

**Curry Creek
Basin Master Plan Update
Venice County Model (E_vcm)**

Book 1 of 3

Basin Summary

July 2001

**Curry Creek Basin Master Plan
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- EXHIBIT 3. 100-Year Floodplain with FPLOS Deficiencies
- EXHIBIT 4. Subbasin / Node-Reach Map

SECTION 1. INTRODUCTION

1.01 Purpose

The Curry Creek Basin Master Plan (BMP) was prepared to (1) characterize the existing hydrologic/hydraulic network; (2) identify existing Flood Protection Level of Service (FPLOS) deficiencies; (3) delineate the existing 100-year/24-hour floodplain to guide future planning and development; and (4) comment on the existing water quality conditions.

1.02 Abbreviations

BMP	- Basin Master Plan
BMPU	- Basin Master Plan Update
CHNEP	- Charlotte Harbor National Estuary Program
CIP	- Capital Improvements Program
DRI	- Development of Regional Impact
EMC	- Event Mean Concentration
FAC	- Florida Administrative Code
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NPDES	- National Pollutant Discharge Elimination System
PLRG	- Pollutant Load Reduction Goal
SWFWMD	- Southwest Florida Water Management District
TMDL	- Total Maximum Daily Load
WMM	- Watershed Management Model
WQLOS	- Water Quality Level of Service

1.03 Description of Study Area

The Curry Creek drainage basin is located in central coastal Sarasota County as shown on Exhibit 1. The basin is approximately 6,398 acres in size and is bounded by US 41 to the west, Jackson Road to the east, and Venice Road to the south. Boarder Road runs east to west through the northern portion of the Curry Creek Basin and Interstate 75 intersects the basin from north to west. The Curry Creek Basin is bordered by the Shakett Creek/Cow Pen Slough basin to the north, Roberts Bay to the west, the Myakka River watershed to the east, and the Hatchett Creek basin to the south. Major residential communities within the basin include Bird Bay Golf Club, Pinebrook South, Waterford, Capri Isles, Sawgrass, Hidden Lakes, and the northern portion of Bay Indies Mobile Home Park (MHP). Major business and commercial uses include Venetia Bay Center, Jacaranda Commercial Center and the Jacaranda/I-75 Interstate Business Center. Rural

lands encompass the extreme northeast and easterly portions of the basin. An aerial map of the basin identifying the major conveyance system of the basin is shown in Exhibit 2.

Drainage from this basin is served by three main collection and conveyance systems. Curry Creek Main accommodates the western region of the basin beginning one-half mile west of Auburn Road continuing west to the ultimate outfall into Roberts Bay. Upper Curry Creek Main (North Blackburn Canal) drains the northeast region of the basin from Jackson Road west to the confluence at Curry Creek. The remaining southeast region of the basin drains through the South Blackburn Canal Lateral from Havana Road west to the confluence at Curry Creek.

The area west of Auburn Road is primarily located in the City of Venice and consists of mainly residential lands with new subdivisions (Waterford and Sawgrass) being constructed in the late 1990s. Unincorporated lands east of Auburn Road consist of several existing residential developments which include the Venice Farms area, Venice Palms, Hidden Lakes and the Venice Ranch Mobile Home Park (MHP), while business and commercial uses include Jacaranda Commercial Center and the Jacaranda/I-75 Interstate Business Center. The areas north of Border Road and east of Fellsmere Road are primarily rural lands with sparsely distributed residences.

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SECTION 2. BACKGROUND

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Historic Curry Creek extends from Roberts Bay to just east of Pinebrook Road. Subsequent drainage works extended a canal to the east in the early 1960s providing a connection with the Myakka River referred to herein as the North Blackburn Canal. This connection was to provide relief of agricultural flooding caused by elevated flood stages of the Myakka River. Based upon the detailed modeling performed in this flood study update, the canal allows an approximate volumetric diversion of freshwater of 7%-8% from the Myakka River. In addition, the North Blackburn Canal reduces the peak flood discharge rate from the Myakka River by approximately 10%. Additional drainage works for agriculture and mosquito control extended a canal to the southeast to approximately Havana Road, referred to herein as the South Blackburn Canal.

