

# LRWRP Annual Average Structure Flow Maps

Revised:05/25/2017

# C-18W-IMP Annual Average Structure Flows in K-AC-FT



Number	Structure Name
20	Total Inflow into C-18W Storage
21	Total Outflow from C-18W Storage
22	Flows from M-O Connector Canal
23	Flows over Corbett Weir
24	Flows into C-18W Storage from Seepage Canal
30	Flows from C-18W Storage to <u>Avenir</u>
31	Flows from C-18W Storage to C-18W Canal
42	Injection Flows to C-18W Storage ASR Wells
43	Withdrawal Flows to C-18W Storage ASR Wells

**42:- ASR in (C18)**

ECB	n/a
FWO	n/a
ALT2	1.5
ALT5	3.8
ALT10	n/a
ALT12	n/a
ALT13	n/a

**31:- C18Imp to C18C**

ECB	n/a
FWO	n/a
ALT2	63.3
ALT5	64.0
ALT10	23.1
ALT12	32.8
ALT13	42.9

**21:- C18Imp Total Out**

ECB	n/a
FWO	n/a
ALT2	63.3
ALT5	64.0
ALT10	23.1
ALT12	32.8
ALT13	60.8

**43:- ASR Out (C18)**

ECB	n/a
FWO	n/a
ALT2	0.8
ALT5	3.4
ALT10	n/a
ALT12	n/a
ALT13	n/a

**C-18W-IMP**

**23:- Corbett Weir**

ECB	n/a
FWO	n/a
ALT2	7.7
ALT5	6.5
ALT10	7.9
ALT12	0.6
ALT13	3.9

**22:- M-O to C18Imp**

ECB	n/a
FWO	n/a
ALT2	55.3
ALT5	68.7
ALT10	n/a
ALT12	0.0
ALT13	0.0

**20:- C18Imp Total In**

ECB	n/a
FWO	n/a
ALT2	70.8
ALT5	83.5
ALT10	16.2
ALT12	51.2
ALT13	3.9

**30:- C18Imp to Avenir**

ECB	n/a
FWO	n/a
ALT2	n/a
ALT5	n/a
ALT10	n/a
ALT12	n/a
ALT13	17.9

**24:- Seep to C18Imp**

ECB	n/a
FWO	n/a
ALT2	7.7
ALT5	8.3
ALT10	8.3
ALT12	n/a
ALT13	n/a

Annual Average Structure Flows in K-AC-FT

- Primary Canals & Streams
- Water Budget Boundaries
- X Flows
- Inflows
- Outflows

DATA SOURCE: Structures flow estimates provided by Avenir/Chesapeake May 11, 2017

# C-51-IMP Annual Average Structure Flows in K-AC-FT



## C-51

### Annual Average Structure Flows in K-AC-FT

- Primary Canals & Streams
- Water Budget Boundaries
- X Flows
- Inflows
- Outflows

GISX SOURCE: Structures Flow location photo by AWH/Chocoma May 11, 2017

Number	Structure Name
13	Flows from C-51 Phase II Reservoir to Force Main.
25	Total Inflow into C-51 Phase II Reservoir
26	Total Outflow from C-51 Phase II Reservoir
36	Flows to Grassy Waters Preserve from C-51 Phase II Reservoir
37	Flows to L-8 Shallow Impoundment from C-51 Phase II Reservoir

37:- C51R to L8Sh	
ECB	n/a
FWO	n/a
ALT2	n/a
ALT5	n/a
ALT10	n/a
ALT12	71.2
ALT13	n/a

25:- C-51Res Total In	
ECB	n/a
FWO	n/a
ALT2	n/a
ALT5	n/a
ALT10	104.7
ALT12	103.3
ALT13	n/a

26:- C-51Res Total Out	
ECB	n/a
FWO	n/a
ALT2	n/a
ALT5	n/a
ALT10	85.7
ALT12	71.2
ALT13	n/a

