

ARKANSAS RIVER CORRIDOR MASTER PLAN

SURVEYED OUTFALLS DATA

TECHNICAL MEMORANDUM

Meshek & Associates, PLC

General

Meshek & Associates, PLC performed extensive field investigations and surveys to determine the locations and pertinent information for all storm sewer outfalls and drainage structures located along the Arkansas River in the vicinity of the corridor study. The investigations were conducted during the period January through June 2009. A total of 266 structures were identified and surveyed. The positional location was determined using standard GPS technology. Along with the horizontal positional coordinates, other information concerning the structures was also collected at the time of the field work, such as invert elevation, size and type of structure, and a photograph of each structure. Figure 1 shows the locations of the structures along the Arkansas River. Table 1 shows some of the attributes of the structures that were collected at the time of the survey. A map book portfolio consisting of 61 map sheets and an index was also developed showing the locations of the structures, the structure ID, and a link to the attribute table.



FIGURE 1 – SURVEYED OUTFALL LOCATIONS

Table 1 Surveyed Outfalls

Point ID	Y Coordinate (ft)	X Coordinate (ft)	Invert Elevation (ft)	Type	Size	Survey Date
2001	405362.2179	2563737.572	616.80	RCP	120 Inch	1/9/2009
2002	405734.169	2563807.7988	617.11	RCP	30 Inch	1/9/2009
2003	406354.4932	2563830.4751	615.49	RCP	30 Inch	1/9/2009
2004	406554.8794	2563829.5292	619.43	RCP	30 Inch	1/9/2009
2005	406913.7941	2563834.0578	623.41	RCP	18 Inch	1/9/2009
2006	407135.756	2563786.5087	609.36	STLP	8 Inch	1/9/2009
2007	407116.7529	2563755.5247	603.89	STLP	8 Inch	1/9/2009
2008	407233.3796	2563772.6626	608.62	STLP	8 Inch	1/9/2009
2009	407202.2411	2563687.5351	603.84	STLP	8 Inch	1/9/2009
2010	407650.2641	2563792.4968	615.74	RCP	30 Inch	1/9/2009
2011	407898.0129	2563786.1952	622.83	RCP	48 Inch	1/9/2009
2012	408190.4099	2563884.6016	615.88	RCP	Parabolic Arch	1/9/2009
2013	408229.4129	2563886.683	617.30	RCB	6X4	1/9/2009
2014	409563.8944	2563885.7945	619.56	RCP	30 Inch	1/9/2009
2015	410161.6166	2563859.4861	615.94	RCP	84 Inch	1/9/2009
2016	410307.0636	2563893.4769	624.69	RCP	24 Inch	1/9/2009
2017	410451.8287	2563856.9081	620.51	CMP	21 Inch	1/9/2009
2018	410661.6706	2563854.4243	619.04	RCP	21 Inch	1/9/2009
2019	411198.7561	2563773.9148	626.04	RCP	18 Inch	1/9/2009
2020	411343.0667	2563755.916	624.25	RCP	30 Inch	1/9/2009
2021	411458.7852	2563738.2067	626.81	RCP	18 Inch	1/9/2009
2022	411641.2276	2563715.1904	623.74	RCP	30 Inch	1/9/2009
2023	411746.8729	2563698.3562	626.68	RCP	18 Inch	1/9/2009
2024	411959.411	2563632.3516	623.51	RCP	30 Inch	1/9/2009
2025	412191.5001	2563524.5911	621.42	RCP	24 Inch	1/9/2009
2026	412452.1443	2563499.3359	624.59	RCP	18 Inch	1/9/2009
2027	412857.1331	2563633.4126	624.08	RCP	24 Inch	1/9/2009
2028	413452.3181	2563498.8351	618.06	RCP	60 Inch	1/9/2009
2029	413893.0383	2563359.5668	623.06	CMP	18 Inch	1/9/2009
2030	414042.1474	2563299.6236	615.20	RCP	48 Inch	1/9/2009
2031	414200.8833	2563347.3624	618.15	RCP	60 Inch	1/9/2009
2032	410920.4792	2563827.472	625.55	RCP	18 Inch	1/9/2009
2033	412639.4381	2563480.7041	625.36	RCP	18 Inch	1/9/2009
2034	415190.2376	2563051.407	623.85	CPP	16 Inch	1/9/2009
2035	415931.559	2562873.4278	625.28	RCP	18 Inch	1/9/2009
2036	416230.1141	2562805.5257	616.19	RCP	96 Inch	1/9/2009
2037	416588.6901	2562734.4501	620.66	RCP	30 Inch	1/9/2009
2038	417598.8363	2562395.2104	625.07	CMP	15 Inch	1/9/2009
2039	417995.3925	2562150.1941	623.51	RCP	30 Inch	1/9/2009

Point ID	Y Coordinate (ft)	X Coordinate (ft)	Invert Elevation (ft)	Type	Size	Survey Date
2041	418839.6092	2561462.0119	628.12	RCP	18 Inch	1/9/2009
2042	419208.4984	2561161.3736	621.27	RCP	40 Inch	1/9/2009
2043	419866.6947	2560819.9148	621.52	RCP	18 Inch	1/9/2009
2044	419952.954	2560770.9981	625.24	RCP	12 Inch	1/9/2009
2045	420258.2432	2560560.753	625.67	RCP	12 Inch	1/9/2009
2046	420582.0391	2560269.9901	633.69	RCP	18 Inch	1/9/2009
2047	420569.6526	2560271.3032	630.70	RCP	18 Inch	1/9/2009
2048	420684.6393	2560158.0346	618.11	RCP	36 Inch	1/9/2009
2049	420867.6366	2559999.7979	629.52	RCP	18 Inch	1/9/2009
2050	421127.9478	2559779.4523	628.42	RCP	15 Inch	1/9/2009
2051	421690.1352	2559127.588	616.52	RCB	10X10	1/9/2009
2052	421705.3444	2559053.0261	622.71	RCP	18 Inch	1/9/2009
2053	421913.8958	2558794.531	625.10	RCP	24 Inch	1/9/2009
2054	421969.5177	2558743.9138	623.36	RCP	18 Inch	1/9/2009
2055	422024.7105	2558669.4556	626.19	RCP	12 Inch	1/9/2009
2056	418516.2803	2561559.0598	624.08	RCP	36 Inch	1/9/2009
2057	418627.0893	2561458.4018	624.30	RCP	24 Inch	1/9/2009
2058	422226.0338	2558438.7044	625.73	RCP	24 Inch	1/9/2009
2059	422599.9526	2557930.4047	639.78	CMP	48 Inch	1/9/2009
2060	422662.718	2557898.8105	643.20	RCP	24X14	1/9/2009
2061	422743.2064	2557788.2326	641.72	RCP	24X14	1/9/2009
2062	422864.8884	2557642.1899	644.52	RCP	24X14	1/9/2009
2063	422840.6303	2557576.691	618.77	RCB	10X10	1/9/2009
2064	423681.4909	2556416.0378	621.05	RCP	108 Inch	1/9/2009
2065	423708.0401	2556366.1882	621.05	RCP	96 Inch	1/9/2009
2066	423727.3894	2556341.2211	622.01	RCP	96 Inch	1/9/2009
2067	423736.7376	2556330.9521	621.98	RCP	96 Inch	1/9/2009
2068	423745.6674	2556322.1416	625.07	RCP	3-30 inch	1/9/2009
2069	423131.4013	2557077.3663	640.28	RCP	18 Inch	1/9/2009
3001	416353.2707	2561377.5985	618.00	RCP	84inch	1/19/2009
3002	420526.7588	2558582.1545	618.33	RCP	60inch	1/19/2009
3003	420672.9307	2558402.7108	621.29	RCP	24inch	1/19/2009
3004	420680.3945	2558398.0558	621.42	RCP	24inch	1/19/2009
3005	420676.7901	2558401.0524	621.15	RCP	36inch	1/19/2009
3006	420684.2318	2558396.0654	621.20	RCP	36inch	1/19/2009
3007	420687.2553	2558393.7459	621.00	RCP	12inch	1/19/2009
3008	420845.3419	2558306.9111	618.38	RCP	18inch	1/19/2009
3009	421736.3207	2556906.5215	625.47	CMP	60inch	1/19/2009
3010	421893.7258	2556690.2252	625.41	CMP	48inch	1/19/2009
3011	421473.4086	2559405.5832	628.31	RCP	15inch	1/19/2009