2.02 Existing Flooding

Public input following the severe rainfall events that occurred between June 1992 and late 1997 identified problem areas in the basin. A public meeting was held on November 13, 1997 as part of an interim study performed by Gee & Jenson. Respondents to the meeting questionnaire expressed concerns regarding drainage problems associated with the lack of routine maintenance and the siltation of the creek bottom. Residents living in the Bay Indies MHP, Mobile City Estates, and Roberts Bay Estates complained of severe street flooding.

Areas that have historically been susceptible to flooding typically correspond to soils defined as either depressional or frequently flooded by the Sarasota County Soils Survey. Most development that has occurred in the Curry Creek Basin has occurred outside of these historical low-lying areas.

2.03 Prior Studies

The Curry Creek basin has been the subject of two previous watershed studies. A list and brief descriptions of these previous studies is provided below:

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SECTION 3. EXISTING CONDITIONS ASSESSMENT

3.01 Flood Protection Level of Service Objectives

The flood protection level of service (FPLOS) objectives applied to the Curry Creek Basin are based upon those adopted by the Sarasota County Comprehensive Plan. Table 3.01 presents the FPLOS standards for Sarasota County.

**Table 3.01
Acceptable Flooding Depths
Flood Plain Level of Service Criteria**

	Rainfall Event Return Period			
	5-year	10-year	25-year	100-year
Structure	None	None	None	None
Roadways:				
Evacuation Route	None	None	None	None
Arterial	None	None	None	6 inches
Collector	None	None	6 inches	9 inches
Neighborhood	None	6 inches	9 inches	12 inches

To quantify the existing FPLOS deficiencies in the Curry Creek Basin, a detailed hydrodynamic computer model was developed to predict flood elevations throughout the watershed. Versions 2.11 and 2.2 of the Advanced Interconnected Pond Routing (AdICPR) software were used to model the watershed. For a complete discussion of the modeling methodology, please refer to the *Phillippi Creek Basin Master Plan Update*. Previous studies of Curry Creek were reviewed and applicable information was incorporated into the updated model. The recently completed improvements of the Sawgrass Development, Auburn and Pinebrook Roads, Jacaranda Commercial Center, Venice Palms Subdivision, Hidden Lakes Subdivision were identified in detail and incorporated into the analysis as an existing condition. Additional detail was also added in the rural areas lying north of Border Road. Copies of the computer input as well as the node-reach diagram are available in digital format upon request from the Stormwater Utility. The node-reach diagram is also attached as Exhibit 6.

The computed flood elevations were used to delineate the horizontal limits of the 100-year floodplain on Southwest Florida Water Management District (SWFWMD) 1-foot contour interval aerial maps. Structures and roadways which were located within the horizontal limits of the floodplain were inventoried as potential FPLOS deficiencies. Roadway FPLOS deficiencies were determined by comparing roadway elevations from SWFWMD aerials, construction plans, or field surveys, to the computed flood levels. Finished floor elevations of structures horizontally located in the 100-year floodplain were field surveyed to verify which constituted FPLOS deficiencies.

3.01.1 Flood Protection Level of Service

EXHIBIT 3 identifies the horizontal limits of the 100-year floodplain and the existing FPLOS deficiencies. Separate FPLOS deficiency tables, included below, have been prepared for unincorporated Sarasota County (Tables 3.01.1, 3.01.3, and 3.01.4) and the City of Venice (Tables 3.01.2 and 3.01.5).

The results of the existing condition assessment indicate that four structure FPLOS deficiencies exist in the Curry Creek Basin. Two of these structures lie in the unincorporated area of Sarasota County (Table 3.01.1). One structure is in Venice Farms (Bonita Drive) and the other structure is in Nokomis Manor. Two structure FPLOS deficiencies are located within the City of Venice in the Bird Bay Golf Club (Table 3.01.2).

