

POPULATION SURVEY OF THE INTERIOR LEAST TERN
ON THE MISSISSIPPI RIVER
FROM
CAPE GIRARDEAU, MISSOURI
TO
BATON ROUGE, LOUISIANA

2007

By

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Under Contract with URS Corporation

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On and between June 23 and July 8, 2007, Kenneth H. Jones, Associate Professor of Biology at Dyersburg State Community College, under contract with URS Corporation, conducted a survey of interior Least Tern (*Sternula antillarum athalassos*) nesting colonies along the Mississippi River. This annual survey is performed for the Memphis District Army Corps of Engineers and assists the U.S. Fish and Wildlife Service with its census in determining population size and distribution of the Interior Least Tern. This survey was the 23rd consecutive annual count since the surveys were initiated in 1985 by the Army Corps of Engineers. The survey area extended 777 miles from Cape Girardeau, Missouri (Upper River Mile 53) to Baton Rouge, Louisiana (River Mile 230) (Figure 1). In prior years three types of surveys were performed: towboat, aerial and small boat (Table 4, Figure 2). The towboat surveys were discontinued in 1995 as were the aerial surveys in 1997 when it became obvious that of the three, the small boat survey yielded the highest and most accurate counts. Past years' surveys terminated about 7 miles downstream of Vicksburg, Mississippi because early aerial surveys in 1986 indicated a scarcity of sandbars and relatively few terns downstream of Vicksburg. Beginning in 2004 the survey was extended to Baton Rouge, Louisiana in order to more thoroughly access the entire range of the Least Tern population on the Lower Mississippi River.

From 1985 through 1996, Least Tern surveys were conducted by John Rumancik, fishery and wildlife biologist from the Memphis District Army Corps of Engineers. Since 1997 the surveys have all been conducted by Dyersburg State Community College and Kenneth Jones, Associate Professor of Biology. Observers and crew members of this year's survey included John Rumancik and Mike Thron, both biologists with the Memphis District and Paul DuBow, Environmental Program Manager at the Corps of Engineers Mississippi Valley Division. Experienced counters from past surveys helping on this year's count included Mark Campen, Andrea Carpenter, Dennis Davin, Dr. Jack Grubaugh, Wanda Jones, and Rob Thomas.

This year's survey yielded a total count of 9,814 Least Terns and 96 nesting colonies, fewer colonies than last years survey, which was 107, but higher total numbers. Forty-one colonies were identified based on the presence of eggs and/or chicks (Tables 1 and 2). Fifty-five colonies were identified based on the presence of a large number of nest scrapes, adult behavior and other indicators of likely reproductive effort such as wetting breast feathers, sitting inland, carrying fish or intense mobbing of intruders. The largest colony was located at Corregidor Dikes (RM 504) with 633 adult terns counted. Other large colonies included Sunflower Cut-off (RM 625.0) with 350 birds, Leland Neck Dikes (RM 540.0) with 410, and Below Plum Pt. Dikes

(RM 303.0) with 303 Least Terns. The smallest colonies were at Marr Towhead (RM 876.0), Linwood Bend (RM 840.0), and Below Grand Gulf Dikes (RM 398.0) with just 13, 16, and 15 birds.

Numbers of adult and juvenile Least Terns were recorded on data sheets developed by the Corps and based on the Cornell University Bird Registry Form. One data sheet was used for each observation with the following noted: date, time, river mile, latitude/longitude (decimal degrees determined from GPS), number of adult terns, presence of juveniles, chicks and eggs, number of nests observed and eggs or chicks in each, locations of sandbars, substrate, distance from vegetation and type, weather conditions, nearest river gage readings, and other notes on bird behavior, signs of predation or other disturbance. Nest counts were determined both by direct observation of scrapes containing eggs (empty scrapes were not counted) or observations of terns setting inland during waterline drift counts. On the data sheets egg counts are listed with number of nests followed with parentheses showing number of eggs (e.g. 1(1) 2(2) 3(3) would mean 1 nest with 1 egg, 2 nests with 2 eggs and 3 nests with 3 eggs). Foraged fingerling fish dropped within the colony were identified and/or collected. Colony locations were marked on 1998 Flood Control and Navigation Maps of the Mississippi River, 61st edition, USACE. Data sheets and colony locations are found in Appendix A.

The average number of adult terns per colony was 102, with colony sizes ranging from as little as 13 adults to as many as 633. The numbers of eggs per nest ranged from 1 to 3 and many nests were associated with debris wrack lines or in close proximity to small, random pieces of drift. Many adults were observed utilizing other habitats often miles away from the nearest colony locations. These habitats included both still and running water of all depths in the channel, behind dikes, in back chutes, tributary mouths, and fast current against revetted banks on the outside of river bends.

The boat survey was initiated June 23, 2007, with the river stage at Memphis, Tennessee at 2.0 and falling (Table 3). This slow fall continued for the duration of the survey, however stages below the mouth of the Arkansas River were influenced by flood conditions on its drainage to the west, adding an extra 10 ft. to Mississippi river stages downstream. This year, as in 2005 and 2006, there was a concerted effort by the American Bird Conservancy to coordinate all Least Tern Monitoring activities within a two-three week time frame. This is to minimize the possibility of different surveys counting the same Least Terns from different areas while terns were still migrating, or recently displaced, looking for optimal breeding habitat. During this 2007 survey the river was exhibiting a slow, continuous fall for every location on the dates surveyed (Table 3). The survey proceeded downstream during daylight hours from Cape Girardeau, Mo., to Baton Rouge, La., at an average pace of 111 miles per day. Due to inclement weather on June 24, the section of river from Caruthersville, Mo (RM 846.0) to Memphis, Tn (RM 735.0) was skipped and surveyed later on July 8 after the rest of the survey was completed.

Upon spotting a likely colony site, the boat would head for the greatest concentration of terns, then approach the bar as close as shallow water levels would allow, cut power, and motor slowly with the current along the perimeter of the bar. Two or more observers would count birds using 7x35 or 8x40 binoculars. One observer counted terns resting along the waterline, while another observer counted birds in the air or sitting inland, presumably on nests. Usually after

this preliminary count, and depending upon the sand bar configuration, the boat would go back and beach near the greatest concentration of terns and one or more observers would then walk toward the perceived center of the colony to find evidence of nesting activity, while others would fan out in different directions to traverse more of the colony area. This technique, counting as the boat proceeds downstream (hereafter referred to as a “perimeter count”), usually produced higher counts than just walking on the sand bar to the colony’s center to induce mobbing (hereafter referred to as a “flush count”). It was particularly effective at colonies where terns were dispersed for several miles along the waterline and the sand bar was low enough that the observers could see across it. However, at many sites, especially those with back chutes with shores not visible from the boat on the channel side, it should be construed that many terns were not seen and the counts were conservative.

The presence of eggs or chicks was considered confirmation of nesting activity. Intense mobbing, wetting of breast feathers, and the presence of fresh scrapes were also considered to indicate an active nest colony at the 55 sites where no eggs or chicks were observed. Once a colony was located, several counts were made, both by observers stationed at the boat and those penetrating the colony. The highest number of birds sighted by any one observer was recorded as the total number for the site, but only when at least two observers were within 5% of the same figure. Only in colonies dispersed over ½ mile in length or with back chutes not visible to all observers, were numbers counted by individual observers added together to obtain a total count. Only one fledged juvenile was noted during the entire survey, and it was on July 8 during the make-up run from Caruthersville, Mo., to Memphis, Tn. Not all colonies were walked by members of the survey party, especially if the colony was widely dispersed and easily observed from the boat. In those instances, even though no eggs were observed, terns seen sitting higher up on the sand bar, away from the waterline, were counted as indicative of number of nests. This assumption produced the larger nest count totals up to 300, as shown in Table 1.

As with previous surveys, observations within the colony were performed as quickly as possible (< 15 minutes) to minimize the disturbance time and limit the exposure of any chicks and eggs to the intense summer heat. Though mobbing behavior was often intense upon the observers first entering the colony, it ceased almost immediately as soon as the observers retreated. The highest counts usually occurred during the initial waterline count or upon the first few minutes of mobbing when most, if not all, of the adults in the colony would join in to dissuade the intrusion. Nesting adults, nest scrapes, and numbers of nests with eggs and chicks were recorded as well as other features of the habitat. Nine thousand eight hundred fourteen (9,814) Least Terns were recorded at 121 locations (Table 1, Figure 1). Of these, 96 sites were identified as nesting colonies with 9,372 adults, 17 sites as resting bars only with 364 adults, and 8 observations were of 78 birds that could not be associated with colonies, either flying over feeding areas or in transit along the river. Of the identified nest colonies, 41 had eggs and/or chicks present and 57 had no observed chicks or eggs. Of the 41 colonies with eggs and/or chicks observed, 6 had chicks but no eggs, 24 had eggs but no chicks, and 11 had both chicks and eggs present within the colony.

As with previous years, the typical tern nest colony was located on an unattached (surrounded by water) sand and/or gravel bar usually associated with a dike field. Those colonies that were attached were located on very large, remote point bars, ½ to 1 mile in width,

and often 2 to 4 miles in length. Isolation and remoteness appeared to be the main selection criteria. The larger colonies were hundreds of acres in size, while some of the smallest were just a few acres or less.

The locations of the colonies as indicated on the 1998 Navigation Maps (Appendix A-I) should be viewed as only approximations based on river mile markers visible from or nearby the sites. Since many sand and gravel bars do move or change shape often, such features on the maps do not necessarily correspond to the actual conditions at the time of the survey (hence the occasional colony indicated in open water). For exact colony locations the GPS latitude/longitude coordinates (decimal degrees) are the most accurate and should be referenced as occurring at the water's edge on the channel side of the colony (except when specified otherwise on the data sheets). Most colonies were located on the high centers or distributed evenly across the bars showing no preference for river vs. chute sides, though there were some exceptions.

The colonies' proximities to the nearest water (least distance from any nest with eggs to the waterline) varied from 10 to 1,000 feet and averaged ~236 feet. Though some colonies were densely populated, with scrapes occurring within a few feet of each other, many more colonies were extremely dispersed with nests occurring hundreds of feet apart and the colony extending as far as a mile or more across the larger sandbars. Major vegetation was absent or far removed (>300 feet) from 80 colony sites, but 16 did have sparse stands of sapling Cottonwoods (*Populus deltoids*) and/or Black Willows (*Salix nigra*) within 300 feet of active nests. The other colonies with vegetation had only very sparse, recently emerged grasses, sedges and forbs in small patches within the colony. Most open water within 2 miles of active colonies appeared to be utilized by foraging terns. These sites included swift current on revetted outside bends, slack water between dikes, chutes, mouths of tributaries and even mid-channel currents.

Recent evidence of predation on terns, their eggs or chicks was noted at 5 colony sites. Mostly Coyotes, but also dogs and foxes were considered responsible for those instances as their tracks wandered from scrape to scrape, with pouncing and often leaving egg shell fragments behind as evidence. The presence of coyote, fox and/or dog tracks was noted at 13 sites and still suggests that coyotes and/or feral dogs are one of the more common predation threats to nesting Least Terns along the Lower Mississippi River. Of 96 colonies, 18 had track evidence of recent intrusion by humans on foot, by boats and ATVs. In 5 colonies there were day campers present at the time of the survey date, but with most limiting their activities to the water line.

Besides Coyotes (*Canis latrans*) and fox (*Vulpes* or *Urocyon*) other potential predators, or their sign, seen near colonies during this year's survey included Armadillo (*Dasypus novemcinctus*), Great Blue Heron (*Ardea herodias*), Egrets (*Casmerodius*, *Egretta*, *Bubulcus*), American Crow (*Corvus brachyrhynchos*), Turkey Vulture (*Cathartes aura*), Black Vulture (*Coragyps atratus*), Mississippi Kite (*Ictinia mississippiensis*) and Bald Eagle (*Haliaeetus leucocephalus*). Also, a possible Red Wolf (*Canis niger*) was observed at Carthage Point Dikes (RM 358).

Other bird species observed on the sand bars or in close proximity to Least Tern colonies included White Pelican (*Pelecanus erythrorhynchos*), Anhinga (*Anhinga anhinga*), Double-

Crested Cormorant (*Phalacrocorax auritus*), Cattle Egret (*Bubulcus ibis*), Snowy egret (*Egretta thula*), Great Egret (*Casmerodius albus*), Great Blue Heron (*Ardea herodias*), Belted Kingfisher (*Megasceryle alcyon*) White Ibis (*Eudocius albus*), Canada Goose (*Branta canadensis*), Mallard Duck (*Anas platyrhynchos*), Killdeer (*Charadrius vociferous*), Sandpipers (*Calidris sp.*) Caspian Tern (*Sterna caspia*), Tree Swallow (*Tachycineta bicolor*), Purple Martin (*Progne subis*), Red-winged Blackbird (*Agelaius phoeniceus*), and Common Grackle (*Quiscalus quiscula*).

Fingerling-size fish of shad (*Dorosoma*), White Bass (*Morone chrysops*), Silver Carp (*Hypophthalmichthys molitrix*) and other fish species were found in colonies and are presumed to have been dropped by foraging adults.

This year's survey was the fourth to cover the additional 200 river miles below Vicksburg, Mississippi and yielded a total count that was up from the 2006 count by roughly 20%. Only the 2004 and 2005 surveys (Figure 2) yielded a higher count than this year's, the third highest count ever for Least Terns in the Lower Mississippi.

Table 1: Least Tern Survey - June 23 - July 8, 2007 - Mississippi River
Cape Girardeau, Missouri, to Baton Rouge, Louisiana

River					Least		
Mile	Mississippi River Location	State	Lat. N	Long. W	Terns		Nests
RIVER MILE:	SITE NAME:	State	Latitude:	Longitude:	Adults:		Nests:
UR 30.5	Bumgard Island	IL	37.04622	89.38099	16	C*	1
946.0	Island #1 Dikes	KY	36.88722	89.11982	23	*	1
940.0	Below Campbell Dikes	KY	36.8035	89.13336	220	C*	8
930.5	Wolf Island Bar	KY	36.68979	89.1482	95	C*	12
924.5	Beckwith Bend	KY	36.60686	89.20319	82	C*	12
920.0	Hickman Bend	MO	36.56955	89.23435	33	C*	3
908.0	Island #6	KY	36.5505	89.40043	21		0
884.0	Kentucky Point Dikes Lower	KY	36.51784	89.55375	22	C*	1
876.0	Marr Towhead	TN	36.4184	89.5363	13	C*	3
872.5	Stewart Towhead Dikes Upper	MO	36.35763	89.51528	150	C*	2
870.5	Stewart Towhead Dikes Lower	MO	36.34634	89.52654	75	C*	5
864.5	Below Cherokee Dikes	TN	36.3201	89.615	9		0
855	Robinson Bayou Dikes	MO	36.24504	89.58076	74	C*	3
846.3	Opp. Caruthersville Dikes	TN	36.19892	89.64358	56	C*	0
840-843	Linwood Bend	MO	36.1659	89.6065	15	C*	9
836.0	Island #18 Towhead Dikes	TN	36.10308	89.63945	127	C*	10
830.0	Island #20 Dikes Upper	TN	36.02275	89.69420	2		0
828.2	Island #20 Dikes Lower	TN	36.01326	89.70654	11		0
827.0	Head of Island #21 Dikes	TN	NA	NA	8		0
825.2	Island #21	TN	35.99061	89.71052	42	C*	0
819.0	Wrights Point Dikes	AR	35.91022	89.64837	56	C*	6
811.5	Below Tamm Bend Dikes Upper	TN	35.90696	89.7452	135	C*	9

SUBTOTAL

1,285

Table 1 continued: Least Tern Survey - June 23 - July 8, 2007 - Mississippi River
Cape Girardeau, MO, to Baton Rouge, LA

River					Least		
Mile	Mississippi River Location	State	Lat. N	Long. W	Terns		Nests
RIVER MILE:	SITE NAME:	State	Latitude:	Longitude:	Adults:		Nests:
807.3	Nebraska Point Dikes Lower	TN	35.85965	89.75936	53	C*	9
803.0	Bend of Island #25	AR	35.82105	89.69914	62	C*	17
797.5	Forked Deer Dikes Lower	TN	35.78093	89.77006	225	C*	30
794.0	Ashport Goldust Dikes	AR	35.79805	89.82213	35		0
789.5	Keyes Point Dikes Upper	TN	35.71679	89.92629	46	C*	9
787.0	Keyes Point Dikes Lower	TN	35.71675	89.92629	79	C*	13
783.5	Below Plum Point Dikes	TN	35.68624	89.91379	303	C*	50
778	Driver Cut-Off	AR	NA	NA	4		0
775.5	Hatchie Towhead	TN	35.53149	89.9095	64	*	6
771.1	Randolph Upper	TN	35.53444	89.89822	150	C*	40
770.5	Randolph Lower	TN	35.52599	89.89949	250	C*	15
766.0	Below Richardson Landing Dikes	TN	35.5244	89.98	16		0
760.5	Cedar Point	TN	35.45266	89.9981	87	*	2
755.0	Densford Bar	TN	35.3902	90.0703	54	C*	4
743	Above Loosahatchie Dikes	TN	35.25086	90.09163	27	C*	4
740.5	Loosahatchie Bar Dikes	AR	35.20767	90.07191	32	C*	1
733.0	Engineer Bar Dikes	AR	35.12323	90.10361	27	*	0
729.5	Vice Presidents Island #46	TN	35.1252	90.1614	121	C*	2
725.0	Dismal Point Dikes Upper	AR	35.0691	90.1838	22	*	0
720.8	Dismal Point Dikes Lower	AR	35.02695	90.21297	60		0
715	Cow Island Bend	MS	35.00434	90.29861	36	C*	6
705	Seyppel Dikes	AR	34.88831	90.2876	32	C*	5
703	Pickett Dikes	AR	34.87582	90.30779	200	C*	25
700.0	Porter Lake Dikes	AR	34.8433	90.36764	65	C*	4
693.0	Commerce Dikes	MS	34.8152	90.4563	112	*	0
687.0	Mhoon Bend	AR	34.73875	90.45414	81	C*	2
680.0	Bordeaux Point Dikes	MS	34.73383	90.56013	21	*	0
676.7	Hardin Cut-Off	AR	34.68522	90.56622	230	C*	75

SUBTOTAL

2,494

Table 1 continued: Least Tern Survey - June 23 - July 8, 2007 - Mississippi River
Cape Girardeau, MO, to Baton Rouge, LA

River Mile	Mississippi River Location	State	Lat. N	Long. W	Least Terns			Nests
RIVER MILE:	SITE NAME:	State	Latitude:	Longitude:	Adults:			Nests:
676.5	Below Walnut Bend Dikes	AR	34.67685	90.57188	29	*		2
672.0	St. Francis Bend	MS	34.6241	90.5835	97	C*		8
668.0	Prairie Point Dikes	AR	34.5625	90.5536	39	*		3
666.5	Prairie Point Towhead	AR	34.54669	90.54383	92	C*		20
662.5	Helena Reach Upper	MS	34.51256	90.58333	35	C*		1
660.0	Helena Reach Lower	MS	34.4602	90.5827	49	C*		1
658.5	Montezuma Bar Dikes	MS	34.4601	90.58348	40	C*		9
656	Montezuma Towhead Dikes	AR	34.40805	90.59296	65	C*		2
651.5	Friars Point Dikes	MS	34.37308	90.67082	65	C*		1
647.0	Kangaroo Point Dikes	AR	34.3661	90.7297	13			0
643.4	Old Town Bend	MS	34.3485	90.7658	39	C*		10
640.0	Island #62 Dikes	AR	34.30351	90.73866	18	*		0
633.0	Robson Towhead	MS	34.26166	90.83301	18	C*		4
629.0	Island #64 Dikes	AR	34.2203	90.8483	6			0
625.0	Sunflower Cut-Off	AR	34.1695	90.90257	350	C*		110
623.0	Below Ludlow Dikes	AR	34.1583	90.9303	12			0
620.0	Island #67 Dikes	MS	34.1150	90.9490	61	C*		11
616.0	Below Knowlton Dikes Upper	AR	34.0811	90.9081	34	*		2
613.6	Below Knowlton Dikes	AR	34.04383	90.89169	25	C*		15
608.0	Island #70 Dikes	MS	34.01977	90.9859	166	*		48
603.0	Henrico Dikes	MS	33.9898	91.0500	70	*		4
599.5	Smith Point Dikes	MS	33.9571	91.0798	15			0
595.0	Victoria Bend Dikes	AR	33.9295	91.0186	130	C*		0
589.0	Terrene Dikes	MS	33.8415	91.0632	88	*		30
583.5	Malone Field Dikes	AR	33.7860	91.0517	42	*		4
578.0	Below Prentiss Dikes	MS	33.7502	91.1336	54	*		9
573.5	Caulk Neck Cut-Off	AR	33.7087	91.1706	3			0
568.6	Catfish Point Dikes	MS	33.6781	91.2242	62	*		9
560.0	Choctaw Bar Island	AR	33.62822	91.014918	21			0
558.5	Choctaw Bend	AR	NA	NA	11			0
554.0	Huntington Point	MS	NA	NA	18	*		4
551	Georgetown Bend	MS	33.51858	91.19123	153	C*		25

SUBTOTAL

1,920

Table 1 continued: Least Tern Survey - June 23 - July 8, 2007 - Mississippi River
Cape Girardeau, MO, to Baton Rouge, LA

River					Least		
Mile	Mississippi River Location	State	Lat. N	Long. W	Terns		Nests
RIVER MILE:	SITE NAME:	State	Latitude:	Longitude:	Adults:		Nests:
544.5	Island #82 Miller Bend D kes	AR	33.42406	91.11989	239	C*	18
540.0	Leland Neck Dikes	MS	33.39602	91.1087	410	C*	130
528.3	Refuge D kes	MS	33.26653	91.12264	125	C*	8
523.0	Seven Oaks D kes	AR	33.18262	91.09313	75	C*	4
521.0	Island #86 D kes Upper	AR	33.15795	91.0872	148	*	50
519.5	Island #86 Dikes Lower	AR	33.1291	91.10169	42	*	7
514.0	Leota Dikes	MS	33.09132	91.16353	62	*	25
510	Cracraft Lower Dikes Upper	AR	33.0381	91.1577	32	*	6
509	Cracraft Lower D kes Lower	AR	33.02516	91.15446	32	*	7
504.0	Corregidor Dikes	MS	32.95736	91.14347	667	*	300
499	Wilson Point D kes	LA	32.9435	91.0833	37	*	8
491.5	Baleshed Landing Dikes	MS	32.8417	91.1278	140	*	36
487.5	Ben Lommond Dikes	MS	32.80477	91.14308	65	C*	17
484.0	Ajax Bar Dikes Upper	MS	32.7455	91.14376	45	C*	12
481.5	Ajax Bar Dikes	MS	32.73746	91.11895	28	C*	4
480.8	Ajax Bar D kes Lower	MS	32.73697	91.10903	95	C*	22
476.6	Point Lookout Dike	LA	32.71685	91.05885	146	*	34
468.5	Arcadia Point Dikes	MS	32.65489	91.1406	29	*	5
460.4	Willow Cutoff D kes	LA	32.5361	91.1006	112		0
456.0	Milliken Bend	MS	32.4757	91.10504	37	*	4
446.5	Marshall Cutoff D kes	LA	32.40516	901.00311	260	*	120
428.5	Below Racetrack Dikes	MS	32.2355	90.97885	109	C*	34
419.0	Newton Bend Dikes	LA	32.1367	91.0100	52	*	22

SUBTOTAL

2,987

Table 1 continued: Least Tern Survey - June 23 - July 8, 2007 - Mississippi River
Cape Girardeau, MO, to Baton Rouge, LA

River					Least		
Mile	Mississippi River Location	State	Lat. N	Long. W	Terns		Nests
RIVER MILE:	SITE NAME:	State	Latitude:	Longitude:	Adults:		Nests:
414.0	Togo Island D kes	LA	32.1094	91.10172	115	c*	35
410	Yucatan D kes	MS	32.07094	91.07669	40	c*	2
409	Big Black River	MS	NA	NA	38		0
398	Below Grand Gulf D kes	MS	31.95363	91.18744	15	*	1
384.2	Spithead Towhead D kes	MS	31.83712	91.34592	200	c*	68
378.0	Waterproof Dikes	LA	31.7604	91.3708	18		0
357.5	Carthage Point Dikes	MS	31.51529	91.49569	7		0
352	Opposite Warnicott Landing Dikes	MS	31.4208	91.4950	17		0
347.5	Esperance Point	LA	31.39534	91.46793	125	c*	22
336.5	Fritz Island Dikes	LA	31.2617	91.56205	150	c*	32
329.0	Jackson Point	MS	31.24683	91.65112	225	c*	16
322.0	Homochito Cutoff	LA	31.1742	91.5947	35	*	9
305.0	Shreves Bar	LA	30.9960	91.6441	2		
300.5	Hog Point Dikes	LA	30.9354	91.64571	138	c*	32
SUBTOTAL					1125		
TOTAL INDIVIDUALS					9,814		
TOTAL SITES					121		
TOTAL COLONIES					96		

c Confirmed chicks or eggs

* Nest colony determined by bird behavior (sitting inland, breasting, carrying fish, etc.)

Table 2: Summary of 2007 Least Tern Survey on the Lower Mississippi River

River Reach	Number of Terns (June 23-July 8, 2007)
Cape Girardeau, MO, to Cairo, IL URM 50 – RM 954	16
Cairo, IL, to Osceola, AR RM 954 – RM 790	1,647
Osceola, AR, to Helena, AR RM 790 – RM 670	2,245
Helena, AR, to Greenville, MS RM 670 – RM 530	2,443
Greenville, MS, to Vicksburg, MS RM 530 – RM 430	2,177
Vicksburg, MS, to Baton Rouge, LA RM 430 - RM 230	1,286
TOTAL	9,814
River Reach	Number of Colonies
Cape Girardeau, MO, to Cairo, IL URM 50 – RM 954	1
Cairo, IL, to Osceola, AR RM 954 – RM 790	20
Osceola, AR, to Helena, AR RM 790 – RM 670	23
Helena, AR, to Greenville, MS RM 670 – RM 530	23
Greenville, MS, to Vicksburg, MS RM 530 – RM 430	18
Vicksburg, MS, to Baton Rouge, LA RM 430 - RM 230	11
TOTAL	96

Table 3: Gage Readings – Lower Mississippi River
Least Tern Surveys – June, July 2007

Shaded numbers indicate local stages at time of survey.

Date	Cairo	New Madrid	Caruthersville	Memphis	Helena	Arkansas City	Greenville	Vicksburg	Natchez
June 14	19.3	10.4	12.8	5.6	12.3	13.8	25.4	19.6	26.8
15	19.5	10.2	12.4	5.2	11.8	13.8	25.2	19.2	26.5
16	19.1	10.0	12.3	4.9	11.5	14.1	25.5	19.1	26.2
17	18.5	9.6	12.0	4.7	11.2	14.3	25.8	19.2	26.1
18	17.8	8.9	11.4	4.4	10.9	14.6	26.0	19.4	26.2
19	17.4	8.3	10.7	3.9	10.6	14.9	26.3	19.6	26.4
20	17.1	7.6	10.2	3.3	10.1	14.8	26.2	20.0	26.9
21	17.4	7.6	9.9	2.6	9.5	14.6	26.0	20.0	27.1
22	16.8	7.4	9.8	2.2	8.9	14.3	25.7	MSG	27.3
23	16.4	6.9	9.4	2.0	8.4	14.1	25.5	19.8	27.3
24	16.2	6.5	9.0	1.7	8.2	13.8	MSG	19.6	27.2
25	16.2	6.2	8.7	1.3	7.8	13.5	24.9	19.4	27.0
26	17.1	6.7	8.7	1.0	7.4	13.3	24.7	18.9	26.8
27	17.5	7.3	9.2	0.9	7.1	13.2	24.5	18.6	26.7
28	18.7	8.2	10.0	1.3	7.1	13.0	24.3	18.4	26.5
29	17.9	8.3	10.5	1.9	7.5	12.9	24.1	18.1	26.1
30	.917	8.1	10.4	2.5	8.1	12.8	24.0	17.8	26.0
July 1	17.3	7.9	10.3	2.7	8.6	13.0	24.0	17.6	27.3
2	17.4	7.4	9.9	2.8	8.9	13.5	MISG	17.8	27.4
3	17.0	7.5	9.7	2.5	9.1	14.0	25.1	18.2	27.4
4	16.9	7.1	9.5	2.2	9.0	14.2	25.5	18.7	27.2
5	17.0	5.9	9.3	1.8	8.8	14.3	25.7	19.1	26.7
6	16.8	7.2	9.7	1.6	8.6	14.2	25.8	19.3	27.1
7	16.6	6.3	10.3	1.8	8.4	14.2	25.8	19.4	27.3
8	16.3	5.2	11.0	2.2	8.3	14.0	25.6	19.4	27.4
9	16.1	4.0	11.6	2.9	8.2	13.7	25.3	19.2	27.4
10	16.0	3.7	11.2	3.5	8.1	13.4	25.0	18.9	27.2
11	15.8	3.8	10.5	3.6	7.9	13.1	24.7	18.6	26.9
12	16.6	7.2	9.9	3.1	9.9	16.3	28.1	22.1	30.7
13	15.8	6.3	9.1	2.4	9.5	16.8	28.6	22.7	31.2
14	14.4	5.2	8.2	1.6	8.9	16.9	28.8	23.5	31.8
15	14.0	4.0	7.0	0.8	8.0	16.7	28.6	23.9	32.7
16	14.4	3.7	6.3	-0.4	7.0	16.3	28.2	24.1	33.4
17	14.2	3.8	6.3	-1.3	5.8	15.9	27.7	23.8	33.4

Table 4: Summary of Least Tern Surveys – 1985 – 2007
Lower Mississippi River

Year	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Aerial											
Individuals	187	1,332	1,125	1,018	2,503	4,182	3,358	2,311	4,589	3,303	3,759
Sites	12	37	49	56	58	56	67	80	66	66	63
Colonies	3	16	24	31	46	36	56	61	46	40	51
Towboat											
Individuals	577	595	575	1,235	508	357	1,154	1,216	2,031	965	489
Sites	35	39	45	71	25	31	39	47	48	39	25
Colonies	15	16	21	33	9	3	29	34	21	30	1
Small Boat											
Individuals	0	2,188	2,206	2,356	2,005	5,038	4,297	3,653	0	6,776	6,971
Sites	0	41	50	72	64	38	66	81	0	78	70
Colonies	0	28	46	60	42	32	57	74	0	69	62
Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Aerial											
Individuals	3,677	2,129	0	0	0	0	0	0	0	0	0
Sites	81	81	0	0	0	0	0	0	0	0	0
Colonies	20	23	0	0	0	0	0	0	0	0	0
Small Boat											
Individuals	3,067	3,428	5,538	6,159	5,920	6,361	5,802	8,082	11,239	10,960	8,171
Sites	47	79	91	134	124	141	100	115	114	118	144
Colonies	31	57	39	38	64	54	68	68	69	88	107
Year	2007										
Small Boat											
Individuals	9,814										
Sites	121										
Colonies	96										



Figure 1: Least Tern Survey – 2007 – Area Map of Nest Colonies on Mississippi River – Cape Girardeau, MO to Baton Rouge, LA

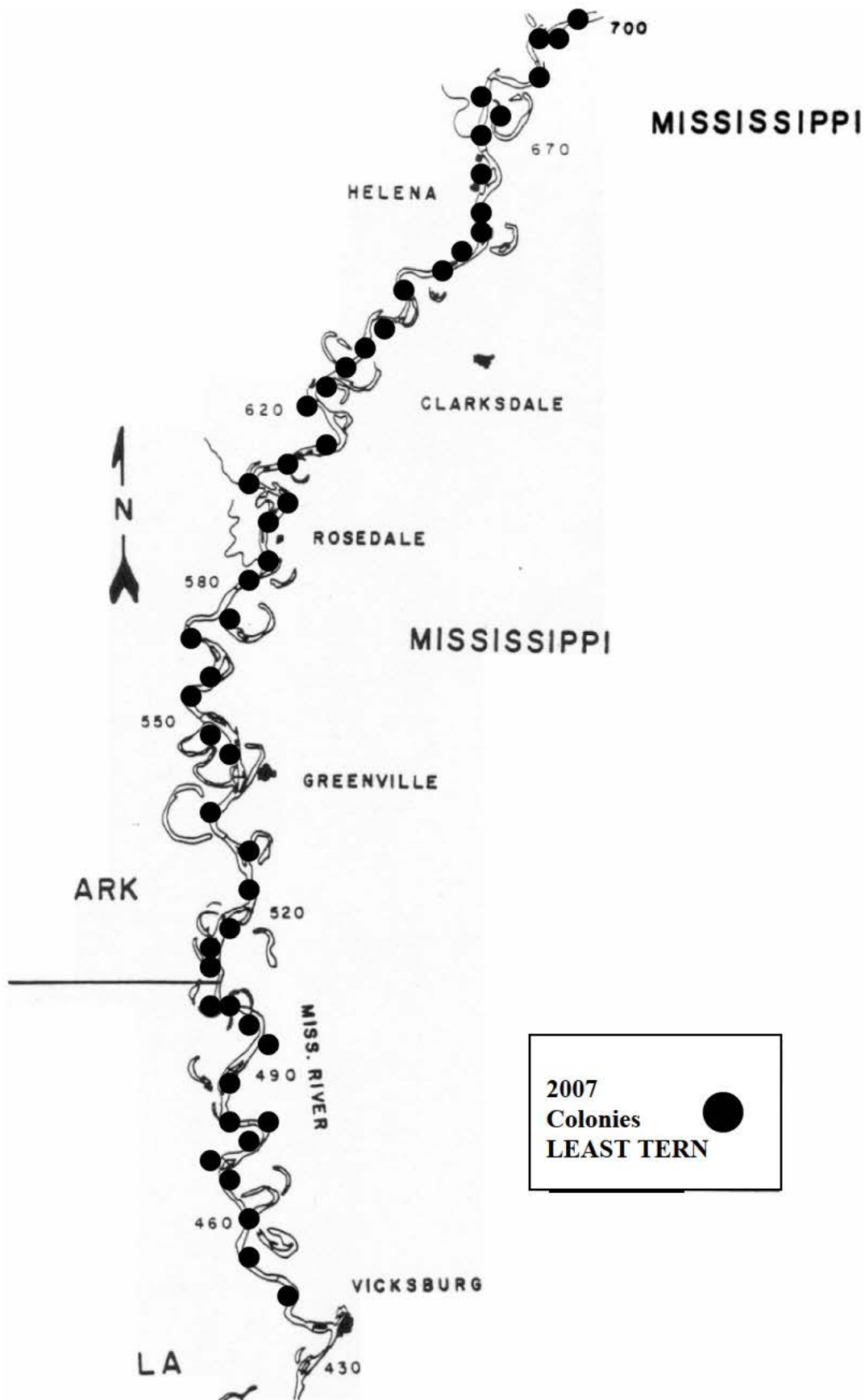


Figure 1 Continued: Area Map of Nest Colonies

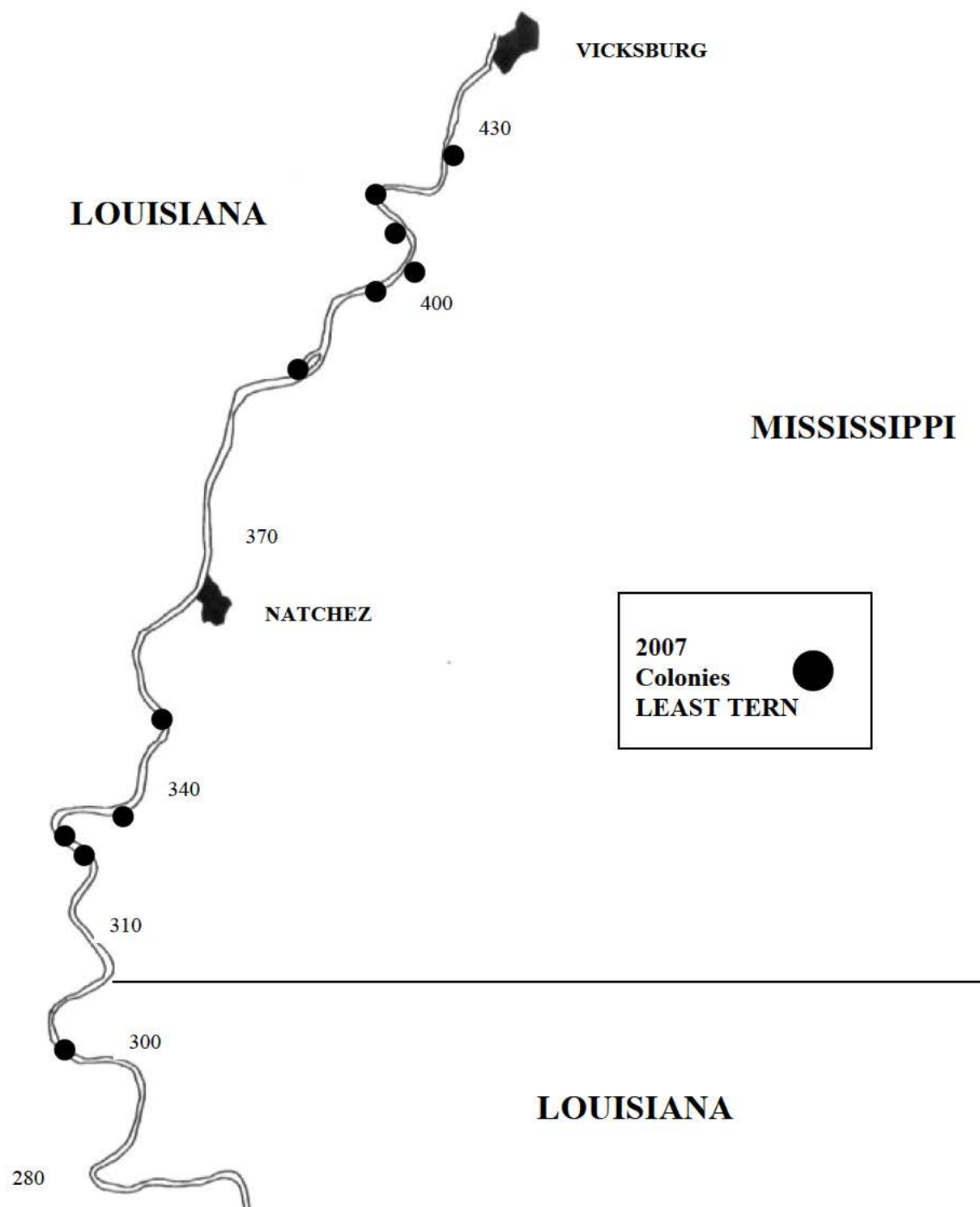
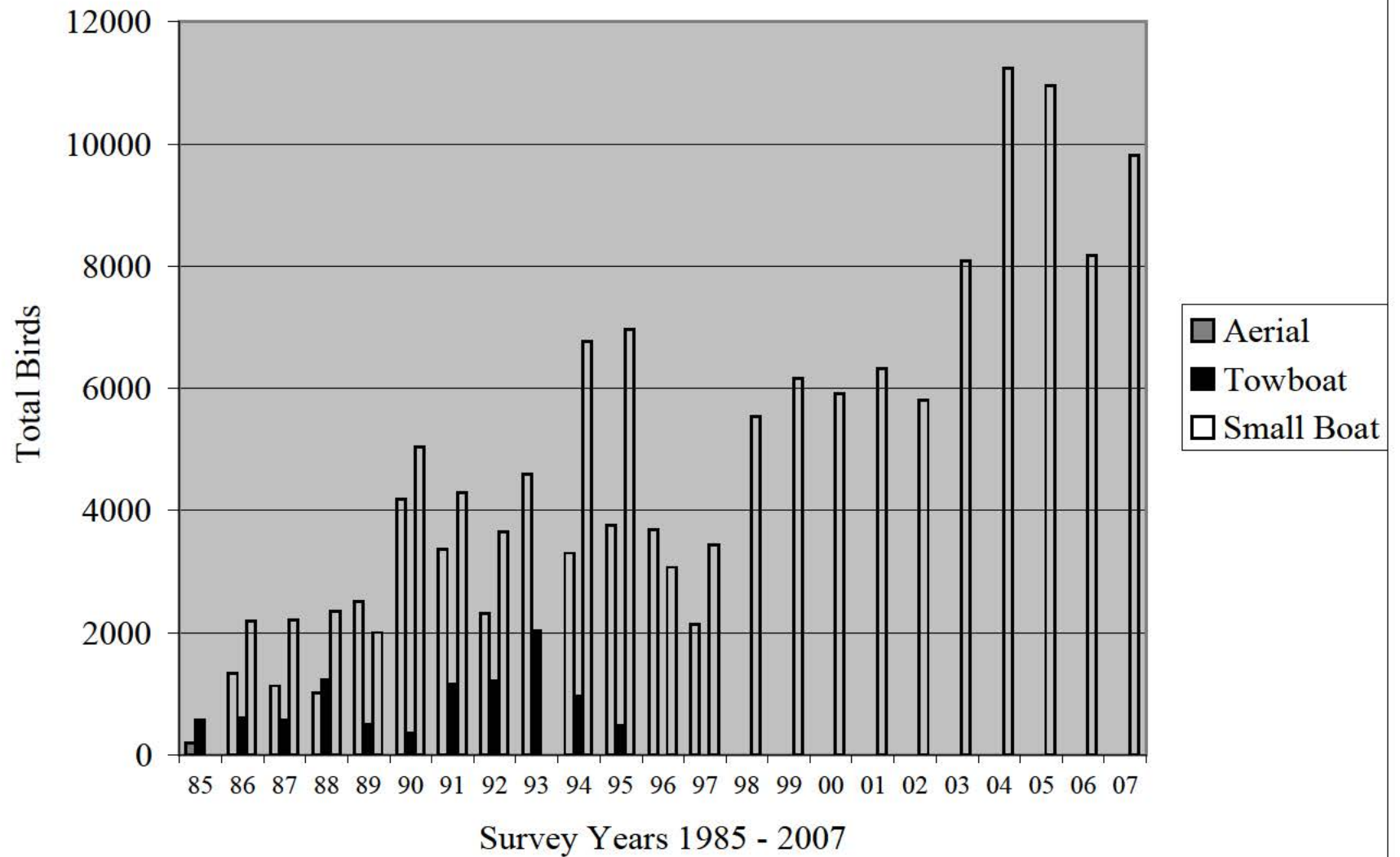


Figure 1 Continued: Area Map of Nest Colonies

Least Tern Surveys
Lower Mississippi River



**Population Survey of the Interior Least Tern
On the Mississippi River from
Cape Girardeau, Missouri to Baton Rouge, Louisiana**

2007

APPENDIX A

APPENDIX A – I

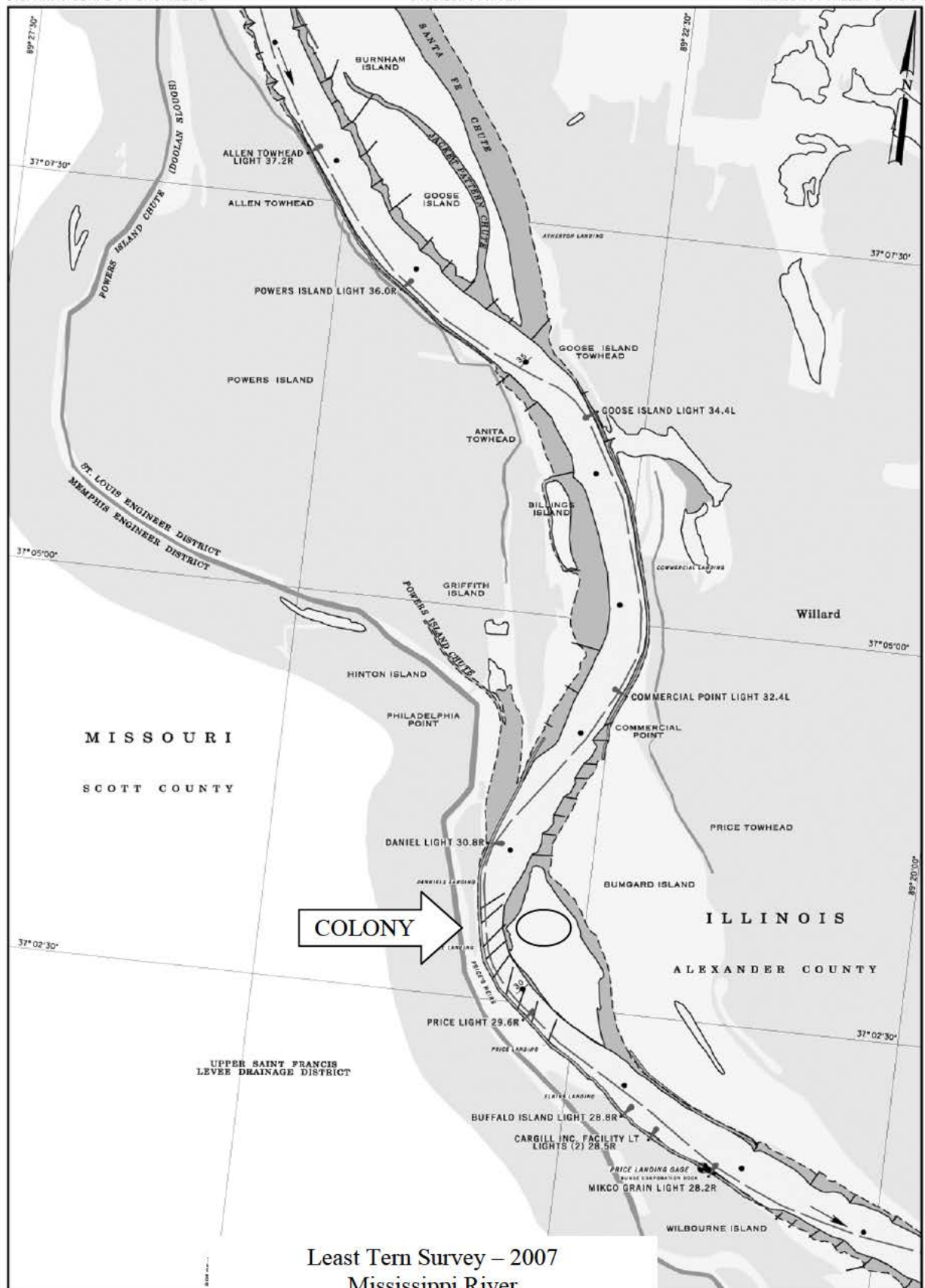
LEAST TERN SURVEY - 2007

**Mississippi River
Cape Girardeau, MO to Baton Rouge, LA**

NEST COLONY LOCATIONS

Memphis District, Corps of Engineers

Maps



1998

MAP NO. 27

Least Tern Survey – 2007
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-1

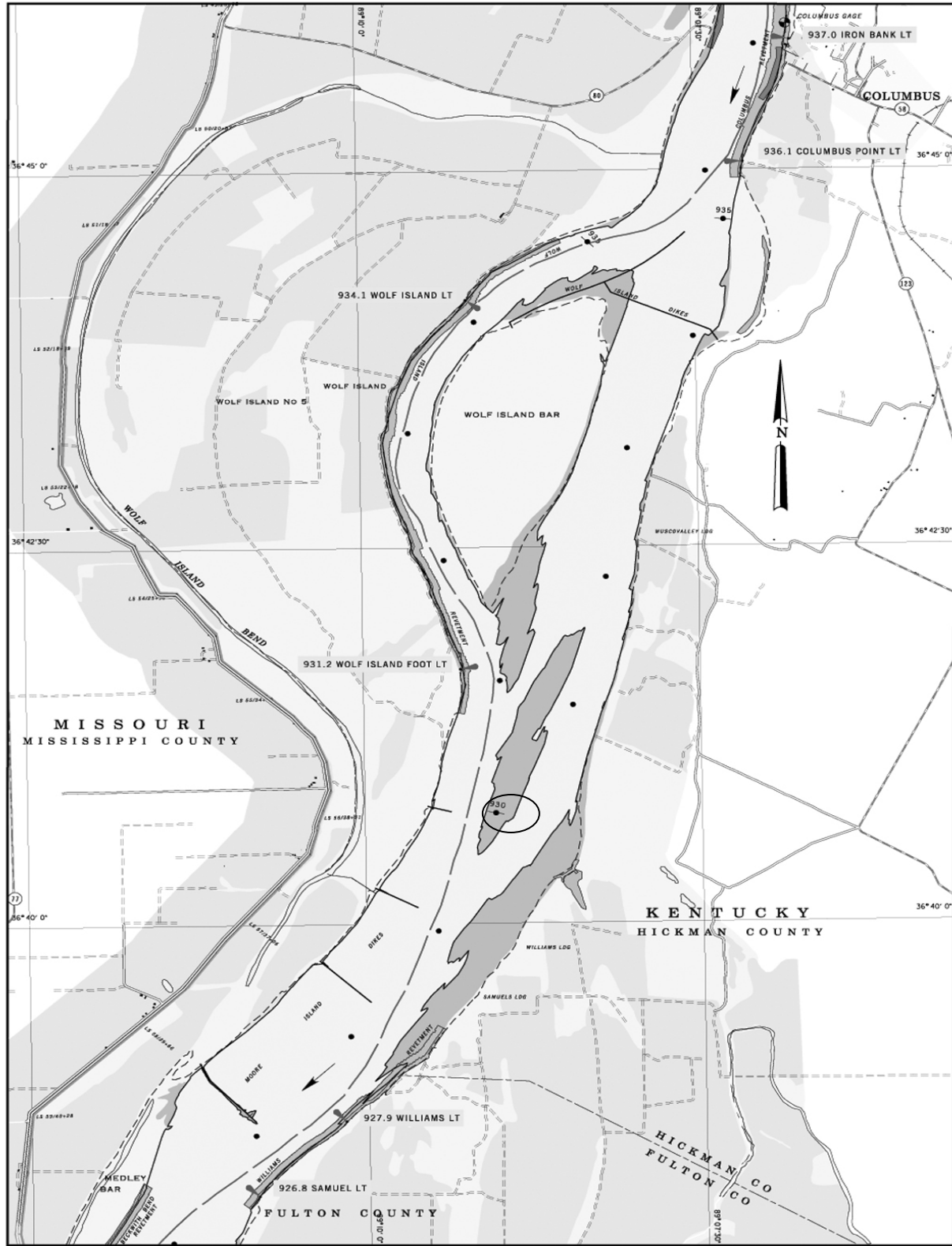


Least Tern Survey – 2007
Mississippi River
Cape Girardeau, MO to Baton Rouge, LA
Nest Colony Locations
Memphis District Corps of Engineers
A-I-2

U.S. ARMY CORPS OF ENGINEERS

MISSISSIPPI RIVER

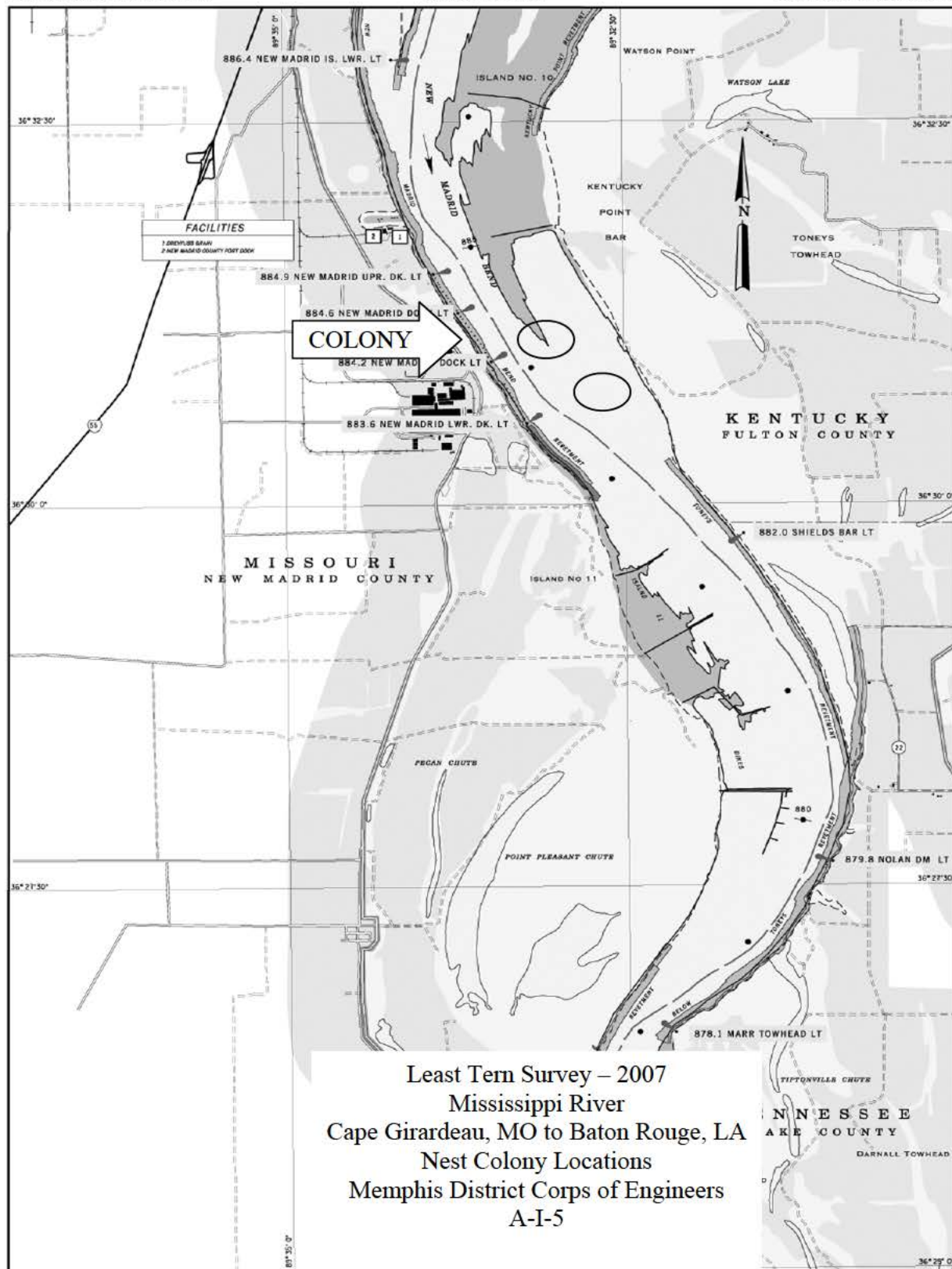
MISSISSIPPI VALLEY DIVISION



1998

SCALE 1:31,680
1 INCH = 1/2 MILE

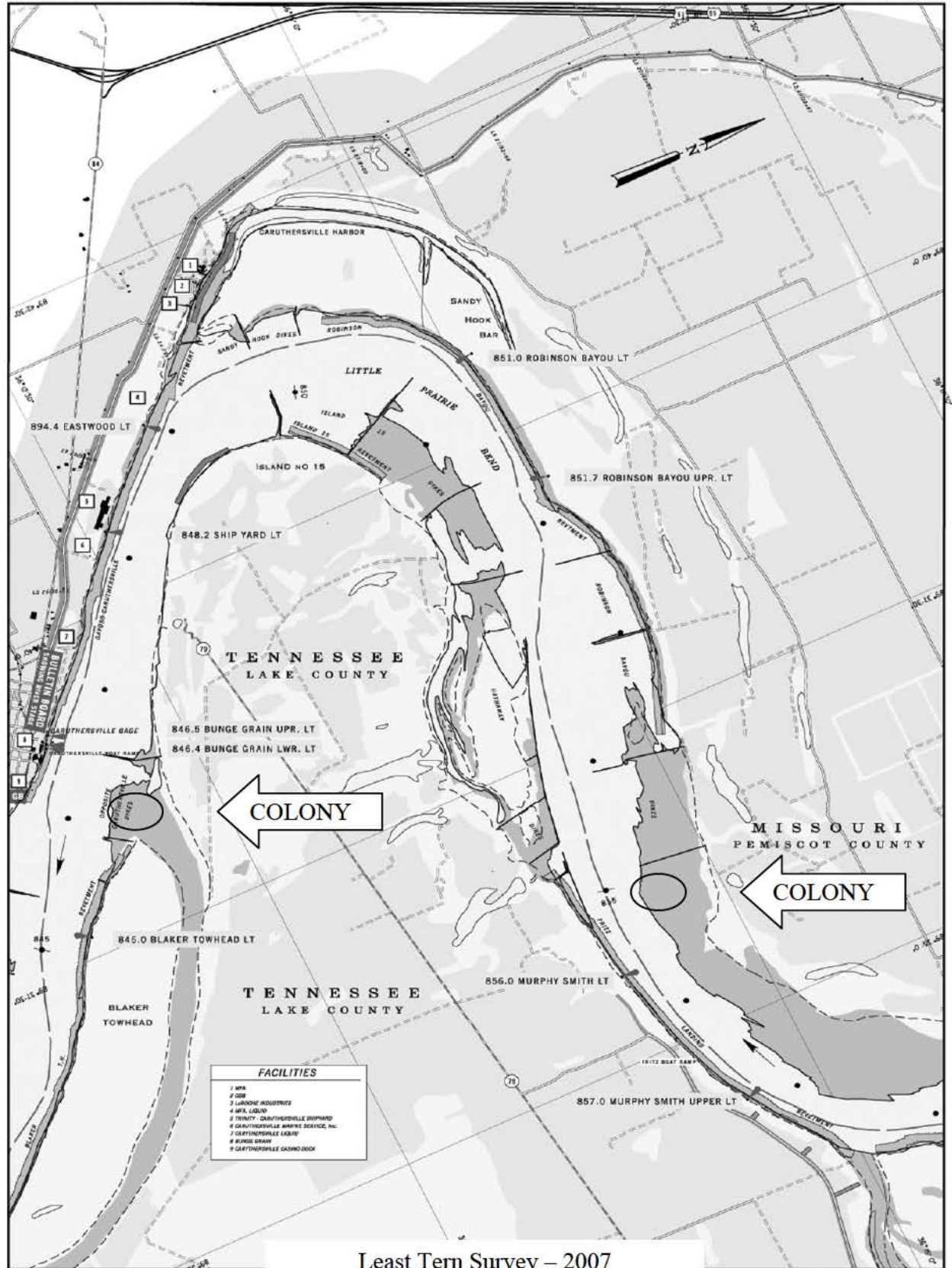
MAP NO. 32





Least Tern Survey – 2007
Mississippi River
Cape Girardeau, MO to Baton Rouge, LA
Nest Colony Locations
Memphis District Corps of Engineers
A-I-6

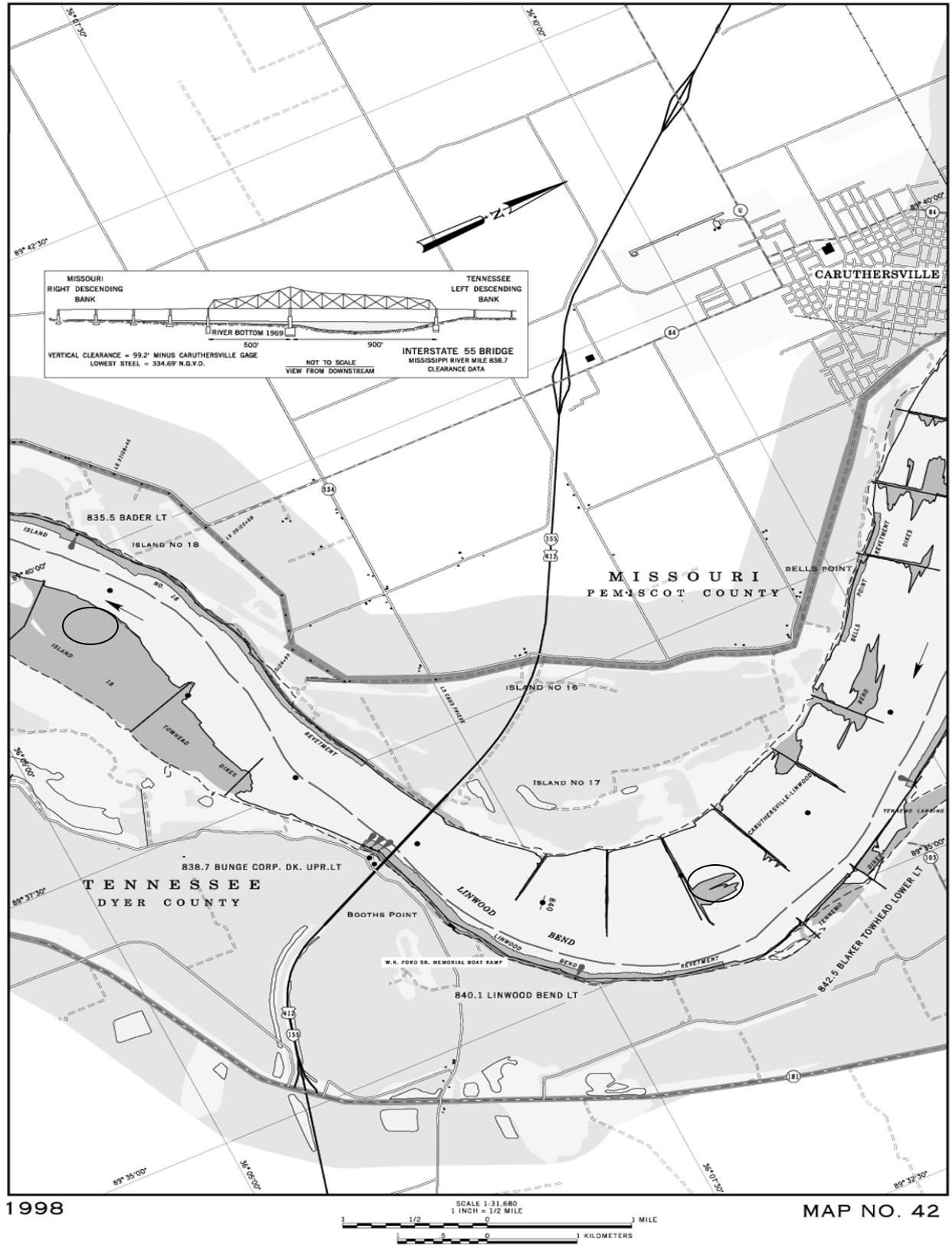
MAP NO. 38

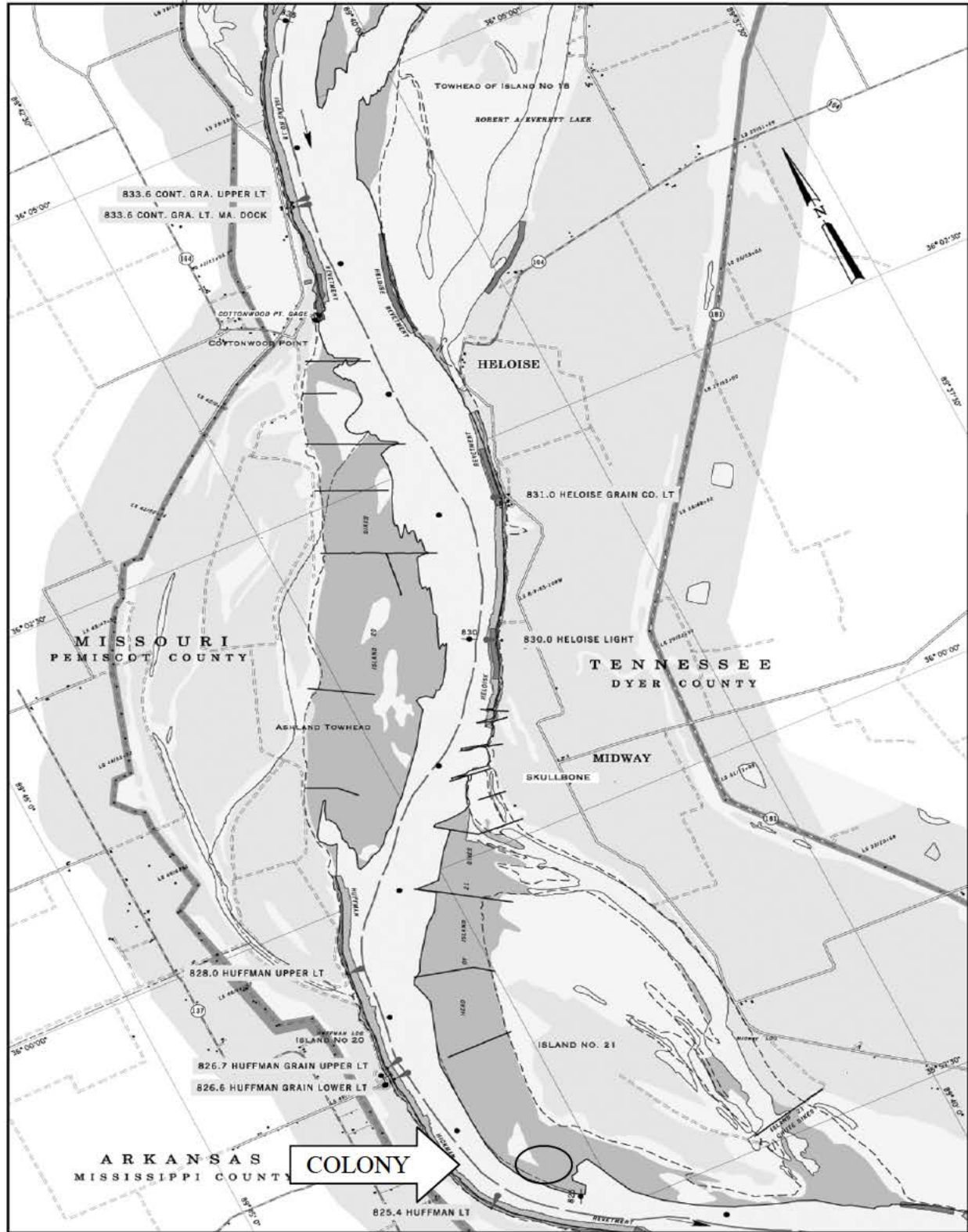


1998

Least Tern Survey – 2007
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-7

MAP NO. 40

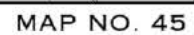




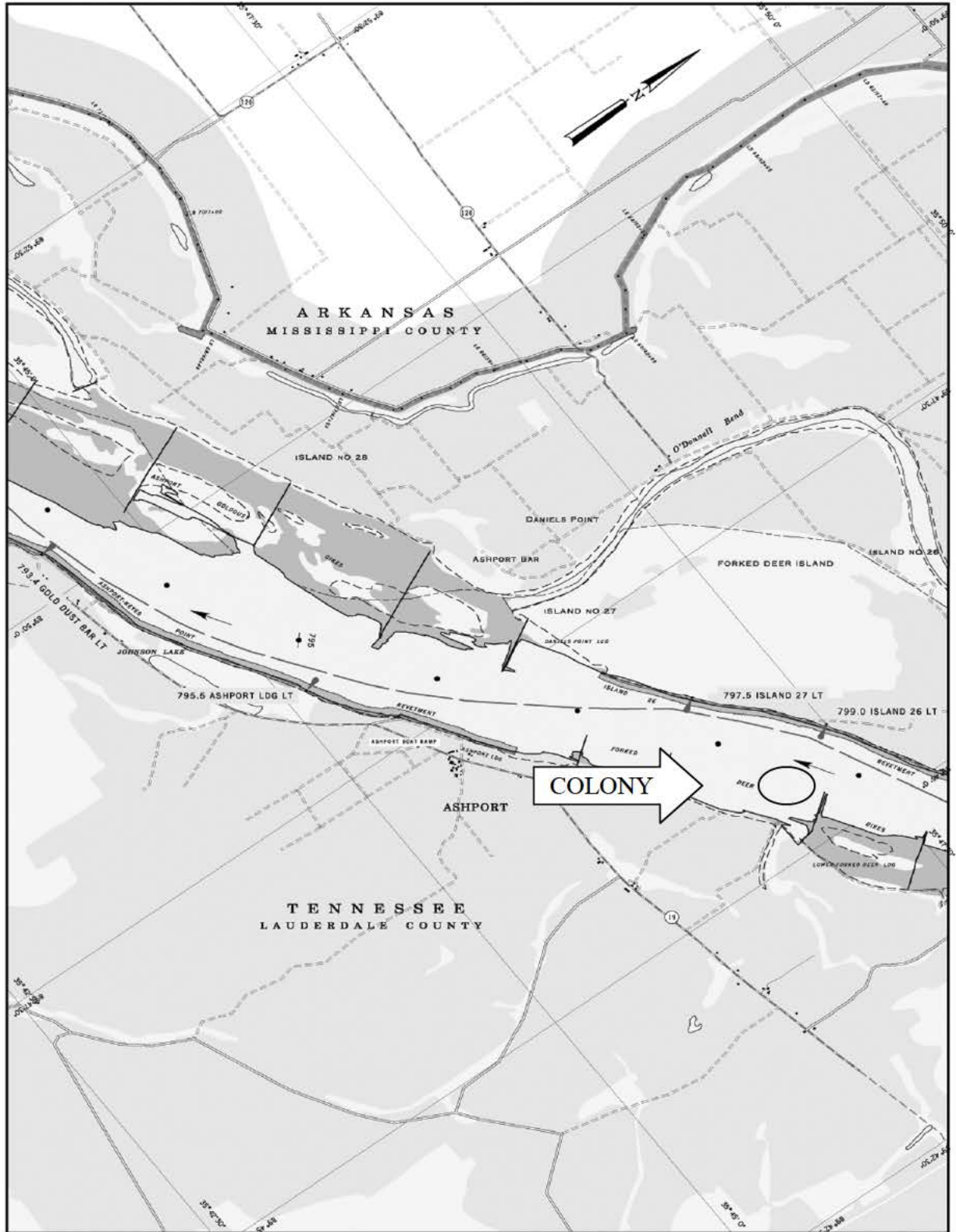
1998

MAP NO. 43

Least Tern Survey - 2007
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-9



Least Tern Survey – 2007
Mississippi River
Cape Girardeau, MO to Baton Rouge, LA
Nest Colony Locations
Memphis District Corps of Engineers
A-I-10

