

## Map 2.1 Atypical Drought Afternoon Thunderstorm Patterns



120° 115° 110° 105° 100° 95° 90° 85° 80° 75° 70° 65° 60° 55° 50° 45° 40° 35° 30° 25° 20° 15° 10° 5° West 0° East 5°

# NATIONAL HURRICANE CENTER ATLANTIC • CARIBBEAN • GULF OF MEXICO • HURRICANE TRACK CHART

NUMBER	TYPE	1995 NAME	DATE
1	H	ALLISON	JUN 03 - 06
2	T	BARRY	JUL 06 - 10
3	T	CHANTAL	JUL 12 - 20
4	T	DEAN	JUL 28 - AUG 02
5	H	ERIN	JUL 31 - AUG 06
6	H	FELIX	AUG 08 - 22
7	T	GABRIELLE	AUG 09 - 12
8	H	HUMBERTO	AUG 22 - SEP 01
9	H	IRIS	AUG 22 - SEP 04

**Map 2.2  
1995**

NUMBER	TYPE	1995 NAME	DATE
10	T	JERRY	AUG 22 - 28
11	T	KAREN	AUG 26 - SEP 03
12	H	LUIS	AUG 27 - SEP 11
13	H	MARILYN	SEP 12 - 22
14	H	NOEL	SEP 26 - OCT 07
15	H	OPAL	SEP 27 - OCT 05
16	T	PABLO	OCT 04 - 08
17	H	ROXANNE	OCT 07 - 21
18	T	SEBASTIEN	OCT 20 - 25
19	H	TANYA	OCT 27 - NOV 01

<span style="color: red;">—</span>	Hurricane
<span style="color: yellow;">—</span>	Tropical Storm
<span style="color: green;">—</span>	Tropical Dep.
+++	Extratropical
•	Position at 0000 UTC
○	Position/date at 1200 UTC
[3]	Tropical Cyclone Number

Lowest Coriolis force at 50° and 40° North

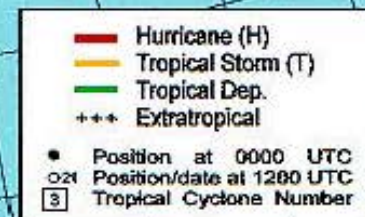
North  
South

120° 115° 110° 105° 100° 95° 90° 85° 80° 75° 70° 65° 60° 55° 50° 45° 40° 35° 30° 25° 20° 15° 10° 5° West 0° East 5°

# NATIONAL HURRICANE CENTER ATLANTIC • CARIBBEAN • GULF OF MEXICO • HURRICANE TRACK CHART

NUMBER	TYPE	1996 NAME	DATE
1	T	ARTHUR	17-21 June
2	H	BERTHA	05-14 July
3	H	CESAR	24-29 July
4	H	DOLLY	19-25 Aug.
5	H	EDOUARD	19 Aug-03 Sep.
6	H	FRAN	23 Aug-08 Sep.
7	T	GUSTAV	28 Aug-02 Sep.
8	H	HORTENSE	03-16 Sep.
9	H	ISIDORE	24 Sep-01 Oct.
10	T	JOSEPHINE	04-08 Oct.
11	T	KYLE	11-12 Oct.
12	H	LILI	14-27 Oct.
13	H	MARCO	16-28 Nov.

**Map 2.3  
1996**



Landfall: Continental Coasts  
from 20° and 40° North

120° 115° 110° 105° 100° 95° 90° 85° 80° 75° 70° 65° 60° 55° 50° 45° 40° 35° 30° 25° 20° 15° 10° 5° West 0° East 5°

# NATIONAL HURRICANE CENTER ATLANTIC • CARIBBEAN • GULF OF MEXICO • HURRICANE TRACK CHART

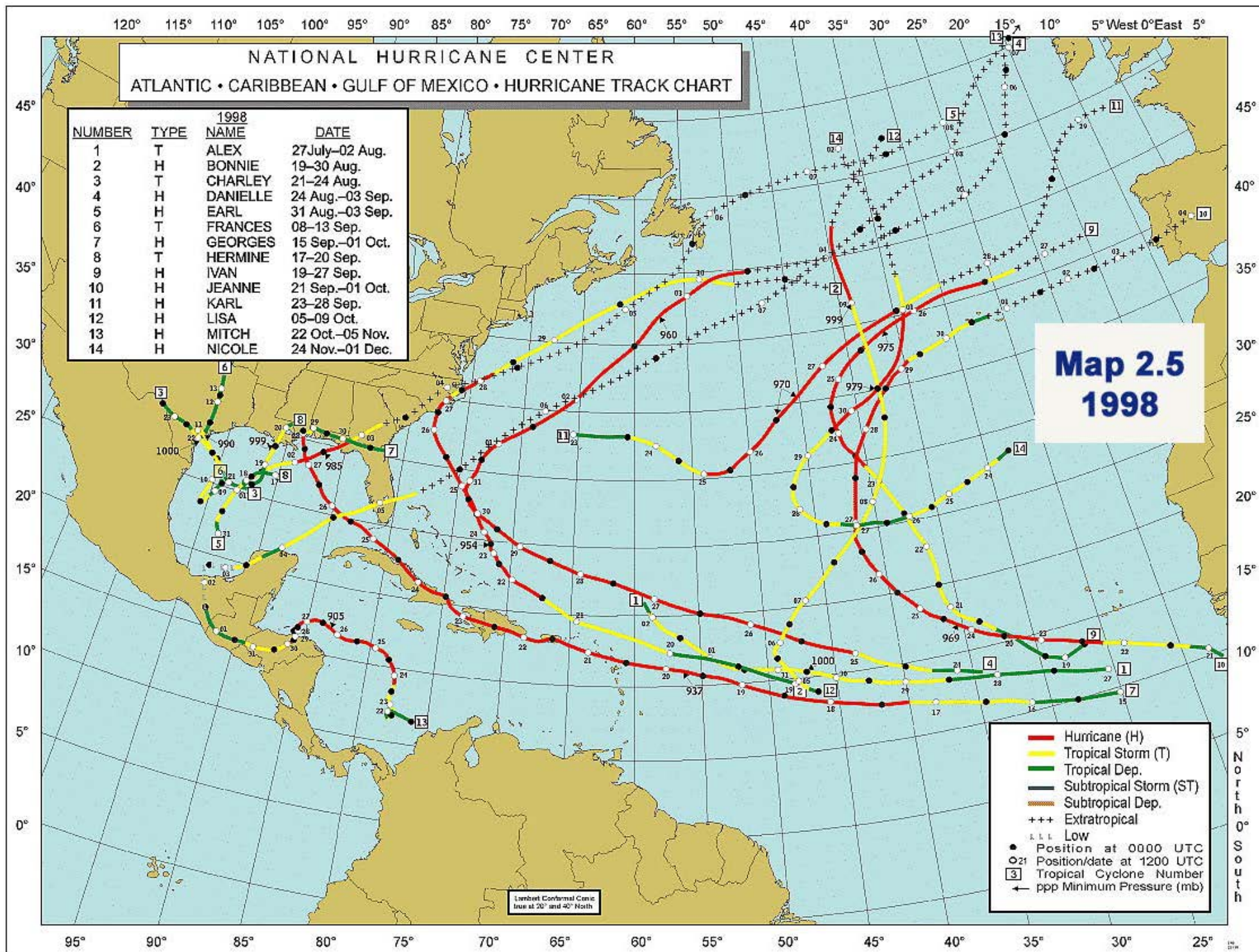
NUMBER	TYPE	1997 NAME	DATE
1	ST	—	01-02 June
2	T	ANA	30 June-04 July
3	H	BILL	11-13 July
4	T	CLAUDETTE	13-16 July
5	H	DANNY	16-26 July
6	H	ERIKA	03-15 Sep.
7	T	FABIAN	04-08 Oct.
8	T	GRACE	16-17 Oct.