**Table 3.01.1
Structure Flood Protection Level of Service Deficiencies
Unincorporated Sarasota County**

Structure Location	Structure Type	Finished Floor Elevation	Node No.	Flood Stage 10-Year	Flood Stage 25-Year	Flood Stage 100-Year
3369 Bonita Drive	Residence	10.42	10831	12.16	12.37	12.78
508 Pinewood Avenue	Residence	6.15	10308	5.56	5.80	6.21
Shaded flood stages indicate structure flood depths exceeding LOS criteria						

**Table 3.01.2
Structure Flood Protection Level of Service Deficiencies
City of Venice**

Structure Location	Structure Type	Finished Floor Elevation	Node No.	Flood Stage 10-Year	Flood Stage 25-Year	Flood Stage 100-Year
632 White Pine Tree Dr	Residence	13.34	10121	12.86	13.19	13.66
634 White Pine Tree Dr	Residence	13.34	10121	12.86	13.19	13.66
Shaded flood stages indicate structure flood depths exceeding LOS criteria						

In addition, several roadway segments are susceptible to flooding in excess of the FPLOS criteria. Public street FPLOS deficiencies in the unincorporated County area include roads in the Nokomis Manor, Venice Farms and North Venice Farms areas and are shown in Tables 3.01.3. There are no public street FPLOS deficiencies within the limits of the City of Venice.

**Table 3.01.3
Public Street Flood Protection Level of Service Deficiencies
Unincorporated Sarasota County**

Public Street Location	Road Class	Edge of Pavement Elevation	Node No.	Flood Stage 10-Year	Flood Stage 25-Year	Flood Stage 100-Year
Ewing Street (West)	Local	11.95	10208	12.08	12.45	13.27
Colonia Avenue	Local	3.55	10308	5.56	5.80	6.21
Olive Avenue	Local	4.45	10314	4.70	5.04	5.63
Edmonson Road	Collector	11.35	10324	11.60	11.77	12.06
Fellsmere Road	Local	8.75	10903	8.96	9.44	10.23
Gladesview Drive	Local	8.75	10903	8.96	9.44	10.23
Jackson Road	Collector	12.65	10980	13.33	13.41	13.55
Jackson Road	Collector	12.65	10982	13.30	13.38	13.51
Shaded flood stages indicate street flood depths exceeding LOS criteria						

Tables 3.01.4 and 3.01.5 detail private street FPLOS deficiencies. There are four FPLOS deficiencies in unincorporated Sarasota County, in the Bay Lakes Estates and Venice Acres areas. There are four private street FPLOS deficiencies in the City of Venice, in the Bird Bay Golf Club, Bay Indies MHP, and Capri Isles subdivisions.

**Table 3.01.4
Private Street Flood Protection Level of Service Deficiencies
Unincorporated Sarasota County**

Private Street Location	Road Class	Edge of Pavement Elevation	Node No.	Flood Stage 10-Year	Flood Stage 25-Year	Flood Stage 100-Year
Bay Lake Boulevard	Local	3.95	10112	4.37	4.65	5.14
Flamboyant Street	Local	3.95	10112	4.37	4.65	5.14
Northway Drive	Local	9.15	10205	10.12	10.14	10.18
Firetree Lane	Local	8.95	10732	8.82	9.52	10.45
Shaded flood stages indicate street flood depths exceeding LOS criteria						

**Table 3.01.5
Private Street Flood Protection Level of Service Deficiencies
City of Venice**

Private Street Location	Road Class	Edge of Pavement Elevation	Node No.	Flood Stage 10-Year	Flood Stage 25-Year	Flood Stage 100-Year
Oakmont lane	Local	12.35	10121	12.86	13.19	13.66
Prestwick Lane	Local	12.25	10121	12.86	13.19	13.66
White Pine Tree Drive	Local	12.05	10121	12.86	13.19	13.66
N. Indies Circle	Local	4.10	10326	5.07	5.28	5.85
Shaded flood stages indicate street flood depths exceeding LOS criteria						

3.02 Water Quality Level of Service Objectives

The Charlotte Harbor National Estuary Program (CHNEP) will be establishing Pollutant Load Reduction Goals (PLRGs) for Roberts Bay. Existing Annual Pollutant Loads were estimated for Curry Creek by Gee & Jenson Engineers-Architects-Planners, Inc. as part of their interim Basin Master Plan Report. Gee & Jenson used the Watershed Management Model (WMM) developed by Camp Dresser & McKee (CDM) as part of the Sarasota County National Pollutant Discharge Elimination System (NPDES) program for stormwater discharges. The model uses a spreadsheet format to estimate annual non-point source loads from direct runoff based upon runoff volumes and event mean concentrations (EMCs). The EMC is defined as the total pollutant discharged during the storm divided by the total runoff volume.