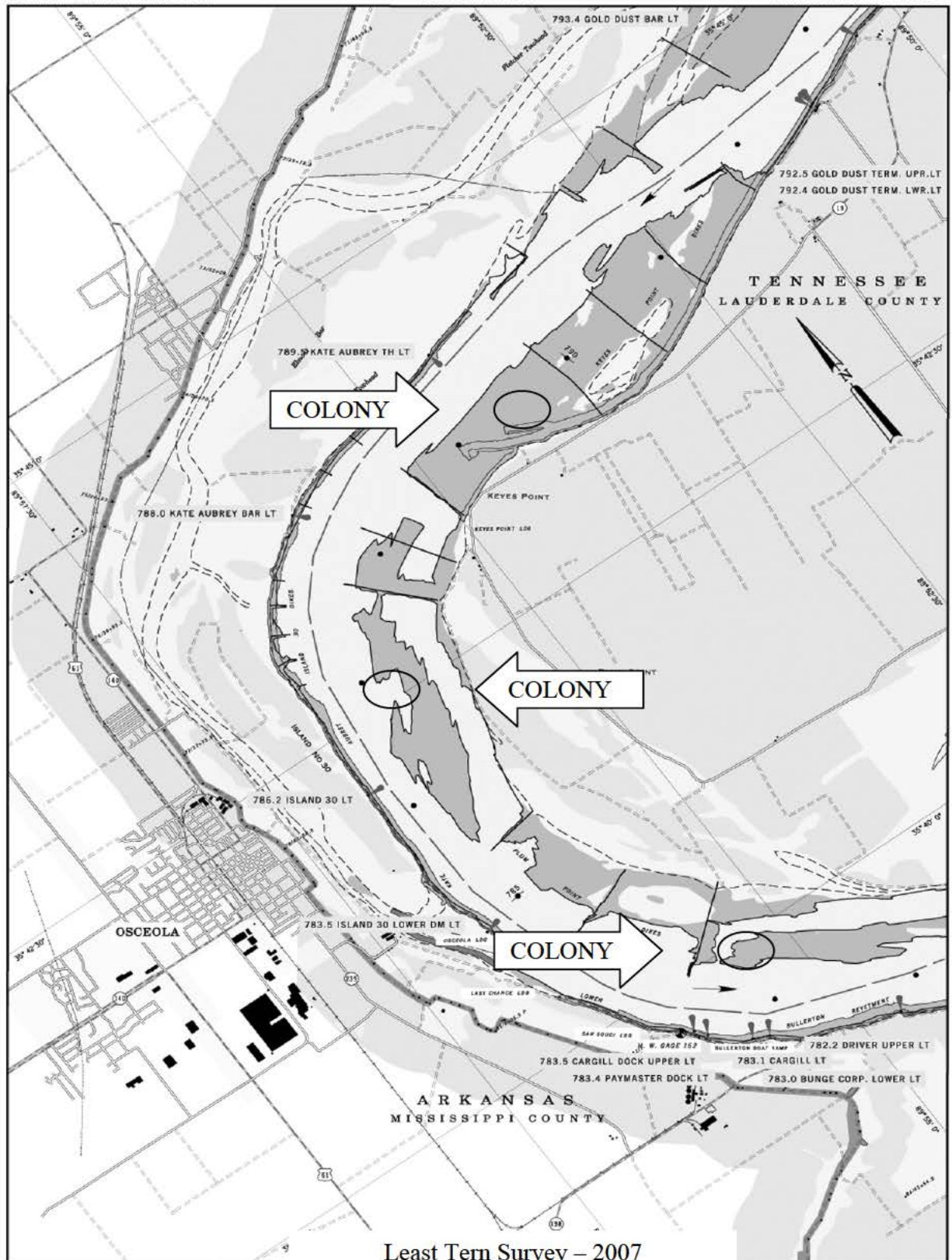


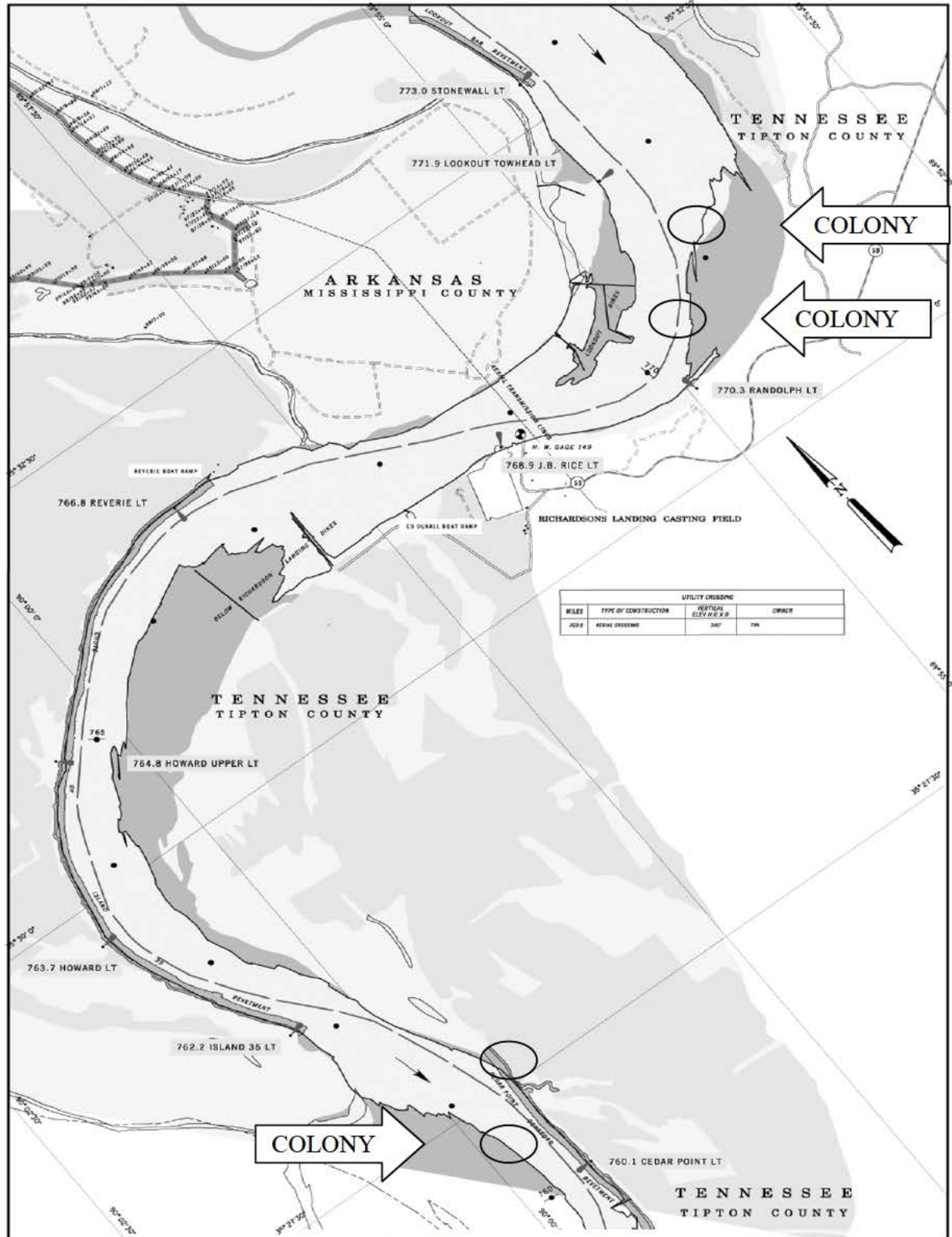
1998

Least Tern Survey – 2007

MAP NO. 47

Mississippi River
Cape Girardeau, MO to Baton Rouge, LA
Nest Colony Locations
Memphis District Corps of Engineers
A-I-11





1998

Least Tern Survey - 2007

MAP NO. 51

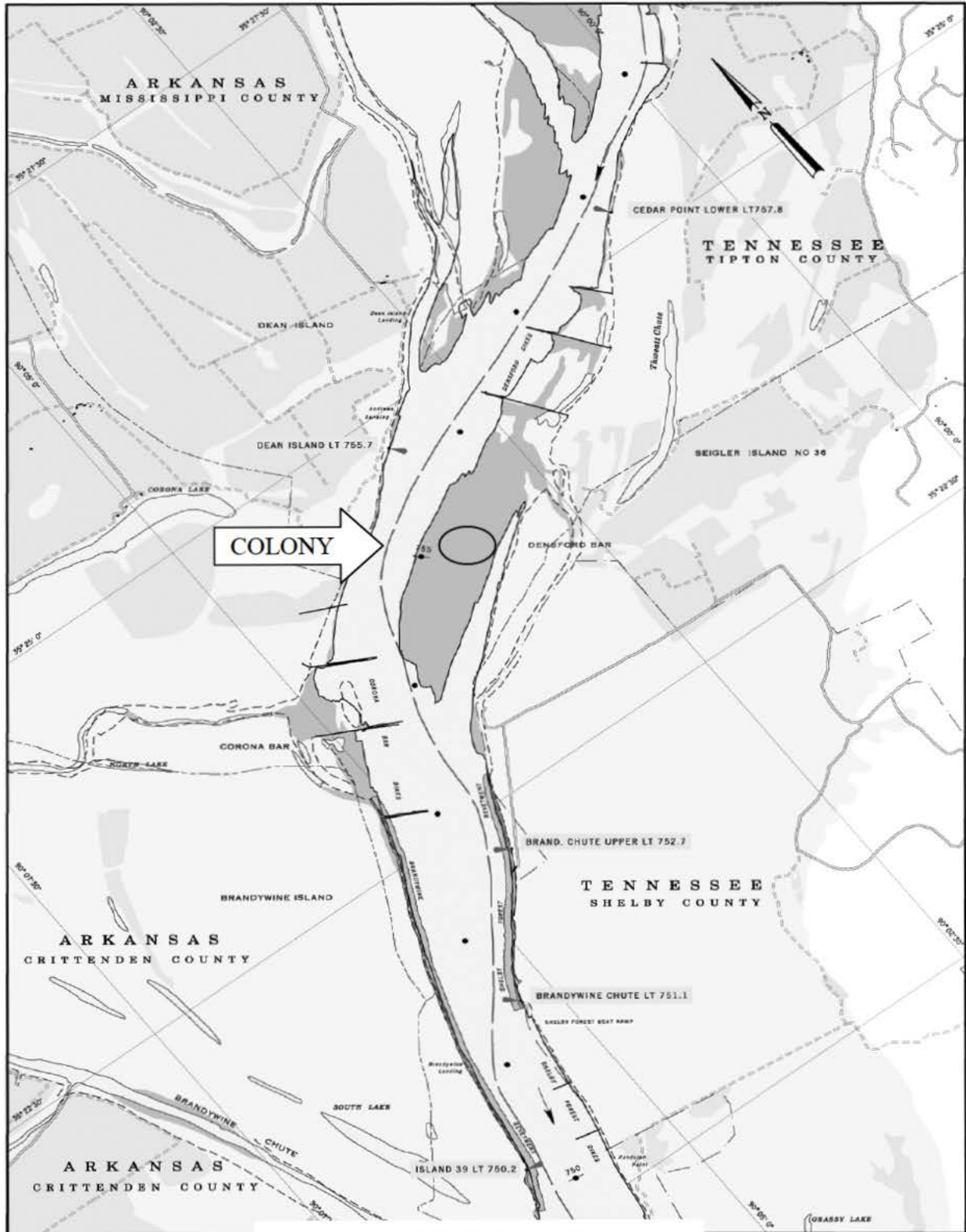
Mississippi River

Cape Girardeau, MO to Baton Rouge, LA

Nest Colony Locations

Memphis District Corps of Engineers

A-I-14



1998

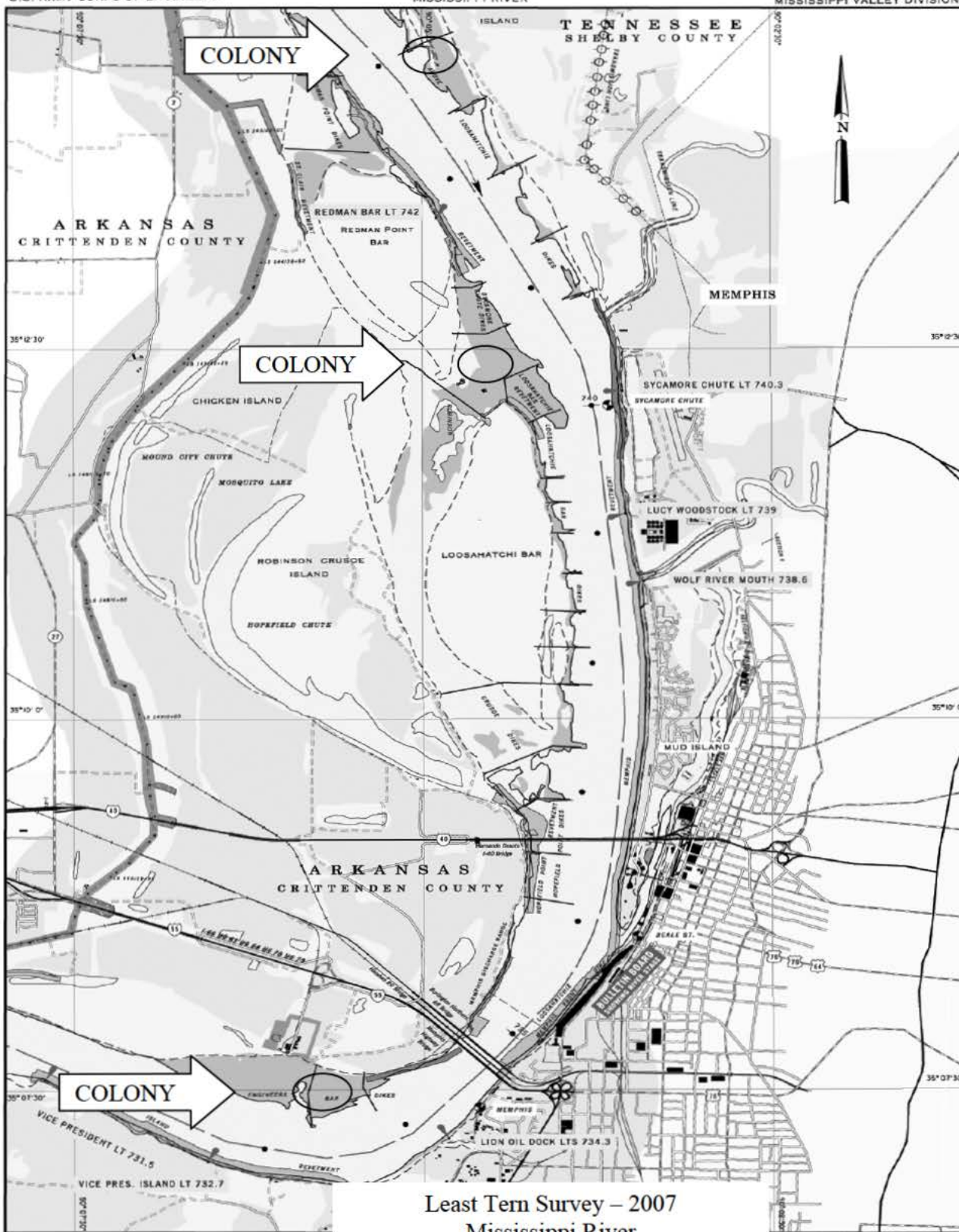
MAP NO. 53

Least Tern Survey – 2007
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-15

U.S. ARMY CORPS OF ENGINEERS

MISSISSIPPI RIVER

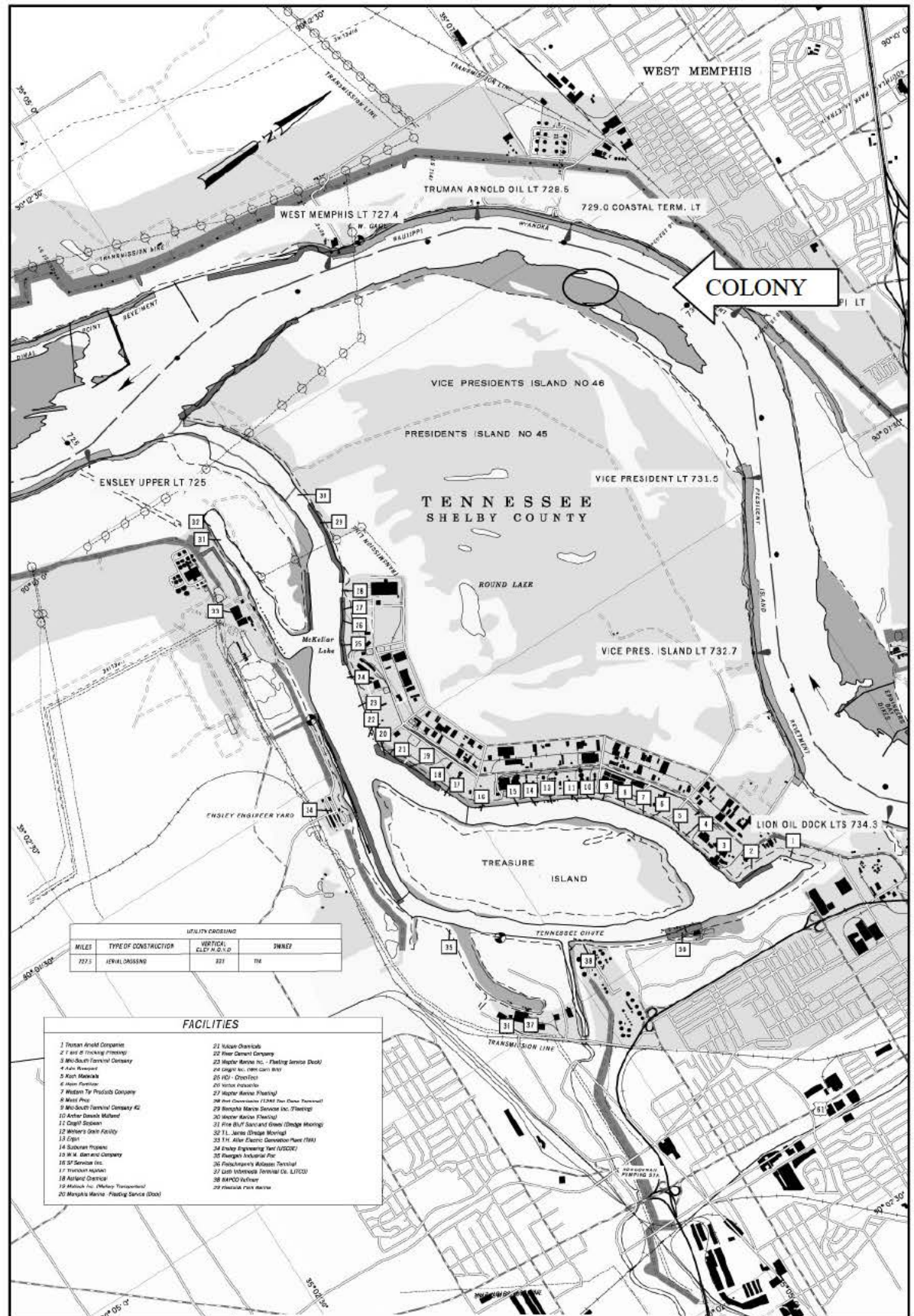
MISSISSIPPI VALLEY DIVISION



1998

MAP NO. 57

Least Tern Survey - 2007
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-16

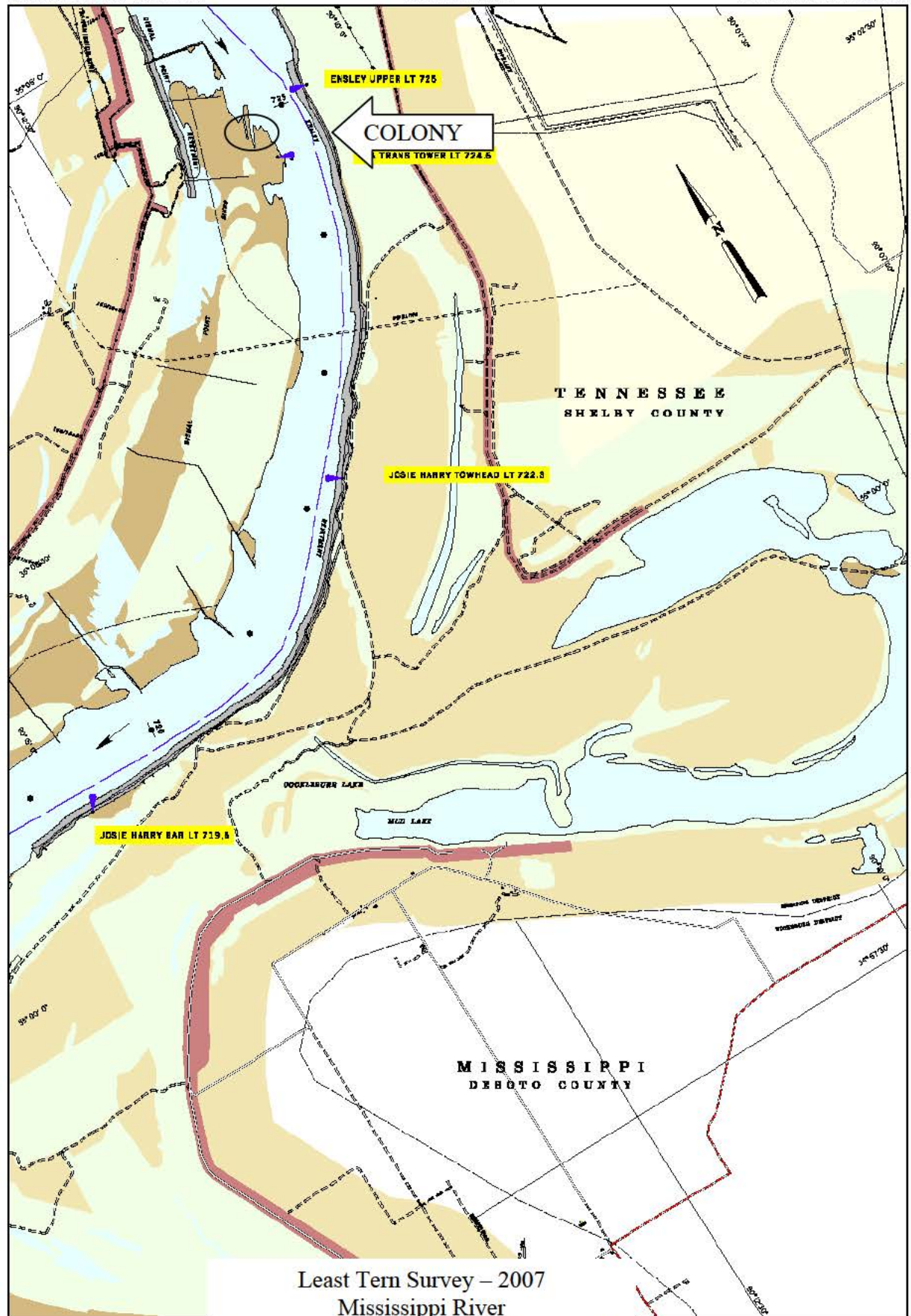


1998

Least Tern Survey - 2007

MAP NO. 58

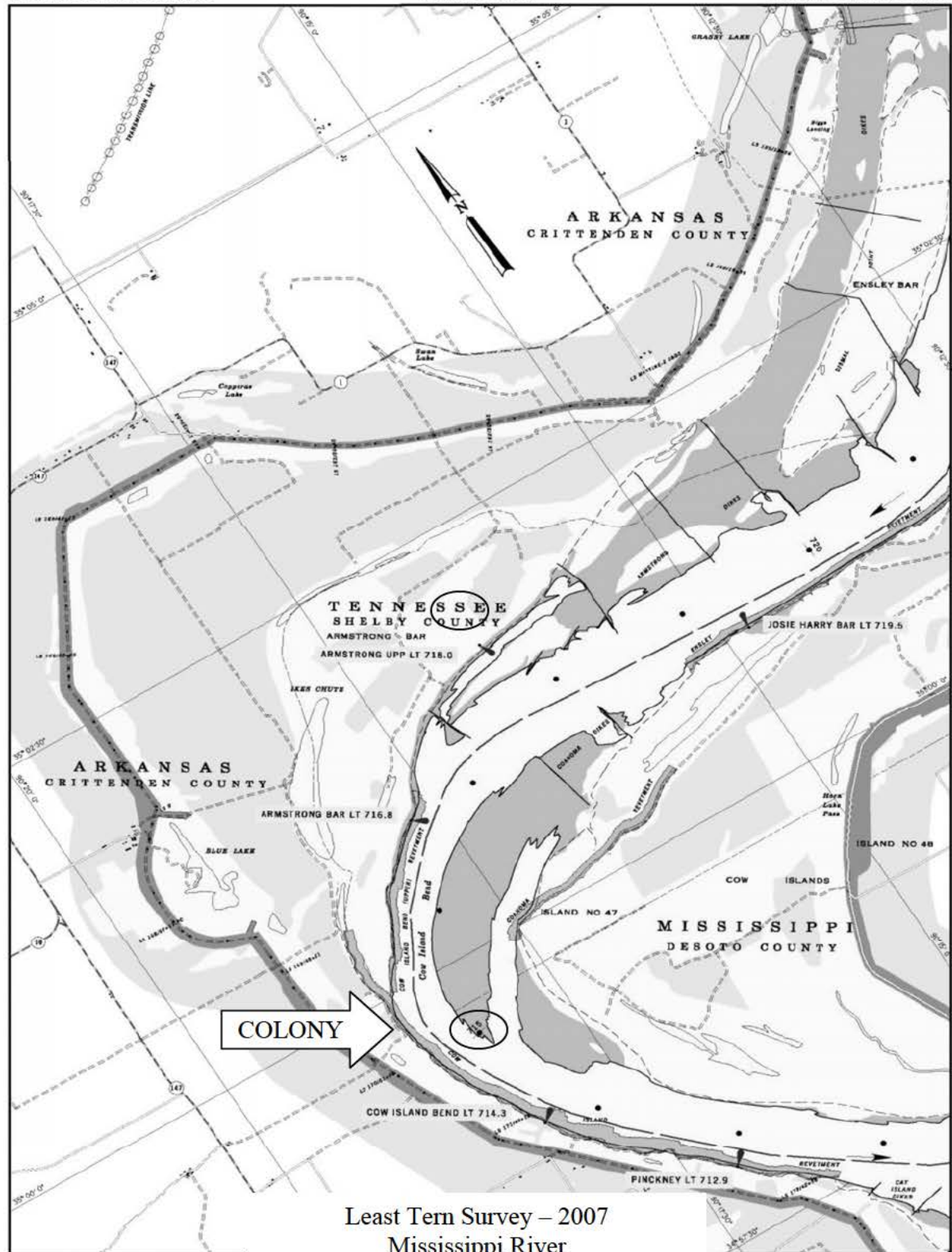
Mississippi River
Cape Girardeau, MO to Baton Rouge, LA
Nest Colony Locations
Memphis District Corps of Engineers
A-I-17



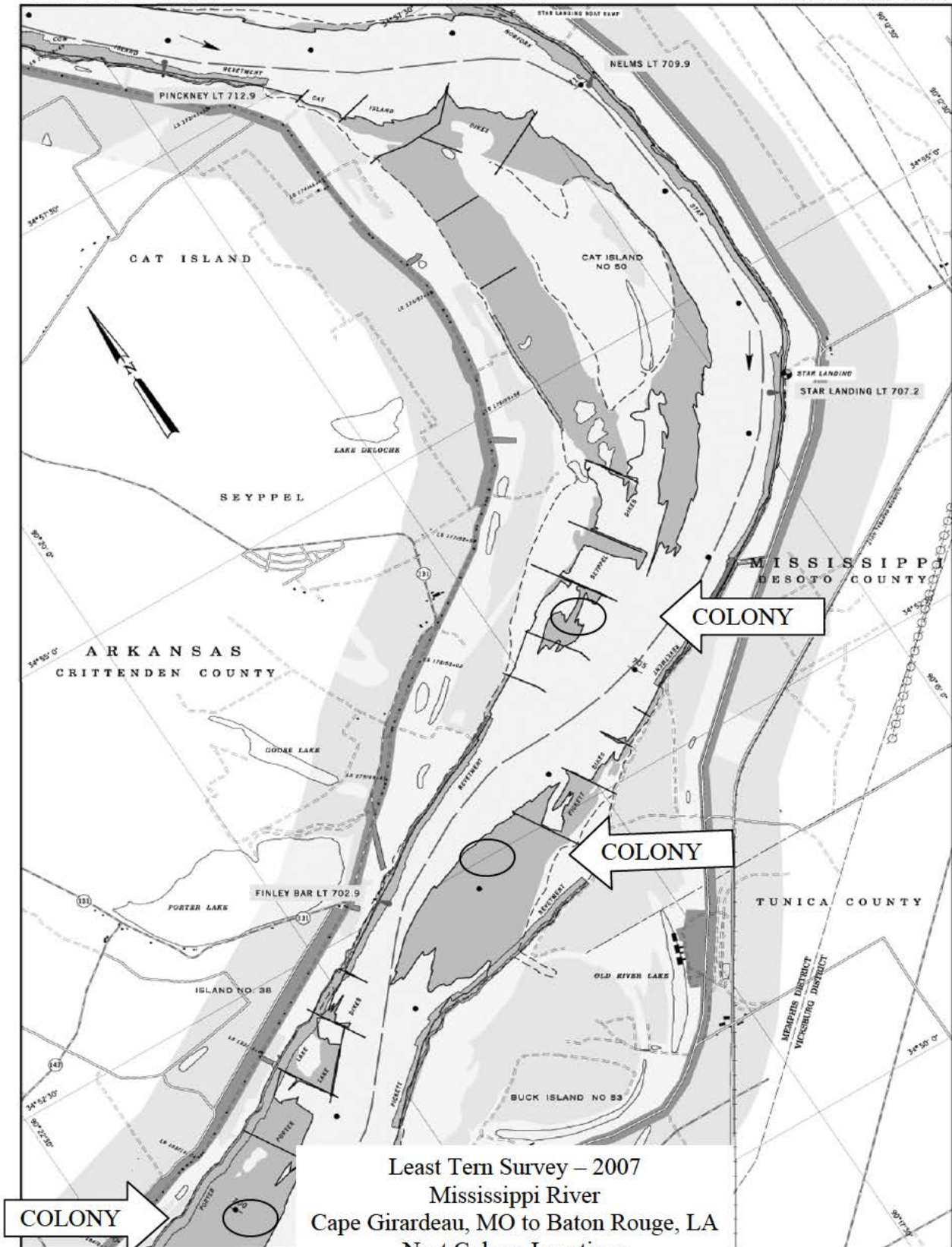
1998

Least Tern Survey – 2007
Mississippi River
Cape Girardeau, MO to Baton Rouge, LA
Nest Colony Locations
Memphis District Corps of Engineers
A-I-18

MAP NO. 59



Least Tern Survey – 2007
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-19

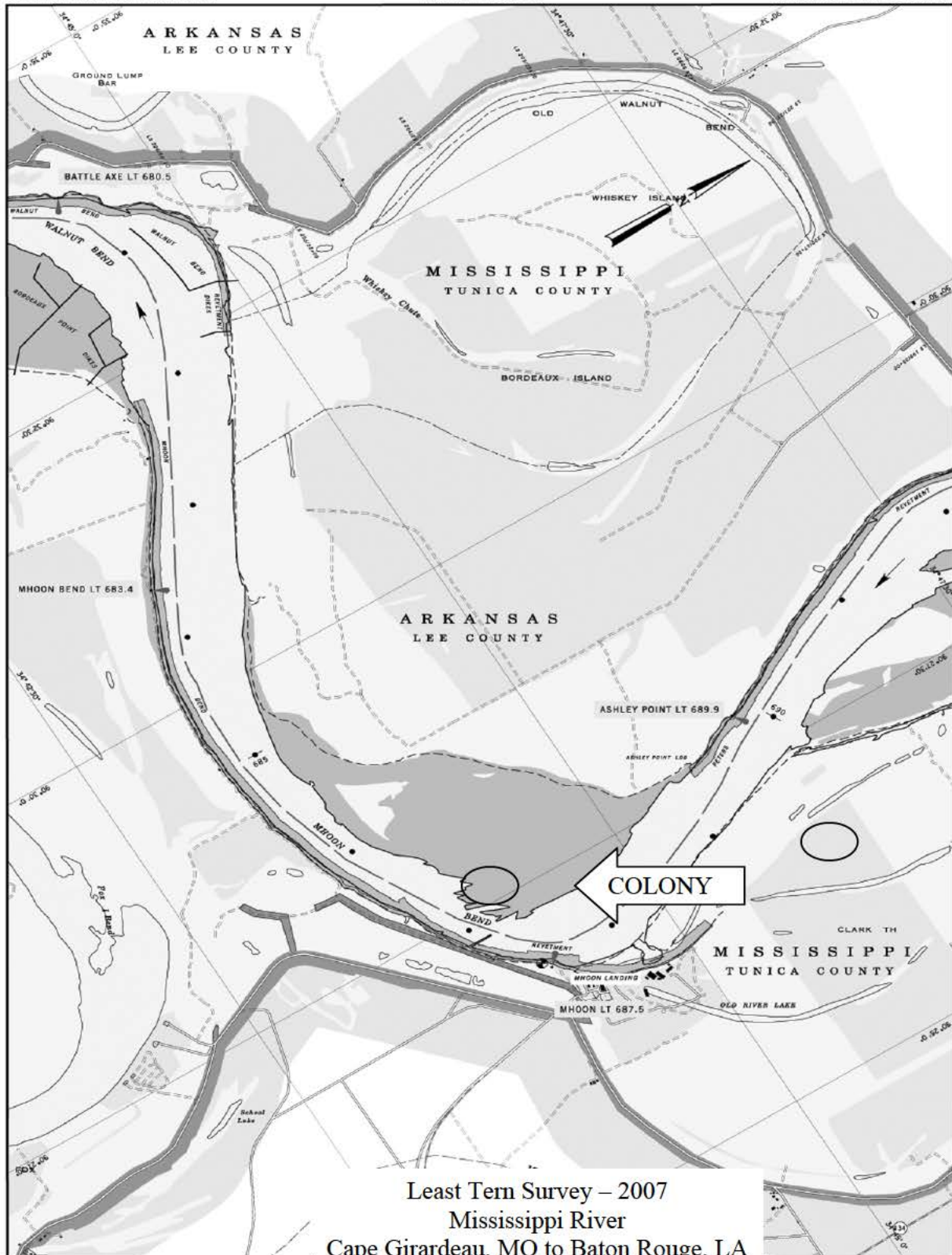


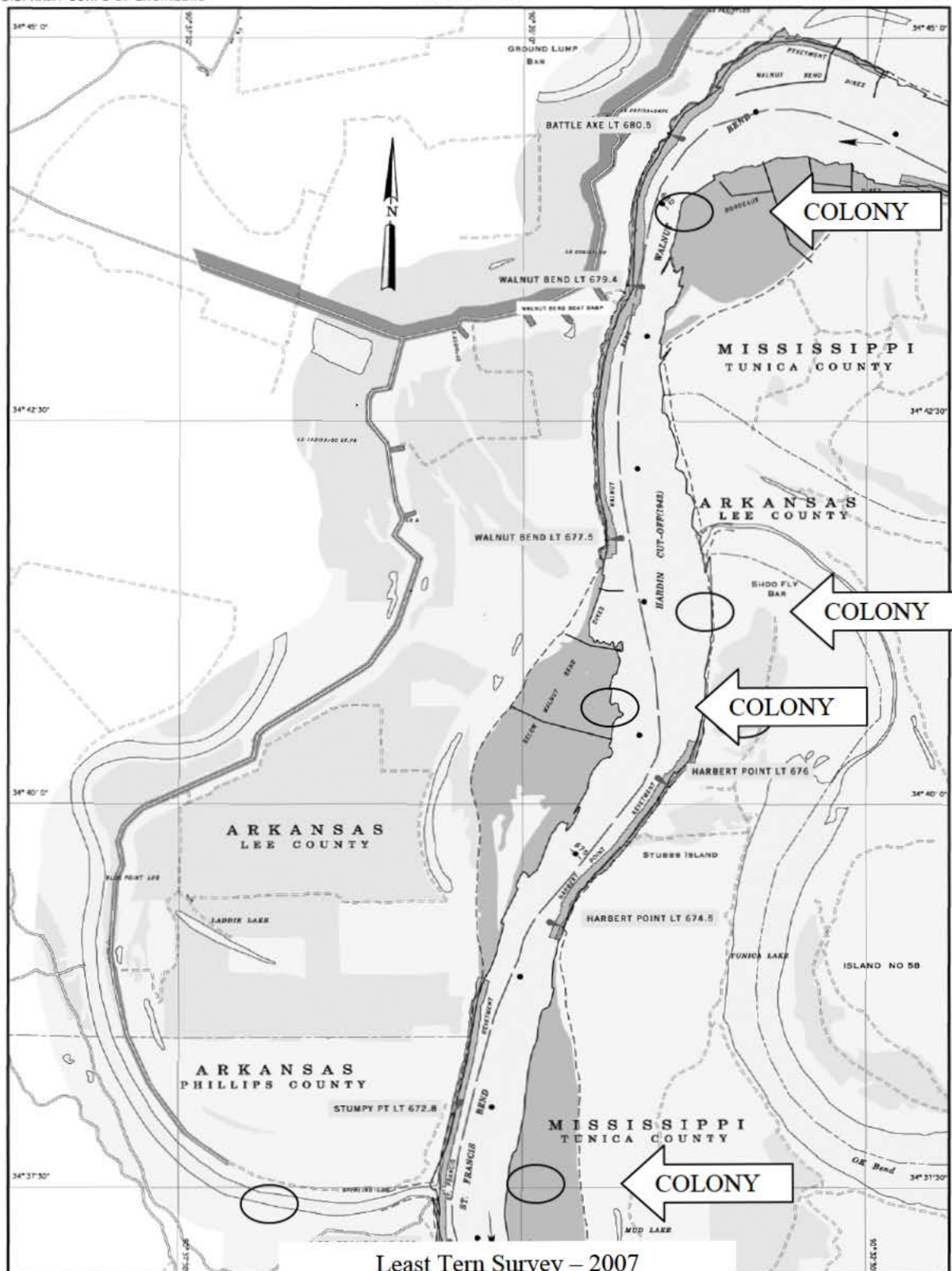
COLONY

1998

Least Tern Survey – 2007
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-20

MAP NO. 61





1998

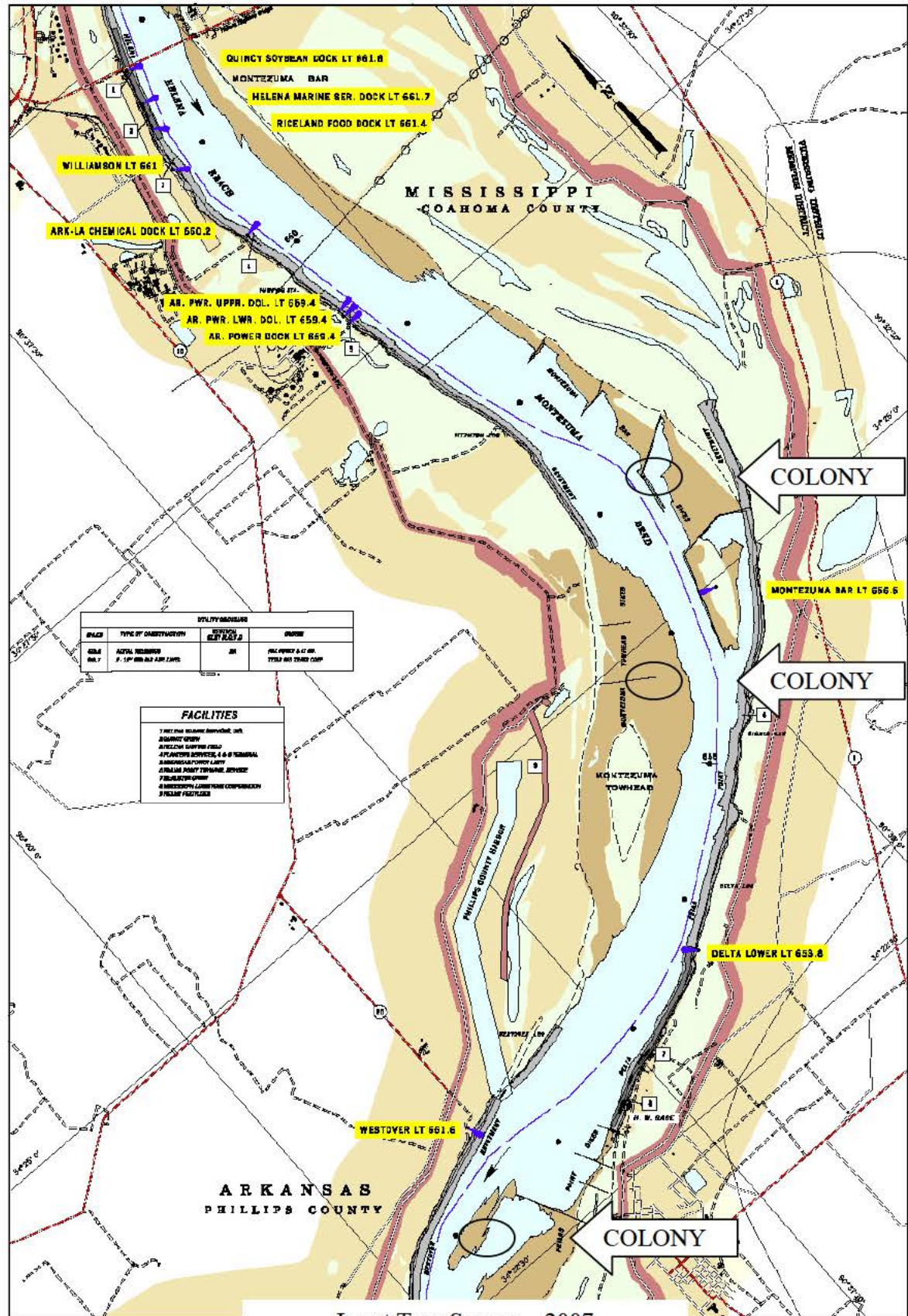
MAP NO. 64

Least Tern Survey - 2007
Mississippi River
Cape Girardeau, MO to Baton Rouge, LA
Nest Colony Locations
Memphis District Corps of Engineers
A-I-23



MAP NO. 66

Mississippi River
Cape Girardeau, MO to Baton Rouge, LA
Nest Colony Locations
Memphis District Corps of Engineers
A-I-24



Least Tern Survey - 2007

Mississippi River

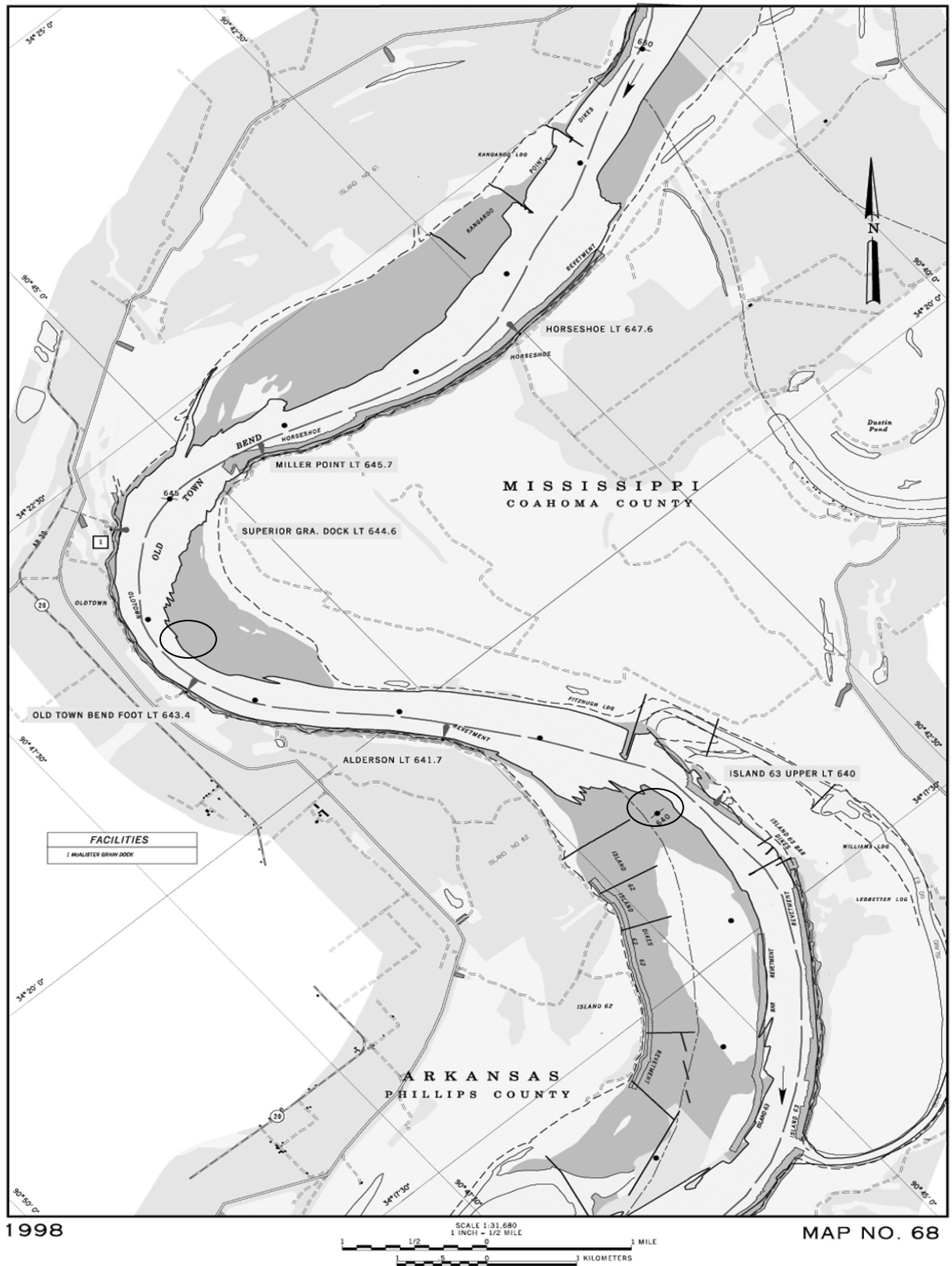
Cape Girardeau, MO to Baton Rouge, LA

Nest Colony Locations

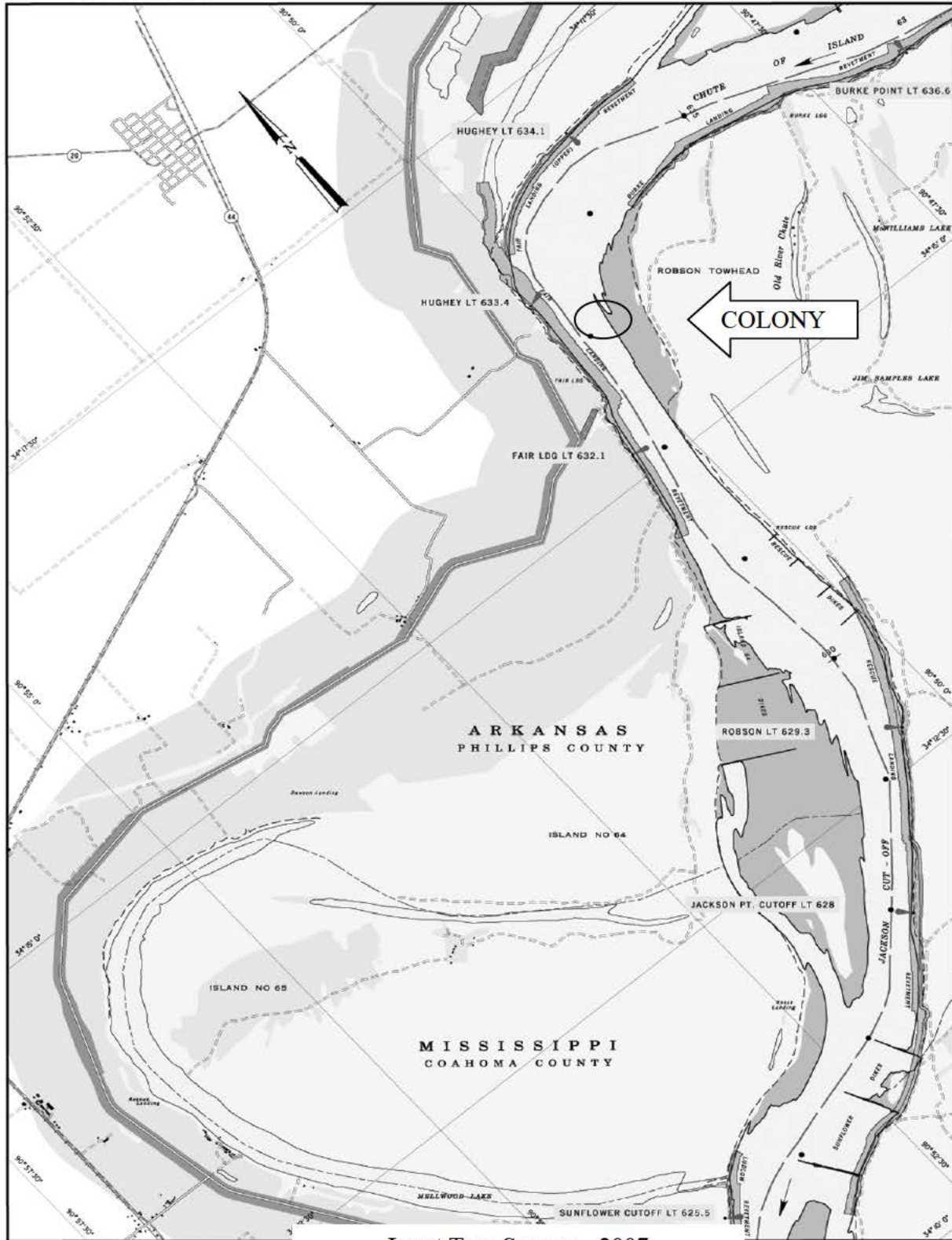
Memphis District Corps of Engineers

A-I-25

MAP NO. 67



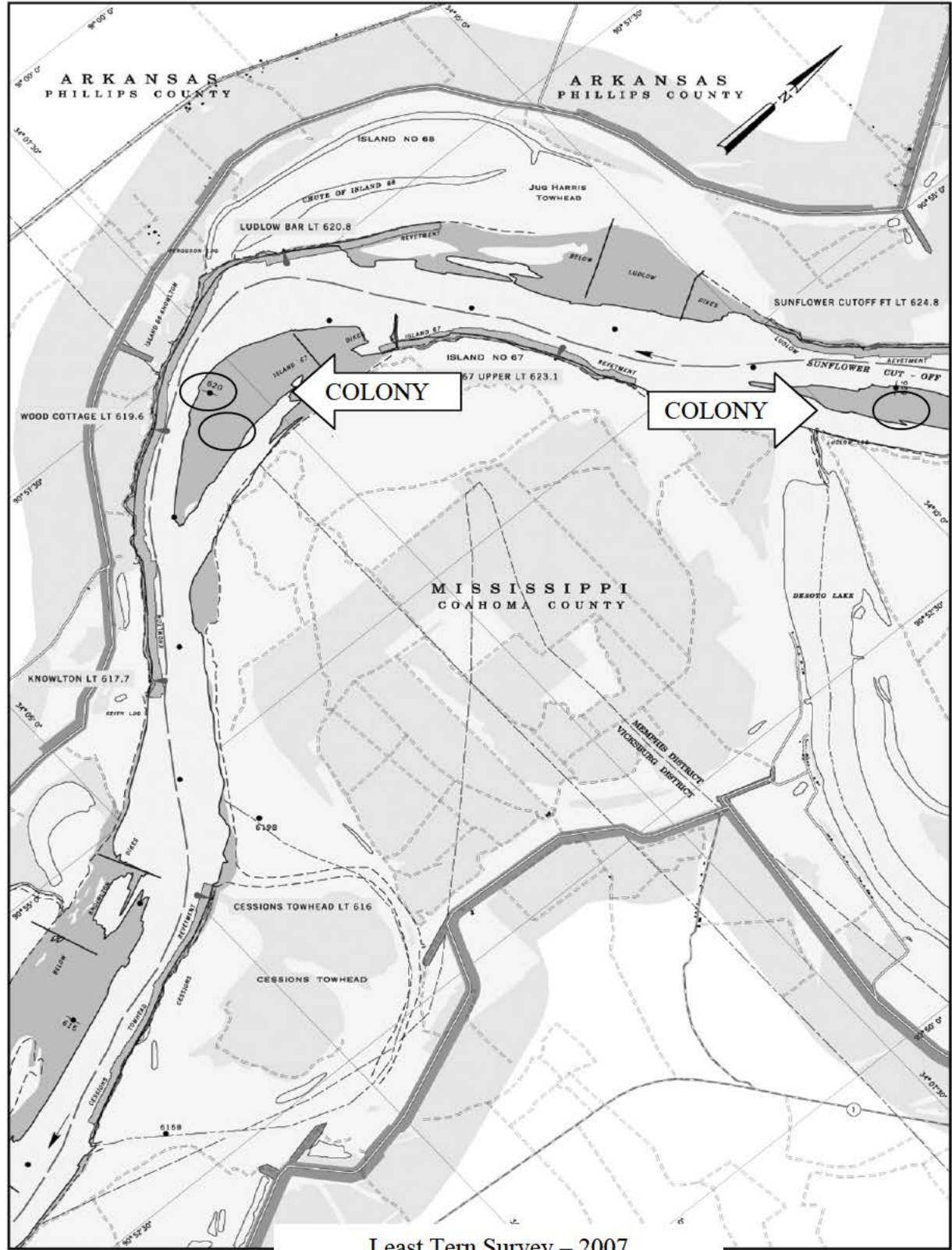
Nest Colony Locations
Memphis District Corps of Engineers
A-I-26



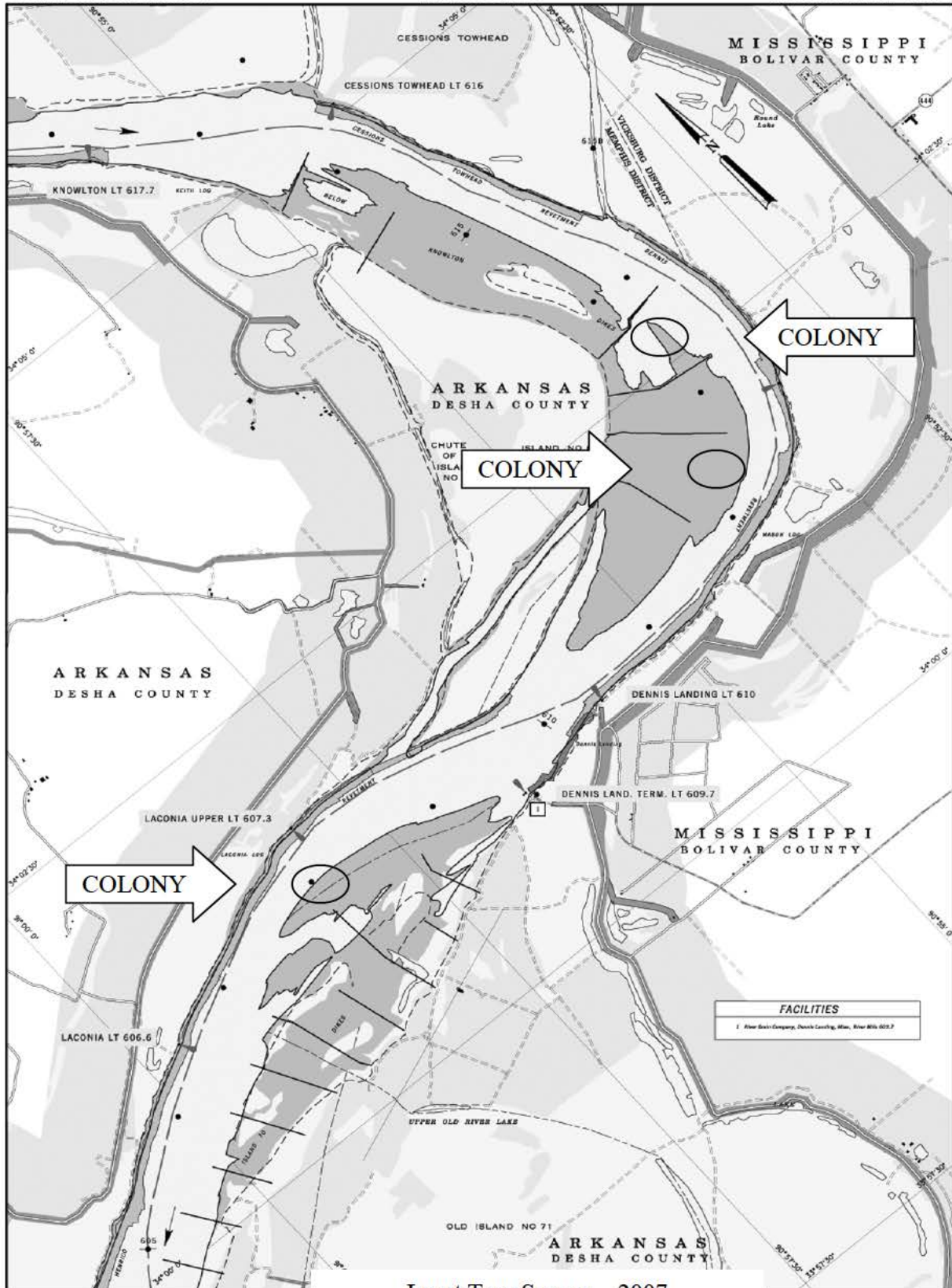
1998

MAP NO. 70

Least Tern Survey – 2007
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-27



Least Tern Survey – 2007
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-28



