



GLOBAL ENVIRONMENTAL ASSESSMENTS AND RESPONSE

COX CREEK MONITORING REPORT

SUBMITTED:
May 15, 2023

DATE OF OBSERVATIONS:

May 10, 2023

LOCATION:

Containment booms, water, and adjacent shores within fifty (50) feet upstream and downstream of all outfalls (002-009, 012 and 014) in Cox Creek, Point Comfort, Texas.

PERFORMED BY:

Matthew Watford – *Project Scientist*
Jess Myers – *Senior Technician*

APPROVED BY:

Anton Kindzirsky – *Principal Scientist*

SIGNATURE:

Anton Kindzirsky

DATE:

5/15/2023

TABLE 1: APPROXIMATE RECENT RAINFALL TOTALS (INCHES) AT POINT COMFORT, TX:

<u>Date</u>	<u>Online Source¹</u>	<u>Rain Gauge at WSM²</u>
05/10/2023	0.42	2.81
05/09/2023	0.95	1.96
05/07/2023	0.02	0.01
05/05/2023	N/A	0.03
05/03/2023	0.04	0.00
04/29/2023	0.00	0.01

INSPECTOR COMMENTS:

- New discharge observed at outfalls 245, 003, 008, and 009. See supplementary report for more details.
- Boom spanning the creek north of Outfall 014 had water flowing over it (See photo **2023-05-10_14_S1** on pg.34).
- Fence south of Outfall 014 was damaged during storm (See photo **2023-05-10_14_S1** on pg.35).
- Silt fence damage observed, conditions available on page 36.

¹ <https://www.localconditions.com/weather-point-comfort-texas/77978/past.php>

² Rain Gauge installed on 06/16/22 and maintained by GEAR near the WSM facility on FPC property

TABLE 2: OUTFALL OBSERVATIONS (reference photos following table)

OUTFALL	LAT/ LONG	DESCRIPTION	PHOTO ID	EVIDENCE OF NEW DISCHARGE³ (Yes/No/ Undetermined)
2/4/5	28.684918, -96.53695	Plastic pellets observed at base of fence, in debris, in center of outfall	2023-05-10_245a	Yes
	28.684868, -96.53709	Plastic pellets observed at base of fence, in debris, in center of outfall	2023-05-10_245b	Yes
003	28.6796, -96.548115	Plastic pellets observed in outfall channel, in debris line, 1ft from fence	2023-05-10_003	Yes
006	28.688725, -96.529258	Plastic pellets observed at base of fence, 30ft S of outfall channel	2023-05-10_006a	No
	28.689055, -96.529162	Plastic pellets observed N side of outfall channel, at base of erosion control sock	2023-05-10_006b	No
007	28.692445, -96.528788	Plastic pellets observed 40ft N of outfall boom, 15ft from road	2023-05-10_007	No
008	28.696793, -96.531588	Plastic pellets observed 1ft from fence, adjacent to flow reducers, in flow path at silt fence blow out	2023-05-10_008a	Yes
	28.696813, -96.531633	Plastic pellets observed 1ft from fence, adjacent to flow reducers, on edge of flow path under silt fence	2023-05-10_008b	Yes
	28.696812, -96.531567	Plastic pellets observed in center of outfall channel, behind first row of flow reducers, in flow path	2023-05-10_008c	Undetermined
009	28.700507, -96.532057	Plastic pellets observed 15ft S of NW fence corner, at base of fence	2023-05-10_009a	Undetermined

³New Discharge of Plastics occurs when any Plastics (flakes, powder, or pellets) are transported from behind FPC-TX property fence-line and settle in outfall area as a result of a stormwater discharge event since January 15th, 2020. Observations supporting evidence of New Discharge of Plastics are linked to specific stormwater discharge events and will not be combined or repeated in GEAR reports. Stormwater discharge events lasting more than 24 hours may include at most one New Discharge of Plastics per day. If “Yes” or “Undetermined”, see supplementary report for additional information.