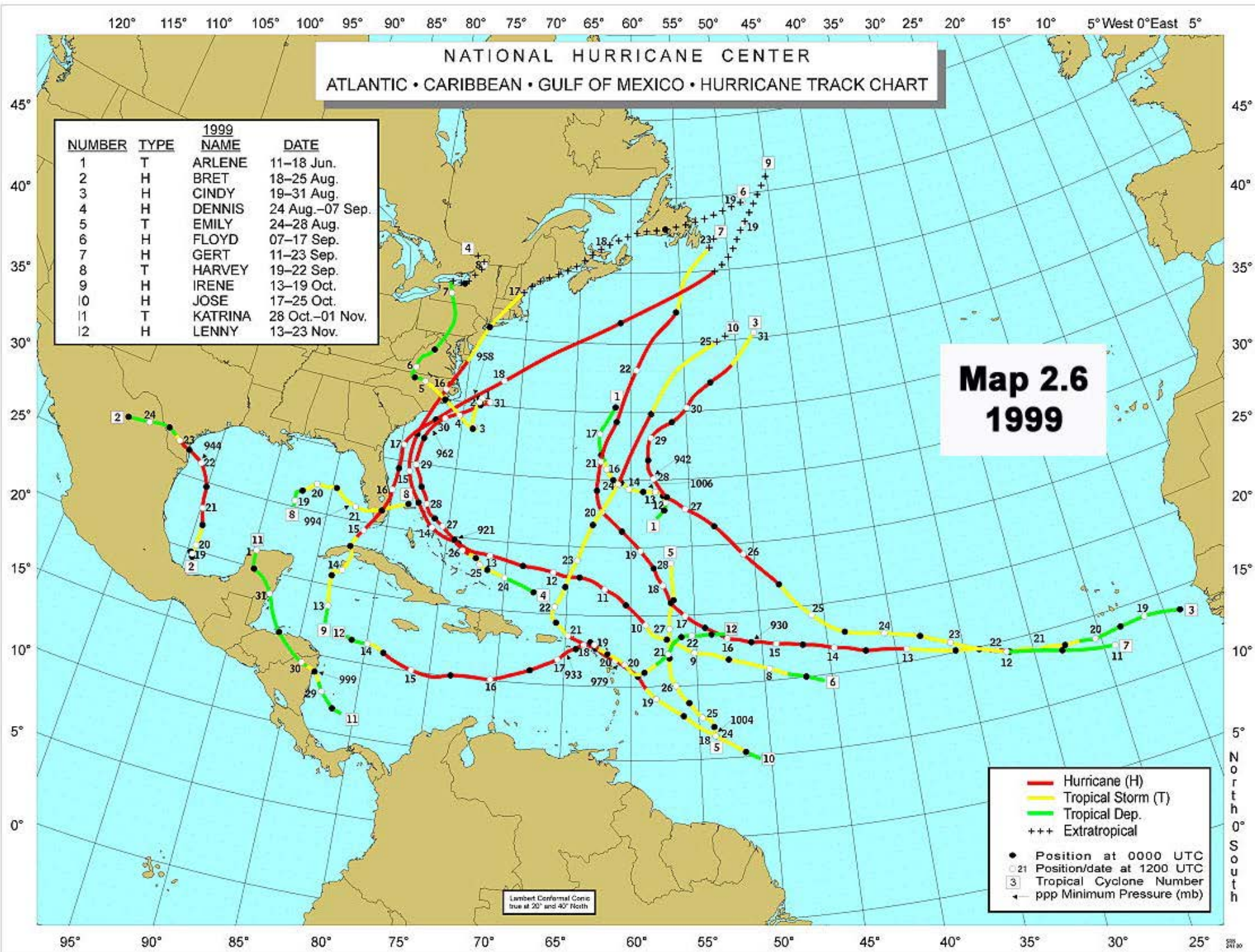
**Map 2.4  
1997**

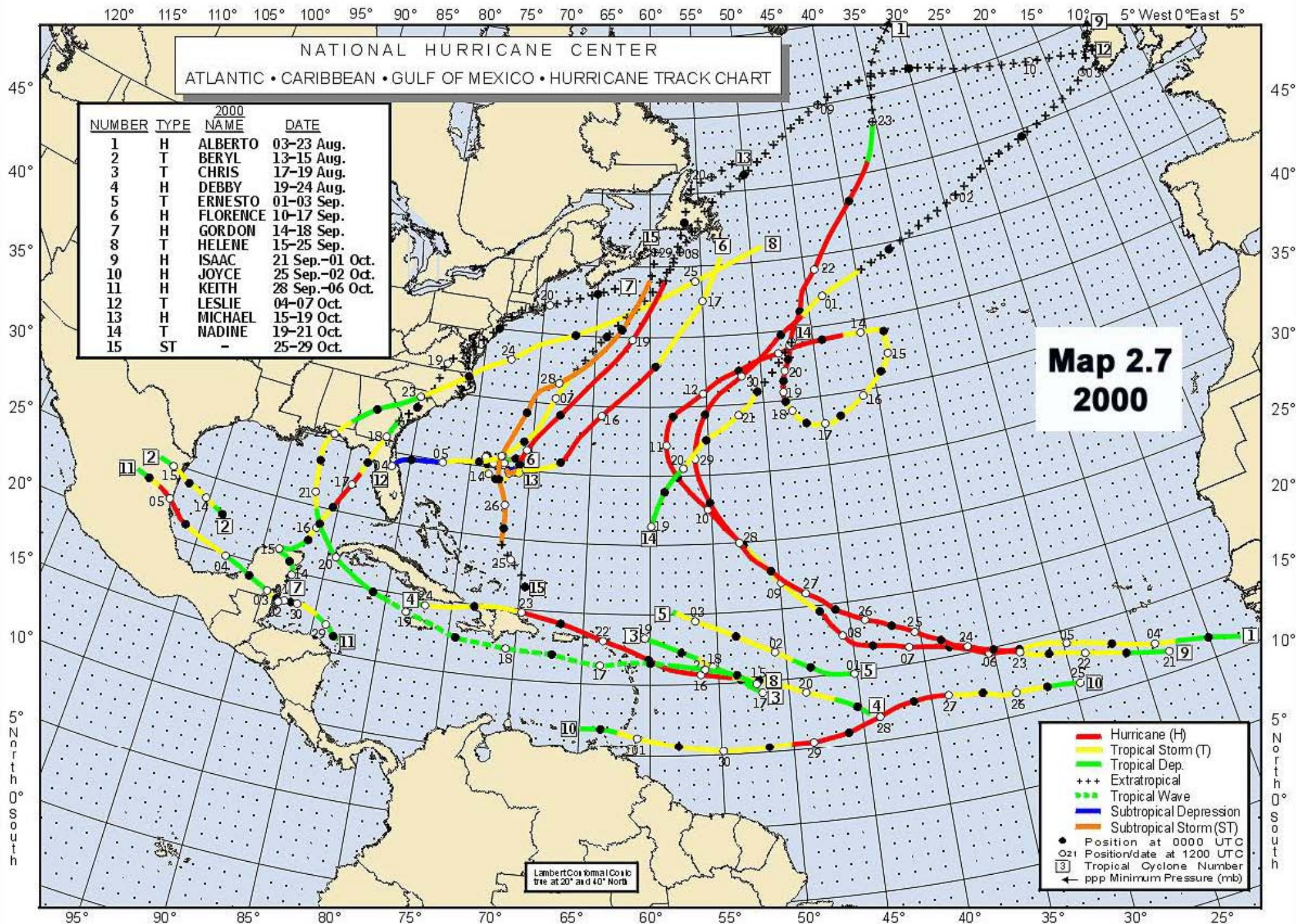
- Hurricane (H)
- Tropical Storm (T)
- Tropical Dep.
- Subtropical Storm (ST)
- Subtropical Dep.
- +++ Extratropical
- Position at 0000 UTC
- Position/date at 1200 UTC
- [3] Tropical Cyclone Number
- ← ppp Minimum Pressure (mb)

Lambert Conformal Conic  
true at 26° and 42° North

North  
0°  
South





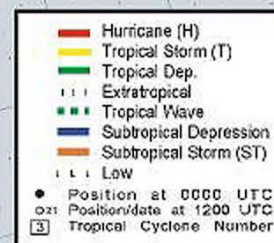


120° 115° 110° 105° 100° 95° 90° 85° 80° 75° 70° 65° 60° 55° 50° 45° 40° 35° 30° 25° 20° 15° 10° 5° West 0° East 5°

# NATIONAL HURRICANE CENTER ATLANTIC • CARIBBEAN • GULF OF MEXICO • HURRICANE TRACK CHART

NUMBER	TYPE	2001 NAME	DATE
1	T	ALLISON	05-17 Jun.
2	T	BARRY	02-07 Aug.
3	T	CHANTAL	14-22 Aug.
4	T	DEAN	22-28 Aug.
5	H	ERIN	01-15 Sep.
6	H	FELIX	07-18 Sep.
7	H	GABRIELLE	11-19 Sep.
8	H	HUMBERTO	21-27 Sep.
9	H	IRIS	04-09 Oct.
10	T	JERRY	06-08 Oct.
11	H	KAREN	12-15 Oct.
12	T	LORENZO	27-31 Oct.
13	H	MICHELLE	29 Oct.-05 Nov.
14	H	NOEL	04-06 Nov.
15	H	OLGA	24 Nov.-04 Dec.

**Map 2.8  
2001**



Lambert Conformal Conic  
Projections at 20° and 40° North

120° 115° 110° 105° 100° 95° 90° 85° 80° 75° 70° 65° 60° 55° 50° 45° 40° 35° 30° 25° 20° 15° 10° 5° West 0° East 5°

NATIONAL HURRICANE CENTER  
ATLANTIC • CARIBBEAN • GULF OF MEXICO • HURRICANE TRACK CHART

NUMBER	TYPE	NAME	DATE
1	T	ARTHUR	14 - 16 Jul.
2	T	BERTHA	04 - 09 Aug.
3	T	CRISTOBAL	05 - 08 Aug.
4	T	DOLLY	29 Aug. - 04 Sep.
5	T	EDOUARD	01 - 06 Sep.
6	T	FAY	05 - 08 Sep.
7	H	GUSTAV	08 - 12 Sep.
8	T	HANNA	12 - 15 Sep.
9	H	ISIDORE	14 - 27 Sep.
10	T	JOSEPHINE	17 - 19 Sep.
11	H	KYLE	20 Sep. - 12 Oct.
12	H	LILI	21 Sep. - 04 Oct.

Map 2.9  
2002

- Hurricane (H)
- Tropical Storm (T)
- Tropical Dep.
- +++ Extratropical
- Tropical Wave/Dissipating
- Subtropical Depression
- Subtropical Storm (ST)
- Low
- Position at 0000 UTC
- Position/date at 1200 UTC
- [3] Tropical Cyclone Number

Lambert Conformal Conic  
true at 20° and 40° North

45°  
40°  
35°  
30°  
25°  
20°  
15°  
10°  
5°  
North  
0°  
South

45°  
40°  
35°  
30°  
25°  
20°  
15°  
10°  
5°  
North  
0°  
South

95° 90° 85° 80° 75° 70° 65° 60° 55° 50° 45° 40° 35° 30° 25°

120° 115° 110° 105° 100° 95° 90° 85° 80° 75° 70° 65° 60° 55° 50° 45° 40° 35° 30° 25° 20° 15° 10° 5° West 0° East 5°

# NATIONAL HURRICANE CENTER ATLANTIC • CARIBBEAN • GULF OF MEXICO • HURRICANE TRACK CHART

NUMBER	TYPE	2003 NAME	DATE
1	T	ANA	20 - 24 Apr.
2	T	BILL	29 Jun. - 02 Jul.
3	H	CLAUDETTE	08 - 17 Jul.
4	H	DANNY	16 - 21 Jul.
5	H	ERIK	14 - 17 Aug.
6	H	FABIAN	27 Aug. - 08 Sep.
7	T	GRACE	30 Aug. - 02 Sep.
8	T	HENRI	03 - 08 Sep.
9	H	ISABEL	06 - 19 Sep.
10	H	JUAN	24 - 29 Sep.
11	H	KATE	26 Sep. - 07 Oct.
12	T	LARRY	01 - 06 Oct.
13	T	MINDY	10 - 14 Oct.
14	T	NICHOLAS	13 - 23 Oct.
15	T	ODETTE	04 - 07 Dec.
16	T	PETER	07 - 11 Dec.