13:- C-51R to FM	
ECB	n/a
FWO	n/a
ALT2	n/a
ALT5	n/a
ALT10	25.3
ALT12	0.0
ALT13	n/a

36:- C-51R to GWP	
ECB	n/a
FWO	n/a
ALT2	n/a
ALT5	n/a
ALT10	60.5
ALT12	0.0
ALT13	n/a

# Flowway-3 Annual Average Structure Flows in K-AC-FT



**18:- TP Farm**

ECB	1.0
FWO	1.0
ALT2	2.3
ALT5	2.3
ALT10	1.9
ALT12	2.3
ALT13	2.3

**19:- HSL Unit2**

ECB	10.2
FWO	10.2
ALT2	11.1
ALT5	11.1
ALT10	10.2
ALT12	11.1
ALT13	11.1

**44:- 9Gems to CC**

ECB	6.9
FWO	6.9
ALT2	0.5
ALT5	0.5
ALT10	7.0
ALT12	0.5
ALT13	0.5

Number	Structure Name
5	Flows to Loxahatchee River from Cypress Creek
15	Flows in Hobe St. Lucie Control District Bypass Canal
18	Flows from Thomas Pepper Farm
19	Flows from Hobe St. Lucie Unit 2 System
27	Flows through Culpepper Outflow Structures
44	Flows to Cypress Creek from Nine Gems
45	Flows to Cypress Creek from Urban Areas

**27:- Culpepper Out**

ECB	28.6
FWO	28.6
ALT2	28.6
ALT5	28.5
ALT10	27.4
ALT12	28.6
ALT13	28.4

**45:- Urban to CC**

ECB	
FWO	
ALT2	
ALT5	
ALT10	
ALT12	
ALT13	

**15:- HSL Bypass**

ECB	12.1
FWO	12.1
ALT2	0.1
ALT5	0.1
ALT10	12.1
ALT12	0.1
ALT13	0.1

**5:- CC to Lox**

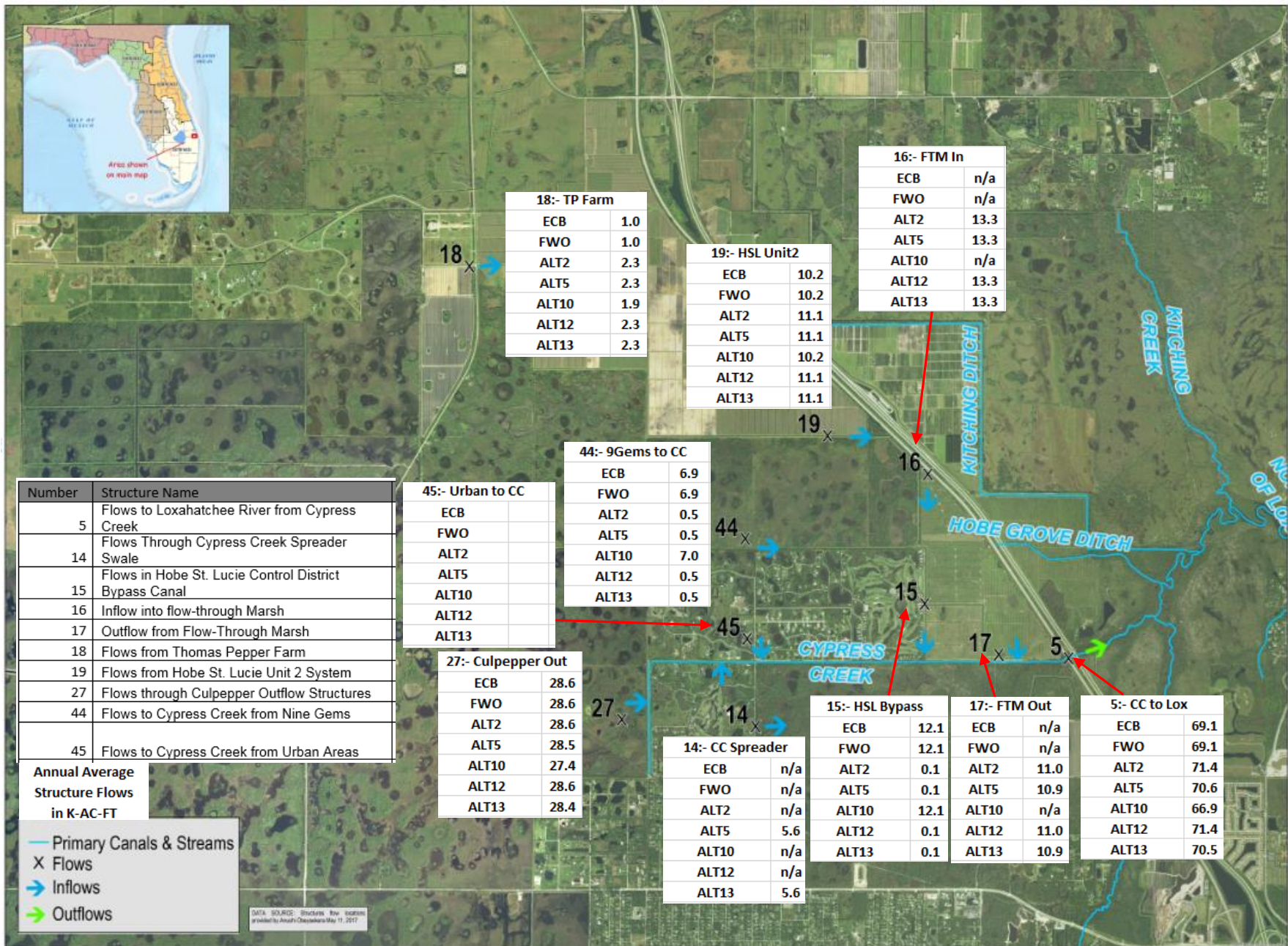
ECB	69.1
FWO	69.1
ALT2	71.4
ALT5	70.6
ALT10	66.9
ALT12	71.4
ALT13	70.5

