior to making such a decision.

#### Structure No. 3:

Refer to plate No. 12 for location and direction from which photographs were taken.

- Photo No. 2-11 Left end of hoisting mechanism for Gate

  "A." Shaft on worm drive gear seized in

  bearing. Shaft was broken loose and rotated

  by application of a lubricant and a 36"

  pipe wrench.
- Photo No. 2-12 Gate "A" left end showing proper cable attachment for hoisting mechanism. Compare this photograph with Structure No. 1,

  Photos Nos. 1-2 and 1-3.

Photo No. 1-29 - Right end of Gate "B" showing metal track.

Photo No. 2-1 - Left end of Gate "A" showing extensive rust and No. 2-3

damage to radial arms supporting gate.

Photo No. 2-2 - Right end of Gate "A" showing extensive rust and No. 2-4

damage to radial arms supporting gate.

Photo No. 2-5 - Left end of Gate "C" showing rust damage to and No. 2-8 radial arms.

Photo No. 2-6 - Right end of Gate "C: showing rust damage to and No. 2-9 radial arms.

Photo No. 2-7 Looking down at bottom chord on Gate "C."

Note deflection in bottom chord of 1-1/2" - 2".

Photo No. 2-10 - Gate "A" from downstream side. Sandbags estimated to weigh 100 lbs. each - 1500 lbs.

dead load added to top of Gate "A" and
Gate "C."

#### Summary and Recommendations:

All of the sluice gates at Structure No. 2 are beyond repair and like Gate "B" are on the point of potential collapse. Loading the remaining metal gates with sandbags is extremely hazardous due to the chance of flooding downstream if failure occurs. According to literature obtained from the manufacturer, the gates were designed to function with a maximum of 12" head over the top of the gate. Adequate safety factors prevent damage to the gate if this overflow is increased beyond that limit for a short period of time when the gates are in new condition.

It is recommended that all of the gates be replaced.

Photos No. 2-13 and 2-14

- Gate "A" showing left and right ends,
radial arms and trunion pins. Note that
radial arms have not deteriorated.

Photos No. 2-15 and 2-16

- Gate "B" showing left and right ends, radial arms and trunion pins. Note that radial arms have not deteriorated.

Photos No. 2-19 and 2-20

Gate "B" operating mechanism.

Photo No. 2-21 - Cap removed from bearing on hoist shaft

Gate "A." Lubricating channel is plugged,

bearing is dry.

Photos No. 2-17 and 2-18

- Overview of Structure #3. Structure has been "in-the-dry" for a number of years, eliminating the exposure condition responsible for the extensive deterioration at Structures 1 and 2. Drainage canal upstream cut around the structure during some previous storm period.

Photo No. 2-23 - Catwalk grating. Extensive rust damage.

Photo No. 2-24 - Gate "B" in open position.

#### Summary and Recommendations:

Structure #3 has not fulfilled its design function - maintaining the water table and allowing for storm water discharge - for a considerable period of time. Storm run-off cut a new channel around the structure, perhaps due to leaving the gates in the closed position during high water periods. As a result of being "in-the-dry,"

the structure has not deteriorated to the extent evidenced at either Structures #1 or #2.

Re-establishment of the channel on the course designed at Structure #3 may accomplish an increased water table elevation which would alleviate the problem at Structure #2.

It is recommended that the grating on the catwalk be replaced. The remaining components of Structure #3 are satisfactory for continued operation. All metal components should be cleaned of rust and repainted with an asphalt impregnated paint. Mechanical hoist mechanisms should be cleaned, lubricating passages cleared, and lubricated.

#### Preliminary Cost Estimate:

#### Structure #1:

 $3 - 4' \times 14'$  radial gates at \$4,800.00 each = \$14,400.00

3 operating units at 2,850.00 each = 8,550.00

1 steel walkway at 4,000.00 each = 4,000.00

#### Structure #2:

 $3 - 4' \times 12'$  radial gates at 4,500.00 each = 13,500.00

Installation for both Structures #1 and #2 45,000.00

\$85,450.00

Plus 10% for contingencies 8,545.00

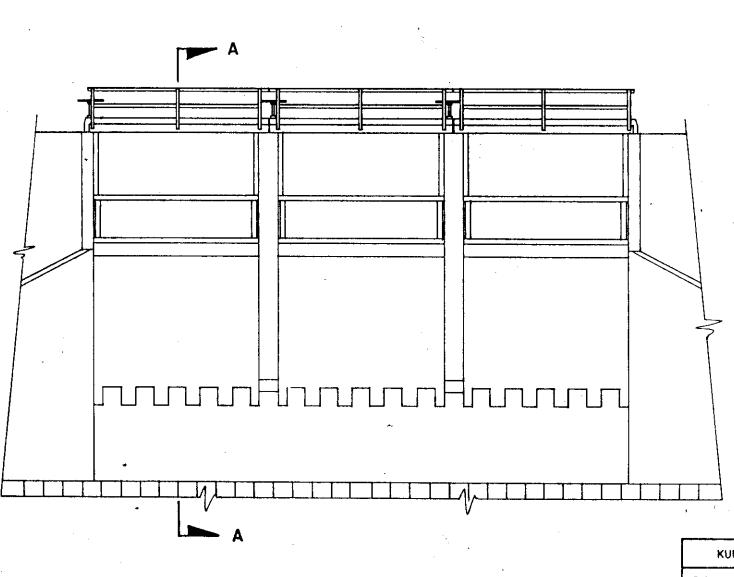
\$93,995.00

say \$95,000.00.

It will be necessary to release the water presently being held behind both Structure No. 1 and Structure No. 2 to facilitate the replacement of the gates. Maintaining the design water level during gate replacement can be accomplished but at an increase in installation cost.

To minimize water Ioss, construction should begin at Structure No. 1 moving to Structure No. 2, after completion of work on Structure No. 1.

No estimate of cost is included for work recommended at Structure No. 3. It is expected that all the work at Structure No. 3 will be accomplished using Sarasota County maintenance personnel.