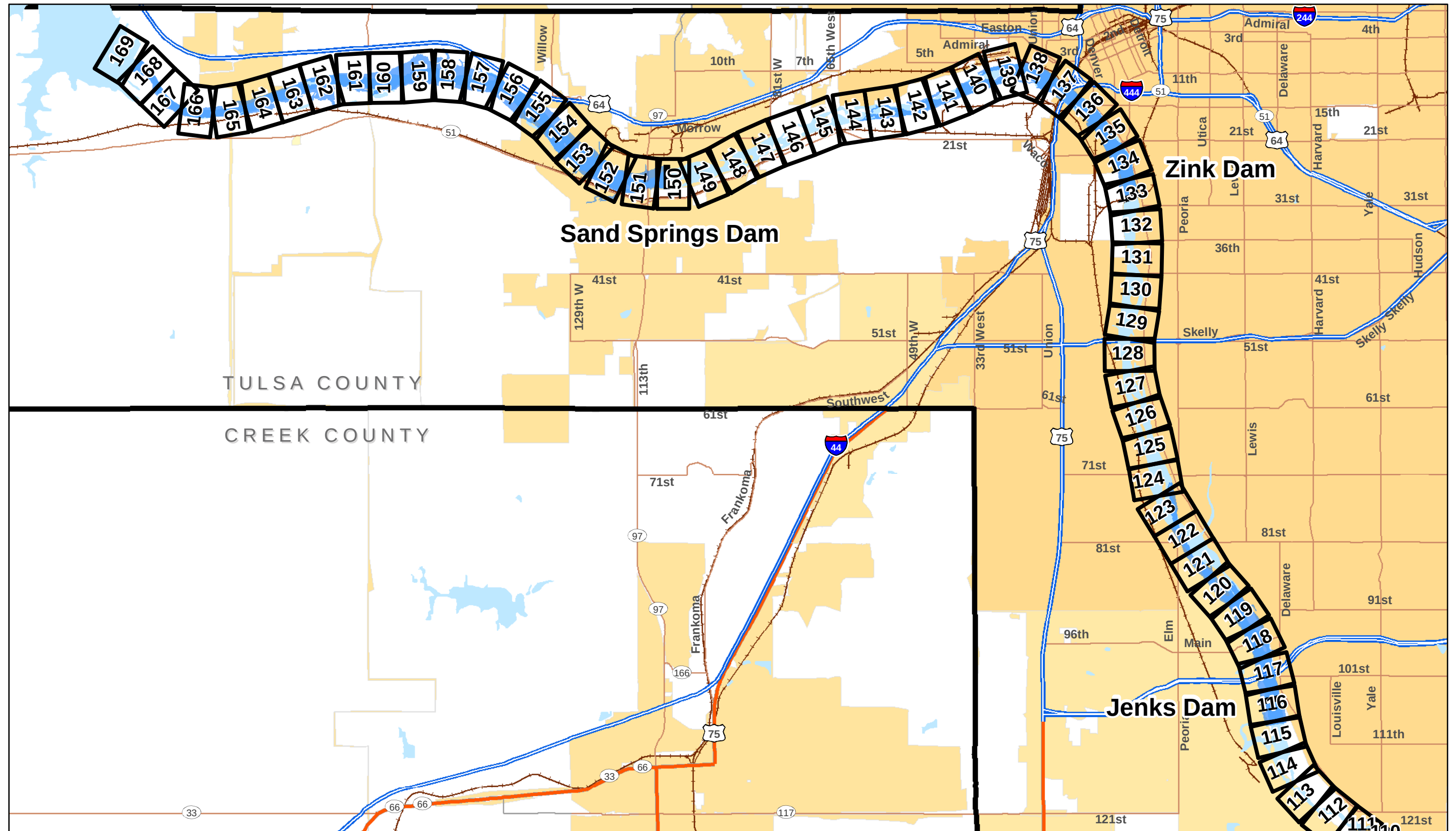
Point ID	Y Coordinate (ft)	X Coordinate (ft)	Invert Elevation (ft)	Type	Size	Survey Date
3013	418249.251	2561968.5909	631.43	RCP	15inch	1/19/2009
3014	418198.9282	2561983.299	621.55	RCP	18inch	1/19/2009
3015	417274.747	2562536.5497	624.11	RCP	30inch	1/19/2009
4001	376956.8958	2573180.433	596.28	DIPT	12inch	2/20/2009
4002	377173.5585	2573136.933	597.51	CPP	42inch	2/20/2009
4003	377813.7162	2572957.769	601.47	PVC	12inch	2/20/2009
4004	378242.8821	2572896.569	597.01	CPP	42inch	2/20/2009
4005	378681.5551	2572771.917	605.00	CPP	21inch	2/20/2009
4006	379316.0326	2572546.535	602.29	RCP	24inch	2/20/2009
4007	379309.9283	2572544.48	602.45	RCP	60inch	2/20/2009
4008	379068.8514	2572601.705	604.84	RCP	36inch	2/20/2009
4009	379624.8291	2572399.384	598.18	RCP	36inch	2/20/2009
4010	380049.0495	2572118.266	610.56	PVC	6inch	2/20/2009
4011	380488.092	2571928.261	598.15	RCP	54inch	2/20/2009
4012	380641.5862	2571849.213	600.50	RCP	42inch	2/20/2009
4013	381332.9106	2571325.291	600.55	RCP	66inch	2/20/2009
4014	383968.928	2569269.22	600.95	RCB	7'X7'	2/20/2009
4015	375570.8138	2574943.41	596.62	RCP	48inch	2/20/2009
4016	375440.5839	2574942.619	593.78	RCP	60inch	2/20/2009
4017	376478.2063	2574737.138	604.65	RCP	60inch	2/20/2009
4018	376423.9214	2574734.074	598.34	RCP	60inch	2/20/2009
4019	376934.4322	2574624.85	603.04	RCP	24inch	2/20/2009
4020	377465.397	2574457.8	606.05	RCP	36inch	2/20/2009
5001	378818.175	2574576.989	597.14	CLD	74' WIDE	2/23/2009
5002	378744.5294	2574462.843	604.55	RCP	24inch	2/23/2009
5003	379767.6782	2573994.096	601.84	RCB	7X5inch	2/23/2009
5004	381029.5636	2573634.349	607.42	RCB	6X5inch	2/23/2009
5005	381970.4872	2573190.266	603.89	RCP	66inch	2/23/2009
5006	381985.4276	2573189.895	603.89	RCB	7X9	2/23/2009
5007	382376.7811	2572857.688	599.89	RCB	2-10X10	2/23/2009
5008	383908.8991	2571460.201	602.20	RCP	30inch	2/23/2009
5009	384296.5113	2571299.122	601.70	RCP	24inch	2/23/2009
5010	384612.436	2571102.896	602.06	RCP	30inch	2/23/2009
5011	385020.7055	2570711.285	602.01	RCP	48inch	2/23/2009
5012	387697.9129	2569181.873	606.96	RCP	36inch	2/23/2009
5013	387541.171	2569355.715	613.30	PVC	6inch	2/23/2009
5014	387216.3934	2569538.474	610.42	RCP	24inch	2/23/2009
5015	386959.7175	2569646.924	612.49	CPP	12inch	2/23/2009
5016	386511.8786	2569876.445	613.97	PVC	6inch	2/23/2009
5017	385977.2145	2570097.906	601.53	RCP	30inch	2/23/2009

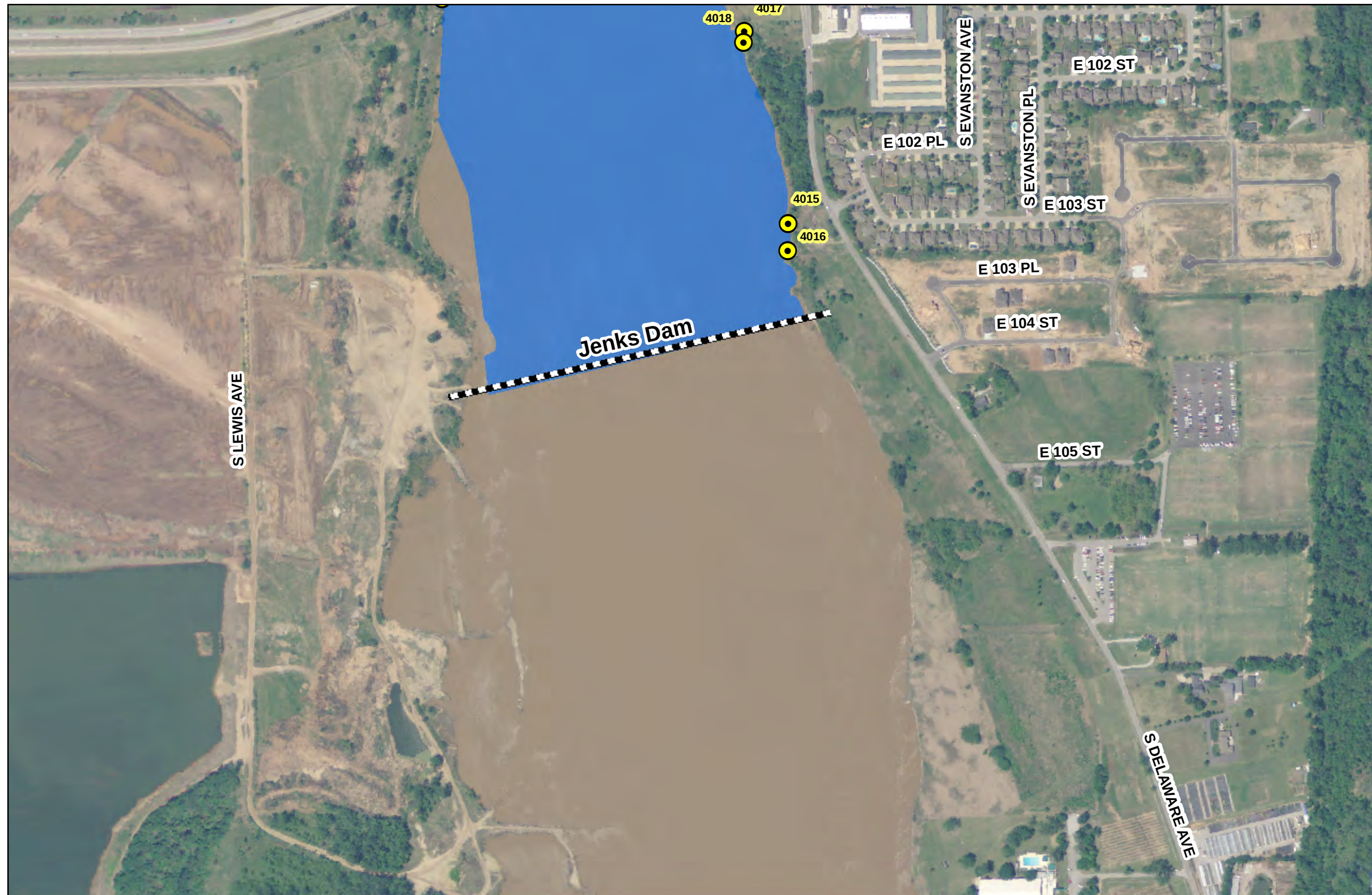
Point ID	Y Coordinate (ft)	X Coordinate (ft)	Invert Elevation (ft)	Type	Size	Survey Date
5019	388696.6554	2567341.506	608.45	RCP	42inch	2/23/2009
6001	376642.6516	2573312.02	594.35	STLP	12"	3/23/2009
6002	376631.5097	2573314.341	594.64	STLP	12"	3/23/2009
6003	379724.7252	2574142.233	624.76	GAS	24"	3/23/2009
6004	379235.008	2572129.326	622.65	GAS	24"	3/23/2009
6005	390664.4269	2566583.47	606.97	RCP	84"	3/23/2009
6006	391695.9543	2566362.3	611.83	RCP	48"	3/23/2009
6007	392252.6758	2566213.021	604.06	RCP	60"	3/23/2009
6008	392430.1249	2566185.944	613.53	RCP	30"	3/23/2009
6009	393225.6397	2565806.231	610.43	RCP	42"	3/23/2009
6010	393240.4926	2565794.662	607.69	RCP	75"X79"	3/23/2009
6011	394182.4991	2565315.059	609.28	RCP	42"	3/23/2009
6012	394173.3064	2565309.148	609.52	RCP	54"	3/23/2009
6013	395838.2074	2564829.069	607.21	RCP	48"	3/23/2009
6014	396443.8164	2564623.001	610.12	RCP	30"	3/23/2009
6015	396448.5623	2564612.121	610.14	RCP	54"	3/23/2009
6016	397715.202	2564437.461	611.69	RCP	96"X95	3/23/2009
7001	398505.0193	2564147.028	616.44	CMP	20"X16"	3/24/2009
7002	398979.2974	2564046.15	616.58	CMP	20"X16"	3/24/2009
7003	399099.7767	2564004.841	613.54	RCP	36"	3/24/2009
7004	399224.3763	2563979.844	615.43	CMP	20"X14"	3/24/2009
7005	399837.047	2563861.019	614.05	RCP	48"	3/24/2009
7006	400229.1092	2563862.675	612.96	RCP	96"x96"	3/24/2009
7007	400402.4466	2563952.946	621.47	CMP	20"X14"	3/24/2009
7008	400583.8967	2563838.794	610.73	RCP	30"	3/24/2009
7009	401257.7661	2563821.782	613.46	RCB	4X4	3/24/2009
7010	401923.8682	2563882.633	618.58	RCB	42"	3/24/2009
7011	402698.1746	2563823.428	613.34	RCP	52"	3/24/2009
7012	393501.7823	2563627.526	618.34	STL	52"	3/24/2009
7013	394366.792	2563611.911	623.03	CMP	48"	3/24/2009
7014	395410.7906	2563408.377	623.28	CMP	48"	3/24/2009
7015	396289.9583	2563032.161	627.10	RCB	2'X2'	3/24/2009
7016	396769.6186	2562885.128	626.96	RCP	5-18"	3/24/2009
7017	397199.8829	2562770.573	625.06	RCP	2-18"	3/24/2009
7018	397657.1507	2562656.735	626.77	RCP	5-18"	3/24/2009
7019	398123.0035	2562555.725	623.58	RCP	5-18"	3/24/2009
7020	398521.3558	2562465.802	625.83	RCP	5-18"	3/24/2009
7021	398930.7697	2562378.568	625.10	RCP	18"	3/24/2009
7022	399134.9684	2562330.738	624.01	RCP	18"	3/24/2009
7023	399826.9329	2562196.435	617.34	RCP	24"	3/24/2009