	28.700538, -96.532092	Plastic pellets observed in NW fence corner, at base of fence	2023-05-10_009b	Undetermined
	28.700215, -96.532112	Plastic pellets observed 3ft from grate, in center of outfall channel	2023-05-10_009c	Yes
012	28.706215, -96.529408	Plastic pellets observed in center of outfall channel, 20ft from fence	2023-05-10_012	No
014	28.709705, -96.530013	Plastic pellets observed on N side of outfall at the high-water line	2023-05-10_014	No

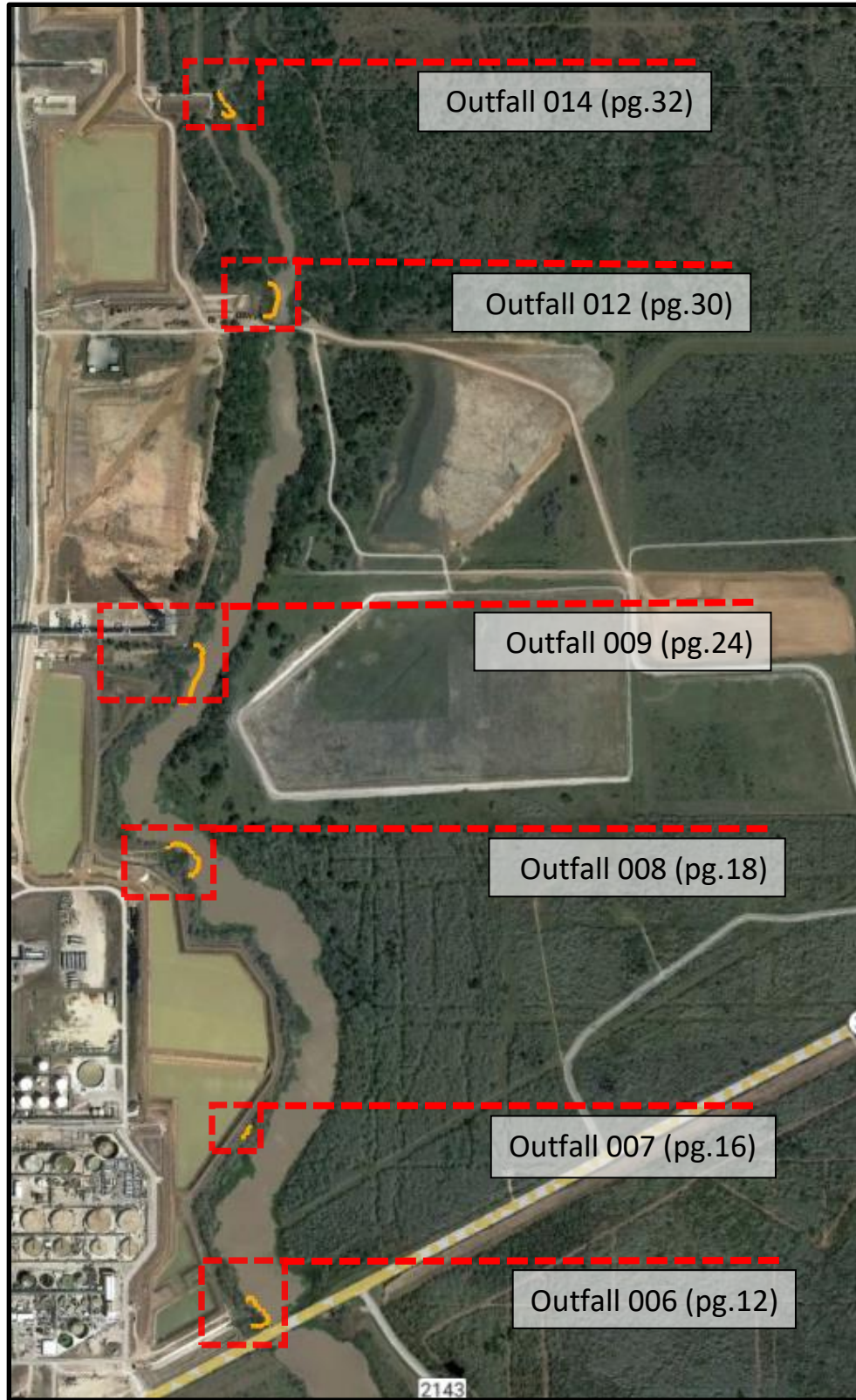
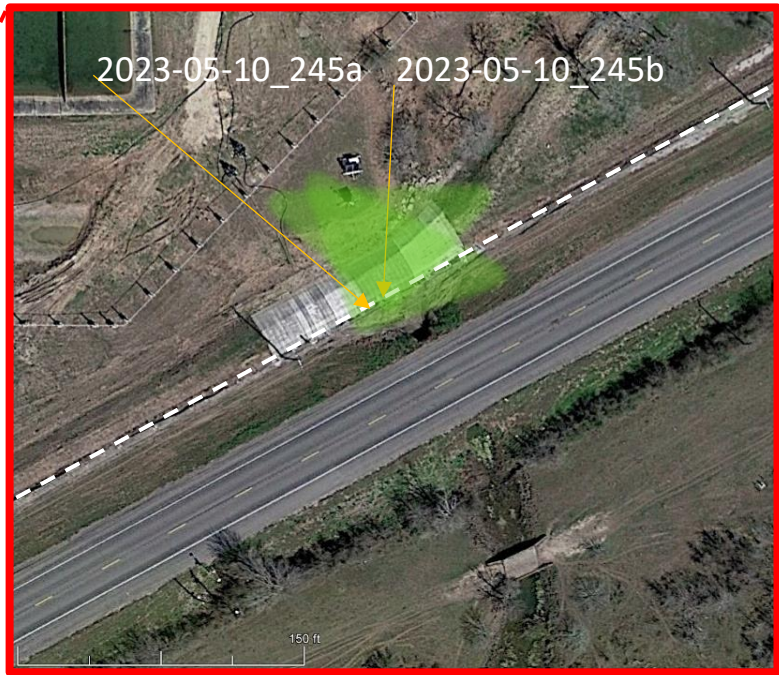