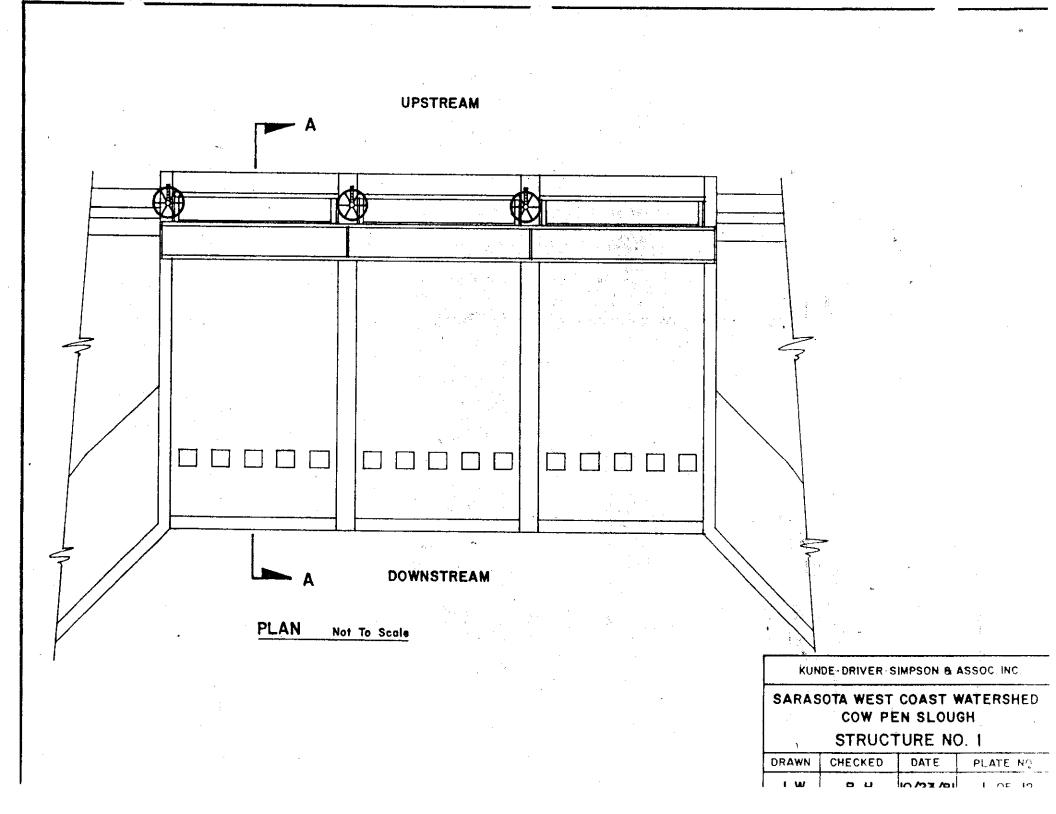


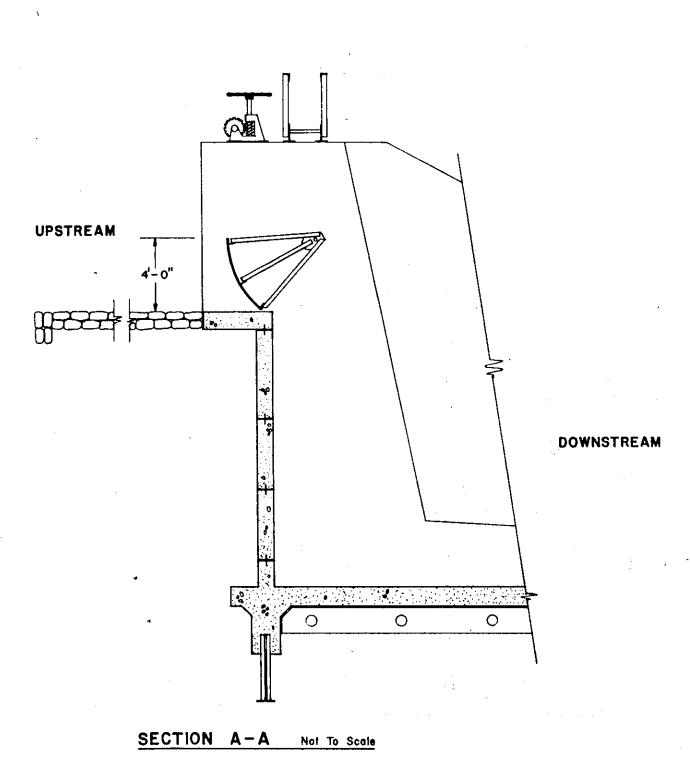
DOWNSTREAM ELEVATION Not To Scale

KUNDE-DRIVER-SIMPSON & ASSOC. INC.

SARASOTA WEST COAST WATERSHED
COW PEN SLOUGH
STRUCTURE NO. I

DRAWN CHECKED DATE PLATE NO



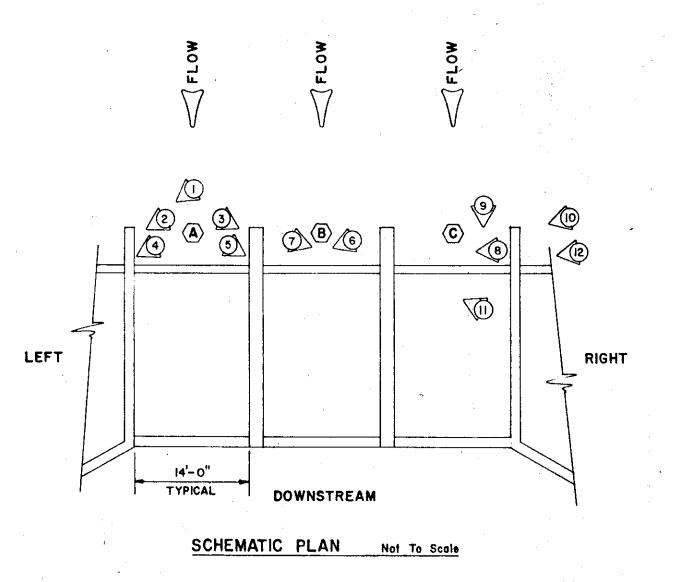


KUNDE-DRIVER-SIMPSON & ASSOC INC.

SARASOTA WEST COAST WATERSHED COW PEN SLOUGH STRUCTURE NO. I

DRAWN CHECKED DATE PLATE NO

#### **UPSTREAM**



LEGEND

PHOTO NUMBER AND DIRECTION

GATE DESIGNATION

DIRECTION OF FLOW

KUNDE-DRIVER-SIMPSON & ASSOC INC.

SARASOTA WEST COAST WATERSHED
COW PEN SLOUGH

STRUCTURE NO. I

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 DATE
 PLATE NO

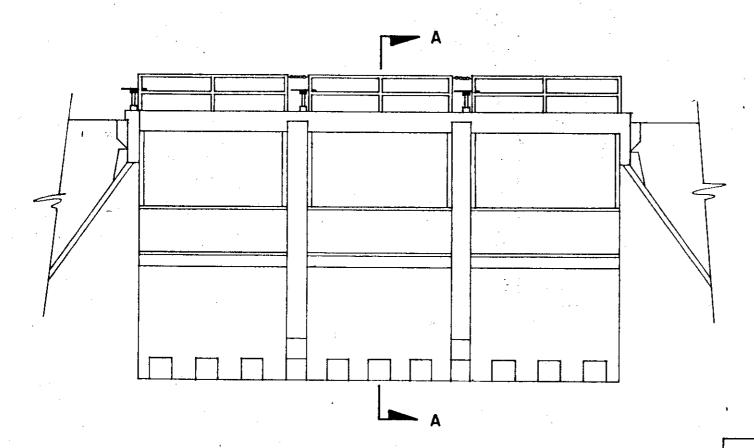
 J.W.
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 4 of 12

# **UPSTREAM** DOWNSTREAM **PLAN** Not To Scale

KUNDE-DRIVER-SIMPSON & ASSOC, INC.

SARASOTA WEST COAST WATERSHED COW PEN SLOUGH STRUCTURE NO. 2

DRAWN CHECKED DATE PLATE NO.

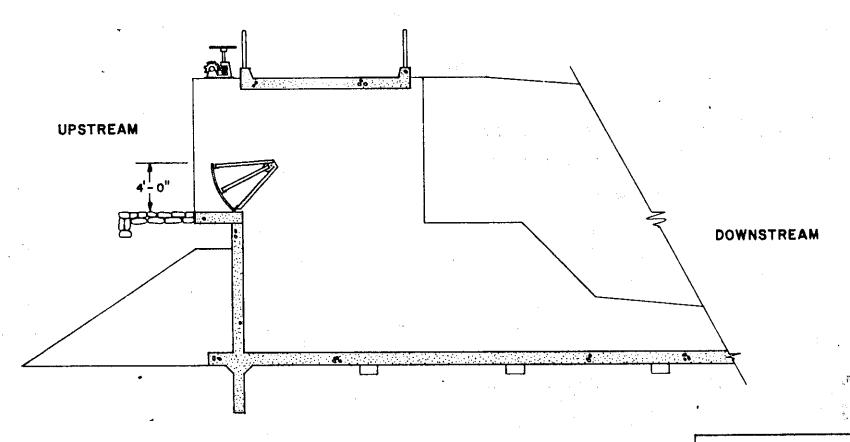


DOWNSTREAM ELEVATION Not To Scale

KUNDE-DRIVER-SIMPSON & ASSOC. INC.

SARASOTA WEST COAST WATERSHED
COW PEN SLOUGH
STRUCTURE NO. 2

DRAWN	CHECKED	DATE	PLATE NO

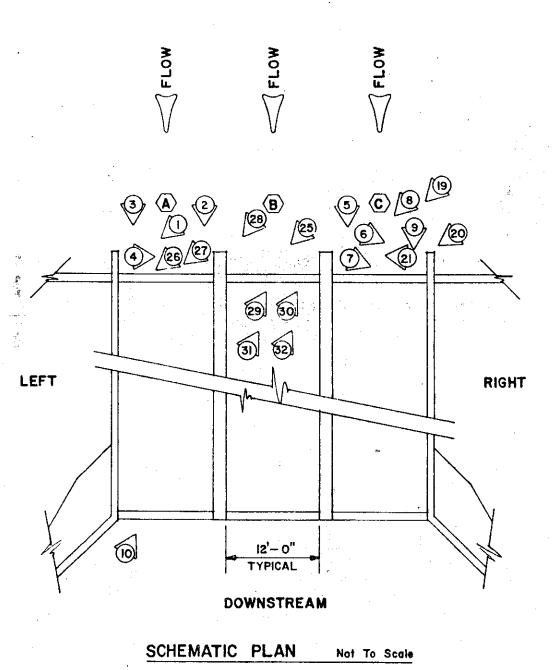


SECTION A-A Not To Scale

KUNDE-DRIVER-SIMPSON & ASSOC. INC.

SARASOTA WEST COAST WATERSHED
COW PEN SLOUGH
STRUCTURE NO. 2

DRAWN CHECKED DATE PLATE NO.



