



Southeast Flood Protection Authority – East

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Authority Facts

- Regional Entity created in 2007 by Legislature as a result of Katrina
- Quasi-State Agency, overseeing 3 subordinate districts
- 225 staff, including
 - Police Department
 - Professional Engineers
 - Pump Station Operators (of different types)
 - Mowers/Heavy Equipment Operators
 - Trades (Plumbers, Electricians, etc)
 - Mechanics
 - Administrative Staff

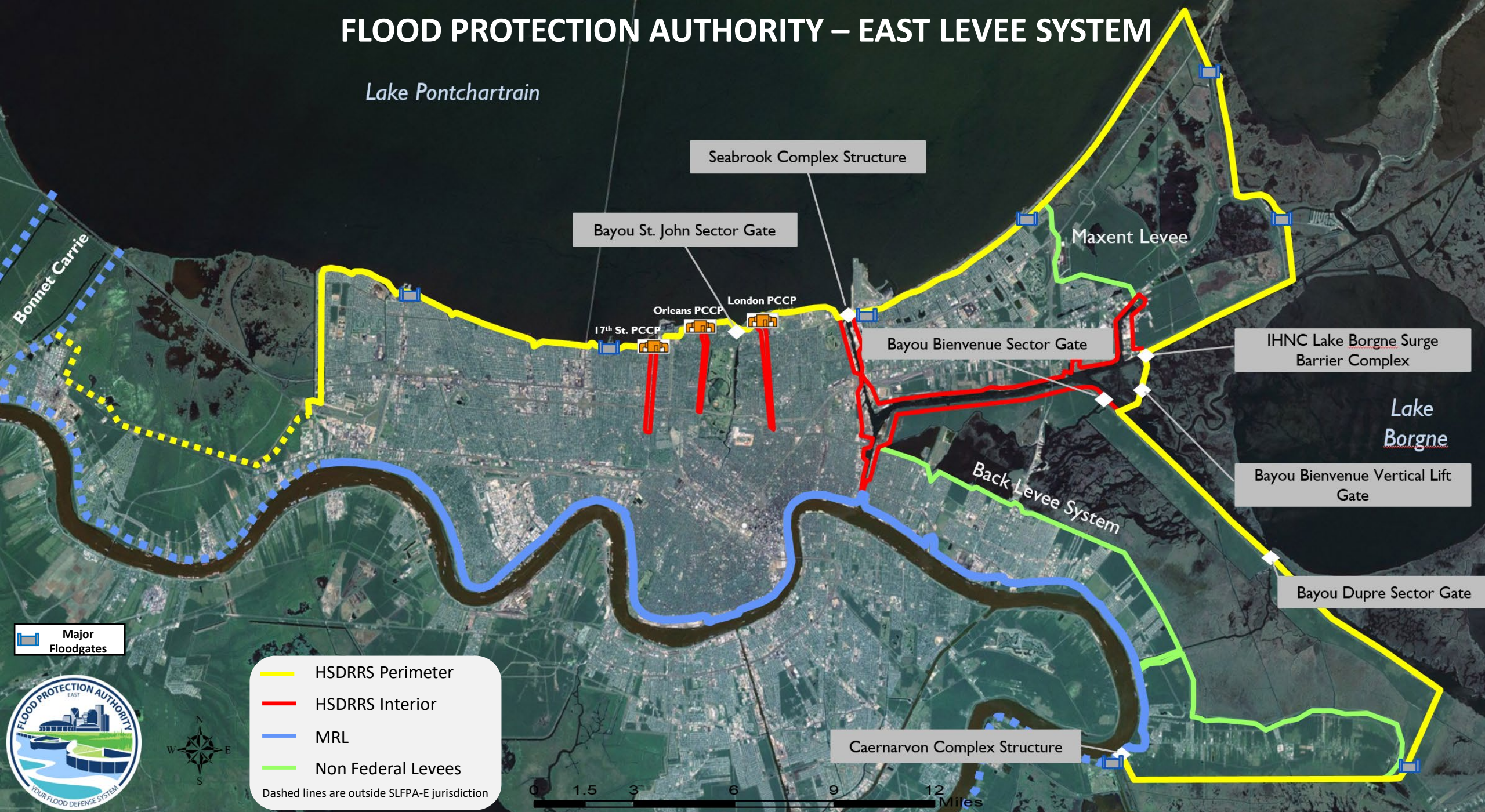


Purpose and Mission

Mission: to ensure the physical and operational integrity of the regional flood risk management system in southeastern Louisiana as a defense against floods and storm surge from hurricanes.