1998

Least Tern Survey - 2007

Mississippi River

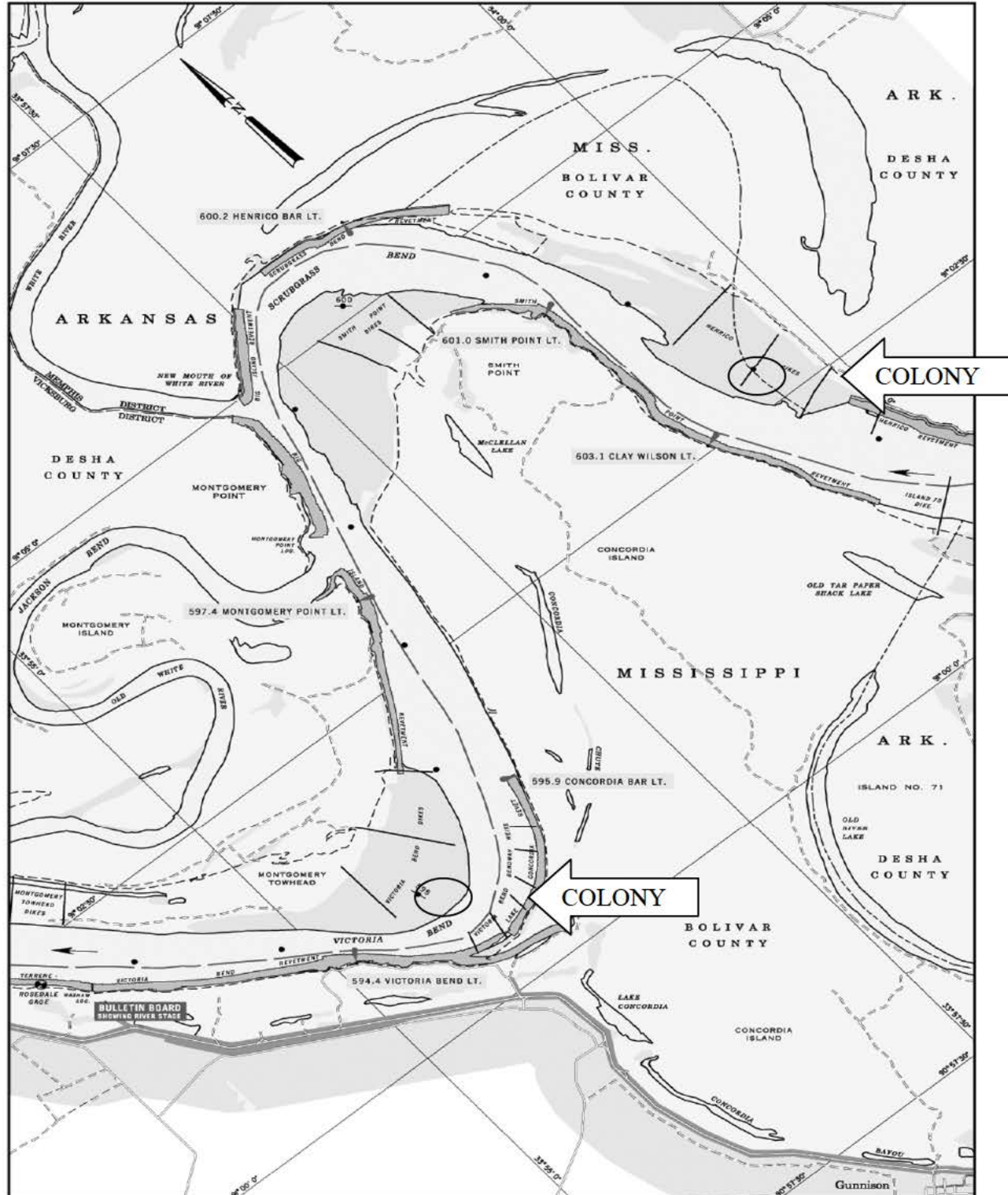
MAP NO. 73

Cape Girardeau, MO to Baton Rouge, LA

Nest Colony Locations

Memphis District Corps of Engineers

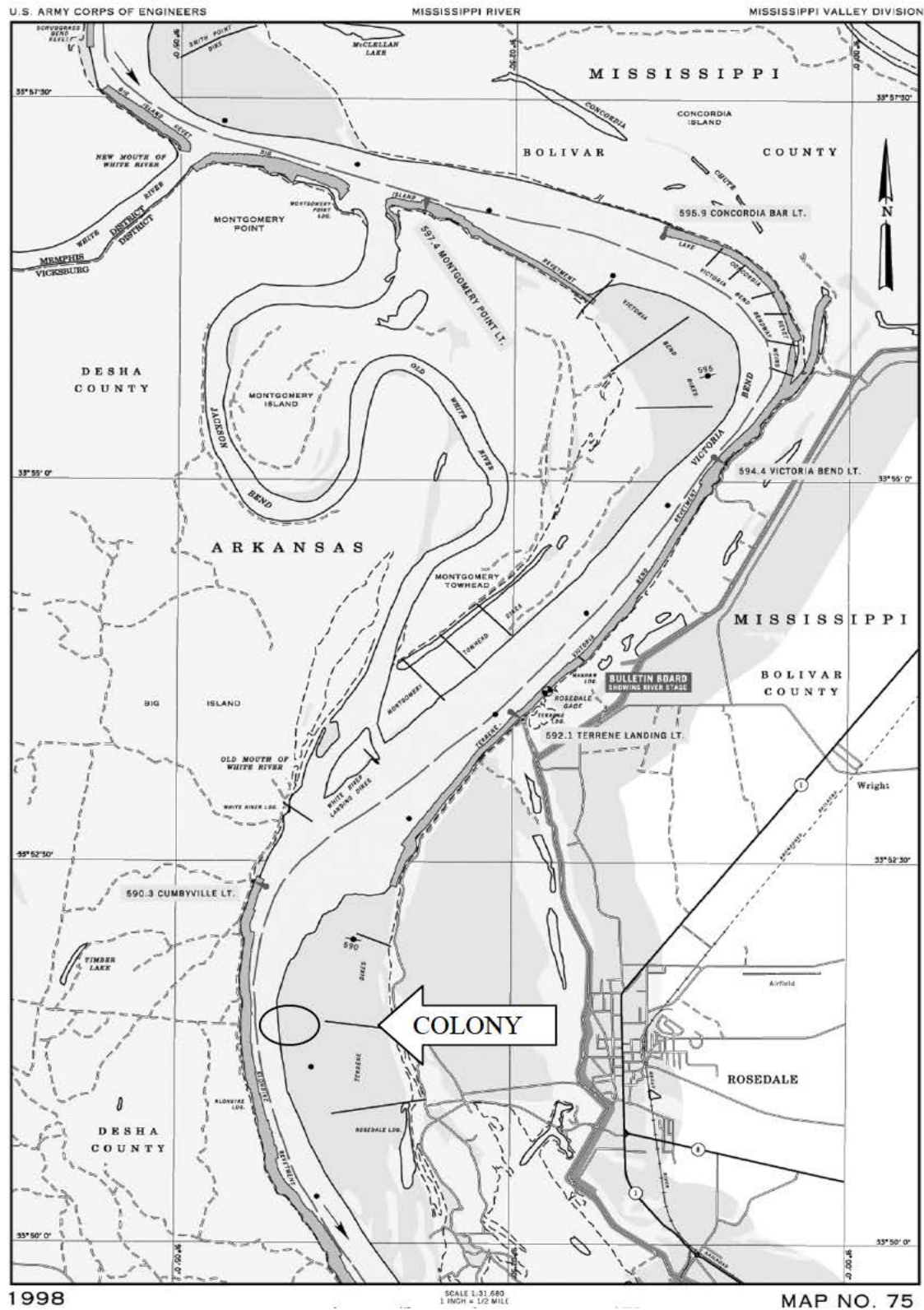
A-I-29



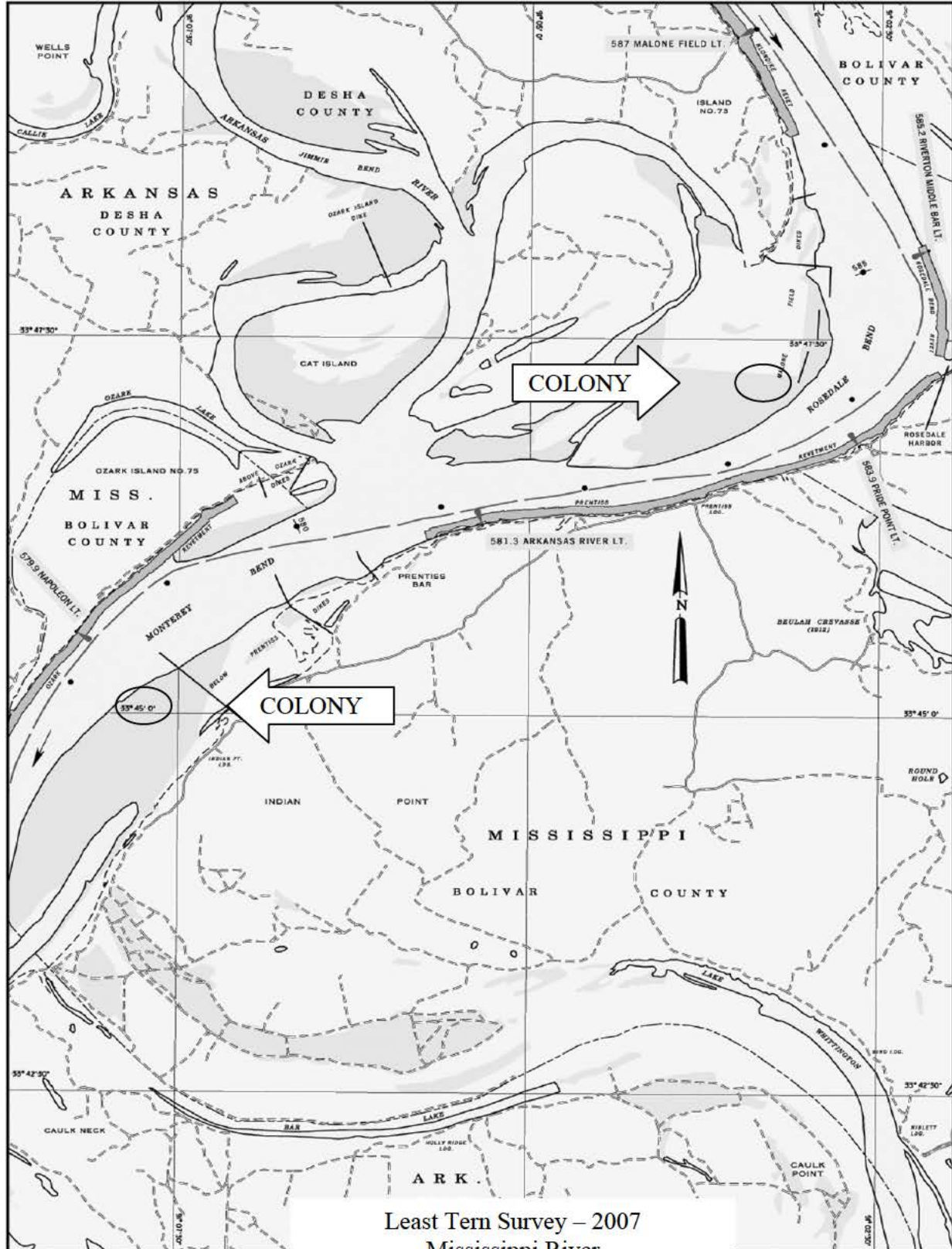
1998

MAP NO. 74

Least Tern Survey – 2007
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-30



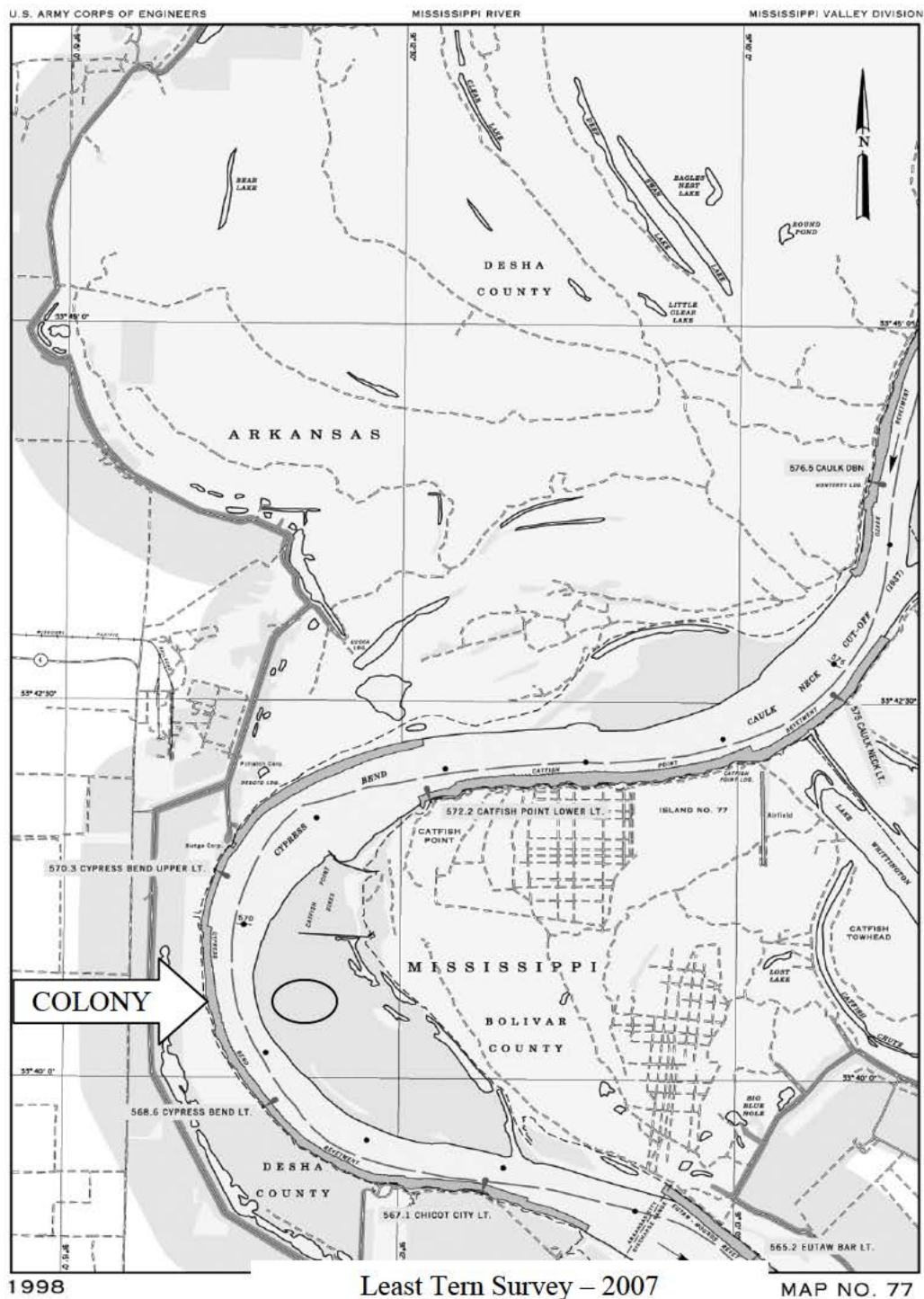
Least Tern Survey – 2007
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-31



1998

MAP NO. 76

Least Tern Survey – 2007
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-32



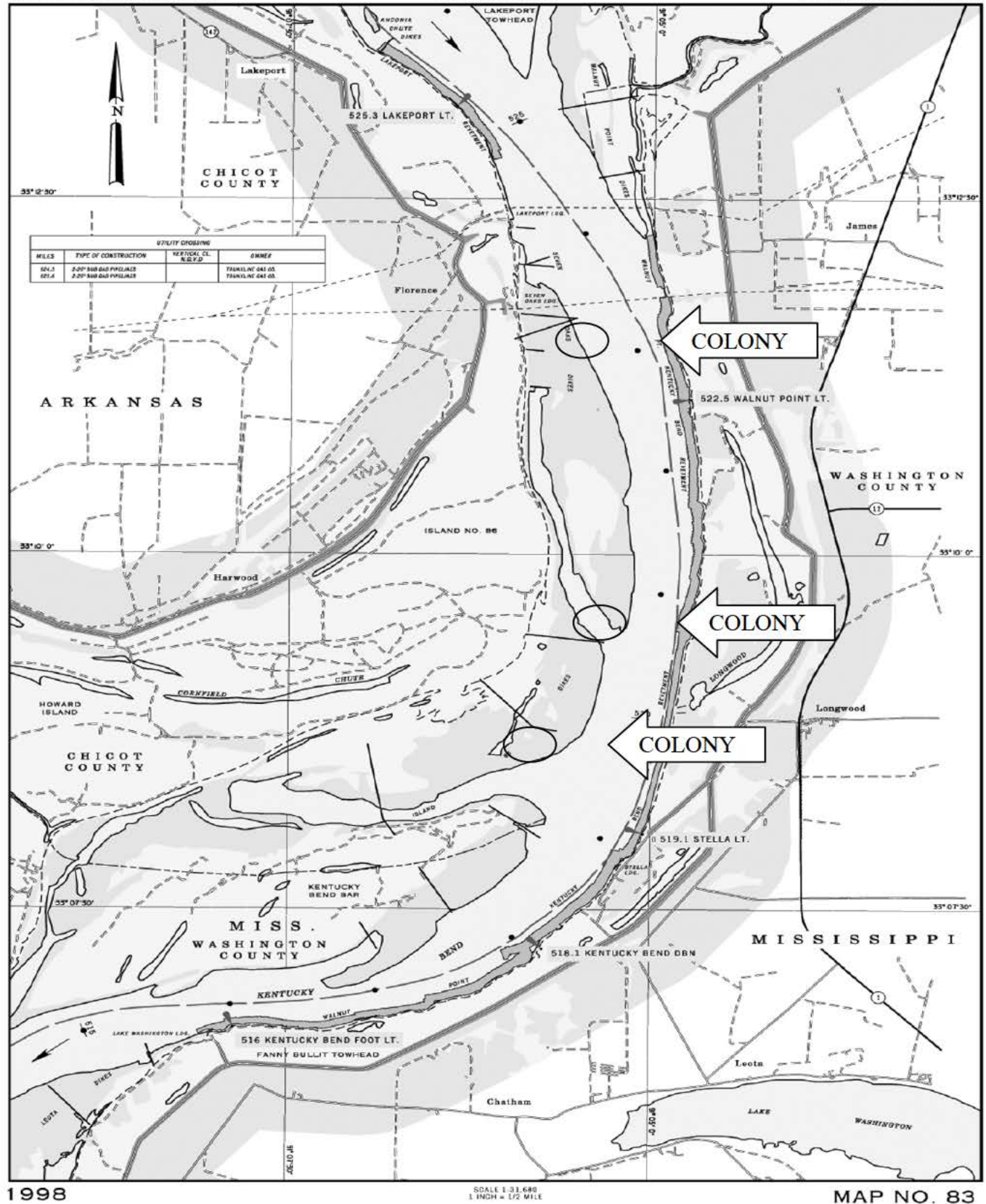


Least Tern Survey – 2007
Mississippi River
Cape Girardeau, MO to Baton Rouge, LA
Nest Colony Locations
Memphis District Corps of Engineers
A-I-35

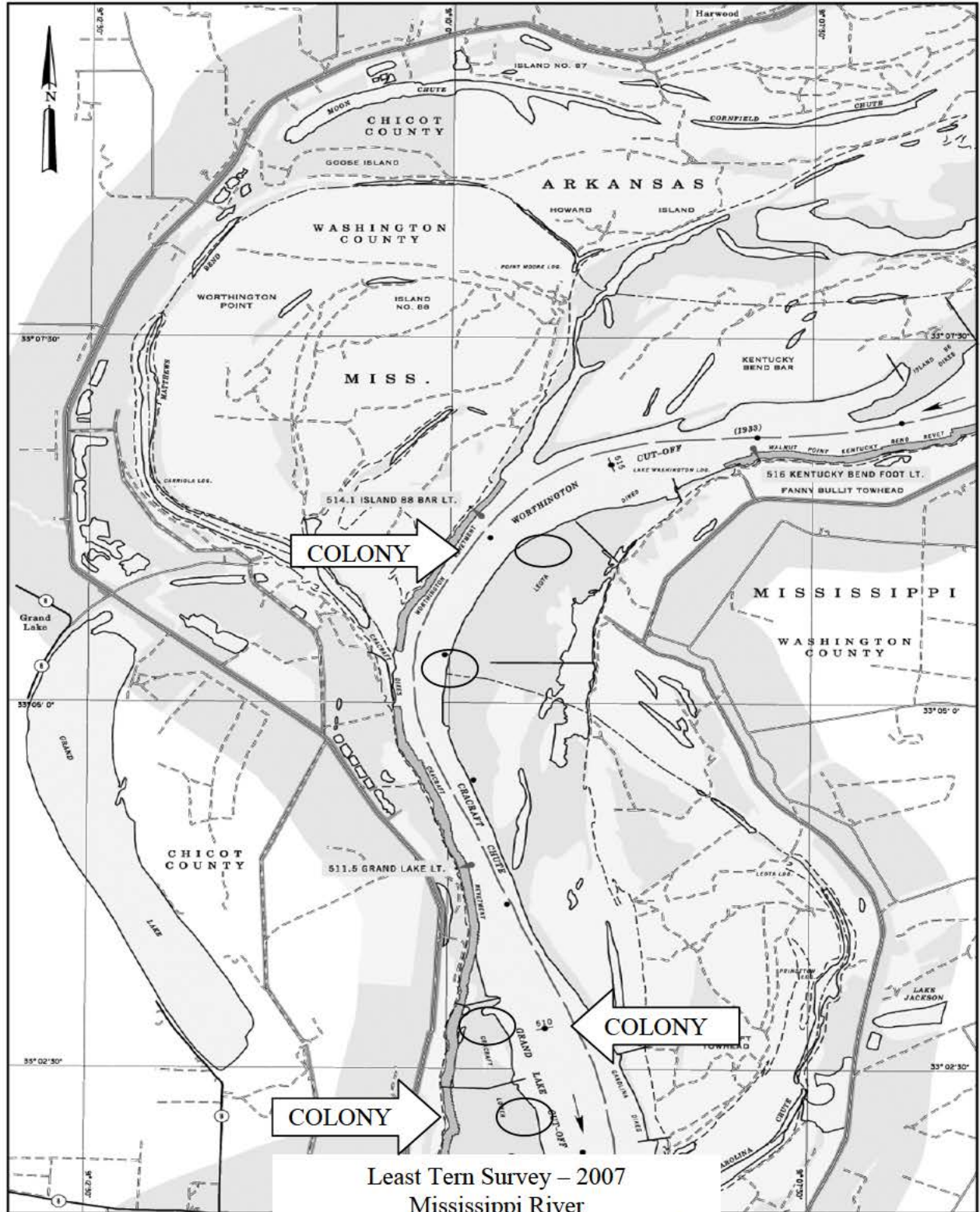


MAP NO. 81

A-I-36



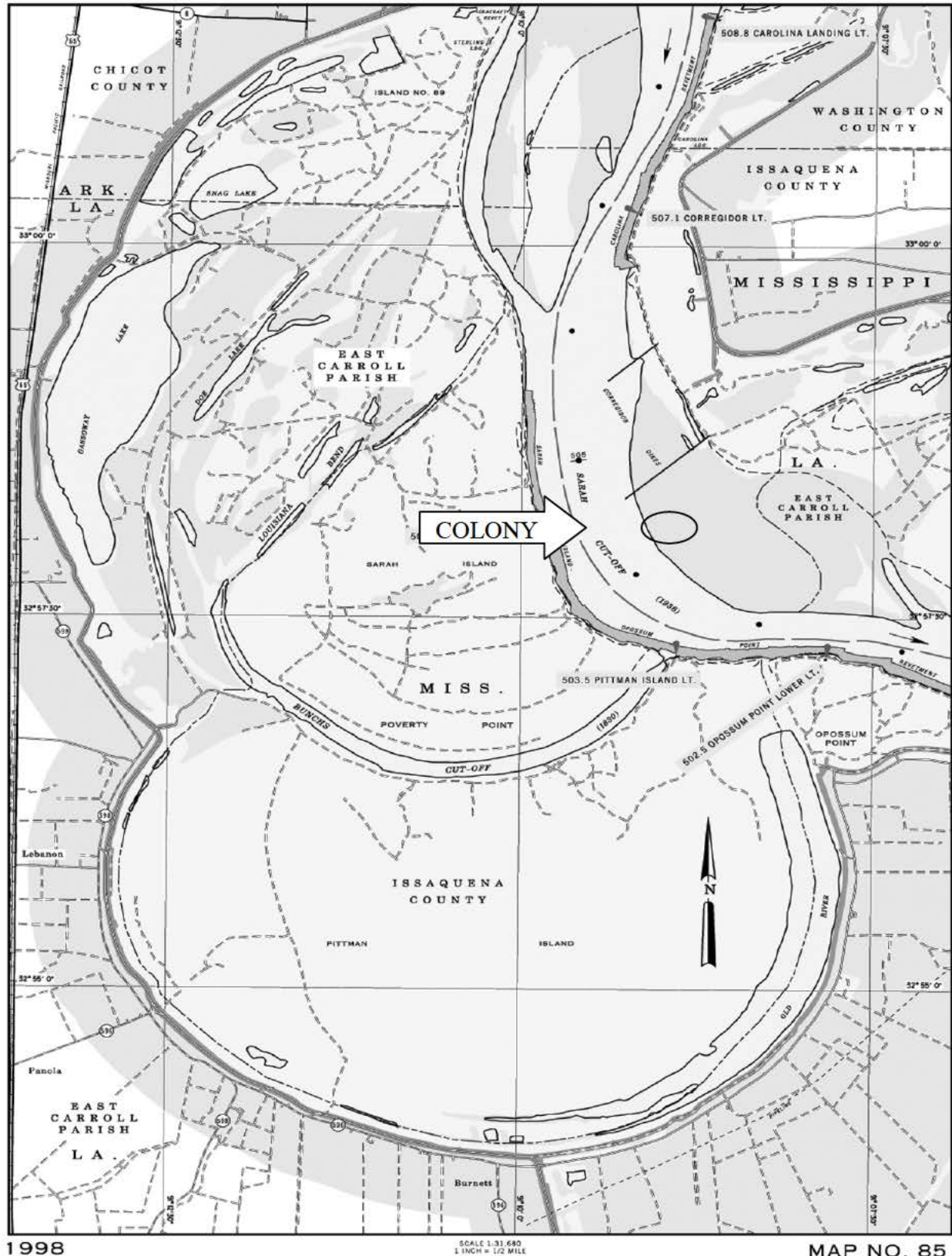
Least Tern Survey – 2007
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-37



1998

Least Tern Survey – 2007
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-38

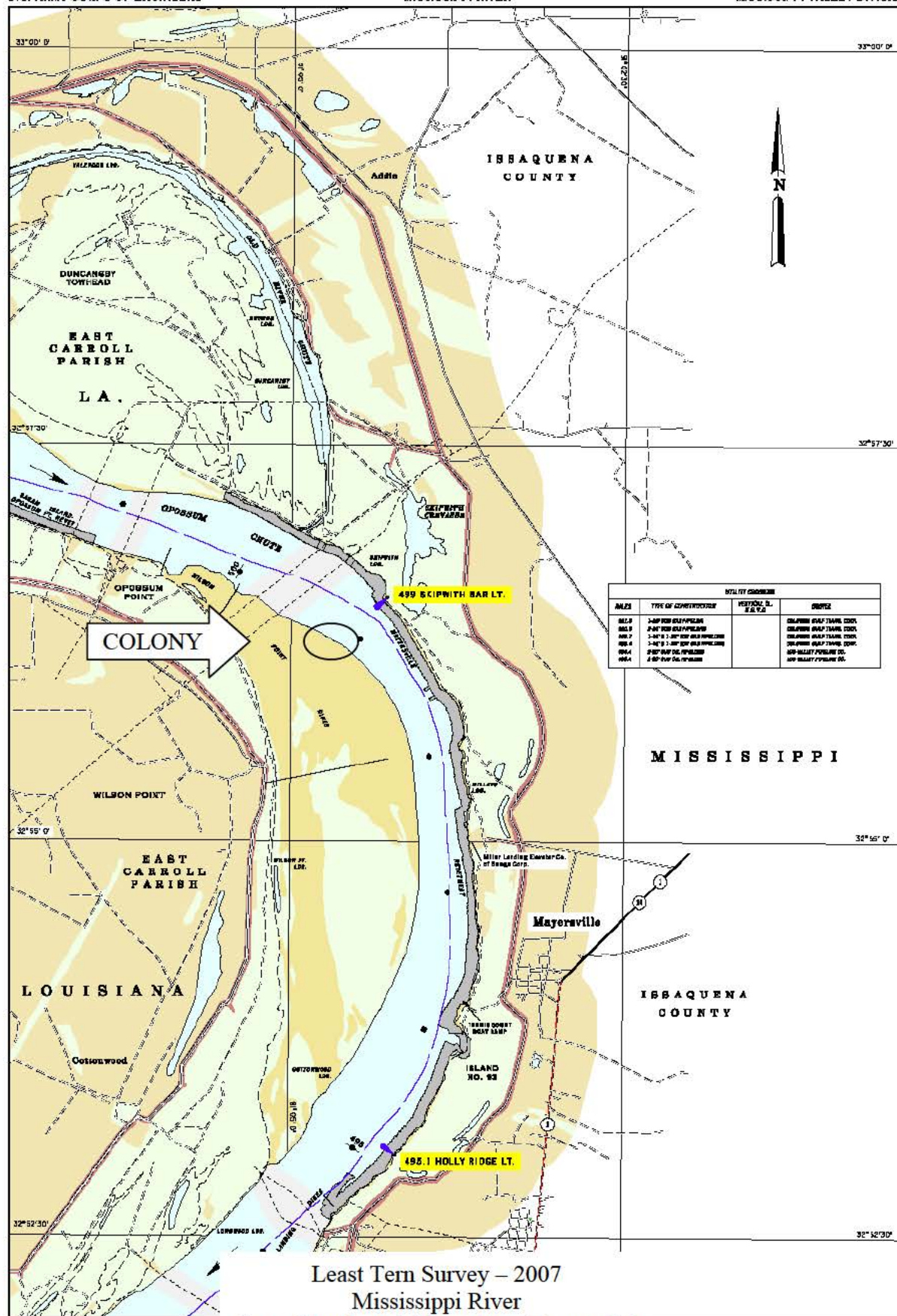
MAP NO. 84



1998

MAP NO. 85

Least Tern Survey – 2007
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-39



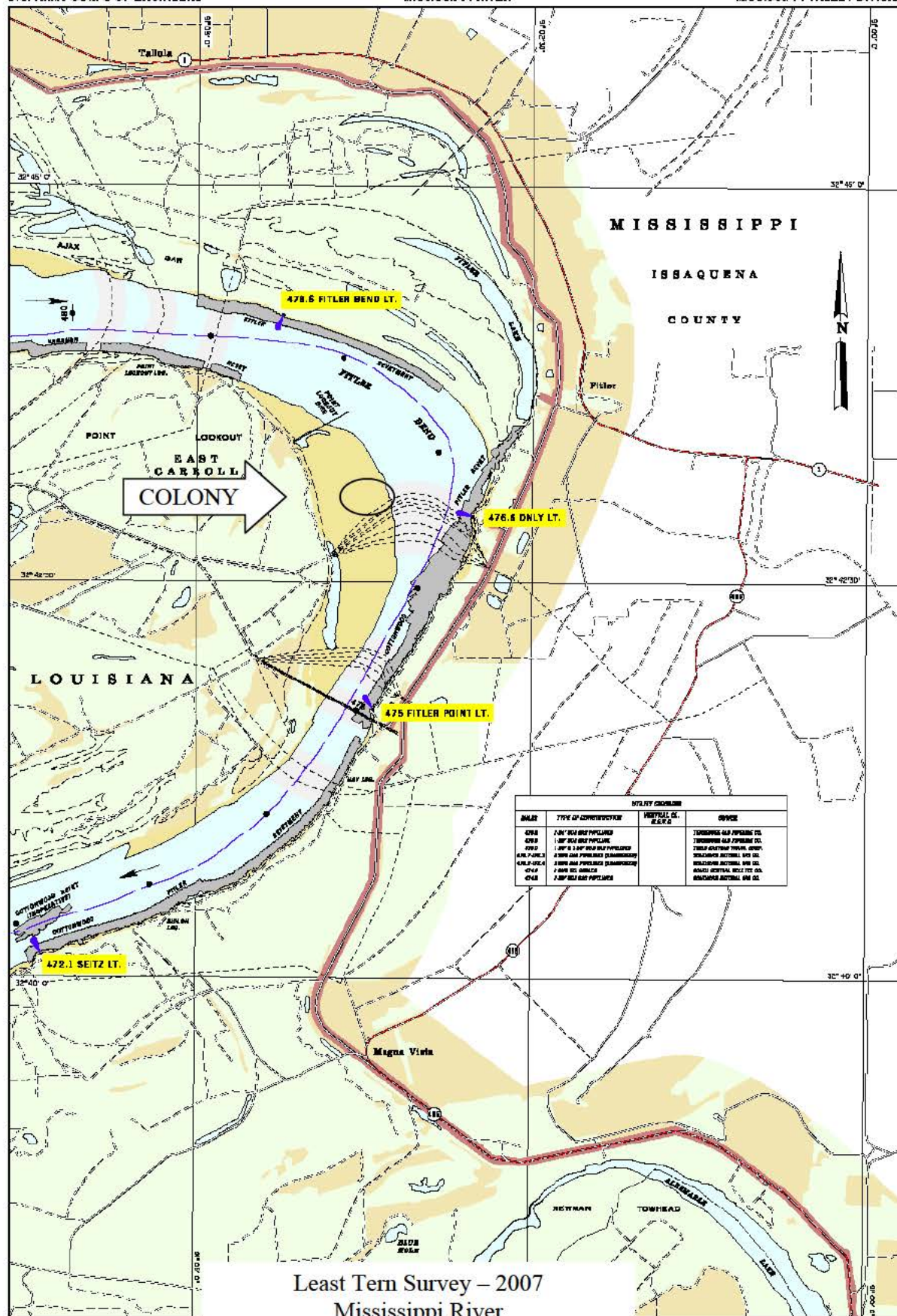
1998

Least Tern Survey - 2007
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-40

MAP NO. 86



Least Tern Survey – 2007
Mississippi River
Cape Girardeau, MO to Baton Rouge, LA
Nest Colony Locations
Memphis District Corps of Engineers
A-I-41



1998

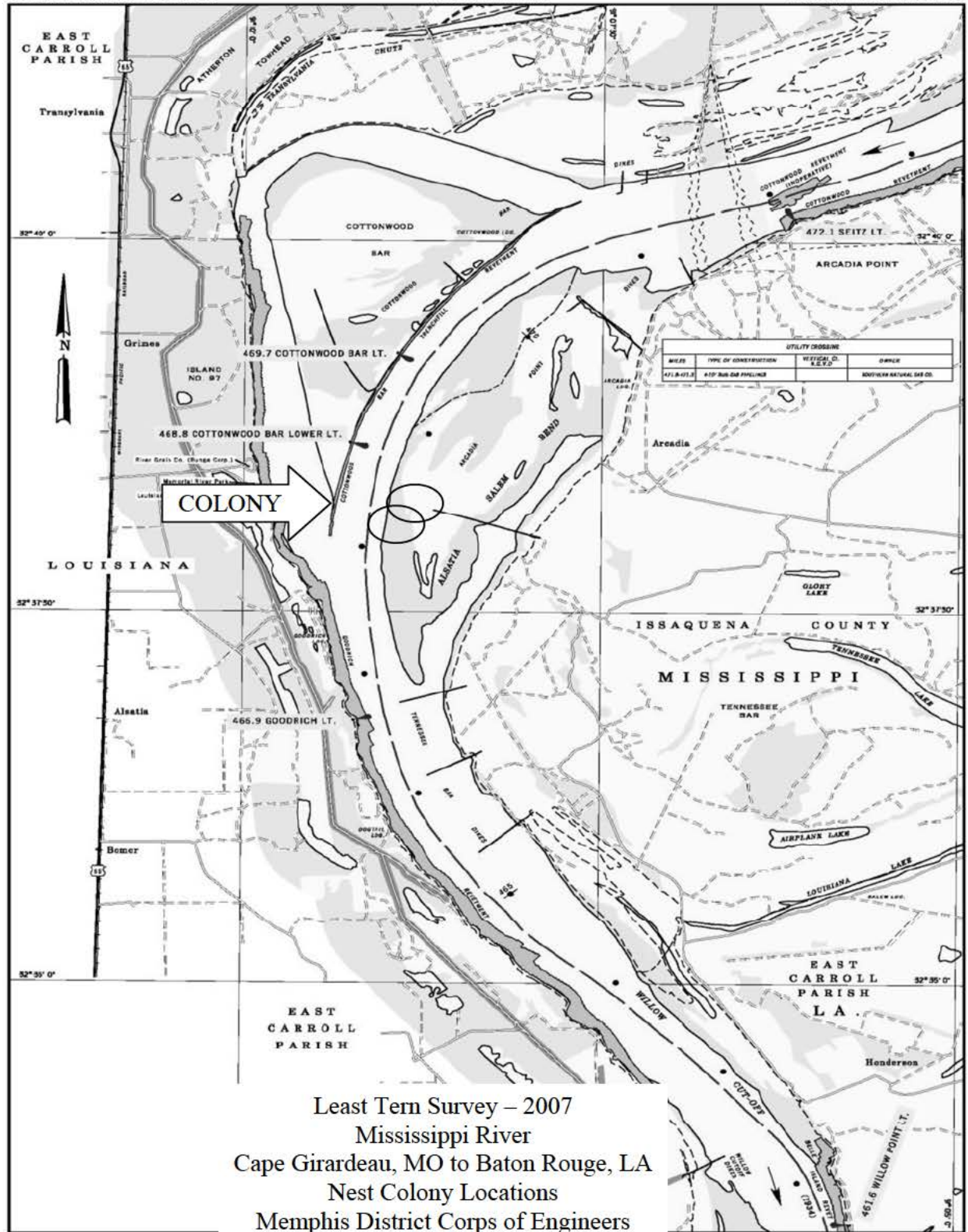
Least Tern Survey - 2007
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-43

MAP NO. 89

U.S. ARMY CORPS OF ENGINEERS

MISSISSIPPI RIVER

MISSISSIPPI VALLEY DIVISION

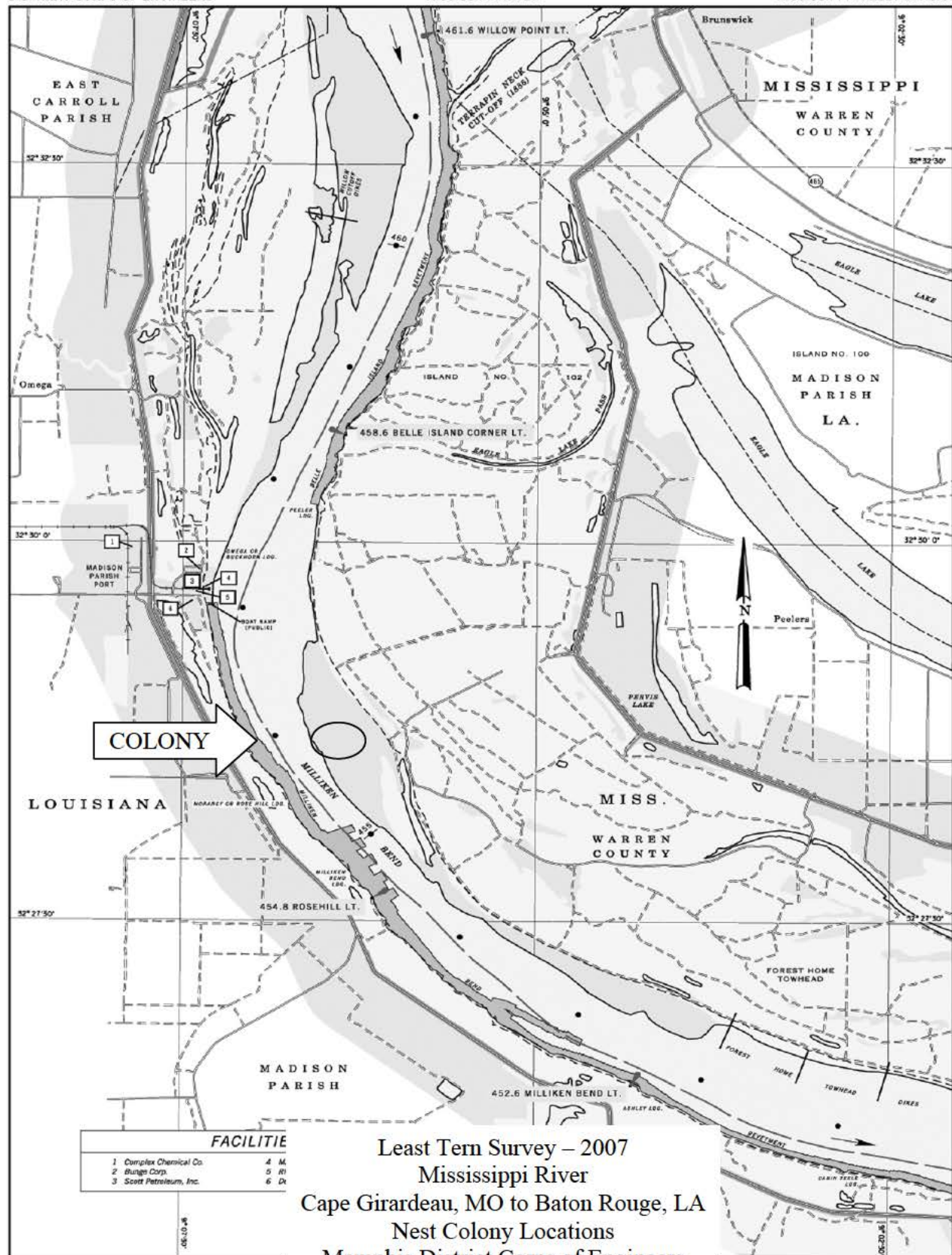


Least Tern Survey - 2007
Mississippi River
Cape Girardeau, MO to Baton Rouge, LA
Nest Colony Locations
Memphis District Corps of Engineers

1998

A-I-44

MAP NO. 90



1998

Least Tern Survey - 2007
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-45

MAP NO. 92



Least Tern Survey – 2007
Mississippi River
Cape Girardeau, MO to Baton Rouge, LA
Nest Colony Locations
Memphis District Corps of Engineers
A-I-46

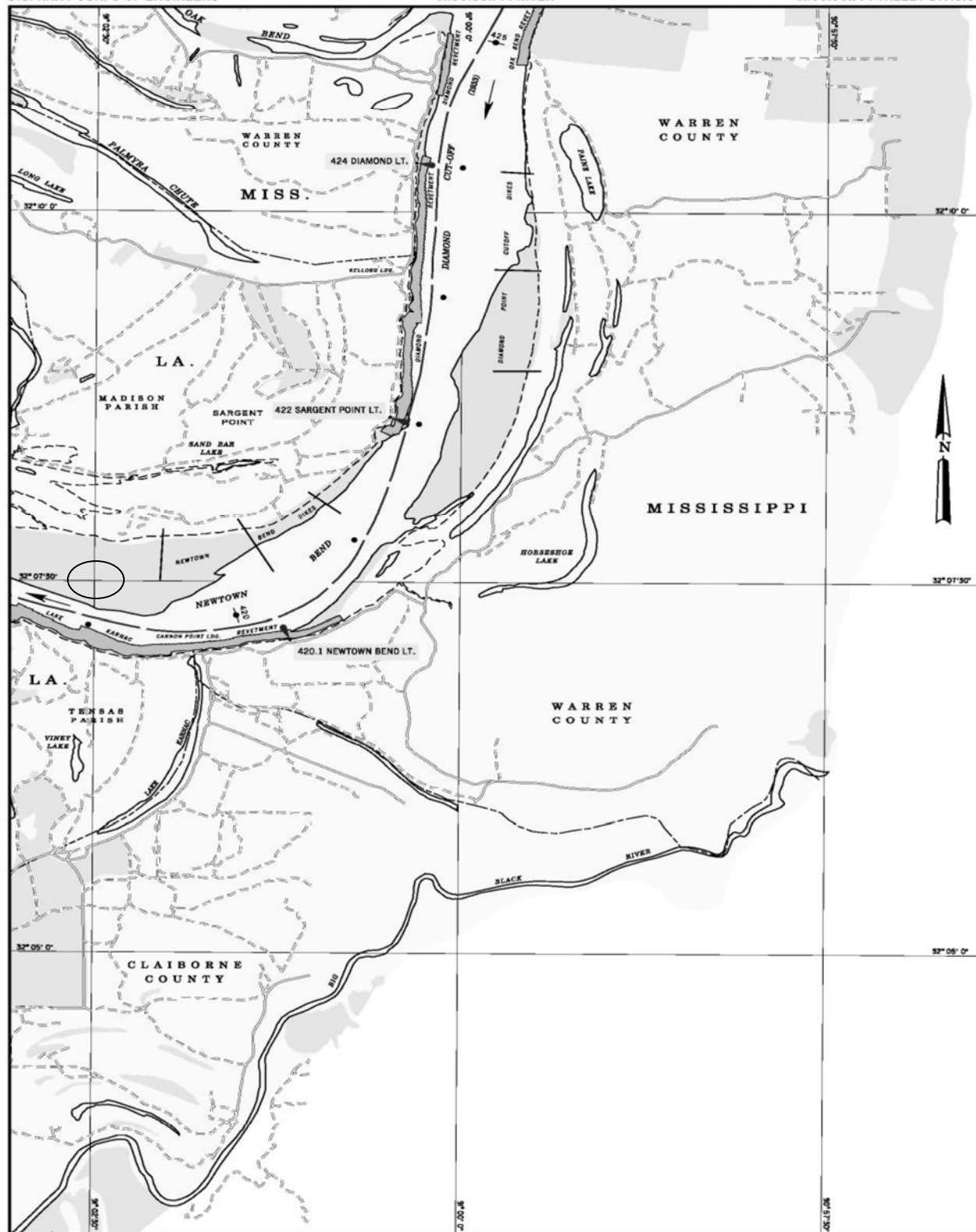


Nest Colony Locations
Memphis District Corps of Engineers
A-I-47

U.S. ARMY CORPS OF ENGINEERS

MISSISSIPPI RIVER

MISSISSIPPI VALLEY DIVISION



1998

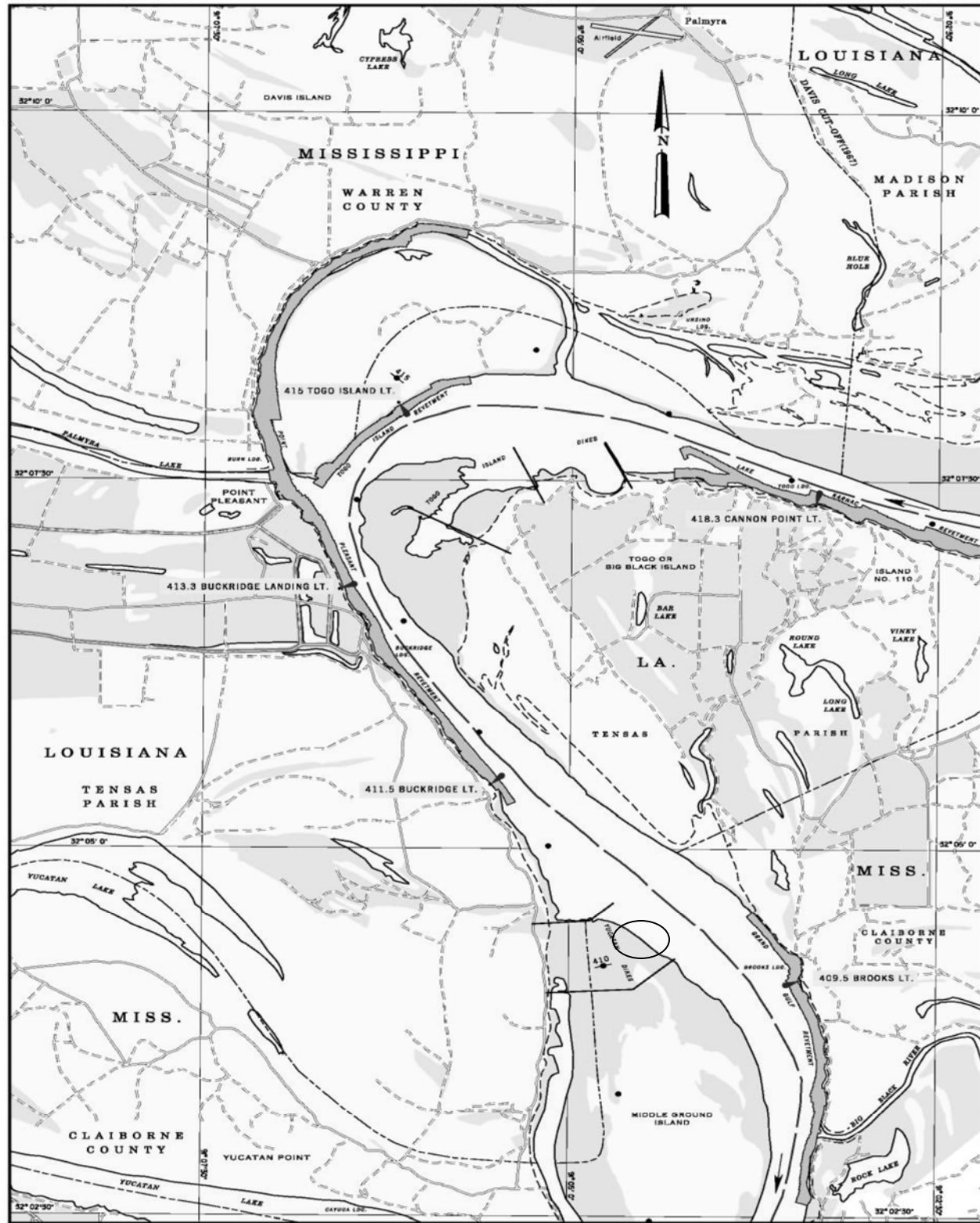
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1 INCH = 1/2 MILE
KILOMETERS

MAP NO. 98

U.S. ARMY CORPS OF ENGINEERS

MISSISSIPPI RIVER

MISSISSIPPI VALLEY DIVISION



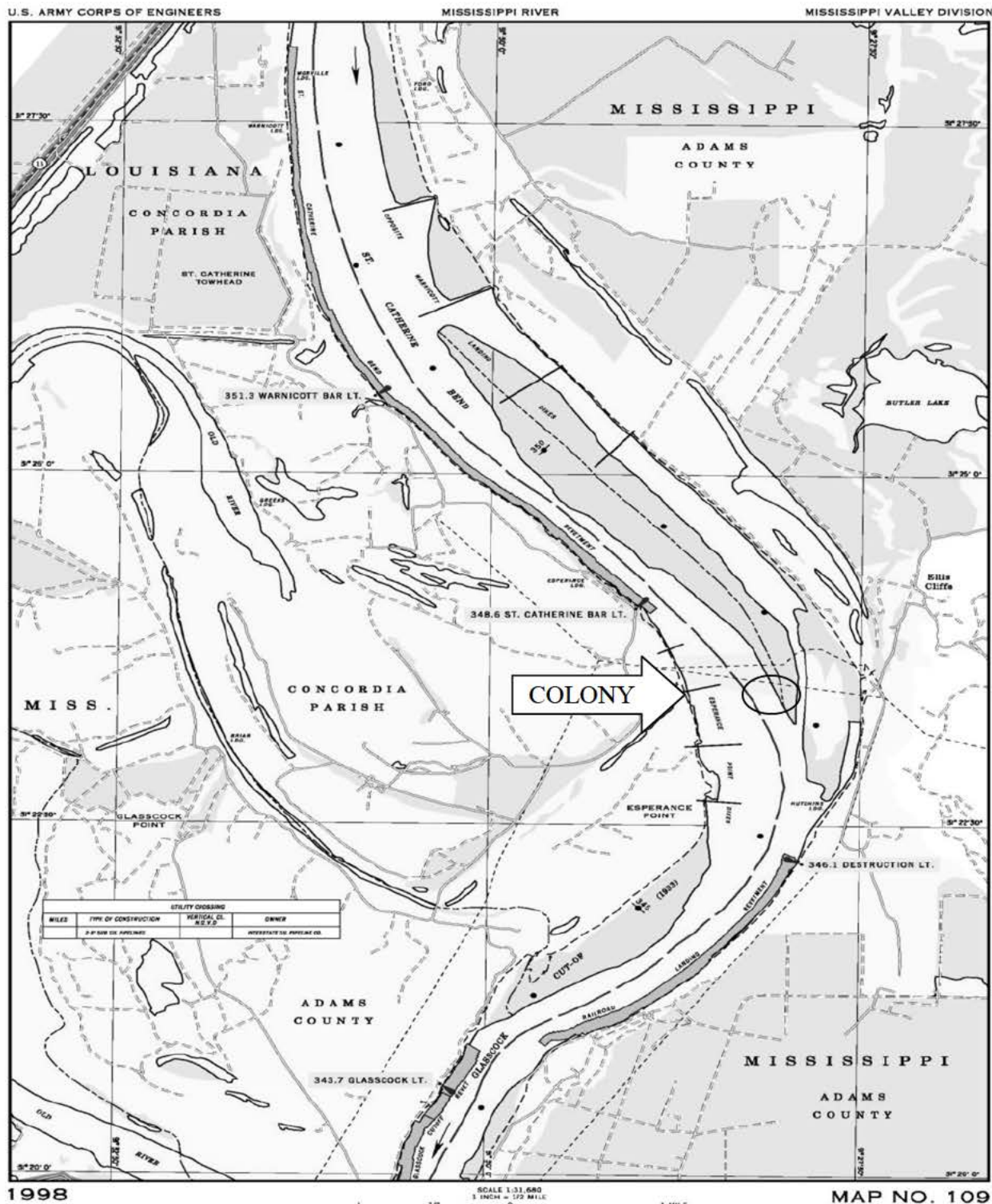
1998

MAP NO. 99

Cape Girardeau, MO to Baton Rouge, LA
Nest Colony Locations
Memphis District Corps of Engineers
A-I-49



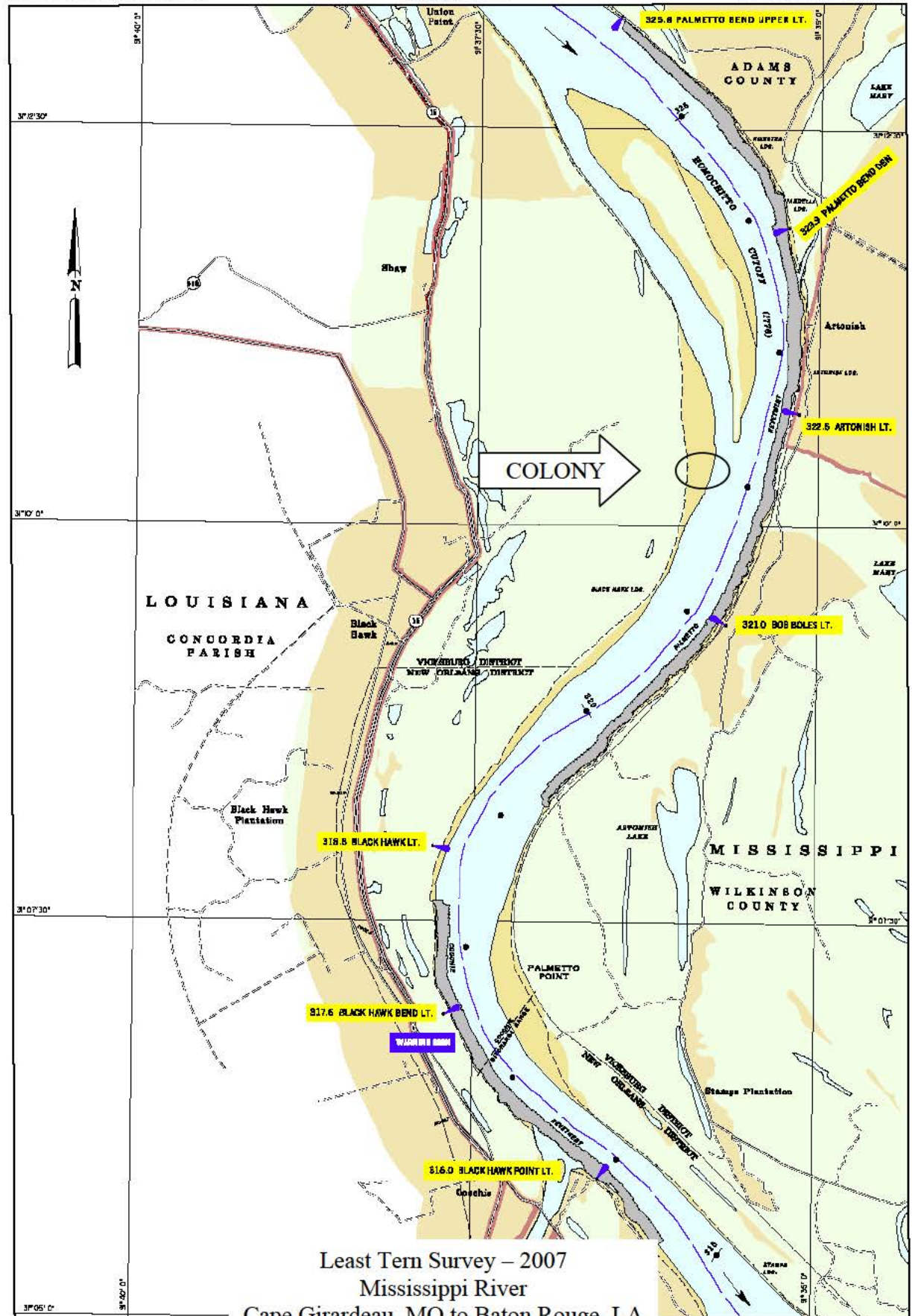
Least Tern Survey – 2007
Mississippi River
Cape Girardeau, MO to Baton Rouge, LA
Nest Colony Locations
Memphis District Corps of Engineers
A-I-51



Least Tern Survey – 2007
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-52



MAP NO. 110



1998

Least Tern Survey – 2007
 Mississippi River
 Cape Girardeau, MO to Baton Rouge, LA
 Nest Colony Locations
 Memphis District Corps of Engineers
 A-I-55

MAP NO. 112



MAP NO. 114

Appendix A – II

LEAST TERN SURVEY - 2007

**Mississippi River
Cape Girardeau, MO to Baton Rouge, LA**

SMALL BOAT SURVEY June 23 – July 8, 2007

Memphis District, Corps of Engineers

Data Sheets

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/23/2007 TIME OF DAY: 7:44 RIVER MILE: UR 30.5

LOCALITY: Alexander ILL SITE NAME: Bumgard Island
County/Parish State

WHERE SITED: Latitude: 37.04622
Longitude: 89.38099

Approximate Distance to Water: 500 Feet

NUMBERS SIGHTED:

Adults: 16
Juveniles:
Eggs: 1(2)
Nests: 1
Chicks: No

SUBSTRATE:

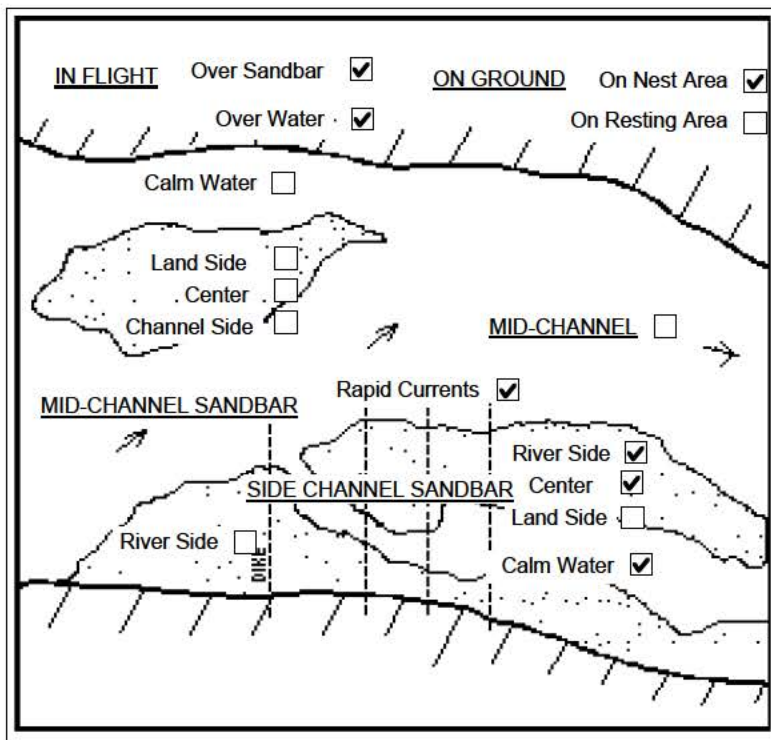
Sand: ☒
Gravel: ☒
Debris: ☐

VEGETATION:

Type:
Distance: 500 Feet

FIELD CONDITION:

Temperature: 80 °F
Rain: No
Wind: calm
% Cloud: <10%



OTHER NOTES:

Left Bank. Medium-height, flat sand and gravel bar (1 mile long x 1/2 mile wide) with no wrack line. Fishing, courting, carrying fish and resting both sides. One set of coyote tracks suggesting possible predation.

ILL side

OBSERVERS: Brown, Carpenter, D. and R. Davin, Jones, Rumancik, Thron

RIVER GAGE READING: Cape Girardeau = 19.6 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/23/2007 TIME OF DAY: 9:59 RIVER MILE: 943.6

LOCALITY: Carlisle KY SITE NAME: Island #1 Dikes
County/Parish State

WHERE SITED: Latitude: 36.88722
Longitude: 89.11982

Approximate Distance to Water: 200 Feet

NUMBERS SIGHTED:

Adults: 23
Juveniles:
Eggs: 0
Nests: 1
Chicks: No

SUBSTRATE:

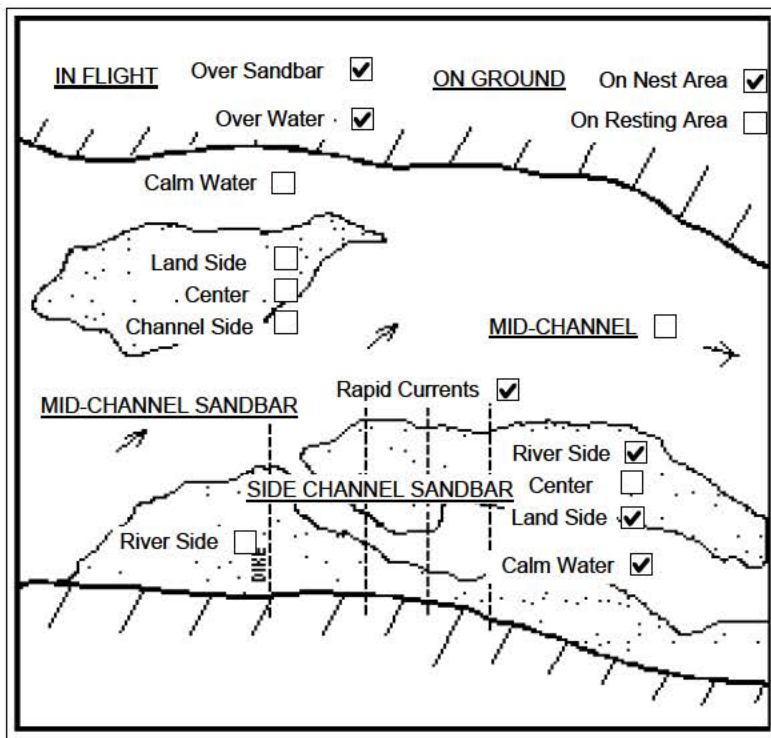
Sand: ☒
Gravel: ☐
Debris: ☒

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 83 °F
Rain: No
Wind: calm
% Cloud: 15%



OTHER NOTES:

Left Bank. Low, flat, 1.5 mile long x 0.5 wide sand bar with scattered debris. ATV tracks present. Drift count only with one observed sitting inland on presumed nest.