LEGEND

PHOTO NUMBER AND DIRECTION

**GATE DESIGNATION** 

DIRECTION OF FLOW

KUNDE-DRIVER-SIMPSON & ASSOC INC

SARASOTA WEST COAST WATERSHED COW PEN SLOUGH STRUCTURE NO. 2

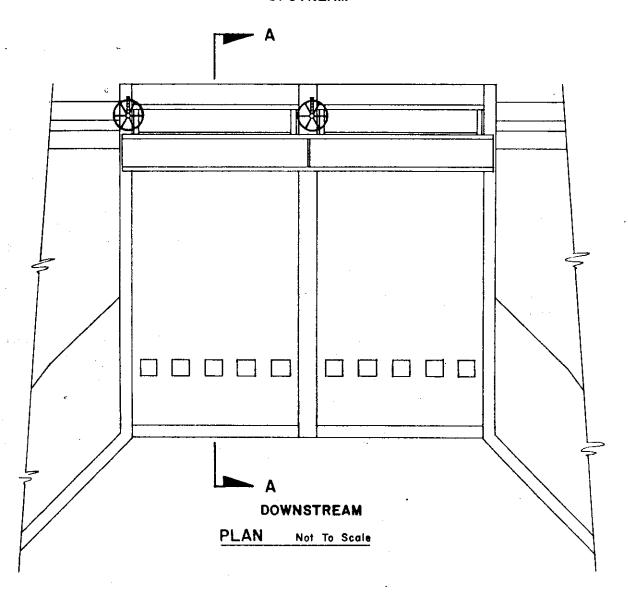
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I A

DOWNSTREAM ELEVATION Not To Scale

STRUCTURE NO.

#### **UPSTREAM**

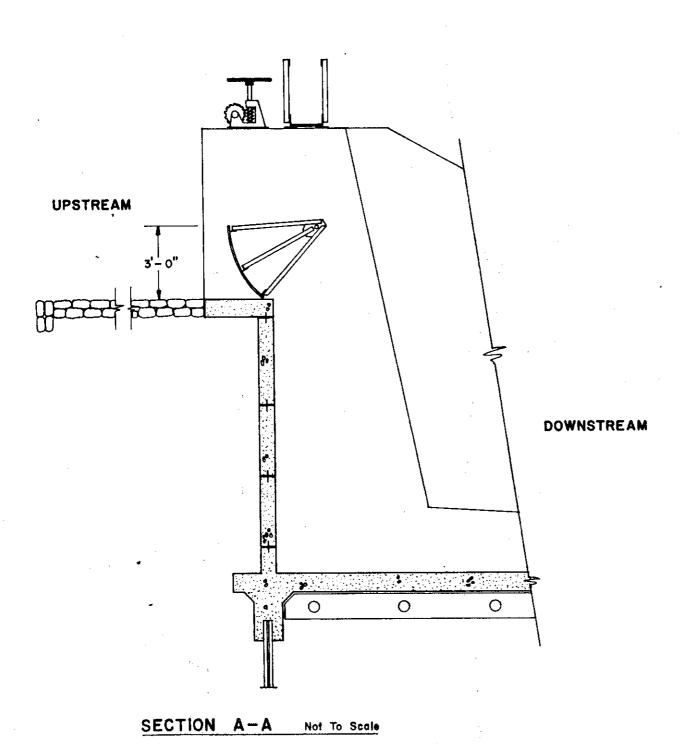


KUNDE DRIVER SIMPSON & ASSOC. INC.

### SARASOTA WEST COAST WATERSHED COW PEN SLOUGH

STRUCTURE NO. 3

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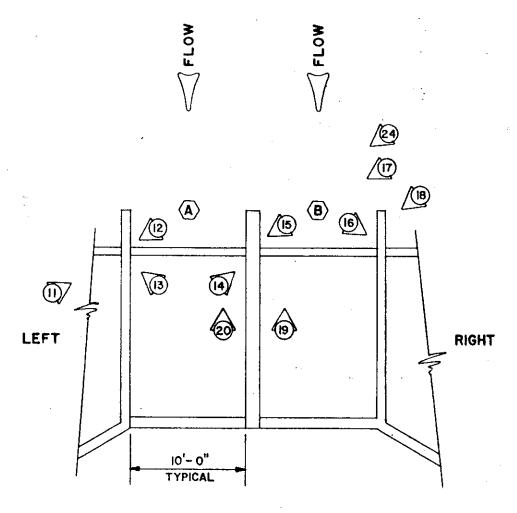


KUNDE DRIVER SIMPSON & ASSOC. INC.

SARASOTA WEST COAST WATERSHED
COW PEN SLOUGH
STRUCTURE NO. 3

DRAWN CHECKED DATE PLATE NO

# UPSTREAM



DOWNSTREAM

SCHEMATIC PLAN Not To Scale

# LEGEND

- PHOTO NUMBER AND DIRECTION
- GATE DESIGNATION
- DIRECTION OF FLOW

KUNDE-DRIVER-SIMPSON & ASSOC. INC.

SARASOTA WEST COAST WATERSHED
COW PEN SLOUGH
STRUCTURE NO. 3

DRAWN	CHECKED	DATE	PL	AT É	NO.
J. W.	R. H.	10/23/81	12	OF	12

# REPORT OF ANNUAL INSPECTION SARASOTA WESTCOAST WATERSHED PROJECT June 19, 1981

The annual inspection of the Sarasota Westcoast Watershed Project was made on this date. The following participated in the inspection tour:

# Sarasota County

Norm Thomas - Environmental Services

# U.S.D.A. Soil Conservation Service

Anthony Polizos - District Conservationist

# A. Structures

The water control gates in structures nos. 1 and 2 are corroded and perforated and the seals in the gates are leaking. Presently, only 1 gate in structure no. 1 is operational. Side inlet structures along the main channel are also corroded and are in need of repair.

There is a severe erosion problem along the wingwalls of both structures due to fishermen traveling up and down the sides on structure no. 1 and cattle and water erosion along structure no. 2.

The bypass around structure no. 3 continues to widen each year. The side slope along the east side of the bypass continues to sluff off causing sediment pollution in the channel. The sediment is deposited downstream causing a shallow area in the channel making it difficult to control water weeds. This area is one of the sources of most water weed problems in the watershed channel.

#### B. Side Slopes

Certain portions of the side slopes along the channel between structures nos. 1 and 2 and between Hy. 72 and no. 2 are severely eroded and are denude of vegetation caused by cattle. The east side slope south of structure no. 2 on the Dort Ranch is fenced from livestock and has a good vegetative cover. The berm caved in on most of the length of the channel which to some extent has resulted in a wider, shallower channel. The vegetable relief channel from Bee Ridge Extension Road to the main C.P.S. channel looks good. There exists a filled area with 3 culverts which cross the vegetable relief channel at the County landfill site. It is being used as a cross-over for trucks which bring fill dirt to the landfill. Erosion is most severe in areas of no spoil along the channel's banks. Cattle traffic coupled with overland water flow caused the erosion. Also, some of the side inlets have scoured drainage ditches leading to them.

#### C. Water Weeds

The entire length of the main channel is congested with hydrilla. Much of this problem stems from the sediment deposited from the bypass of structure no. 3. The shallow area in this portion of the channel acts as a nursery for hydrilla and this is the source for the rest of the channel. Chemical treatment of the main channel is on a continuous basis. The hydrinths were treated during the spring months.

# D. Pump Plant

The Maintenance Department is in charge of upkeep on the pump plant. Presently, the entire building and pumps have been painted. The large fuel tank has been drained and pumped with 5 P.S.I. of dry nitrogen to preserve it. A 500 gallon underground tank has been installed for periodic operation. The pump plant received new batteries and it is being readied for starting as of this date.

# E. Operating Schedule

Dr. Jeffrey Lincer, Sarasota County Environmental Specialist, is operating the gates. He depends on landusers affected by the channel to inform him of any difficulties which may arise. Dr. Lincer operates the gates by opening them 8 inches maximum to allow the water to gradually go down. Once the excess water is removed, the gates are closed. This works well during the summer and fall months with all landusers. However, no severe storms were experienced during this period.

### F. Urbanization

Urbanization is encroaching the watershed project. There are two subdivisions north of Hy. 72 and one by structure No. 1, along the main channel. There is an additional subdivision along the main channel north of Hy. 72 which is plotted for cluster housing away from the main channel. Landowners in one subdivision removed the berm along the channel and used it to build up the floor elevations for their homes. There is a possibility of flooding in these areas. One of the landowners is using part of the berm as a landing strip for his plane. However, the strip is one of the areas along the main channel with the most vegetation and least erosion problem.

The subdivision adjacent to structure No. 1 is permitting docks to be erected below this structure. The County is requiring owners to sign an agreement permit whereby the owner will have to dismantle the dock for maintenance given 6 months notice.

### G. Recommendations

The gates in structure Nos. 1 and 2 should be repaired or replaced. Sandblasting, reinforcement and coating to retard rust are needed on these gates. Replace cables where needed with stainless steel ones. Also, replace all seals in these gates.