Figure 1: Boom locations (in orange) on Cox Creek between outfalls 006 and 014. Locations were verified by GPS on 01/04/2023. Any observed changes to boom locations will be updated in this and the following figures. Aerial imagery dated March 2022, sourced from Google Earth.

Photo Notes:

- 1.) Boom locations drawn in orange on outfall maps 006, 007, 008, 009, 012 and 014
- 2.) Wide frame photos included to show outfall-boom conditions and specific location of plastics observations (photo ID signified by “w” following “date-outfall#”).
- 3.) Triangular green highlight added to outfall aerial images to show field of view of wide frame photos (aerial images oriented with north towards top of page). 90° corner of triangle denotes photo origin.
- 4.) Scalebar (mm) used for reference in zoom and wide frame photos.
- 5.) Orange marking paint applied at outfalls is used to indicate presence of plastics, green marking paint indicates absence of plastics.
- 6.) Orange/green marking paint is intended to be temporary and only applied to soil and grass. No paint is applied to fencing or concrete structures.
- 7.) Pellets highlighted in zoom photos by semi-transparent red circles.
- 8.) Aerial images retrieved from Google Earth (photographed in approx. March 2020). Dashed white line indicates fence line.
- 9.) Original, higher resolution photos available upon request.

Outfall 2/4/5



2023-05-10_245w1



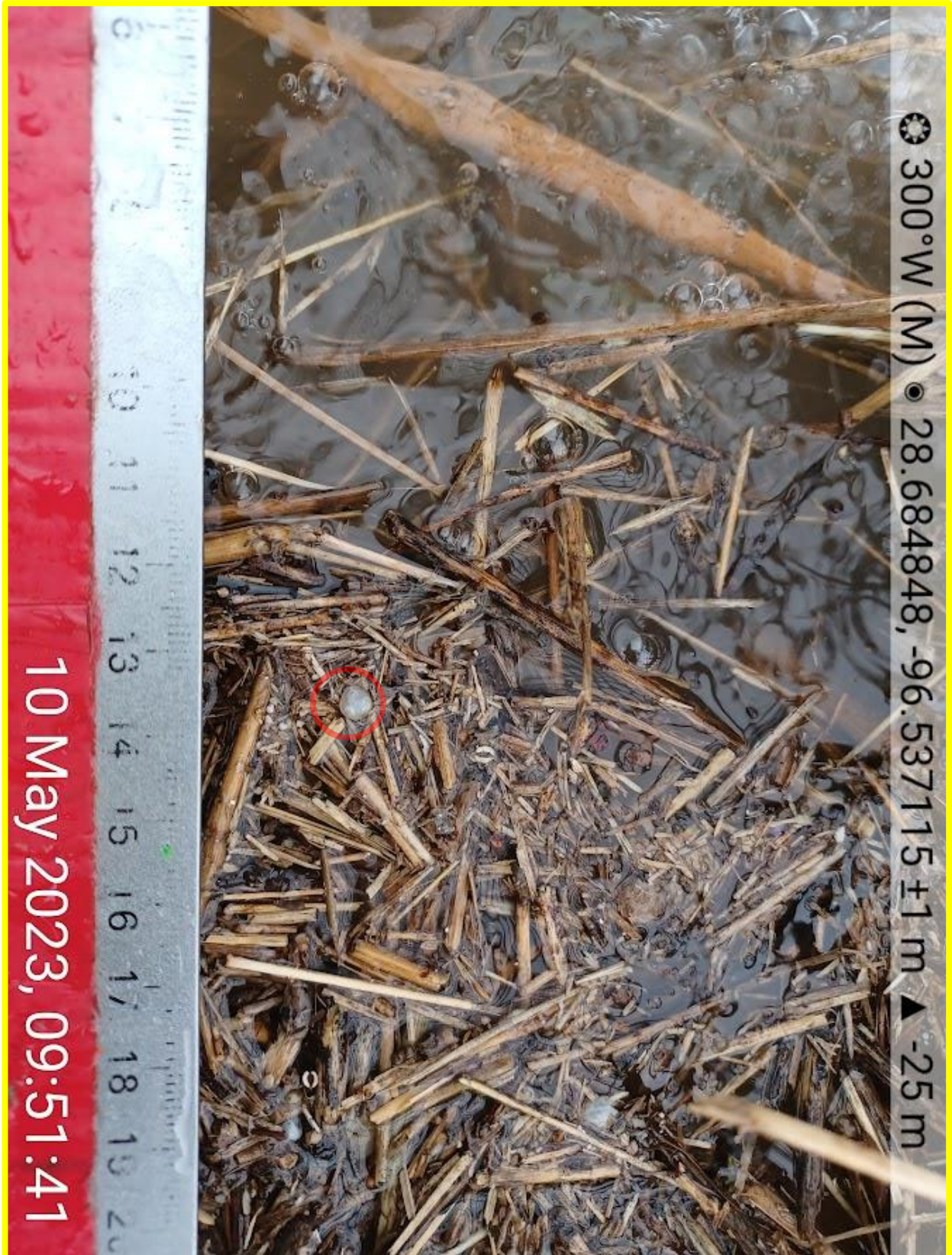
2023-05-10_245a



2023-05-10_245w2