KY side

OBSERVERS: Brown, Carpenter, D. and R. Davin, Jones, Rumancik, Thron

RIVER GAGE READING: Cairo = 16.4 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/23/2007 TIME OF DAY: 10:30 RIVER MILE: 940.0

LOCALITY: Carlisle KY SITE NAME: Below Campbell Dikes
County/Parish State

WHERE SITED: Latitude: 36.80350
Longitude: 89.13336

Approximate Distance to Water: 500 Feet

NUMBERS SIGHTED:

Adults: 220
Juveniles:
Eggs: 3(3) 2(2)
Nests: 5
Chicks: No

SUBSTRATE:

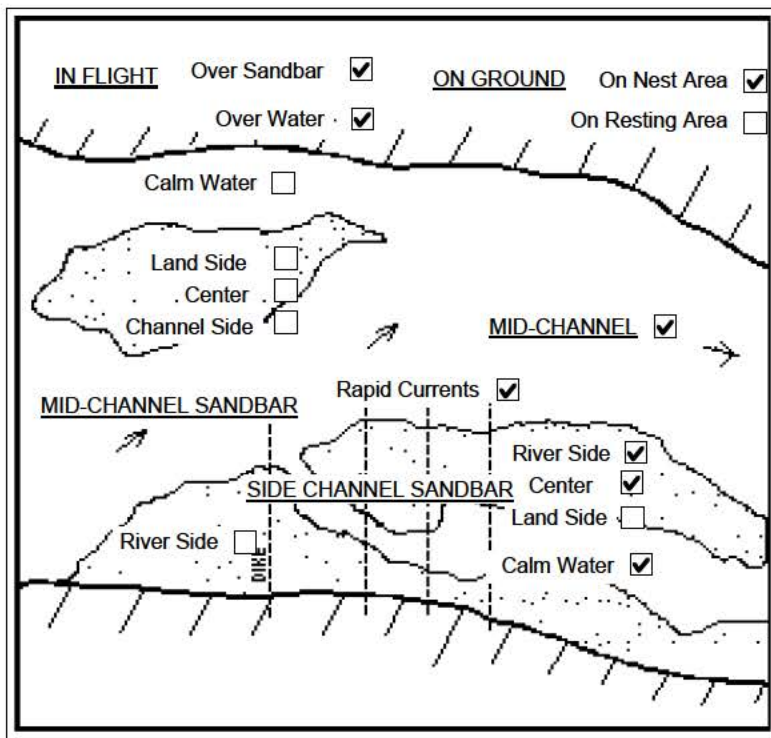
Sand: ☒
Gravel: ☒
Debris: ☒

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 87 °F
Rain: No
Wind: calm
% Cloud: 40% cirrus



OTHER NOTES:

Left Bank. Long, low, flat, unattached sand and pea-sized gravel bar (1 X 1/4 mile wide) with nests along ripple lines center of bar. No tracks. Nine adults fishing opposite bank. Three fingerling sized fish dropped in colony.

KY side

OBSERVERS: Brown, Carpenter, D. and R. Davin, Jones, Rumancik, Thron

RIVER GAGE READING: Cairo = 16.4 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/23/2007 TIME OF DAY: 11:18 RIVER MILE: 930.0

LOCALITY: Hickman KY SITE NAME: Wolf Island Bar
County/Parish State

WHERE SITED: Latitude: 36.68979
Longitude: 89.14820

Approximate Distance to Water: 500 Feet

NUMBERS SIGHTED:

Adults: 95
Juveniles:
Eggs: 2(3) 10(2)
Nests: 12
Chicks: No

SUBSTRATE:

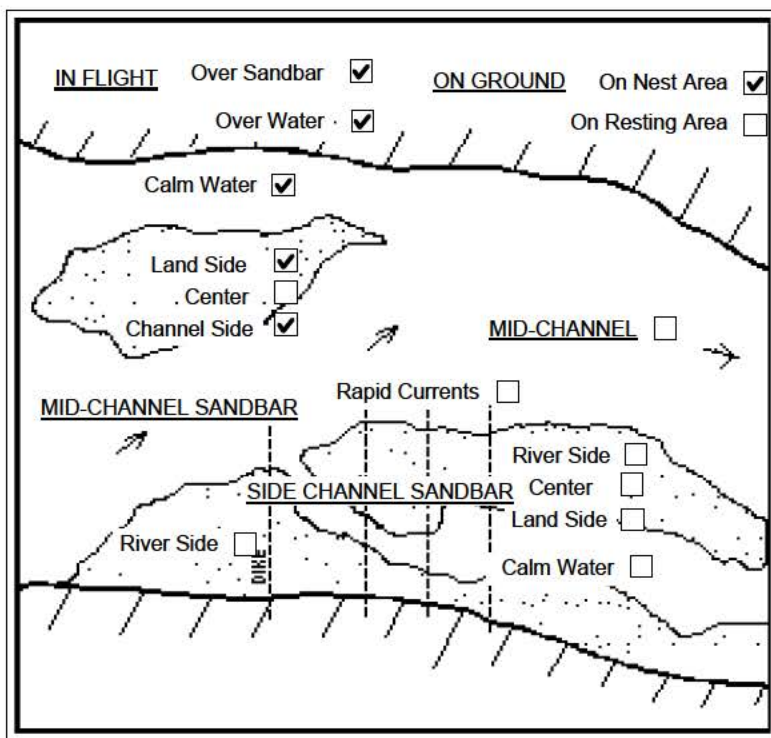
Sand: ☒
Gravel: ☒
Debris: ☒

VEGETATION:

Type: Grass/3ft. Cottonwoods
Distance: 100 Feet

FIELD CONDITION:

Temperature: 86 °F
Rain: No
Wind: S 3-5 mph
% Cloud: 70% cirrus



OTHER NOTES:

Left Bank. Large, mid-channel, undulating, high, sand bar with small wrack lines and ripples containing nests. Fishing, breasting, courting and resting on both sides, no tracks or disturbance noted.

KY side

OBSERVERS: Brown, Carpenter, D. and R. Davin, Jones, Rumancik, Thron

RIVER GAGE READING: Cairo = 16.4 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/23/2007 TIME OF DAY: 11:38 RIVER MILE: 928.0

LOCALITY: Mississippi MO SITE NAME: Moore Island Dikes
County/Parish State

WHERE SITED: Latitude: _____
Longitude: _____

Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:

Adults: 2
Juveniles: _____
Eggs: _____
Nests: _____
Chicks: No

SUBSTRATE:

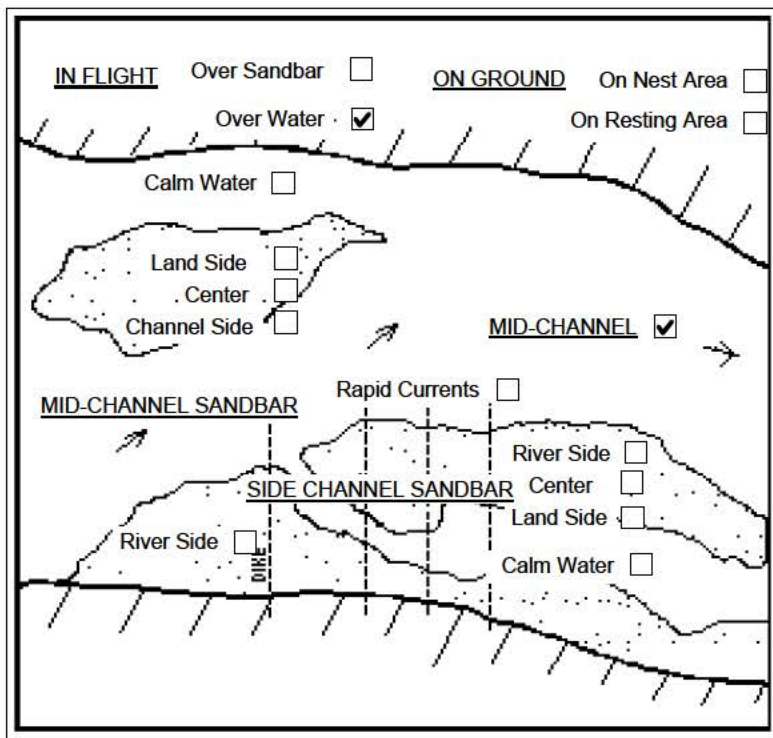
Sand: ☐
Gravel: ☐
Debris: ☐

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 86 °F
Rain: No
Wind: S 5-10 mph
% Cloud: 70%



OTHER NOTES:

Two fishing mid-channel.

OBSERVERS: Brown, Carpenter, D. and R. Davin, Jones, Rumancik, Thron

RIVER GAGE READING: Cairo = 16.4 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/23/2007 TIME OF DAY: 12:02 RIVER MILE: 924.5

LOCALITY: Fulton KY SITE NAME: Beckwith Bend
County/Parish State

WHERE SITED: Latitude: 36.60686
Longitude: 89.20319

Approximate Distance to Water: 50 Feet

NUMBERS SIGHTED:

Adults: 82
Juveniles:
Eggs: 12
Nests: 12
Chicks: No

SUBSTRATE:

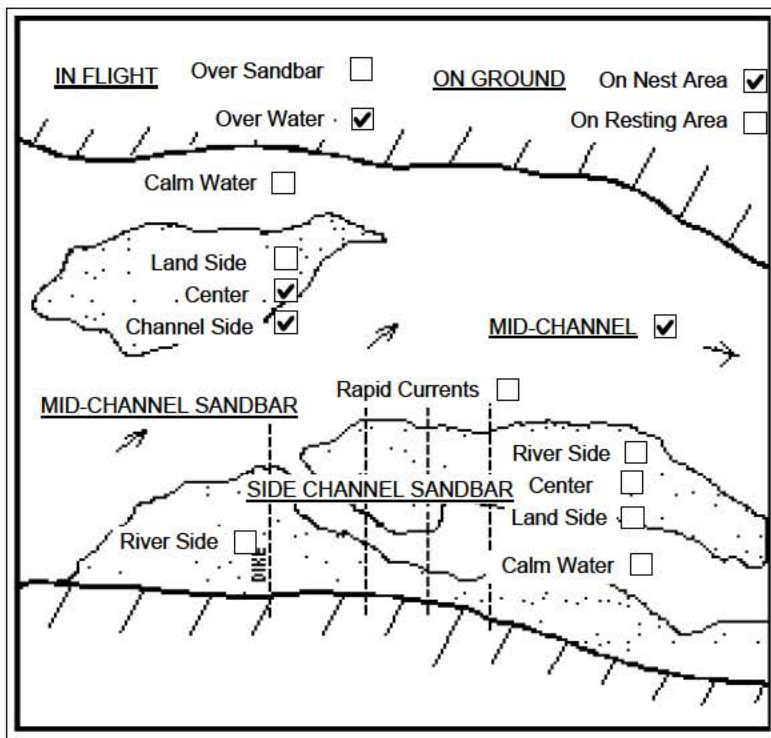
Sand: ☒
Gravel: ☒
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 86 °F
Rain: No
Wind: S 5-10 mph
% Cloud: 80%



OTHER NOTES:

Left Bank. Small, flat, unattached sand/gravel bar 2 ft. in elevation. Perimeter count only with most birds at waterline, colony widely dispersed. No tracks or disturbance.

KY side

OBSERVERS: Brown, Carpenter, D. and R. Davin, Jones, Rumancik, Thron

RIVER GAGE READING: Cairo = 16.4 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/23/2007 TIME OF DAY: 12:21 RIVER MILE: 920.0

LOCALITY: Mississippi MO SITE NAME: Hickman Bend
County/Parish State

WHERE SITED: Latitude: 36.56955
Longitude: 89.23435

Approximate Distance to Water: 300 Feet

NUMBERS SIGHTED:

Adults: 33
Juveniles:
Eggs: 1(2) 2(3)
Nests: 3
Chicks: No

SUBSTRATE:

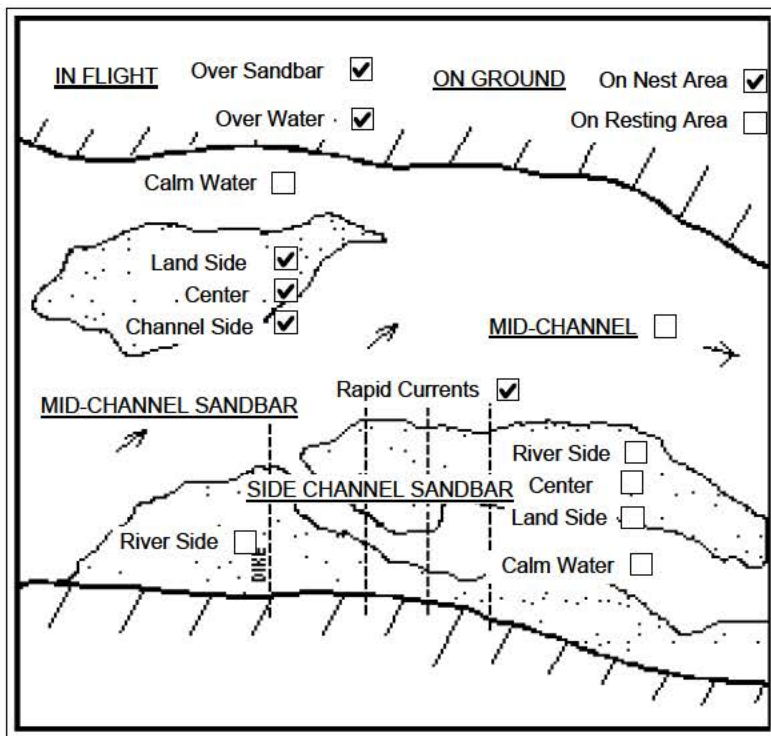
Sand: ☒
Gravel: ☒
Debris: ☒

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 88 °F
Rain: No
Wind: S 5-10 mph
% Cloud: 80%



OTHER NOTES:

Right Bank. Medium size, attached sand/gravel bar with day campers playing frisbee. Mobbing light, some breasting 3 eggs abandoned. ATV, people and dog tracks.

MO side

OBSERVERS: Brown, Carpenter, D. and R. Davin, Jones, Rumancik, Thron

RIVER GAGE READING: Cairo = 16.4 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/23/2007 TIME OF DAY: 13:30 RIVER MILE: 908.0

LOCALITY: Fulton KY SITE NAME: Island #6
County/Parish State

WHERE SITED: Latitude: 36.55050
Longitude: 89.40043

Approximate Distance to Water: 100 Feet

NUMBERS SIGHTED:

Adults: 21
Juveniles:
Eggs:
Nests: 0
Chicks: No

SUBSTRATE:

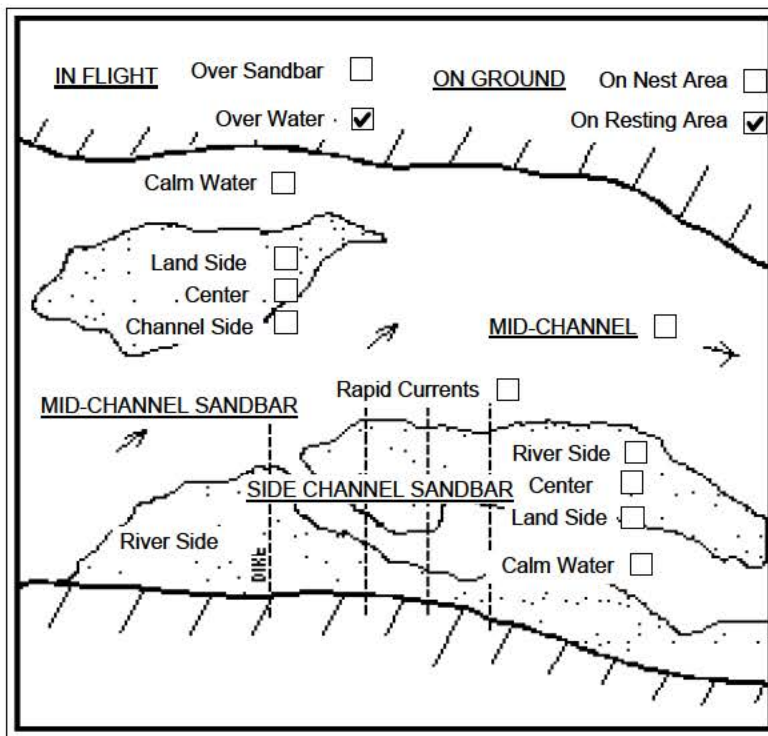
Sand: ☒
Gravel: ☒
Debris: ☒

VEGETATION:

Type: Hardwoods
Distance: 1500 Feet

FIELD CONDITION:

Temperature: 86 °F
Rain: No
Wind: S 5-10 mph
% Cloud: 80%



OTHER NOTES:

Left Bank. Resting bar attached to bank, but one scrape in gravel observed with no eggs. Terns courting and carrying fish, but most resting at waterline. No tracks or disturbance factors noted.

KY side

OBSERVERS: Brown, Carpenter, D. and R. Davin, Jones, Rumancik, Thron

RIVER GAGE READING: Cairo = 16.4 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/23/2007 TIME OF DAY: 14:33 RIVER MILE: 891.0

LOCALITY: Fulton KY SITE NAME: Kentucky Point Dikes Upper
County/Parish State

WHERE SITED: Latitude: _____
Longitude: _____

Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:

Adults: 1
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:

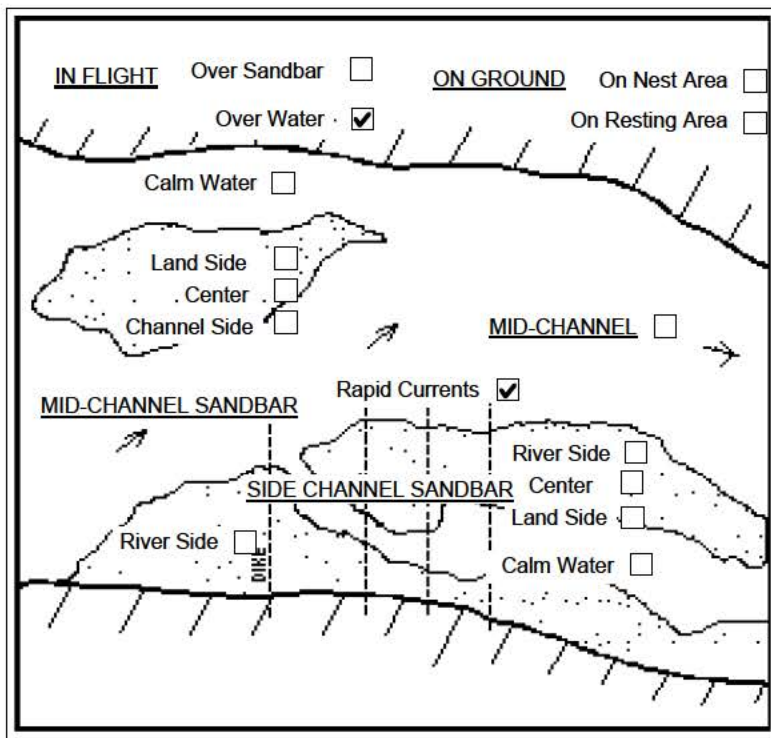
Sand: ☐
Gravel: ☐
Debris: ☐

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 85 °F
Rain: No
Wind: SW 15-20 mph
% Cloud: 80%



OTHER NOTES:

One tern fishing mid-channel. Day campers just downstreamstream.

OBSERVERS: Brown, Carpenter, D. and R. Davin, Jones, Rumancik, Thron

RIVER GAGE READING: New Madrid = 6.9 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/23/2007 TIME OF DAY: 14:50 RIVER MILE: 884.0

LOCALITY: Fulton KY SITE NAME: Kentucky Point Dikes Lower
County/Parish State

WHERE SITED: Latitude: 36.51784
Longitude: 89.55375

Approximate Distance to Water: Feet

NUMBERS SIGHTED:

Adults: 22
Juveniles:
Eggs:
Nests: 0
Chicks: No

SUBSTRATE:

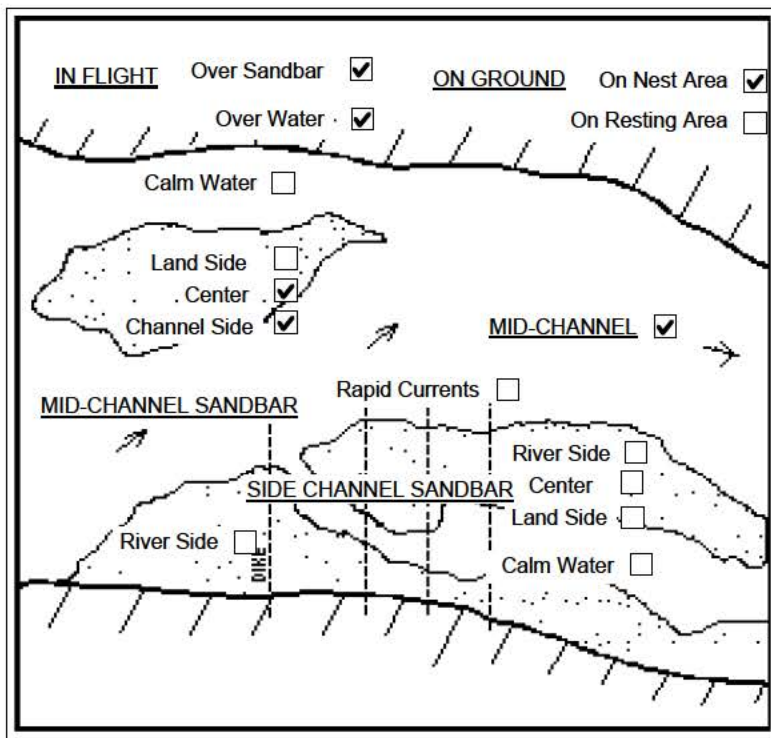
Sand: ☒
Gravel: ☐
Debris: ☐

VEGETATION:

Type: Cottonwoods <2 ft.
Distance: 50 Feet

FIELD CONDITION:

Temperature: 85 °F
Rain: No
Wind: SW 15-25 mph
% Cloud: 80%



OTHER NOTES:

Left Bank. Medium high (8 ft.), flat-topped sand bar, unattached. Birds breasting and mobbing, one egg shell observed, chicks likely present but not observed. No recreational evidence.

KY side

OBSERVERS: Brown, Carpenter, D. and R. Davin, Jones, Rumancik, Thron

RIVER GAGE READING: New Madrid = 6.9 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/23/2007 TIME OF DAY: 15:26 RIVER MILE: 876.0

LOCALITY: Lake TN SITE NAME: Marr Towhead
County/Parish State

WHERE SITED: Latitude: 36.4184
Longitude: 89.5363

Approximate Distance to Water: 500 Feet

NUMBERS SIGHTED:

Adults: 13
Juveniles:
Eggs:
Nests: 3
Chicks: No

SUBSTRATE:

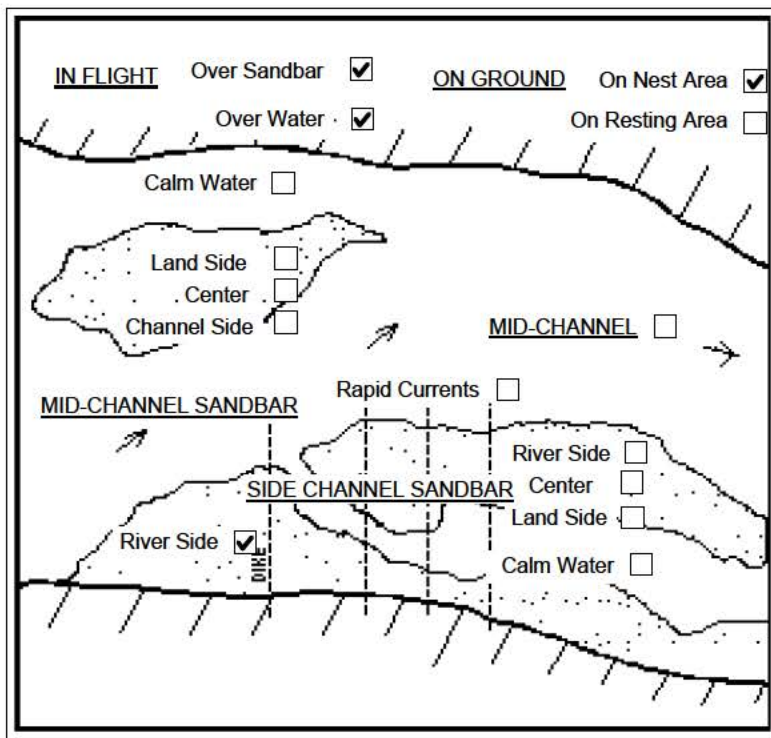
Sand: ☒
Gravel: ☒
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 85 °F
Rain: No
Wind: N 5 mph
% Cloud: 70%



OTHER NOTES:

Left Bank. Small, attached riverside bar with birds resting at waterline. Day campers 1/2 mile downstream.

TN side

OBSERVERS: Brown, Carpenter, D. and R. Davin, Jones, Rumancik, Thron

RIVER GAGE READING: Caruthersville = 9.4 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/23/2007 TIME OF DAY: 15:44 RIVER MILE: 871.6

LOCALITY: New Madrid MO SITE NAME: Stewart Towhead Dikes Upper
County/Parish State

WHERE SITED: Latitude: 36.35763
Longitude: 89.51528

Approximate Distance to Water: 500 Feet

NUMBERS SIGHTED:

Adults: 150
Juveniles:
Eggs: 2(3)
Nests: 2
Chicks: No

SUBSTRATE:

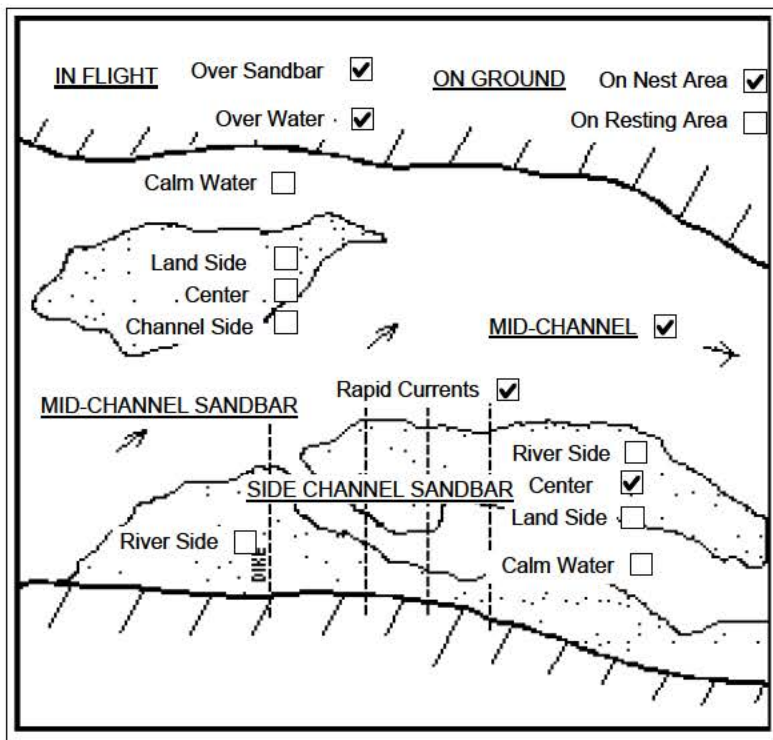
Sand: ☒
Gravel: ☒
Debris: ☒

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 82 °F
Rain: No
Wind: N 5 mph
% Cloud: 70%



OTHER NOTES:

Right Bank. Flat, 1/2 mile long colony with day campers and human tracks. Birds fishing opposite bank.

MO side

OBSERVERS: Brown, Carpenter, D. and R. Davin, Jones, Rumancik, Thron

RIVER GAGE READING: Caruthersville = 9.4 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/23/2007 TIME OF DAY: 16:13 RIVER MILE: 870.5

LOCALITY: New Madrid MO SITE NAME: Stewart Towhead Dikes Lower
County/Parish State

WHERE SITED: Latitude: 36.34634
Longitude: 89.52654

Approximate Distance to Water: 500 Feet

NUMBERS SIGHTED:

Adults: 75
Juveniles:
Eggs: 3(3) 2(1)
Nests: 5
Chicks: No

SUBSTRATE:

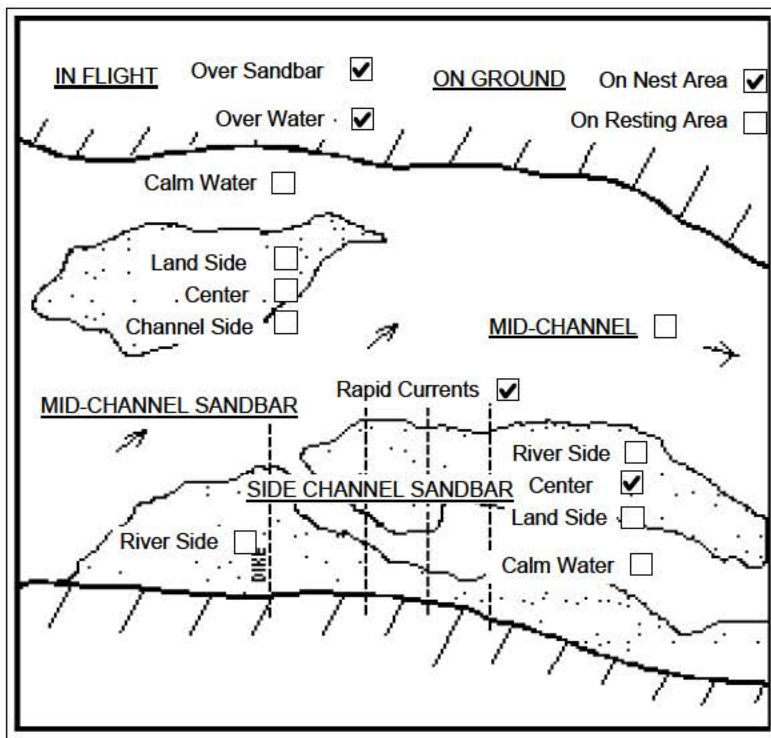
Sand: ☒
Gravel: ☐
Debris: ☒

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 86 °F
Rain: No
Wind: N 5 mph
% Cloud: 75%



OTHER NOTES:

Right Bank. Downstream of colony measured in previous data sheet, long, narrow and gently undulating, with nests located near debris. One abandoned scrape, some scrapes contain glass marbles place their by other researchers. No other signs of disturbance.

MO side

OBSERVERS: Brown, Carpenter, D. and R. Davin, Jones, Rumancik, Thron

RIVER GAGE READING: Caruthersville = 9.4 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/23/2007 TIME OF DAY: 16:36 RIVER MILE: 864.5

LOCALITY: Lake TN SITE NAME: Below Cherokee Dikes
County/Parish State

WHERE SITED: Latitude: 36.32010
Longitude: 89.61500

Approximate Distance to Water: Feet

NUMBERS SIGHTED:

Adults: 9
Juveniles:
Eggs:
Nests: 0
Chicks: No

SUBSTRATE:

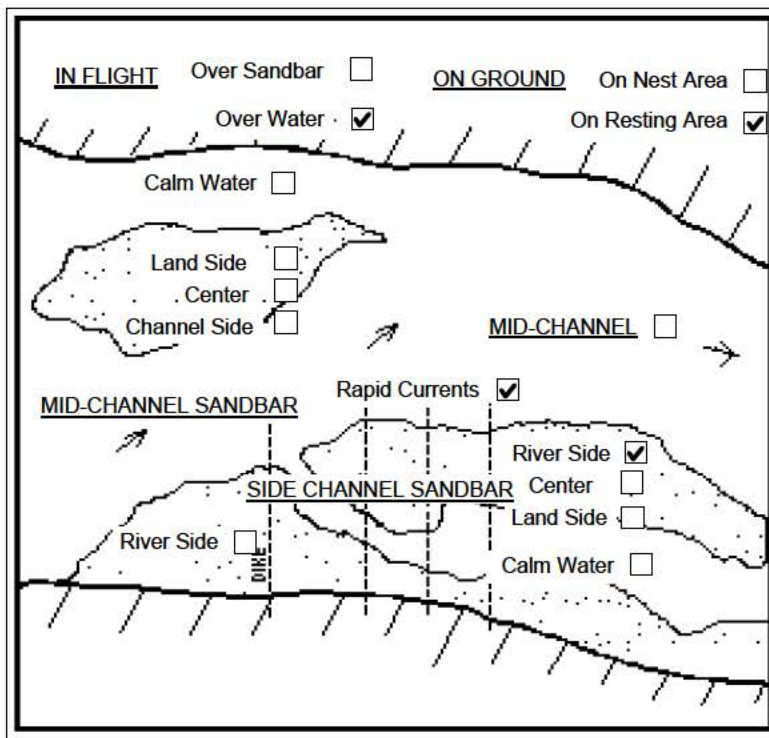
Sand: ☒
Gravel: ☐
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 86 °F
Rain: No
Wind: W 10-15 mph
% Cloud: 90%



OTHER NOTES:

Left Bank. Attached, very large, broad, gently sloping bar of solid sand 2 miles in length. ATV present along with many ATV tracks.

TN side

OBSERVERS: Brown, Carpenter, D. and R. Davin, Jones, Rumancik, Thron

RIVER GAGE READING: Caruthersville = 9.4 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/23/2007 TIME OF DAY: 17:08 RIVER MILE: 854.0

LOCALITY: Pemiscot MO SITE NAME: Robinson Bayou Dikes
County/Parish State

WHERE SITED: Latitude: 36.24504
Longitude: 89.58076

Approximate Distance to Water: 300 Feet

NUMBERS SIGHTED:

Adults: 74
Juveniles:
Eggs: 3(3)
Nests: 3
Chicks: Yes

SUBSTRATE:

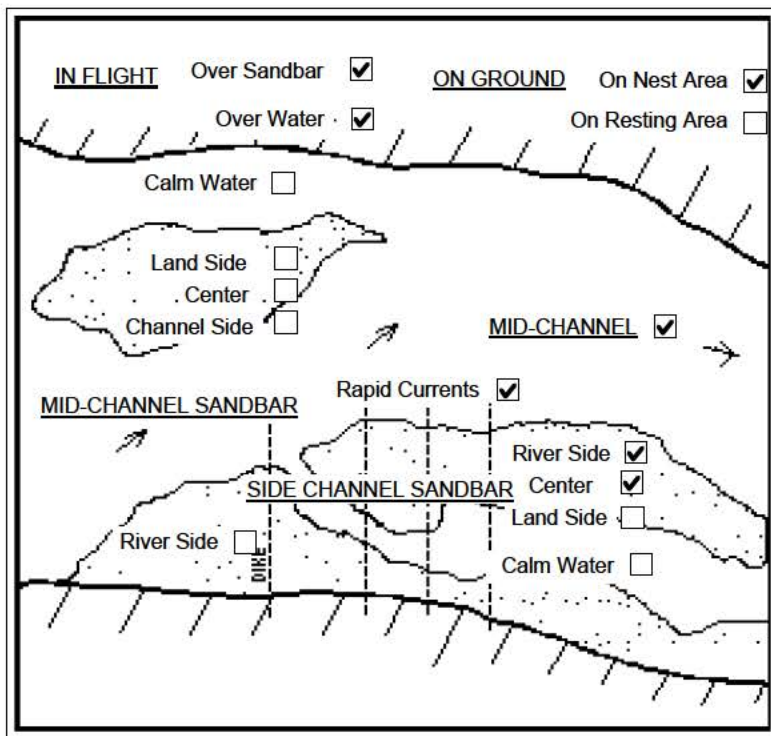
Sand: ☒
Gravel: ☐
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 87 °F
Rain: No
Wind: W 12-15 mph
% Cloud: 60%



OTHER NOTES:

Right Bank. Very long (2-3 miles), attached, flat, point bar of packed sand with colony in dike field lower end. One chick observed (1 day old), and 4 empty scrapes, but 3 with eggs. ATV and canine tracks present. Four White Pelicans, 8 Canada Geese in vicinity.

MO side

OBSERVERS: Brown, Carpenter, D. and R. Davin, Jones, Rumancik, Thron

RIVER GAGE READING: Caruthersville = 9.4 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 7/8/2007 TIME OF DAY: 6:13 RIVER MILE: 846.3

LOCALITY: Lake TN SITE NAME: Opp. Caruthersville Dikes
County/Parish State

WHERE SITED: Latitude: 36.19892
Longitude: 89.64358

Approximate Distance to Water: Feet

NUMBERS SIGHTED:

Adults: 56
Juveniles:
Eggs:
Nests: 0
Chicks: Yes

SUBSTRATE:

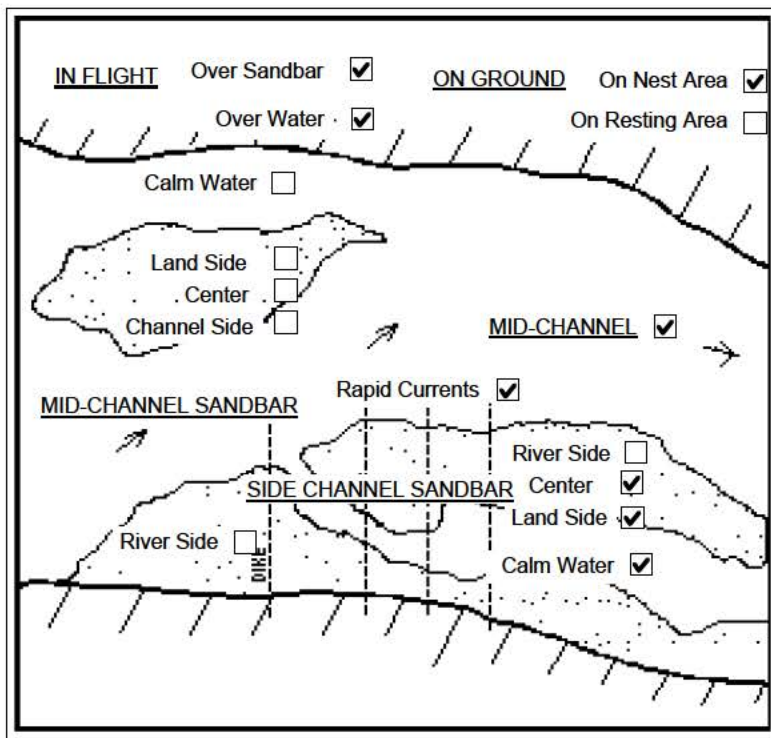
Sand: ☒
Gravel: ☐
Debris: ☒

VEGETATION:

Type: Willows/Cottonwoods (3-
Distance: 300 Feet

FIELD CONDITION:

Temperature: 76 °F
Rain: No
Wind: calm
% Cloud: 0



OTHER NOTES:

Left Bank. Small, undulating, sand bar upstream from Blaker Towhead between dikes. Four chicks (4-5 days old) observed. Many scrapes with hatched egg shells. Terns mobbing juvenile Bald Eagle, courting, fishing both sides, and carrying fish, many fishing on opposite bank along dikes. Mature Bald Eagle noted at mouth of Caruthersville harbor, 3 more below Caruthersville.

TN side

OBSERVERS: D. and R. Davin, Grubaugh, K. and W. Jones, Rumancik, Thron

RIVER GAGE READING: Caruthersville = 11.0
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 7/8/2007 TIME OF DAY: 6:33 RIVER MILE: 841.2

LOCALITY: Pemiscott MO SITE NAME: Linwood Bend
County/Parish State

WHERE SITED: Latitude: 36.15166
Longitude: 89.59692

Approximate Distance to Water: 50 Feet

NUMBERS SIGHTED:

Adults: 15
Juveniles:
Eggs:
Nests: 9
Chicks: No

SUBSTRATE:

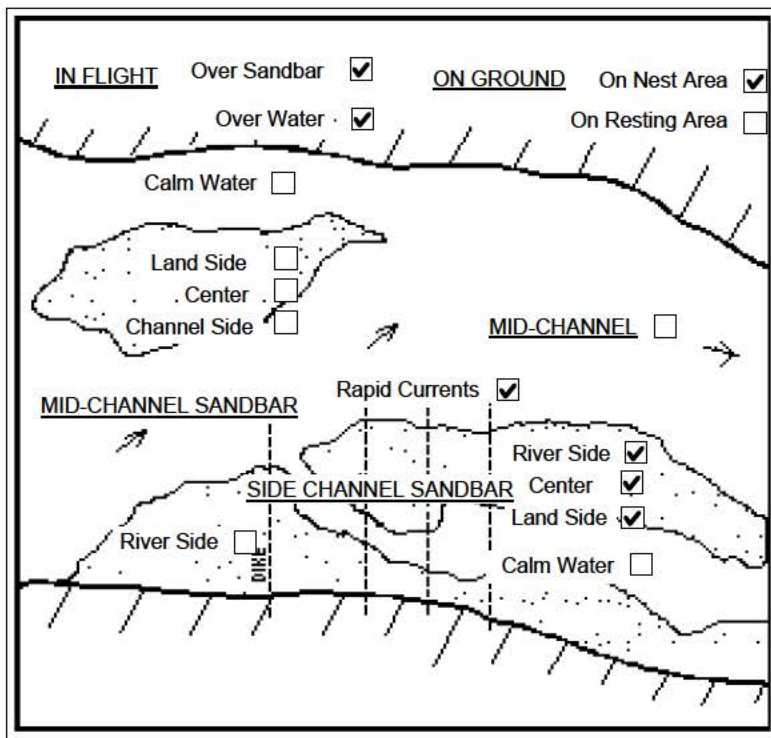
Sand: ☒
Gravel: ☒
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 76 °F
Rain: No
Wind: calm
% Cloud: 0



OTHER NOTES:

Right Bank. Small, low, flat, sand and gravel bar (800 x 300 ft.), unattached. Many fishing along dikes and back chutes, no disturbance factors noted.

MO side

OBSERVERS: D. and R. Davin, Grubaugh, K. and W. Jones, Rumancik, Thron

RIVER GAGE READING: Caruthersville = 11.0
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 7/8/2007 TIME OF DAY: 7:02 RIVER MILE: 836.0

LOCALITY: Dyer TN SITE NAME: Island #18 Towhead Dikes
County/Parish State

WHERE SITED: Latitude: 36.10308
Longitude: 89.63945

Approximate Distance to Water: 300 Feet

NUMBERS SIGHTED:

Adults: 127
Juveniles:
Eggs:
Nests: 10
Chicks: Yes

SUBSTRATE:

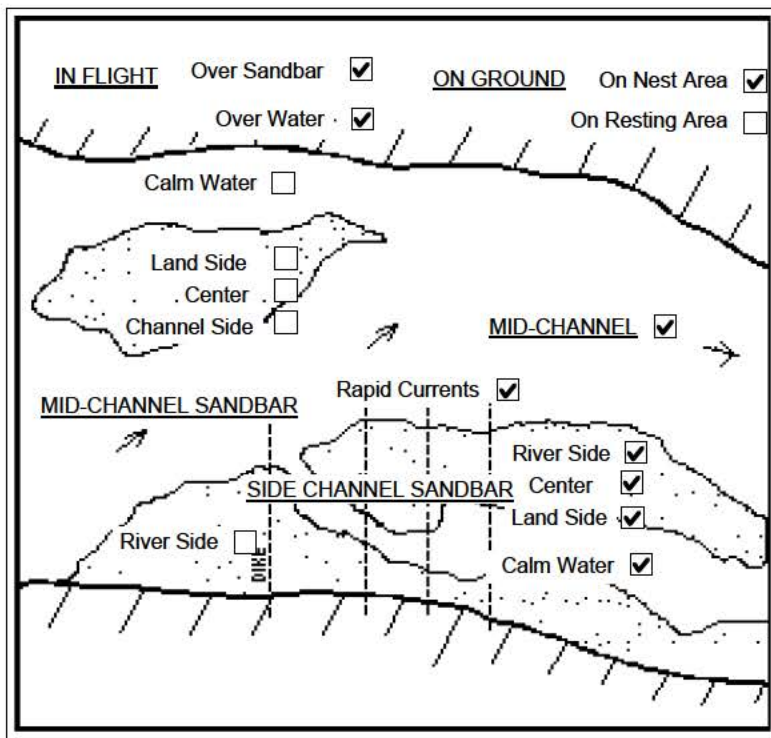
Sand: ☒
Gravel: ☒
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 76 °F
Rain: No
Wind: calm
% Cloud: 0



OTHER NOTES:

Left Bank. Large, gently rolling sand bar (8-10 ft. high) attached to wooded island. Many chicks scattered across entire bar with 12 counted, age 1 & 1/2 weeks old. Ten adults sitting on nests. ATV tracks and 1 Bald Eagle in vicinity.

TN side

OBSERVERS: D. and R. Davin, Grubaugh, K. and W. Jones, Rumancik, Thron

RIVER GAGE READING: Caruthersville = 11.0
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

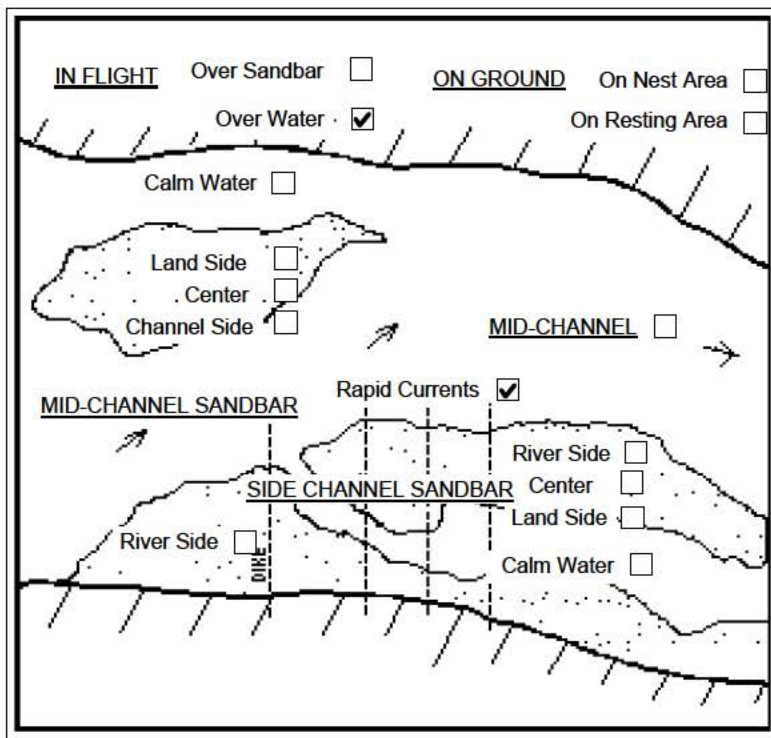
SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 7/8/2007 TIME OF DAY: 7:29 RIVER MILE: 830.0

LOCALITY: Dyer TN SITE NAME: Island #20 Dikes Upper
County/Parish State

WHERE SITED: Latitude: 36.02275
Longitude: 89.69420

Approximate Distance to Water: Feet



NUMBERS SIGHTED:

Adults: 2
Juveniles:
Eggs:
Nests: 0
Chicks: No

SUBSTRATE:

Sand: ☐
Gravel: ☐
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 77 °F
Rain: No
Wind: calm
% Cloud: 0

OTHER NOTES:

Two terns fishing between dikes.

MO side

OBSERVERS: D. and R. Davin, Grubaugh, K. and W. Jones, Rumancik, Thron

RIVER GAGE READING: Caruthersville = 11.0
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

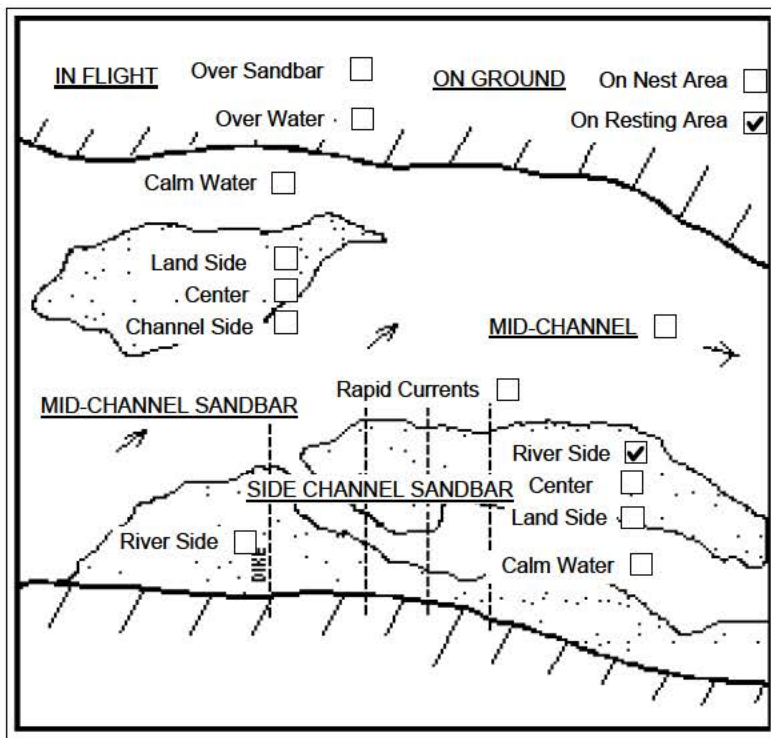
SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 7/8/2007 TIME OF DAY: 7:35 RIVER MILE: 829.5

LOCALITY: Dyer TN SITE NAME: Island #20 Dikes Lower
County/Parish State

WHERE SITED: Latitude: 36.01326
Longitude: 89.70654

Approximate Distance to Water: Feet



NUMBERS SIGHTED:

Adults: 11
Juveniles:
Eggs:
Nests: 0
Chicks: No

SUBSTRATE:

Sand: ☒
Gravel: ☒
Debris: ☐

VEGETATION:

Type: Willows/Cottonwoods
Distance: 500 Feet

FIELD CONDITION:

Temperature: 77 °F
Rain: No
Wind: calm
% Cloud: 0

OTHER NOTES:

Right Bank. Attached downstream point of wooded island, 2 ft. elevation. Eleven resting at waterline.

MO side

OBSERVERS: D. and R. Davin, Grubaugh, K. and W. Jones, Rumancik, Thron

RIVER GAGE READING: Caruthersville = 11.0
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

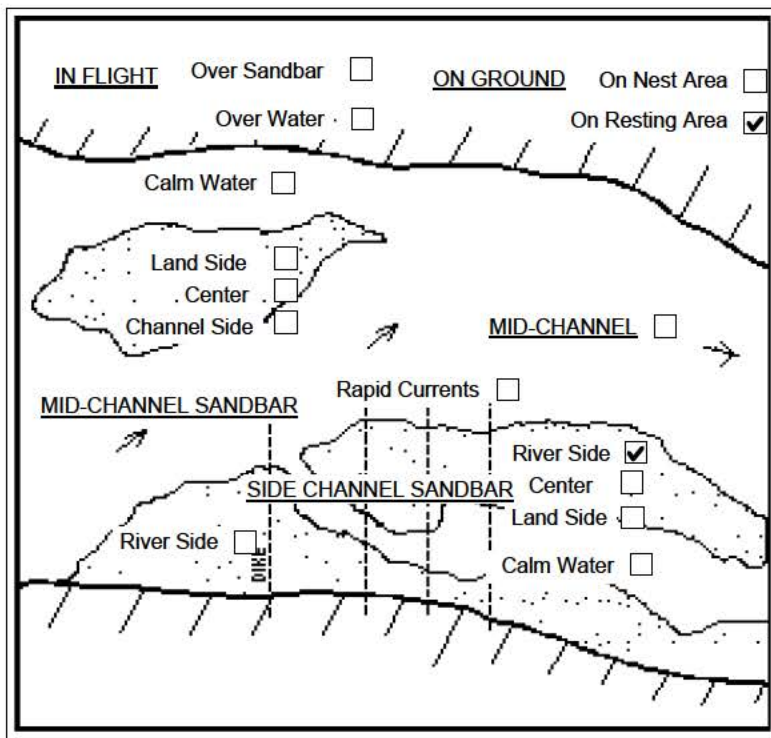
SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 7/8/2007 TIME OF DAY: 7:37 RIVER MILE: 827.0

LOCALITY: Dyer TN SITE NAME: Head of Island #21 Dikes
County/Parish State

WHERE SITED: Latitude: _____
Longitude: _____

Approximate Distance to Water: _____ Feet



NUMBERS SIGHTED:

Adults: 8
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:

Sand: ☒
Gravel: ☐
Debris: ☐

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 78 °F
Rain: No
Wind: calm
% Cloud: 0

OTHER NOTES:

Left Bank. Eleven resting at waterline

TN side

OBSERVERS: D. and R. Davin, Grubaugh, K. and W. Jones, Rumancik, Thron

RIVER GAGE READING: Caruthersville = 11.0
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 7/8/2007 TIME OF DAY: 7:45 RIVER MILE: 825.2

LOCALITY: Dyer TN SITE NAME: Island #21
County/Parish State

WHERE SITED: Latitude: 35.96197
Longitude: 89.71049

Approximate Distance to Water: 800 Feet

NUMBERS SIGHTED:

Adults: 42
Juveniles:
Eggs:
Nests: 0
Chicks: Yes

SUBSTRATE:

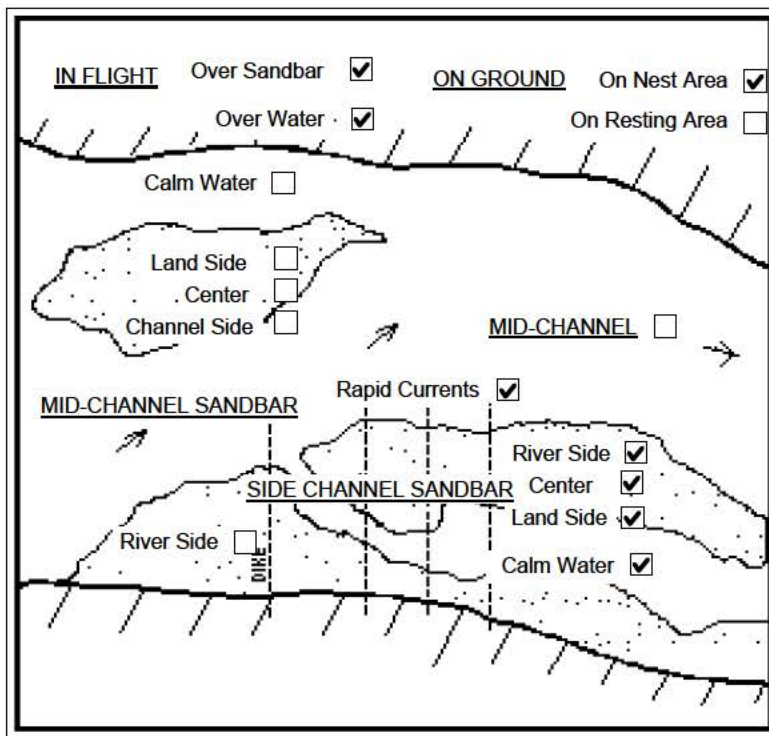
Sand: ☒
Gravel: ☐
Debris: ☒

VEGETATION:

Type: Willows/Cottonwoods/gr
Distance: 500 Feet

FIELD CONDITION:

Temperature: 78 °F
Rain: No
Wind: calm
% Cloud: 0



OTHER NOTES:

Left Bank. High, unattached, sand, mud, and gravel bar with much debris. Many chicks up to 1 1/2 weeks old, many at waterline. Heavy mobbing of Great Blue Heron and ATV tracks.

TN side

OBSERVERS: D. and R. Davin, Grubaugh, K. and W. Jones, Rumancik, Thron

RIVER GAGE READING: Caruthersville = 11.0
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 7/8/2007 TIME OF DAY: 7:54 RIVER MILE: 819.0

LOCALITY: Mississippi AR SITE NAME: Wrights Point Dikes
County/Parish State

WHERE SITED: Latitude: 35.91022
Longitude: 89.64837

Approximate Distance to Water: 800 Feet

NUMBERS SIGHTED:

Adults: 56
Juveniles:
Eggs: 1(3)
Nests: 6
Chicks: Yes

SUBSTRATE:

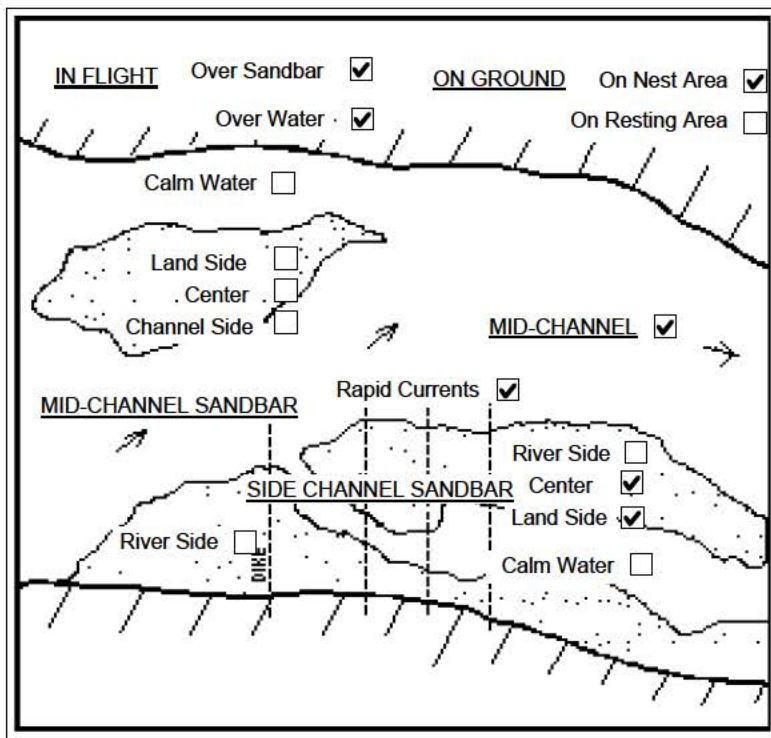
Sand: ☒
Gravel: ☒
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 80 °F
Rain: No
Wind: NE 5 mph
% Cloud: 0



OTHER NOTES:

Right Bank. Large, high (18 ft.), attached 50/50 sand and gravel bar with mostly empty scrapes on center and backside, sand and gravel. Chicks up to 1 week old. Fingerling shad. Campers present downstream and 2 fishing boats.

AR side

OBSERVERS: D. and R. Davin, Grubaugh, K. and W. Jones, Rumancik, Thron

RIVER GAGE READING: Caruthersville = 11.0
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 7/8/2007 TIME OF DAY: 8:50 RIVER MILE: 811.5

LOCALITY: Lauderdale TN SITE NAME: Below Tamm Bend Dikes
County/Parish State

WHERE SITED: Latitude: 35.90696
Longitude: 89.74520

Approximate Distance to Water: 300 Feet

NUMBERS SIGHTED:

Adults: 135
Juveniles:
Eggs: 1(2)
Nests: 9
Chicks: Yes

SUBSTRATE:

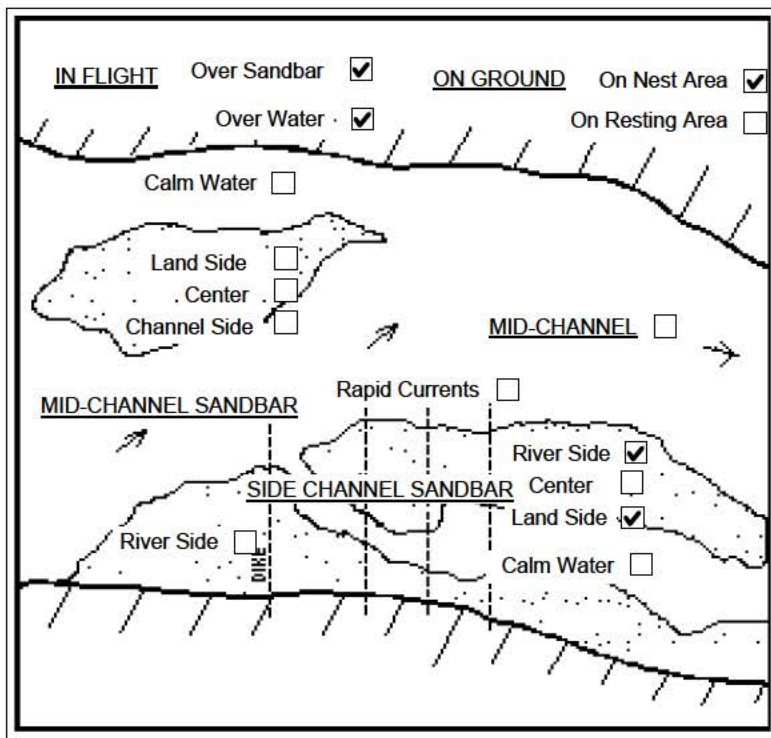
Sand: ☒
Gravel: ☒
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 81 °F
Rain: No
Wind: calm
% Cloud: 0



OTHER NOTES:

Left Bank. Very large gravel/sand bar with colony widely dispersed. Ten chicks up to 1 week old, many scrapes.

TN side

OBSERVERS: D. and R. Davin, Grubaugh, K. and W. Jones, Rumancik, Thron

RIVER GAGE READING: Caruthersville = 11.0
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 7/8/2007 TIME OF DAY: 9:15 RIVER MILE: 807.3

LOCALITY: Lauderdale TN SITE NAME: Nebraska Point Dikes
County/Parish State

WHERE SITED: Latitude: 35.85965
Longitude: 89.75936

Approximate Distance to Water: 800 Feet

NUMBERS SIGHTED:

Adults: 53
Juveniles:
Eggs:
Nests: 9
Chicks: No

SUBSTRATE:

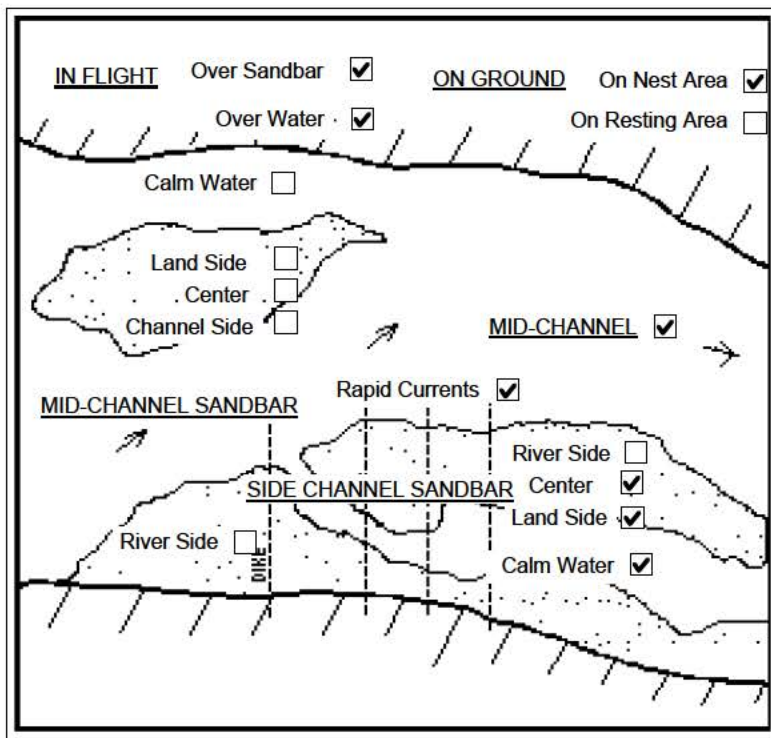
Sand: ☒
Gravel: ☐
Debris: ☒

VEGETATION:

Type: Cottonwood/willows
Distance: 60 Feet

FIELD CONDITION:

Temperature: 83 °F
Rain: No
Wind: calm
% Cloud: 0



OTHER NOTES:

Left Bank. High (20 ft.) long, broad bar of soft sand. Eight fishing and flying opposite bank. Camping remnants, Armadillo and dog tracks.