Earthwork and fill is need by the wingwalls of structure No. 2. Earthwork and sand-bagging or concrete is necessary along the wingwalls of structure No. 1 to accommodate the erosion problem caused by fishermen. The bypass on structure No. 3 needs corrective measures. S.C.S. is working on a solution. Sediment from this bypass was deposited downstream and should be removed from the channel.

Grade, slope, and vegetate certain portions of the banks south of Hy. 72 to structure No. 1. Fencing is needed to keep cattle off the channel banks. Livestock watering facilities will also be needed. Also, earthwork is needed around most of the side inlets. Repair or replace side inlets as needed.

Do not allow any more landowners or any adjacent subdivisions to remove spoil from the berm for "fill". Have landowners who removed spoil to reduce erosion along the main channel by sloping the edge away from the bank and also provide for side inlets to carry off excess water safely.

Chemical treatment of water weeds should be stepped up to reduce the hazards of this should a severe storm pass through the area.

Anthony Polizos

District Conservationist

U.S.D.A. Soil Conservation Service

Norm Thomas

Environmental Services

Sarasota County



# Southwest Florida Water Management District

5060 U.S. HIGHWAY 41, SOUTH — BROOKSVILLE, FLORIDA 33512 PHONE (904) 796-7211

BRUCE A. SAMSON, Chairman, Tampa Wm. O. STUBBS, JR., Vice Chairman, Dade City JAMES CAMPBELL, Secretary, Plant City RONALD B. LAMBERT, Treasurer, Wauchula

B. T. LONGINO, Sarasota CLIFF STEPHENS, Clearwater DON CRANE, St. Petersburg JIM KIMBROUGH, Brooksville ARCH UPDIKE, JR., Lake Wales DONALD R. FEASTER, Executive Director

April 20, 1981

The Honorable Dallas Dort, Chairman Sarasota Soil & Water Conservation District 2900 Ringling Blvd. Sarasota, Florida 33577

RE: Cow Pen Slough Water Management Investigation

Dear Chairman Dort:

At the request of the Sarasota County Commission and the Sarasota Soil and Water Conservation District, the Manasota Basin Board of our District agreed (letter from Mr. Feaster to Mrs. Clay and Mr. Daniels dated March 27, 1979) to conduct a long range program of investigation of the Sarasota West Coast Watershed Project; locally known as the Cow Pen Slough Project. The Phase I report, entitled "Cow Pen Slough Water Management Investigation Phase I" has been completed and ten copies are herewith enclosed.

The Phase I Study is a preliminary Staff effort to determine whether further construction should be undertaken and/or changes made in the original project. The specific analytical objectives of Phase I Study are as follows:

- 1. Adjustment of the Cow Pen Slough (CPS) hydroperiod to reduce detrimental impacts to Dona and Robert's Bays (DARB).
- 2. Development of the municipal water supply potential of CPS including possible use of Phillippi Creek and Myakka River.
- 3. Drainage and flood control in CPS Watershed.
- 4. Flood control in the agriculturally productive muck lands east of Sarasota.
- 5. Resolution and disposition of the partially completed Public Law-566, SWCWP.

The following recommendations are made based on our Phase I preliminary analysis.

1. The existing structures in Cow Pen Slough (CPS) should be operated to simulate natural outflow conditions. However, storage within the canal itself is small, so the positive impacts of such an operation schedule will probably be slight and additional structures in the canal would also be of little value in hydro-period modification. Aquatic weeds in CPS should be controlled to limit their movement into Dona Bay.

- 2. Development of a public water supply using CPS and the Myakka River is possible, however, the presence of a sanitary landfill in the upper reaches of CPS is a major concern and should probably preclude further investigation of CPS as a source. Additionally, other projects in the area already include the possible use of the Myakka as a source. Diversion of CPS waters to Braden River is possible, but such a diversion probably would be of little use; because when the Braden River is low and requires more water to meet the Bradenton water demand, CPS is also low and has little water to offer.
- 3. Drainage in the completed portion of CPS is adequate and no additional drainage is warranted.
- 4. Flooding in the CPS Basin is potentially the most severe problem in the area. The retaining levee has been breached in several places, and the King's Gate development is in notable peril; since it is actually within the slough itself. The past years have been relatively dry, but there will be flooding in these areas in the future. Actions should be undertaken now to remedy the existing situations and to prevent their occurrence in the future.
- 5. Flooding in the muckland farming areas will still cause economic loss to the farming interests. The problem can be compounded if housing developments were allowed to move into the area as farming ceases. If it is deemed economically feasible and desirable, a project alternative should be pursued to reduce flooding in the muckland farming areas. Strict zoning and land management regulation should keep housing out of such a flood prone area.
- 6. The Sarasota West Coast Watershed Project should not be completed as originally planned. The existing facilities should be refurbished and maintained, and Structure #3 should be made operational.

The CPS Project is a highly emotional subject among local interests, and any contemplated action will probably meet with strong opposition. The original Project was conceived almost twenty years ago and, the nature of the County itself has changed radically since that time. For these reasons, the importance of completing this particular Project has diminished. Therefore, with the exception of the actions discussed above, it is recommended that the original Project be considered complete in its present state.

Very truly yours,

D. R. FEASTER, P.E. Executive Director

DRF:JAM:RVM:cd1

Enclosures:

(1) Letter of March 27, 1979

(2) 10 copies of the report

21-260-PUB -28-01

March 27, 1979

The Honorable Beverly Clay, Chairman Sarasota County Board of Commissioners Post Office Box 8 Sarasota, FL 33578

Re: Sarasota West Coast Watershed Project (Cow Pen Slough)

Dear Chairman Clay:

As a result of your letter of November 27, 1978 on the referenced project. the Southwest Florida Water Management District (SWFWMD) Staff made a study of the operation, maintenance and repair of Cow Pen Slough. The study, a copy of which is attached hereto, reached the following conclusions:

The aquatic weed program is being performed in a good manner. à.

There appears to be no reason for change.

Required repairs are extensive, an estimated \$161,000. This figure Ь. is contingent on the project sponsors getting the property owners to agree to donate the right-of-way for fencing to keep cattle off the slough banks.

Because of the proximity of the Sarasota County Staff, it appears to be more feasible for the County to run the needed repair and

maintenance program.

At its regular meeting on March 14, 1979, the Manasota Basin Board accepted the Staff recommendation to undertake no repair or maintenance work at this time, and recognized that any repair or maintenance by the District should be on a one-time contract basis, or by financial participation with the County in support of their repair and maintenance program. The District Staff will be available to work with the County and SCS Staffs to reach agreement on an acceptable program, and to obtain Basin Board approval therefor.

The Board also approved the concept of a long range study which will examine the original Sarasota West Coast Watershed Project, analyze the development and other changes which have occurred, and include all

The Honorable Beverly Clay, Chairman March 26, 1979 Page Two

4.3

current concerns such as municipal water supply sources and environmental impacts. This study should determine the best water management methods for solving the complex problems of the area.

We look forward to working with your staff to bring the Cow Pen Slough Project to a successful conclusion.

Sincerely.

D. R. Feaster, P.E. Executive Director

DRF:WFS:bh

Enclosure: Cow Pen Slough Study

cc: Sarasota County Commission Members (w/enclosure) Hanasota Basin Board Members (w/enclosure) Heury H. Baniels, Chairman, Sarasata Soil & Water Conservation District Anthony Polizos, USDA, SCS (w/enclosure)

bcc: J. B. Butler

E. Hoyt

C. H. Hiller

R. Gates

P. A. Lambert J. A. Hann

R. McLean

Mr. Henry M. Daniels, Chairman Sarasota Scil and Water Conservation District 2900 Ringling Boulevard Sarasota, FL 33577

Re: Sarasota West Coast Watershed Project (Cow Pen Slough)

Dear Mr. Daniels:

As a result of your letter of November 27, 1978 on the referenced project, the Southwest Florida Water Management District (SWFWMD) Staff made a study of the operation, maintenance and repair of Cow Pen Slough. The study, a copy of which is attached hereto, reached the following conclusions:

a. The aquatic weed program is being performed in a good manner. There appears to be no reason for change.

b. Required repairs are extensive, an estimated \$161,000. This figure is contingent on the project sponsors getting the property owners to agree to donate the right-of-way for fencing to keep cattle off the slough banks.

c. Decause of the proximity of the Sarasota County Staff, it appears to be more feasible for the County to run the needed repair and maintenance program.

At its regular meeting on March 14, 1979, the Manasota Basin Board accepted the Staff recommendation to undertake no repair or maintenance work at this time, and recognized that any repair or maintenance by the District should be on a one-time contract basis, or by financial participation with the County in support of their repair and maintenance program. The District Staff will be available to work with the County and SCS Staffs to reach agreement on an acceptable program, and to obtain Basin Board approval therefor.