3.02.1 Water Quality Level of Service

A summary of the existing conditions model output for the conventional non-point source pollutants, nutrients, and metals is listed in Table 3.02.1. The gross pollutant load reflects the total estimated amount of pollutant load that is generated in the basin. Net annual pollutant load, as presented in Table 3.02.1, is defined as the amount of estimated pollutant discharged into the final receiving waterbody. Net load calculations take into account the mitigating effect of existing stormwater treatment facilities and wetlands. The non-point source pollutant load calculations are based strictly on land use configuration and the estimates have not been calibrated with actual sampling data.

**Table 3.02.1
Total Annual Pollutant Loads for Existing Conditions**

Parameter	Gross Load (lbs/year)	Pollutant Removal		Net Load (lbs/year)
		(lbs/year)	(%)	
Biochemical Oxygen Demand	241,099	36,789	15	204,310
Chemical Oxygen Demand	1,721,846	488,801	28	1,233,045
Total Suspended Solids	3,936,700	1,074,769	27	2,861,931
Total Dissolved Solids	2,748,213	0	0.0	2,748,213
Total Phosphorus	21,283	2,346	11	18,937
Total Dissolved Phosphorus	2,763	1,331	48	1,432
Total Kjeldahl Nitrogen	49,590	7,377	15	42,213
NO ₂ + NO ₃ Nitrogen	21,988	9,666	44	12,322
Total Lead	3,417	2,221	65	1,196
Total Copper	636	351	55	285
Total Zinc	3,621	1,445	40	2,176
Total Cadmium	28	10	36	18

In addition, any new development within the drainage basin is required to include stormwater treatment facilities to mitigate potential increases in pollutant loads as required by the Land Development Regulations. Any future capital improvement project to address FPLOS deficiencies will consider incorporating stormwater treatment components into its design.

SECTION 4. CONCLUSIONS AND RECOMMENDATIONS

4.01 Delineation of Existing Floodplain

As part of the Curry Creek BMP, the limits of the 100-year riverine floodplain have been identified and mapped, and is shown on Exhibit 3. Adoption of the Curry Creek BMP will assure that the floodplain area will be recognized and that the floodplain functions will be preserved when new development proposals are considered. In addition, the detailed stormwater model developed as part of the BMP provides a valuable tool to evaluate the effects of proposed land use changes.

It is recommended that the Curry Creek model update be utilized as a basis of review to evaluate proposed development and drainage modifications so that potential adverse increases in off-site flood stages are adequately mitigated. In addition, it is recommended that finished floor elevations be set a minimum of one foot above the 100-year flood elevations computed by the Curry Creek flood study update, if such elevations are higher than the base flood elevations contained on the current Flood Insurance Rate Maps.

4.02 Preliminary Investigation of Existing FPLOS Deficiencies

As indicated previously in Section 3, there are several structure and street FPLOS deficiencies that exist in the Curry Creek Basin. A preliminary investigation of the cause and potential solutions for each is provided below:

In the Curry Creek basin, four structures, seven public streets, and eight private streets are FPLOS deficiencies as shown in Exhibit 3.

Two structures and three private streets in the Bird Bay Golf Club and one private street located in the Bay Indes Mobile Home Park (MHP) are FPLOS deficiencies in the City of Venice. The Curry Creek Basin Master Plan has been submitted to and discussed with the City of Venice Engineer. The City of Venice has its own stormwater utility and will review concerns in the city as appropriate.

In unincorporated Sarasota County, seven public streets have been identified as FPLOS deficiencies. Three of the seven public roads (Ewing Street, Fellsmere Road, and Gladesview Drive) are non-maintained roads and are FPLOS deficiencies only in the 100-year event.

Edmonson Road is a collector and does not meet FPLOS criteria for the 10 year storm event (no standing water on the road) but does meet the FPLOS criteria for the 25 year and the 100 year storm events. Road Program is working on improvement plans for Edmonson Road. Staff has provided information to Road Program to be considered during the design of the roadway improvements.