Annual Average Structure Flows in K-AC-FT

- Primary Canals & Streams
- X Flows
- ➔ Inflows
- ➔ Outflows

DATA SOURCE: Structures flow stations provided by Anand's Office on May 11, 2017

# Flowway-Alts Annual Average Structure Flows in K-AC-FT



**18:- TP Farm**

ECB	1.0
FWO	1.0
ALT2	2.3
ALT5	2.3
ALT10	1.9
ALT12	2.3
ALT13	2.3

**19:- HSL Unit2**

ECB	10.2
FWO	10.2
ALT2	11.1
ALT5	11.1
ALT10	10.2
ALT12	11.1
ALT13	11.1

**16:- FTM In**

ECB	n/a
FWO	n/a
ALT2	13.3
ALT5	13.3
ALT10	n/a
ALT12	13.3
ALT13	13.3

**44:- 9Gems to CC**

ECB	6.9
FWO	6.9
ALT2	0.5
ALT5	0.5
ALT10	7.0
ALT12	0.5
ALT13	0.5

**45:- Urban to CC**

ECB	
FWO	
ALT2	
ALT5	
ALT10	
ALT12	
ALT13	

**27:- Culpepper Out**

ECB	28.6
FWO	28.6
ALT2	28.6
ALT5	28.5
ALT10	27.4
ALT12	28.6
ALT13	28.4

**15:- HSL Bypass**

ECB	12.1
FWO	12.1