Point ID	Y Coordinate (ft)	X Coordinate (ft)	Invert Elevation (ft)	Type	Size	Survey Date
7025	401744.4125	2562004.905	605.89	RCP	60"	3/24/2009
7026	401777.997	2562014.294	595.73	RCP	Submerged	3/24/2009
7028	401466.302	2562108.871	605.88	RCP	52"	3/24/2009
7029	400318.3802	2562142.571	622.87	RCP	24"	3/24/2009
7030	400101.8031	2562162.543	613.67	STL	12"	3/24/2009
7031	400835.2994	2562026.735	635.35	SSMH	MD 40+-	3/24/2009
7032	402088.1445	2561280.887	609.96	RCB	3-15'X14'	3/24/2009
7033	402050.3797	2561351.162	616.38	RCP	18"	3/24/2009
7034	402281.1136	2561559.377	620.47	RCP	24"	3/24/2009
8001	402641.5951	2561654.603	622.47	CMP	36"	3/31/2009
8002	402920.2419	2561706.952	621.31	CMP	36"	3/31/2009
8003	403159.4139	2561708.325	624.37	RCP	18"	3/31/2009
8004	403961.5664	2561373.744	621.64	RCP	15"	3/31/2009
8005	404050.296	2561278.52	608.27	CRK	20'WIDE	3/31/2009
8006	404093.2675	2561388.405	615.40	RCP	36"	3/31/2009
8007	407089.8421	2562101.63	609.55	RCP	60"	3/31/2009
8008	407987.1841	2562308.672	607.24	RCP	60"	3/31/2009
8009	409425.6643	2562313.728	606.43	CMP	18"	3/31/2009
8010	410688.2282	2562137.368	625.68	RCP	18"	3/31/2009
8011	412688.6226	2562061.775	622.44	FL	2'X1' SPILLWAY	3/31/2009
8012	405181.3431	2563750.862	620.92	RCP	18"	3/31/2009
8013	404996.1035	2563772.673	617.85	RCP	42"	3/31/2009
8014	404516.5889	2563808.024	628.20	RCP	18"	3/31/2009
8015	403491.976	2563805.682	614.67	RCP	54"	3/31/2009
8016	403282.1943	2563748.017	603.93	RCB	3-12'X16'	3/31/2009
9001	413453.2808	2524619.094	645.34	RCB	2-6'X5'	4/1/2009
9002	416180.5201	2518210.666	647.28	RCP	18"	4/1/2009
9003	416531.8872	2528286.07	638.70	RCP	96"	4/1/2009
9004	424475.4853	2506365.207	654.67	RCB	5'x6'	4/1/2009
9005	423715.7	2511109.835	645.44	CMP	9'DIA	4/1/2009
9006	423538.1377	2511830.778	669.21	RCB	2'X4'	4/1/2009
9007	423458.5491	2511992.926	671.92	RCB	4'X2'	4/1/2009
9008	423093.4704	2512568.154	660.29	RCB	4'X3'	4/1/2009
9009	422566.2878	2513378.775	687.86	RCB	2'X2'	4/1/2009
9010	421887.5409	2514338.374	647.52	RCP	42"	4/1/2009
9011	421376.0576	2515385.604	653.53	RCB	4'X4'	4/1/2009
9012	421086.5647	2516331.428	635.88	RCB	3-13'X14'	4/1/2009
9013	421070.5422	2516584.897	653.11	RCP	24"	4/1/2009
10001	417798.9783	2520980.009	637.45	RCP	4-48"	4/2/2009
10002	417758.77	2521003.1679	634.83	RCP	72"	4/2/2009

Point ID	Y Coordinate (ft)	X Coordinate (ft)	Invert Elevation (ft)	Type	Size	Survey Date
10004	415519.5522	2524565.1847	639.91	CMP	18"	4/2/2009
10005	416057.7659	2524653.2983	638.07	RCP	3-48"	4/2/2009
10006	416125.7556	2524653.1891	639.90	RCP	60"	4/2/2009
10007	416125.9738	2524658.8474	640.03	RCP	60"	4/2/2009
10008	416083.0733	2525405.1256	641.33	RCP	18"	4/2/2009
10009	416448.4344	2526664.6979	644.26	STL	8"	4/2/2009
10010	416450.2835	2526668.7723	643.51	STL	36"	4/2/2009
10011	416454.7851	2526677.6702	643.49	STL	36"	4/2/2009
10012	416353.3204	2526693.1448	636.53	RCP	36"	4/2/2009
10013	416355.6622	2526698.2556	636.36	RCP	42"	4/2/2009
10014	416724.8166	2529862.7724	638.57	STL	24"	4/2/2009
10015	416941.0924	2530698.4287	637.59	STL	12"	4/2/2009
10016	417199.3077	2531851.7676	641.81	RCP	36"	4/2/2009
10017	417322.5865	2532369.9522	646.63	RCP	18"	4/2/2009
10018	417688.0503	2532865.4173	634.96	CMP	96"X69"	4/2/2009
10019	417711.008	2532849.0377	636.54	RCP	2-60"	4/2/2009
10020	415359.8816	2532028.9927	633.16	CMP	3-9'DIA	4/2/2009
10021	418613.2072	2534738.3874	638.45	RCP	24"	4/2/2009
10022	419329.2786	2535593.2837	637.08	RCP	18"	4/2/2009
10023	423035.7871	2539073.152	630.04	RCP	52"	4/2/2009
10024	423110.4479	2538969.9327	630.09	RCB	5-11'X11'	4/2/2009
10025	420993.315	2538234.8692	639.69	STL	2-30"	4/2/2009
10026	420983.8988	2538241.2809	632.42	RCP	18"	4/2/2009
10027	420972.1059	2538236.6118	632.48	CMP	2-48"	4/2/2009
10028	420007.8024	2536783.3477	639.21	STL	24"	4/2/2009
10029	422097.7269	2538469.8867	633.26	RCP	36"	4/2/2009
11001	421734.4575	2539197.781	634.34	RCP	48"	4/7/2009
11002	421719.0388	2539170.743	632.60	RCP	2-24"	4/7/2009
11003	421710.7367	2539154.371	632.52	RCP	2-24"	4/7/2009
11004	420962.6067	2541035.032	606.59	CMP	48"	4/7/2009
11005	421498.7406	2544304.151	630.65	STL	18"	4/7/2009
11006	421249.8688	2543620.462	630.10	RCP	30"	4/7/2009
11007	421078.6698	2542831.213	641.36	GAS1 ST	CONOCO	4/7/2009
11008	421937.8728	2545367.399	629.37	CMP	60"	4/7/2009
11009	421930.0317	2545344.066	631.59	RCP	18"	4/7/2009
11010	422877.8333	2547725.437	624.50	CMP	60"	4/7/2009
11011	422874.2811	2547718.669	625.77	CMP	48"	4/7/2009
11012	422872.8183	2547714.442	627.26	CMP	18"	4/7/2009
11013	422869.7365	2547706.203	626.05	CMP	2-36"	4/7/2009
11014	423169.0334	2548348.507	629.05	CMP	36"	4/7/2009