The Board also approved the concept of a long range study which will examine the original Sarasota West Coast Watershed Project, analyze the development and other changes which have occurred, and include all

Mr. Henry M. Daniels, Chairman March 26, 1979 Page Two

current concerns such as municipal water supply sources and environmental impacts. This study should determine the best water management methods for solving the complex problems of the area.

We look forward to working with your staff to bring the Cow Pen Slough Project to a successful conclusion.

Sincerely.

D. R. Feaster, P.E. Executive Director

DRF: WFS: bh

Enclosure: Cow Pen Slough Study

cc: Mrs. Beverly Clay, Chairman, Sarasota County Commission Sarasota County Commission Members Manasota Basin Board Members Anthony Polizos, USDA, SCS

bcc: J. B. Butler

E. Hoyt

C. H. Miller

R. Gates

P. A. Lambert J. A. Mann

R. McLean

d disrupt the ential area around New

andegren sent a letter to , ebb and other state leaders last week reiterating the county's objections to the bridge alignment the FDOT has approved, and asking the

ded the prage a with a four-lane, high fixed structure structed on the Gulf side c the pass, which would run through the center of the Lide Shores subdivision.

The state considered many alternative alignments and the "null alternative," which

Sanc Tribu to go tion of what is situation. Sandegr previous state and made it "It to anybody Webb may change in greatly rel. residents.

The med scheduled fo day, Sande courtroom

# Three Seats Open On Soil, Water Unit

#### Herald-Tribune Reporter

Three positions on the Sarasota Soil and Water Conservation District board of supervisors are up for election this fall.

So far, only one person is fully qualified as a candidate for election to the board.

Another man is close to filing all the necessary papers.

" Eugene Engman is the only fully qualified candidate for election to the five-member board which oversees such things as the digging of farm ponds and irrigation ditches. Engman qualified Monday by filing the proper financial disclosure forms, loyalty oath and by submitting a petition signed by 25 registered Sarasota County voters.

Partially qualified is Edward R. Keil. He has until

Hospital News

MEMORIAL HOSPITAL

Births

Mr. and Mrs. Keith H. Dusenberry, 1067 Newton St., Englewood, a girl, July 14.

Mr. and Mrs. Richard O. Curwood, 884 Tanagar Road, Venice,
a boy, July 14.

Mr. and Mrs. Wijliam J. Fields,
612 W. Venice Ave., Venice, a boy,
July 15.

Friday to file all the proper forms.

That leaves one position for which there is no candidate. According to the supervisor of elections office, that position will be filled by a gubernatorial appointment.





# Sarasota Soil and Water Conservation District

2900 Ringling Blvd. • Sarasota, Florida 33577 .• Phone 953-4737

Supervisors		
Dallas Dort, Chairman 3466 Gulfmead Drive 33581	365-1770, 349-3209,	office home
Henry Daniels, Vice Chairman P.O. Box 790 Sarsota, FL 33578	371-2424, 371-0286,	office home
Gene Engman, member 106 Bayview Parkway Nokomis, FL 33555	366-2420, 185-4645,	office home
Boyce Blackmon, member Rt. 2 Box 332-X Sarasota, FL 33582	371-6591, 371-6462,	office home
Junior Underhill, member 6685 Clark Rd. Sarasota, FL 33583	924-3558 <b>,</b>	home
Personnel		
Tony Polizos, District Conservationist P.O. Box 1604 9 Sarasota, FL 33578	53-4737, 53-1073,	office home
Luther Rozar, District Secretary 2900 Ringling Blvd. Sarasota, FL 33577	55-6239, 71-8920,	office home
Florence G. Hays, Tresurer P.O. Box 790 Sarasota, FL 33578	71-2424,	office
Debbie Davis, District Clerk 2900 Ringling Blvd. Sarasota, FL 33577	53-4737,	office

# UNITED STATES DEPARTMENT OF AGRICULTURE

### SOIL CONSERVATION SERVICE

2900 Ringling Blvd., Sarasota, Florida 33577

April 5, 1979

Mr. Gene Engman 106 Bayview Parkway Nokomis, Klorida 33555

Dear Mr. Engman:

Here are the finds on Cow Pen Slough, SWFWMD presented to the Manasota Basin Board. Mr. Dort requested we have a special meeting as soon as possible on this matter.

I talked to Jeff Lincer and he feels that we should meet with county staff before our recommendations are presented to the County Commission.

Please try to be present at our "Speaking Contest" on April 18th. We have several kids interested in this. It will be at 3:30 pm in the Extension Auditorium. Fear not, I will not ask you to be a judge:

Sincerely,

Anthony Polizos

District Conservationist

AP/lm

Enclosure

cc Dallas Dort



March 27, 1979

The Honorable Beverly Clay, Chairman Sarasota County Board of Commissioners Post Office Box 8 Sarasota, FL 33578

Re: Sarasota West Coast Hatershed Project (Cow Pen Slough)

Dear Chairman Clay:

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The Honorable Beverly Clay, Chairman March 26, 1979 Page Two

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We look forward to working with your staff to bring the Cow Pen Slough Project to a successful conclusion.

Sincerely,

D. R. Feaster, P.E. Executive Director

DRF:WFS:bh

Enclosure: Cow Pen Slough Study

cc: Sarasota County Commission Members (w/enclosure)
Manasota Basin Board Members (w/enclosure)
Menry M. Baniels, Chairman, Sarasota Soil & Water Conservation District
Anthony Polizos, USDA, SCS (w/enclosure)

bcc: J. B. Butler

E. Hoyt

C. H. Miller

R. Gates

P. A. Lambert

J. A. Mann

R. McLean

Mr. Henry M. Daniels, Chairman Sarasota Soil and Water Conservation District 2900 Ringling Boulevard Sarasota, FL 33577

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cc: Mrs. Beverly Clay, Chairman, Sarasota County Commission Sarasota County Commission Members Manasota Basin Board Members Anthony Polizos, USDA, SCS

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E. Hoyt

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R. Gates

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J. A. Mann

R. McLean

File 21-000-PLA-04-10

March 21, 1979

#### MEMORANDUM

TO: • B. R. Laseter, Director, Department of Operations

FROM: W. F. Sietman, Assistant Director, Resource Development

Division

RE: Sarasota West Coast Watershed (Cow Pen Slough)

Background and Short Range Program

### Background

The watershed is located in the western part of Sarasota County, which is in the winter vegetable and cattle ranching Gulf Coastal Area of south Florida. The watershed includes 242 square miles, or 154,680 (range lend) acres of grassland, winter vegetable farms, citrus groves, and residential and urban areas.

The principal watershed problems faced in 1961 were flood damage and drainage. Problems included flood damage to residential property along the banks of Phillippi Creek in the City of Sarasota and in scattered areas near Main Number 1; flood damage to crops in the highly productive muck lands east of Sarasota; and flooding of pasture and range lands along Cow Pen Slough which were flooded several times a year, with waterstanding on them 20 to 30 days during prolonged wet periods.

A watershed work plan for the Sarasota West Coast Watershed in Sarasota and Manatee Counties, Florida, was developed in 1961 by the Sarasota Soil Conservation District, the Board of County Commissioners of Sarasota County and the Manatee River Soil Conservation District as the sponsoring local organizations, with assistance from the U.S. Department of Agriculture (USDA), Soil Conservation Service (SCS).

The objectives of the Sponsors were to protect the vegetable areas, improved pasturelands and rangelands from floodwater damages; to provide adequate drainage outlets for Cow Pen Slough areas; and to conserve water during dry seasons.

The Work Plan included the necessary works of improvement to alleviate the problems within the framework which was then acceptable and probably would have accomplished the desired objectives. Estimated cost for the project was \$3,188,200 in 1961.

Three (3) segments of work comprising about 40% of the project were completed. Table 1 shows the three projects, the major features contained in the construction cost and estimated annual maintenance costs. Also shown are the estimated construction and maintenance costs in terms of January 1979 dollars, based on the Construction Index.

#### COW PEN SLOUGH PROJECT Table 1

Features Year Channel Berm Structure	Original Cost Construction Annual	Jan. 1979 Cost Construction Annual
1961 Total Project Estimate	\$3,188,200 \$24,100	\$10,521,100 \$79,600
1964 2 mi0- #1(3 gate)	\$ 116,000 \$ 1,545	\$ 359,600 \$ 4,800
1966 11.2 mi. 900' #2(3 gate) #3(2 gate)	\$ 456,000 \$ 5,810	\$ 1,276,800 \$16,300
1967 -OO- Pump. Sta.	\$ 521,000 No. Est.	\$ 1,391,100 -0-
1979 Aquatic Weeds	-0- No. Est.	-0- \$15,000
Total Construction Cost Estimated Replacement Cost	\$1,093,000	\$ 3,027,500
Annual Maintenance Cost on Comp Based on Original Estimate (wit		

station) Plus Aquatic Weeds.