ALT2	0.1
ALT5	0.1
ALT10	12.1
ALT12	0.1
ALT13	0.1

**17:- FTM Out**

ECB	n/a
FWO	n/a
ALT2	11.0
ALT5	10.9
ALT10	n/a
ALT12	11.0
ALT13	10.9

**5:- CC to Lox**

ECB	69.1
FWO	69.1
ALT2	71.4
ALT5	70.6
ALT10	66.9
ALT12	71.4
ALT13	70.5

**14:- CC Spreader**

ECB	n/a
FWO	n/a
ALT2	n/a
ALT5	5.6
ALT10	n/a
ALT12	n/a
ALT13	5.6

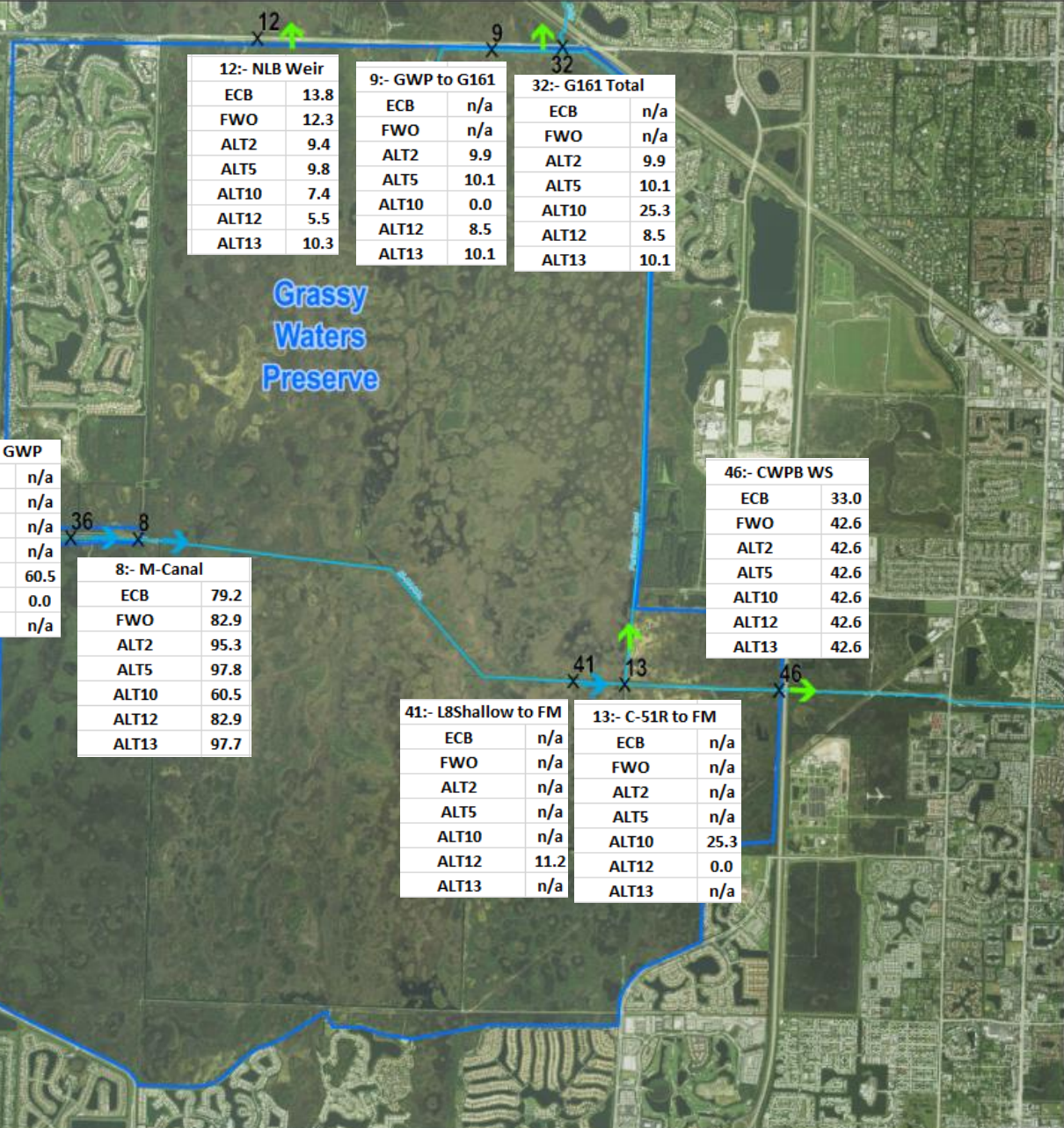
Number	Structure Name
5	Flows to Loxahatchee River from Cypress Creek
14	Flows Through Cypress Creek Spreader Swale
15	Flows in Hobe St. Lucie Control District Bypass Canal
16	Inflow into flow-through Marsh
17	Outflow from Flow-Through Marsh
18	Flows from Thomas Pepper Farm
19	Flows from Hobe St. Lucie Unit 2 System
27	Flows through Culpepper Outflow Structures
44	Flows to Cypress Creek from Nine Gems
45	Flows to Cypress Creek from Urban Areas