FLOOD PROTECTION AUTHORITY – EAST LEVEE SYSTEM



Hurricane & Storm Damage Risk Reduction System (HSDRRS)

Corps of Engineers authorized by Congress to construct 100-year risk reduction for the Greater New Orleans region.

The \$14.5 billion HSDRRS is one of the strongest, largest, and most complex of its kind in the world.

HSDRRS substantially completed on June 1, 2011.

Operation and maintenance completely turned over to the Flood Protection Authority (FPA) in 2013.



Levee System Infrastructure Statistics

Infrastructure Component	EJLD	OLD	LBBLD	Total
Levee/Floodwall (miles)*	28	107	57	192
Levee Turf Maintenance Area (acres)	730	1400	1400	3530
Flood Gates (land-based)	14	200	32	246
Navigable Floodgates	0	6	2	8
Permanent Canal Closures and Pumps	0	3	0	3

*Includes 1.8 mile IHNC-Lake Borgne Surge Barrier

IHNC Lake Borgne Surge Barrier



1,271 CONCRETE CYLINDER PILES:

66-inch diameter spun concrete reinforced piles
144-ft. in length, filled with concrete 80-ft. from top
Driven to a depth of -130 feet

2,512 CLOSURE PILES:

Placed in the gaps between both sides of the cylinder piles
18-in x 18-in., 55 ft. in length
Driven to a depth -40 feet

638 STEEL BATTER PILES:

Spaced every 12 feet
38" diameter, 205' in length
Driven to a depth of -190 feet





Complex Structures / Navigation Gates



GIWW Sector Gate (150-ft.)



GIWW Barge Bypass Gate (150-ft.)



Bayou Bienvenue Life Gate (56'-ft.)



Seabrook Control Structure (96-ft.)





Protected Side

Sector Gate

Barge Gate

Flood Side



IHNC Lake Borgne Surge Barrier



Project Facts

- 26 months from concept to completion
- Largest design-build Civil Works project in history of USACE
- Concrete barrier spanning 1.8 miles
- Constructed to elevation of 25'
- Constructed with:
 - 2,538 closure piles (18" diameter, 55' long, driven to -40')
 - 645 Steel batter piles (36" diameter, 205' long, driven to -190')
 - 1,271 spun cast concrete pipe piles (66" diameter, 140' long, driven to -130')
- Contains 3 Navigation Gates
- Sector gates weight 750 tons
- Total cost of \$1 Billion

Inner Harbor Navigation Canal (IHNC)

Bayou Bienvenue
Old Sector Gate

Surge Barrier Wall

Bayou Bienvenue

Mississippi River
Gulf Outlet (MRGO)

South
Floodwall Tie-In

Gulf Intracoastal Waterway (GIWW)

GIWW Sector Gate

GIWW
Barge Gate

Vertical Lift Gate
at Bayou Bienvenue









Sluice gate



Slide gate



Swing Gate



Land-based Floodgate Types

Double Slide gate



Double Swing/Miter Gate



Overhead gate



Valve



Stoplog gate



Complex Structures / Navigation Gates



Bayou Dupre Control Structure (56-ft.)



Bayou Bienvenue Sector Gate (56-ft.)



Caernarvon Control Structure (56-ft.)