**Map 2.10  
2003**

- Hurricane (H)
- Tropical Storm (T)
- Tropical Dep.
- +++ Extratropical
- Tropical Wave/Dissipating
- Subtropical Depression
- Subtropical Storm (ST)
- Low
- Position at 0000 UTC
- Position/date at 1200 UTC
- Tropical Cyclone Number

Lambert Conformal Conic  
true at 20° and 40° North

NATIONAL HURRICANE CENTER  
ATLANTIC • CARIBBEAN • GULF OF MEXICO • HURRICANE TRACK CHART

NUMBER	TYPE	2004 NAME	DATE
1	H	ALEX	31 Jul.-6 Aug.
2	T	BONNIE	3-13 Aug.
3	H	CHARLEY	9-14 Aug.
4	H	DANIELLE	13-21 Aug.
5	T	EARL	13-15 Aug.
6	H	FRANCES	25 Aug.-8 Sep.
7	H	GASTON	27 Aug.-1 Sep.
8	T	HERMINE	27-31 Aug.
9	H	IVAN	2-24 Sep.
10	H	JEANNE	13-28 Sep.
11	H	KARL	16-24 Sep.
12	H	LISA	19 Sep.-3 Oct.
13	T	MATTHEW	8-10 Oct.
14	ST	NICOLE	10-11 Oct.
15	T	OTTO	29 Nov.-3 Dec.

Map 2.11  
2004

- Hurricane (H)
- Tropical Storm (T)
- Tropical Dep.
- +++ Extratropical
- Wave/Low
- Subtropical Depression
- Subtropical Storm (ST)
- Position at 0000 UTC
- Position/date at 1200 UTC
- [3] Tropical Cyclone Number

Lambert Conformal Conic  
true at 20° and 49° North

# NATIONAL HURRICANE CENTER ATLANTIC • CARIBBEAN • GULF OF MEXICO • HURRICANE TRACK CHART

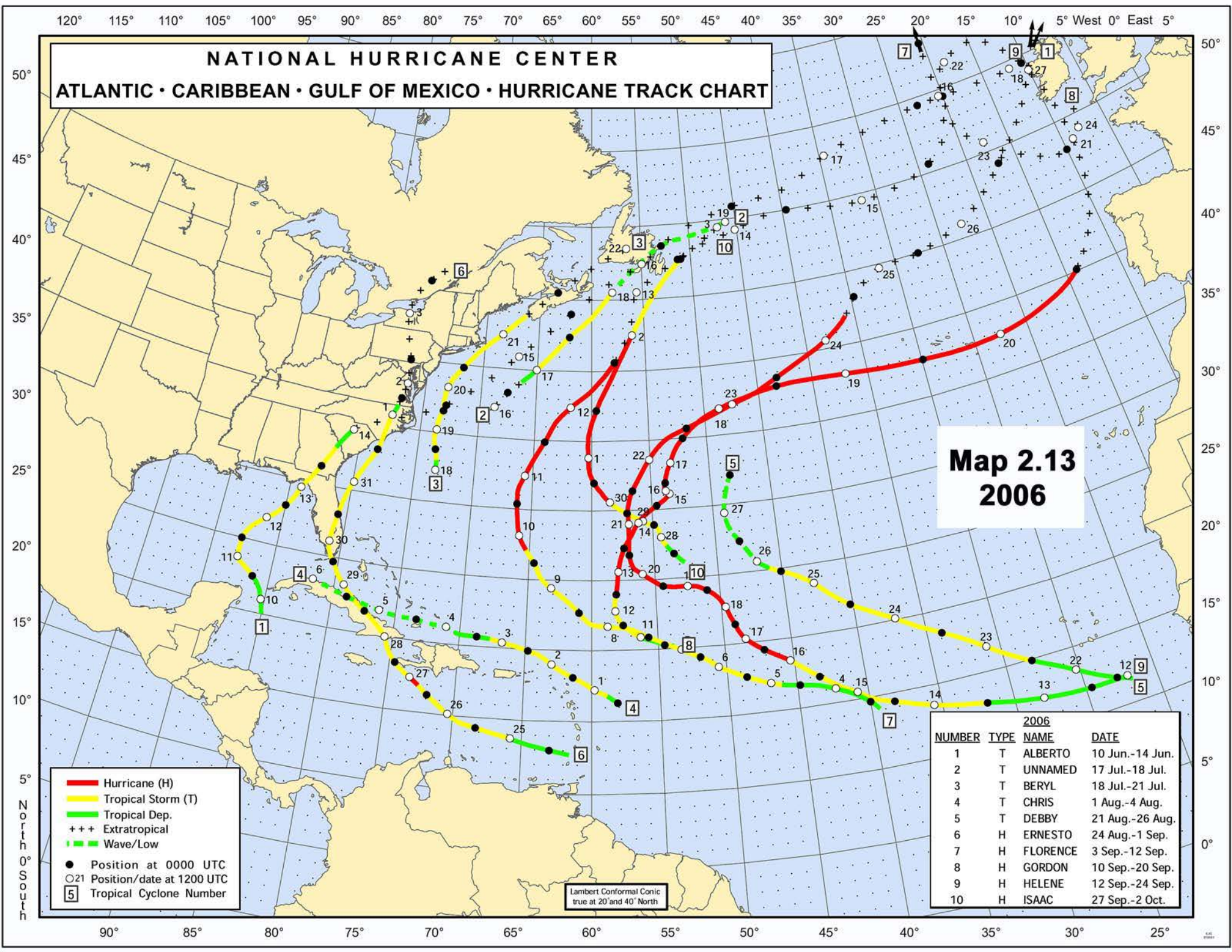
Map 2.12  
2005

NUMBER	TYPE	NAME	DATE
1	T	ARLENE	8 Jun.-13 Jun.
2	T	BRET	28 Jun.-30 Jun.
3	H	CINDY	3 Jul.-7 Jul.
4	H	DENNIS	4 Jul.-13 Jul.
5	H	EMILY	11 Jul.-21 Jul.
6	T	FRANKLIN	21 Jul.-29 Jul.
7	T	GERT	23 Jul.-25 Jul.
8	T	HARVEY	2 Aug.-8 Aug.
9	H	IRENE	4 Aug.-18 Aug.
10	T	JOSE	22 Aug.-23 Aug.
11	H	KATRINA	23 Aug.-30 Aug.
12	T	LEE	28 Aug.-2 Sep.
13	H	MARIA	1 Sep.-10 Sep.

NUMBER	TYPE	NAME	DATE
14	H	NATE	5 Sep.-10 Sep.
15	H	OPHELIA	6 Sep.-17 Sep.
16	H	PHILIPPE	17 Sep.-23 Sep.
17	H	RITA	18 Sep.-26 Sep.
18	H	STAN	1 Oct.-5 Oct.
19	ST	UNNAMED	4 Oct.-5 Oct.
20	T	TAMMY	5 Oct.-6 Oct.
21	H	VINCE	8 Oct.-11 Oct.
22	H	WILMA	15 Oct.-25 Oct.
23	T	ALPHA	22 Oct.-24 Oct.
24	H	BETA	26 Oct.-31 Oct.
25	T	GAMMA	14 Nov.-21 Nov.
26	T	DELTA	22 Nov.-28 Nov.
27	H	EPSILON	29 Nov.-8 Dec.
28	T	ZETA	30 Dec.-6 Jan. 2006

- Hurricane (H)
- Tropical Storm (T)
- Tropical Dep.
- +++ Extratropical
- Wave/Low
- Subtropical Depression
- Subtropical Storm (ST)
- Position at 0000 UTC
- 21 Position/date at 1200 UTC
- 5 Tropical Cyclone Number