TN side

OBSERVERS: D. and R. Davin, Grubaugh, K. and W. Jones, Rumancik, Thron

RIVER GAGE READING: Caruthersville = 11.0
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 7/8/2007 TIME OF DAY: 9:30 RIVER MILE: 803.0

LOCALITY: Mississippi AR SITE NAME: Bend of Island #25
County/Parish State

WHERE SITED: Latitude: 35.82105
Longitude: 89.69914

Approximate Distance to Water: 100 Feet

NUMBERS SIGHTED:

Adults: 62
Juveniles:
Eggs:
Nests: 17
Chicks: No

SUBSTRATE:

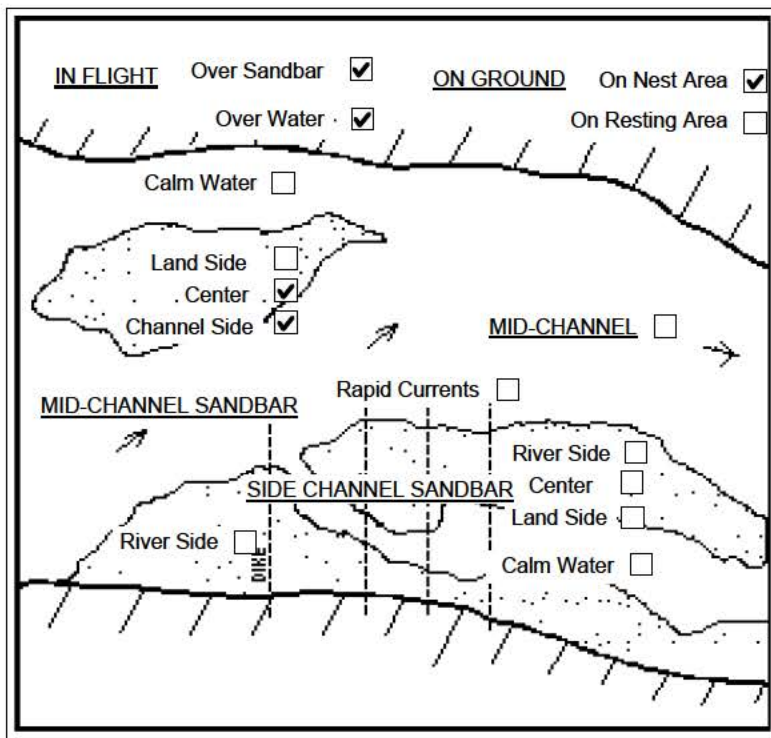
Sand: ☒
Gravel: ☒
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 82 °F
Rain: No
Wind: calm
% Cloud: 0



OTHER NOTES:

Right Bank. Small, low, flat, unattached mid-channel bar with 17 sitting on scrapes, others at waterline and fishing back shoot. No tracks

AR side

OBSERVERS: D. and R. Davin, Grubaugh, K. and W. Jones, Rumancik, Thron

RIVER GAGE READING: Caruthersville = 11.0
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 7/8/2007 TIME OF DAY: 9:53 RIVER MILE: 798.0

LOCALITY: Lauderdale TN SITE NAME: Forked Deer Dikes
County/Parish State

WHERE SITED: Latitude: 35.78093
Longitude: 89.77006

Approximate Distance to Water: 75 Feet

NUMBERS SIGHTED:

Adults: 225
Juveniles:
Eggs: 1(2) 2(1)
Nests: 30
Chicks: Yes

SUBSTRATE:

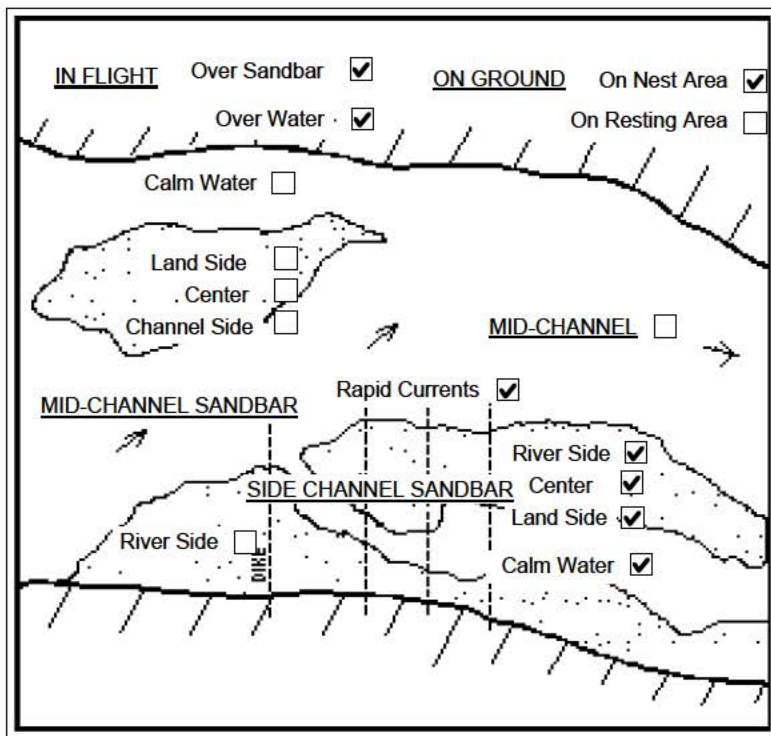
Sand: ☒
Gravel: ☐
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 82 °F
Rain: No
Wind: calm
% Cloud: 0



OTHER NOTES:

Left Bank. Unattached, long, low (3 ft.), flat, clean, sand bar with pea-gravel patches (1 mile x 400 ft. wide). Many chicks (20+ up to 4 days old) and scrapes. Terns breasting and fishing both sides. No tracks or disturbance sign noted.

TN side

OBSERVERS: D. and R. Davin, Grubaugh, K. and W. Jones, Rumancik, Thron

RIVER GAGE READING: Caruthersville = 11.0
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 7/8/2007 TIME OF DAY: 10:29 RIVER MILE: 794.0

LOCALITY: Mississippi AR SITE NAME: Ashport Goldust Dikes
County/Parish State

WHERE SITED: Latitude: 35.79805
Longitude: 89.82213

Approximate Distance to Water: 100 Feet

NUMBERS SIGHTED:

Adults: 35
Juveniles:
Eggs:
Nests: 0
Chicks: No

SUBSTRATE:

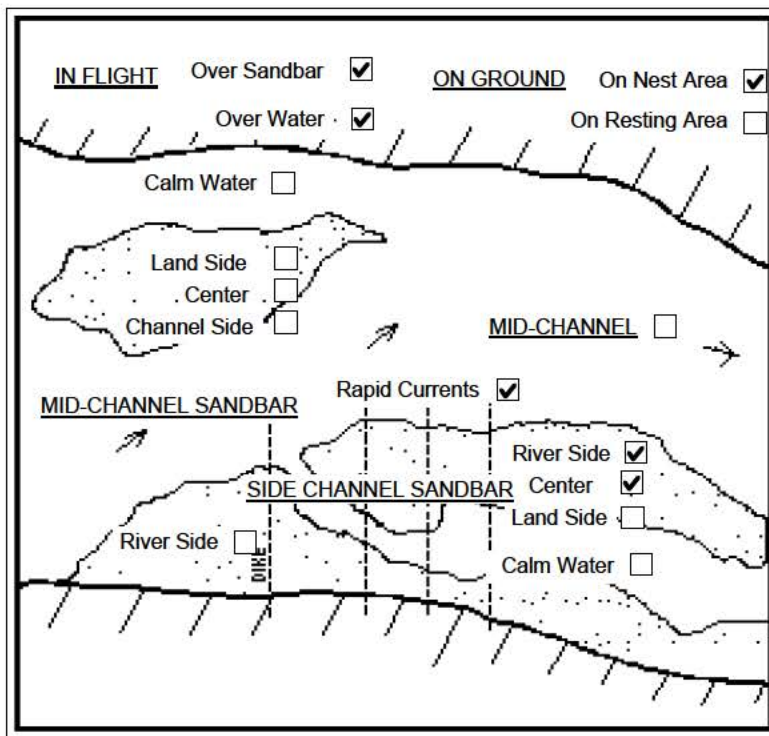
Sand: ☒
Gravel: ☐
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 82 °F
Rain: No
Wind: NE 5mph
% Cloud: 0



OTHER NOTES:

Right Bank. Large, long, clean, flat sand bar between dikes. Day campers lower end of colony and ATV tracks abundant.

AR side

OBSERVERS: D. and R. Davin, Grubaugh, K. and W. Jones, Rumancik, Thron

RIVER GAGE READING: Caruthersville = 11.0
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 7/8/2007 TIME OF DAY: 10:38 RIVER MILE: 789.5

LOCALITY: Lauderdale TN SITE NAME: Keyes Point Dikes Upper
County/Parish State

WHERE SITED: Latitude: 35.73037
Longitude: 89.90223

Approximate Distance to Water: 30 Feet

NUMBERS SIGHTED:

Adults: 46
Juveniles:
Eggs: 1(2)
Nests: 9
Chicks: No

SUBSTRATE:

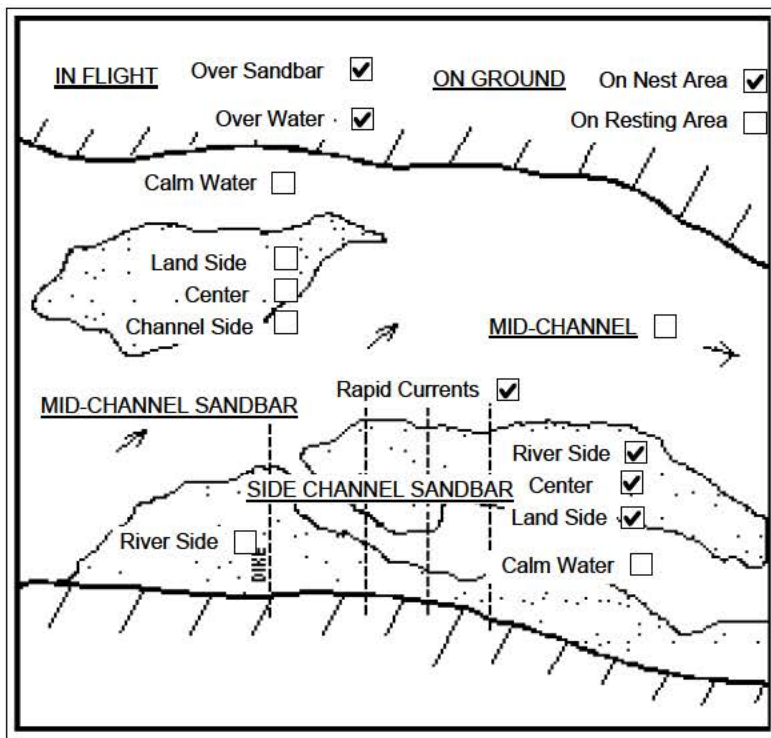
Sand: ☒
Gravel: ☒
Debris: ☐

VEGETATION:

Type: Cottonwoods/grass
Distance: 100 Feet

FIELD CONDITION:

Temperature: 83 °F
Rain: No
Wind: calm
% Cloud: 0



OTHER NOTES:

Left Bank. Flat, medium height, sand and gravel bar with most nests in gravel. Birds breasting and human footprints.

TN side

OBSERVERS: D. and R. Davin, Grubaugh, K. and W. Jones, Rumancik, Thron

RIVER GAGE READING: Caruthersville = 11.0
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 7/8/2007 TIME OF DAY: 11:01 RIVER MILE: 787.0

LOCALITY: Lauderdale TN SITE NAME: Keyes Point Dikes Lower
County/Parish State

WHERE SITED: Latitude: 35.71675
Longitude: 89.93629

Approximate Distance to Water: 200 Feet

NUMBERS SIGHTED:

Adults: 79
Juveniles:
Eggs:
Nests: 13
Chicks: No

SUBSTRATE:

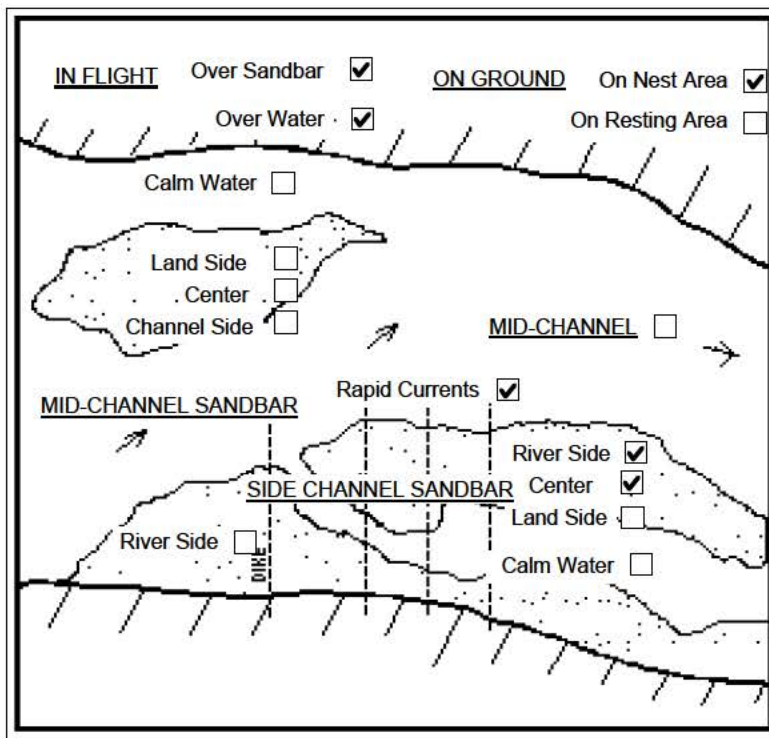
Sand: ☒
Gravel: ☐
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 84 °F
Rain: No
Wind: calm
% Cloud: 0



OTHER NOTES:

Left Bank. Long, low, extended sandbar, attached upstream. Drift count only but no tracks or other disturbance observed.

TN side

OBSERVERS: D. and R. Davin, Grubaugh, K. and W. Jones, Rumancik, Thron

RIVER GAGE READING: Caruthersville = 11.0
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 7/8/2007 TIME OF DAY: 11:20 RIVER MILE: 783.5

LOCALITY: Lauderdale TN SITE NAME: Below Plum Point Dikes
County/Parish State

WHERE SITED: Latitude: 35.65674
Longitude: 89.91379

Approximate Distance to Water: 150 Feet

NUMBERS SIGHTED:

Adults: 303
Juveniles:
Eggs:
Nests: 50
Chicks: Yes

SUBSTRATE:

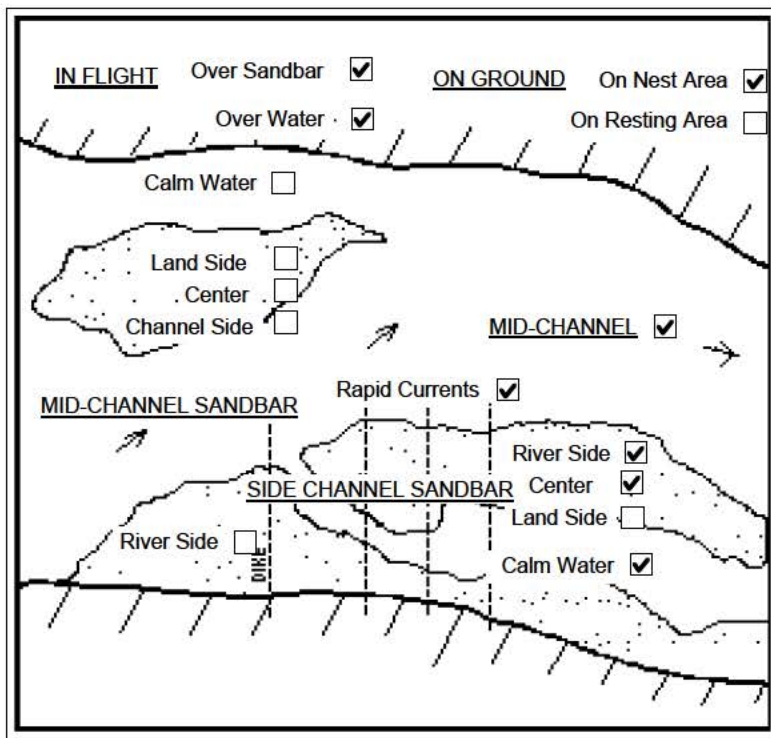
Sand: ☒
Gravel: ☐
Debris: ☐

VEGETATION:

Type: grass
Distance: Feet

FIELD CONDITION:

Temperature: 84 °F
Rain: No
Wind: calm
% Cloud: 0



OTHER NOTES:

Left Bank. Small, unattached sand bar (300 x 800 ft.) less than 2 ft. in elevation. Light mobbing with breasting and fishing on both sides. Chicks too numerous to count, all ages up to 2 weeks old.

TN side

OBSERVERS: D. and R. Davin, Grubaugh, K. and W. Jones, Rumancik, Thron

RIVER GAGE READING: Caruthersville = 11.0
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 7/8/2007 TIME OF DAY: 11:50 RIVER MILE: 778.0

LOCALITY: Mississippi AR SITE NAME: Driver Cut-Off
County/Parish State

WHERE SITED: Latitude: _____
Longitude: _____

Approximate Distance to Water: _____ Feet

NUMBERS SIGHTED:

Adults: 4
Juveniles: _____
Eggs: _____
Nests: 0
Chicks: No

SUBSTRATE:

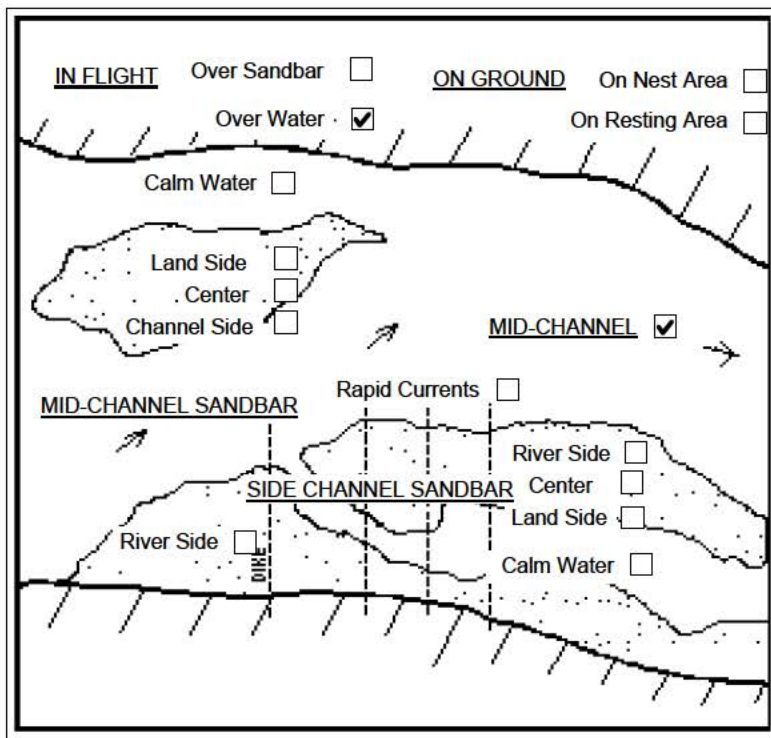
Sand: ☐
Gravel: ☐
Debris: ☐

VEGETATION:

Type: _____
Distance: _____ Feet

FIELD CONDITION:

Temperature: 85 °F
Rain: No
Wind: calm
% Cloud: 0



OTHER NOTES:

Four terns in flight.

TN side

OBSERVERS: D. and R. Davin, Grubaugh, K. and W. Jones, Rumancik, Thron

RIVER GAGE READING: Memphis = 2.2
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 7/8/2007 TIME OF DAY: 12:05 RIVER MILE: 775.0

LOCALITY: Lauderdale TN SITE NAME: Hatchie Towhead
County/Parish State

WHERE SITED: Latitude: 35.53149
Longitude: 89.90950

Approximate Distance to Water: Feet

NUMBERS SIGHTED:

Adults: 64
Juveniles:
Eggs:
Nests: 6
Chicks: No

SUBSTRATE:

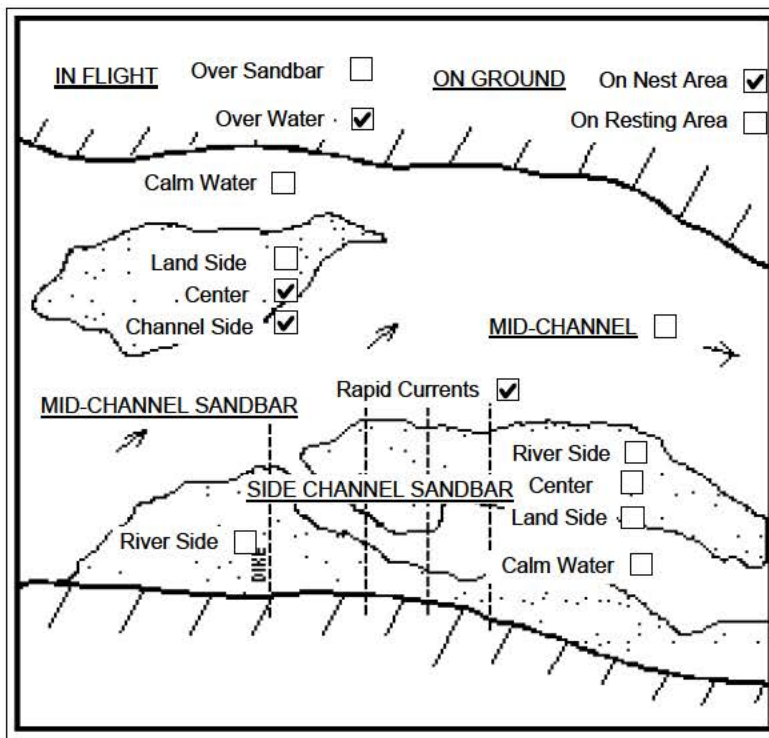
Sand: ☒
Gravel: ☒
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 86 °F
Rain: No
Wind: calm
% Cloud: 10%



OTHER NOTES:

Left Bank. Long(1 mile) attached sandbar with lignite chunks. Perimeter count indicates 6 tending scrapes, others breasting river side. No signs of disturbance.

TN side

OBSERVERS: D. and R. Davin, Grubaugh, K. and W. Jones, Rumancik, Thron

RIVER GAGE READING: Memphis = 2.2
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 7/8/2007 TIME OF DAY: 12:22 RIVER MILE: 771.5

LOCALITY: Tipton TN SITE NAME: Randolph Upper
County/Parish State

WHERE SITED: Latitude: 35.53444
Longitude: 89.89822

Approximate Distance to Water: 50 Feet

NUMBERS SIGHTED:

Adults: 150
Juveniles:
Eggs: 1(3) 5(2)
Nests: 40
Chicks: Yes

SUBSTRATE:

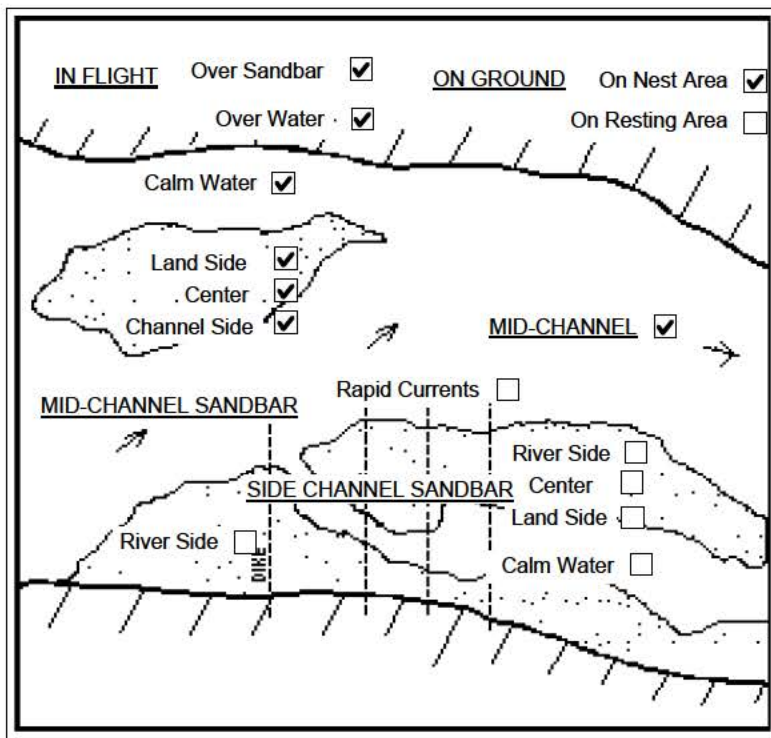
Sand: ☒
Gravel: ☒
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 87 °F
Rain: No
Wind: calm
% Cloud: 10%



OTHER NOTES:

Left Bank. Mid-size, unattached, mid-channel sand bar upstream from high large spoil bar maintained by dredge spoil. Many chicks (up to 4 days old) and nests with eggs, one chick mortality cause unknown. No signs of disturbance.

TN side

OBSERVERS: D. and R. Davin, Grubaugh, K. and W. Jones, Rumancik, Thron

RIVER GAGE READING: Memphis = 2.2
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 7/8/2007 TIME OF DAY: 12:43 RIVER MILE: 770.0

LOCALITY: _____ SITE NAME: Randolph Lower

County/Parish _____ State _____

WHERE SITED: Latitude: 35.52599

Longitude: 89.89949

Approximate Distance to Water: 100 Feet

NUMBERS SIGHTED:

Adults: 250

Juveniles: _____

Eggs: _____

Nests: 15

Chicks: Yes

SUBSTRATE:

Sand: ☒

Gravel: ☒

Debris: ☐

VEGETATION:

Type: Grass

Distance: 50 Feet

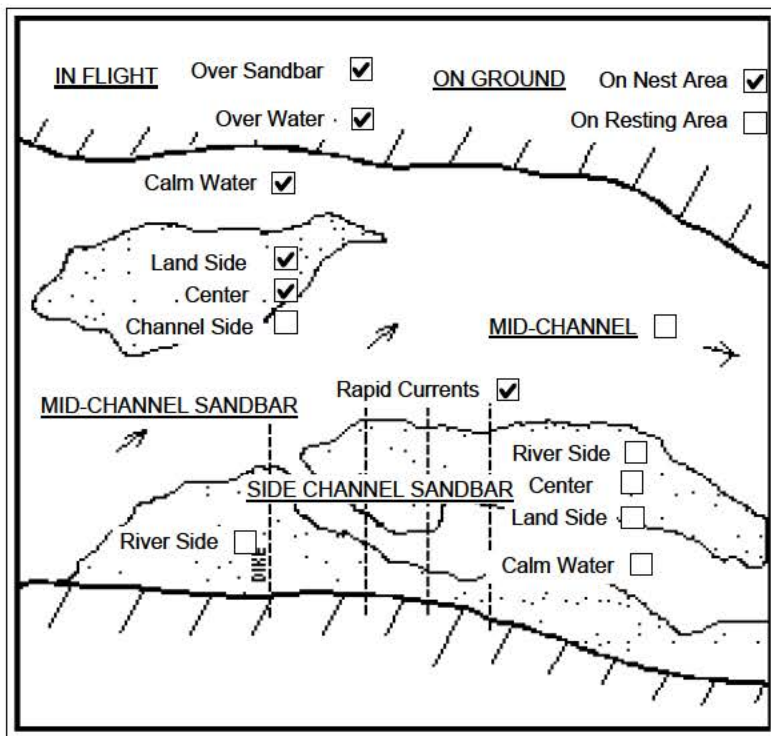
FIELD CONDITION:

Temperature: 87 °F

Rain: No

Wind: calm

% Cloud: 10%



OTHER NOTES:

Left Bank. Large, high, spoil bar 20 ft. in elevation. Many chicks up to 2 weeks of age and older, some hiding in grass clumps, one found dead. Signs of camping at the water line.

OBSERVERS: _____

RIVER GAGE READING: _____ = _____
(Gage Location) (Elevation)

FLY ☐ BOAT ☒

DATE: 7/8/2007 TIME OF DAY: 13:12 RIVER MILE: 766.0

NUMBERS SIGHTED:

Adults: 16

Juveniles:

Eggs:

Nests: 0

Chicks: No

SUBSTRATE:

Sand: ☒

Gravel: ☒

Debris: ☒

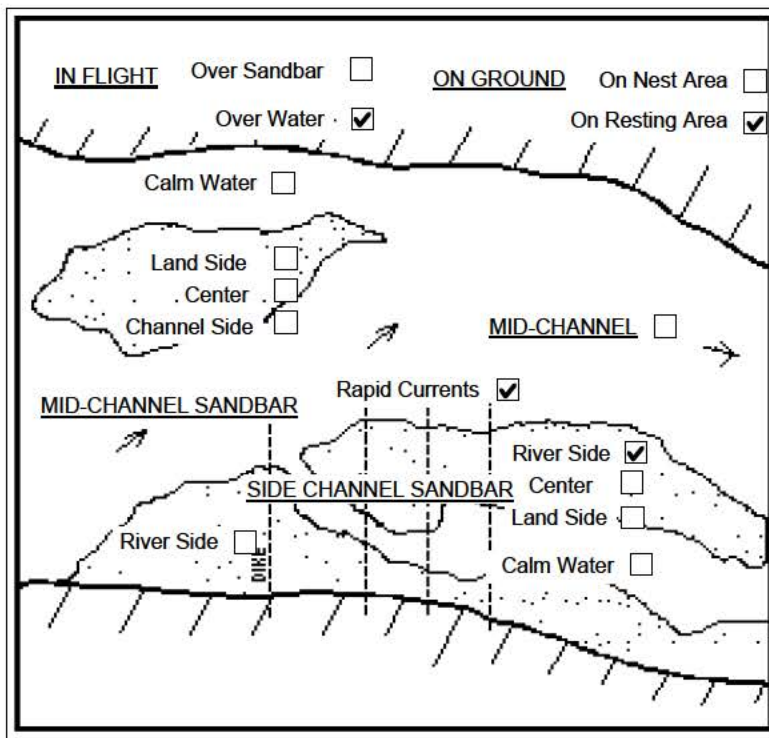
VEGETATION:

Type: _____

Distance: _____ Feet

FIELD CONDITION:

Temperature: 87 °F
Rain: No
Wind: calm
% Cloud: 10%



OTHER NOTES:

Left Bank. Low (3 ft.), long (2-3 miles), attached sand/gravel bar with lignite debris field. No reproductive behavior, resting bar only. No signs of disturbance.

TN side

OBSERVERS: D. and R. Davin, Grubaugh, K. and W. Jones, Rumancik, Thron

RIVER GAGE READING: $\frac{\text{Memphis}}{(\text{Gage Location})} = \frac{2.2}{(\text{Elevation})}$

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 7/8/2007 TIME OF DAY: 13:30 RIVER MILE: 760.5

LOCALITY: Tipton TN SITE NAME: Cedar Point
County/Parish State

WHERE SITED: Latitude: 35.45266
Longitude: 89.9981

Approximate Distance to Water: 700 Feet

NUMBERS SIGHTED:

Adults: 87
Juveniles:
Eggs:
Nests: 2
Chicks: No

SUBSTRATE:

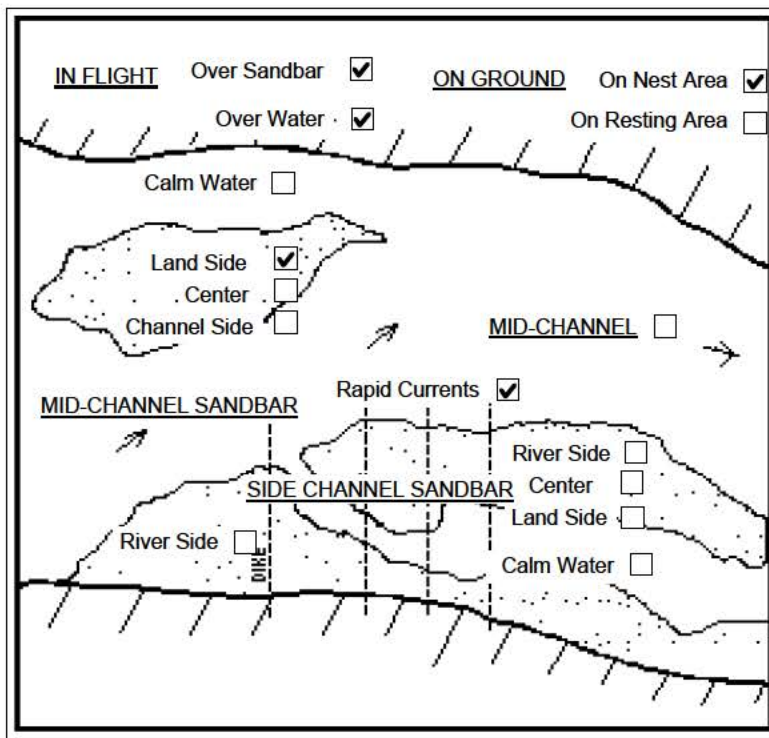
Sand: ☒
Gravel: ☒
Debris: ☒

VEGETATION:

Type: Willows
Distance: 1000 Feet

FIELD CONDITION:

Temperature: 88 °F
Rain: No
Wind: calm
% Cloud: 10%



OTHER NOTES:

Right Bank. Long, broad, large, attached at least to wooded island with large back chute. Perimeter count yields 2 nests. No signs of disturbance.

AR side

OBSERVERS: D. and R. Davin, Grubaugh, K. and W. Jones, Rumancik, Thron

RIVER GAGE READING: Memphis = 2.2
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 7/8/2007 TIME OF DAY: 13:51 RIVER MILE: 755.0

LOCALITY: Shelby TN SITE NAME: Densford Bar
County/Parish State

WHERE SITED: Latitude: 35.3902
Longitude: 90.0703

Approximate Distance to Water: 500 Feet

NUMBERS SIGHTED:

Adults: 54
Juveniles:
Eggs:
Nests: 4
Chicks: No

SUBSTRATE:

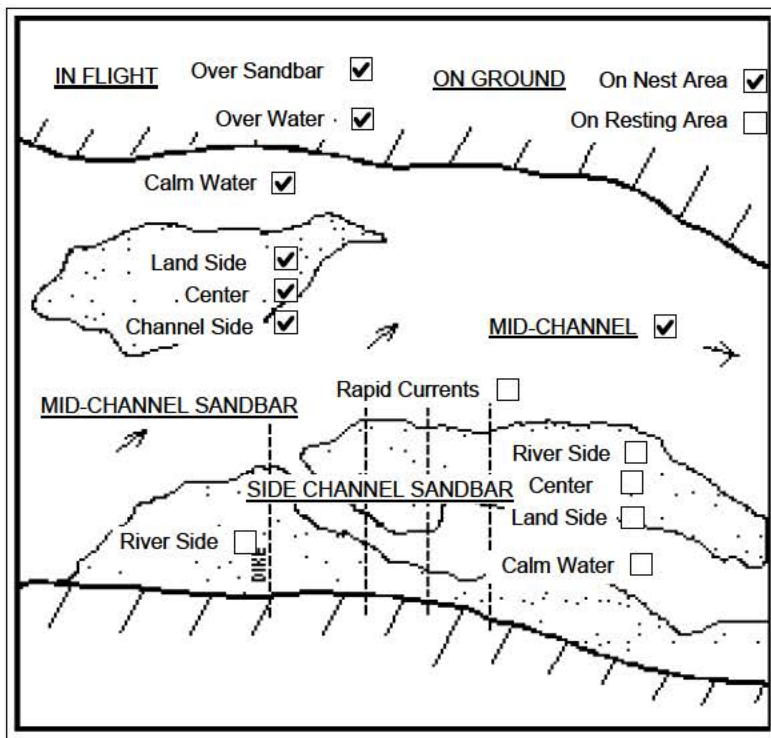
Sand: ☒
Gravel: ☐
Debris: ☐

VEGETATION:

Type: Willows/Cottonwoods
Distance: 1000 Feet

FIELD CONDITION:

Temperature: 88 °F
Rain: No
Wind: calm
% Cloud: 10%



OTHER NOTES:

Left Bank. Long, high (20 ft.) mid-channel sand bar with only 2 scrapes noted on perimeter count. Most are resting at waterline. Recreation activities on backside chute.

TN side

OBSERVERS: D. and R. Davin, Grubaugh, K. and W. Jones, Rumancik, Thron

RIVER GAGE READING: Memphis = 2.2
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 7/8/2007 TIME OF DAY: 14:28 RIVER MILE: 743.1

LOCALITY: SITE NAME: Above Loosahatchie Dikes

County/Parish State

WHERE SITED: Latitude: 35.25086

Longitude: 90.09163

Approximate Distance to Water: 100 Feet

NUMBERS SIGHTED:

Adults: 27

Juveniles:

Eggs: 2(1) 1(2) 1(3)

Nests: 4

Chicks: No

SUBSTRATE:

Sand: ☒

Gravel: ☐

Debris: ☐

VEGETATION:

Type:

Distance: Feet

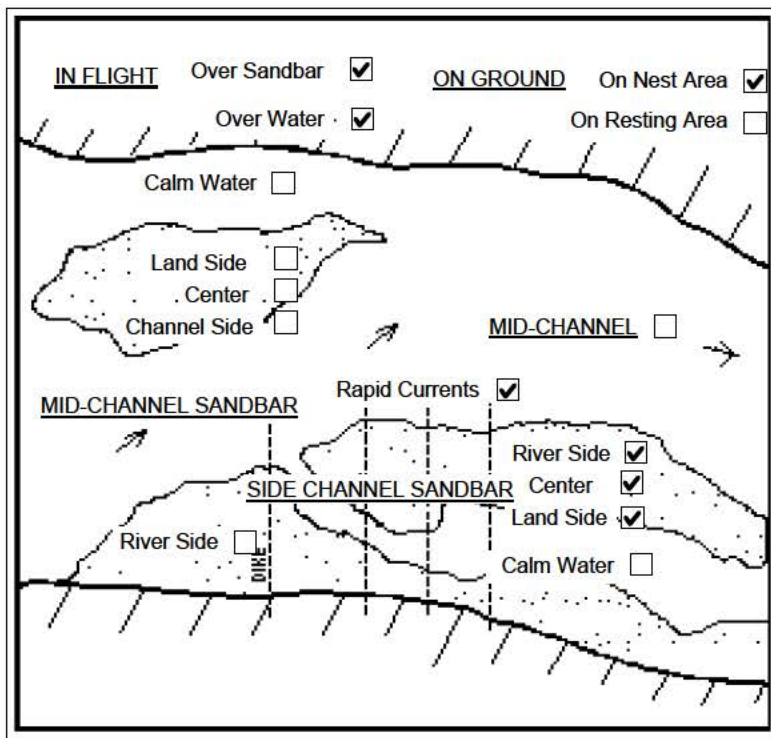
FIELD CONDITION:

Temperature: 88 °F

Rain: No

Wind: calm

% Cloud: 10%



OTHER NOTES:

Left Bank. Small (800 x 500 ft.), unattached, sand bar below dike. Human tracks.

OBSERVERS:

RIVER GAGE READING: Memphis = 2.2
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 7/8/2007 TIME OF DAY: 14:41 RIVER MILE: 740.5

LOCALITY: Crittenden AR SITE NAME: Loosahatchie Bar Dikes
County/Parish State

WHERE SITED: Latitude: 35.20767
Longitude: 90.07191

Approximate Distance to Water: 5 Feet

NUMBERS SIGHTED:

Adults: 32
Juveniles: 1
Eggs:
Nests: 1
Chicks: Yes

SUBSTRATE:

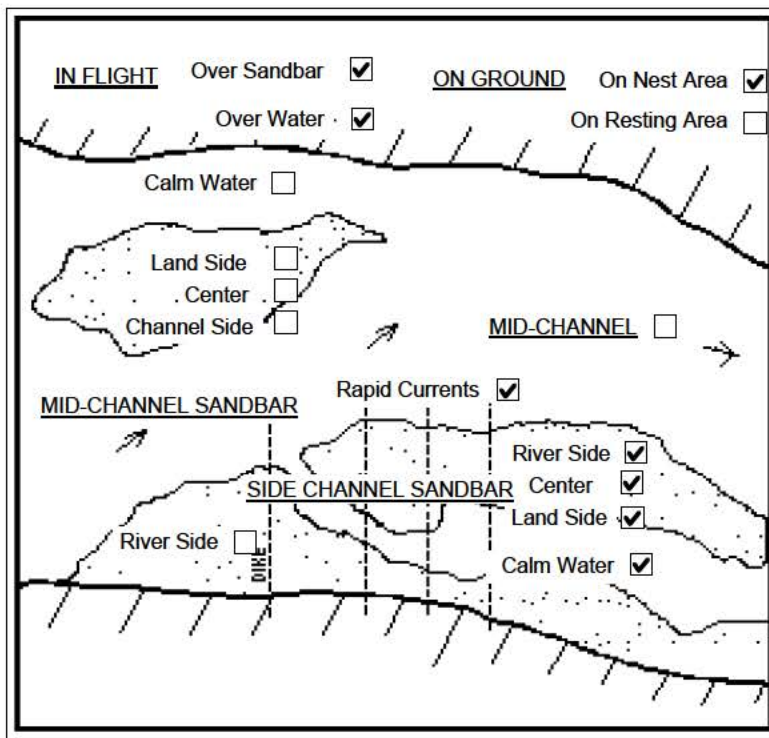
Sand: ☒
Gravel: ☒
Debris: ☒

VEGETATION:

Type: Hardwoods
Distance: 1000 Feet

FIELD CONDITION:

Temperature: 88 °F
Rain: No
Wind: calm
% Cloud: 10



OTHER NOTES:

Right Bank. Medium size gravel bar, 8 ft. in elevation with some sand and mud within dike field. Attached and undulating with scattered lignite. Two scrapes and one adult on nest at waterline, 2 chicks 1 1/2 weeks of age, 1 fledgling. Terns mobbing and breasting. Day campers at waterline

AR side

OBSERVERS: D. and R. Davin, Grubaugh, K. and W. Jones, Rumancik, Thron

RIVER GAGE READING: Memphis = 2.2
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/25/2007 TIME OF DAY: 7:55 RIVER MILE: 733.0

LOCALITY: Crittenden AR SITE NAME: Engineer Bar Dikes
County/Parish State

WHERE SITED: Latitude: 35.12323
Longitude: 90.10361

Approximate Distance to Water: 50 Feet

NUMBERS SIGHTED:

Adults: 27
Juveniles:
Eggs:
Nests: 0
Chicks: No

SUBSTRATE:

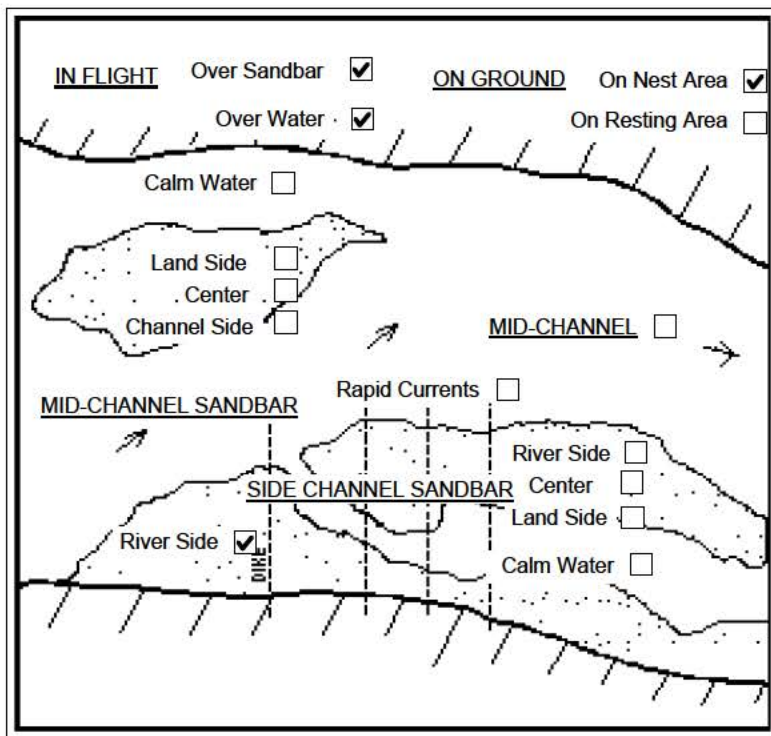
Sand: ☒
Gravel: ☐
Debris: ☐

VEGETATION:

Type: Willows
Distance: 800 Feet

FIELD CONDITION:

Temperature: 78 °F
Rain: No
Wind: SE 3-5 mph
% Cloud: 80



OTHER NOTES:

Right Bank. High (10 ft.), flat, medium size, attached sand bar with most terns resting at waterline. Empty scrapes but birds carrying fish, courting. Canine tracks.

AR side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Memphis = 1.3 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/25/2007 TIME OF DAY: 8:32 RIVER MILE: 730.0

LOCALITY: Shelby TN SITE NAME: Vice Presidents Island #46
County/Parish State

WHERE SITED: Latitude: 35.1252
Longitude: 90.1614

Approximate Distance to Water: 600 Feet

NUMBERS SIGHTED:

Adults: 121
Juveniles:
Eggs: 1(2) 1(3)
Nests: 2
Chicks: No

SUBSTRATE:

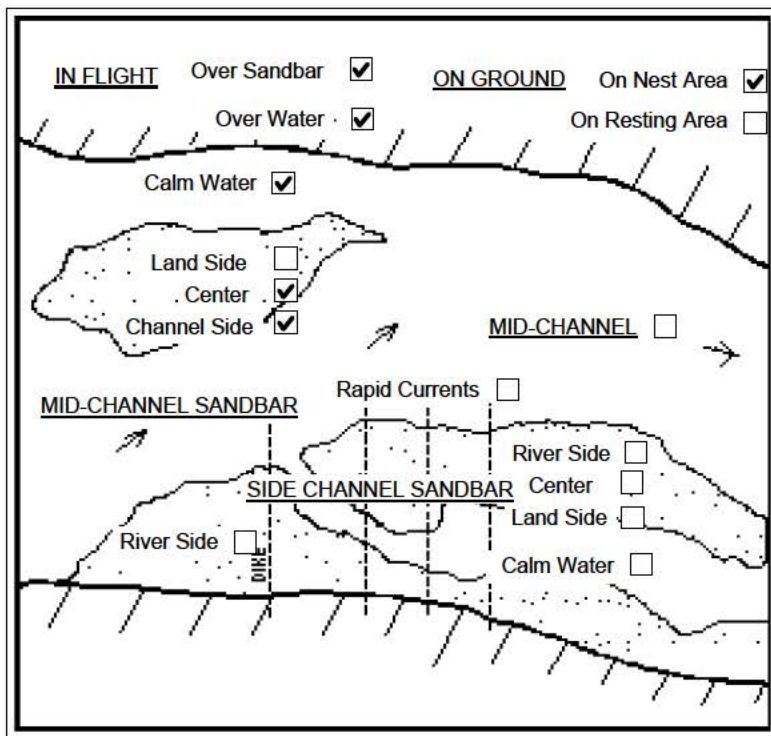
Sand: ☒
Gravel: ☒
Debris: ☒

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 79 °F
Rain: No
Wind: SE 3-5 mph
% Cloud: 100



OTHER NOTES:

Left Bank. Medium high (6 ft.) sand and gravel with lignite debris field, attached. Two nests with eggs and empty scrapes. Canine and human tracks.

TN side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Memphis = 1.3 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/25/2007 TIME OF DAY: 8:48 RIVER MILE: 725.0

LOCALITY: Crittenden AR SITE NAME: Dismal Point Dikes Upper
County/Parish State

WHERE SITED: Latitude: 35.0691
Longitude: 90.1838

Approximate Distance to Water: 200 Feet

NUMBERS SIGHTED:

Adults: 22
Juveniles:
Eggs:
Nests: 4
Chicks: No

SUBSTRATE:

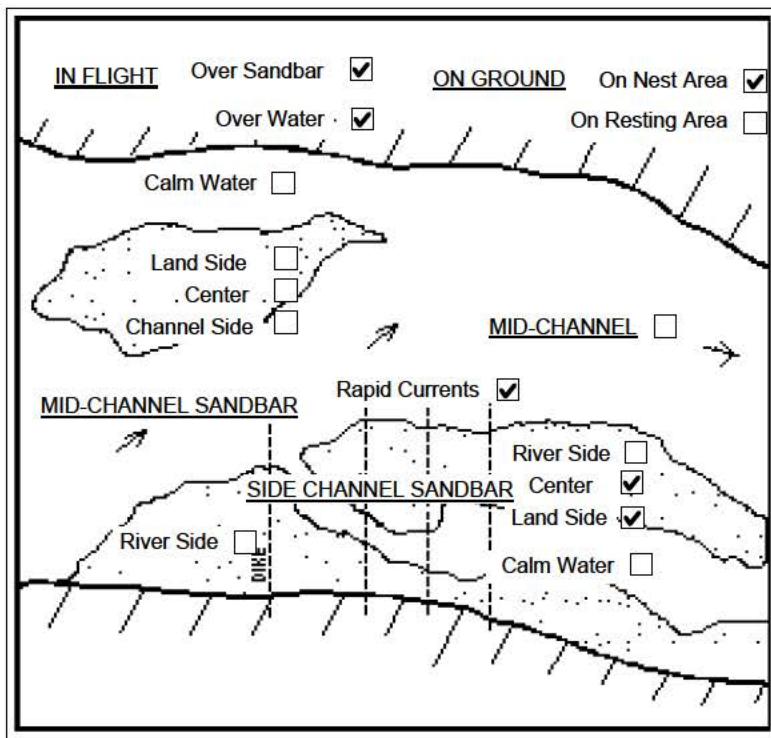
Sand: ☒
Gravel: ☒
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 80 °F
Rain: No
Wind: SE 3-5 mph
% Cloud: 100



OTHER NOTES:

Right Bank. Medium-high, unattached sand bar with undulations. Four terns sitting on scrapes. No signs of disturbance.

AR side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Memphis = 1.3 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/25/2007 TIME OF DAY: 8:57 RIVER MILE: 720.8

LOCALITY: Crittenden AR SITE NAME: Dismal Point Dikes Lower
County/Parish State

WHERE SITED: Latitude: 35.02695
Longitude: 90.21297

Approximate Distance to Water: Feet

NUMBERS SIGHTED:

Adults: 60
Juveniles:
Eggs:
Nests: 0
Chicks: No

SUBSTRATE:

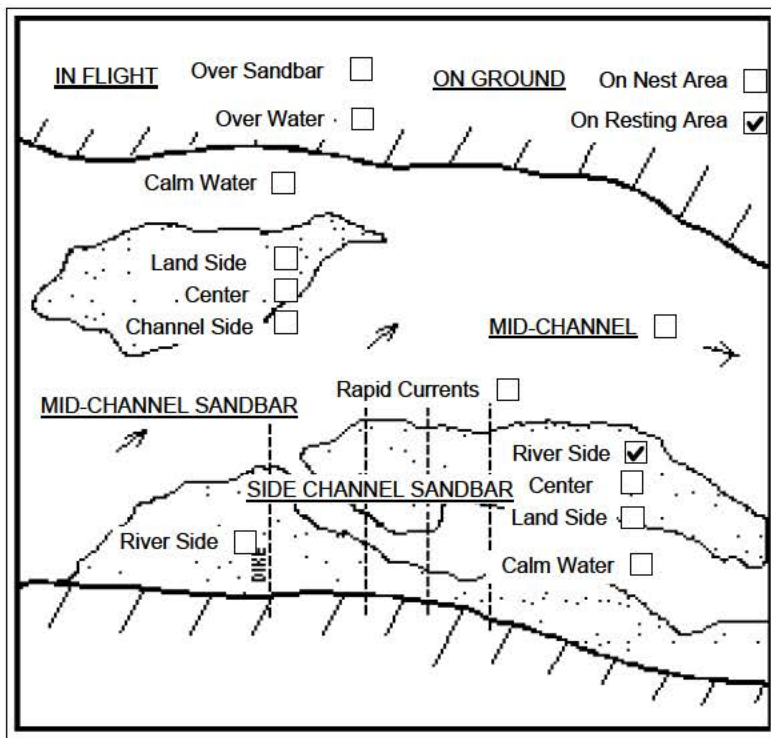
Sand: ☒
Gravel: ☐
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 80 °F
Rain: No
Wind: S 5 mph
% Cloud: 100



OTHER NOTES:

Right Bank. Small (15 x 50 yds.), barely emergent (1/2 foot), unattached, sand bar. Some courting behavior, with falling river stages possible future colony. No disturbance factors.

AR side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Memphis = 1.3 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/25/2007 TIME OF DAY: 9:24 RIVER MILE: 715.0

LOCALITY: Desoto MS SITE NAME: Cow Island Bend
County/Parish State

WHERE SITED: Latitude: 35.00434
Longitude: 90.29861

Approximate Distance to Water: 120 Feet

NUMBERS SIGHTED:

Adults: 36
Juveniles:
Eggs: 5(1) 1(3)
Nests: 6
Chicks: No

SUBSTRATE:

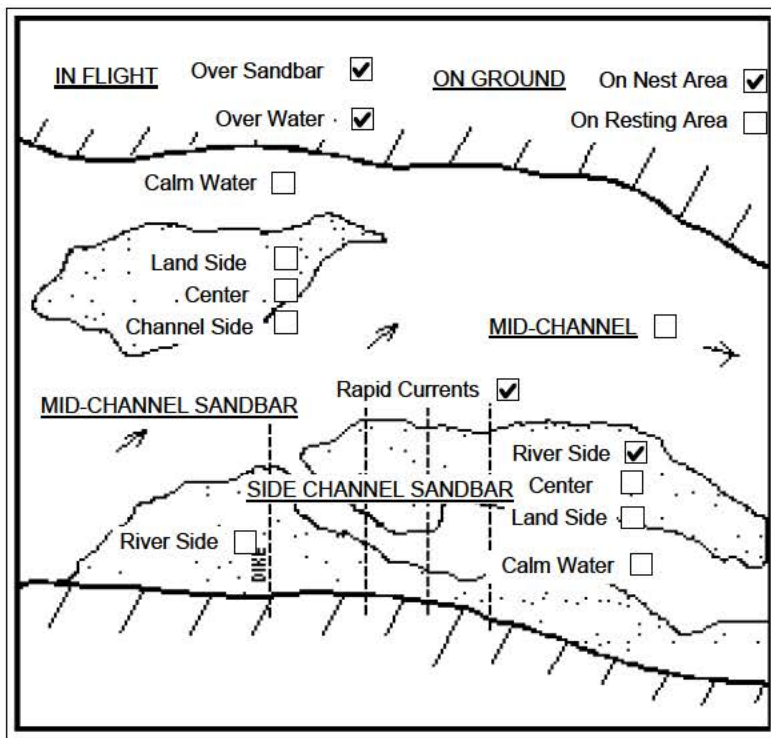
Sand: ☒
Gravel: ☐
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 79 °F
Rain: No
Wind: SW 5 mph
% Cloud: 90



OTHER NOTES:

Left Bank. Large, 2 mile long sand bar with colony on downstream, unattached portion. Terns courting.
Coyote tracks within colony and 1 Caspian Tern, 1 juvenile Bald Eagle.

MS side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Memphis = 1.3 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/25/2007 TIME OF DAY: 10:04 RIVER MILE: 705.0

LOCALITY: Crittenden AR SITE NAME: Seyppel Dikes
County/Parish State

WHERE SITED: Latitude: 34.88831
Longitude: 90.2876

Approximate Distance to Water: 75 Feet

NUMBERS SIGHTED:

Adults: 32
Juveniles:
Eggs:
Nests: 5
Chicks: No

SUBSTRATE:

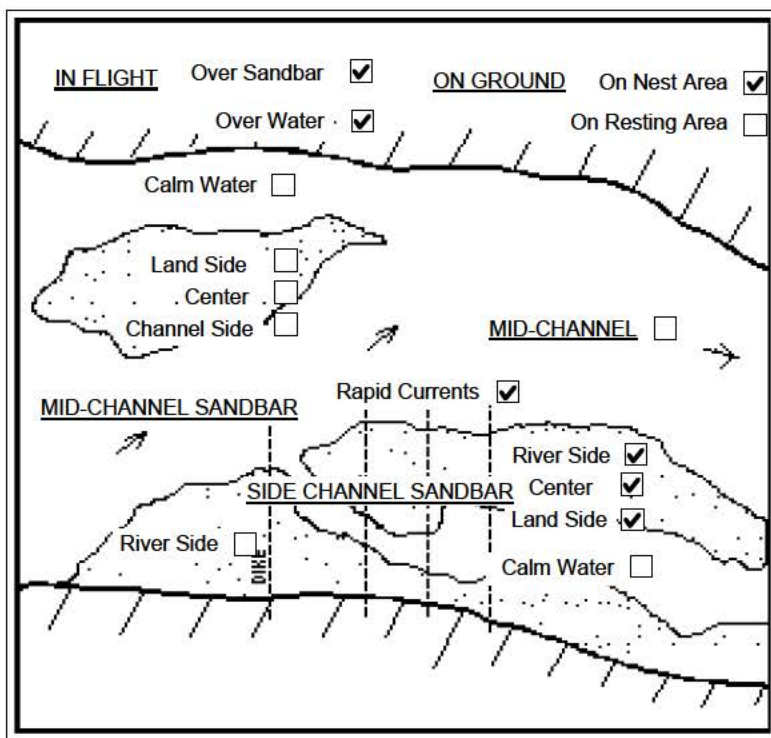
Sand: ☒
Gravel: ☐
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 83 °F
Rain: No
Wind: calm
% Cloud: 50



OTHER NOTES:

Right Bank. Huge, high, flat sand bar amidst dike field, colony located on lower end on smaller, unattached series of smaller, low spits of sand. Breasting, carrying fish, and sitting on scrapes. No tracks.

AR side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Memphis = 1.3 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/25/2007 TIME OF DAY: 10:19 RIVER MILE: 703.0

LOCALITY: Crittenden AR SITE NAME: Pickett Dikes
County/Parish State

WHERE SITED: Latitude: 34.87582
Longitude: 90.30779

Approximate Distance to Water: 800 Feet

NUMBERS SIGHTED:

Adults: 200
Juveniles:
Eggs: 5(1) 7(2) 14(3) 1(4)
Nests: 25
Chicks: Yes

SUBSTRATE:

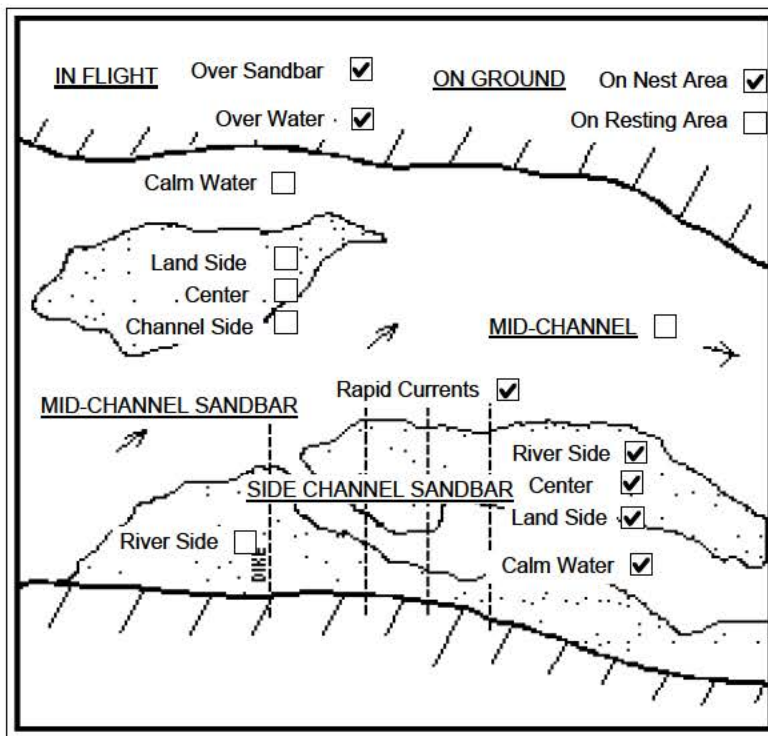
Sand: ☒
Gravel: ☒
Debris: ☒

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 86 °F
Rain: No
Wind: calm
% Cloud: 60



OTHER NOTES:

Left Bank. Unattached, medium size hard-packed sand bar with pea gravel (1 1/2 x 1/2 mile wide). Heavy mobbing, fishing both sides, courting. No tracks or disturbance indicators. One dead chick in scrape. Threadfin Shad, White Bass fingerlings. Ten chicks observed, ages 1-3 days.

MS side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Memphis = 1.3 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/25/2007 TIME OF DAY: 11:04 RIVER MILE: 699.0

LOCALITY: Crittenden AR SITE NAME: Porter Lake Dikes
County/Parish State

WHERE SITED: Latitude: 34.84330
Longitude: 90.36764

Approximate Distance to Water: 300 Feet

NUMBERS SIGHTED:

Adults: 65
Juveniles:
Eggs:
Nests: 4
Chicks: No

SUBSTRATE:

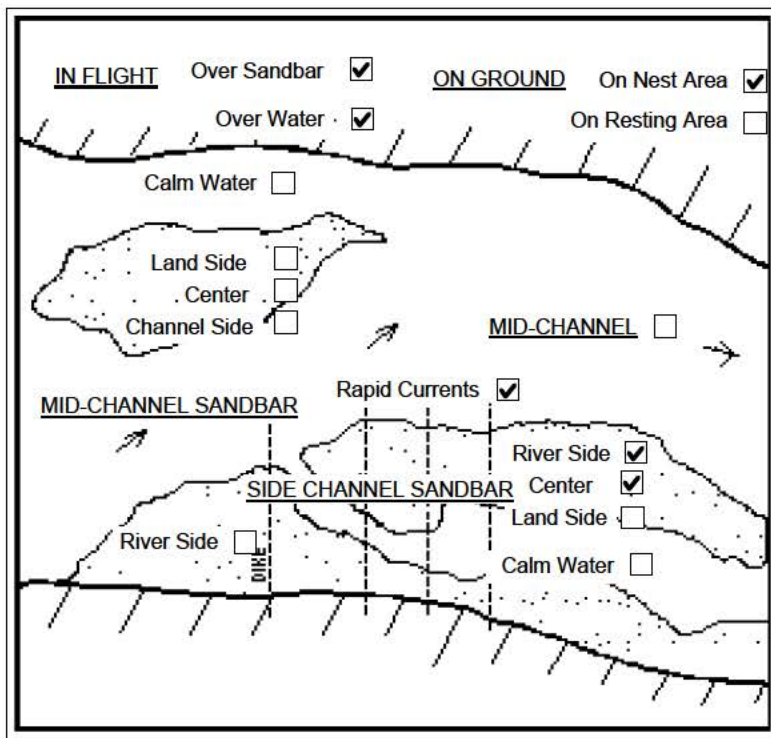
Sand: ☒
Gravel: ☒
Debris: ☒

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 84 °F
Rain: No
Wind: calm
% Cloud: 20



OTHER NOTES:

Right Bank. Medium size sand bar, unattached, long, between dikes. Four terns sitting on scrapes, others courting and fishing river side.

AR side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Memphis = 1.3 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/25/2007 TIME OF DAY: 12:43 RIVER MILE: 693.0

LOCALITY: Tunica MS SITE NAME: Commerce Dikes
County/Parish State

WHERE SITED: Latitude: 34.8152
Longitude: 90.4563

Approximate Distance to Water: Feet

NUMBERS SIGHTED:

Adults: 112
Juveniles:
Eggs:
Nests: 1
Chicks: No

SUBSTRATE:

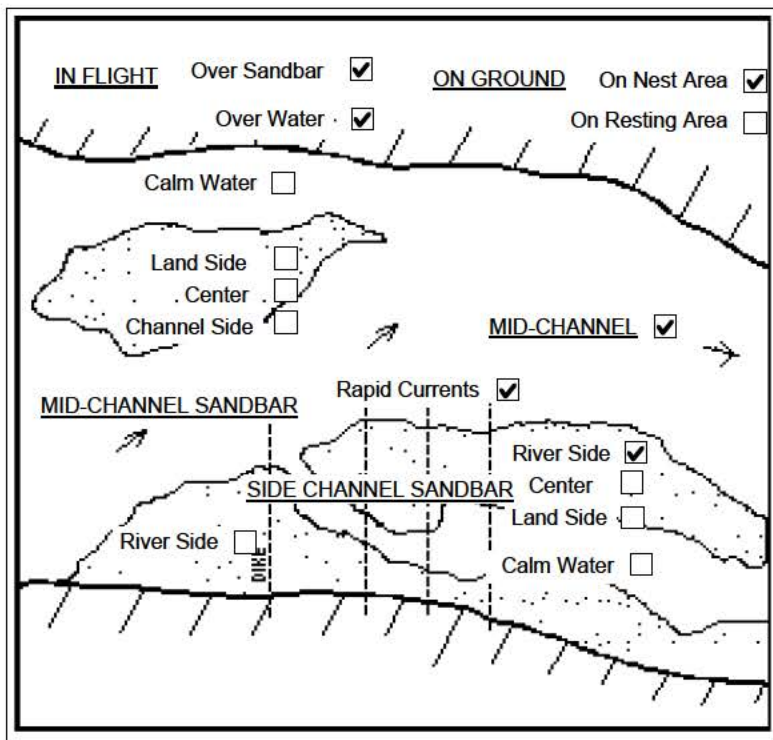
Sand: ☒
Gravel: ☒
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 84 °F
Rain: No
Wind: calm
% Cloud: 20



OTHER NOTES:

Left Bank. Large, attached 2.5 mile long by 1 mile wide sand bar, gently undulating with patches of pea gravel. Most Terns resting at waterline. Most birds counted along the waterline during perimeter count. One nest assumed from tern sitting inland. No tracks or other notable disturbance.