Annual Average Structure Flows in K-AC-FT

— Primary Canals & Streams  
X Flows  
→ Inflows  
→ Outflows

DATA SOURCE: Structures flow estimates provided by Ansoft/Chowdhury May 11, 2017

# Grassy Waters Preserve Annual Average Structure Flows in K-AC-FT



12:- NLB Weir	
ECB	13.8
FWO	12.3
ALT2	9.4
ALT5	9.8
ALT10	7.4
ALT12	5.5
ALT13	10.3

9:- GWP to G161	
ECB	n/a
FWO	n/a
ALT2	9.9
ALT5	10.1
ALT10	0.0
ALT12	8.5
ALT13	10.1

32:- G161 Total	
ECB	n/a
FWO	n/a
ALT2	9.9
ALT5	10.1
ALT10	25.3
ALT12	8.5
ALT13	10.1

36:- C-51R to GWP	
ECB	n/a
FWO	n/a
ALT2	n/a
ALT5	n/a
ALT10	60.5
ALT12	0.0
ALT13	n/a

8:- M-Canal	
ECB	79.2
FWO	82.9
ALT2	95.3
ALT5	97.8
ALT10	60.5
ALT12	82.9
ALT13	97.7

46:- CWPB WS	
ECB	33.0
FWO	42.6
ALT2	42.6
ALT5	42.6
ALT10	42.6
ALT12	42.6
ALT13	42.6

41:- L8Shallow to FM	
ECB	n/a
FWO	n/a
ALT2	n/a
ALT5	n/a
ALT10	n/a
ALT12	11.2
ALT13	n/a

13:- C-51R to FM	
ECB	n/a
FWO	n/a
ALT2	n/a
ALT5	n/a
ALT10	25.3
ALT12	0.0
ALT13	n/a