2023-05-10_245b



10 May 2023, 09:51:41

300° W (M) • 28.684848, -96.537115 ±1 m ▲ -25 m

Outfall 003



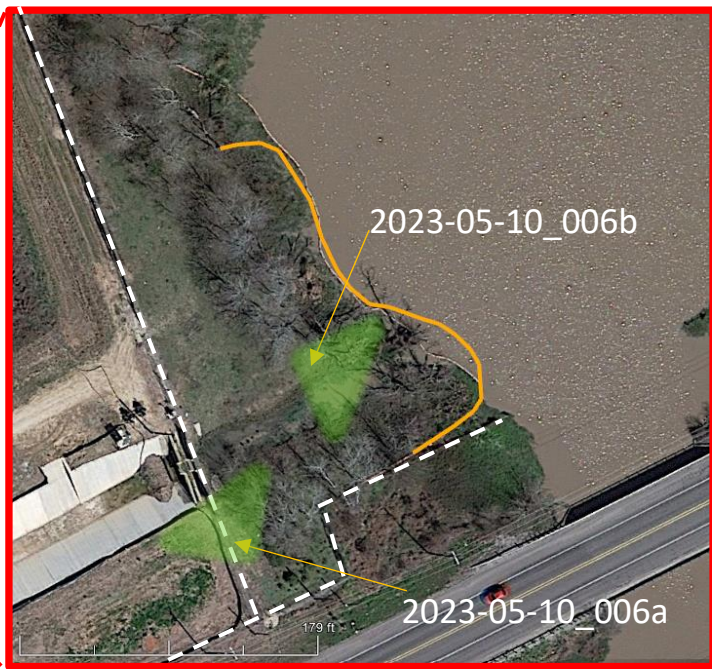
2023-05-10_003w



2023-05-10_003



Outfall 006



2023-05-10_006w1

☀ 329°NW (M) • 28.688725, -96.529258 ±3 m ▲ -28 m



10 May 2023, 13:21:54

2023-05-10_006a



2023-05-10_006w2

☉ 119°E (M) ● 28.689055° N, 96.529162° W ±1 m



2023-05-10_006b



Outfall 007



2023-05-10_007w

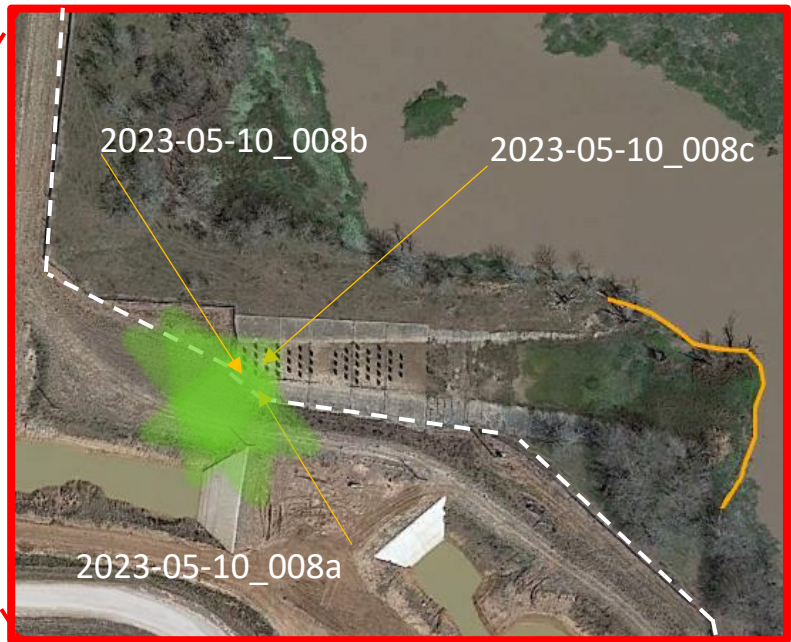
☀ 211°S (M) • 28.692445, -96.528788 ±3 m ▲ -29 m



2023-05-10_007



Outfall 008



2023-05-10_008w1



2023-05-10_008a



2023-05-10_008w2



2023-05-10_008b



2023-05-10_008w3

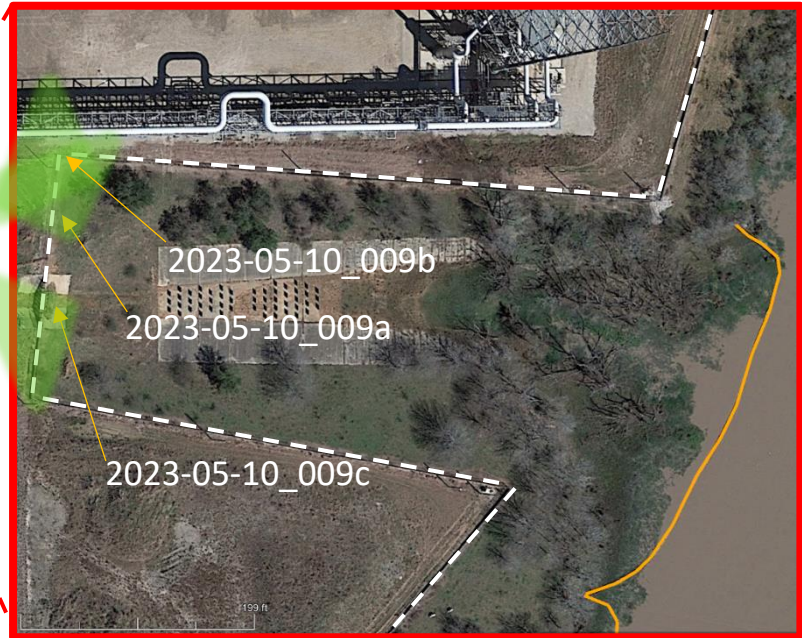
📍 211°S (M) 📍 28.696812° N, 96.531567° W ±1 m