MS side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Helena = 7.8 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/25/2007 TIME OF DAY: 13:10 RIVER MILE: 687.0

LOCALITY: Lee AR SITE NAME: Mhoon Bend
County/Parish State

WHERE SITED: Latitude: 34.73875
Longitude: 90.45414

Approximate Distance to Water: 150 Feet

NUMBERS SIGHTED:

Adults: 81
Juveniles:
Eggs:
Nests: 2
Chicks: No

SUBSTRATE:

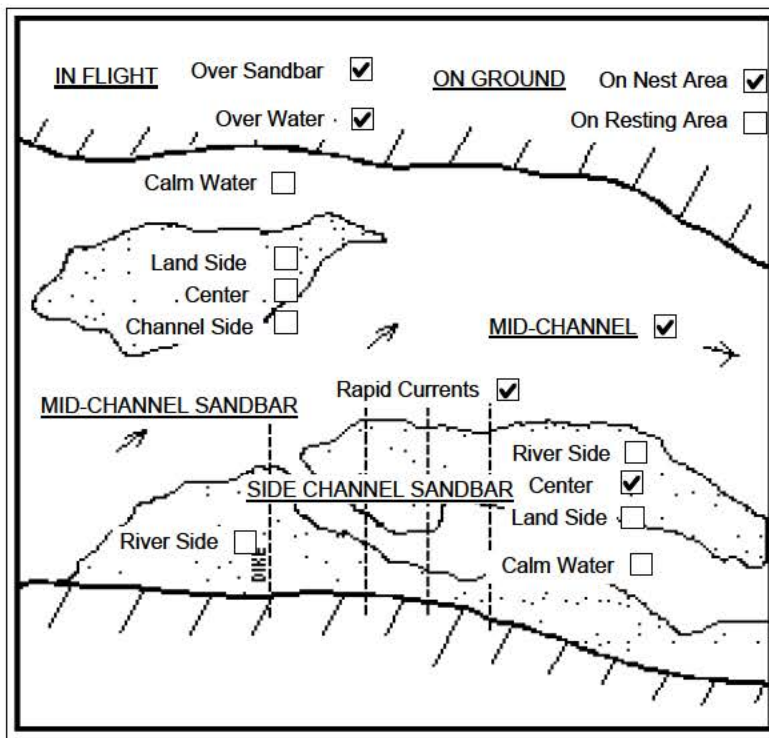
Sand: ☒
Gravel: ☒
Debris: ☒

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 84 °F
Rain: No
Wind: calm
% Cloud: 20



OTHER NOTES:

Right Bank. Another very large (3 miles) attached, undulating, sand and gravel bar with large stand of willows at center. Perimeter count with colony dispersed widely across the high center. One Great Blue Heron downstream, Mississippi Kites 2 miles upstream, but no other signs of disturbance.

AR side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Helena = 7.8 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/25/2007 TIME OF DAY: 13:30 RIVER MILE: 680.0

LOCALITY: Tunica MS SITE NAME: Bordeaux Point Dikes
County/Parish State

WHERE SITED: Latitude: 34.73383
Longitude: 90.56013

Approximate Distance to Water: 300 Feet

NUMBERS SIGHTED:

Adults: 21
Juveniles:
Eggs:
Nests: 0
Chicks: No

SUBSTRATE:

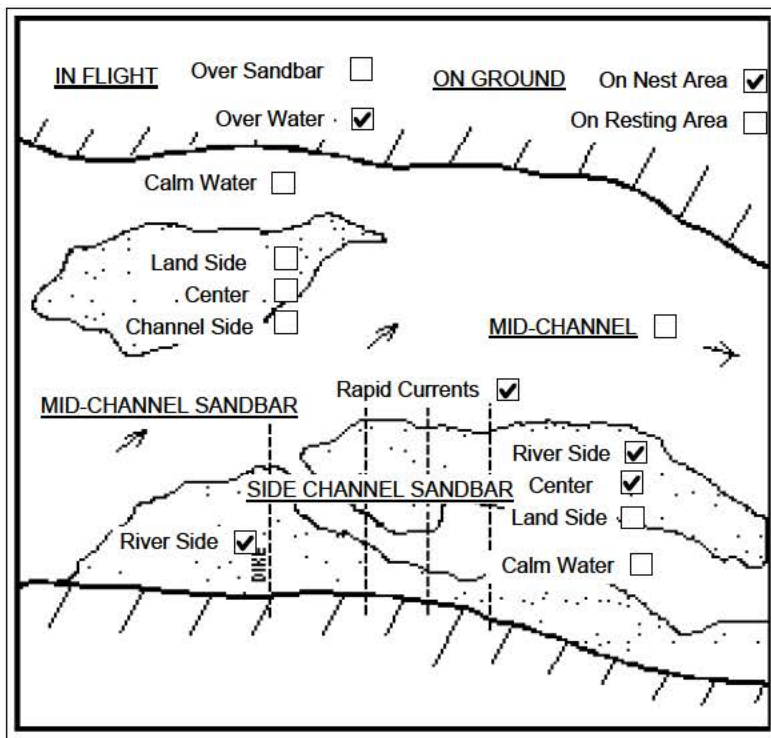
Sand: ☒
Gravel: ☒
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 89 °F
Rain: No
Wind: calm
% Cloud: 50



OTHER NOTES:

Left Bank. Large, sloping, attached point bar of sand, gravel and mud. One egg shell, but no active nests. Two sets of deer tracks but no other signs of disturbance.

MS side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Helena = 7.8 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/25/2007 TIME OF DAY: 13:59 RIVER MILE: 676.7

LOCALITY: Lee AR SITE NAME: Hardin Cut-Off
County/Parish State

WHERE SITED: Latitude: 34.68522
Longitude: 90.56622

Approximate Distance to Water: 60 Feet

NUMBERS SIGHTED:

Adults: 230
Juveniles:
Eggs: 3(1) 1(3)
Nests: 75
Chicks: Yes

SUBSTRATE:

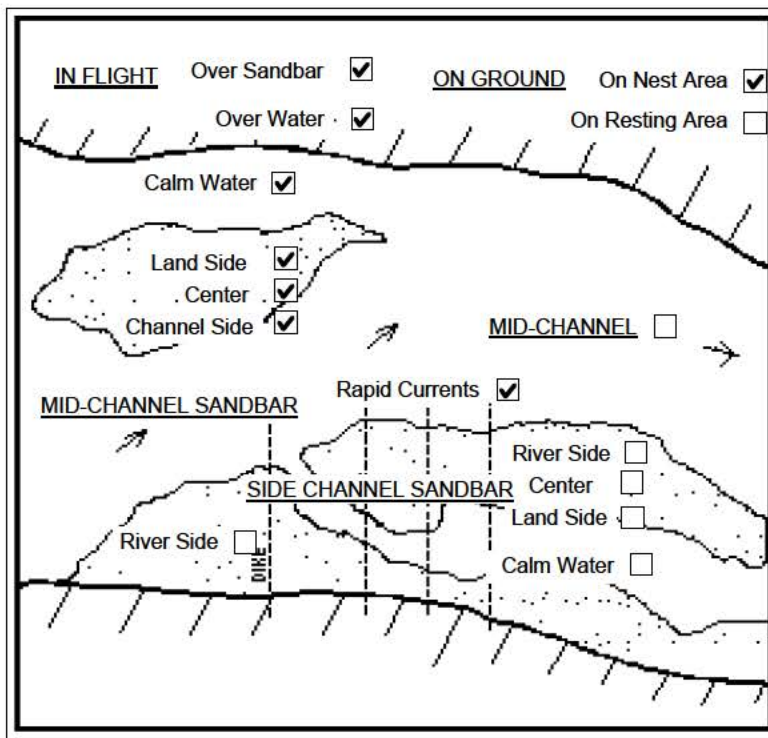
Sand: ☒
Gravel: ☐
Debris: ☒

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 90 °F
Rain: No
Wind: calm
% Cloud: 50



OTHER NOTES:

Left Bank. Small, low, flat, mid-channel bar with scattered debris. Four chicks 1-3 days old, heavy mobbing, 1 abandoned egg. No tracks or other signs of disturbance.

MS side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Helena = 7.8 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/25/2007 TIME OF DAY: 14:07 RIVER MILE: 676.5

LOCALITY: Lee AR SITE NAME: Below Walnut Bend Dikes
County/Parish State

WHERE SITED: Latitude: 34.67685
Longitude: 90.57188

Approximate Distance to Water: 100 Feet

NUMBERS SIGHTED:

Adults: 29
Juveniles:
Eggs:
Nests: 2
Chicks: No

SUBSTRATE:

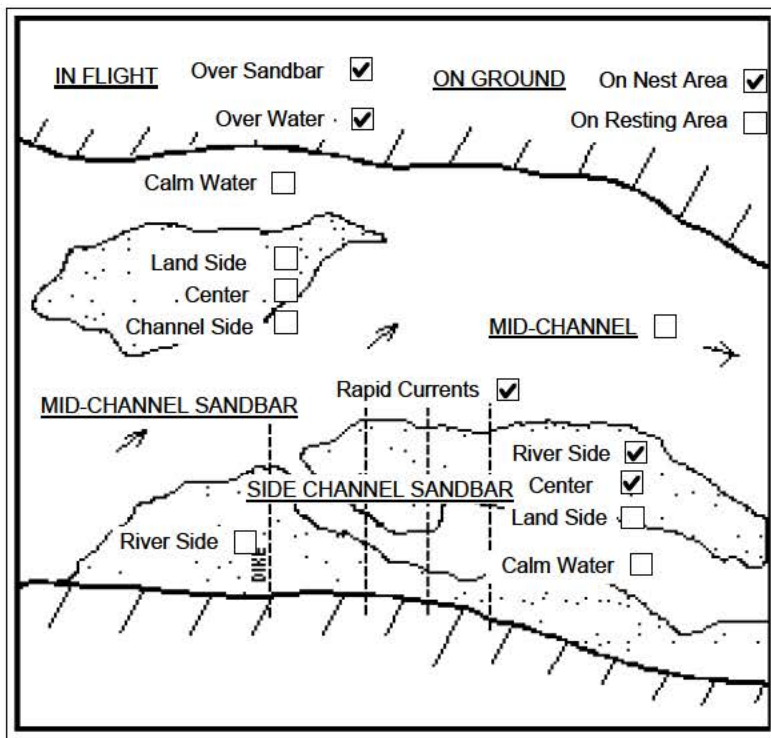
Sand: ☒
Gravel: ☒
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 93 °F
Rain: No
Wind: calm
% Cloud: 50



OTHER NOTES:

Right Bank. Gently sloping, attached sand bar with patches of gravel. Two sitting inland. No apparent disturbance or tracks.

AR side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Helena = 7.8 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/25/2007 TIME OF DAY: 14:29 RIVER MILE: 672.0

LOCALITY: Tunica MS SITE NAME: St. Francis Bend
County/Parish State

WHERE SITED: Latitude: 34.6241
Longitude: 90.5835

Approximate Distance to Water: 800 Feet

NUMBERS SIGHTED:

Adults: 97
Juveniles:
Eggs:
Nests: 8
Chicks: No

SUBSTRATE:

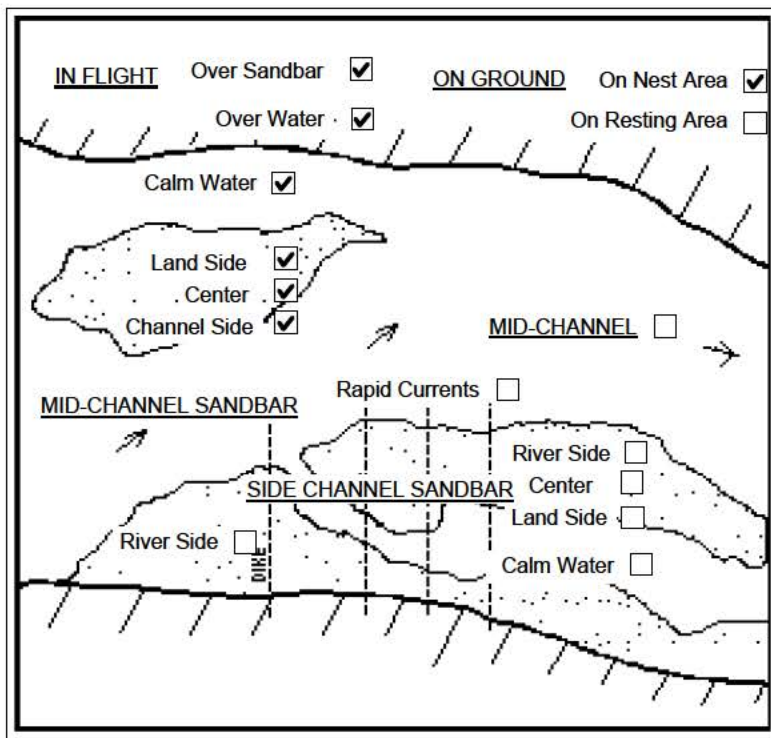
Sand: ☒
Gravel: ☐
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 93 °F
Rain: No
Wind: calm
% Cloud: 50



OTHER NOTES:

Left Bank. Very large, flat, high, unattached, clean sand bar. Colony at least 3 miles long by 1/2 mile wide, with nests widely scattered. Mobbing heron in back chute. No tracks or other disturbance signs.

MS side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Helena = 7.8 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/25/2007 TIME OF DAY: 15:05 RIVER MILE: 668.0

LOCALITY: Phillips AR SITE NAME: Prairie Point Dikes
County/Parish State

WHERE SITED: Latitude: 34.5625
Longitude: 90.5536

Approximate Distance to Water: 300 Feet

NUMBERS SIGHTED:

Adults: 39
Juveniles:
Eggs:
Nests: 3
Chicks: No

SUBSTRATE:

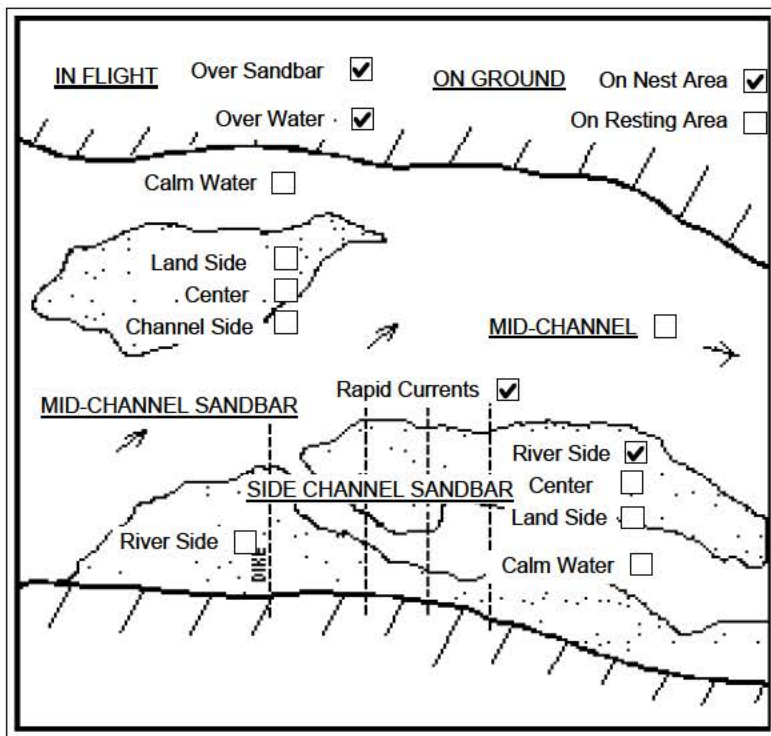
Sand: ☐
Gravel: ☒
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 89 °F
Rain: No
Wind: W 10 mph
% Cloud: 60



OTHER NOTES:

Right Bank. Large, high, undulating, gravel bar attached to heavily wooded island. Terns were breasting, fishing and carrying fish. Perimeter count yields 3 nests in gravel. Four fishing opposite bank. No disturbance noted.

AR side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Helena = 7.8 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/25/2007 TIME OF DAY: 15:15 RIVER MILE: 666.5

LOCALITY: Phillips AR SITE NAME: Prairie Point Towhead
County/Parish State

WHERE SITED: Latitude: 34.54669
Longitude: 90.54383

Approximate Distance to Water: 300 Feet

NUMBERS SIGHTED:

Adults: 92
Juveniles:
Eggs:
Nests: 20
Chicks: No

SUBSTRATE:

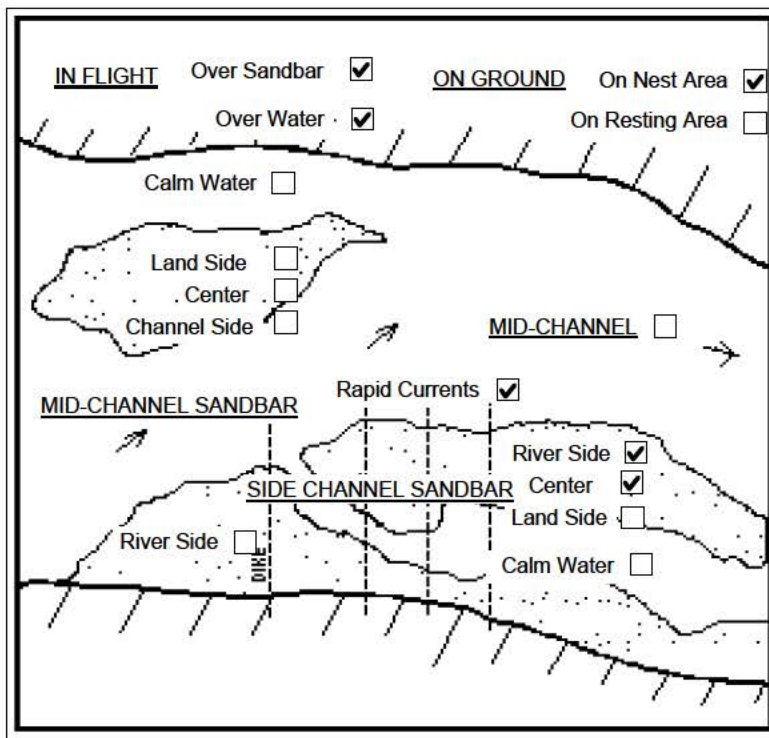
Sand: ☒
Gravel: ☒
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 89 °F
Rain: No
Wind: W 10 mph
% Cloud: 60



OTHER NOTES:

Right Bank. Large point bar of gravel (attached upper end) and sand (unattached lower end). No disturbance noted. Three Ruddy Turnstones and 1 Ringbilled Gull

AR side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Helena = 7.8 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/25/2007 TIME OF DAY: 15:52 RIVER MILE: 662.5

LOCALITY: Coahoma MS SITE NAME: Helena Reach Upper
County/Parish State

WHERE SITED: Latitude: 34.51256
Longitude: 90.58333

Approximate Distance to Water: 100 Feet

NUMBERS SIGHTED:

Adults: 35
Juveniles:
Eggs:
Nests: 1
Chicks: No

SUBSTRATE:

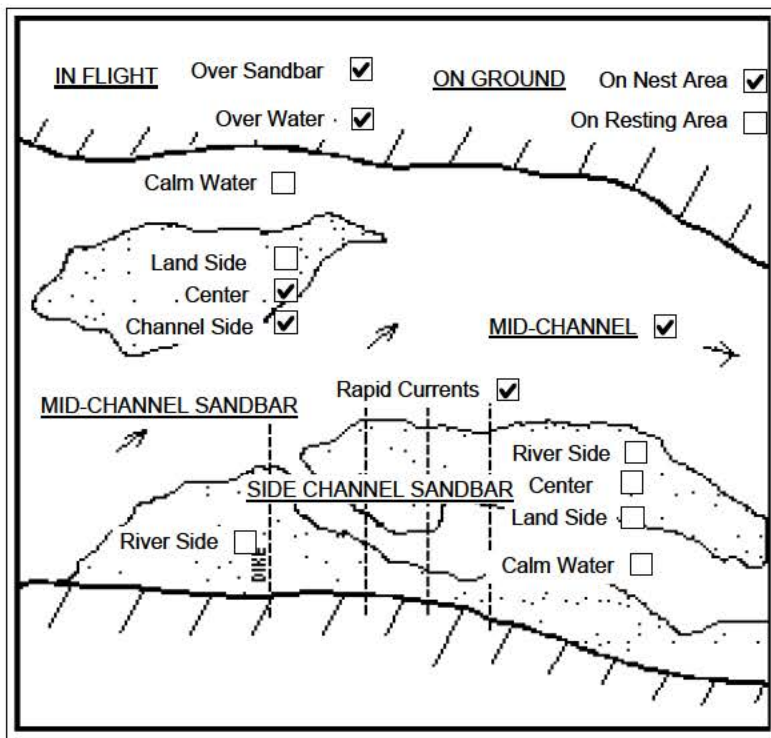
Sand: ☒
Gravel: ☐
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 89 °F
Rain: No
Wind: W 5 mph
% Cloud: 60



OTHER NOTES:

Left Bank. New colony site last year, still in use, with solid, flat, low (3 ft.) unattached, mid-channel sand bar. Courting and breasting on channel side. No tracks or disturbance signs.

MS side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Helena = 7.8F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/25/2007 TIME OF DAY: 15:46 RIVER MILE: 660.0

LOCALITY: Coahoma MS SITE NAME: Helena Reach Lower
County/Parish State

WHERE SITED: Latitude: 34.4602
Longitude: 90.5827

Approximate Distance to Water: 100 Feet

NUMBERS SIGHTED:

Adults: 49
Juveniles:
Eggs:
Nests: 1
Chicks: No

SUBSTRATE:

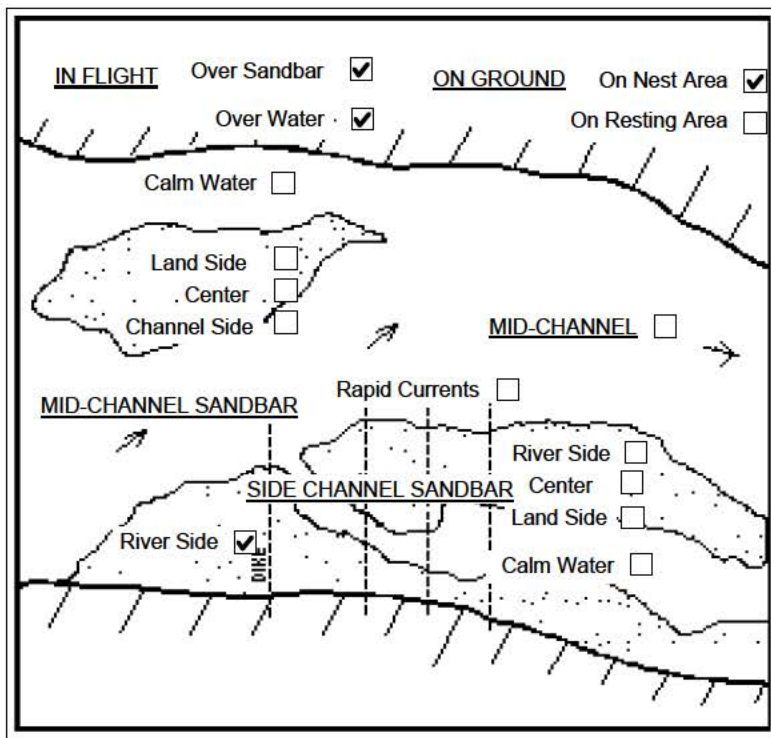
Sand: ☒
Gravel: ☐
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 88 °F
Rain: No
Wind: W 10 mph
% Cloud: 40



OTHER NOTES:

Left Bank. Attached sand bar (5 ft.) of clean, solid sand. No visible tracks or disturbance. Most resting at waterline with one observed on scrape in center. Rock Doves present also.

MS side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Helena = 7.8 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/26/2007 TIME OF DAY: 8:01 RIVER MILE: 658.5

LOCALITY: Coahoma MS SITE NAME: Montezuma Bar Dikes
County/Parish State

WHERE SITED: Latitude: 34.4601
Longitude: 90.58348

Approximate Distance to Water: 50 Feet

NUMBERS SIGHTED:

Adults: 40
Juveniles:
Eggs:
Nests: 9
Chicks: No

SUBSTRATE:

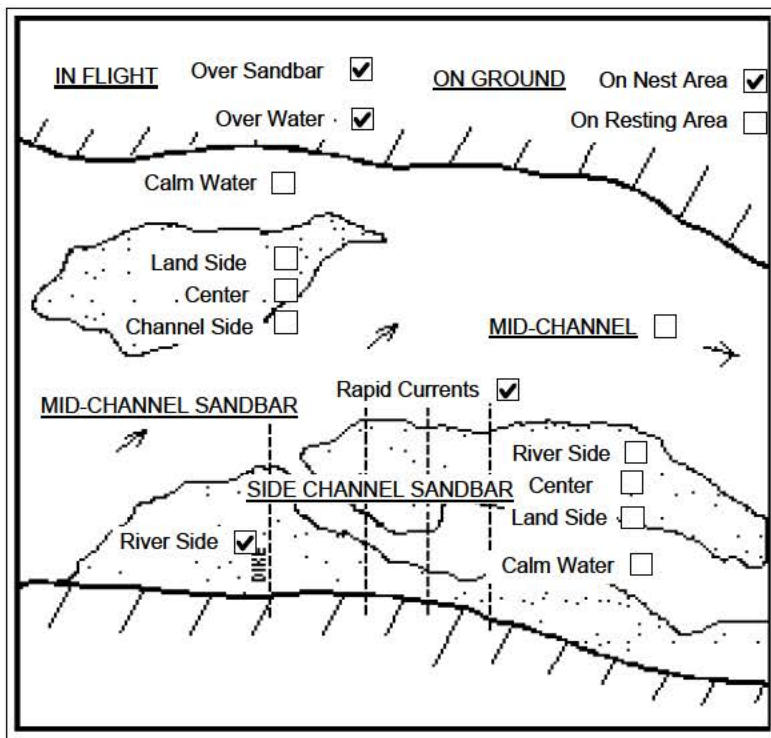
Sand: ☒
Gravel: ☐
Debris: ☒

VEGETATION:

Type:
Distance: 50 Feet

FIELD CONDITION:

Temperature: 83 °F
Rain: No
Wind: S 5 mph
% Cloud: 75



OTHER NOTES:

Left Bank. Attached, undulating sand bar with most birds resting at waterline. Some courting activity with 9 sitting on nests. No tracks of any kind.

MS aisw

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thron

RIVER GAGE READING: Helena = 7.4 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/26/2007 TIME OF DAY: 8:27 RIVER MILE: 655.0

LOCALITY: Phillips AR SITE NAME: Montezuma Towhead Dikes
County/Parish State

WHERE SITED: Latitude: 34.40805
Longitude: 90.59296

Approximate Distance to Water: 500 Feet

NUMBERS SIGHTED:

Adults: 65
Juveniles:
Eggs: 1(2) 1(3)
Nests: 2
Chicks: No

SUBSTRATE:

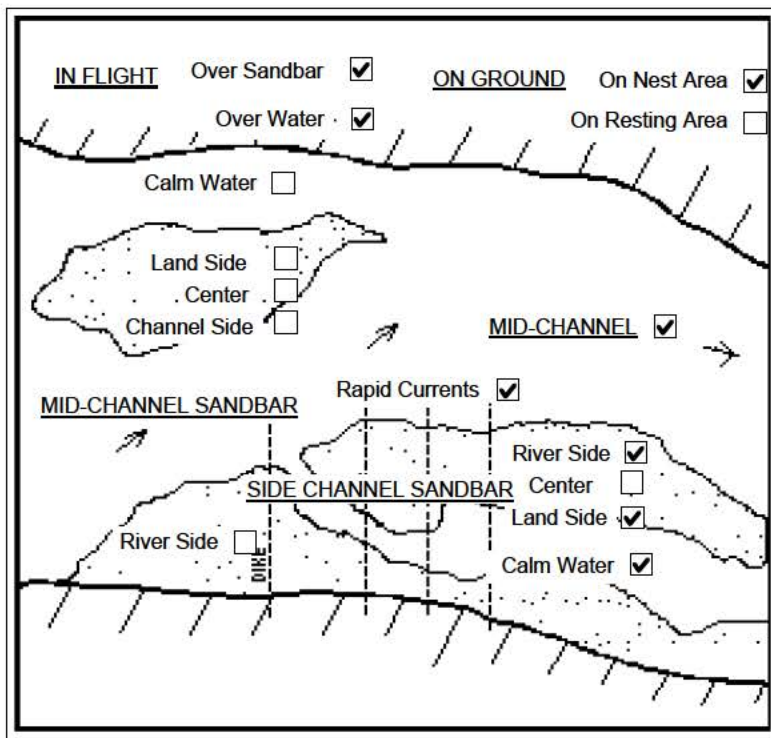
Sand: ☒
Gravel: ☒
Debris: ☒

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 83 °F
Rain: No
Wind: S 5 mph
% Cloud: 80 cirrus



OTHER NOTES:

Right Bank. Attached medium size sand bar with patches of gravel. Nests in wrackline with courting behavior, mobbing, and coyote tracks present.

AR side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thron

RIVER GAGE READING: Helena = 7.4 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/26/2007 TIME OF DAY: 9:02 RIVER MILE: 651.5

LOCALITY: Coahoma MS SITE NAME: Friars Point Dikes
County/Parish State

WHERE SITED: Latitude: 34.37308
Longitude: 90.67082

Approximate Distance to Water: 150 Feet

NUMBERS SIGHTED:

Adults: 65
Juveniles:
Eggs: 1(3)
Nests: 1
Chicks: Yes

SUBSTRATE:

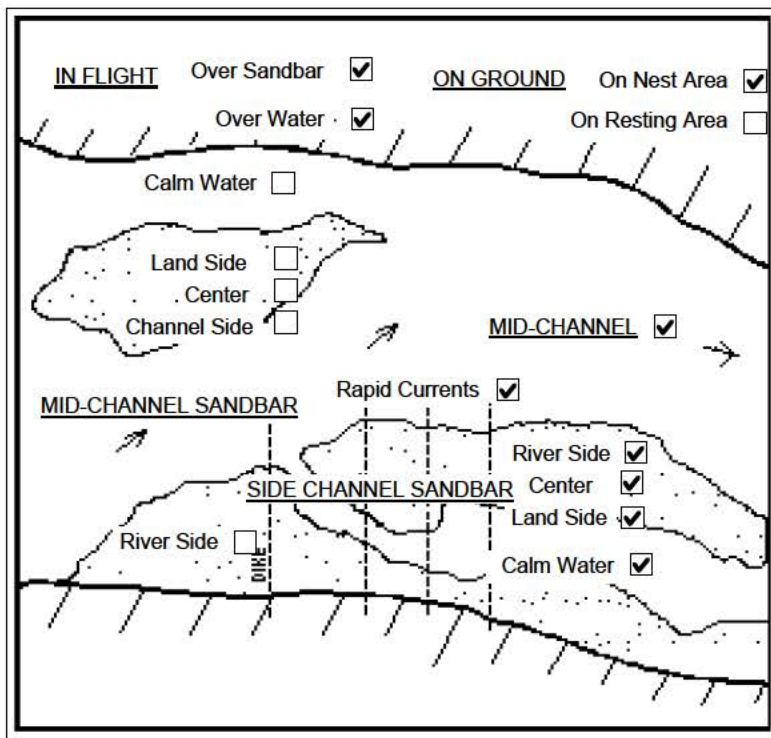
Sand: ☒
Gravel: ☐
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 84 °F
Rain: No
Wind: S 5 mph
% Cloud: 90 cirrus



OTHER NOTES:

Left Bank. Clean, medium high (8 ft.), flat sand bar, attached upstream. Terns utilizing all sides, 2 chicks 1 and 4 days old. One fishing opposite bank. Coyote, goose, and ATV tracks.

MS side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thron

RIVER GAGE READING: Helena = 7.4 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/26/2007 TIME OF DAY: 9:39 RIVER MILE: 647.0

LOCALITY: Phillips AR SITE NAME: Kangaroo Point Dikes
County/Parish State

WHERE SITED: Latitude: 34.3661
Longitude: 90.7297

Approximate Distance to Water: Feet

NUMBERS SIGHTED:

Adults: 13
Juveniles:
Eggs:
Nests: 0
Chicks: No

SUBSTRATE:

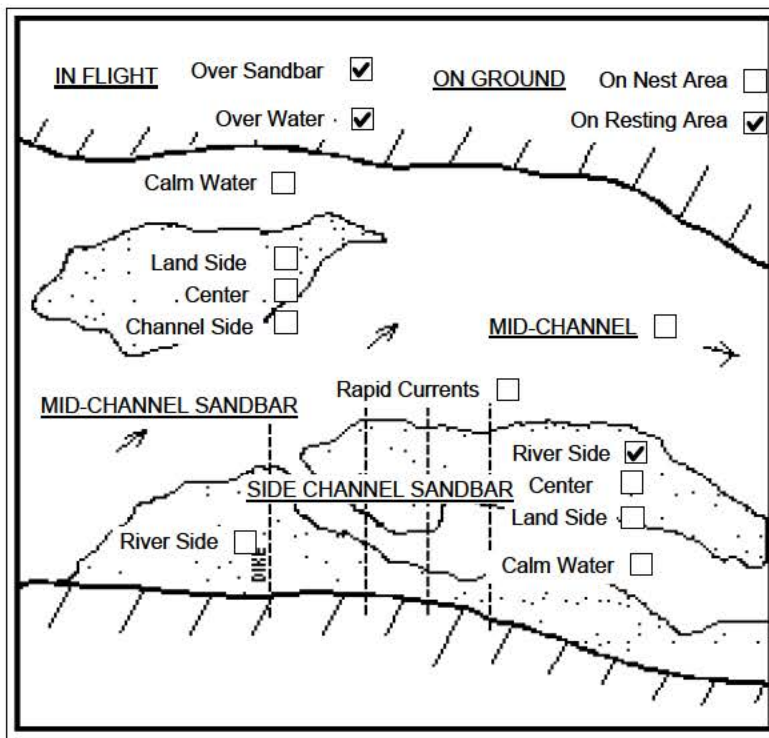
Sand: ☒
Gravel: ☐
Debris: ☒

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 84 °F
Rain: No
Wind: S 5 mph
% Cloud: 90



OTHER NOTES:

Right Bank. Long, attached sand bar (9ft.). Nine terns resting at waterline, 4 flying upstream, no signs of reproductive behavior, resting bar only.

AR side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thron

RIVER GAGE READING: Helena = 7.4 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/26/2007 TIME OF DAY: 9:55 RIVER MILE: 643.4

LOCALITY: Coahoma MS SITE NAME: Old Town Bend
County/Parish State

WHERE SITED: Latitude: 34.3485
Longitude: 90.7658

Approximate Distance to Water: 500 Feet

NUMBERS SIGHTED:

Adults: 39
Juveniles:
Eggs:
Nests: 10
Chicks: No

SUBSTRATE:

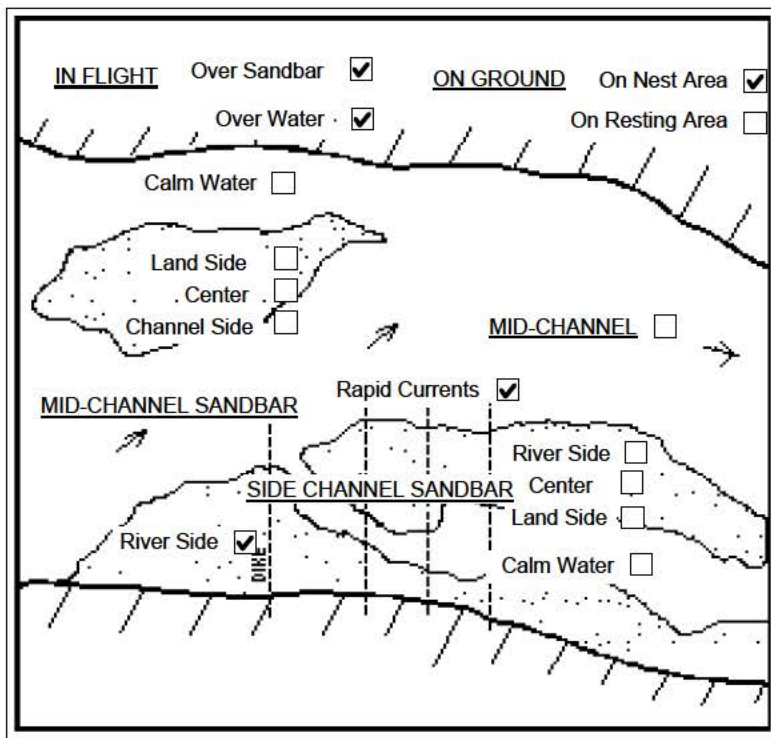
Sand: ☒
Gravel: ☒
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 83 °F
Rain: No
Wind: S 5 mph
% Cloud: 80



OTHER NOTES:

Left Bank. Attached, convoluted bar of sand, mud and gravel, with large back chute. Most birds resting or fishing along waterline, 10 sitting inland on scrapes. No signs of disturbance.

MS side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thron

RIVER GAGE READING: Helena = 7.4 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

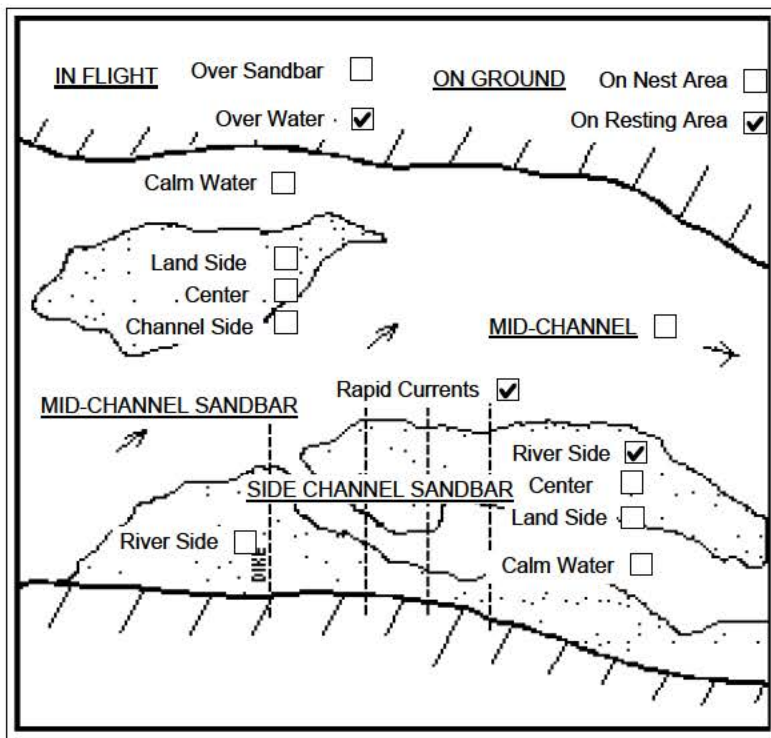
SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/26/2007 TIME OF DAY: 10:26 RIVER MILE: 640.0

LOCALITY: Phillips AR SITE NAME: Island #62 Dikes
County/Parish State

WHERE SITED: Latitude: 34.30351
Longitude: 90.73866

Approximate Distance to Water: Feet



NUMBERS SIGHTED:

Adults: 18
Juveniles:
Eggs:
Nests: 0
Chicks: No

SUBSTRATE:

Sand: ☒
Gravel: ☐
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 84 °F
Rain: No
Wind: S 5 mph
% Cloud: 80

OTHER NOTES:

Right Bank. High (12 ft.), gently sloping, attached sand bar. Most Terns resting at waterline, some courting, a few scrapes. Canine tracks.

AR side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thron

RIVER GAGE READING: Helena = 7.4 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/26/2007 TIME OF DAY: 10:49 RIVER MILE: 633.0

LOCALITY: Coahoma MS SITE NAME: Robson Towhead
County/Parish State

WHERE SITED: Latitude: 34.26166
Longitude: 90.83301

Approximate Distance to Water: 200 Feet

NUMBERS SIGHTED:

Adults: 18
Juveniles:
Eggs:
Nests: 4
Chicks: No

SUBSTRATE:

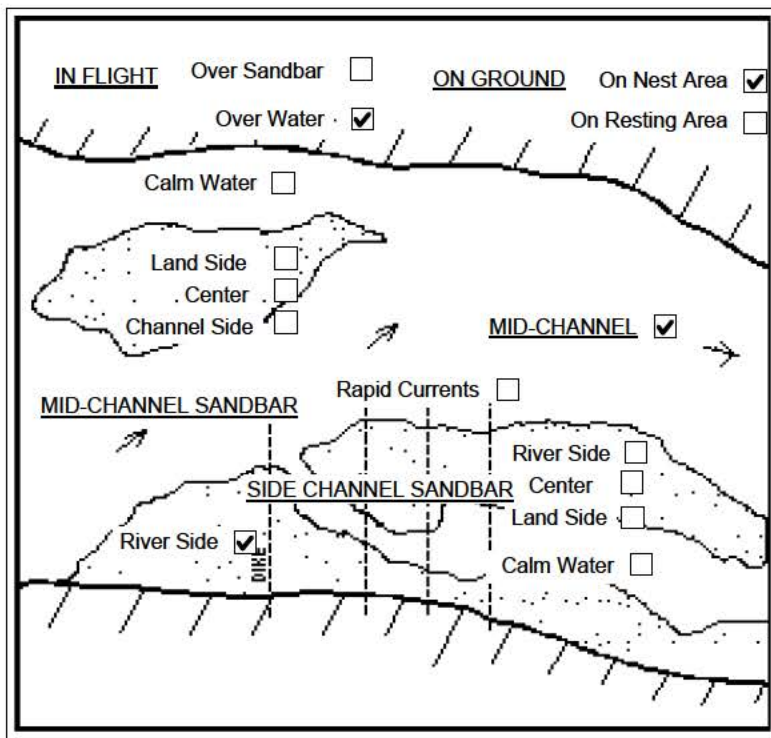
Sand: ☒
Gravel: ☒
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 85 °F
Rain: No
Wind: S 5 mph
% Cloud: 80



OTHER NOTES:

Left Bank. Low (3 ft.), attached riverside bar of sand and pea gravel. All birds resting at waterline except 4 sitting inland on scrapes. No tracks, Great Blue Heron at colony perimeter.

MS side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thron

RIVER GAGE READING: Helena = 7.4 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/26/2007 TIME OF DAY: 11:00 RIVER MILE: 629.0

LOCALITY: Phillips AR SITE NAME: Island #64 Dikes
County/Parish State

WHERE SITED: Latitude: 34.2203
Longitude: 90.8483

Approximate Distance to Water: Feet

NUMBERS SIGHTED:

Adults: 6
Juveniles:
Eggs:
Nests: 0
Chicks: No

SUBSTRATE:

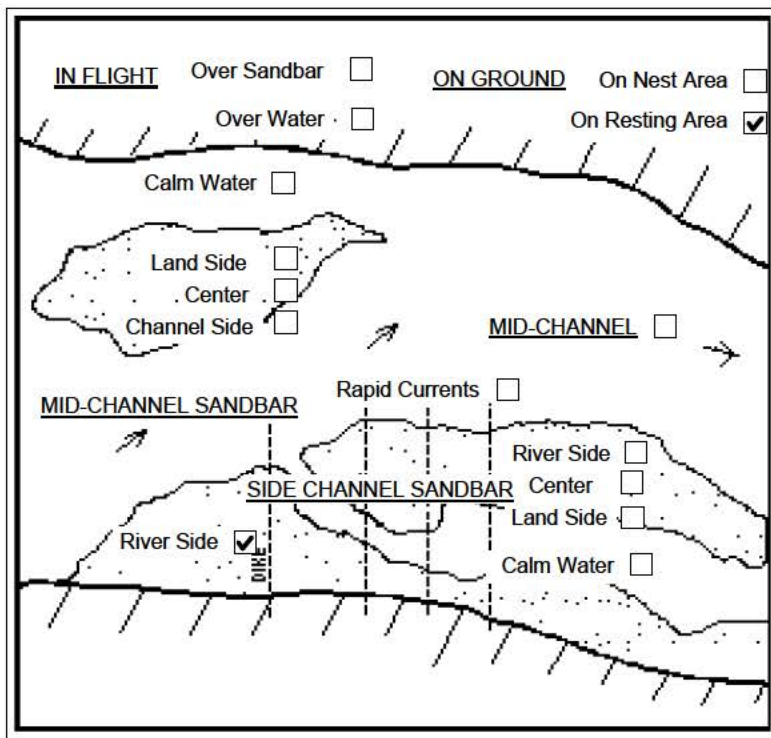
Sand: ☒
Gravel: ☐
Debris: ☒

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 85 °F
Rain: No
Wind: S 5 mph
% Cloud: 90



OTHER NOTES:

Right Bank. Large, attached, riverside sandbar. All resting at waterline.

AR side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thron

RIVER GAGE READING: Helena = 7.4 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/26/2007 TIME OF DAY: 11:20 RIVER MILE: 625.0

LOCALITY: Phillips AR SITE NAME: Sunflower Cut-Off
County/Parish State

WHERE SITED: Latitude: 34.16950
Longitude: 90.90257

Approximate Distance to Water: 10 Feet

NUMBERS SIGHTED:

Adults: 350
Juveniles:
Eggs: 3(1) 11(2) 37(3)
Nests: 50
Chicks: Yes

SUBSTRATE:

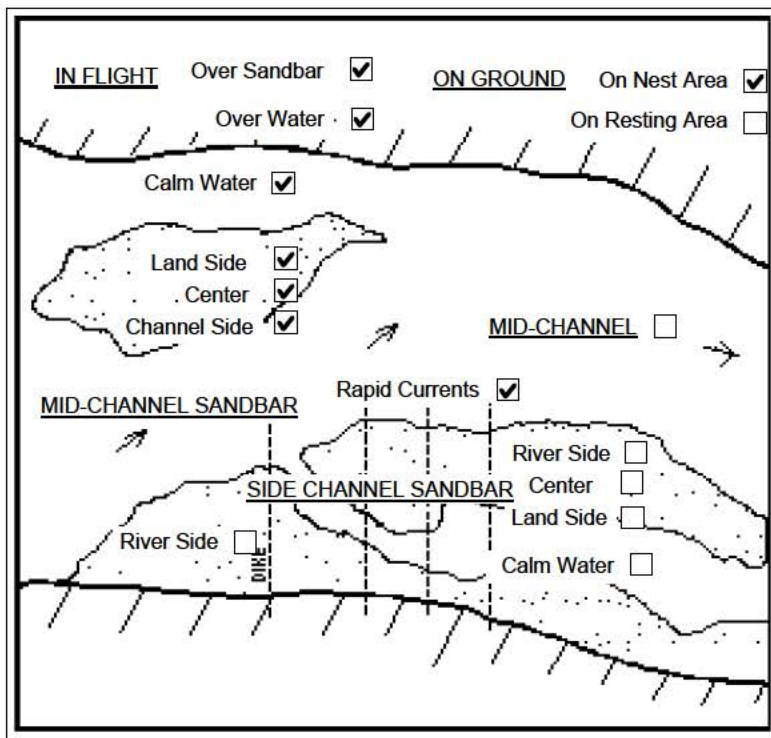
Sand: ☒
Gravel: ☐
Debris: ☐

VEGETATION:

Type: Willows/Cottonwoods
Distance: 100 Feet

FIELD CONDITION:

Temperature: 85 °F
Rain: No
Wind: S 3 mph
% Cloud: 70



OTHER NOTES:

Left Bank. Medium size (1/2 mile x 500 yds. Wide), 8 ft. tall, flat, mid-channel bar of sand and mud, unattached at entrance to Desoto Lake. GPS from lower chute side. No signs of predation. Courting and fishing both sides. Twenty-six chicks 1-3 days old. One White Bass and turtle tracks in colony. No signs of disturbance.

MS side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thron

RIVER GAGE READING: Helena = 7.4 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/26/2007 TIME OF DAY: 11:55 RIVER MILE: 623.0

LOCALITY: Phillips AR SITE NAME: Below Ludlow Dikes
County/Parish State

WHERE SITED: Latitude: 34.1583
Longitude: 90.9303

Approximate Distance to Water: Feet

NUMBERS SIGHTED:

Adults: 12
Juveniles:
Eggs:
Nests: 0
Chicks: No

SUBSTRATE:

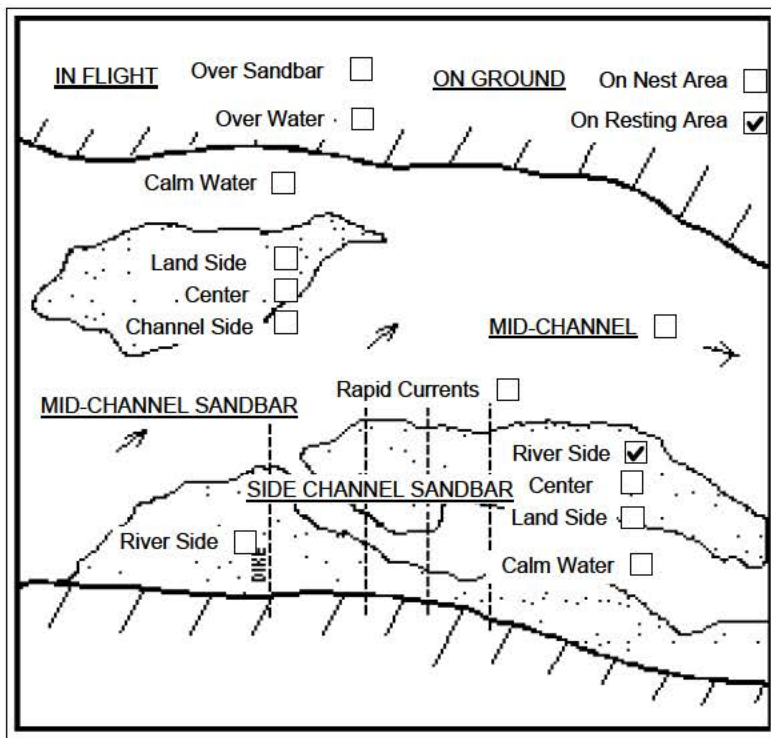
Sand: ☐
Gravel: ☒
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 85 °F
Rain: No
Wind: S 3 mph
% Cloud: 90



OTHER NOTES:

Right Bank. Terns resting at waterline along with Great Blue Heron but no mobbing. No signs of disturbance.

AR side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thron

RIVER GAGE READING: Helena = 7.4 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/26/2007 TIME OF DAY: 12:20 RIVER MILE: 620.0

LOCALITY: Coahoma MS SITE NAME: Island #67 Dikes
County/Parish State

WHERE SITED: Latitude: 34.1150
Longitude: 90.9490

Approximate Distance to Water: 200 Feet

NUMBERS SIGHTED:

Adults: 61
Juveniles:
Eggs:
Nests: 11
Chicks: No

SUBSTRATE:

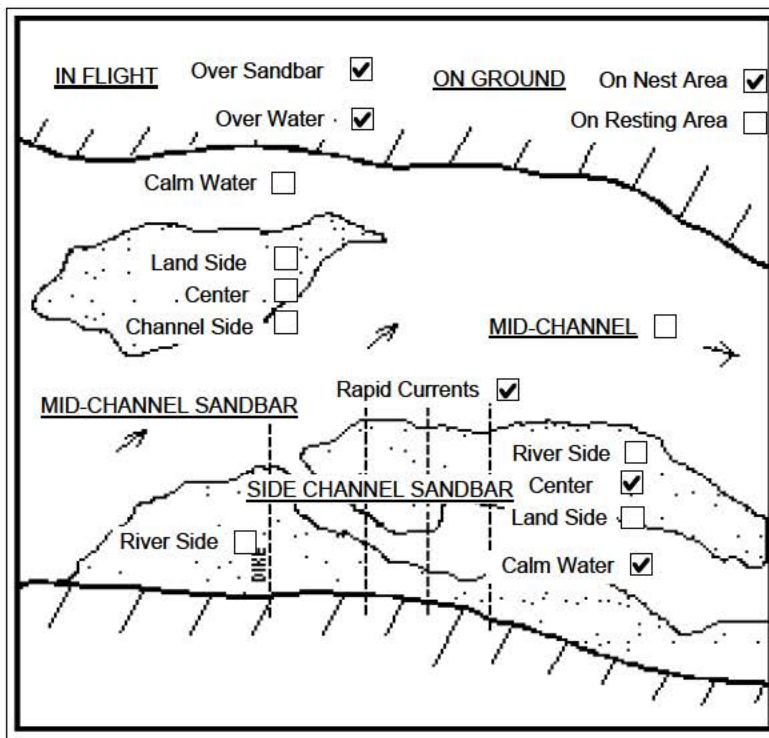
Sand: ☒
Gravel: ☐
Debris: ☒

VEGETATION:

Type: Willows/Cottonwoods
Distance: 800 Feet

FIELD CONDITION:

Temperature: 84 °F
Rain: No
Wind: S 5 mph
% Cloud: 90



OTHER NOTES:

Left Bank. Long, large, high (15 ft.), attached, rippled sand bar with nests along length of bar's high center along wrack line. No disturbance or tracks.

MS side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thron

RIVER GAGE READING: Helena = 7.4 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/26/2007 TIME OF DAY: 12:30 RIVER MILE: 616.0

LOCALITY: Desha AR SITE NAME: Below Knowlton Dikes Upper
County/Parish State

WHERE SITED: Latitude: 34.0811
Longitude: 90.9081

Approximate Distance to Water: 300 Feet

NUMBERS SIGHTED:

Adults: 34
Juveniles:
Eggs:
Nests: 2
Chicks: No

SUBSTRATE:

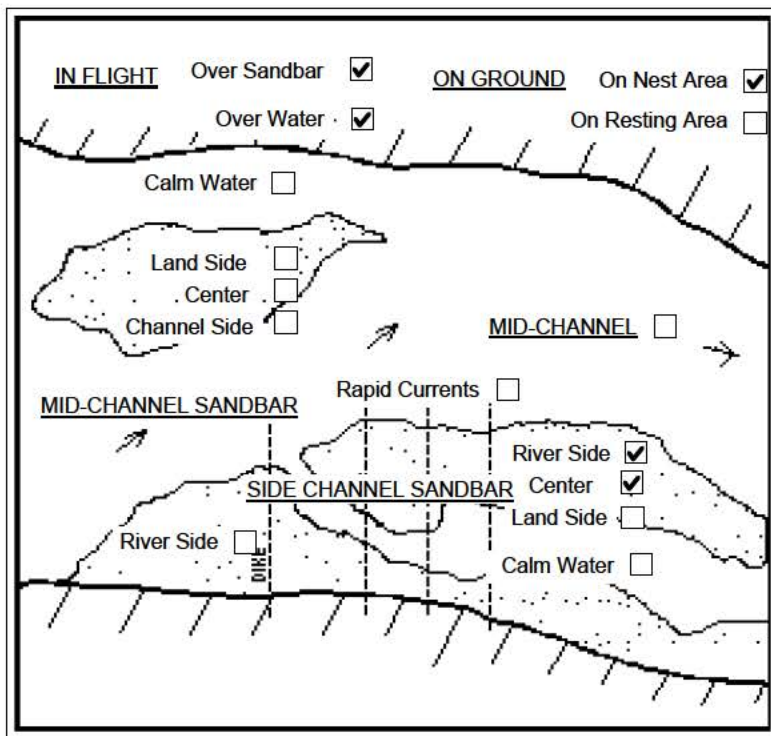
Sand: ☒
Gravel: ☒
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 91 °F
Rain: No
Wind: S 5 mph
% Cloud: 90



OTHER NOTES:

Right Bank. Small, unattached sand bar (6 ft.) below first dike. Perimeter count yields 2 possible nests.

AR side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thron

RIVER GAGE READING: Helena = 7.4 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/26/2007 TIME OF DAY: 13:20 RIVER MILE: 612.0

LOCALITY: Desha AR SITE NAME: Below Knowlton Dikes Lower
County/Parish State

WHERE SITED: Latitude: 34.04383
Longitude: 90.89169

Approximate Distance to Water: 60 Feet

NUMBERS SIGHTED:

Adults: 25
Juveniles:
Eggs:
Nests: 15
Chicks: No

SUBSTRATE:

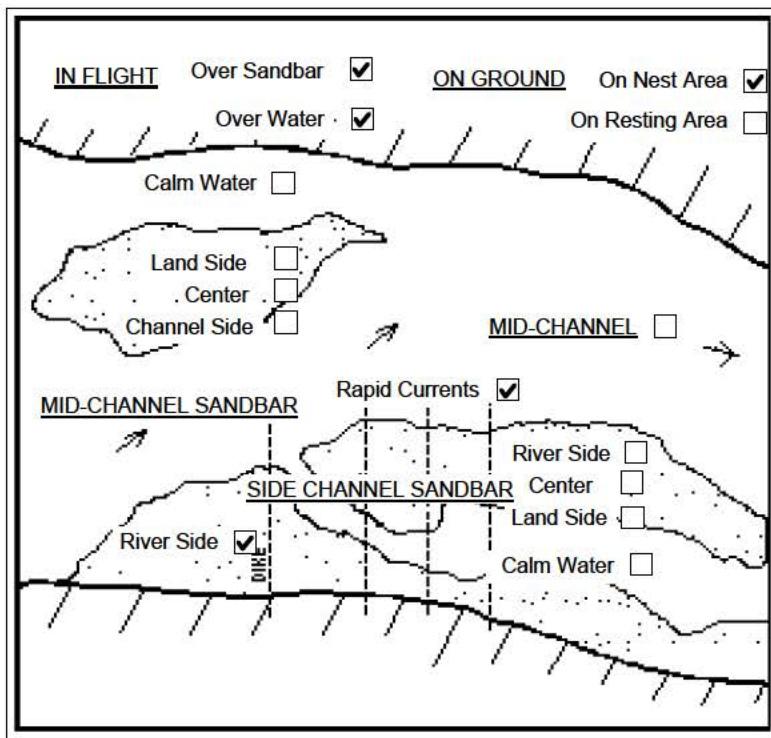
Sand: ☒
Gravel: ☐
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 91 °F
Rain: No
Wind: S 3-5 mph
% Cloud: 50



OTHER NOTES:

Right Bank. Attached, riverside, sand bar, scattered debris and hatched egg shells. No signs of disturbance.

AR side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thron

RIVER GAGE READING: Helena = 7.4 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/26/2007 TIME OF DAY: 13:33 RIVER MILE: 608.0

LOCALITY: Bolivar MS SITE NAME: Island #70 Dikes
County/Parish State

WHERE SITED: Latitude: 34.01977
Longitude: 90.9859

Approximate Distance to Water: 600 Feet

NUMBERS SIGHTED:

Adults: 166
Juveniles:
Eggs:
Nests: 48
Chicks: No

SUBSTRATE:

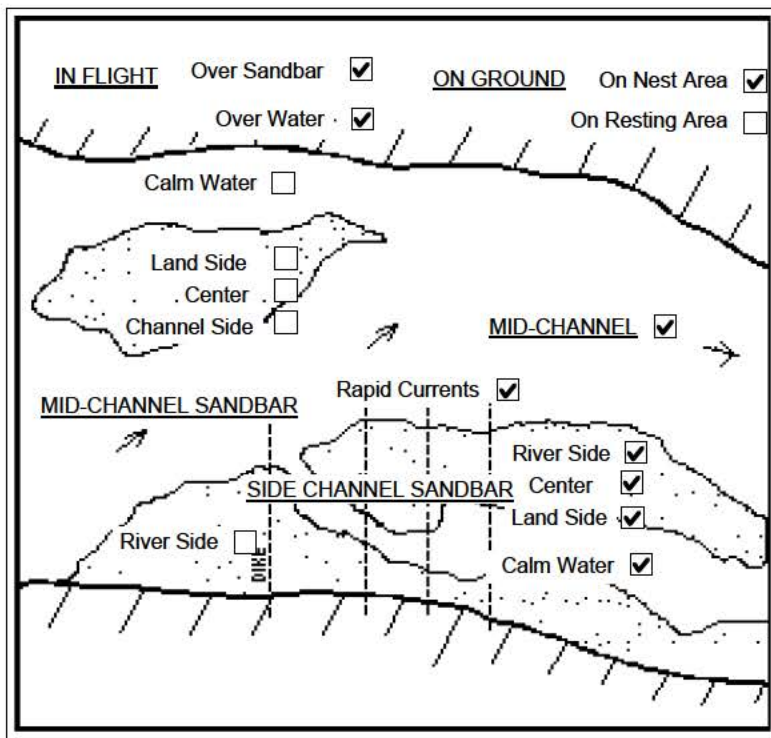
Sand: ☒
Gravel: ☒
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 92 °F
Rain: No
Wind: S 5 mph
% Cloud: 50



OTHER NOTES:

Left Bank. Long, high (10 ft.) sand and gravel bar with birds at waterline and 48 3 sitting inland on scrapes. Most likely attached but no tracks.

MS side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thron

RIVER GAGE READING: Helena = 7.4 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/26/2007 TIME OF DAY: 13:56 RIVER MILE: 603.0

LOCALITY: Bolivar MS SITE NAME: Henrico Dikes
County/Parish State

WHERE SITED: Latitude: 33.9898
Longitude: 91.0500

Approximate Distance to Water: 300 Feet

NUMBERS SIGHTED:

Adults: 70
Juveniles:
Eggs:
Nests: 7
Chicks: No

SUBSTRATE:

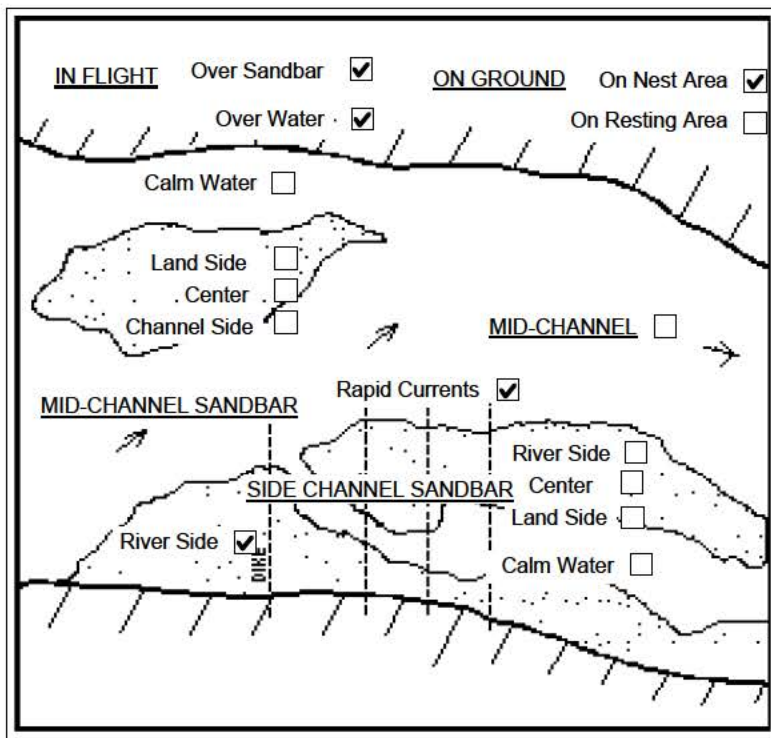
Sand: ☒
Gravel: ☐
Debris: ☒

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 86 °F
Rain: No
Wind: NW 5 mph
% Cloud: 60



OTHER NOTES:

Right Bank. Long, low, flat, attached river-side sand bar with some debris. Perimeter count yields 70 birds, 7 on scrapes, one flying opposite bank. No disturbance factors noted. Storm approaching.