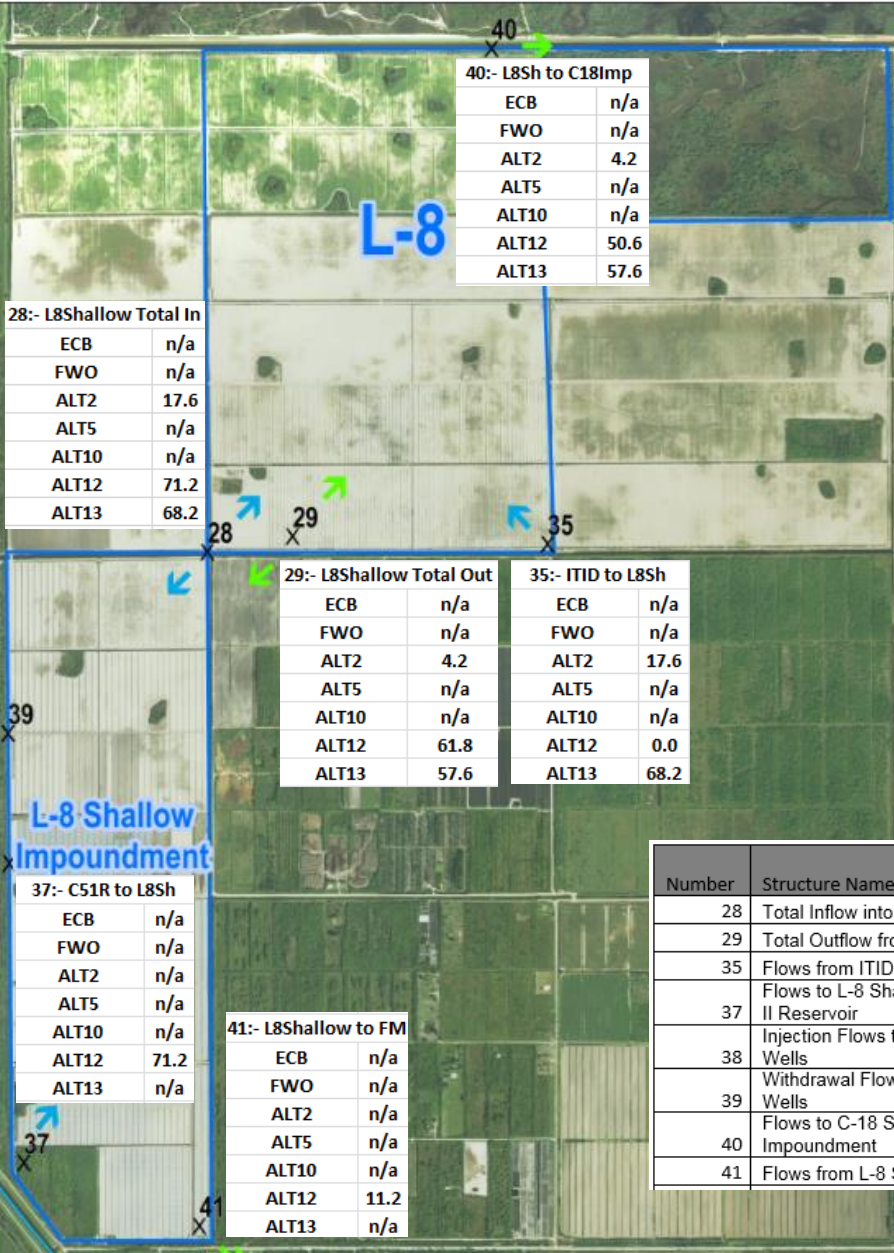
Number	Structure Name
8	Flows to Grassy Waters Preserve from M-Canal.
9	Flows to G-161 from Grassy Waters Preserve
12	Flows over Northlake Weir
13	Flows from C-51 Phase II Reservoir to Force Main.
32	Total Flow over G-161
36	Flows to Grassy Waters Preserve from C-51 Phase II Reservoir
41	Flows from L-8 Shallow Impoundment to Force Main
46	Water Supply For West Palm

## Annual Average Structure Flows in K-AC-FT

- Primary Canals & Streams
- Water Budget Boundaries
- X Flows
- Inflows
- Outflows

DATA SOURCE: Structure flow totals provided by Anshu Chhabra May 11, 2017

# L-8 Impoundment Annual Average Structure Flows in K-AC-FT



40:- L8Sh to C18Imp	
ECB	n/a
FWO	n/a
ALT2	4.2
ALT5	n/a
ALT10	n/a
ALT12	50.6
ALT13	57.6

28:- L8Shallow Total In	
ECB	n/a
FWO	n/a
ALT2	17.6
ALT5	n/a
ALT10	n/a
ALT12	71.2
ALT13	68.2

39:- ASR Out (L8)	
ECB	n/a
FWO	n/a
ALT2	n/a
ALT5	n/a
ALT10	n/a
ALT12	n/a
ALT13	3.5

29:- L8Shallow Total Out	
ECB	n/a
FWO	n/a
ALT2	4.2
ALT5	n/a
ALT10	n/a
ALT12	61.8
ALT13	57.6

35:- ITID to L8Sh	
ECB	n/a
FWO	n/a
ALT2	17.6
ALT5	n/a
ALT10	n/a
ALT12	0.0
ALT13	68.2

38:- ASR In (L8)	
ECB	n/a
FWO	n/a
ALT2	n/a
ALT5	n/a
ALT10	n/a
ALT12	n/a
ALT13	3.8