2023-05-10_008c



Outfall 009



2023-05-10_009w1



2023-05-10_009a



2023-05-10_009w2



2023-05-10_009b



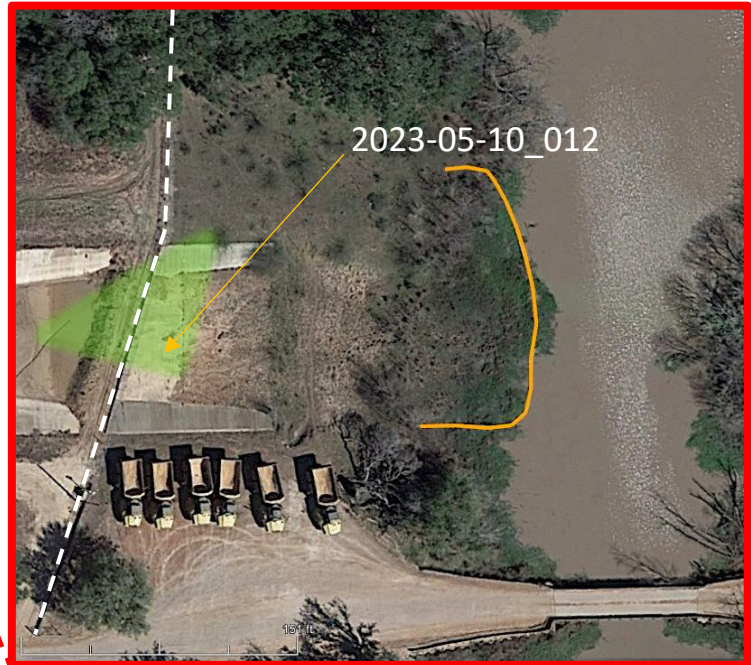
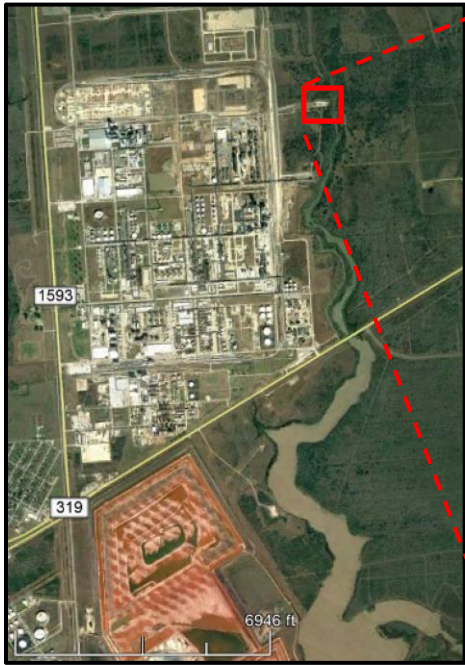
2023-05-10_009w3



2023-05-10_009c



Outfall 012



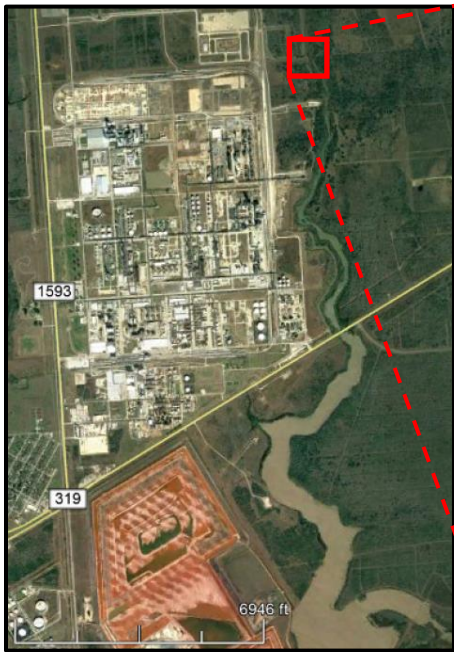
2023-05-10_012w



2023-05-10_012



Outfall 014



2023-05-10_014w

☀ 78°NE (M) • 28.709705, -96.530013 ±1 m ▲ -27 m



2023-05-10_014w



2023-05-10_014_S1



Boom that stretches across creek north of Outfall 014 had water flowing over top of it on the far side, in area highlighted by red oval.