AR side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thron

RIVER GAGE READING: Helena = 7.4 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/26/2007 TIME OF DAY: 14:23 RIVER MILE: 599.5

LOCALITY: Bolivar MS SITE NAME: Smith Point Dikes
County/Parish State

WHERE SITED: Latitude: 33.9571
Longitude: 91.0798

Approximate Distance to Water: Feet

NUMBERS SIGHTED:

Adults: 15
Juveniles:
Eggs:
Nests: 0
Chicks: No

SUBSTRATE:

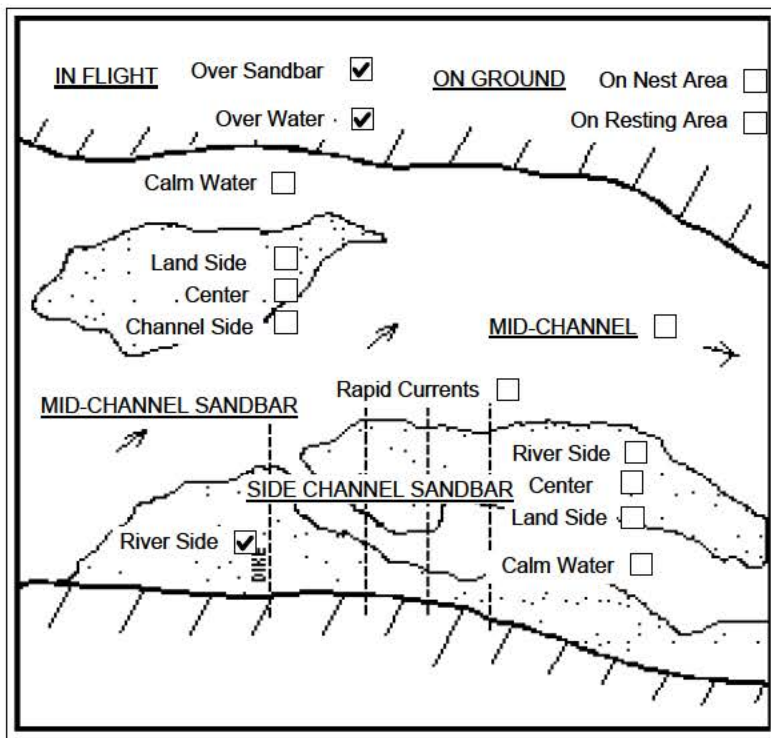
Sand: ☒
Gravel: ☐
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 88 °F
Rain: No
Wind: NW 5 mph
% Cloud: 90



OTHER NOTES:

Left Bank. Large, attached point bar with undulating and dissected mud and sand. ATVs and 15 day campers at waterline. Storm approaching.

MS side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thron

RIVER GAGE READING: Arkansas City = 13.3 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/26/2007 TIME OF DAY: 14:36 RIVER MILE: 595.0

LOCALITY: Desha AR SITE NAME: Victoria Bend Dikes
County/Parish State

WHERE SITED: Latitude: 33.9295
Longitude: 91.0186

Approximate Distance to Water: Feet

NUMBERS SIGHTED:

Adults: 130
Juveniles:
Eggs:
Nests: 0
Chicks: No

SUBSTRATE:

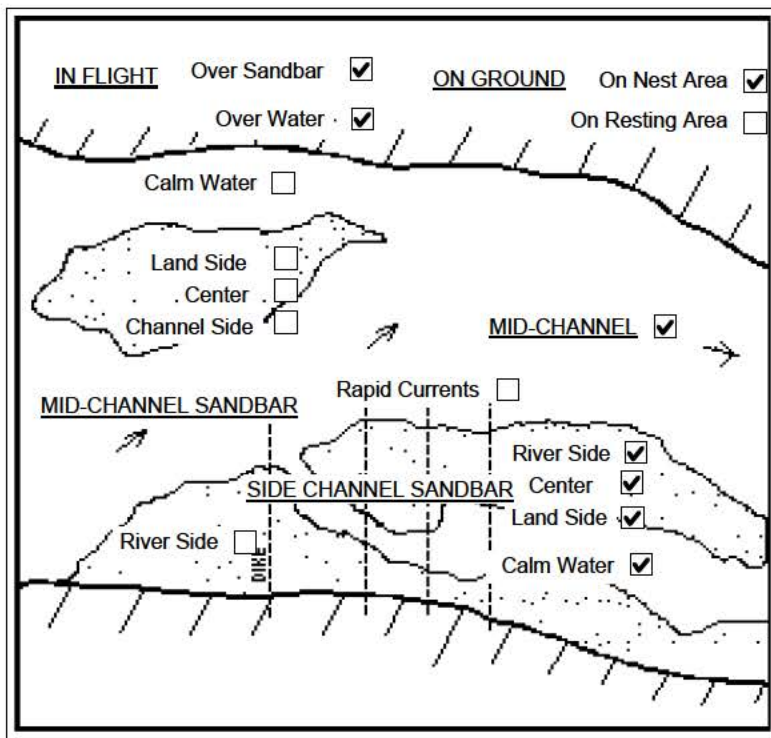
Sand: ☒
Gravel: ☒
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 81 °F
Rain: No
Wind: NE 30 mph
% Cloud: 100



OTHER NOTES:

Right Bank. Large, broad, rounded, attached sand bar with patches of silt and mud. Sandstorm in progress due to approaching storm. Poor visibility prevents identification of terns sitting on scrapes. Colony identified based on numbers seen in the air with storms onslaught.

AR side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thron

RIVER GAGE READING: Arkansas City = 13.3 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/26/2007 TIME OF DAY: 15:26 RIVER MILE: 589.0

LOCALITY: Bolivar MS SITE NAME: Terrene Dikes
County/Parish State

WHERE SITED: Latitude: 33.8415
Longitude: 91.0632

Approximate Distance to Water: 200 Feet

NUMBERS SIGHTED:

Adults: 88
Juveniles:
Eggs:
Nests: 30
Chicks: No

SUBSTRATE:

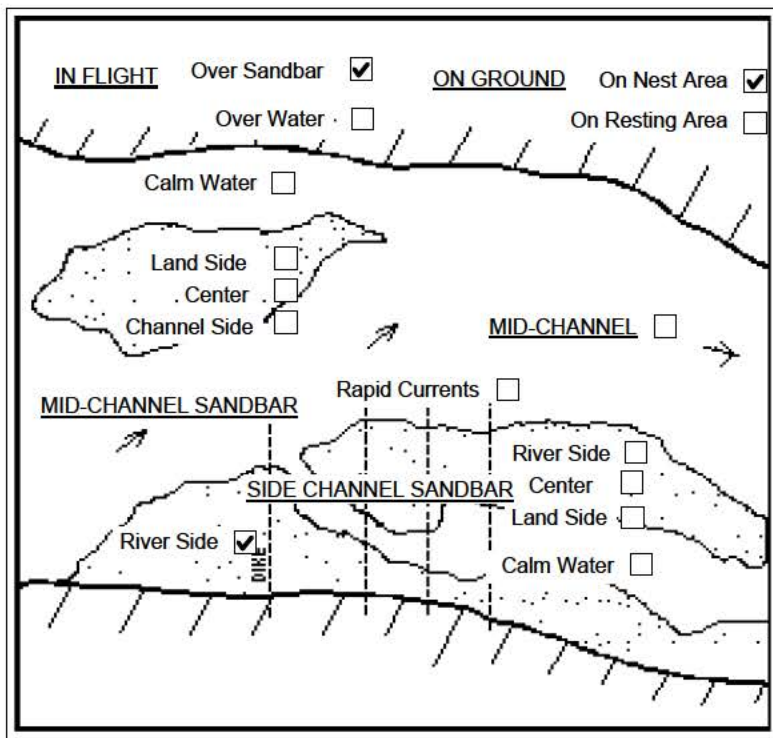
Sand: ☒
Gravel: ☒
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 75 °F
Rain: Yes
Wind: NE 5 mph
% Cloud: 100



OTHER NOTES:

Left Bank. Long, attached, undulating sand bar with some gravel and 30 terns sitting inland on scrapes.

MS side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thron

RIVER GAGE READING: Arkansas City = 13.3 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/26/2007 TIME OF DAY: 15:43 RIVER MILE: 583.5

LOCALITY: Desha AR SITE NAME: Malone Field Dikes
County/Parish State

WHERE SITED: Latitude: 33.7860
Longitude: 91.0517

Approximate Distance to Water: 600 Feet

NUMBERS SIGHTED:

Adults: 42
Juveniles:
Eggs:
Nests: 4
Chicks: No

SUBSTRATE:

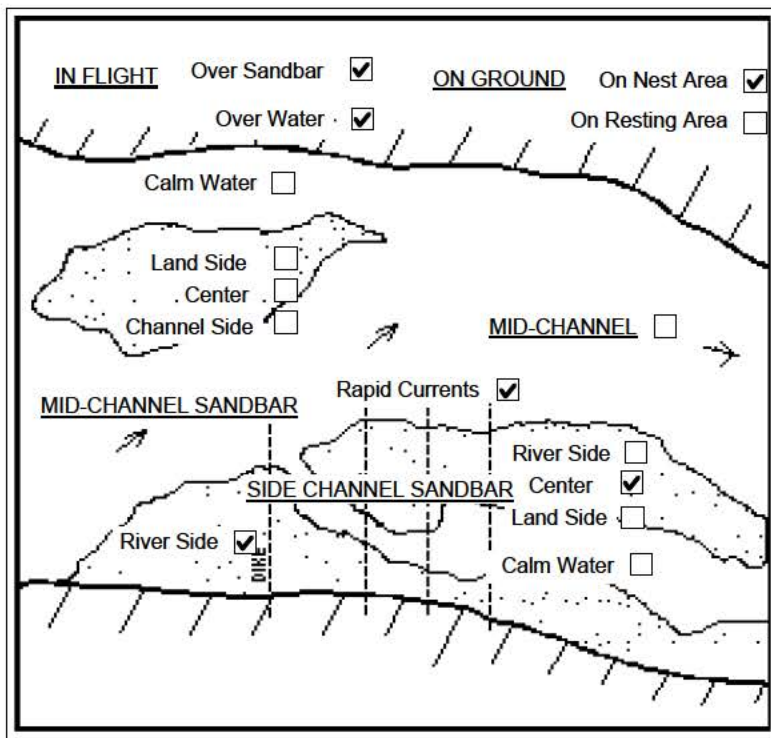
Sand: ☒
Gravel: ☒
Debris: ☒

VEGETATION:

Type: Willows
Distance: 1000 Feet

FIELD CONDITION:

Temperature: 75 °F
Rain: No
Wind: NE 5 mph
% Cloud: 100



OTHER NOTES:

Right Bank. Broad, wide, high (6 ft.), attached, flat-topped, bar of sand and gravel and wrack lines on higher ground. Nests dispersed for 1 mile along wrack line. No disturbance factors noted.

AR side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thron

RIVER GAGE READING: Arkansas City = 13.3 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/26/2007 TIME OF DAY: 16:01 RIVER MILE: 578.0

LOCALITY: Bolivar MS SITE NAME: Below Prentiss Dikes
County/Parish State

WHERE SITED: Latitude: 33.7502
Longitude: 91.1336

Approximate Distance to Water: 1000 Feet

NUMBERS SIGHTED:

Adults: 54
Juveniles:
Eggs:
Nests: 9
Chicks: No

SUBSTRATE:

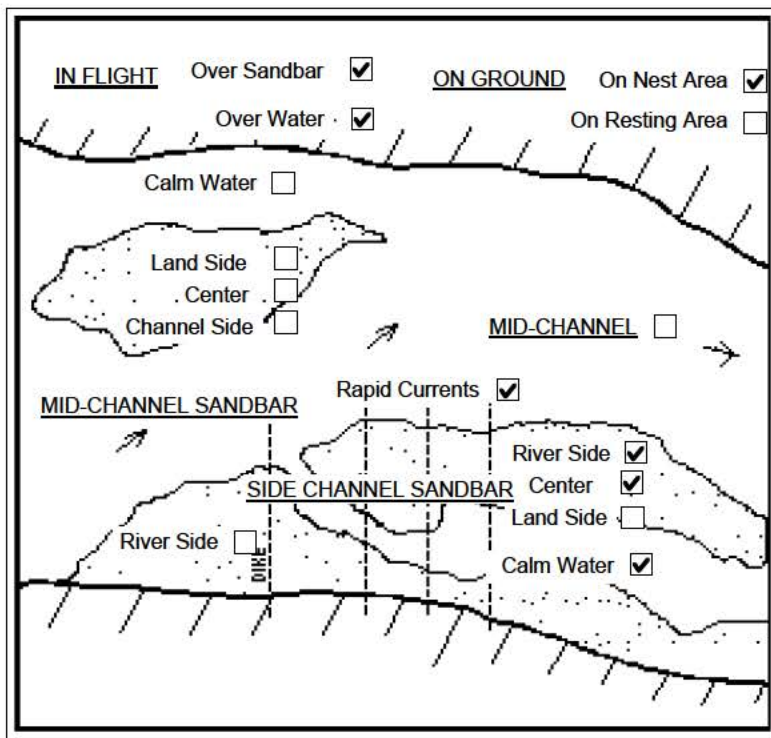
Sand: ☒
Gravel: ☐
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 76 °F
Rain: No
Wind: NE 5 mph
% Cloud: 100



OTHER NOTES:

Left Bank. Long, flat, unattached sand bar with intense recreational activity. Perimeter count yields 54 terns with 9 sitting on scrapes. Many terns fishing in back chute. No disturbance factors.

MS side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thron

RIVER GAGE READING: Arkansas City = 13.3 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/26/2007 TIME OF DAY: 16:10 RIVER MILE: 573.5

LOCALITY: Desha AR SITE NAME: Caulk Neck Cut-Off
County/Parish State

WHERE SITED: Latitude: 33.7087
Longitude: 91.1706

Approximate Distance to Water: Feet

NUMBERS SIGHTED:

Adults: 3
Juveniles:
Eggs:
Nests: 0
Chicks: No

SUBSTRATE:

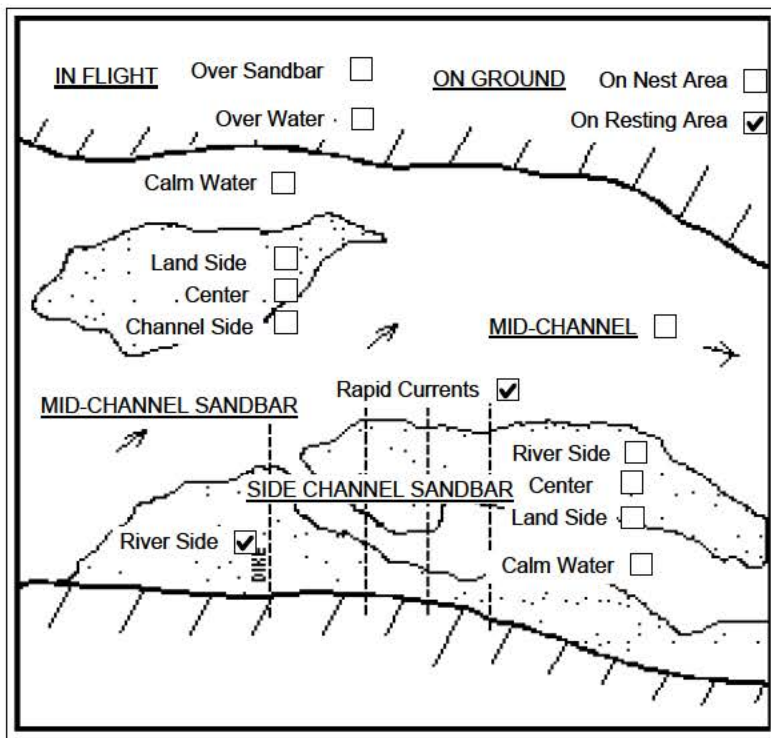
Sand: ☒
Gravel: ☒
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 77 °F
Rain: No
Wind: NE 5 mph
% Cloud: 100



OTHER NOTES:

Right Bank. Attached, medium size point bar, no activity, 3 terns resting at waterline. Interesting side note: Many trees (with green foliage) and driftwood are in main channel possibly due to flooding in Arkansas river watershed.

AR side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thron

RIVER GAGE READING: Arkansas City = 13.3 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/26/2007 TIME OF DAY: 16:25 RIVER MILE: 568.6

LOCALITY: Bolivar MS SITE NAME: Catfish Point Dikes
County/Parish State

WHERE SITED: Latitude: 33.6781
Longitude: 91.2242

Approximate Distance to Water: 500 Feet

NUMBERS SIGHTED:

Adults: 62
Juveniles:
Eggs:
Nests: 9
Chicks: No

SUBSTRATE:

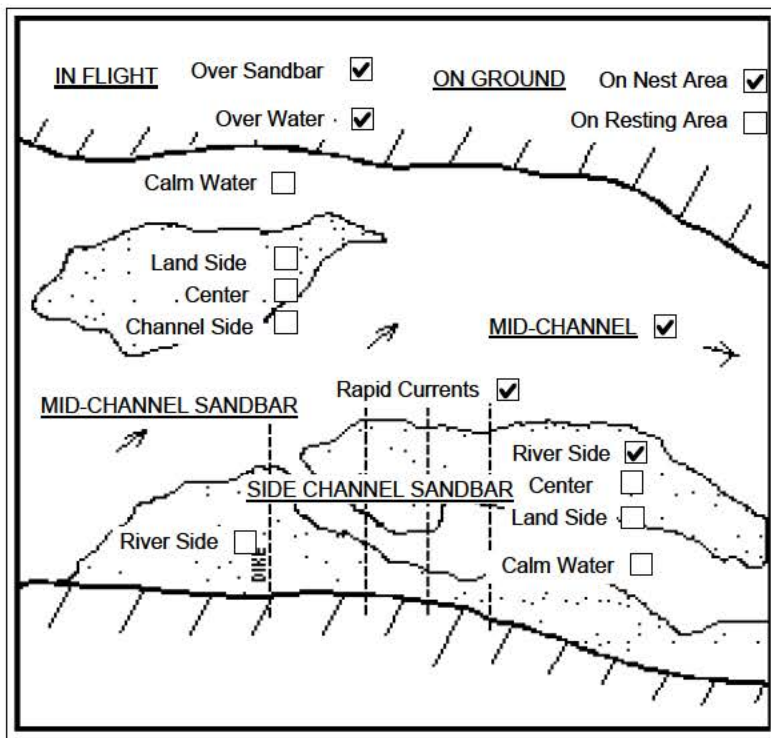
Sand: ☒
Gravel: ☒
Debris: ☒

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 77 °F
Rain: Yes
Wind: NE 5 mph
% Cloud: 100



OTHER NOTES:

Left Bank. Wide, attached, sand and gravel bar. Most Least Terns were counted along waterline, but 9 sitting indicated nests in gravel patches. Much courting activity, 2 Mallards present. No signs of disturbance.

MS side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thron

RIVER GAGE READING: Arkansas City = 13.3 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

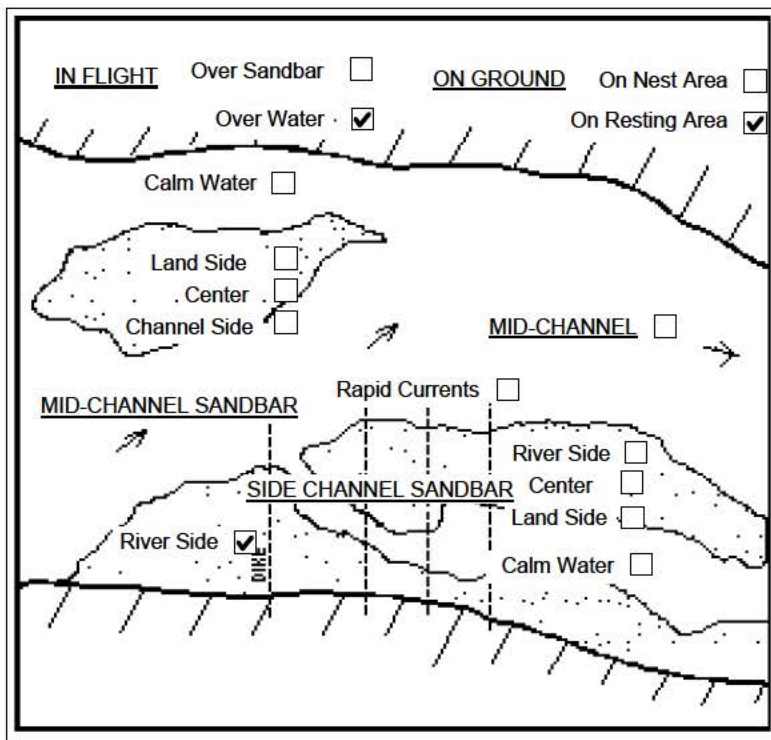
SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/26/2007 TIME OF DAY: 16:52 RIVER MILE: 564.0

LOCALITY: Desha AR SITE NAME: Choctaw Bar Island
County/Parish State

WHERE SITED: Latitude: 33.62822
Longitude: 91.14918

Approximate Distance to Water: Feet



NUMBERS SIGHTED:

Adults: 21
Juveniles:
Eggs:
Nests: 0
Chicks: No

SUBSTRATE:

Sand: ☒
Gravel: ☒
Debris: ☒

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 77 °F
Rain: No
Wind: NE 5 mph
% Cloud: 100

OTHER NOTES:

Right Bank. Large sand and gravel bar attached to large wooded Choctaw Bar Island. Birds restin along waterline, some mobbing a crow but no other signs of reproductive behavior. No disturbance factors.

AR side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thron

RIVER GAGE READING: Arkansas City = 13.3F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/26/2007 TIME OF DAY: 17:04 RIVER MILE: 558.5

LOCALITY: Desha AR SITE NAME: Choctaw Bend
County/Parish State

WHERE SITED: Latitude: NA
Longitude: NA

Approximate Distance to Water: Feet

NUMBERS SIGHTED:

Adults: 11
Juveniles:
Eggs:
Nests: 0
Chicks: No

SUBSTRATE:

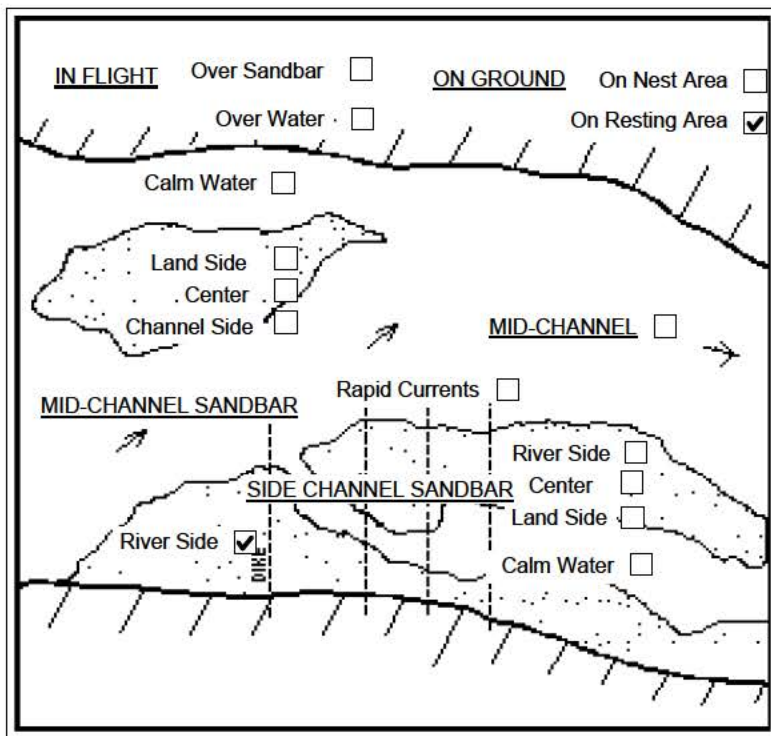
Sand: ☒
Gravel: ☐
Debris: ☐

VEGETATION:

Type: Willows
Distance: 500 Feet

FIELD CONDITION:

Temperature: 79 °F
Rain: No
Wind: NE 5-8 mph
% Cloud: 100



OTHER NOTES:

Right Bank. Back chute behind Choctaw Bar Island, attached, river side bar. All birds resting at waterline, no visible disturbance factors.

AR side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thron

RIVER GAGE READING: Arkansas City = 13.3 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/26/2007 TIME OF DAY: 17:18 RIVER MILE: 554.0

LOCALITY: Bolivar MS SITE NAME: Huntington Point
County/Parish State

WHERE SITED: Latitude: NA
Longitude: NA

Approximate Distance to Water: 20 Feet

NUMBERS SIGHTED:

Adults: 18
Juveniles:
Eggs:
Nests: 4
Chicks: No

SUBSTRATE:

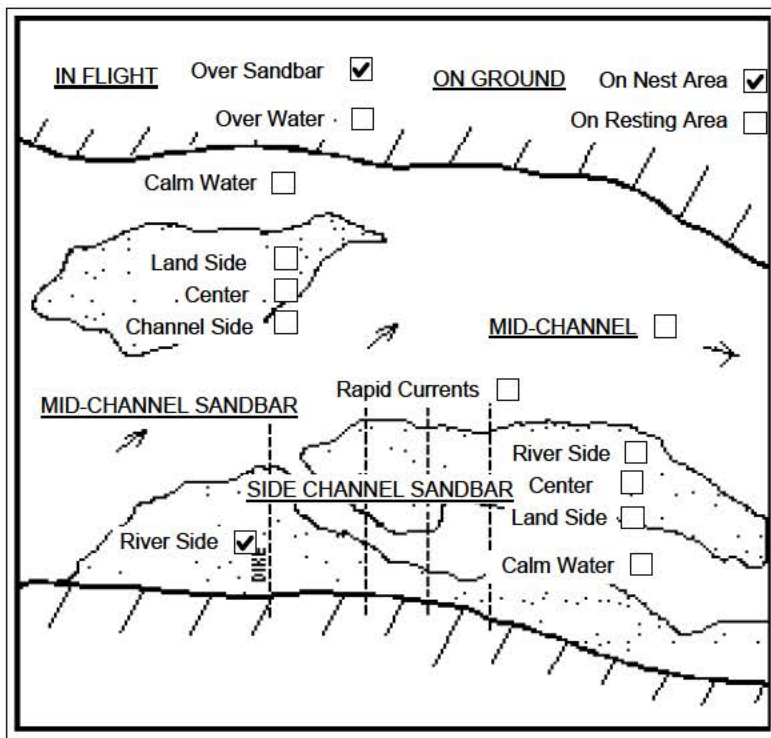
Sand: ☒
Gravel: ☒
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 80 °F
Rain: No
Wind: NE 3 mph
% Cloud: 100



OTHER NOTES:

Left Bank. Low, flat, unattached, riverside bar of sand, gravel and mud on lower end. Most birds resting waterline with four sitting on scrapes. No disturbance signs.

MS side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thron

RIVER GAGE READING: Arkansas City = 13.3 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/26/2007 TIME OF DAY: 17:30 RIVER MILE: 551.0

LOCALITY: Bolivar MS SITE NAME: Georgetown Bend
County/Parish State

WHERE SITED: Latitude: 33.51858
Longitude: 91.19123

Approximate Distance to Water: 20 Feet

NUMBERS SIGHTED:

Adults: 153
Juveniles:
Eggs: 19(3) 6(2) 2(1)
Nests: 25
Chicks: Yes

SUBSTRATE:

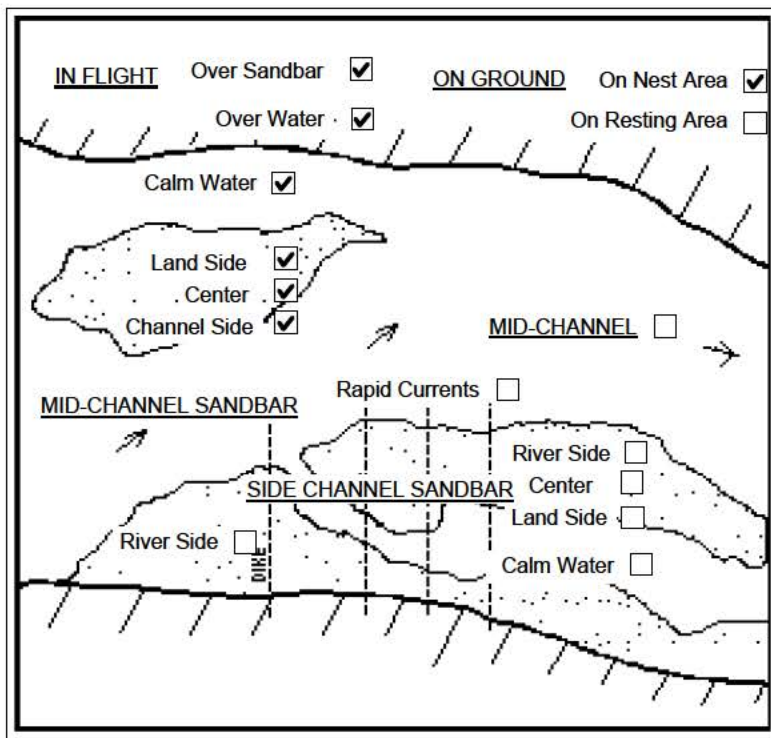
Sand: ☒
Gravel: ☐
Debris: ☐

VEGETATION:

Type: Cottonwoods/willows
Distance: 50 Feet

FIELD CONDITION:

Temperature: 80 °F
Rain: No
Wind: NE 5 mph
% Cloud: 100



OTHER NOTES:

Left Bank. Mid-channel sand bar, new colony, unattached, low, flat, clean sand with vegetation less than 3 feet tall. Many chicks hatching and up to 4 days old. No disturbance factors

MS side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thron

RIVER GAGE READING: Arkansas City = 13.3 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/26/2007 TIME OF DAY: 18:06 RIVER MILE: 544.5

LOCALITY: Chicot AR SITE NAME: Island #82 Miller Bend Dikes
County/Parish State

WHERE SITED: Latitude: 33.42406
Longitude: 91.11989

Approximate Distance to Water: 100 Feet

NUMBERS SIGHTED:

Adults: 239
Juveniles:
Eggs: 18(2)
Nests: 18
Chicks: No

SUBSTRATE:

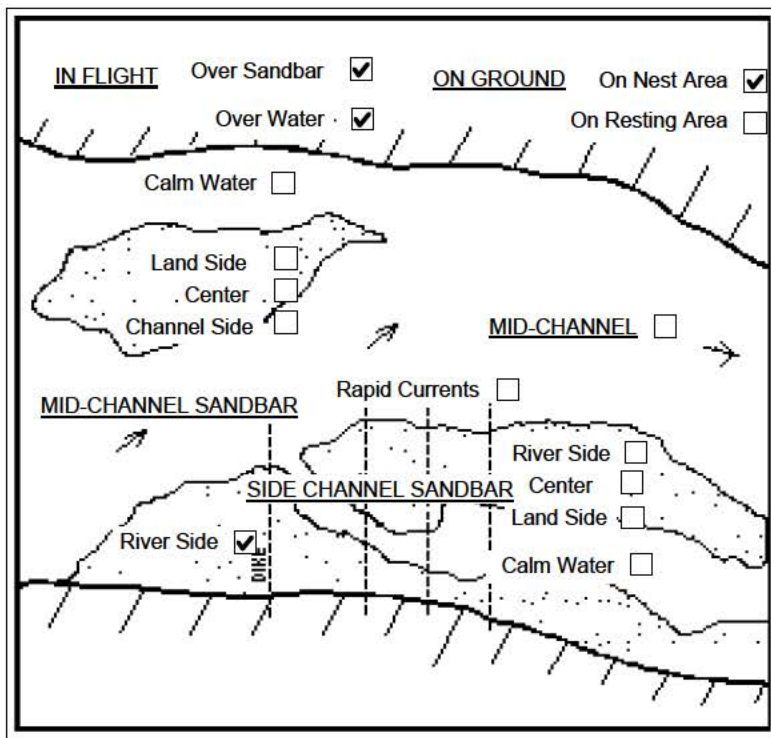
Sand: ☒
Gravel: ☒
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 82 °F
Rain: No
Wind: NE 5 mph
% Cloud: 100



OTHER NOTES:

Right Bank. Low (3 ft.), flat, attached, sand, gravel and mud. 125 White Pelicans near colony but no mobbing by terns. No tracks or other disturbing factors.

AR side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thron

RIVER GAGE READING: Greenville = 24.7 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/26/2007 TIME OF DAY: 18:27 RIVER MILE: 540.0

LOCALITY: Washington MS SITE NAME: Leland Neck Dikes
County/Parish State

WHERE SITED: Latitude: 33.39602
Longitude: 91.10870

Approximate Distance to Water: 150 Feet

NUMBERS SIGHTED:

Adults: 410
Juveniles:
Eggs:
Nests: 130
Chicks: No

SUBSTRATE:

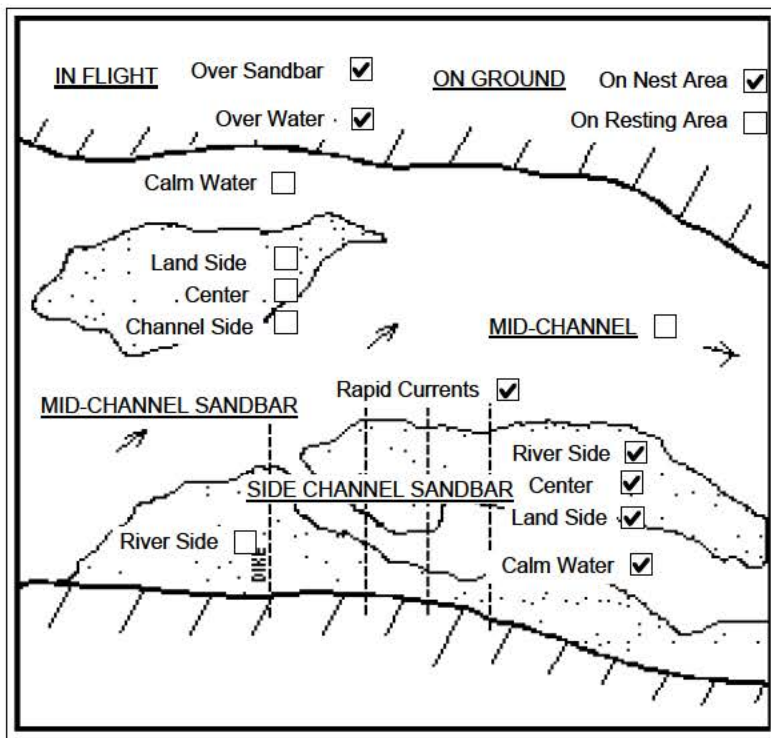
Sand: ☒
Gravel: ☐
Debris: ☒

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 83 °F
Rain: No
Wind: NE 5 mph
% Cloud: 100



OTHER NOTES:

Left Bank. Medium size, unattached sand bar 3 miles upstream from entrance to Greenville harbor. Day campers just downstream on same bar riverside. No tracks or other disturbance within colony.

MS side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thron

RIVER GAGE READING: Greenville = 24.7 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/27/2007 TIME OF DAY: 8:55 RIVER MILE: 529.0

LOCALITY: Washington MS SITE NAME: Refuge Dikes
County/Parish State

WHERE SITED: Latitude: 33.26653
Longitude: 91.12264

Approximate Distance to Water: 500 Feet

NUMBERS SIGHTED:

Adults: 125
Juveniles:
Eggs: 1(1) 1(2) 3(3)
Nests: 8
Chicks: Yes

SUBSTRATE:

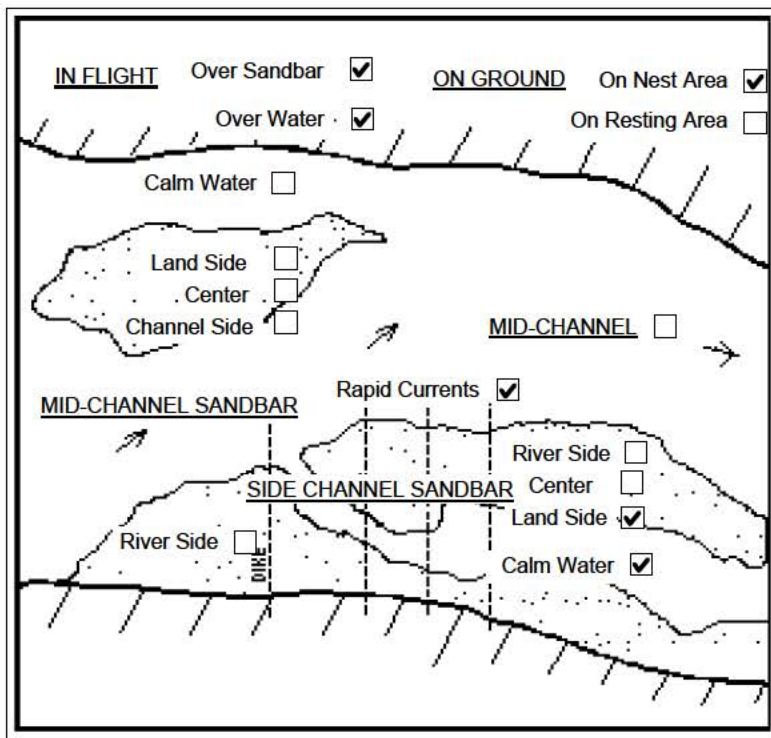
Sand: ☒
Gravel: ☐
Debris: ☒

VEGETATION:

Type: Willows/Grass
Distance: 80 Feet

FIELD CONDITION:

Temperature: 78 °F
Rain: No
Wind: Calm
% Cloud: 20



OTHER NOTES:

Left Bank. Small, high, clean, unattached sand bar below 1st dike. Approximately 1/4 mile long and wide, with upper end of mud flats. Nests with eggs and newly hatched chicks up to 3 days old. Twelve eggs displaced from scrapes (previous days storm?). Mobbing of observers and human tracks in colony. 150 White Pelicans backside.

MS side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Greenville = 24.5 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/27/2007 TIME OF DAY: 9:42 RIVER MILE: 523.0

LOCALITY: Chico AR SITE NAME: Seven Oaks Dikes
County/Parish State

WHERE SITED: Latitude: 33.18262
Longitude: 91.09313

Approximate Distance to Water: 40 Feet

NUMBERS SIGHTED:

Adults: 75
Juveniles:
Eggs: 1(2) 6(3)
Nests: 7
Chicks: Yes

SUBSTRATE:

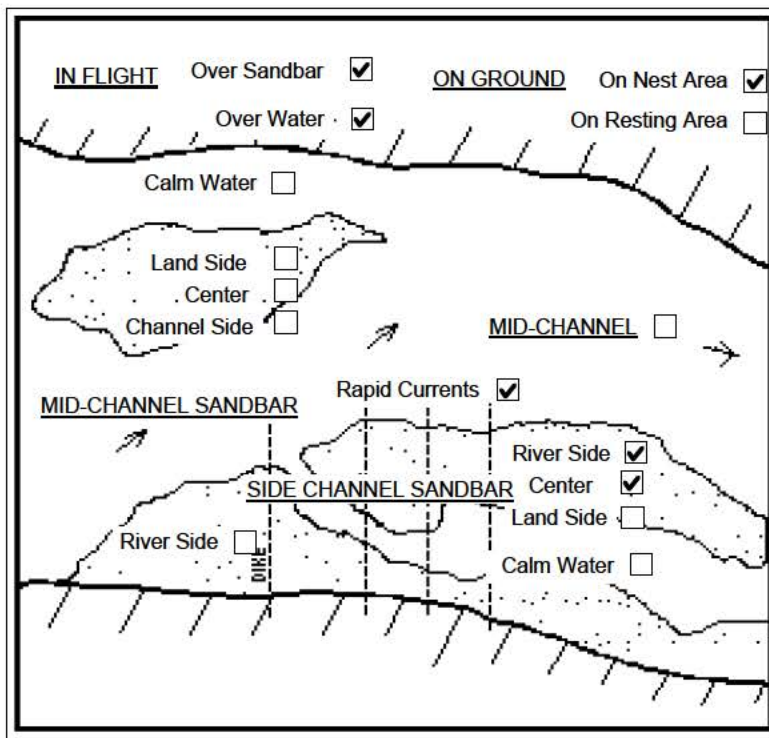
Sand: ☒
Gravel: ☐
Debris: ☐

VEGETATION:

Type: Willows/CW/grass/forbs
Distance: 0 Feet

FIELD CONDITION:

Temperature: 82 °F
Rain: No
Wind: Calm
% Cloud: 10



OTHER NOTES:

Right Bank. Small, unattached, sand and mud bar below notched dike. Eggs and chicks up to 1 week old. Nests in sand and mud, some with vegetation in the scrape. Canine tracks present.

AR side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Greenville = 24.5 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/27/2007 TIME OF DAY: 9:54 RIVER MILE: 521.0

LOCALITY: Chicot AR SITE NAME: Island #86 Dikes Upper
County/Parish State

WHERE SITED: Latitude: 33.15795
Longitude: 91.08720

Approximate Distance to Water: 50 Feet

NUMBERS SIGHTED:

Adults: 148
Juveniles:
Eggs:
Nests: 50
Chicks: No

SUBSTRATE:

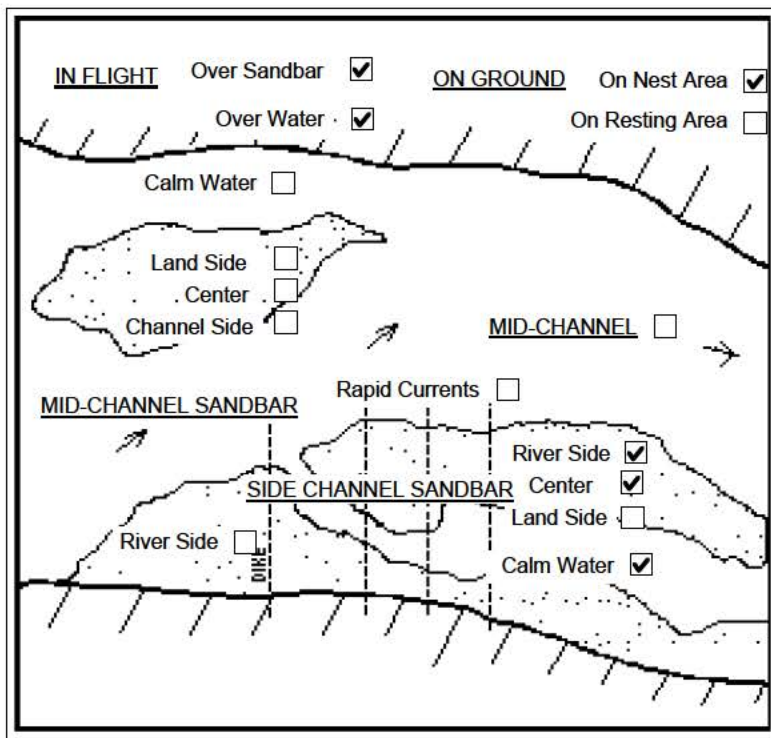
Sand: ☒
Gravel: ☐
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 82 °F
Rain: No
Wind: Calm
% Cloud: 10



OTHER NOTES:

Right Bank. Small, low, flat, unattached sand bar below 1st dike. Drift count yields highest count. No tracks, but Snowy Egrets and White Pelicans nearby.

AR side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Greenville = 24.5 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/27/2007 TIME OF DAY: 10:13 RIVER MILE: 518.5

LOCALITY: Chico AR SITE NAME: Island #86 Dikes Lower
County/Parish State

WHERE SITED: Latitude: 33.12910
Longitude: 91.10169

Approximate Distance to Water: 100 Feet

NUMBERS SIGHTED:

Adults: 42
Juveniles:
Eggs:
Nests: 7
Chicks: No

SUBSTRATE:

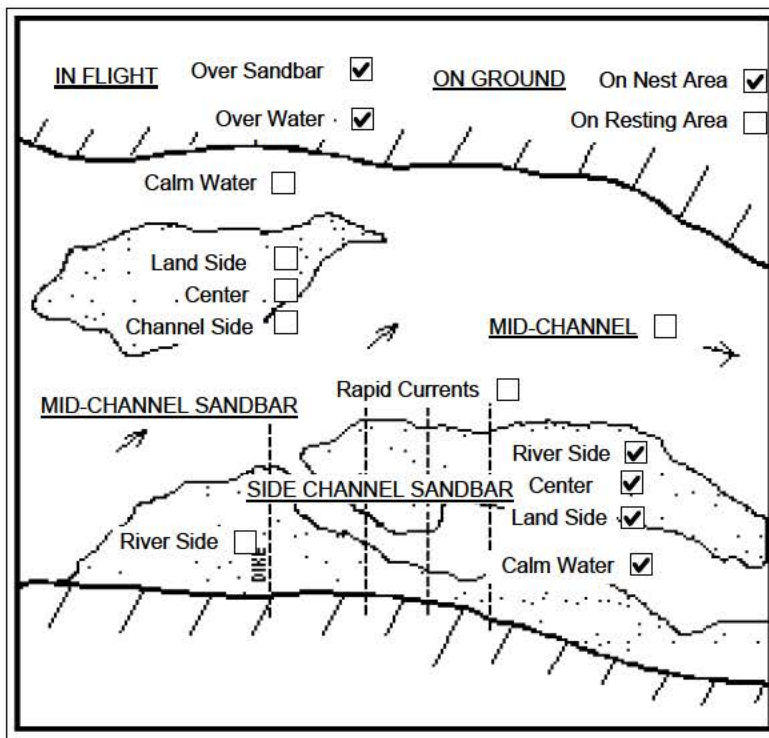
Sand: ☒
Gravel: ☐
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 82 °F
Rain: No
Wind: Calm
% Cloud: 10



OTHER NOTES:

Right Bank. Small, unattached, low, flat, sand bar. Birds sitting inland on scrapes, others fishing back chute, courting or resting at waterline. No tracks or disturbance noted.

AR side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Greenville = 24.5 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/27/2007 TIME OF DAY: 10:27 RIVER MILE: 514.0

LOCALITY: Washington MS SITE NAME: Leota Dikes
County/Parish State

WHERE SITED: Latitude: 33.09132
Longitude: 91.16353

Approximate Distance to Water: 150 Feet

NUMBERS SIGHTED:

Adults: 62
Juveniles:
Eggs:
Nests: 25
Chicks: No

SUBSTRATE:

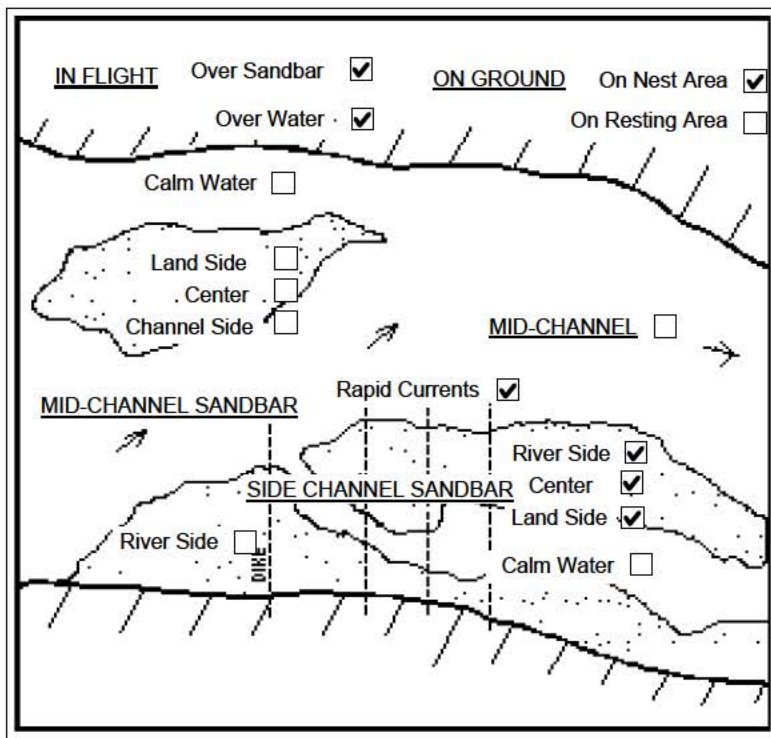
Sand: ☒
Gravel: ☐
Debris: ☒

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 83 °F
Rain: No
Wind: Calm
% Cloud: 60



OTHER NOTES:

Left Bank. Long, clean, sand bar, unattached downstream pt. with birds sitting on scrapes, courting, and resting at waterline. No tracks observed.

MS side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Greenville = 24.5 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/27/2007 TIME OF DAY: 10:48 RIVER MILE: 510.0

LOCALITY: Chicot AR SITE NAME: Cracraft Lower Dikes Upper
County/Parish State

WHERE SITED: Latitude: 33.03810
Longitude: 91.15770

Approximate Distance to Water: 100 Feet

NUMBERS SIGHTED:

Adults: 32
Juveniles:
Eggs: 1(2) 4(3)
Nests: 6
Chicks: Yes

SUBSTRATE:

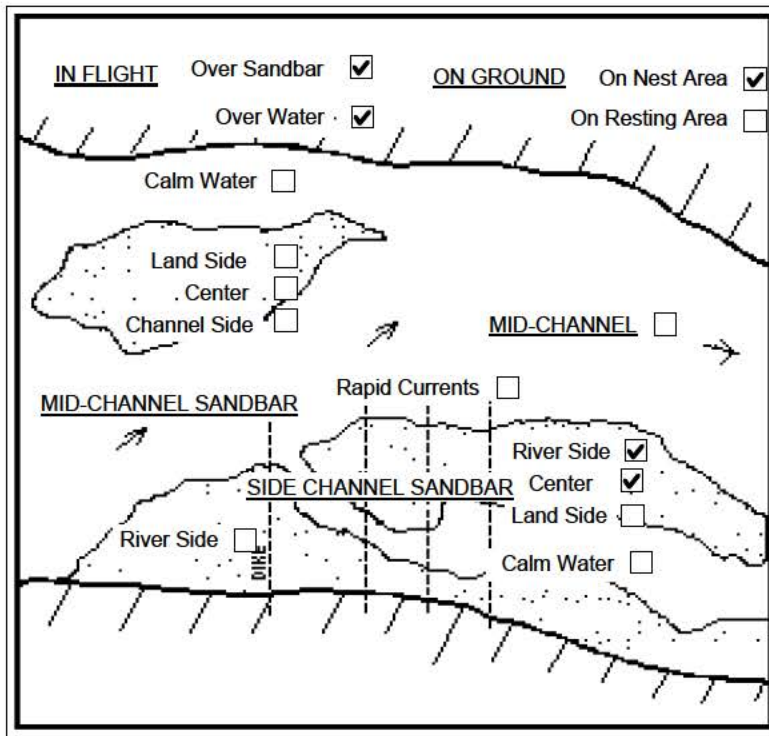
Sand: ☒
Gravel: ☐
Debris: ☐

VEGETATION:

Type: Willows/Cottonwoods
Distance: 15 Feet

FIELD CONDITION:

Temperature: 83 °F
Rain: No
Wind: Calm
% Cloud: 60



OTHER NOTES:

Right Bank. Upstream point of island at Cracraft dikes, clean sand, nests among small cottonwoods and willows. Terns mobbing heron, egrets and comorants. No other disturbance factors noted.

AR side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Greenville = 24.5 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/27/2007 TIME OF DAY: 11:05 RIVER MILE: 509.2

LOCALITY: Chicot AR SITE NAME: Cracraft Lower Dikes Lower
County/Parish State

WHERE SITED: Latitude: 33.02516
Longitude: 91.15446

Approximate Distance to Water: 200 Feet

NUMBERS SIGHTED:

Adults: 32
Juveniles:
Eggs:
Nests: 7
Chicks: No

SUBSTRATE:

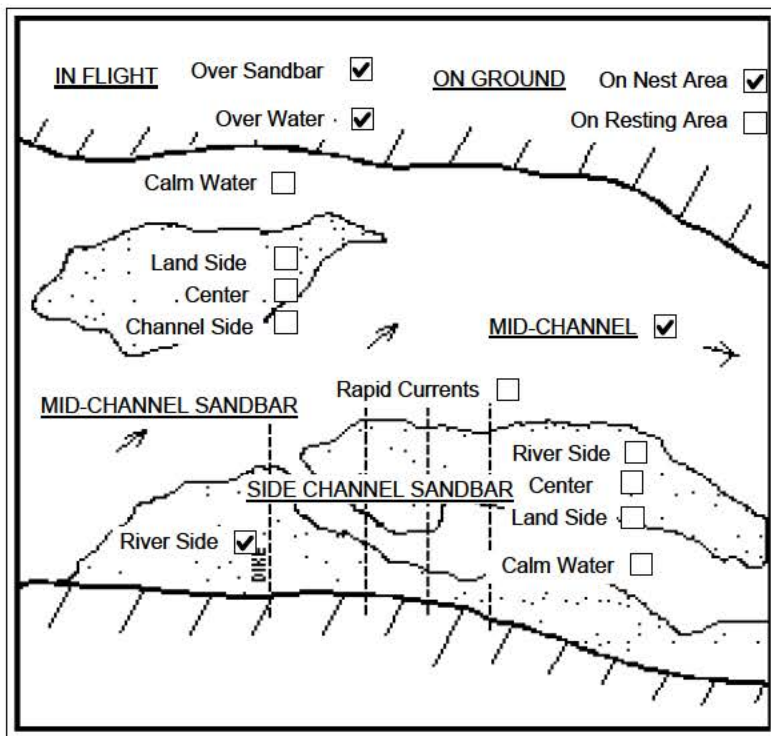
Sand: ☒
Gravel: ☐
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 83 °F
Rain: No
Wind: Calm
% Cloud: 60



OTHER NOTES:

Right Bank. Long, 1.5 mile, riverside sand bar. Colony thinly spread entire length. Seven sitting inland, others resting at waterline. No disturbance noted.

AR side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Greenville = 24.5 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/27/2007 TIME OF DAY: 11:33 RIVER MILE: 504.0

LOCALITY: Issaquena MS SITE NAME: Corregidor Dikes
County/Parish State

WHERE SITED: Latitude: 32.95736
Longitude: 91.14347

Approximate Distance to Water: 100 Feet

NUMBERS SIGHTED:

Adults: 667
Juveniles:
Eggs:
Nests: 300
Chicks: No

SUBSTRATE:

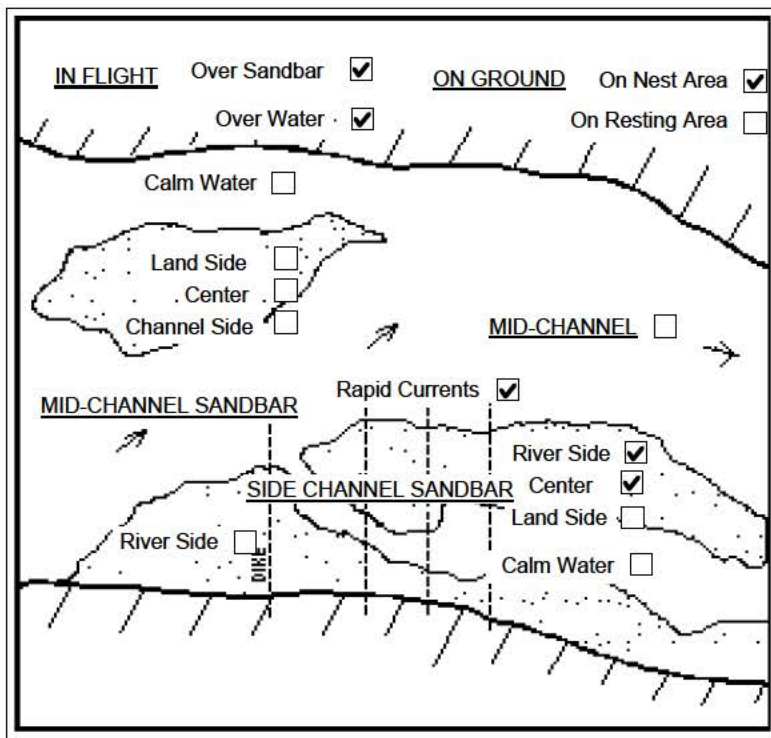
Sand: ☒
Gravel: ☐
Debris: ☒

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 84 °F
Rain: No
Wind: Calm
% Cloud: 60



OTHER NOTES:

Left Bank. Long (3/4 mile), narrow, unattached, crescent shaped sand and mud bar in bend of Sarah Cut-Off (attached in 2006). Huge colony site with camping remnants.

MS side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Greenville = 24.5 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/27/2007 TIME OF DAY: 11:47 RIVER MILE: 499.0

LOCALITY: East Carroll LA SITE NAME: Wilson Point Dikes
County/Parish State

WHERE SITED: Latitude: 32.9435
Longitude: 91.0833

Approximate Distance to Water: 100 Feet

NUMBERS SIGHTED:

Adults: 37
Juveniles:
Eggs:
Nests: 8
Chicks: No

SUBSTRATE:

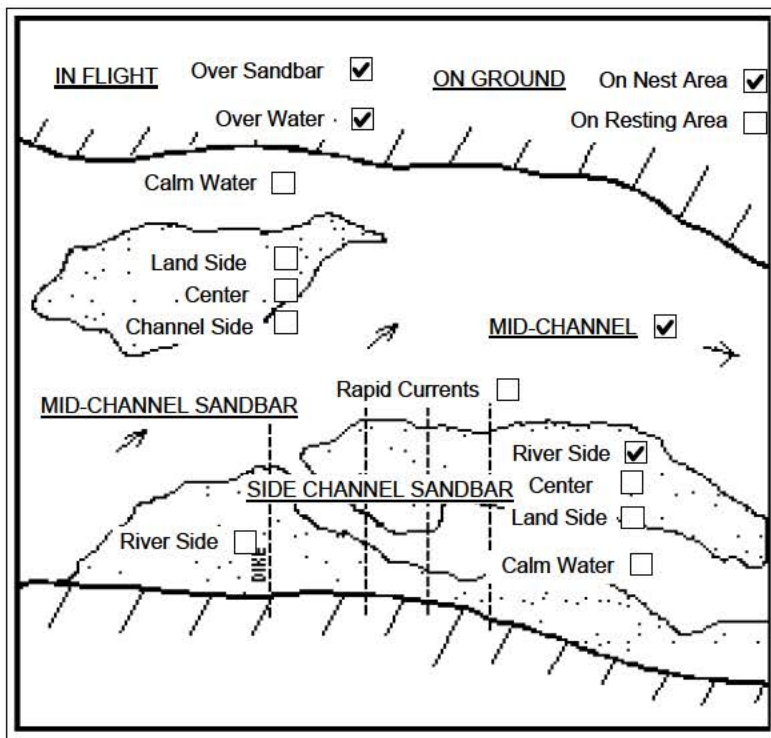
Sand: ☒
Gravel: ☐
Debris: ☒

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 84 °F
Rain: No
Wind: S 5-10 mph
% Cloud: 65



OTHER NOTES:

Right Bank. Attached, sand bar above last visible dike. Most Terns observed resting at waterline or fishing during perimeter count, but 8 sitting inland on scrapes. No disturbance noted.

LA side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Greenville = 24.5 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/27/2007 TIME OF DAY: 12:05 RIVER MILE: 491.5

LOCALITY: Issaquena MS SITE NAME: Baleshed Landing Dikes
County/Parish State

WHERE SITED: Latitude: 32.8417
Longitude: 91.1278

Approximate Distance to Water: 60 Feet

NUMBERS SIGHTED:

Adults: 140
Juveniles:
Eggs:
Nests: 36
Chicks: No

SUBSTRATE:

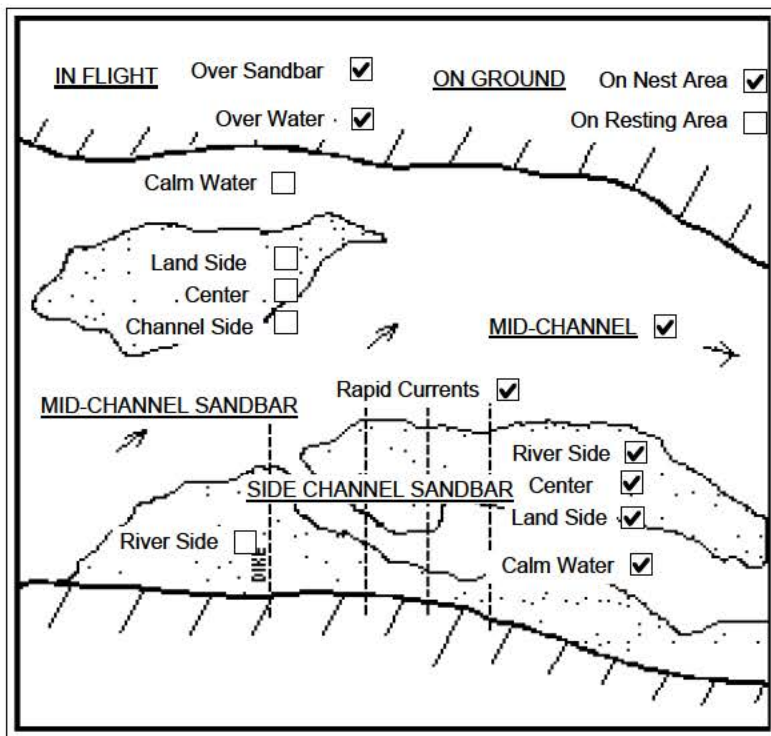
Sand: ☒
Gravel: ☐
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 84 °F
Rain: No
Wind: S 5 mph
% Cloud: 40



OTHER NOTES:

Left Bank. Small, barely exposed, clean, sand bar upstream from Stack Island. No tracks or disturbance, 27 Canada Geese at waterline.

MS side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Greenville = 24.5 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/27/2007 TIME OF DAY: 13:14 RIVER MILE: 488.0

LOCALITY: Issaquena MS SITE NAME: Ben Lommond Dikes
County/Parish State

WHERE SITED: Latitude: 32.80477
Longitude: 91.14308

Approximate Distance to Water: 50 Feet

NUMBERS SIGHTED:

Adults: 65
Juveniles:
Eggs:
Nests: 17
Chicks: No

SUBSTRATE:

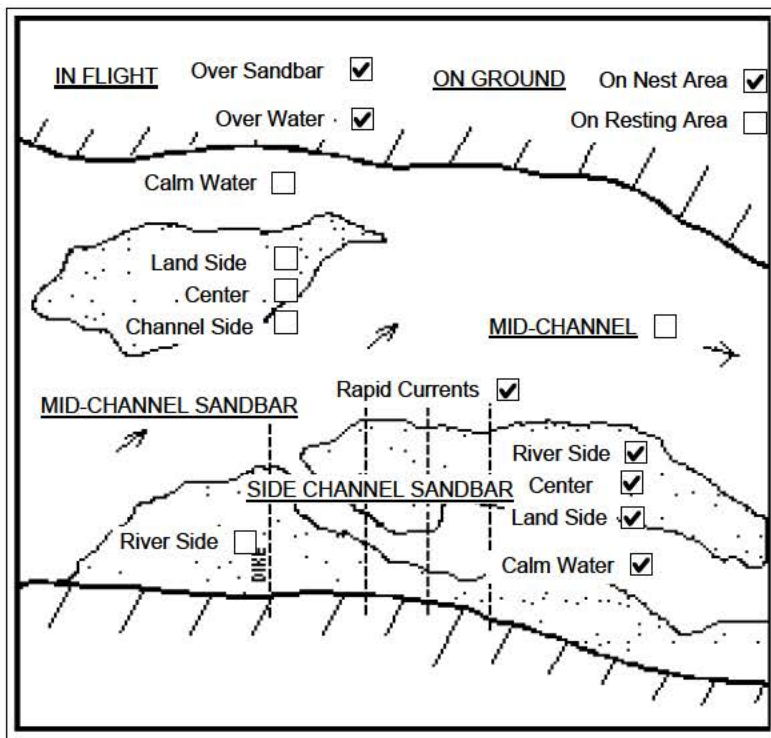
Sand: ☒
Gravel: ☐
Debris: ☐

VEGETATION:

Type: Willows/CW/grass
Distance: 0 Feet

FIELD CONDITION:

Temperature: 86 °F
Rain: No
Wind: S 5 mph
% Cloud: 40



OTHER NOTES:

Left Bank. Low, very small, rounded, unattached sand bar just downstream from Stack Island. Nests in amongst sparse grass with one tern sitting on eggs not in a scrape. Spotted Sandpiper also observed. No tracks or disturbance.