The Curry Creek BMP recommends a minor improvement project to address FPLOS deficiencies involving a structure in the Nokomis Manor subdivision, a section of Olive Road (a local neighborhood roadway), and a section of Colonia Avenue east of Albee Farm Road.

Please note that the flooding on Colonia Avenue will be reduced, however it will remain a FPLOS deficiency. Residents in the vicinity of the deficient section of Colonia Avenue have alternative access to their homes from Edmonson Road.

There are FPLOS deficiencies identified at the eastern border of the Curry Creek study. Two sections on Jackson Road and a structure on Bonita Drive will be revisited once additional information is provided by the Myakka River Watershed Study, scheduled to be completed in August 2002. The Myakka River Flood Study should clarify the impact to this area.

There are four private streets identified as FPLOS deficiencies in unincorporated Sarasota County. Two private streets are located in the Bay Lakes Estates and two private streets are located in Venice Acres.

4.03 Future Development

Although the Basin Master Plan has identified existing FPLOS deficiencies, it also affords the opportunity to plan for the future. At this time Sarasota County has no formal process to develop or to provide incentives for regional stormwater facilities. In the meantime, such a proposal would need to be privately initiated.

4.04 Long Term Maintenance

Easement acquisition should be pursued in order to provide consistent maintenance and reduction of erosion.

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The computed flood elevations were used to delineate the horizontal limits of the 100-year floodplain on Southwest Florida Water Management District (SWFWMD) 1-foot contour interval aerial maps. Structures and roadways which were located within the horizontal limits of the floodplain were inventoried as potential FPLOS deficiencies. Roadway FPLOS deficiencies were determined by comparing roadway elevations from SWFWMD aeriels, construction plans, or field surveys, to the computed flood levels. Finished floor elevations of structures horizontally located in the 100-year floodplain were field surveyed to verify which constituted FPLOS deficiencies.

3.01.1 Flood Protection Level of Service

EXHIBIT 3 identifies the horizontal limits of the 100-year floodplain and the existing FPLOS deficiencies. Separate FPLOS deficiency tables, included below, have been prepared for unincorporated Sarasota County (Tables 3.01.1, 3.01.3, and 3.01.4) and the City of Venice (Tables 3.01.2 and 3.01.5).

The results of the existing condition assessment indicate that four structure FPLOS deficiencies exist in the Curry Creek Basin. Two of these structures lie in the unincorporated area of Sarasota County (Table 3.01.1). One structure is in Venice Farms (Bonita Drive) and the other structure is in Nokomis Manor. Two structure FPLOS deficiencies are located within the City of Venice in the Bird Bay Golf Club (Table 3.01.2).

**Table 3.01.1
Structure Flood Protection Level of Service Deficiencies
Unincorporated Sarasota County**

Structure Location	Structure Type	Finished Floor Elevation	Node No.	Flood Stage 10-Year	Flood Stage 25-Year	Flood Stage 100-Year
3369 Bonita Drive	Residence	10.42	10831	12.16	12.37	12.78
508 Pinewood Avenue	Residence	6.15	10308	5.56	5.80	6.21
Shaded flood stages indicate structure flood depths exceeding LOS criteria						

**Table 3.01.2
Structure Flood Protection Level of Service Deficiencies
City of Venice**

Structure Location	Structure Type	Finished Floor Elevation	Node No.	Flood Stage 10-Year	Flood Stage 25-Year	Flood Stage 100-Year
632 White Pine Tree Dr	Residence	13.34	10121	12.86	13.19	13.66
634 White Pine Tree Dr	Residence	13.34	10121	12.86	13.19	13.66
Shaded flood stages indicate structure flood depths exceeding LOS criteria						

In addition, several roadway segments are susceptible to flooding in excess of the FPLOS criteria. Public street FPLOS deficiencies in the unincorporated County area include roads in the Nokomis Manor, Venice Farms and North Venice Farms areas and are shown in Tables 3.01.3. There are no public street FPLOS deficiencies within the limits of the City of Venice.