\$36,000

Work completed is about 40% of the original project. No work is now contemplated, since environmental problems in Donna Bay have been blamed at least in part on Cow Pen Slough; and the benefit-cost ratio appears to be less than sufficient to justify continuation of the project.

In evaluating benefits derived from the portion of the project accomplished, SCS stated the following:

"Case History of Watershed Benefits. During the spring of 1967 the watershed experienced a very severe drought. The water control structures held water throughout 13 miles of channel. The spring of 1971 was the driest in history and the water in the watershed channel was the only water between the Sarasota Bay and the Myakka River. All other channels and ponds dried up and the watershed channel supplied water for livestock and wildlife. The watershed channel was well-stocked with fish and helps to restock native ponds when the wet season comes. A check of the watershed channel in May 1971 showed a very well balanced fish population. There were three (3) minor floods during 1968 and the same number in FY 1969. It is estimated that the loss of beef production on the highly improved pastures which would have been flooded for several days without the channel would have been \$32,000, so this amount of benefits occurred

Memorandum March 21, 1979 Page Three

as a result of the project. Flooding rains the last week of June 1974 flooded most streams, but there was no flooding of pastures on Cow Pen. Monetary benefits to improved pastures are estimated at \$45,000 because flooding was prevented for a week or more. There were no major storms during the past three years."

Provisions for operation and maintenance were contained in the original agreement. The agreement stated that all structural measures would be operated and maintained by the Board of County Commissioners of Sarasota County, with costs borne by the Commissioners by the use of monies made available from funds derived through existing authorities. Operation and maintenance, estimated in 1961 to cost \$24,100 annually, includes maintaining channel improvements and structures to their designed capacity; trimming vegetation; removing channel obstructions; operating and repairing structures; operating and maintaining the pump plant and control and removal of aquatic weeds. An annual inspection is to be made at such time as to make it possible to complete any maintenance required before the beginning of the rainy season.

The last inspection of the watershed was made on March 14, 1978. Water weed control was considered good, although a hydrilla problem existed in the shallow water between Highway 72 and Structure No. 3. Many deficiencies were noted at each structure, side slope erosion was noted, the berm has caved in on much of the length of the channel, inlet pipes and ditches draining into the slough were clogged with water hyacinths and silt, and the pump plant had not been operated for some time and therefore had many deficiencies. The inspection report is attached as Enclosure 1 to this memorandum. Listed deficiencies have not been corrected, and maintenance work in general has been sadly lacking.

# Recommended Cow Pen Slough Short Range Program

Aquatic weeds appear to be under control. The County program is basically the same as what the District would do. The Slough is not budgeted separately by the County, but aquatic weeds personnel estimate costs to be in excess of \$10,000 annually. The District estimate for the work is \$15,000 annually. Since the work is being done in a good manner with satisfactory results, there appears to be no reason for change.

Structures 1 and 2 are in a poor state of repair. Gate arms are badly corroded. The gate surfaces were under water and could not be observed, but the District experience indicates that the skin will probably be worse than the arms and braces. It appears that all 6 gates on the 2 structures will have to be replaced. In addition, all metal surfaces are rusting. They need to be sand blasted, painted, and checked thoroughly for potential failures (the catwalk on Structure 1 is loose, and should

Memorandum March 21, 1979 Page Four

be repaired). Structure 1 has some erosion around the wing walls which must be repaired and protected with riprap. Estimates for the required work are \$22,000 for Structure 1 and \$19,000 for Structure 2. Estimated annual maintenance is \$2,000 for each structure, or a total of \$4,000.

Structure 3 failed shortly after construction. SCS personnel are studying possible corrective action. The most likely solution appears to be permanent removal of the gates, adjustment of the sill to a proper elevation, and installation of a sheet pile weir in the new channel with the elevation designed in conjunction with the sill elevation at Structure 3. Federal funds would probably be available for this work. No work should be undertaken on this structure by either the County or the District. The need for and function of the structures should be included in the Long Range Study.

Developers are encroaching into the easements. In the Gator Creek Development on the west side of Cow Pen Slough and north of State Route 72, one man is apparently landing his airplane on the berm and parking it in his yard. In addition, berms along the slough have been torn down and apparently used for fill, most probably to raise floor slab elevations. This problem should be investigated to determine the need for the berm, and what corrective action should be taken. Even if the berm is determined to be unnecessary, the developer or responsible property owner should be required to slope the transition to adjacent unremoved berms in an acceptable manner, and should be required to establish a drainage system with discharge into the slough through drop culverts or other systems which would minimize bank erosion. The County should resolve this problem and enforce decisions made on all developers. However, costs for drainage are included in the estimates for fencing.

The canal banks and berms for the most part are badly eroded. Most, if not all of the erosion can be attributed to cattle going to the canal for water. The erosion has in turn caused siltation of portions of the slough. Repair costs for the banks and canal cross sections is estimated to be \$97,000, including cleaning and repairing culverts and establishing vegetation. Annual maintenance, including mowing operations is estimated at \$18,000 annually.

A better solution, and one that is acceptable to SCS, is to fence the slough to keep cattle off the berms and banks, and to repair only the worst portions of the bank where further bank failure appears imminent. Vegetation would reestablish itself naturally and protect the banks. An example of this can be found on the Dort Ranch to the south of Structure 2. The east bank is fenced and protected from cattle. A good growth of vegetation is protecting that bank. On the opposite bank, accessible to cattle, erosion continues to be bad. Owners have not been approached by the District on this concept. SCS personnel have talked with Mr. Dallas Dort, who reportedly agrees with the concept, but is concerned about the

Memorandum March 21, 1979 Page Five

location of the fence and the amount of land he might lose. The land required should be held to the minimum required for good maintenance, and in particularly bad areas should be far enough from the bank so that any progressive bank failure prior to the establishment of vegetation would not carry the fence with it. Small water systems would be required at appropriate locations to take water from the slough to small ponds for the cattle to drink. Estimates for this work are \$20,000 for the repair of the worst banks, \$100,000 for fencing, water supply and drainage, and an annual maintenance cost of \$5,000. Some right-of-way costs may be incurred.

A comparison of the two methods shows that bank repair without fencing and annual maintenance for 2 years would be ( $$97,000 + 2 \times $18,000$ ) or \$133,000, while fencing and partial bank repair for a like period would be( $$100,000 + $20,000 + 2 \times $5,000$ ) or \$130,000. Without considering any real estate costs, fencing would then be cheaper over a two year period by about \$3,000, and would save an estimated \$13,000 annually thereafter. Fencing is therefore recommended.

The pump station has not been operated for several years. The fuel tanks need repairs, and the engines and pumps need to be thoroughly checked prior to start up. Making an estimate of work required is extremely difficult without opening up the engines and pumps. With the work required on the tanks, building maintenance, and a thorough check of the engines and pumps, it is estimated that \$12,000 will be required to start up the pump system. Initial work could bring to light additional work, such as a requirement for a complete engine rebuilding, which could make the actual cost considerably higher. Periodic maintenance of the pump station should be programmed for \$5,000 annually. No work is recommended for the pump station, however, until such time as a use is found for the station. There is no justification for rehabilitating a pump station which cannot be used.

The following is a summary of the above costs. Figures in parentheses are not recommended.

Feature	Estimated Costs		
	Repair A	nnual Maintenance	
Structure #1	\$ 22,000	\$ 2,000	
Structure #2	19,000	2,000	
Structure #3	none recommended	-0 <b>-</b>	
Canal - all	( 97,000)	( 18,000)	
<ul><li>worst sections</li></ul>	20,000	3,000	
Fence and Drainage	100,000	2,000	
(Cost of Real Estate			
Right-of-way)	unknown		
Pump Plant	( 12,000)	( 5,000)	
Aquatic Weeds	-0-	15,000	
Total Recommended	\$161,000	\$24,000	

Memorandum March 21, 1979 Page Six

# Accomplishment of the Short Range Program

Over the years, Sarasota County has not performed the maintenance required by the original contract with SCS, with the exception of aquatic weeds. There is no indication of any money budgeted for required maintenance of the slough, and the little maintenance performed was done on a haphazard basis when resources could be spared from other assigned work. Now there appears to be a genuine interest in repairs and maintenance, but there is an accumulation of maintenance required that could total a quarter of a million dollars if it were all done. The County is looking for help in order to get the slough maintenance under control. If the Manasota Board undertakes the maintenance, it will be taxing Manatee County residents in addition to Sarasota County residents for the support which Sarasota County failed to provide over a number of years. Because of the proximity of Sarasota County Staff, it appears to be more feasible for the County to run the needed maintenance program. If the Basin Board desires to participate in the maintenance program, all work done should be on a one time basis, accomplished by contract, and should be done only if the County gives assurance that it will perform future maintenance. An alternate to this would be financial participation with? the County in support of their maintenance program for any portion of the one time repair which the Board wished to consider, under the same  $\sim$ conditions listed above.