MS side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Vicksburg = 18.6 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/27/2007 TIME OF DAY: 13:36 RIVER MILE: 484.0

LOCALITY: Issaquena MS SITE NAME: Ajax Bar Dikes Upper
County/Parish State

WHERE SITED: Latitude: 32.74550
Longitude: 91.14376

Approximate Distance to Water: 500 Feet

NUMBERS SIGHTED:

Adults: 45
Juveniles:
Eggs:
Nests: 12
Chicks: No

SUBSTRATE:

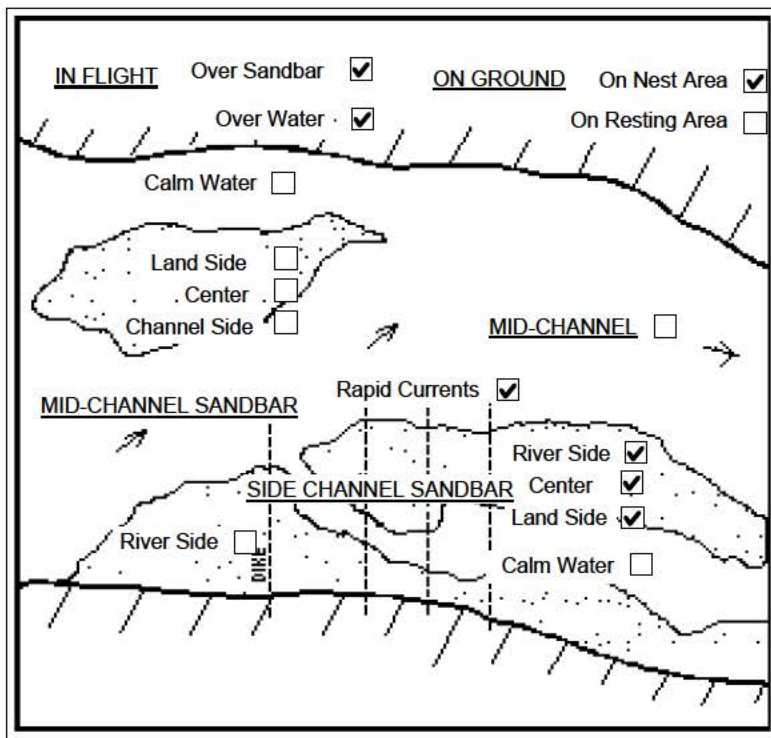
Sand: ☒
Gravel: ☐
Debris: ☒

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 86 °F
Rain: No
Wind: S 5 mph
% Cloud: 40



OTHER NOTES:

Left Bank. Broad, high, undulating, attached, sand bar. Terns sitting inland on scrapes and resting at waterline. No tracks or disturbance signs.

MS side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Vicksburg = 18.6 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/27/2007 TIME OF DAY: 13:46 RIVER MILE: 481.6

LOCALITY: Issaquena MS SITE NAME: Ajax Bar Dikes
County/Parish State

WHERE SITED: Latitude: 32.73746
Longitude: 91.11895

Approximate Distance to Water: 100 Feet

NUMBERS SIGHTED:

Adults: 28
Juveniles:
Eggs: 1(2) 2(3)
Nests: 4
Chicks: No

SUBSTRATE:

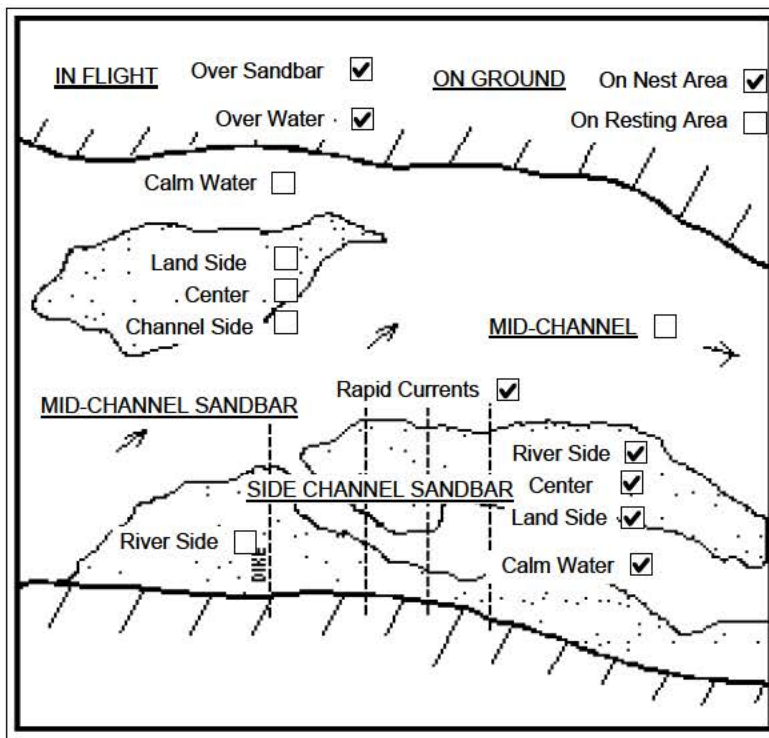
Sand: ☒
Gravel: ☐
Debris: ☐

VEGETATION:

Type: Cottonwoods/grass
Distance: 200 Feet

FIELD CONDITION:

Temperature: 86 °F
Rain: No
Wind: S 5 mph
% Cloud: 40



OTHER NOTES:

Left Bank. Higher, larger sand bar than last year's. Terns breasting, fishing and courting. No tracks or disturbance factors.

MS side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Vicksburg = 18.6 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/27/2007 TIME OF DAY: 14:00 RIVER MILE: 480.0

LOCALITY: Issaquena MS SITE NAME: Ajax Bar Dikes Lower
County/Parish State

WHERE SITED: Latitude: 32.73697
Longitude: 91.10903

Approximate Distance to Water: 30 Feet

NUMBERS SIGHTED:

Adults: 95
Juveniles:
Eggs: 2(1) 11(2) 6(3)
Nests: 22
Chicks: Yes

SUBSTRATE:

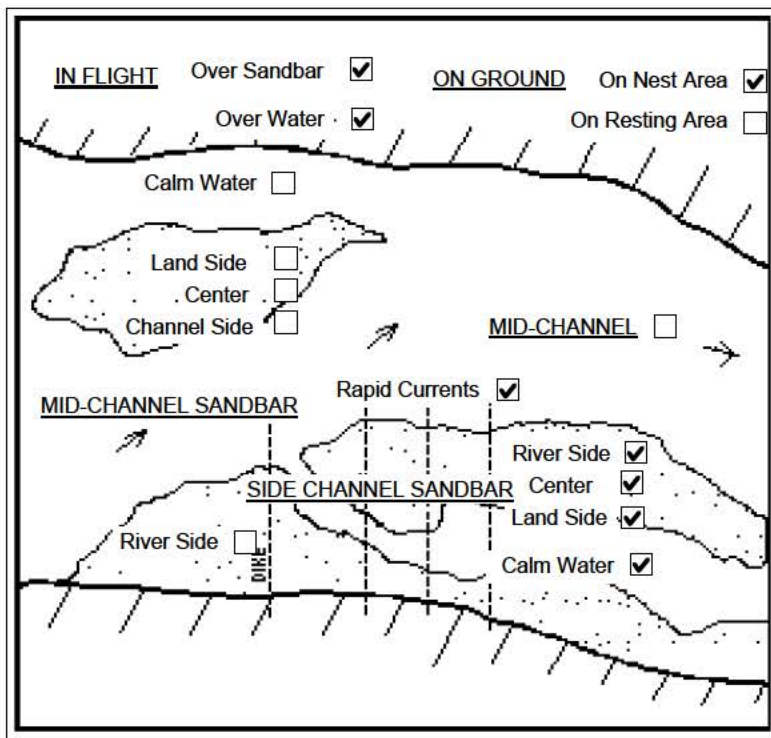
Sand: ☒
Gravel: ☐
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 86 °F
Rain: No
Wind: S 5 mph
% Cloud: 40



OTHER NOTES:

Left Bank. Medium size (800 x 150 yds.), high isolated sand bar below last dike with scattered debris.
Chicks observed less than 1 week of age. No tracks or disturbance factors.

MS side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Vicksburg = 18.6 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/27/2007 TIME OF DAY: 14:16 RIVER MILE: 476.6

LOCALITY: East Carroll LA SITE NAME: Point Lookout Dike
County/Parish State

WHERE SITED: Latitude: 32.71685
Longitude: 91.05885

Approximate Distance to Water: 300 Feet

NUMBERS SIGHTED:

Adults: 146
Juveniles:
Eggs:
Nests: 34
Chicks: No

SUBSTRATE:

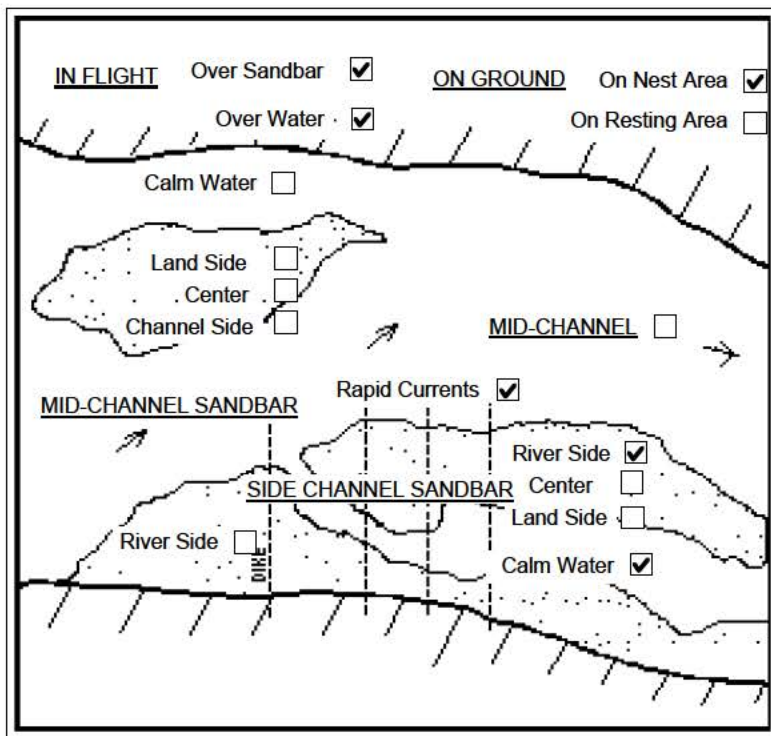
Sand: ☒
Gravel: ☐
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 86 °F
Rain: No
Wind: S 5 mph
% Cloud: 40



OTHER NOTES:

Right Bank. Low, flat, wet, unattached sand bar in Filter Bend. No tracks or disturbance. Egrets present.

LA side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Vicksburg = 18.6 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/27/2007 TIME OF DAY: 14:40 RIVER MILE: 469.0

LOCALITY: Issaquena MS SITE NAME: Arcadia Point Dikes
County/Parish State

WHERE SITED: Latitude: 32.65489
Longitude: 91.14060

Approximate Distance to Water: 200 Feet

NUMBERS SIGHTED:

Adults: 29
Juveniles:
Eggs:
Nests: 5
Chicks: No

SUBSTRATE:

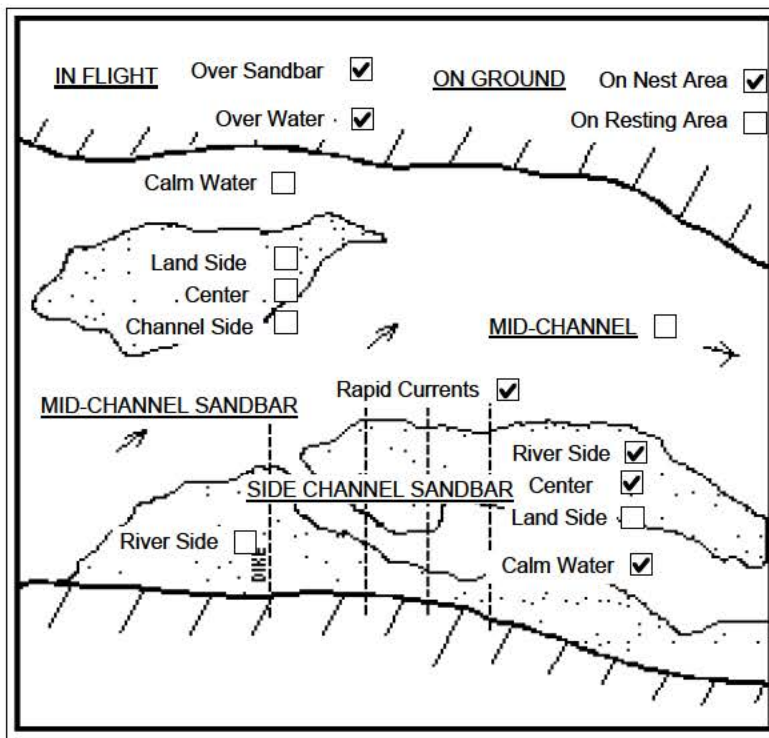
Sand: ☒
Gravel: ☐
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 86 °F
Rain: No
Wind: W 10-12 mph
% Cloud: 60



OTHER NOTES:

Left Bank. Large, sand bar attached to downstream end of large wooded island. Colony widely dispersed. Perimeter count indicates 5 sitting on scrapes. No disturbance noted. Three Great Blue Herons and 2 Great Egrets.

MS side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Vicksburg = 18.6 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/27/2007 TIME OF DAY: 14:55 RIVER MILE: 460.4

LOCALITY: East Carroll LA SITE NAME: Willow Cutoff Dikes
County/Parish State

WHERE SITED: Latitude: 32.5361
Longitude: 91.1006

Approximate Distance to Water: Feet

NUMBERS SIGHTED:

Adults: 112
Juveniles:
Eggs:
Nests: 0
Chicks: No

SUBSTRATE:

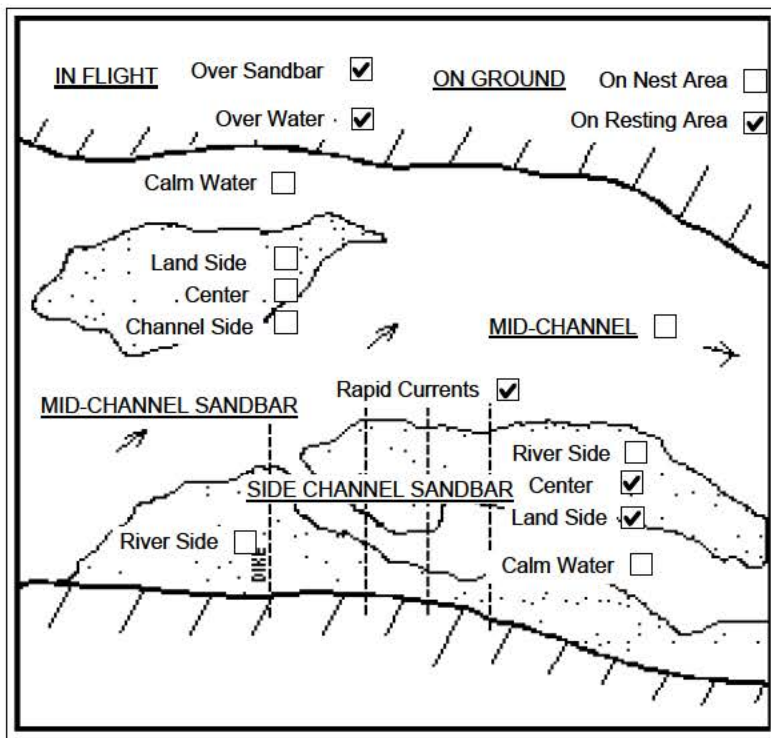
Sand: ☒
Gravel: ☒
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 86 °F
Rain: No
Wind: W 5 mph
% Cloud: 60



OTHER NOTES:

Right Bank. Large, long, low, flat, sand and gravel bar. All terns in flight or resting at waterline. No disturbance, 9 Fish Crows over back chute.

LA side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Vicksburg = 18.6 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/27/2007 TIME OF DAY: 15:10 RIVER MILE: 456.0

LOCALITY: Warren MS SITE NAME: Milliken Bend
County/Parish State

WHERE SITED: Latitude: 32.47570
Longitude: 91.10504

Approximate Distance to Water: 80 Feet

NUMBERS SIGHTED:

Adults: 37
Juveniles:
Eggs:
Nests: 4
Chicks: No

SUBSTRATE:

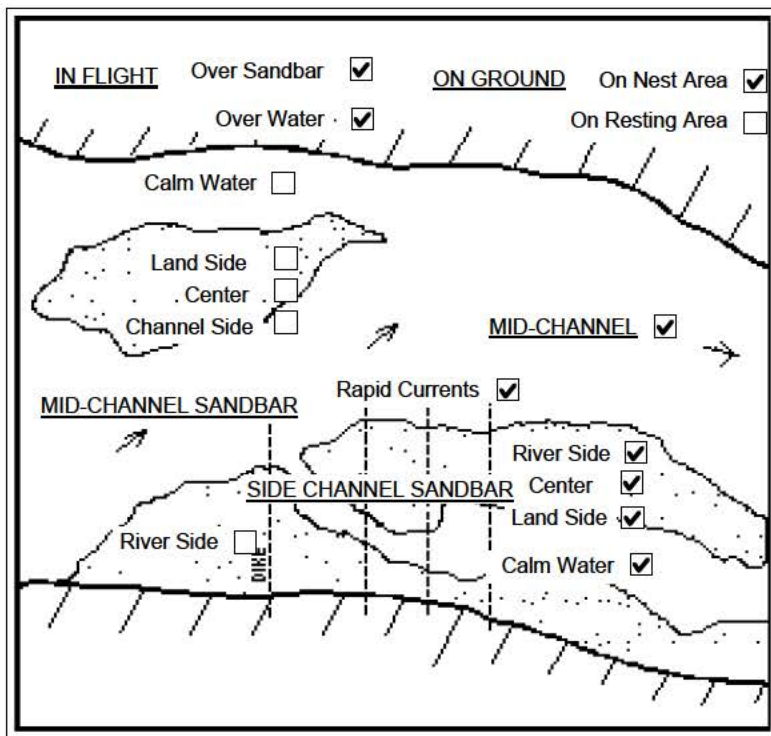
Sand: ☒
Gravel: ☒
Debris: ☒

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 86 °F
Rain: No
Wind: S 8 mph
% Cloud: 50



OTHER NOTES:

Left Bank. Attached point bar of gravel, sand and debris with nests in gravel. No tracks or disturbance.

MS side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Vicksburg = 18.6 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/27/2007 TIME OF DAY: 15:30 RIVER MILE: 447.5

LOCALITY: Madison LA SITE NAME: Marshall Cutoff Dikes
County/Parish State

WHERE SITED: Latitude: 32.40516
Longitude: 91.00311

Approximate Distance to Water: 40 Feet

NUMBERS SIGHTED:

Adults: 260
Juveniles:
Eggs:
Nests: 120
Chicks: No

SUBSTRATE:

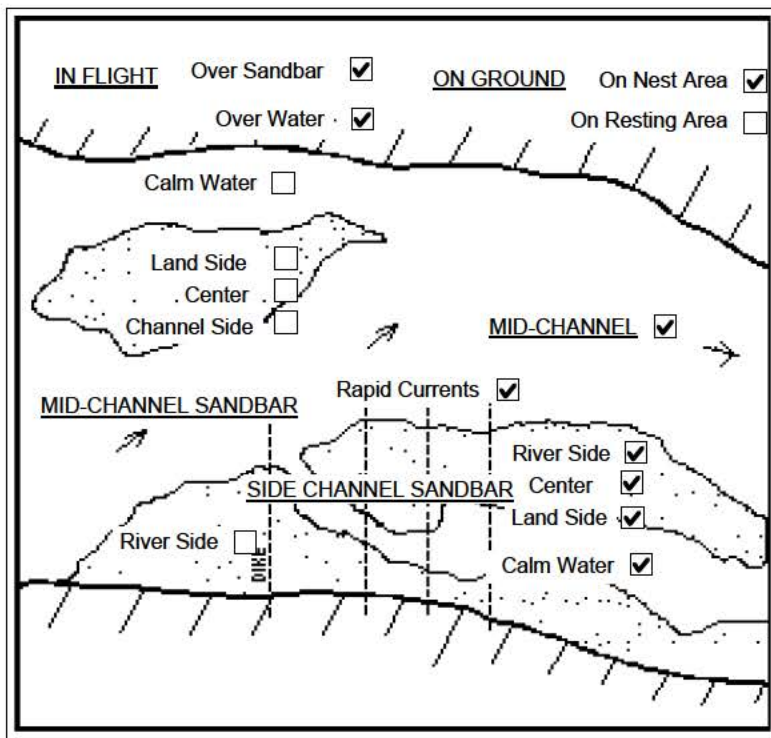
Sand: ☒
Gravel: ☐
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 85 °F
Rain: No
Wind: SW 12-15 mph
% Cloud: 50



OTHER NOTES:

Right Bank. Unattached, small, low sand bar (3 ft. elevation). Nests densely packed with terns mobbing heron at water's edge. No tracks, chicks or disturbance noted.

LA side

OBSERVERS: Campen, Carpenter, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Vicksburg = 18.6 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/28/2007 TIME OF DAY: 9:05 RIVER MILE: 428.5

LOCALITY: Warren MS SITE NAME: Below Racetrack Dikes
County/Parish State

WHERE SITED: Latitude: 32.23550
Longitude: 90.97885

Approximate Distance to Water: 60 Feet

NUMBERS SIGHTED:

Adults: 109
Juveniles:
Eggs: 7(1) 13(2) 27(3)
Nests: 34
Chicks: No

SUBSTRATE:

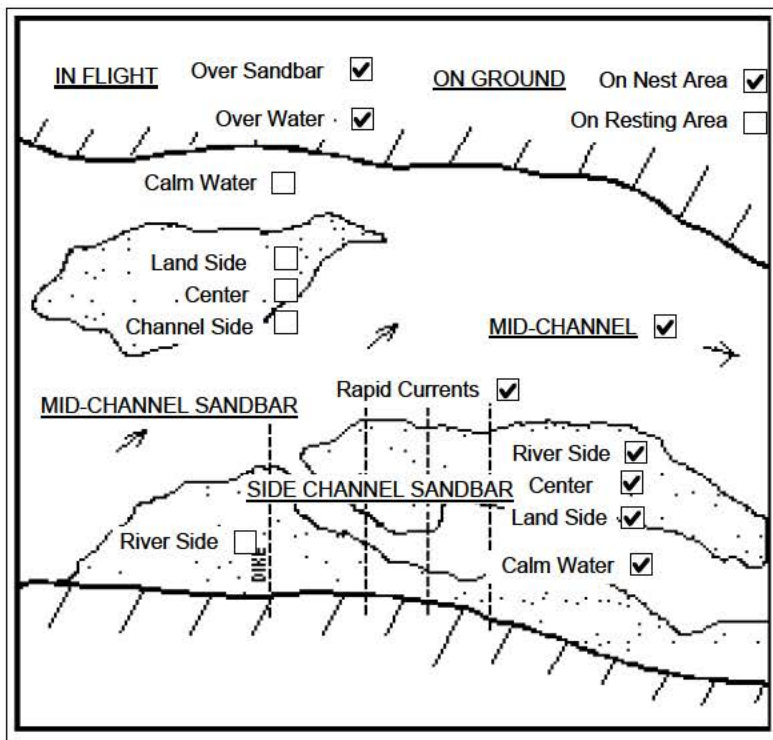
Sand: ☒
Gravel: ☒
Debris: ☒

VEGETATION:

Type: Cottonwoods/willows
Distance: 1000 Feet

FIELD CONDITION:

Temperature: 81 °F
Rain: No
Wind: Calm
% Cloud: 0



OTHER NOTES:

Left Bank. Low series of flat, unattached, incised sand bars (max. elev. 5 ft.) above and below last dike. Nests along ripple lines and among sparse grass. Canine tracks suggest chicks were eaten but not eggs. No chicks observed. Eight White Pelicans observed.

MS side

OBSERVERS: Campen, Carpenter, Dubowy, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Vicksburg = 18.4 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/28/2007 TIME OF DAY: 9:28 RIVER MILE: 419.0

LOCALITY: Madison LA SITE NAME: Newton Bend Dikes
County/Parish State

WHERE SITED: Latitude: 32.1367
Longitude: 91.0100

Approximate Distance to Water: 300 Feet

NUMBERS SIGHTED:

Adults: 52
Juveniles:
Eggs:
Nests: 22
Chicks: No

SUBSTRATE:

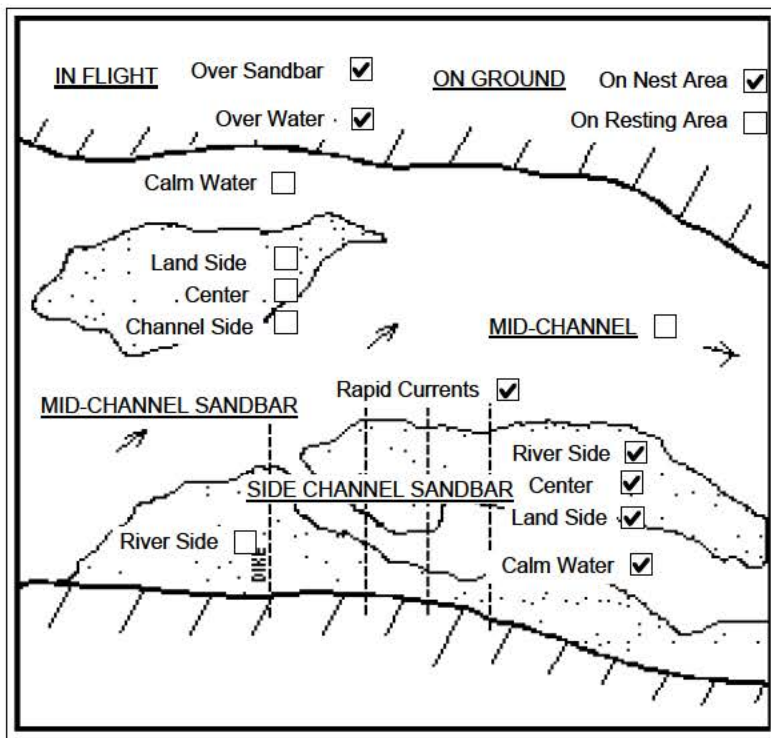
Sand: ☒
Gravel: ☐
Debris: ☐

VEGETATION:

Type: Cottonwoods
Distance: 80 Feet

FIELD CONDITION:

Temperature: 82 °F
Rain: No
Wind: Calm
% Cloud: 0



OTHER NOTES:

Right Bank. Medium-sized, attached sand bar with mud. Terns mobbing egrets with 22 sitting inland.
Cottonwoods sprouting but no signs of disturbance.

LA side

OBSERVERS: Campen, Carpenter, Dubowy, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Vicksburg = 18.4 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/28/2007 TIME OF DAY: 10:05 RIVER MILE: 414.0

LOCALITY: Tensas LA SITE NAME: Togo Island Dikes
County/Parish State

WHERE SITED: Latitude: 32.10940
Longitude: 91.10172

Approximate Distance to Water: 20 Feet

NUMBERS SIGHTED:

Adults: 115
Juveniles:
Eggs: 13(1) 7(2) 3(3)
Nests: 35
Chicks: No

SUBSTRATE:

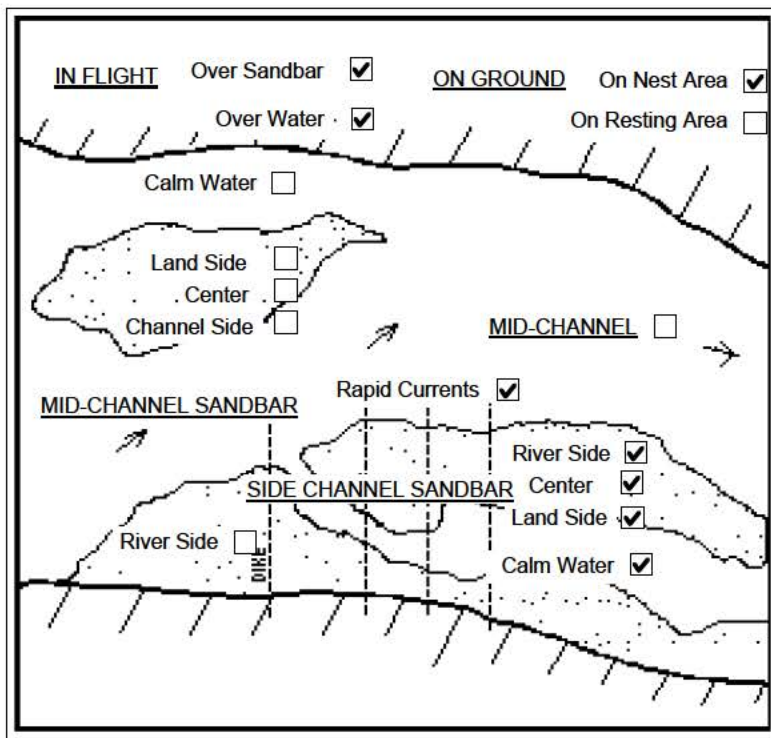
Sand: ☒
Gravel: ☐
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 83 °F
Rain: No
Wind: SE 5 mph
% Cloud: 0



OTHER NOTES:

Left Bank. Small, low, unattached sand bar (2 ft. elev.) much reduced in size from previous year. Lots of human tracks and their debris with some eggs scattered. Birds courting and resting waterline.

MS side

OBSERVERS: Campen, Carpenter, Dubowy, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Vicksburg = 18.4 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/28/2007 TIME OF DAY: 10:29 RIVER MILE: 410.0

LOCALITY: Claiborne MS SITE NAME: Yucatan Dikes
County/Parish State

WHERE SITED: Latitude: 32.07094
Longitude: 91.07669

Approximate Distance to Water: 100 Feet

NUMBERS SIGHTED:

Adults: 40
Juveniles:
Eggs: 1(1) 1(2)
Nests: 2
Chicks: No

SUBSTRATE:

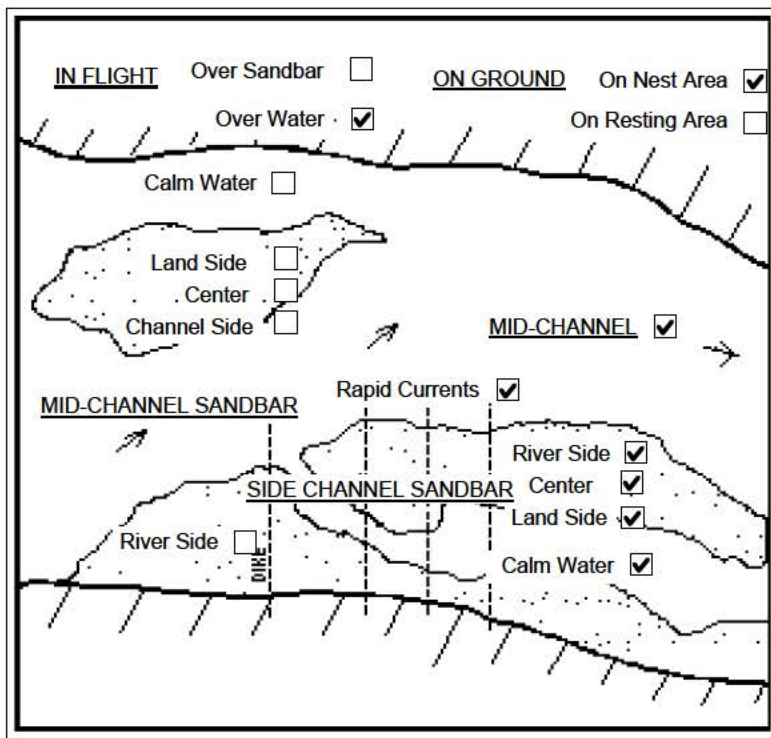
Sand: ☒
Gravel: ☒
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 83 °F
Rain: No
Wind: L & V
% Cloud: 50



OTHER NOTES:

Right Bank. Upstream attached point of Middle Ground Island. Terns utilizing all sides, recent signs of predation, egg fragments and coyote tracks. One Turkey Vulture, 1 Black Vulture, and 1 Loggerhead Shrike.

LA side

OBSERVERS: Campen, Carpenter, Dubowy, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Vicksburg = 18.4 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/28/2007 TIME OF DAY: 11:00 RIVER MILE: 408.5

LOCALITY: Claiborne MS SITE NAME: Big Black River
County/Parish State

WHERE SITED: Latitude: NA
Longitude: NA

Approximate Distance to Water: Feet

NUMBERS SIGHTED:

Adults: 38
Juveniles:
Eggs:
Nests:
Chicks: No

SUBSTRATE:

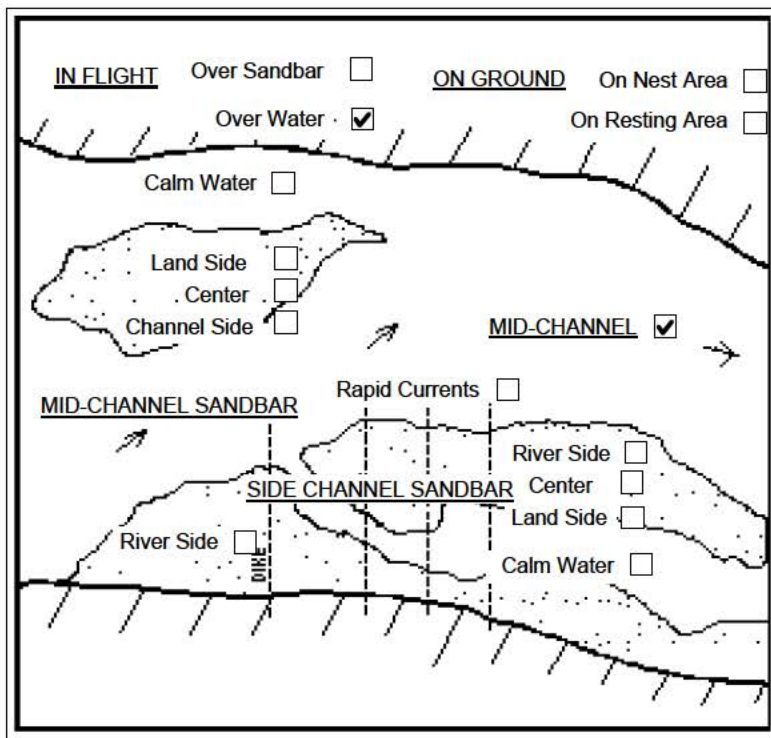
Sand: ☐
Gravel: ☐
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 83 °F
Rain: No
Wind: Calm
% Cloud: 50



OTHER NOTES:

Left Bank. Mouth of Big Black River, 38 terns fishing with one Red-Bellied Woodpecker, 1 Kingbird, 1 Phoebe, 3 egrets, 4 Tree Swallows, and 5 Snowy Egrets.

MS side

OBSERVERS: Campen, Carpenter, Dubowy, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Vicksburg = 18.4 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/28/2007 TIME OF DAY: 11:25 RIVER MILE: 398.0

LOCALITY: Claiborne MS SITE NAME: Below Grand Gulf Dikes
County/Parish State

WHERE SITED: Latitude: 31.95363
Longitude: 91.18744

Approximate Distance to Water: 25 Feet

NUMBERS SIGHTED:

Adults: 15
Juveniles:
Eggs:
Nests: 1
Chicks: No

SUBSTRATE:

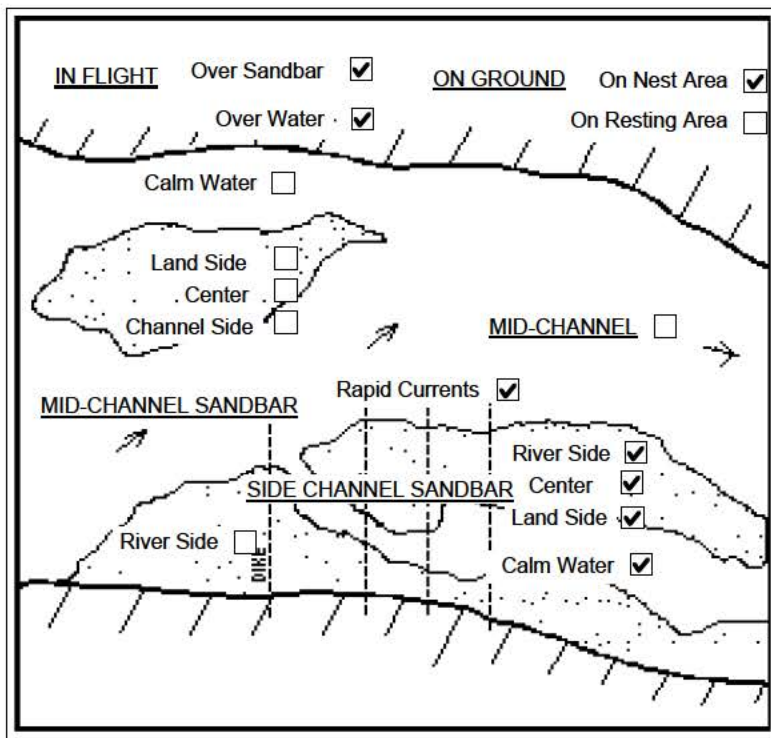
Sand: ☒
Gravel: ☐
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 83 °F
Rain: No
Wind: Calm
% Cloud: 50



OTHER NOTES:

Left Bank. Small, barely emergent, unattached, flat, sand bar. One observed sitting on scrape. No tracks or other disturbance.

MS side

OBSERVERS: Campen, Carpenter, Dubowy, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Vicksburg = 18.4 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/28/2007 TIME OF DAY: 12:09 RIVER MILE: 384.2

LOCALITY: Jefferson MS SITE NAME: Spithead Towhead Dikes
County/Parish State

WHERE SITED: Latitude: 31.83712
Longitude: 91.34592

Approximate Distance to Water: 200 Feet

NUMBERS SIGHTED:

Adults: 200
Juveniles:
Eggs: 1(1) 9(2) 19(3)
Nests: 68
Chicks: Yes

SUBSTRATE:

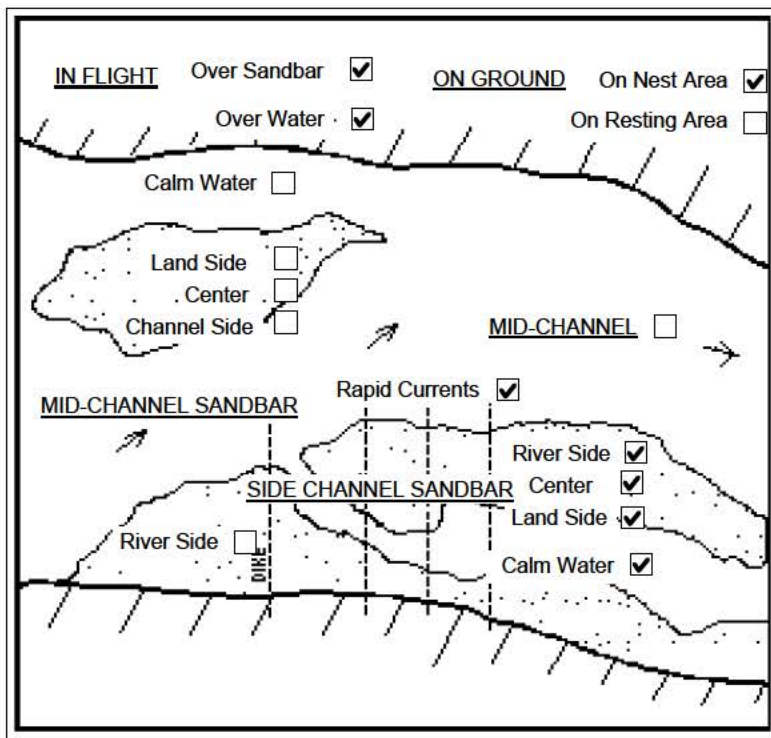
Sand: ☒
Gravel: ☒
Debris: ☒

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 85 °F
Rain: No
Wind: Calm
% Cloud: 50



OTHER NOTES:

Left Bank. Huge, long, high (6-12 ft.), extended, unattached, sand bar with patches of mud and gravel. Colony dispersed along central high ridge of bar. Perimeter count = 138, flush count = 200. Chicks hatching and up to 1 week old. Fox tracks within colony.

MS side

OBSERVERS: Campen, Carpenter, Dubowy, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Natchez = 26.5 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/28/2007 TIME OF DAY: 12:40 RIVER MILE: 380.0

LOCALITY: Tensas LA SITE NAME: Waterproof Dikes
County/Parish State

WHERE SITED: Latitude: 31.7604
Longitude: 91.3708

Approximate Distance to Water: Feet

NUMBERS SIGHTED:

Adults: 18
Juveniles:
Eggs:
Nests: 0
Chicks: No

SUBSTRATE:

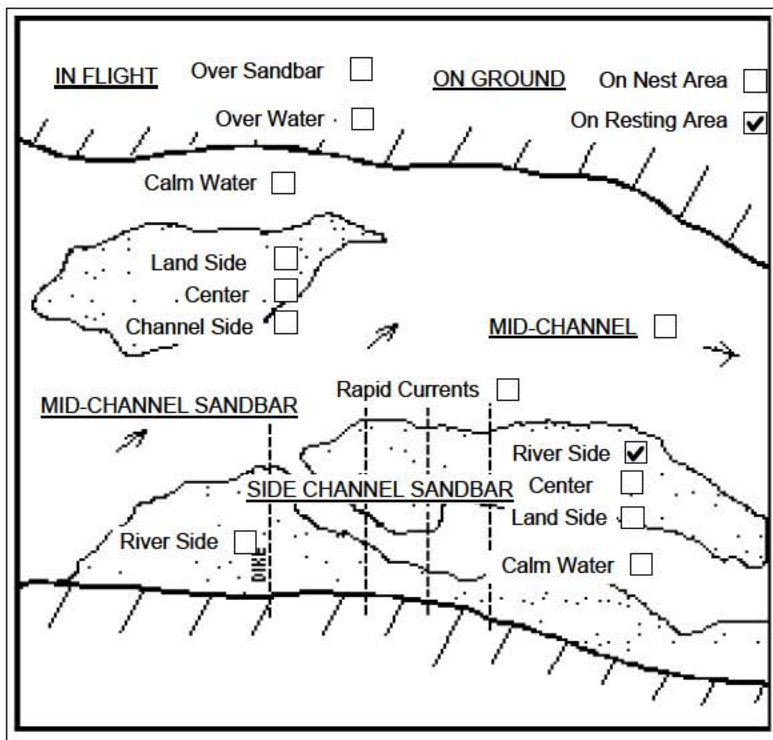
Sand: ☒
Gravel: ☐
Debris: ☒

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 85 °F
Rain: No
Wind: Calm
% Cloud: 50



OTHER NOTES:

Right Bank. Attached sand bar (6 ft. elev.) with all birds resting at waterline.

LA side

OBSERVERS: Campen, Carpenter, Dubowy, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Natchez = 26.5 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

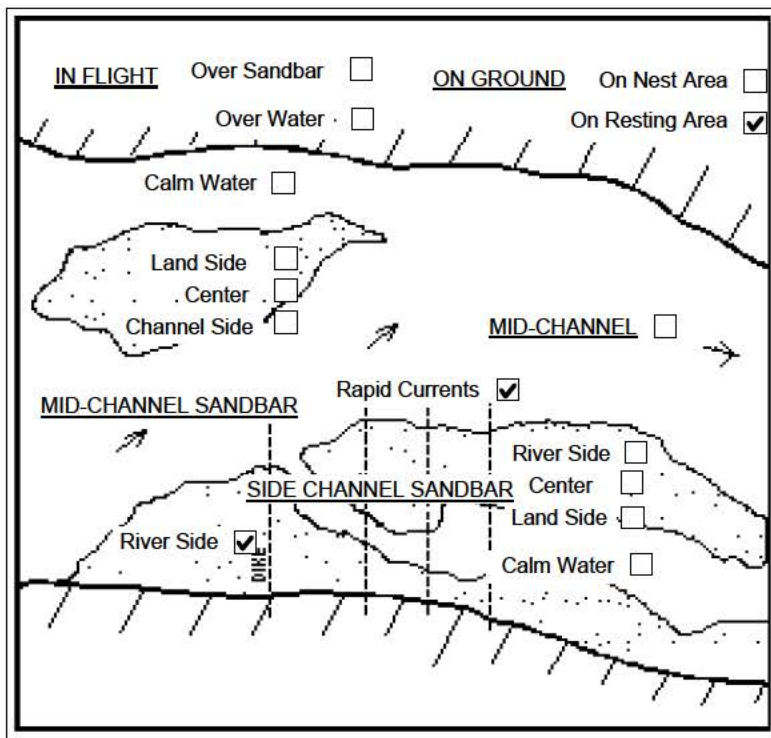
SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/29/2007 TIME OF DAY: 9:06 RIVER MILE: 357.0

LOCALITY: Adams MS SITE NAME: Carthage Point Dikes
County/Parish State

WHERE SITED: Latitude: 31.51529
Longitude: 91.49569

Approximate Distance to Water: Feet



NUMBERS SIGHTED:

Adults: 7
Juveniles:
Eggs:
Nests: 0
Chicks: No

SUBSTRATE:

Sand: ☒
Gravel: ☒
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 80 °F
Rain: No
Wind: Calm
% Cloud: 20

OTHER NOTES:

Left Bank. Attached sand and gravel bar with birds resting at waterline or courting and carrying fish.
Oyster bed deposits on bar with Great Blue Herons, Great and Snowy Egrets. Lone Red Wolf observed
retreating from bar as we approached.

MS side

OBSERVERS: Campen, Carpenter, Davin, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Natchez = 26.1 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/29/2007 TIME OF DAY: 9:45 RIVER MILE: 352.0

LOCALITY: Adams MS SITE NAME: Opposite Warnicott Landing Dikes
County/Parish State

WHERE SITED: Latitude: 31.4208
Longitude: 91.4950

Approximate Distance to Water: Feet

NUMBERS SIGHTED:

Adults: 17
Juveniles:
Eggs:
Nests: 0
Chicks: No

SUBSTRATE:

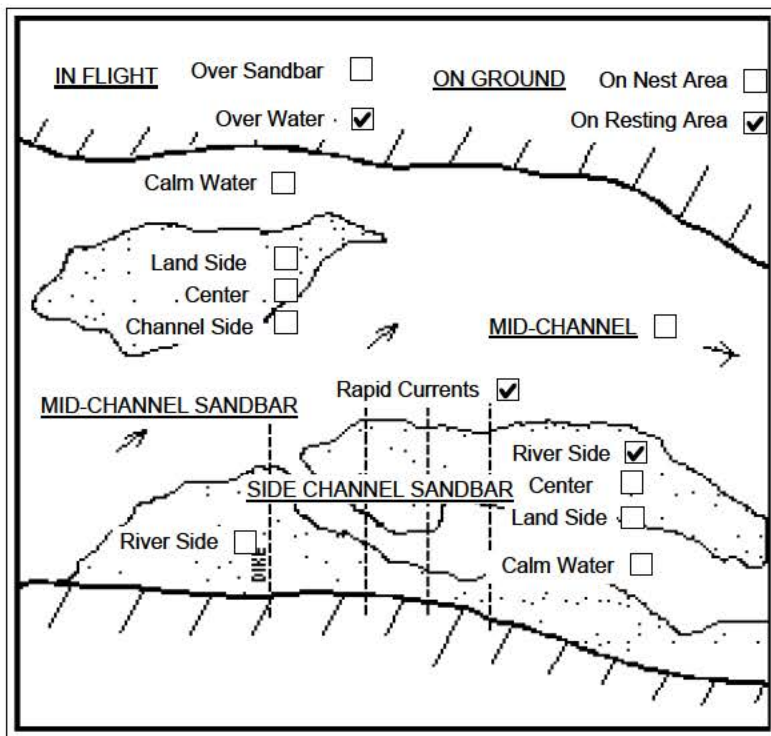
Sand: ☒
Gravel: ☐
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 83 °F
Rain: No
Wind: Calm
% Cloud: 10



OTHER NOTES:

Left Bank. Large, attached sand bar with all birds resting at waterline. No signs of disturbance.

MS side

OBSERVERS: Campen, Carpenter, Davin, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Natchez = 26.1 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/29/2007 TIME OF DAY: 9:57 RIVER MILE: 347.5

LOCALITY: Concordia LA SITE NAME: Esperance Point
County/Parish State

WHERE SITED: Latitude: 31.39534
Longitude: 91.46793

Approximate Distance to Water: 100 Feet

NUMBERS SIGHTED:

Adults: 125
Juveniles:
Eggs: 3(1) 10(2) 3(3)
Nests: 22
Chicks: Yes

SUBSTRATE:

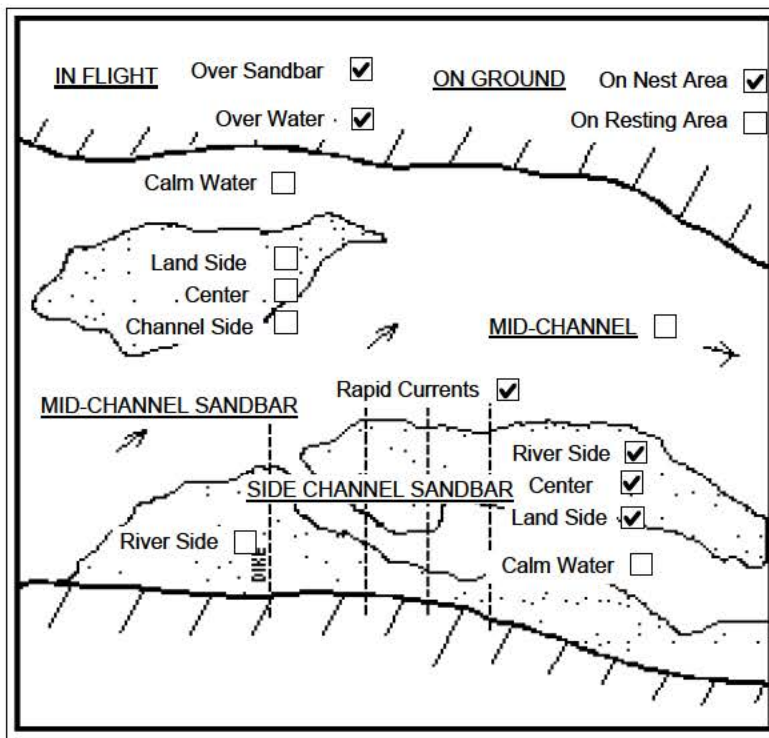
Sand: ☒
Gravel: ☒
Debris: ☐

VEGETATION:

Type: Cottonwoods/grass
Distance: 0 Feet

FIELD CONDITION:

Temperature: 82 °F
Rain: No
Wind: Calm
% Cloud: 45



OTHER NOTES:

Right Bank. Unattached, small gravel and sand bar (700 x 400 ft.), extremely undulating and dissected, new colony, chicks up to 1 week old, abandoned and damaged eggs with goose or pelican tracks around scrapes. Nests in sparse grass and debris, Wild Turkeys just downstream and 20 Wood Storks

LA side

OBSERVERS: Campen, Carpenter, Davin, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Natchez = 26.1 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/29/2007 TIME OF DAY: 10:42 RIVER MILE: 336.5

LOCALITY: Concordia LA SITE NAME: Fritz Island Dikes
County/Parish State

WHERE SITED: Latitude: 31.26170
Longitude: 91.56205

Approximate Distance to Water: 20 Feet

NUMBERS SIGHTED:

Adults: 150
Juveniles:
Eggs: 5(1) 12(2) 7(3)
Nests: 32
Chicks: Yes

SUBSTRATE:

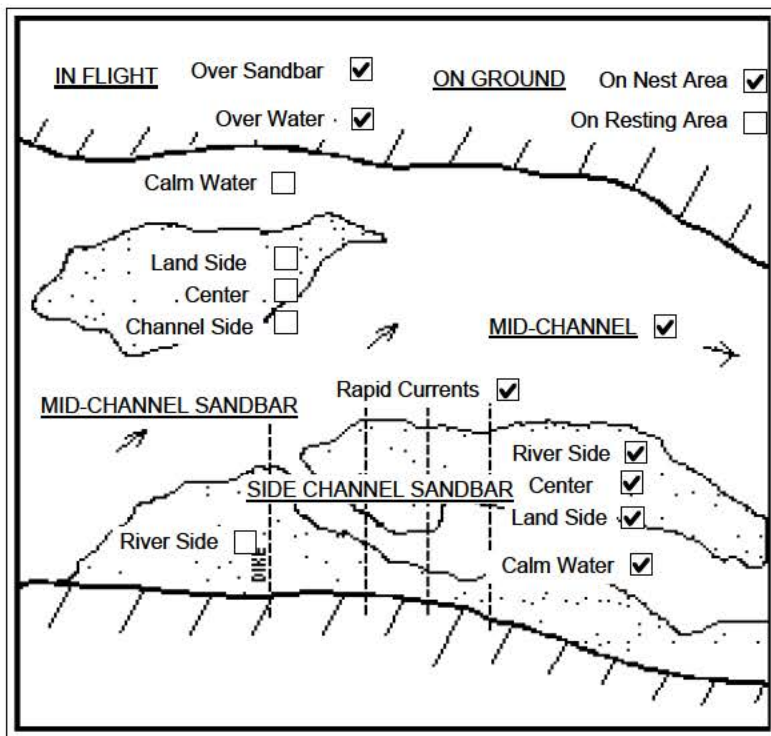
Sand: ☒
Gravel: ☐
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 83 °F
Rain: No
Wind: Calm
% Cloud: 40



OTHER NOTES:

Right Bank. Unattached, small (700 x 400 ft.), clean, flat, sand bar with chicks hatching and up to 1 week old. No signs of disturbance, Bald Eagle and Ruby Throated Hummingbird observed in Washout Bayou.

LA side

OBSERVERS: Campen, Carpenter, Davin, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Natchez = 26.1 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/29/2007 TIME OF DAY: 10:53 RIVER MILE: 329.0

LOCALITY: Adams MS SITE NAME: Jackson Point
County/Parish State

WHERE SITED: Latitude: 31.24683
Longitude: 91.65112

Approximate Distance to Water: 20 Feet

NUMBERS SIGHTED:

Adults: 225
Juveniles:
Eggs: 1(1) 10(2) 3(3)
Nests: 16
Chicks: Yes

SUBSTRATE:

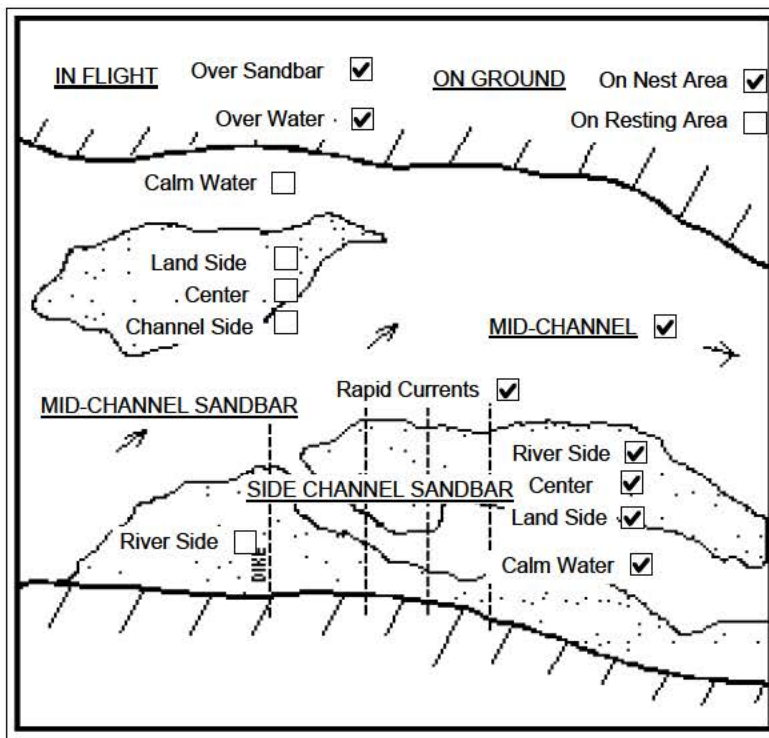
Sand: ☒
Gravel: ☐
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 84 °F
Rain: No
Wind: Calm
% Cloud: 40



OTHER NOTES:

Left Bank. Mid-channel, isolated point bar, unattached, clean sand, 5 ft. high. Chicks hatching in nests across the whole bar up to 1 week of age. No signs of disturbance. Fish dropped in colony include drum, bass, sunfish. Seven White Ibis just downstream.

MS side

OBSERVERS: Campen, Carpenter, Davin, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Natchez = 26.1 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/29/2007 TIME OF DAY: 11:21 RIVER MILE: 322.0

LOCALITY: Concordia LA SITE NAME: Homochito Cutoff
County/Parish State

WHERE SITED: Latitude: 31.1742
Longitude: 91.5947

Approximate Distance to Water: 50 Feet

NUMBERS SIGHTED:

Adults: 35
Juveniles:
Eggs:
Nests: 9
Chicks: No

SUBSTRATE:

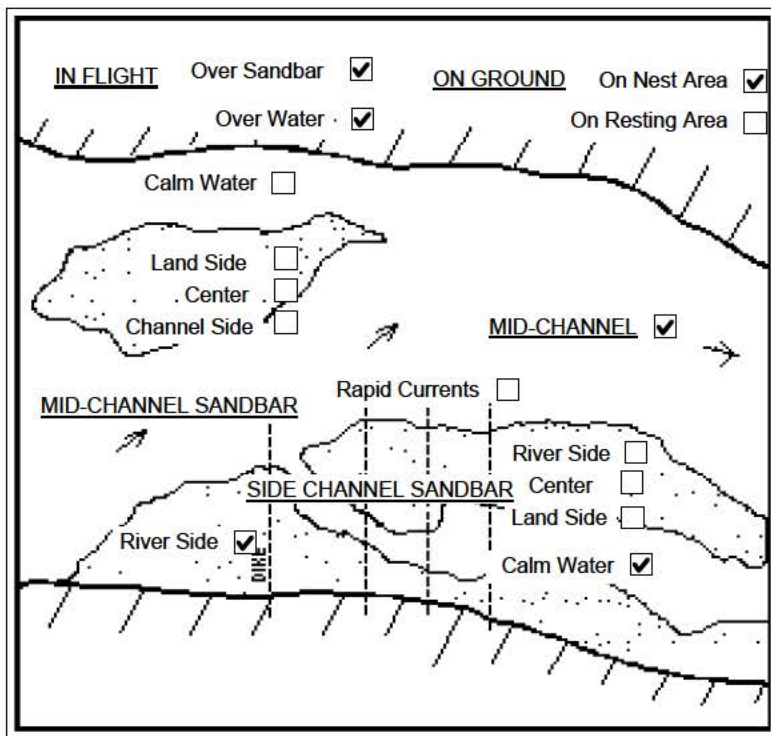
Sand: ☒
Gravel: ☒
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 82 °F
Rain: No
Wind: Calm
% Cloud: 65



OTHER NOTES:

Right Bank. Riverside sand bar (5 ft. elev.) behind Island in Homochito Cutoff. Nine terns sitting inland.
No tracks or disturbance.

LA side

OBSERVERS: Campen, Carpenter, Davin, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Natchez = 26.1 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/29/2007 TIME OF DAY: 11:53 RIVER MILE: 305.0

LOCALITY: West Feliciana LA SITE NAME: Shreves Bar
County/Parish State

WHERE SITED: Latitude: 30.9960
Longitude: 91.6441

Approximate Distance to Water: Feet

NUMBERS SIGHTED:

Adults: 2
Juveniles:
Eggs:
Nests: 2
Chicks: No

SUBSTRATE:

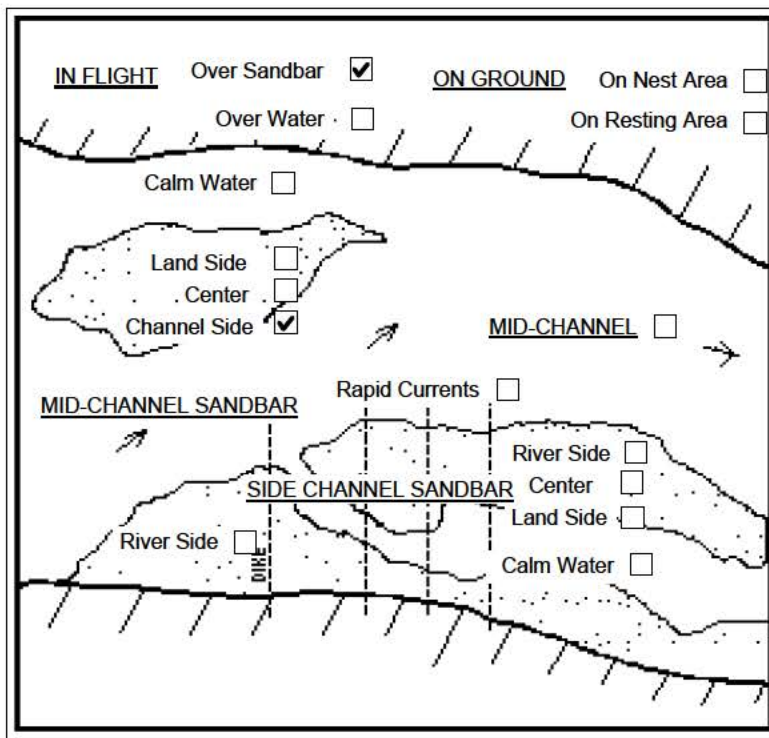
Sand: ☒
Gravel: ☐
Debris: ☐

VEGETATION:

Type:
Distance: Feet

FIELD CONDITION:

Temperature: 85 °F
Rain: No
Wind: Calm
% Cloud: 50



OTHER NOTES:

Left Bank. Attached, upstream point of large island. Medium high bar with 2 birds resting at waterline. No tracks or signs of predation.

OBSERVERS: Campen, Carpenter, Davin, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Natchez = 26.1 F
(Gage Location) (Elevation)

FIELD SIGHTING DATA SHEET

FLY ☐ BOAT ☒

SPECIES: Interior Least Tern (*Sterna antillarum athalassos*)

DATE: 6/29/2007 TIME OF DAY: 12:15 RIVER MILE: 300.5

LOCALITY: West Feliciana LA SITE NAME: Hog Point Dikes
County/Parish State

WHERE SITED: Latitude: 30.93540
Longitude: 91.64571

Approximate Distance to Water: 150 Feet

NUMBERS SIGHTED:

Adults: 138
Juveniles:
Eggs:
Nests: 32
Chicks: No

SUBSTRATE:

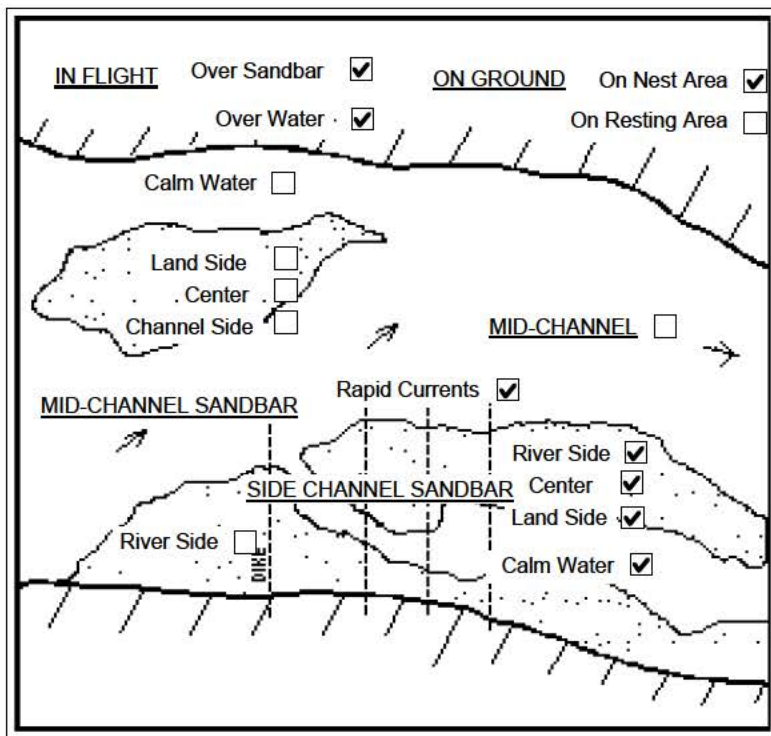
Sand: ☒
Gravel: ☐
Debris: ☐

VEGETATION:

Type: Willows/grass
Distance: 200 Feet

FIELD CONDITION:

Temperature: 85 °F
Rain: No
Wind: Calm
% Cloud: 30



OTHER NOTES:

Left Bank. Attached, upstream point of wooded island with large, open back chute. Birds courting, carrying fish, breasting, some resting in shade of willows. Nests all across bar, utilizing all sides of bar. No tracks observed.

OBSERVERS: Campen, Carpenter, Davin, Grubaugh, Jones, Rumancik, Thomas, Thron

RIVER GAGE READING: Natchez = 26.1 F
(Gage Location) (Elevation)