Table 3.01.3
Public Street Flood Protection Level of Service Deficiencies
Unincorporated Sarasota County

Public Street Location	Road Class	Edge of Pavement Elevation	Node No.	Flood Stage 10-Year	Flood Stage 25-Year	Flood Stage 100-Year
Ewing Street (West)	Local	11.95	10208	12.08	12.45	13.27
Colonia Avenue	Local	3.55	10308	5.56	5.80	6.21
Olive Avenue	Local	4.45	10314	4.70	5.04	5.63
Edmonson Road	Collector	11.35	10324	11.60	11.77	12.06
Fellsmere Road	Local	8.75	10903	8.96	9.44	10.23
Gladesview Drive	Local	8.75	10903	8.96	9.44	10.23
Jackson Road	Collector	12.65	10980	13.33	13.41	13.55
Jackson Road	Collector	12.65	10982	13.30	13.38	13.51
Shaded flood stages indicate street flood depths exceeding LOS criteria						

Tables 3.01.4 and 3.01.5 detail private street FPLOS deficiencies. There are four FPLOS deficiencies in unincorporated Sarasota County, in the Bay Lakes Estates and Venice Acres areas. There are four private street FPLOS deficiencies in the City of Venice, in the Bird Bay Golf Club, Bay Indies MHP, and Capri Isles subdivisions.

Table 3.01.4
Private Street Flood Protection Level of Service Deficiencies
Unincorporated Sarasota County

Private Street Location	Road Class	Edge of Pavement Elevation	Node No.	Flood Stage 10-Year	Flood Stage 25-Year	Flood Stage 100-Year
Bay Lake Boulevard	Local	3.95	10112	4.37	4.65	5.14
Flamboyant Street	Local	3.95	10112	4.37	4.65	5.14
Northway Drive	Local	9.15	10205	10.12	10.14	10.18
Firetree Lane	Local	8.95	10732	8.82	9.52	10.45
Shaded flood stages indicate street flood depths exceeding LOS criteria						

Table 3.01.5
Private Street Flood Protection Level of Service Deficiencies
City of Venice

Private Street Location	Road Class	Edge of Pavement Elevation	Node No.	Flood Stage 10-Year	Flood Stage 25-Year	Flood Stage 100-Year
Oakmont lane	Local	12.35	10121	12.86	13.19	13.66
Prestwick Lane	Local	12.25	10121	12.86	13.19	13.66
White Pine Tree Drive	Local	12.05	10121	12.86	13.19	13.66
N. Indies Circle	Local	4.10	10326	5.07	5.28	5.85
Shaded flood stages indicate street flood depths exceeding LOS criteria						

3.02 Water Quality Level of Service Objectives

The Charlotte Harbor National Estuary Program (CHNEP) will be establishing Pollutant Load Reduction Goals (PLRGs) for Roberts Bay. Existing Annual Pollutant Loads were estimated for Curry Creek by Gee & Jenson Engineers-Architects-Planners, Inc. as part of their interim Basin Master Plan Report. Gee & Jenson used the Watershed Management Model (WMM) developed by Camp Dresser & McKee (CDM) as part of the Sarasota County National Pollutant Discharge Elimination System (NPDES) program for stormwater discharges. The model uses a spreadsheet format to estimate annual non-point source loads from direct runoff based upon runoff volumes and event mean concentrations (EMCs). The EMC is defined as the total pollutant discharged during the storm divided by the total runoff volume.

3.02.1 Water Quality Level of Service

A summary of the existing conditions model output for the conventional non-point source pollutants, nutrients, and metals is listed in Table 3.02.1. The gross pollutant load reflects the total estimated amount of pollutant load that is generated in the basin. Net annual pollutant load, as presented in Table 3.02.1, is defined as the amount of estimated pollutant discharged into the final receiving waterbody. Net load calculations take into account the mitigating effect of existing stormwater treatment facilities and wetlands. The non-point source pollutant load calculations are based strictly on land use configuration and the estimates have not been calibrated with actual sampling data.