# Recommendation

That the Manasota Basin Board not participate in the repair or maintenance of Cow Pen Slough.

WFS:bh Enclosure; 1. Inspection Report

cc: J. B. Butler

E. Hoyt

C. H. Miller

R. Gates

P. A. Lambert

J. A. Mann

R. McLean

# REPORT OF ANNUAL INSPECTION SARASOTA WEST COAST WATERSHED March 15, 1979

The annual inspection of the Sarasota West Coast Watershed was made on March 15, 1979. The following participated in the inspection tour:

Frank Stafford - Aquatic Plant Control Department. Tony Polizos - Soil Conservation Service.

### A. STRUCTURES

The water control gates in Structures Nos. 1 and 2 are corroded and need sand-blasting and coating with asphalt. All gates on both Structures need reinforcement or replacement. A catwalk needs to be constructed around the gate controls on Structures Nos. 1 and 2 for safety reasons. Fill is needed on the southwest corner of Structure No. 1 due to erosion from fishermen traveling up and down the edge of the Structure.

The bypass around Structure No. 3 continues to widen each year. The side slope along the east side of the bypass continues to sluff off causing sediment pollution in the channel. The sediment is deposited downstream causing a shallow stretch in the channel making it difficult to control water weeds. This area is the source of most water weed problems in the watershed channel.

# B. WATER WEEDS

Sarasota County, Aquatic Weed Control Department has done a good job on water weed control this year. The water hyacinths are all but lacking in the channel. However, hydrilla does exist in the upper portion of the channel between highway 72 and Structure No. 3. This is due to shallow water caused by the sediment deposited from the bypass of Structure No. 3. Very little hydrilla grows in the deeper portions of the channel due to lack of sunlight and maintenance program. The annual treatment for hydrilla in the upper portion was made in February.

#### C. SIDE SLOPES

Certain portions of the side slopes along the channel between Structure Nos. 1 and 2 are severely eroded and are denude of vegetation caused by cattle. The east side slope on the Dort ranch is fenced from livestock and has a good vegetative cover. The berm caved in on most of the length of the channel which, to some extent has resulted in a wider, shallower channel. The vegetable relief channel extending from Bee Ridge Extension Road to the main C.P.S. channel looks good. However, continuous cattle traffic along unfenced portions will bring the same problems as the rest of the channel. Fencing along this portion will solve the problem.

:

Report of Annual Inspection March 15, 1979
Page 2.

In areas of no spoil along the channel's banks, erosion is to a point where corrective action is needed. Perhaps a small berm along the edge is needed to keep water from running over the side and causing erosion. Or, a drop pipe may be needed in some cases. Some of the flashboard inlet pipes and ditches draining into the slough is clotted with water hyacinths and some sediment. This may also be a source of pollution. Also, some of the side inlets have erosion problems which fencing may correct.

#### D. OPERATING SCHEDULE

Presently Dr. Jeffrey Lincer, Sarasota County Environmental Specialist, is operating the gates. He depends on landowners affected by the channel to inform him of any difficulties which may arise. Dr. Lincer operates the gates by opening them 8" maximum to allow the water to gradually go down. Once the excess water is removed, the gates are closed. This worked well during the summer months with all landowners. However, no severe storms were experienced during this period.

### E. PUMP PLANT

The Maintenance Department is in charge of upkeep on the pump plant. Presently, they are painting the entire building. The large fuel tank is drained and will be pumped with 2 to 5 p.s.i. of dry nitrogen to preserve it. A 500 gallon underground tank is being installed for periodic operation.

# F. URBANIZATION

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Is encroaching the watershed project. There are two subdivisions north of highway 72 and one by Structure No. 1, along the main channel. Landowners in one subdivision removed the berm along the channel and used it to build up the floor elevation for their homes. Also, one of the landowners ditched his property and is outletting directly over the banks of the main channel. There is also a possibility of flooding in these areas. One of the landowners is using part of the berm as a landing strip for his plane.

#### G. RECOMMENDATIONS

The gates in Structures Nos. 1 and 2 should be repaired or replaced. Sand blasting, reinforcement and coating to retard rust are needed on these gates. Replace cables where needed with stainless steel ones. Fill is needed on the southwest corner of Structure No. 2. The bypass on Structure No. 3 continues to erode each year. Deepen channel, slope, and vegetate sides to prevent further erosion.

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Grade and slope certain portions of the banks south of Structure No. 2. Fencing is needed to keep cattle off of the channel banks.

 Report of Annual Inspection March 15, 1979
 Page 3.

Do not allow any more landowners or any adjacent subdivision to remove spoil from the berm for "fill". Have landowners who removed spoil to reduce erosion along the main channel by sloping the edge away from the bank and also, provide for side inlets to carry off excess water safely.

Anthony Polizos/

District Conservationist Soil Conservation Service Frank Stafford, Coordinator)

Aquatic Plant and Water Control

Sarasota County

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#### SARASOTA WESTCOAST WATERSHED ADVISORY BOARD MEETING

MINUTES 5/19/78

The Sarasota Westcoast Watershed Advisory Board was called to order at 1:30 PM by Anthony Polizos, District Conservationist. Those present were Frank Stafford, L. W. Moomaw, Homer Wynn, Jeff Lincer, Norman Thomas, Jim Neville. Henry Daniels and Cyrus Bispham of the Sarasota Soil and Water Conservation District, Anthony Polizos, L. E. Neal and George Moore of the Soil Conservation Service. Also present were members of Dona and Roberts Bay Association, Manasota 88 and Save Our Bays.

A list of recommendations were presented by Mr. William Moomaw (see attachment). These recommendations have been Xeroxed and included in the minutes. After the recommendations were read, Anthony Polizos asked for comments concerning the recommendations as read. There were no comments.

Other topics that were discussed were, dismantling the Pumping Station, short term maintenance goals, and controlling aquatic weeds in the channel.

DISMANTLING THE PUMPING STATION

- 1. The advantages and disadvantages of dismantling the pumping station were discussed briefly. Dr. Lincer of Sarasota County Environmental Division believes that they should not be dismantled because they may be needed in the future.

  SHORT TERM MAINTENANCE GOALS
- 1. Dr. Lincer said that funds are available for repairing the gates. Gates at Structures (1) and (2) are being considered for repair.
- 2. An operation schedule for opening and closing the gates was discussed:
  - a) various county agencies will be involved in an experimental project for controlling the water level in the channel of S.W.C.W.S.

Minutes Sarasota Westcoast Watershed 5/19/78 - Con't page 2.

b) rainfall data collect throughout the county will be used to determine when the gates should be opened.

# AQUATIC WEED CONTROL

1. The Sarasota County Aquatic Plant Division of the Environmental Services Department has been rather successful in controlling the aquatic weed population.

Anthony Polizos
District Conservationist

Secretary, Pro Tem

Mr. William E. Austin State Conservationist P. O. Box 1208 Gainesville, Florida 32602

Dear Mr. Austin:

The ad-hoc Water Shed Advisory Board list the following recommendations and goals. We feel the Advisory Board has agreed to a list which is sound and acceptable to the Community and should meet approval of the Soil Conservation Service.

- 1. Reduce the rate, amount and duration of impact of fresh water, fresh water weeds, suspended solids and sediment that enter Shakett Creek-Dona Bay. This can be done by directing as much of the initial runoff
- as possible back into the uplands and swamps, where the suspended solids and aquatic weeds can be utilized (recycled) without damage to the estuaries. As part of this technique, it is possible that portions of Salt and Fox Creeks could be put back into function. In this regard, South West Florida Water Management District is using similar techniques on their four Rivers Basin Project that should be investigated. Meandering connections, through swamp areas and flag ponds should be used wherever possible. Another and additional means would be use of retaining lakes and ponds with levees. Provision would have to be made to assure adequate compensation to the land owners affected by the above. (The above procedures are to be completed prior to the following items except #2. This is to protect Dona and Robert's Bays from bad effects of any construction taking place in the Water Shed District.)
- 2. The banks where cattle are now watering and grazing should be fenced.
- 3. The banks on the slough canal should be sloped where needed and vegetated to reduce erosion.
- 4. Repair or replace gates in Structures No. 1 and 2 (replace cables with stainless steel ones).
- 5. No more major channelization or extension of the canal which will put more water through Dona Bay.
- 6. Dredge slope and vegetate around Structure No. 3 to S.C.S. specifications.
- 7. Dismantle and sell "Vegetable Relief Canal" pump plant on Bee Ridge Road.
  Also sell easements where needed.
- 8. Dredge in the channel to remove sediment deposited from washout of Structure No.3.
- 9. Comprehensive gate operations schedule needed.