Lambert Conformal Conic  
true at 20° and 40° North



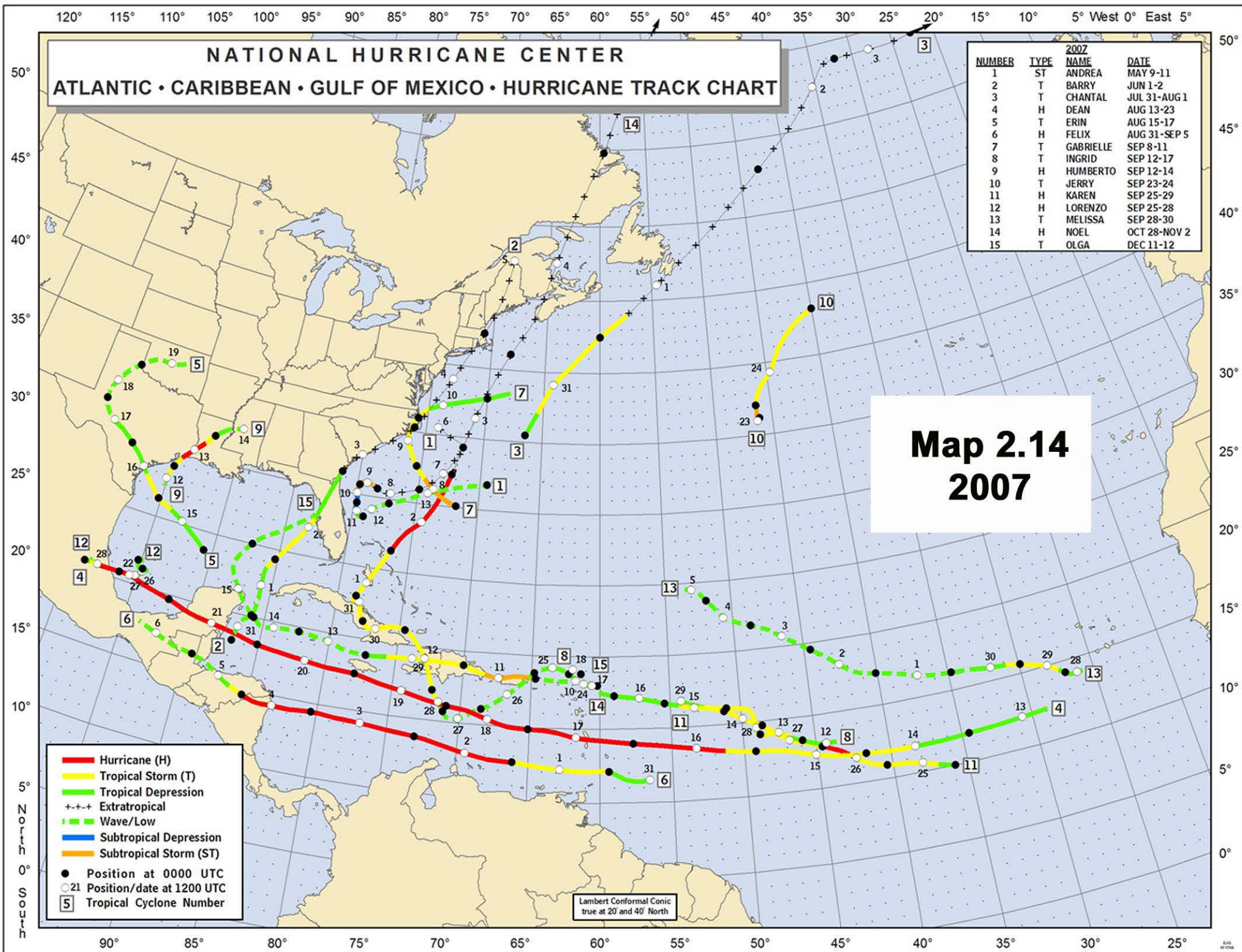
**NATIONAL HURRICANE CENTER**  
**ATLANTIC • CARIBBEAN • GULF OF MEXICO • HURRICANE TRACK CHART**

**Map 2.13**  
**2006**

- Hurricane (H)
- Tropical Storm (T)
- Tropical Dep.
- +++ Extratropical
- - - Wave/Low
- Position at 0000 UTC
- 21 Position/date at 1200 UTC
- [5] Tropical Cyclone Number

2006			
NUMBER	TYPE	NAME	DATE
1	T	ALBERTO	10 Jun.-14 Jun.
2	T	UNNAMED	17 Jul.-18 Jul.
3	T	BERYL	18 Jul.-21 Jul.
4	T	CHRIS	1 Aug.-4 Aug.
5	T	DEBBY	21 Aug.-26 Aug.
6	H	ERNESTO	24 Aug.-1 Sep.
7	H	FLORENCE	3 Sep.-12 Sep.
8	H	GORDON	10 Sep.-20 Sep.
9	H	HELENE	12 Sep.-24 Sep.
10	H	ISAAC	27 Sep.-2 Oct.

Lambert Conformal Conic  
true at 20° and 40° North



U.S. DEPARTMENT OF COMMERCE, NATIONAL WEATHER SERVICE  
NORTH ATLANTIC HURRICANE TRACKING CHART

2008

NUMBER	TYPE	NAME	DATE
1	T	ARTHUR	MAY 31-JUN 1
2	MH	BERTHA	JUL 3-20
3	T	CRISTOBAL	JUL 19-23
4	H	DOLLY	JUL 20-25
5	T	EDOUARD	AUG 3-6
6	T	FAY	AUG 15-26
7	MH	GUSTAV	AUG 25-SEP 4
8	H	HANNA	AUG 28-SEP 7
9	MH	IKE	SEP 1-14
10	T	JOSEPHINE	SEP 2-6
11	H	KYLE	SEP 25-29
12	T	LAURA	SEP 29-OCT 1
13	T	MARCO	OCT 6-7
14	T	NANA	OCT 12-14
15	MH	OMAR	OCT 13-18
16	MH	PALOMA	NOV 5-9

Map 2.15  
2008

LAMBERT CONFORMAL CONIC PROJECTION  
STANDARD PARALLELS AT 30° AND 60°  
SCALE OF NAUTICAL MILES  
0 250 500

- Major Hurricane
- Hurricane
- Tropical Storm
- Tropical Depression
- Subtropical Storm
- Subtropical Depression
- Wave/Low
- Extratropical
- Position at 0000 UTC
- Position/date at 1200 UTC
- [5] Tropical Cyclone Number

**Photo 5.1**



**Photo 5.2**



**Photo 5.3**



**Photo 5.4**



# INSIDE CHANNEL

50 CFR 17.108

FWC PRT# 02-042

FAC# 68C 22.015

**Photo 5.5**



**Photo 5.6**



**Photo 5.7**



# 2008 Data Sets

Data Set Name	Time Period	Brief Description
<b>HBMP SAS Data Sets</b>		
<a href="#">Flwd08.sd2</a>	1931-2008	Historic daily flow data for: Peace at Bartow, Fort Meade, Zolfo Springs and Arcadia. Daily tributary flows for: Horse Creek near Arcadia; Joshua Creek near Nocatee; Prairie Creek near Ft. Ogden; and Shell Creek near Punta Gorda. Daily flows for the Myakka River near Sarasota and Big Slough near North Port. Historic daily Peace River and Shell Creek Water Treatment Facility withdrawals. All values in cfs.
<a href="#">Cmov8308.sd2</a>	1983-2008	Water quality and phytoplankton biomass measurements (1983-2008) from monthly surface samples collected at each of the four moving isohalines. Relative locations reflect distances from the river mouth in kilometers.
<a href="#">Hymov08.sd2</a>	1983-2008	Monthly hydrolab <i>in situ</i> water quality measurements taken at 0.5 meter intervals at each of the four moving isohalines. Relative locations reflect distances from the river mouth in kilometers.
<a href="#">Hyfix08.sd2</a>	1996-2008	Monthly <i>in situ</i> hydrolab water column profile data taken at 0.5 meter intervals from fixed sample locations from near the river's mouth to just upstream of the Treatment Facility.
<a href="#">Cfix9608.sd2</a>	1996-2008	Monthly surface and bottom chemical water quality samples taken at five intervals from fixed sample locations from near the river's mouth to just upstream of the Treatment Facility.
<a href="#">Efix9608.sd2</a>	1996-2008	Water column extinction coefficients collected at the fixed sampling locations.
<a href="#">Boca04.sd2</a>	1996-2004	Water level at 15-minute intervals from the continuous recording gage near Boca Grande.
<a href="#">HH08.sd2</a>	1996-2008	Water Level, and surface and bottom conductivity and temperature at 15-minute intervals from the continuous recording gage on the Peace River near Harbor Heights (River Kilometer 15.5).
<a href="#">PRH08.sd2</a>	1997-2008	Water Level, and surface and bottom conductivity and temperature at 15-minute intervals from the continuous recording gage on the Peace River near Peace River Heights (River Kilometer 26.7).
<a href="#">RK21_08.sd2</a>	2006-2008	Near surface conductivity and temperature at 15-minute intervals from the HBMP continuous recording gage attached to the Manatee Speed Zone Sign located on the Peace River near Liverpool side channel (River Kilometer 21.9).
<a href="#">RK23_08.sd2</a>	2006-2008	Near surface conductivity and temperature at 15-minute intervals from the HBMP continuous recording gage attached to the Manatee Speed Zone Sign located on the Peace at River Kilometer 23.4.
<a href="#">RK24_08.sd2</a>	2006-2008	Near surface conductivity and temperature at 15-minute intervals from the HBMP continuous recording gage attached to the Manatee Speed Zone Sign located on the Peace River just downstream of Navigator Marina (River Kilometer 24.5).
<a href="#">RK12_08.sd2</a>	2008	Near bottom conductivity, temperature and dissolved oxygen at 15-minute intervals from the HBMP continuous recording gage attached to a channel marker located on the Peace River just downstream of Shell Creek (River Kilometer 12.9).
<a href="#">RK30_08.sd2</a>	2008	Near surface conductivity and temperature at 15-minute intervals from the HBMP continuous recording gage attached to the Manatee Speed Zone Sign located on the Peace River just upstream of the Facility (River Kilometer 30.6).
<a href="#">RK31_08.sd2</a>	2008	Near surface conductivity and temperature at 15-minute intervals from the HBMP continuous recording gage attached to the old railroad trestle located on the Peace River just upstream of Facility (River Kilometer 31.7).
<b>Environmental Quality Laboratory Background Data Sets</b>		
<a href="#">Chem_v12.sd2</a>	1976-1990	EQL fixed station Charlotte Harbor background water chemistry data.
<a href="#">Hall_v12.sd2</a>	1976-1990	EQL fixed station Charlotte Harbor hydrolab water column profile data.