**Table 3.02.1
Total Annual Pollutant Loads for Existing Conditions**

Parameter	Gross Load (lbs/year)	Pollutant Removal		Net Load (lbs/year)
		(lbs/year)	(%)	
Biochemical Oxygen Demand	241,099	36,789	15	204,310
Chemical Oxygen Demand	1,721,846	488,801	28	1,233,045
Total Suspended Solids	3,936,700	1,074,769	27	2,861,931
Total Dissolved Solids	2,748,213	0	0.0	2,748,213
Total Phosphorus	21,283	2,346	11	18,937
Total Dissolved Phosphorus	2,763	1,331	48	1,432
Total Kjeldahl Nitrogen	49,590	7,377	15	42,213
NO ₂ + NO ₃ Nitrogen	21,988	9,666	44	12,322
Total Lead	3,417	2,221	65	1,196
Total Copper	636	351	55	285
Total Zinc	3,621	1,445	40	2,176
Total Cadmium	28	10	36	18

In addition, any new development within the drainage basin is required to include stormwater treatment facilities to mitigate potential increases in pollutant loads as required by the Land Development Regulations. Any future capital improvement project to address FPLOS deficiencies will consider incorporating stormwater treatment components into its design.

SECTION 4. CONCLUSIONS AND RECOMMENDATIONS

4.01 Delineation of Existing Floodplain

As part of the Curry Creek BMP, the limits of the 100-year riverine floodplain have been identified and mapped, and is shown on Exhibit 3. Adoption of the Curry Creek BMP will assure that the floodplain area will be recognized and that the floodplain functions will be preserved when new development proposals are considered. In addition, the detailed stormwater model developed as part of the BMP provides a valuable tool to evaluate the effects of proposed land use changes.

It is recommended that the Curry Creek model update be utilized as a basis of review to evaluate proposed development and drainage modifications so that potential adverse increases in off-site flood stages are adequately mitigated. In addition, it is recommended that finished floor elevations be set a minimum of one foot above the 100-year flood elevations computed by the Curry Creek flood study update, if such elevations are higher than the base flood elevations contained on the current Flood Insurance Rate Maps.

4.02 Preliminary Investigation of Existing FPLOS Deficiencies

As indicated previously in Section 3, there are several structure and street FPLOS deficiencies that exist in the Curry Creek Basin. A preliminary investigation of the cause and potential solutions for each is provided below:

In the Curry Creek basin, four structures, seven public streets, and eight private streets are FPLOS deficiencies as shown in Exhibit 3.

Two structures and three private streets in the Bird Bay Golf Club and one private street located in the Bay Indes Mobile Home Park (MHP) are FPLOS deficiencies in the City of Venice. The Curry Creek Basin Master Plan has been submitted to and discussed with the City of Venice Engineer. The City of Venice has its own stormwater utility and will review concerns in the city as appropriate.

In unincorporated Sarasota County, seven public streets have been identified as FPLOS deficiencies. Three of the seven public roads (Ewing Street, Fellsmere Road, and Gladesview Drive) are non-maintained roads and are FPLOS deficiencies only in the 100-year event.

Edmonson Road is a collector and does not meet FPLOS criteria for the 10 year storm event (no standing water on the road) but does meet the FPLOS criteria for the 25 year and the 100 year storm events. Road Program is working on improvement plans for Edmonson Road. Staff has provided information to Road Program to be considered during the design of the roadway improvements.

The Curry Creek BMP recommends a minor improvement project to address FPLOS deficiencies involving a structure in the Nokomis Manor subdivision, a section of Olive Road (a local neighborhood roadway), and a section of Colonia Avenue east of Albee Farm Road.

Please note that the flooding on Colonia Avenue will be reduced, however it will remain a FPLOS deficiency. Residents in the vicinity of the deficient section of Colonia Avenue have alternative access to their homes from Edmonson Road.

There are FPLOS deficiencies identified at the eastern border of the Curry Creek study. Two sections on Jackson Road and a structure on Bonita Drive will be revisited once additional information is provided by the Myakka River Watershed Study, scheduled to be completed in August 2002. The Myakka River Flood Study should clarify the impact to this area.

There are four private streets identified as FPLOS deficiencies in unincorporated Sarasota County. Two private streets are located in the Bay Lakes Estates and two private streets are located in Venice Acres.

4.03 Future Development

Although the Basin Master Plan has identified existing FPLOS deficiencies, it also affords the opportunity to plan for the future. At this time Sarasota County has no formal process to develop or to provide incentives for regional stormwater facilities. In the meantime, such a proposal would need to be privately initiated.

4.04 Long Term Maintenance

Easement acquisition should be pursued in order to provide consistent maintenance and reduction of erosion.