37:- C51R to L8Sh	
ECB	n/a
FWO	n/a
ALT2	n/a
ALT5	n/a
ALT10	n/a
ALT12	71.2
ALT13	n/a

41:- L8Shallow to FM	
ECB	n/a
FWO	n/a
ALT2	n/a
ALT5	n/a
ALT10	n/a
ALT12	11.2
ALT13	n/a

Number	Structure Name
28	Total Inflow into L-8 Shallow Impoundment
29	Total Outflow from L-8 Shallow Impoundment
35	Flows from ITID to L-8 Shallow Impoundment
37	Flows to L-8 Shallow Impoundment from C-51 Phase II Reservoir
38	Injection Flows to L-8 Shallow Impoundment ASR Wells
39	Withdrawal Flows to L-8 Shallow Impoundment ASR Wells
40	Flows to C-18 Storage from L-8 Shallow Impoundment
41	Flows from L-8 Shallow Impoundment to Force Main

Annual Average Structure Flows in K-AC-FT

— Primary Canals & Streams  
 Water Budget Boundaries  
 X Flows  
→ Inflows  
→ Outflows

DATA SOURCE: Structures flow estimates provided by Aquatic Operations on May 11, 2017

# LRWRP Model Domain Annual Average Structure Flows in K-AC-FT



Number	StructureName
1	Flows over C-18 Weir
2	Flows over G92
3	Flows over Lainhart Dam
4	Flows Discharging to Tide Through S-46
5	Flows to Loxahatchee River from Cypress Creek
6	Flows to Loxahatchee River from Hobe Grove Ditch
7	Flows to Loxahatchee River from Kitching Creek
10	Total Available Runoff in Indian Trails Improvement District
11	Flows over G-160
32	Total Flow over G-161
33	Flows from L-8 Basin to C-51 Canal

## Annual Average Structure Flows in K-AC-FT

- Primary Canals & Streams
- X Flows
- Inflows
- Outflows

DATA SOURCE: Structures flow estimates provided by Ansoft/Chesapeake May 11, 2017

### 6:- Hobe Grove

ECB	10.7
FWO	10.7
ALT2	10.1
ALT5	10.0
ALT10	8.9
ALT12	10.1
ALT13	10.0

### 7:- Kitching

ECB	10.0
FWO	9.9
ALT2	9.9
ALT5	9.9
ALT10	9.9
ALT12	9.9
ALT13	9.9

### 5:- CC to Lox

ECB	69.1
FWO	69.1
ALT2	71.4
ALT5	70.6
ALT10	66.9
ALT12	71.4
ALT13	70.5

### 3:- LNHRD

ECB	78.4
FWO	77.6
ALT2	108.1
ALT5	109.6
ALT10	92.3
ALT12	107.9
ALT13	102.3

### 4:- S-46

ECB	35.3
FWO	35.1
ALT2	78.2
ALT5	78.8
ALT10	56.3
ALT12	73.4
ALT13	74.1

### 1:- C18 Weir

ECB	31.1
FWO	31.1
ALT2	92.6
ALT5	93.7
ALT10	40.6
ALT12	64.5
ALT13	73.9

### 2:- G-92

ECB	51.0
FWO	50.2
ALT2	80.6
ALT5	81.7
ALT10	64.7
ALT12	80.4
ALT13	74.4

### 10:- ITID Total

ECB	72.1
FWO	72.0
ALT2	71.8
ALT5	72.1
ALT10	73.7
ALT12	72.7
ALT13	73.2

### 33:-L8B to C51Canal

ECB	103.5
FWO	103.5
ALT2	102.9
ALT5	103.1
ALT10	31.3
ALT12	39.1
ALT13	104.3

### 11:- G160 Total

ECB	n/a
FWO	n/a
ALT2	7.3
ALT5	7.0
ALT10	9.6
ALT12	12.4
ALT13	7.8

### 32:- G161 Total

ECB	n/a
FWO	n/a
ALT2	9.9
ALT5	10.1
ALT10	25.3
ALT12	8.5
ALT13	10.1