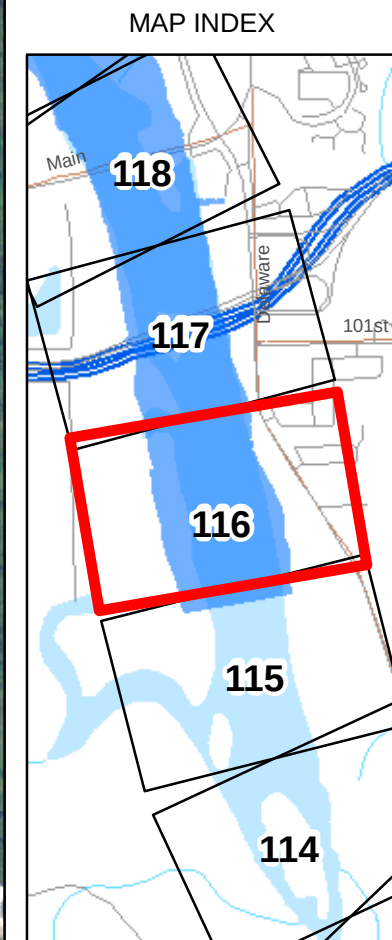
Point ID	Y Coordinate (ft)	X Coordinate (ft)	Invert Elevation (ft)	Type	Size	Survey Date
11016	423115.478	2548369.294	628.25	CMP	36"	4/7/2009
11017	418480.2445	2542893.406	627.46	RCB	2-13'X15' 1-17'X15'	4/7/2009
11018	418877.7091	2542923.09	634.01	STL	24"	4/7/2009
11019	419206.3098	2542841.267	634.43	STL	18"	4/7/2009
11020	419270.8794	2542799.631	629.80	STL	24"	4/7/2009
11021	419854.3348	2543323.365	640.72	GAS1 -	CONOCO	4/7/2009
11022	419809.5296	2543304.103	639.48	CMP	18"	4/7/2009
11023	419736.9153	2544538.899	642.55	RCP	36"	4/7/2009
11024	420200.9415	2546335.099	632.15	RCP	36"	4/7/2009
11025	422596.9729	2555115.795	618.67	CMP	3-24"	4/7/2009
11026	422135.978	2550455.806	635.82	STL	15"	4/7/2009
11027	421875.1433	2549755.939	650.19	GAS2 ST	MAGELLAN	4/7/2009
11028	423245.0403	2549225.821	635.21	GAS2 -	MAGELLAN	4/7/2009
11029	423973.0645	2550122.868	628.71	CMP	18"	4/7/2009
11030	424012.6029	2550290.698	625.76	STL	30"	4/7/2009
11031	424011.6293	2550300.682	625.72	CMP	48"	4/7/2009
11032	424137.3058	2550585.447	629.20	CMP	15"	4/7/2009
11033	424154.4269	2550642.706	628.19	CMP	12"	4/7/2009
11034	424238.4735	2550955.131	628.93	CMP	8"	4/7/2009
11035	424361.9278	2551772.624	625.14	CMP	18"	4/7/2009
11036	424503.4439	2552831.693	627.50	RCP	36"	4/7/2009