**Data Set Name WORK.FLWD08**

Member Type DATA  
 Engine V9  
 Created Friday, April 03,  
 2009 11:25:52 AM  
 Last Modified Friday, April 03,  
 2009 11:25:52 AM

Observations 28490  
 Variables 22  
 Indexes 0  
 Observation Length 176  
 Deleted Observations 0

#	Variable	Type	Len	Format	Informat	Label
9	Arcadia	Num	8	8.1	F12.	Peace River at Arcadia (cfs)
17	BIGS	Num	8	8.1	F12.	Big Slough near North Port (cfs)
12	Bartow	Num	8	8.1	F12.	Peace at Bartow (cfs)
20	CHARLIE	Num	8	8.1	F12.	Charlie Creek near Gardner (cfs)
7	DATE	Num	8	DATE9.	DATE9.	DATE
5	DAY	Num	8	BEST12.	F12.	DAY
13	FTMeade	Num	8	8.1	F12.	Peace at Ft Meade (cfs)
18	F_	Num	8	BEST12.	F12.	F_Rainfall
	RAINFALL					
8	Horse	Num	8	8.1	F12.	Horse Creek near Arcadia (cfs)
10	Joshua	Num	8	8.1	F12.	Joshua Creek at Nocatee (cfs)
4	MONTH	Num	8	BEST12.	F12.	MONTH
16	MYAKKA	Num	8	8.1	F12.	Myakka River near Sarasota (cfs)
19	PAYNE	Num	8	8.1	F12.	Payne Creek near Bowling Green (cfs)
21	PHJ	Num	8	8.1		Total gaged flow upstream of the Facility
22	PHJS	Num	8	8.1		Total gaged flow to the upper harbor
2	PWITH	Num	8	8.2	F12.	Peace Facility Widthdrawal (cfs)
14	Prairie	Num	8	8.1	F12.	Prairie Creek near Ft. Ogden (cfs)
1	SASDATE	Num	8	BEST12.	F12.	SAS Date
3	SWITH	Num	8	8.2	F12.	Shell Facility Widthdrawal (cfs)
11	Shell	Num	8	8.1	F12.	Shell Creek near Punta Gorda (cfs)
6	YEAR	Num	8	BEST12.	F12.	YEAR
15	Zolfo	Num	8	8.1	F12.	Peace at Zolfo (cfs)

# Data Set Name WORK.CMOV8308

Member Type	DATA	Observations	1336
Engine	V9	Variables	55
Created	Friday, April 03, 2009 11:25:53 AM	Indexes	0
Last Modified	Friday, April 03, 2009 11:25:53 AM	Observation Length	440
		Deleted Observations	0

#	Variable	Type	Len	Format	Label
47	ALK	Num	8		Alkalinity (mg/l)
24	CF1	Num	8	8.1	Chlorophyll a >20 um Fraction (mg/m3)
25	CF2	Num	8	8.1	Chlorophyll a 20><5 um Fraction (mg/m3)
26	CF3	Num	8	8.1	Chlorophyll a 5> um Fraction (mg/m3)
27	CF4	Num	8	8.1	% Chlorophyll a >20 um Size Fraction
28	CF5	Num	8	8.1	% Chlorophyll a 20><5 um Size Fraction
29	CF6	Num	8	8.1	% Chlorophyll a 5> um Size Fraction
15	CHLA	Num	8	8.1	Chlorophyll-a (ug/l)
54	CHLB	Num	8		Chlorophyll b (mg/m3)
55	CHLC	Num	8		Chlorophyll c (mg/m3)
44	CL	Num	8	8.1	Chloride (mg/l)
7	COLOR	Num	8	8.	Color (CPU)
45	DATE	Num	8	DATE8.	Date
5	DAY	Num	8	8.	Day
4	DIS	Num	8	8.1	Distance (km)
42	DOC	Num	8	8.2	Dissolved Organic Carbon (mg/l)
50	DOP	Num	8		Dissolved Orthophosphate (mg/L)
14	EXC	Num	8	8.2	Light Extinction Coefficient
18	F1	Num	8	8.2	Uptake >20 um Fraction (mg Carbon/m3/E)
19	F2	Num	8	8.2	Uptake 20><5 um Fract. (mg Carbon/m3/E)
20	F3	Num	8	8.2	Uptake 5> um Fraction (mg Carbon/m3/E)
21	F4	Num	8	8.1	% Carbon Uptake >20 um Size Fraction
22	F5	Num	8	8.1	% Carbon Uptake 20><5 um Size Fraction
23	F6	Num	8	8.1	% Carbon Uptake 5> um Size Fraction
32	IOC	Num	8	8.2	Inorganic Carbon (mg/l)
43	IRON	Num	8	8.2	Iron (mg/l)
6	LIGHT	Num	8	8.1	Light Same Day (Einsteins)
2	MONTH	Num	8	8.	Month
9	N23	Num	8	8.3	Nitrite/Nitrate (mg/l)
8	NH34	Num	8	8.3	Ammonia/Ammonium (mg/l)
11	NP	Num	8	8.1	Available N/P Ratio
33	NPA	Num	8	8.1	Available N/P Atomic Ratio
35	ONIT	Num	8	8.2	TKN - NH4 (mg/l)
10	OP	Num	8	8.3	Orthophosphorus (mg/l)
37	OPD01	Num	8	8.2	Depth 1% of Surface Light Remains (m)
38	OPD10	Num	8	8.2	Depth 10% of Surface Light Remains (m)
39	OPD50	Num	8	8.2	Depth 50% of Surface Light Remains (m)
17	P2	Num	8	8.2	Carbon Uptake (mg Carbon/m3/hr)
16	P3	Num	8	8.2	Carbon Uptake (mg Carbon/m3/E)
46	SASDATE	Num	8		SAS Date
13	SI	Num	8	8.2	Silica (mg/l)
51	SOURCE	Char	3		
3	STATION	Num	8	8.	Sample Location
30	TKN	Num	8	8.2	Total Kjeldahl Nitrogen (mg/l)
36	TN	Num	8	8.2	TKN + N23 (mg/l)
12	TNTP	Num	8	8.1	Total N/P Ratio
34	TNTPA	Num	8	8.1	Total N/P Atomic Ratio
41	TOC	Num	8	8.2	Total Organic Carbon (mg/l)
31	TP	Num	8	8.3	Total Phosphorus (mg/l)
48	TSS	Num	8		Total Suspended Solids (mg/l)
40	TURB	Num	8	8.2	Turbidity
52	TYPE	Char	6		
49	VSS	Num	8		Volatile Suspended Solids (mg/L)
1	YEAR	Num	8	8.	Year
53	time	Num	8	TIME5.	

**Data Set Name      WORK.HYMOV08**

Member Type	DATA	Observations	8046
Engine	V9	Variables	17
Created	Friday, April 03, 2009 11:25:53 AM	Indexes	0
		Observation Length	136
Last Modified	Friday, April 03, 2009 11:25:53 AM	Deleted Observations	0

#	Variable	Type	Len	Format	Label
7	COND	Num	8	8.1	Conductivity
12	DATE	Num	8	DATE7.	DayMonthYear
3	DAY	Num	8	4.	Day
4	DEPTH	Num	8	4.1	Sample Depth (m)
13	DIS	Num	8	8.1	Distance (km)
6	DO	Num	8	8.1	Dissolved Oxygen (mg/l)
2	MONTH	Num	8	8.	Month
9	ORP	Num	8	5.	Oxidation Reduction Potential
8	PH	Num	8	8.1	pH
10	SAL	Num	8	8.1	Salinity (ppt)
11	SASDATE	Num	8	6.	SAS Date
14	SOURCE	Char	4		Data Source
16	STATION	Num	8	6.	
5	TEMP	Num	8	8.1	Temperature (C)
15	TYPE	Char	6		Moving or Fixed
1	YEAR	Num	8	8.	Year
17	time	Num	8	TIME5.	

**Data Set Name      WORK.HYFIX08**

Member Type      DATA

Engine            V9

Created           Friday, April 03,  
2009 11:25:53 AMLast Modified    Friday, April 03,  
2009 11:25:53 AM

Observations      17225

Variables          16

Indexes            0

Observation Length    128

Deleted Observations   0

#	Variable	Type	Len	Format	Label
12	COND	Num	8	8.	Specific Conductance (us/cm)
6	DATE	Num	8	DATE7.	Date
10	DAY	Num	8		Day
5	DEPTH	Num	8	8.1	Sampling Depth (m)
4	DIS	Num	8		River Kilometer of Site Location
13	DO	Num	8	8.2	Dissolved Oxygen (mg/L)
9	MONTH	Num	8	8.	Month
14	PH	Num	8	8.2	pH Water Whole Field (std.units)
16	SAL	Num	8	8.1	Salinity (psu)
3	SASDATE	Num	8		SAS Date
1	SOURCE	Char	4		Collected By
15	STATION	Num	8	6.	
11	TEMP	Num	8	8.1	Temperature (C)
7	TIME	Num	8	TIME5.	Time
2	TYPE	Char	5		Moving or Fixed
8	YEAR	Num	8	8.	Year

## Data Set Name

WORK.CFIX9608

Observations	1486		
Member Type	DATA	Variables	40
Engine	V9	Indexes	0
Created	Friday, April 03, 2009 11:25:54 AM	Observation Length	312
Last Modified	Friday, April 03, 2009 11:25:54 AM	Deleted Observations	0

### # Variable Type Len Format Label

23	ALK	Num	8	Alkalinity Lab (mg/L as CaCO3)
33	CF1	Num	8	> 20 um Size Fraction
34	CF2	Num	8	20> <5 um Size Fraction
35	CF3	Num	8	> 5 um Size Fraction
32	CHLA	Num	8 8.2	Chlorophyll a (ug/L)
39	CHLB	Num	8 8.2	Chlorophyll b (mg/m3)
40	CHLC	Num	8 8.2	Chlorophyll c (mg/m3)
19	CL	Num	8	Chloride Dissolved (mg/l as Cl)
11	COLOR	Num	8	Color (Platinum-cobalt units)
1	DATE	Num	8 DATE7.	Date
4	DAY	Num	8	Day
9	DEP	Char	3 \$3.	Surface or Bottom Sample
6	DIS	Num	8	Distance from Mouth of River
17	DOC	Num	8	Carbon, Organic dissolved (mg/l as C)
25	DOP	Num	8	Dissolved Orthophosphate (mg/L)
18	IOC	Num	8	Carbon, Inorganic Total (mg/l as C)
36	IRON	Num	8	Iron (mg/L)
3	MONTH	Num	8	Month
15	N23	Num	8	Nitrogen, NO2+NO3 Total (mg/l as N)
37	NH34	Num	8	Ammonia/Ammonium (mg/l)
26	NP	Num	8 8.1	Ration of Availiable Nitriogen to Phosphorus
28	NPA	Num	8 8.1	Atomic Ration of Availiable Nitriogen to Phosphorus
30	ONIT	Num	8	Organic Nitrogen (mg/L)
22	OP	Num	8	Phosphorus Ortho Total (mg/l as P)
5	SASDATE	Num	8	SAS Date
20	SI	Num	8	Silica, Dissolved (mg/l as SiO2)
7	SOURCE	Char	4	Collected By
24	STATION	Num	8	Station Number
14	TKN	Num	8	Nitrogen, Total Kjeldahl (mg/l as N)
31	TN	Num	8	Total Nitrogen (mg/L)
27	TNTP	Num	8 8.1	Ration of Total Nitriogen to Phosphorus
29	TNTPA	Num	8 8.1	Atomic Ration of Total Nitriogen to Phosphorus
16	TOC	Num	8	Carbon, Organic Total (mg/l as C)
21	TP	Num	8	Phosphorus, Phosphorus Total (mg/l as P)
13	TSS	Num	8	Residue Volatile, suspended (mg/l)
10	TURB	Num	8	Turbidity (NTU)
8	TYPE	Char	5	Moving or Fixed
12	VSS	Num	8	Residue Total at 105 degC susp (mg/l)
2	YEAR	Num	8	Year
38	time	Num	8 TIME5.	