2023-05-10_014_S2



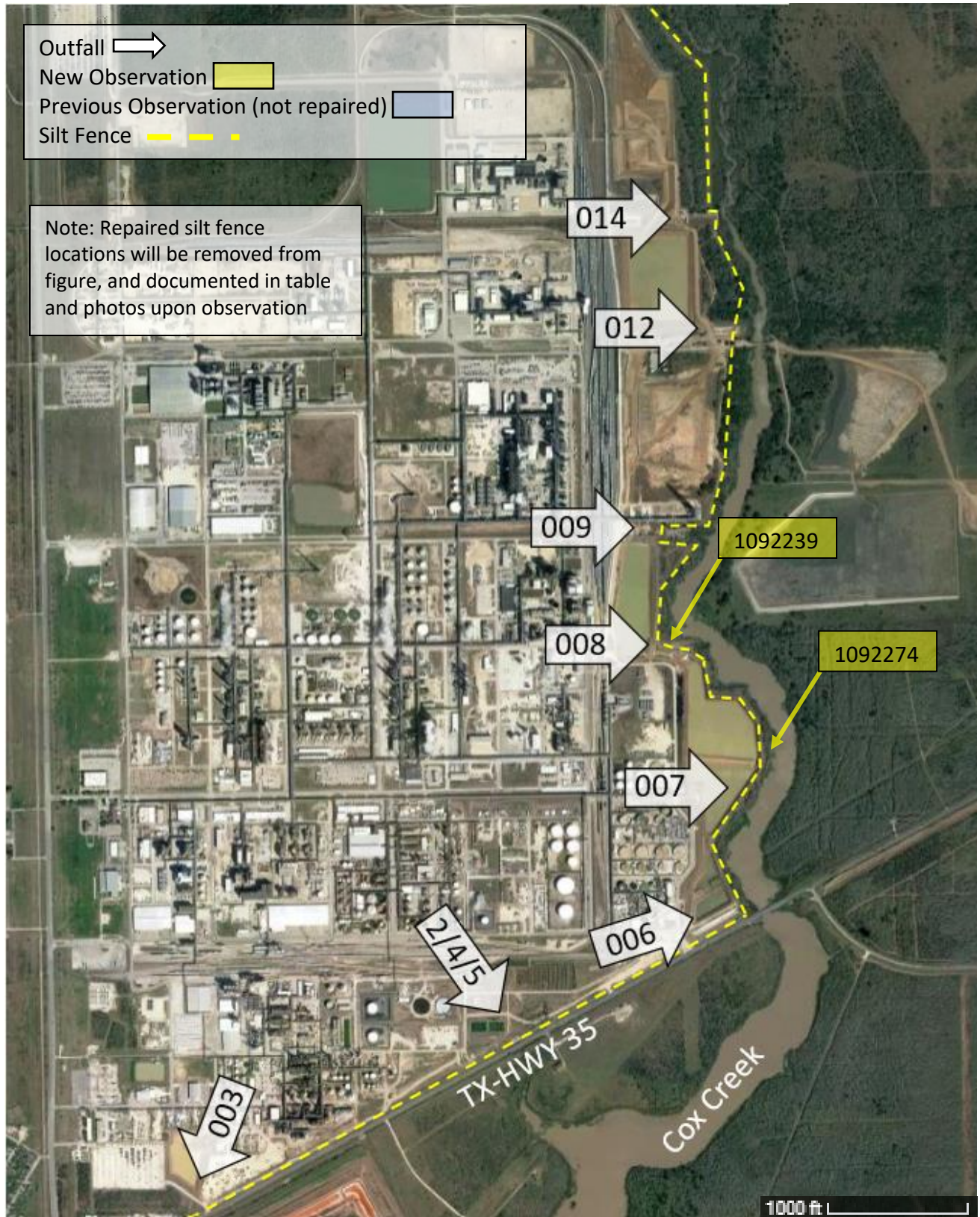
Fence line south of Outfall 014 laid over due to water flow.

TABLE 3: SILT FENCE CONDITION OBSERVATIONS

ITEM	TAG ID	LAT/LONG	DATE FIRST OBSERVED	DATE REPAIR OBSERVED	PHOTO ID	Pg. #	LOCATION/DESCRIPTION
1	1092239	28.696803, -96.531592	5/10/2023	N/A	2023-05-10_008_S1	38	Section of silt fence washed out at Outfall 008, adjacent to beginning of flow reducers.
2	1092274	28.693, -96.528527	5/10/2023	N/A	2023-05-10_007_S1	39	Section of silt fence between Outfalls 007 and 008 washed out.

See tag ID locations in map on following page. See previous reports for photos of earlier observations (where pg. # N/A)

FIGURE 1: MAP OF OBSERVED SILT FENCE CONDITIONS ON 05/10/2023



2023-05-10_008_S1 (Item 1, Tag ID: 1092239)



Silt fence adjacent to the flow reducers at Outfall 008. Silt fence was blown out due to flow, sandbags were washed under silt fence as a result of the damage.

2023-05-10_008_S1 (Item 1, Tag ID: 1092239)



2023-05-10_007_S1 (Item 2, Tag ID: 1092274)



Silt fence North of Outfall 007 was washed out during recent rains.

2023-05-10_007_S1 (Item 2, Tag ID: 1092274)