Legend

- Surveyed Outfalls
- Proposed Low Water Dams
- Proposed / Existing Lake



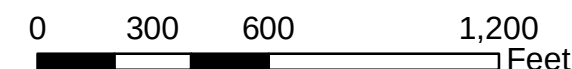
Map116

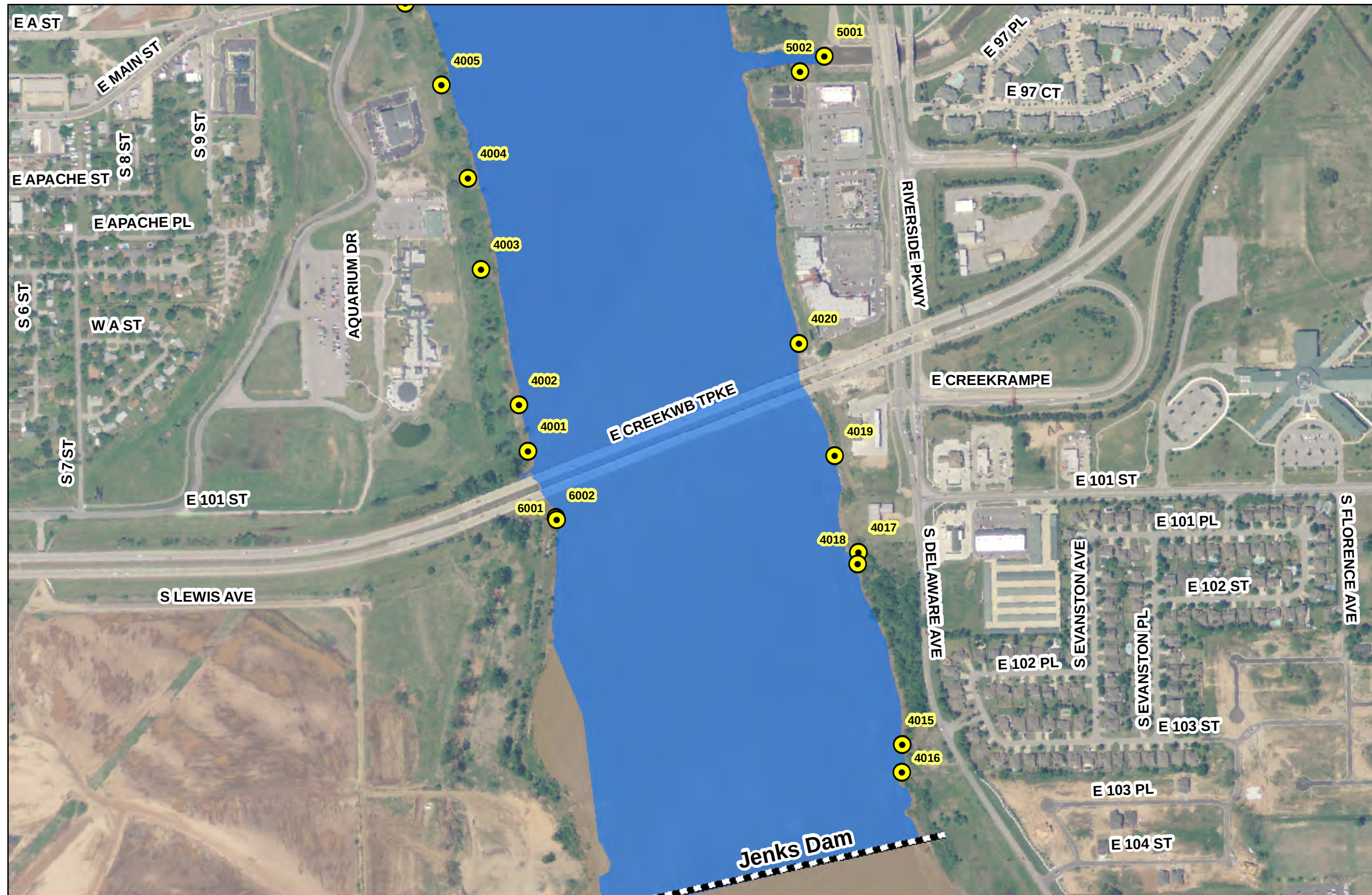


ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN SURVEYED OUTFALLS



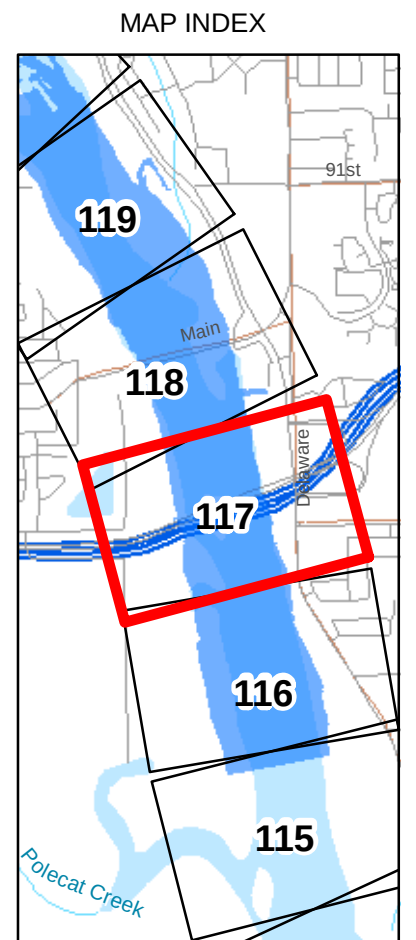
Date: Oct 27, 2009





Legend

- Surveyed Outfalls
- Proposed Low Water Dams
- Proposed / Existing Lake



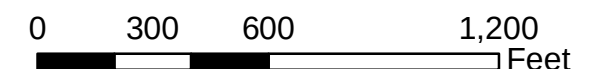
Map117

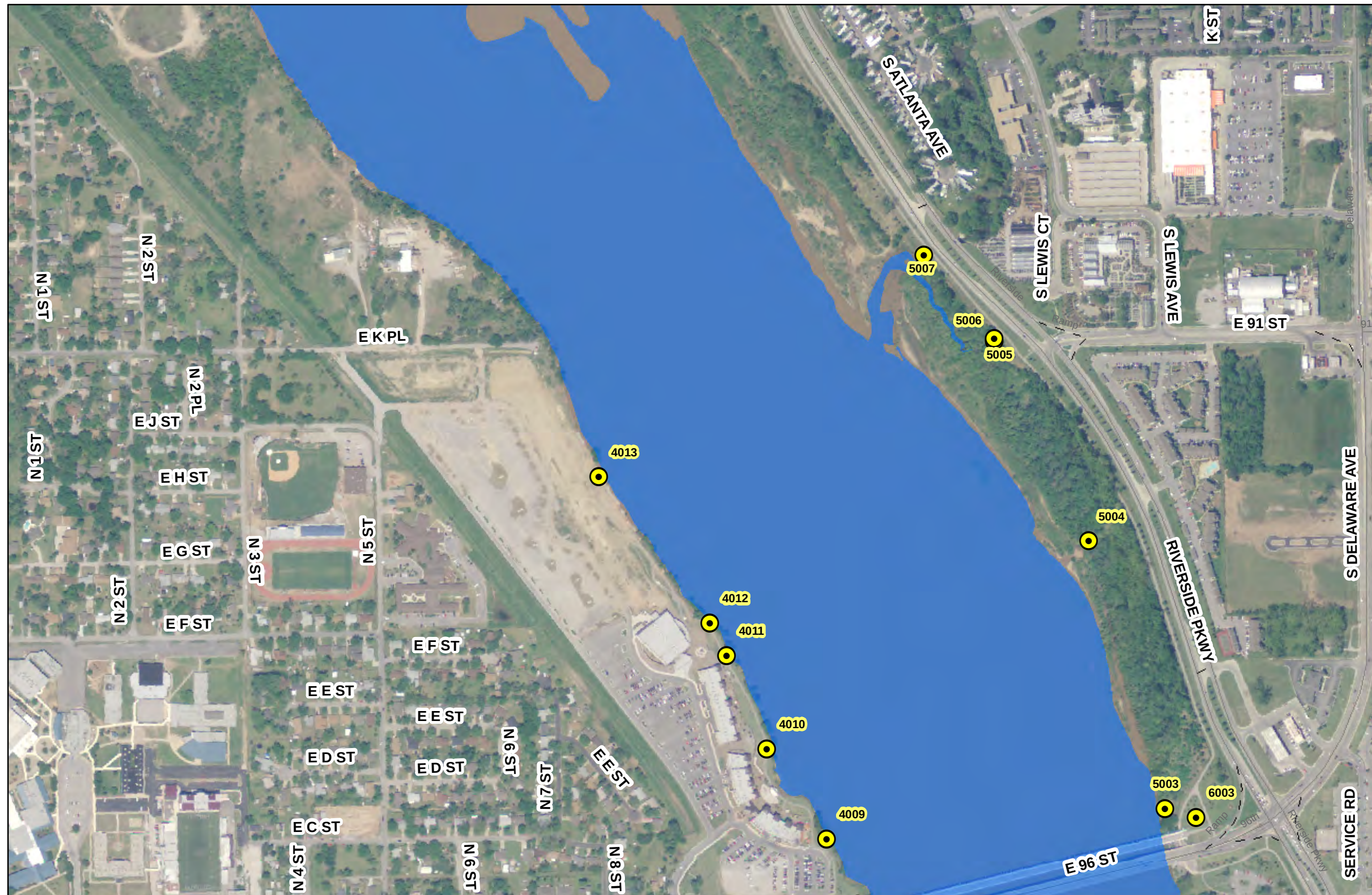


ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN SURVEYED OUTFALLS



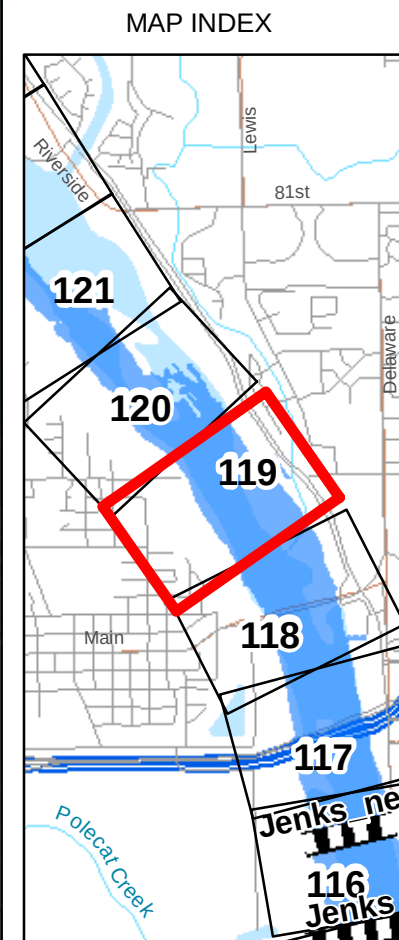
Date: Oct 27, 2009





Legend

- Proposed Low Water Dams
- Surveyed Outfalls
- Proposed / Existing Lake



Map119



ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN SURVEYED OUTFALLS



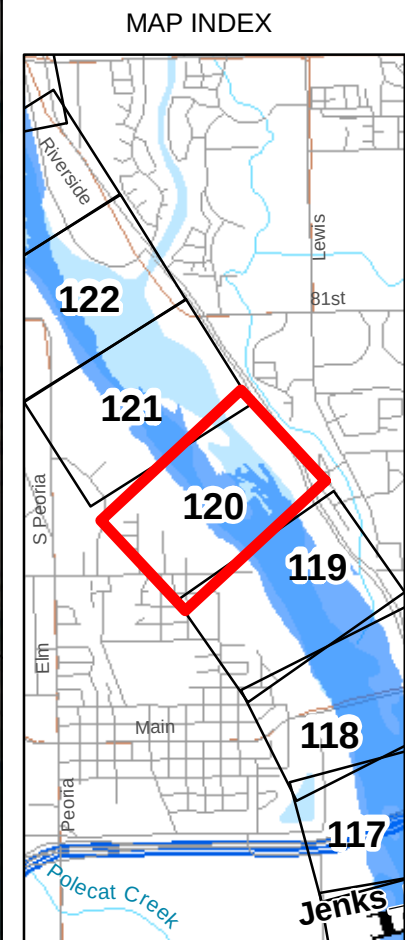
Date: Oct 27, 2009





Legend

- Proposed Low Water Dams
- Surveyed Outfalls
- Proposed / Existing Lake



Map120



ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN SURVEYED OUTFALLS



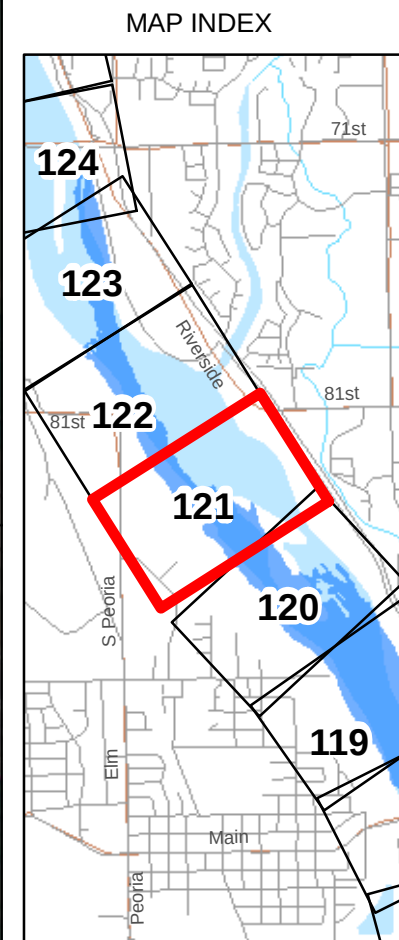
Date: Oct 27, 2009





Legend

- Proposed Low Water Dams
- Surveyed Outfalls
- Proposed / Existing Lake



Map121



ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN

SURVEYED OUTFALLS



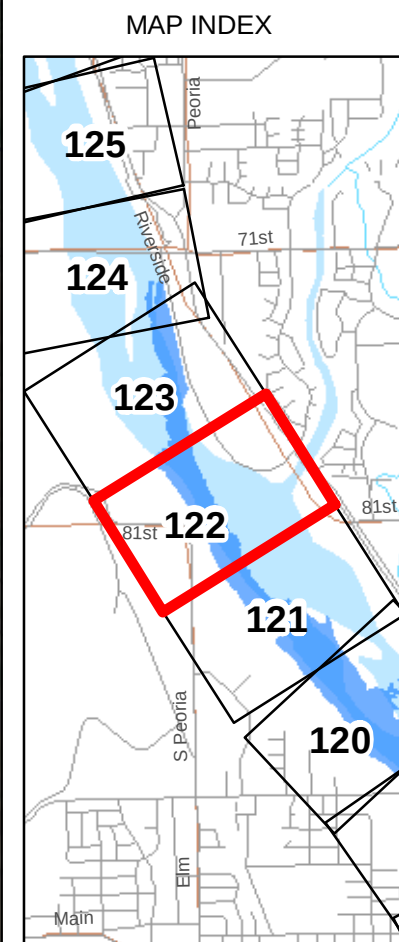
Date: Oct 27, 2009





Legend

- Proposed Low Water Dams
- Surveyed Outfalls
- Proposed / Existing Lake