**Data Set Name WORK.EFIX9608**

Member Type DATA  
Engine V9  
Created Friday, April 03,  
2009 11:25:54 AM  
Last Modified Friday, April 03,  
2009 11:25:54 AM

Observations 1799  
Variables 13  
Indexes 0  
Observation Length 96  
Deleted Observations 0

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#	Variable	Type	Len	Format	Label
9	DATE	Num	8	DATE8.	Sampling Date
2	DAY	Num	8		Day
12	DIS	Num	8		River Kilometer
5	EXC	Num	8		Extinction Coefficient
1	MONTH	Num	8		Month
6	OPD01	Num	8		1% Light Depth
7	OPD10	Num	8		10% Light Depth
8	OPD50	Num	8		50% Light Depth
10	SASDATE	Num	8		
13	SOURCE	Char	3		
4	STATION	Num	8		EQL Station #
11	TYPE	Char	5		
3	YEAR	Num	8		Year

**Data Set Name      WORK.HH08**

Member Type      DATA  
Engine            V9  
Created            Friday, April 03,  
                    2009 11:25:54 AM  
  
Last Modified      Friday, April 03,  
                    2009 11:25:54 AM

Observations            411979  
Variables                15  
Indexes                  0  
Observation Length      112  
  
Deleted Observations    0

#	Variable	Type	Len	Format	Label
6	CONDBOT	Num	8		Bottom Conductance (uS/cm @25C)
5	CONDSURF	Num	8		Surface Conductance (uS/cm @25C)
2	DATE	Num	8	DATE7.	Date
11	DAY	Num	8		Day
15	DIS	Num	8		Distance from Mouth of River
1	GAGE	Char	8		USGS Gage Number
4	GHEIGHT	Num	8		Gage Height (feet)
10	MONTH	Num	8		Month
12	SASDATE	Num	8		SAS Date
13	SOURCE	Char	4		Collected By
8	TEMPBOT	Num	8		Bottom Temperature (degrees C)
7	TEMPSURF	Num	8		Surface Temperature (degrees C)
3	TIME	Num	8	TIME5.	Time
14	TYPE	Char	4		Moving, Fixed or Gage
9	YEAR	Num	8		Year

**Data Set Name**                      **WORK.PRH08**

Member Type        DATA  
Engine              V9  
Created              Friday, April 03,  
                      2009 11:26:02 AM

Last Modified       Friday, April 03,  
                      2009 11:26:02 AM

Observations                      376382  
Variables                          15  
Indexes                            0  
Observation Length               112  
  
Deleted Observations              0

#	Variable	Type	Len	Format	Informat	Label
6	CONDBOT	Num	8			Bottom Conductance (uS/cm @25C)
5	CONDSURF	Num	8			Surface Conductance (uS/cm @25C)
2	DATE	Num	8	DATE7.		Date
11	DAY	Num	8	BEST12.	F12.	Day
15	DIS	Num	8			Distance from Mouth of River
1	GAGE	Char	8			USGS Gage Number
4	GHEIGHT	Num	8			Gage Height (feet)
10	MONTH	Num	8	BEST12.	F12.	Month
12	SASDATE	Num	8			SAS Date
13	SOURCE	Char	4			Collected By
8	TEMPBOT	Num	8			Bottom Temperature (degrees C)
7	TEMPSURF	Num	8			Surface Temperature (degrees C)
3	TIME	Num	8	TIME5.		Time
14	TYPE	Char	4			Moving, Fixed or Gage
9	YEAR	Num	8	BEST12.	F12.	Year

<b>Data Set Name</b>	<b>WORK.RK12_08</b>	<b>Observations</b>	<b>21805</b>
Member Type	DATA	Variables	16
Engine	V9	Indexes	0
Created	Friday, April 03, 2009 11:26:07 AM	Observation Length	120
Last Modified	Friday, April 03, 2009 11:26:07 AM	Deleted Observations	0

#	Variable	Type	Len	Format	Informat	Label
7	Battery	Num	8			Battery
12	COND	Num	8			Specific Conductance (uS/cm @ 25C)
9	DAY	Num	8			
16	DIS	Num	8			Distance from River Mouth (kilometers)
5	DO	Num	8			Bottom Dissolved Oxygen Level
1	Date	Num	8	DATE9.	DATE9.	Date
6	Depth	Num	8			Depth
13	GAGE	Char	4			Gage Location ID
8	MONTH	Num	8			
11	SASDATE	Num	8			SAS Date
14	SOURCE	Char	5			Collected By
4	Salinity	Num	8			Salinity
15	TYPE	Char	4			Fixed Location
3	Temp	Num	8			Temperature (degree C)
2	Time	Num	8	TIME8.	TIME8.	Time
10	YEAR	Num	8			

<b>Data Set Name</b>	<b>WORK.RK21_08</b>	<b>Observations</b>	<b>96087</b>
Member Type	DATA	Variables	14
Engine	V9	Indexes	0
Created	Friday, April 03, 2009 11:26:07 AM	Observation Length	104
Last Modified	Friday, April 03, 2009 11:26:07 AM	Deleted Observations	0

#	Variable	Type	Len	Format	Informat	Label
14	Battery	Num	8			Battery
9	COND	Num	8			Specific Conductance (uS/cm @ 25C)
6	DAY	Num	8			
13	DIS	Num	8			Distance from River Mouth (kilometers)
1	Date	Num	8	DATE9.	DATE9.	Date
10	GAGE	Char	3			Gage Location ID
5	MONTH	Num	8			
8	SASDATE	Num	8			SAS Date
11	SOURCE	Char	5			Collected By
4	Salinity	Num	8			Salinity
12	TYPE	Char	4			Fixed Location
3	Temp	Num	8			Temperature (degree C)
2	Time	Num	8	TIME8.	TIME8.	Time
7	YEAR	Num	8			

<b>Data Set Name</b>	<b>WORK.RK23_08</b>	<b>Observations</b>	<b>74688</b>
Member Type	DATA	Variables	14
Engine	V9	Indexes	0
Created	Friday, April 03, 2009 11:26:07 AM	Observation Length	104
Last Modified	Friday, April 03, 2009 11:26:07 AM	Deleted Observations	0

# Variable Type Len Format Informat Label

14	Battery	Num	8		Battery
9	COND	Num	8		Specific Conductance (uS/cm @ 25C)
6	DAY	Num	8		
13	DIS	Num	8		Distance from River Mouth (kilometers)
1	Date	Num	8	DATE9. DATE9.	Date
10	GAGE	Char	3		Gage Location ID
5	MONTH	Num	8		
8	SASDATE	Num	8		SAS Date
11	SOURCE	Char	5		Collected By
4	Salinity	Num	8		Salinity
12	TYPE	Char	4		Fixed Location
3	Temp	Num	8		Temperature (degree C)
2	Time	Num	8	TIME8. TIME8.	Time
7	YEAR	Num	8		

<b>Data Set Name</b>	<b>WORK.RK24_08</b>	<b>Observations</b>	<b>98527</b>
Member Type	DATA	Variables	14
Engine	V9	Indexes	0
Created	Friday, April 03, 2009 11:26:09 AM	Observation Length	104
Last Modified	Friday, April 03, 2009 11:26:09 AM	Deleted Observations	0

#	Variable	Type	Len	Format	Informat	Label
14	Battery	Num	8			Battery
9	COND	Num	8			Specific Conductance (uS/cm @ 25C)
6	DAY	Num	8			
13	DIS	Num	8			Distance from River Mouth (kilometers)
1	Date	Num	8	DATE9.	DATE9.	Date
10	GAGE	Char	3			Gage Location ID
5	MONTH	Num	8			
8	SASDATE	Num	8			SAS Date
11	SOURCE	Char	5			Collected By
4	Salinity	Num	8			Salinity
12	TYPE	Char	4			Fixed Location
3	Temp	Num	8			Temperature (degree C)
2	Time	Num	8	TIME8.	TIME8.	Time
7	YEAR	Num	8			

**Data Set Name** WORK.RK30\_08

Member Type DATA  
Engine V9  
Created Friday, April 03,  
2009 11:26:09 AM  
Last Modified Friday, April 03,  
2009 11:26:09 AM

Observations 22157  
Variables 14  
Indexes 0  
Observation Length 104  
Deleted Observations 0

## # Variable Type Len Format Informat Label

5	Battery	Num	8		Battery
10	COND	Num	8		Specific Conductance (uS/cm @ 25C)
7	DAY	Num	8		
14	DIS	Num	8		Distance from River Mouth (kilometers)
1	Date	Num	8	DATE9. DATE9.	Date
11	GAGE	Char	4		Gage Location ID
6	MONTH	Num	8		
9	SASDATE	Num	8		SAS Date
12	SOURCE	Char	5		Collected By
4	Salinity	Num	8		Salinity
13	TYPE	Char	4		Fixed Location
3	Temp	Num	8		Temperature (degree C)
2	Time	Num	8	TIME8. TIME8.	Time
8	YEAR	Num	8		