Bayou St. John Sector Gate (30-ft. non-navigable)

Permanent Pump Stations

Exclusive to Lake Pontchartrain

Cost to build \$600M+

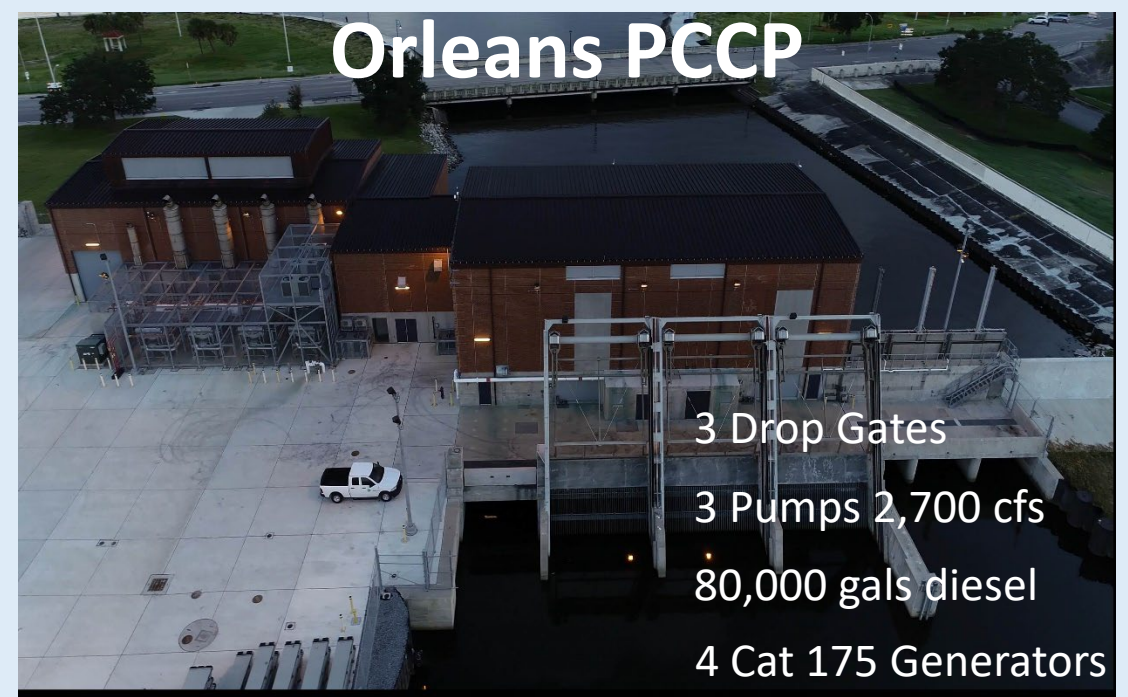
Responsibility turned over to FPA in May 2018

17th Street PCCP



11 Drop Gates
8 Pumps 12,600 cfs
300,000 gals diesel
15 Cat 175 Generators

Orleans PCCP



3 Drop Gates
3 Pumps 2,700 cfs
80,000 gals diesel
4 Cat 175 Generators

London PCCP



7 Drop Gates
6 Pumps 9,000 cfs
250,000 gals diesel
11 Cat 175 Generators

Floodgate Closure Procedures

Barge Gate closure at surge barrier (IHNC) 96 hours ahead of event (Sooner if Fast moving Storm).

When surge is forecast to 5' at the surge barrier, contact USCG to initiate RNA, so surge barrier sector gate can be closed within 24 hours (followed by BB VLG and Seabrook). This is in accordance with USACE Water Control Plan.

Generally starting with floodgates with the lowest sills first, the exceptions are RR and highways, monitor and delay them as much we can.

Update public web site that lists floodgates and their status, open or closed.



Floodgate Closure Procedures continued...

Depending on size of storm and path, there are three tiers of closure.

- up to +6.0' , surge 2' to 4'
- up to +8.0' , surge 3' to 5'
- close all gates

It takes 24 to 48 hours to close all floodgates prior to gale force winds in the area.

High Tide events impact four low sill gates of NOPB, 29/32, others monitored. Could impact lowest 12.