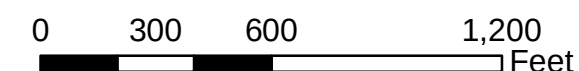
Map122



ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN **SURVEYED OUTFALLS**



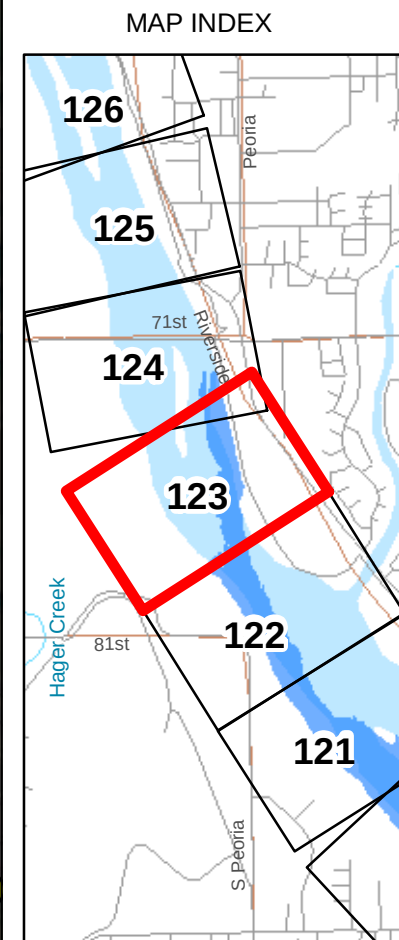
Date: Oct 27, 2009





Legend

- Proposed Low Water Dams
- Surveyed Outfalls
- Proposed / Existing Lake



Map123



ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN SURVEYED OUTFALLS



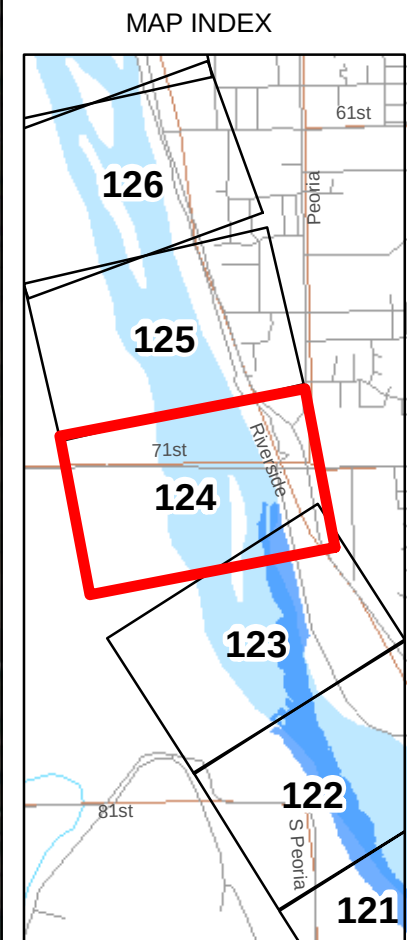
Date: Oct 27, 2009





Legend

- Proposed Low Water Dams
- Surveyed Outfalls
- Proposed / Existing Lake



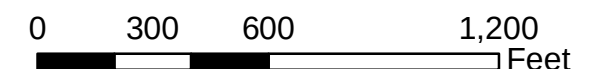
Map124

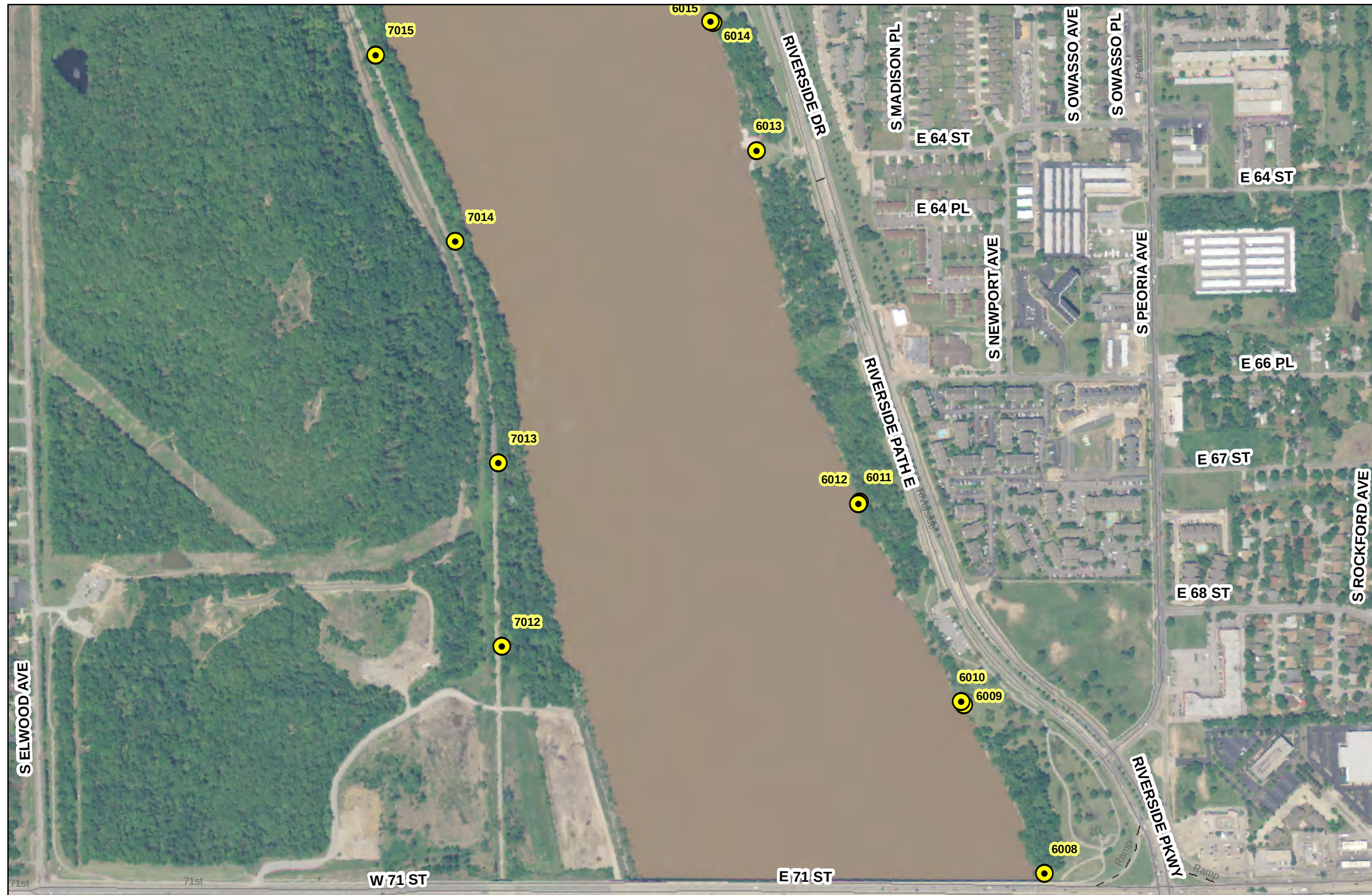


ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN SURVEYED OUTFALLS



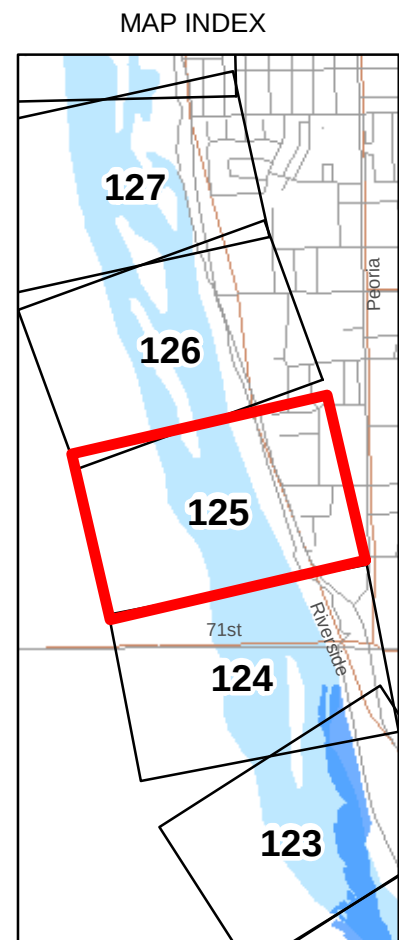
Date: Oct 27, 2009





Legend

- Proposed Low Water Dams
- Surveyed Outfalls
- Proposed / Existing Lake



Map125



ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN

SURVEYED OUTFALLS



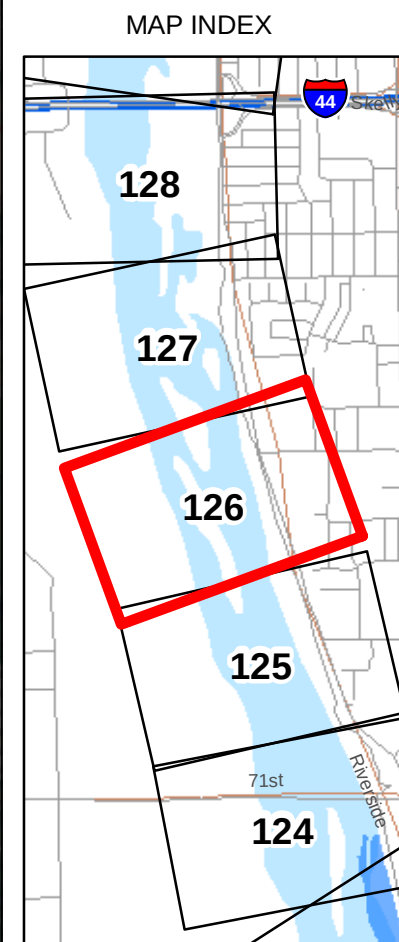
Date: Oct 27, 2009





Legend

- Proposed Low Water Dams
- Surveyed Outfalls
- Proposed / Existing Lake



Map126



ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN

SURVEYED OUTFALLS



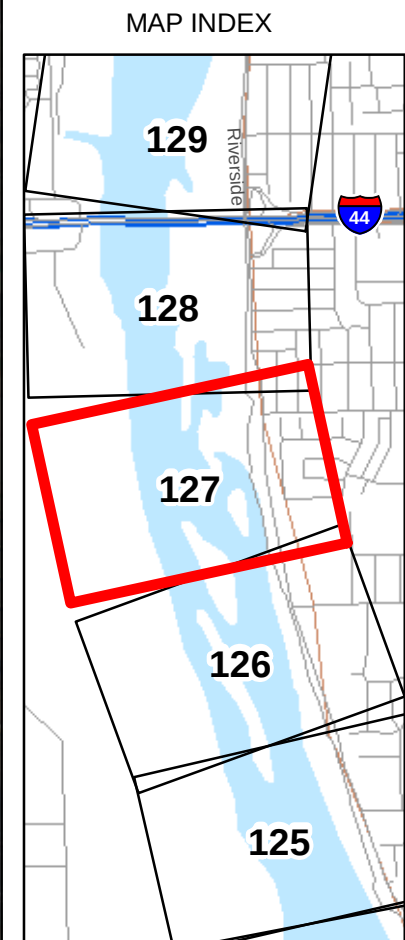
Date: Oct 27, 2009





Legend

- Proposed Low Water Dams
- Surveyed Outfalls
- Proposed / Existing Lake



Map127



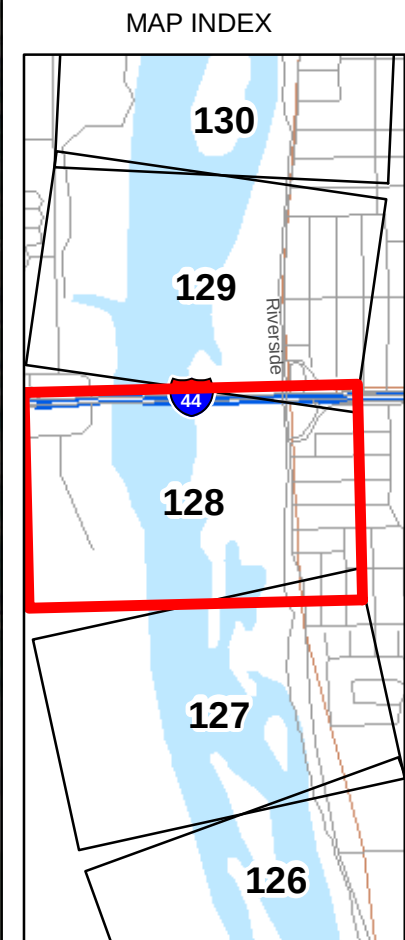
ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN SURVEYED OUTFALLS