Please study these proposals and make notes as to feasibility on the above goals. We are looking forward to seeing you at our meetings.

Sincerely,

Watershed Advisory Board

MEMBERS OF THE AD-HOC. WATERSHED ADVISORY BOARD ARE:

Aquatic Weed Control: Frank Stafford

Sarasota S.W.C.D.: Henry Daniels Cyrus Bispham

Dona & Robert's Bay Assn.: William Moomaw

County Engineering Dept: Homer Wynn

County Commissioner: Jim Neville

Environmental Service: Norman Thomas
Dr. Jeff Lincer

Soil Conservation Service: Anthony Polizos George Moore

Others participating in discussions and ideas included:

Dona & Robert's Bay Association

Sarasota Community Action Council

Manasota 88

Save Our Bays

2900 Ringling Blvd. • Sarasota, Florida 33577 • Phone 953-4737 SARASOTA WESTCOAST WATERSHED PROJECT

A Joint Meeting with Sarasota County, Soil Conservation Service, Sarasota Soil and Water Conservation District, and Southwest Florida Water Management District.

MINUTES
October 11, 1978
1:00 P.M.
2900 Ringling Blvd., Sarasota Florida

Supervisors present: Dallas Dort, B. T. Longino and Gene Henderson.

Others attending were: Donald Feaster, Zeb Palmer, Rich McLean, Bill Allee and

Sue Kollenbaum of S.W.F.W.M.D., also Jeff Lincer and Norman Thomas, Sarasota

County Environmental Division and Russell Klier of Pollution Control. and

Edward Keil and Gene Engman. SCS representatives were Jesse Livingston, Anthony

Polizos and L. E. Neal.

The meeting was called to order at 1:00 pm by Buster Longino (acting monitor).

Purpose: This meeting was held to discuss the possibilities of S.W.F.W.M.D. taking over Sarasota Westcoast Watershed Project or having SWFWMD be a co-sponsor of the project along with the County Commission, and the Soil Conservation District.

Three key issues concerning the watershed project were brought before this group for discussion. They are:

- A) The continuation of the Watershed Project.
- B) The intensification of Operation and Maintenance Plans For the Project.
- C) The pumping station.

Several people at the meeting directed questions to Mr. J. Livingston concerning the status of the Watershed. His reply was that before the status could be determined an impact statement would have to be written. This should

WISE USE OF NATURAL RESOURCES

Sarasota Westcoast Watershed Project Page 2 Oct. 11, 1978

be preceded by recommendation from an Ad Hoc committee made up of the sponsoring agencies.

Mr. Livingston also stated that there would be no more remaining works of the channel completed.

Tony'Polizos mentioned this issue will be discussed again with the Sarasota County Commission on October 31, 1978 at 11:30 in the Court Room E of the Court House.

Don Feaster made a few comments concerning SWFWMD being a sponsor of the project. The decision to be a sponsor would be made by the Basin Board. Because Sarasota S.W.C.D. does not have funds to operate and maintain the project, the County Commission and SWFWMD are the only two agencies that are capable of cosponsoring the project.

Jeff Lincer said he would be in favor of a program where SWFWMD and the County shared the operation and maintenance of the project. Mr. Lincer would like to see a hydrologist devise a plan for operating the gates throughout the slough. He felt that this area is where SWFWMD's expertise would be appreciated.

Lincer believes that it is somewhat difficult for a local agency to maintain such a project because it is hard for the residents living near the watershed project to reach an agreement on operating the gates and various other management practice. He also said that he would appreciate it if a hydrologist would devise a plan for operating the gates.

Dallas Dort called to the attention of the group the major areas of concern that he felt a solution or recommendation should be provided for on the Watershed Project.

- 1. Removal of the Pump Station
- 2. What agency will assume the responsibility for operation and maintainance?
- 3. Should Structure #3 be repaired or removed?

Mr. Livingston agreed with Mr. Dort that the above issues should be discussed and a request for recommendations should be submitted to SCS. After the decisions

have been made on these issues, an impact statement could be written which is required on a Project such as the Sarasota Westcoast Watershed at this point. Mr. Livingston along with Mr. Dort, and others agreed that the letter to S.C.S. should cover at least four specific points. They are as listed:

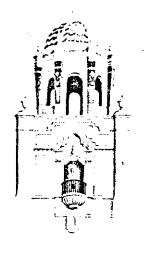
- A. No more channelization.
- B. Repairing Structure #3.
- C. Stabilizing the channels to reverse the present erosion situation
- D. The possibility of using the pump plant in some other capacity because of the fact it cannot be used as planned.

Mr. Dort recommended that a request for SCS to provide additional recommendations for managing the Watershed project.

A letter should be written to SWFWMD requesting them to sponsor or cosponsor the Watershed Project. After the request is made and the Basin Board approves the request, the SWFWMD staff, along with SCS and the County would evaluate the Project before SWFWMD will take over the project.

B. T. Longino, Acting Chairman

L. E. Neal. Secretary. Pro Tem



### COUNTY OF SARASOTA

FLORIDA

# BOARD OF COMMISSIONERS

ANDREW SANDEGREN \* DISTRICT 1
BEVERLY CLAY \* DISTRICT 2
JAMES D. NEVILLE \* DISTRICT 3
JOHN M. SABA, JR. \* DISTRICT 4
LARRY RHODES \* DISTRICT 5
ED MARONEY \* COUNTY ADMINISTRATOR

P.O. BOX 8 SARASOTA, FLA. 33578 PHONE: 813/365-1000

November 1, 1978

Mr. Derrill McAteer, Chairman SWFWMD Brooksville, Florida 33512

Dear Mr. McAteer:

It is our understanding that, in order for SWFWMD to investigate what role they might be able to play in the operation and/or maintenance of the Sarasota West Coast Watershed Project (Cow Pen Slough), a formal request by the sponsors is necessary.

Accordingly, we request you to consider the possible involvement of your District in the Cow Pen Slough project. We have had one informal meeting with Mr. Feaster and Mr. Longino regarding Cow Pen Slough. We would welcome an opportunity for further discussions at whatever level you deem appropriate.

We look forward to hearing from you or your designee as soon as possible .

Sincerely yours,

Andrew Sandegren, Chairman Board of County Commissioners Henry Daniels, Chairman
Sarasota Soil & Water Conservation
District



# COUNTY OF SARASOTA

FLORIDA

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P.O. BOX 8 SARASOTA, FLA. 33578 PHONE: 813/365-1000

July 17, 1978

Mr. Donald R. Feaster, Exec.Director Southwest Florida Water Management District 5060 U.S. Highway 41, South Brooksville, Fla. 33512

Dear Mr. Feaster,

It is my understanding that the Southwest Florida Water Management District is considering the Cow Pen Slough as one of it's Works of the District for the next year. Heretofore, the responsibility of managing and maintaining this channelized effort has been the responsibility of the County, the Conservation District and the Soil Conservation Service.

Since it is unlikely that the project will ever be completed, because of environmental impacts, and the existing land uses differ significantly from those which surrounded the original project, the original water management guidelines may no longer be appropriate. At this point, the County, with counseling from the Soil Conservation Service and the District Supervisors, is operating the control gates in an attempt to minimize the impact of this water on both the coastal and upland habitats. However, a subject that needs to be addressed as soon as possible is how to conserve this viable and vital resource.

We would like to meet with you to discuss the ramifications and details of SWFWMD taking on Cow Pen Slough as one of it's official Works of the District as soon as possible. I would appreciate your letting me know when this would be convenient.

Your assistance on this matter will be greatly appreciated.

xc: Sara.Co. Commrs., Clay,
Sandegren, Neville, Saba,
Rhodes
Tony Polizos, Dist. Conservationist
Henry Daniels, Chairman, District
Supervisors
Norm Thomas, Director,

Environmental Services

Sincerely,

Ed Maroney,

County Administrator.

JL:jy



# Sarasofa Soil Conservation District

2900 Ringling Blvd. • Sarasota, Florida 335<del>80</del> • Phone <del>958-4350</del>

September 19, 1978

To all Supervisors:

The Sarasota County Commission will meet with us on October 3, 1978, at 11:30 AM in Courtroom E (2nd floor). This is a most important meeting since we will be discussing the watershed project and its future. We will hold a Supervisor's meeting prior to that at 9:30 AM in the Soil Conservation Service Office.

Please call Tony if you cannot come.

Sincerely,

Henry Daniels

Chairman

HD/1m

cc: Gene Engman Ed Keil