First floodgates closed for Ida

Code	8/25/21 Status	Current Status	Closure Date	Closure Time	Opening Date	Opening Time
B-03	OPEN	OPEN	8/26/2021	8:25 AM	8/31/2021	2:55 PM
A-03	OPEN	OPEN	8/26/2021	8:28 AM	8/31/2021	1:30 PM
A-01	OPEN	OPEN	8/26/2021	9:02 AM	8/31/2021	1:05 PM
B-01	OPEN	OPEN	8/26/2021	9:05 AM	8/31/2021	3:10 PM
D-03	OPEN	OPEN	8/26/2021	9:47 AM	8/31/2021	4:15 PM
D-05	OPEN	OPEN	8/26/2021	10:10 AM	8/31/2021	4:35 PM
L-30	OPEN	OPEN	8/26/2021	1:40 PM	8/30/2021	2:45 PM
E-11	OPEN	OPEN	8/26/2021	2:00 PM	8/31/2021	10:50 AM
W-13	OPEN	OPEN	8/26/2021	2:15 PM	8/31/2021	1:12 PM
N-03	OPEN	OPEN	8/26/2021	2:20 PM	8/31/2021	4:05 PM
W-14	OPEN	OPEN	8/26/2021	2:21 PM	8/31/2021	1:02 PM
W-15	OPEN	OPEN	8/26/2021	2:29 PM	8/31/2021	12:42 PM
N-04	OPEN	OPEN	8/26/2021	2:38 PM	8/31/2021	4:35 PM
S-02	OPEN	OPEN	8/26/2021	2:52 PM	8/31/2021	12:21 PM
W-24	OPEN	OPEN	8/26/2021	2:52 PM	9/7/2021	8:25 AM
W-25	OPEN	OPEN	8/26/2021	3:00 PM	9/7/2021	9:15 AM
ER-05	OPEN	OPEN	8/26/2021	3:02 PM	8/31/2021	12:45 PM
W-26	OPEN	OPEN	8/26/2021	3:10 PM	9/2/2021	10:45 AM
X-06	OPEN	OPEN	8/26/2021	3:16 PM	9/1/2021	10:34 AM
W-38	OPEN	OPEN	8/26/2021	3:20 PM	8/31/2021	11:47 AM
OCW-01	OPEN	OPEN	8/26/2021	3:28 PM	8/31/2021	12:15 PM
M-03	OPEN	OPEN	8/26/2021	3:30 PM	8/30/2021	5:55 PM
M-04	OPEN	OPEN	8/26/2021	3:48 PM	8/30/2021	5:45 PM
M-05	OPEN	OPEN	8/26/2021	4:07 PM	8/30/2021	5:38 PM
S-06	OPEN	OPEN	8/26/2021	9:15 PM	9/1/2021	11:30 AM
OHV-19	OPEN	OPEN	8/27/2021	7:45 AM	8/31/2021	12:25 PM
C-03	OPEN	OPEN	8/27/2021	8:00 AM	9/1/2021	1:50 PM
OHV-18	OPEN	OPEN	8/27/2021	8:15 AM	8/31/2021	12:20 PM
W-01	OPEN	OPEN	8/27/2021	8:25 AM	8/31/2021	1:41 PM
A-02	OPEN	OPEN	8/27/2021	8:30 AM	8/31/2021	1:15 PM
Z-01	OPEN	OPEN	8/27/2021	8:30 AM	8/30/2021	2:15 PM
Z-03	OPEN	OPEN	8/27/2021	8:30 AM	9/1/2021	10:30 AM
W-03	OPEN	OPEN	8/27/2021	8:50 AM	8/31/2021	1:23 PM
N-05	OPEN	OPEN	8/27/2021	8:58 AM	8/31/2021	4:38 PM
E-04	OPEN	OPEN	8/27/2021	9:22 AM	8/31/2021	1:15 PM
OHV-23	OPEN	OPEN	8/27/2021	9:30 AM	9/1/2021	12:00 PM