Date: Oct 27, 2009



Legend

- Proposed Low Water Dams
- Surveyed Outfalls
- Proposed / Existing Lake



Map128

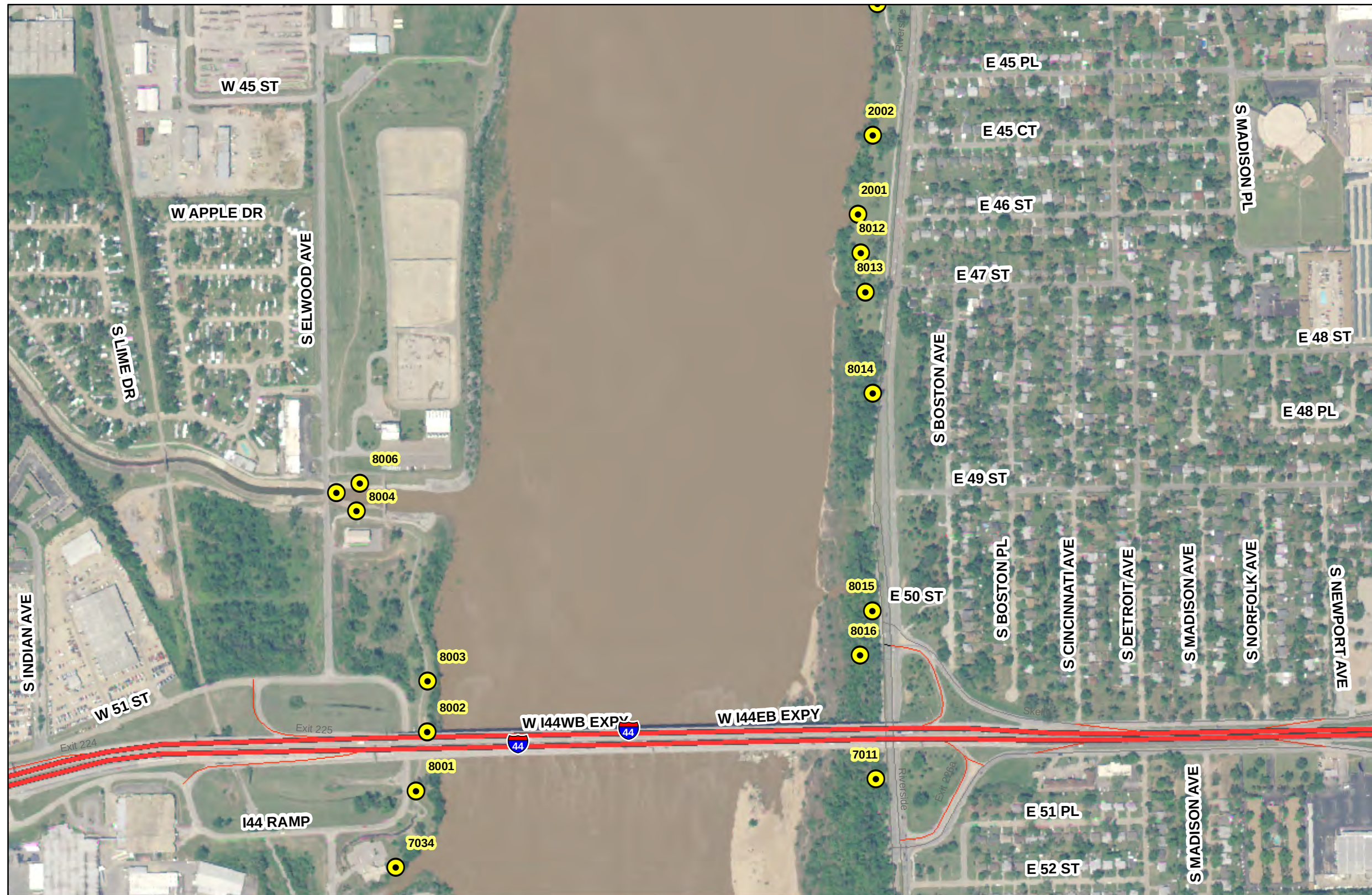


ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN SURVEYED OUTFALLS



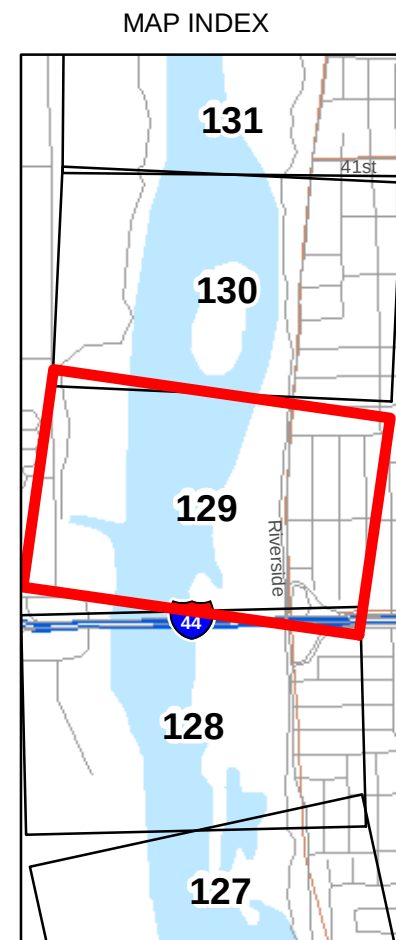
Date: Oct 27, 2009





Legend

- Proposed Low Water Dams
- Surveyed Outfalls
- Proposed / Existing Lake



Map129

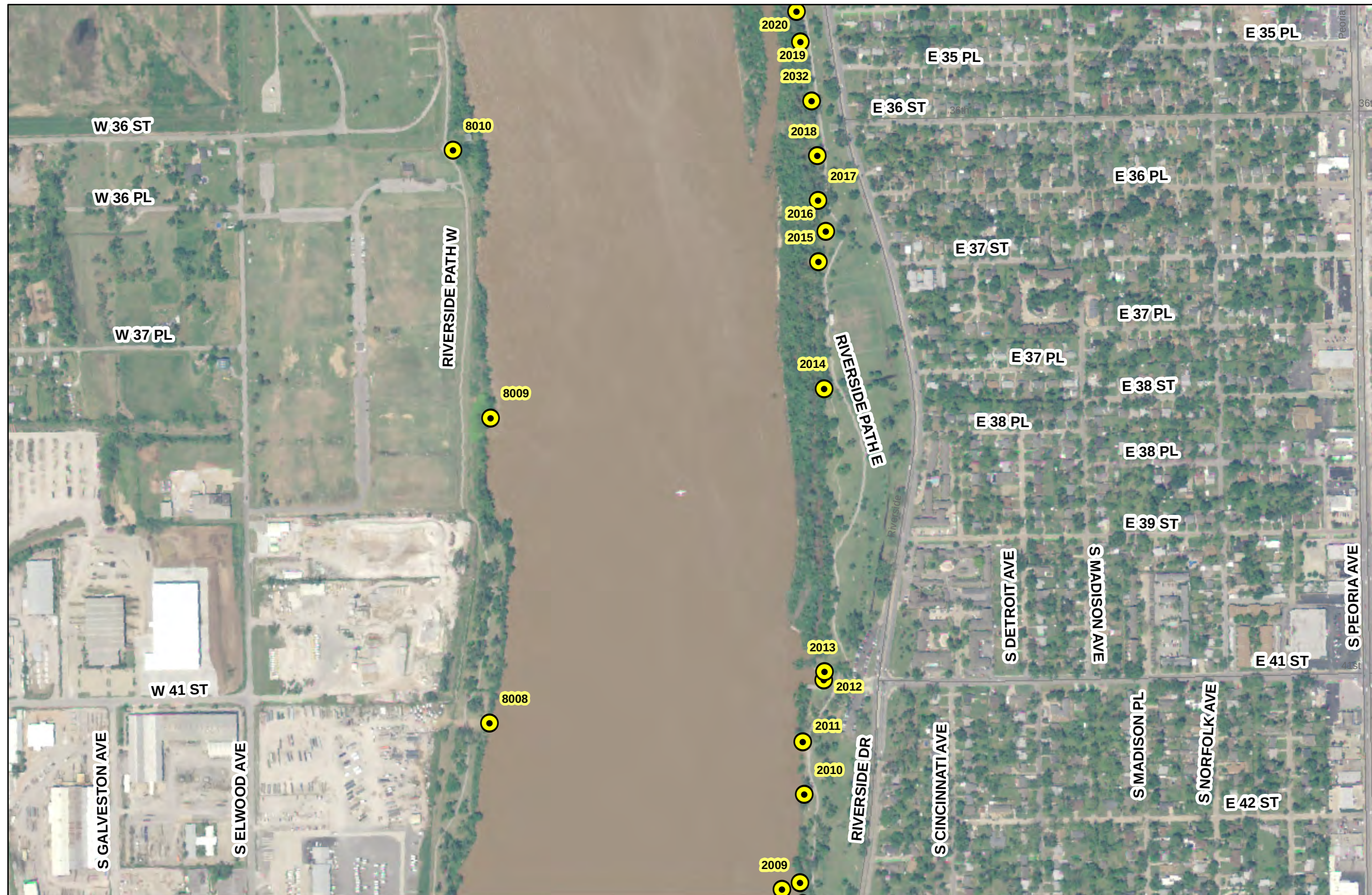


ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN SURVEYED OUTFALLS



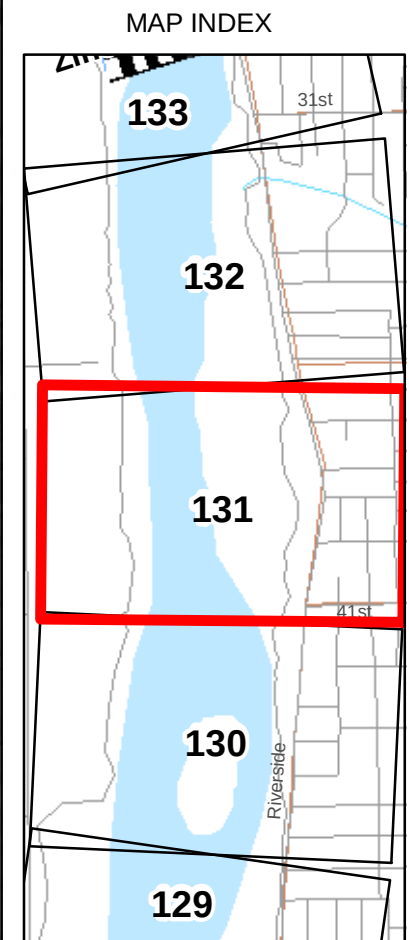
Date: Oct 27, 2009





Legend

- Proposed Low Water Dams
- Surveyed Outfalls
- Proposed / Existing Lake