**Data Set Name**      **WORK.RK31\_08**

Member Type	DATA	Observations	22198
Engine	V9	Variables	14
Created	Friday, April 03, 2009 11:26:10 AM	Indexes	0
		Observation Length	104
Last Modified	Friday, April 03, 2009 11:26:10 AM	Deleted Observations	0

**# Variable Type Len Format Informat Label**

5	Battery	Num	8		Battery
10	COND	Num	8		Specific Conductance (uS/cm @ 25C)
7	DAY	Num	8		
14	DIS	Num	8		Distance from River Mouth (kilometers)
1	Date	Num	8	DATE9. DATE9.	Date
11	GAGE	Char	4		Gage Location ID
6	MONTH	Num	8		
9	SASDATE	Num	8		SAS Date
12	SOURCE	Char	5		Collected By
4	Salinity	Num	8		Salinity
13	TYPE	Char	4		Fixed Location
3	Temp	Num	8		Temperature (degree C)
2	Time	Num	8	TIME8. TIME8.	Time
8	YEAR	Num	8		

<b>Data Set Name</b>	<b>WORK.BOCA04</b>	<b>Observations</b>	<b>280688</b>
<b>Member Type</b>	<b>DATA</b>	<b>Variables</b>	<b>10</b>
<b>Engine</b>	<b>V9</b>	<b>Indexes</b>	<b>0</b>
<b>Created</b>	<b>Thursday, May 03, 2007 01:12:21 PM</b>	<b>Observation Length</b>	<b>80</b>
<b>Last Modified</b>	<b>Thursday, May 03, 2007 01:12:21 PM</b>	<b>Deleted Observations</b>	<b>0</b>

#	Variable	Type	Len	Format	Label
2	DATE	Num	8	DATE7.	Date
7	DAY	Num	8		Day
1	GAGE	Char	15		USGS Gage Number
4	GHEIGHT	Num	8		Gage Height (feet)
6	MONTH	Num	8		Month
8	SASDATE	Num	8		SAS Date
10	SOURCE	Char	4		
3	TIME	Num	8	TIME5.	Time
9	TYPE	Char	4		
5	YEAR	Num	8		Year

<b>Data Set Name</b>	<b>WORK.CHALL_2</b>	<b>Observations</b>	<b>3546</b>
<b>Member Type</b>	<b>DATA</b>	<b>Variables</b>	<b>37</b>
<b>Engine</b>	<b>V9</b>	<b>Indexes</b>	<b>0</b>
<b>Created</b>	<b>Thursday, May 03, 2007 01:12:23 PM</b>	<b>Observation Length</b>	<b>296</b>
<b>Last Modified</b>	<b>Thursday, May 03, 2007 01:12:23 PM</b>	<b>Deleted Observations</b>	<b>0</b>

#	Variable	Type	Len	Format	Label
24	ALK	Num	8	6.1	Alkalinity-CaCO3 (mg/l)
26	CA	Num	8	6.1	Calcium Hardness (mg/l)
13	CHLA	Num	8	7.1	Chlorophyll a (ug/l)
14	CL	Num	8	7.1	Chloride (mg/l)
17	COLOR	Num	8	5.	Color (CPU)
3	D	Num	8		Day
23	DAY	Num	8		Day
18	DEPTH	Num	8		
37	DO	Num	8		Dissolved Oxygen (mg/l)
19	DOC	Num	8		Dissolved Organic Carbon (mg/l)
31	F	Num	8	6.2	Fluoride (mg/l)
32	FC	Num	8	5.	Fecal Coliform Bacteria (c/100 ml)
20	FE	Num	8		Iron (mg/l)
33	FS	Num	8	5.	Fecal Strep. Bacteria (c/100 ml)
25	HARD	Num	8	5.	Hardness-CaCO3 (mg/l)
11	IOC	Num	8	7.1	Inorganic Carbon (mg/l)
2	M	Num	8		Month
27	MG	Num	8	6.1	Magnesium Hardness (mg/l)
22	MONTH	Num	8		Month
4	N23	Num	8	6.3	Nitrite/Nitrate (mg/l)
5	NH3	Num	8	6.3	Ammonia/Ammonium (mg/l)
8	OP	Num	8	6.3	Orthophosphorus (mg/l)
30	PH	Num	8		
15	SASDATE	Num	8		SAS Date
9	SI	Num	8	6.2	Silica (mg/l)
28	SO4	Num	8	6.1	Sulfate (mg/l)
16	STATION	Num	8		Station Number
34	TC	Num	8	5.	Total Coliform Bacteria (c/100 ml)
36	TCOL	Num	8		Total Coliform Bacteria (c/100 ml)
29	TDS	Num	8	5.	Total Dissolved Solids (mg/l)
35	TEMP	Num	8		
6	TKN	Num	8	6.2	Total Kjeldahl Nitrogen (mg/l)
10	TOC	Num	8	7.1	Total Organic Carbon (mg/l)
7	TP	Num	8	6.2	Total Phosphorus (mg/l)
12	TURB	Num	8	4.1	turbidity (NTU)
1	Y	Num	8		Year
21	YEAR	Num	8		Year

Data Set Name        **WORK.HYDROALL**

Observations    22515

Member Type	DATA	Variables	13
Engine	V9	Indexes	0
Created	Thursday, May 03, 2007 01:12:23 PM	Observation Length	104
Last Modified	Thursday, May 03, 2007 01:12:23 PM	Deleted Observations	0

#	Variable	Type	Len	Label
7	COND	Num	8	Conductivity (mmho)
3	DAY	Num	8	Day
5	DEPTH	Num	8	Depth (meters)
6	DO	Num	8	Dissolved Oxygen (mg/l)
2	MONTH	Num	8	Month
9	ORP	Num	8	Oxidation Reduction Potential
8	PH	Num	8	pH
10	SAL	Num	8	Salinity o/oo
12	SASDATE	Num	8	SAS Date
11	SAT	Num	8	Percent Oxygen Saturation
4	STATION	Num	8	Station Number
13	TEMP	Num	8	Temperature (C)
1	YEAR	Num	8	Year

## SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

IN RE:

DECLARATION OF WATER  
SHORTAGE EMERGENCY RELATING  
TO USE OF THE PEACE RIVER  
TO AUGMENT THE PEACE RIVER/MANASOTA  
REGIONAL WATER SUPPLY AUTHORITY'S RESERVOIR  
AND AQUIFER STORAGE AND RECOVERY WELLFIELDS

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### FIFTH MODIFICATION TO EXECUTIVE DIRECTOR ORDER NO. SWF 07-045

David L. Moore, Executive Director of the Southwest Florida Water Management District, a public corporation (DISTRICT), at District Headquarters, 2379 Broad Street, Brooksville, Florida, received evidence and information from District staff and representatives of the Peace River / Manasota Regional Water Supply Authority (AUTHORITY), regarding drought conditions causing a public water supply shortage within the AUTHORITY's Regional System and low water levels in its reservoir and both aquifer storage and recovery (ASR) wellfields, thereby creating a public health, safety and welfare emergency, and based upon such evidence and information finds and determines:

#### **FINDINGS OF FACT**

1. Section 373.246, Florida Statutes (F.S.), requires each water management district to adopt a Water Shortage Plan (PLAN) as a means of assuring appropriate responses to droughts and other types of water shortage events.
2. Chapter 40D-21, Florida Administrative Code (F.A.C.), constitutes the DISTRICT's PLAN.
3. Part III of Chapter 40D-21, F.A.C., sets forth the emergency provisions of the PLAN.
4. Within Part III of the PLAN, Rule 40D-21.331(3), F.A.C., specifies that, if the DISTRICT determines that conditions are rapidly deteriorating, or if the DISTRICT receives a request for emergency action, the DISTRICT shall ascertain if emergency actions are necessary to protect public health, safety, or welfare, considering such factors as whether the affected users can obtain water from other users or other sources on a

temporary basis and whether there are recommendations from, and emergency actions taken by, a local government in the affected area.

5. Rule 40D-21.371(1), F.A.C., specifies that the Executive Director of the DISTRICT may issue orders containing response mechanisms deemed necessary to address such an emergency, and that these mechanisms may include authorizations to temporarily withdraw from a permitted source in a manner or for a purpose not expressly granted by the applicable Water Use Permit; and restrictions that involve apportioning, rotating, limiting, or prohibiting the use of water.
6. Rules 40D-21.391(1), (2) and (3), F.A.C., allow for emergency orders to be issued by the Executive Director without prior notice, subject to concurrence by the DISTRICT's Governing Board and proper notice to affected water users and local officials.
7. The AUTHORITY has been issued Water Use Permit No. 20010420.004 (PERMIT) authorizing withdrawals from the Peace River at the AUTHORITY's intake structure.
8. The AUTHORITY has requested emergency DISTRICT water shortage action which would allow it to continue taking withdrawals from the Peace River intake as specified in Executive Director Order No. SWF 07-045 and further modify the temporary change in diversion schedule previously authorized in the Fourth Modification to the Executive Director Order No. SWF 07-045 to continue to be consistent with the DISTRICT's proposed minimum flow schedule for the lower Peace River. Specifically, the AUTHORITY has requested:
  - a. That terms of this emergency order be extended beyond the previous October 26, 2008 expiration.
  - b. Continuation of the temporary modification to Special Condition #7A of the PERMIT as specified in the Second Modification to Executive Director Order No. SWF 07-045. This modification temporarily changes the low flow threshold for diversions to 90 cubic feet per second (cfs) based on the combined daily flow at the Peace River at Arcadia gauge (USGS gauge 02296750), Horse Creek near Arcadia (USGS gauge 02297310) and Joshua Creek at Nocatee (USGS gauge 02297100) for the previous day instead of the normal cut-off of 130 cfs at the Peace River at Arcadia (USGS gauge 02296750) only.
  - c. Further change to the temporary modification to Special Condition #7B of the PERMIT, replacing the diversion schedule previously specified in the Fourth Modification to Executive

Director Order No. SWF 07-045 with the following seasonally-adjusted, three-block schedule:

Dates	Maximum Diversion Shall Not Exceed:	Under These Conditions
<b>Block 1</b> (April 20 to June 25)	10 percent of the combined daily flow at the Arcadia, Horse Creek and Joshua Creek gauges for the previous day	Combined flow is between 90 cfs and 221 cfs
	22.1 cfs (10 percent of the combined daily flow at 221 cfs) plus 26 percent of the combined daily flow above 221 cfs at the Arcadia, Horse Creek and Joshua Creek gauges for the previous day.	Combined flow is above 221 cfs
<b>Block 2</b> (October 27 to April 19)	14 percent of the combined daily flow at the Arcadia, Horse Creek and Joshua Creek gauges for the previous day	Combined flow is between 90 cfs and 330 cfs
	46.2 cfs (14 percent of the combined daily flow at 330 cfs) plus 15 percent of the combined daily flow above 330 cfs at the Arcadia, Horse Creek and Joshua Creek gauges for the previous day.	Combined flow is above 330 cfs
<b>Block 3</b> (June 26 to October 26)	12 percent of the combined daily flow at the Arcadia, Horse Creek and Joshua Creek gauges for the previous day	Combined flow is between 90 cfs and 1370 cfs
	1370 cfs (12 percent of the combined daily flow at 1370 cfs), plus 15 percent of the combined daily flow above 1370 cfs at the Arcadia, Horse Creek and Joshua Creek gauges for the previous day.	Combined flow is above 1370 cfs

9. As of September 4, 2008, the AUTHORITY had been able to withdraw a total of approximately 1.5 billion gallons of water from the river that would not have been otherwise available to meet regional demand since Executive Director Order No. SWF 07-045 was originally issued on August 13, 2007.
10. As of September 4, 2008, the AUTHORITY had combined total of approximately 750 million gallons of water stored in its reservoir and

two ASR wellfields. This compares to a combined storage capacity of about 8.0 billion gallons, and represents an extremely low water supply condition.

11. As of September 4, 2008, the AUTHORITY was estimating that it would be able to increase total storage to about 1.1 billion gallons (an increase of 350 million gallons) prior to the expiration date of the Fourth Modification to this Order. This would still represent an extremely low water supply condition early in the annual dry season.
12. The AUTHORITY requests the emergency authorization described in Paragraph 8. above to continue capturing as much surface water as possible, in an environmentally responsible manner, in order to meet current demand and increase its stored reserves for later use when surface water diversions are not available. Capturing this surface water is an integral component of the projects being pursued by the AUTHORITY to bolster available supplies and maintain sufficient water quality in order to meet the public health, welfare and safety needs of its service area during the annual dry season, which runs from October through June.
13. DISTRICT staff has determined that several hydrologic factors, including designated water resource indicators in the PLAN, have not experienced sufficient improvement, compared to the conditions reported in Executive Director Order No. SWF 07-045. Specifically:
  - a. As of October 8, 2008, the 7-day average streamflow was substantially below normal throughout the Peace River watershed, compared to historical streamflow for that same time period. The Peace River (as measured at the Arcadia Station, 7-day average) was flowing at 330 cfs, which is equivalent to the 8th percentile, and a declining trend was expected to continue during the dry season.
  - b. As of September 30, 2008, the AUTHORITY's service area had been experiencing a rainfall deficit for more than two years. Despite normal rainfall during the past twelve months, the Northern Peace River basin has a 19.5-inch rainfall deficit over a 24-month period. Over this same time period, the Southern Peace River Basin has a 15.5-inch rainfall deficit and the Manasota Basin has a 22.3-inch rainfall deficit.
  - c. As of October 6, 2008, groundwater levels were trending downward in the AUTHORITY'S service area. The average level in

these counties was registering at the 28<sup>th</sup> percentile, which is considered on the low end of the "normal range" as specified in the PLAN.

- d. As of October 16, 2008, the Climate Prediction Center is predicting uncertain conditions (equal chances of below-normal, normal and above-normal rainfall) until December 2008, followed by below-normal rainfall from January 2009 to April 2009, and then a return to uncertain conditions through June 2009.
14. In combination with uncertain and below-normal rainfall predictions, the current water resource conditions and resulting water supply conditions, especially the low amount of storage in the AUTHORITY's two ASR wellfields, continue to constitute a threat to both public water supply and to public health, safety and welfare.

#### **ULTIMATE FINDINGS OF FACT**

15. The exercise of the non-emergency powers under subsections 373.175(1) and (2) and 373.246(1), F.S., and Part II of Chapter 40D-21, F.A.C., are not sufficient to protect the public health, safety, or welfare, nor the drinking water supply of persons who depend upon the AUTHORITY.
16. In order to mitigate the effects of the long-term rainfall deficit on, and to make water available for immediate use as well as storage in the AUTHORITY's reservoir and two ASR wellfields, the AUTHORITY has requested that the DISTRICT authorize the AUTHORITY to take surface water diversions from the Peace River intake based on the DISTRICT's proposed minimum flows for the lower Peace River, which provides for a seasonally-adjusted withdrawal schedule based on the combined daily flow at the Peace River at Arcadia (USGS gauge 02296750), Horse Creek near Arcadia (USGS gauge 02297310) and Joshua Creek at Nocatee (USGS gauge 02297100) for the previous day.

#### **CONCLUSIONS OF LAW**

17. The Executive Director of the DISTRICT is duly authorized by subsections 373.119(2), 373.175(4) and 373.246(7), F.S., and Rule 40D-21.331(5), F.A.C., to declare a water shortage emergency and to issue emergency orders reciting the existence of an emergency and requiring that action be taken as deemed necessary to meet the emergency.

18. The PERMIT includes a condition authorizing the DISTRICT to modify the PERMIT in the event the DISTRICT declares a water shortage.

### **ORDERED**

19. A water shortage emergency is continuing for the AUTHORITY's reservoir and two ASR wellfields. The ongoing emergency is putting at risk the reliability of the drinking water supply for over 250,000 residents within portions of the AUTHORITY's service area, which includes the City of North Port and the counties of Charlotte, DeSoto, Sarasota and Manatee (Manatee County does not currently receive water from the AUTHORITY), including associated fire suppression systems, hospitals, schools, businesses and governmental and community facilities.
20. The PERMIT is hereby modified as follows:
  - a. In lieu of the low flow threshold provided in Special Condition #7A of the PERMIT, diversions are allowed whenever the previous day's combined daily flow at the Peace River at Arcadia (USGS gauge 02296750), Horse Creek near Arcadia (USGS gauge 02297310) and Joshua Creek at Nocatee (USGS gauge 02297100) is at least 90 cfs.
  - b. In lieu of the diversion schedule provided in Special Condition #7B of the PERMIT, the amount of diversion from the Peace River intake may follow the "Temporary Diversion Schedule" table shown in paragraph 8.c. above, effective immediately.
  - c. However, in lieu of Special Condition #7C of the PERMIT, in no case shall the diversion amount exceed the difference between the previous day combined daily flow at the Arcadia, Horse Creek and Joshua Creek gauges and 90 cfs.
21. This order shall remain in effect until public health, safety and welfare are restored regarding the reliability of the water supply for over 250,000 residents within portions of the AUTHORITY's service area, which includes the City of North Port and the counties of Charlotte, DeSoto, Sarasota and Manatee (Manatee County does not currently receive water from the AUTHORITY), including associated fire suppression systems, hospitals, schools, businesses and governmental and community facilities. This order is subject to modification or revocation by the Governing Board or Executive Director as conditions warrant.

22. In lieu of a formal letter, the AUTHORITY may use an e-mail communication to Lois.Sorensen@swfwmd.state.fl.us as a means of requesting any additional extension or other modification to this Order.
23. Except as provided in paragraphs 20. through 22., above, all other terms and conditions of Executive Director Order No. SWF 07-045 shall remain in full force and effect.

DONE AND ORDERED in Hernando County, Florida, as of October 23, 2008.

Southwest Florida Water  
Management District

Filed this 23 day  
of October, 2008.

By: David L. Moore 10-23-08  
David L. Moore  
Executive Director

Channem. Lee  
Agency Clerk

(SEAL)

Approved as to Legal Form and Content

Kal

Attorney

## **NOTICE OF RIGHTS**

Persons to whom this Executive Director Order is directed, or whose substantial interests are affected, may request pursuant to subsection 373.119(3), Florida Statutes (F.S.), to petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S., and Chapter 28-106, Florida Administrative Code (F.A.C.). A request for a hearing must: 1) explain how the petitioner's or other person's substantial interests will be affected by the District's action; 2) state all material facts disputed by the petitioner or other person, or state that there are no disputed facts; and 3) otherwise comply with Chapter 28-106, F.A.C.

A request for hearing must be filed with and received by the Agency Clerk of the District at District Headquarters, 2379 Broad Street, Brooksville, Florida 34604-6899 within twenty-one (21) days of receipt of this notice. Receipt is deemed to be the fifth day after the date on which this notice is deposited in the United States mail. Failure to file a request for hearing within this time period shall constitute a waiver of any right you or any other person may have to request a hearing under Sections 120.569 and 120.57, F.S.

Mediation pursuant to Section 120.573, F.S., and Rule 28-106.111, F.A.C., to settle an administrative dispute regarding the District's action in this matter is not available prior to the filing of a request for hearing.

In accordance with subsection 120.569(1), F.S., the following additional administrative or judicial review may be available.

A party who is adversely affected by final agency action may seek review of the action in the appropriate District Court of Appeal pursuant to Section 120.68, F.S., by filing a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, within thirty (30) days after the rendering of the final action by the District.

PURSUANT TO SUBSECTION 373.119(3), F.S., AND NOTWITHSTANDING ANY OTHER PROVISION UNDER CHAPTER 120, F.S., PERSONS TO WHOM THE ORDER IS DIRECTED SHALL COMPLY THEREWITH IMMEDIATELY, AND THE TIMELY FILING OF A PETITION SHALL NOT STAY SUCH PERSON'S OBLIGATION TO MAINTAIN SUCH COMPLIANCE DURING THE PENDENCY OF ANY ADMINISTRATIVE PROCEEDING.