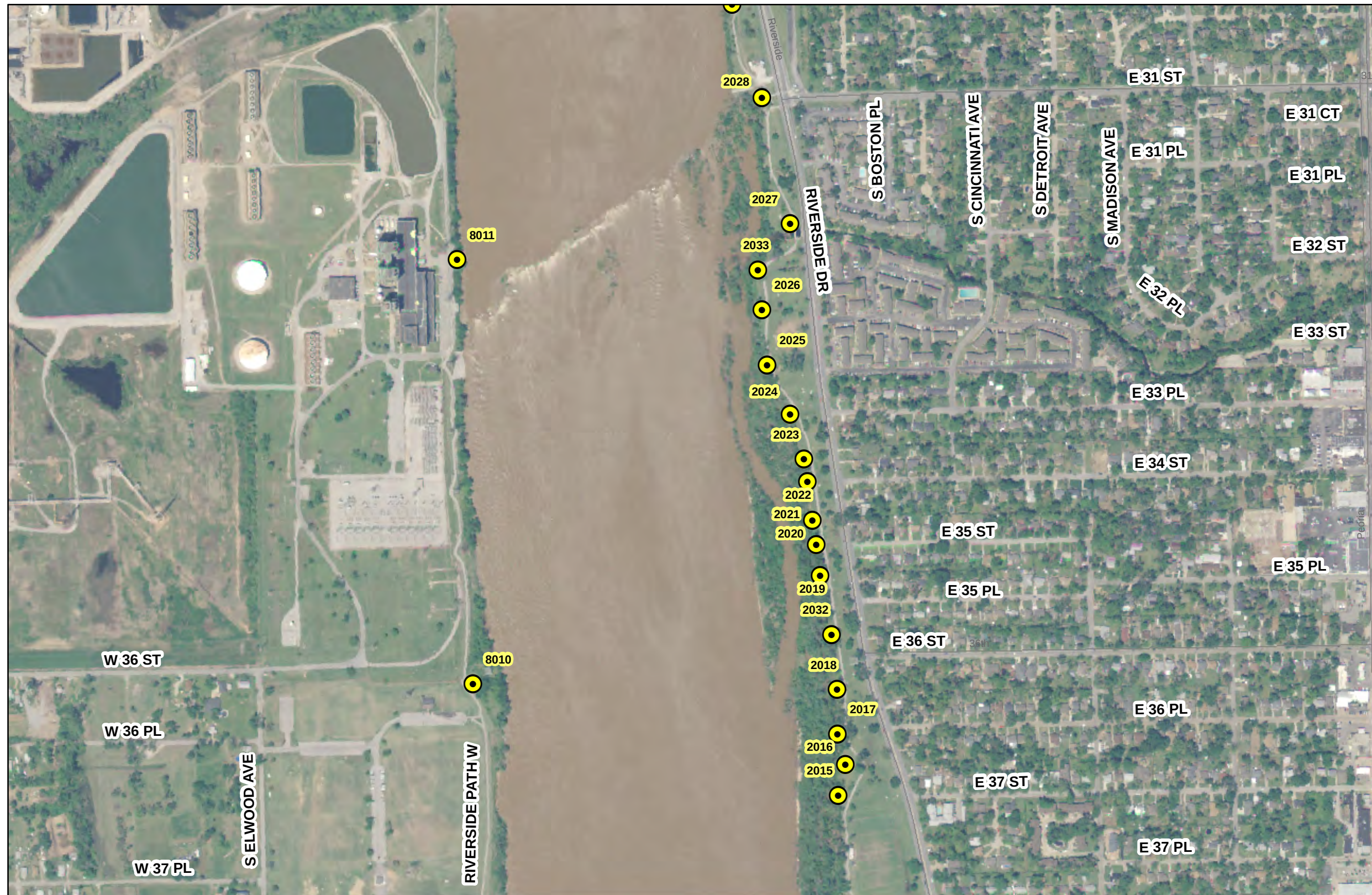
Map131



ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN SURVEYED OUTFALLS

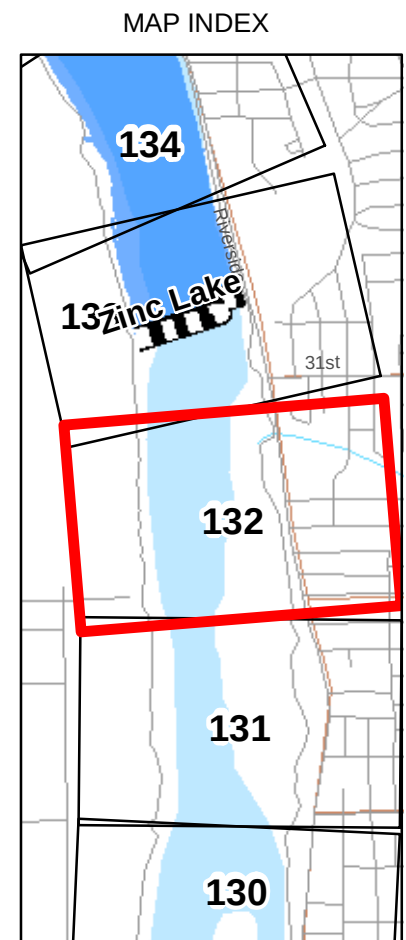
0 300 600 1,200 Feet

Date: Oct 27, 2009



Legend

- Proposed Low Water Dams
- Surveyed Outfalls
- Proposed / Existing Lake



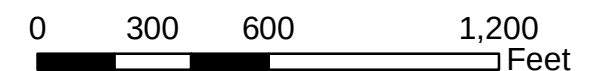
Map132

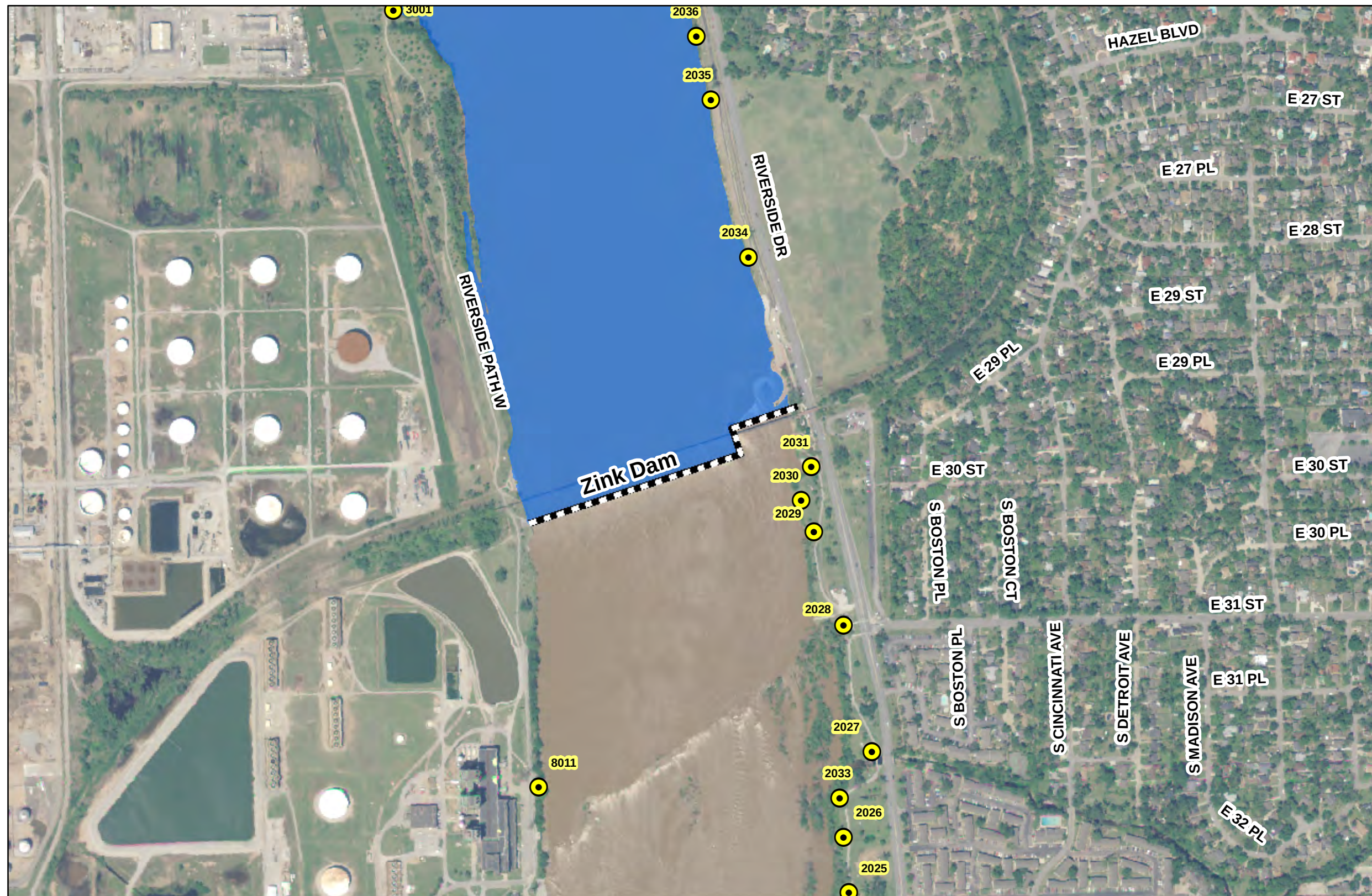


ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN SURVEYED OUTFALLS



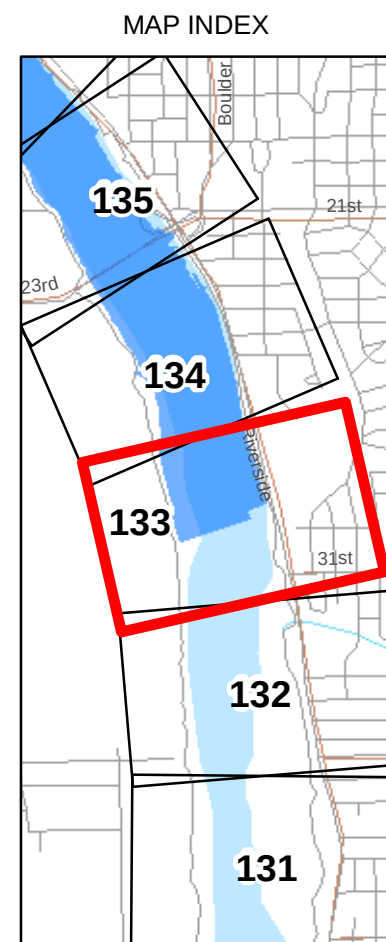
Date: Oct 27, 2009





Legend

- Surveyed Outfalls
- Proposed Low Water Dams
- Proposed / Existing Lake



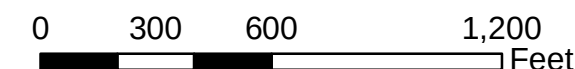
Map133

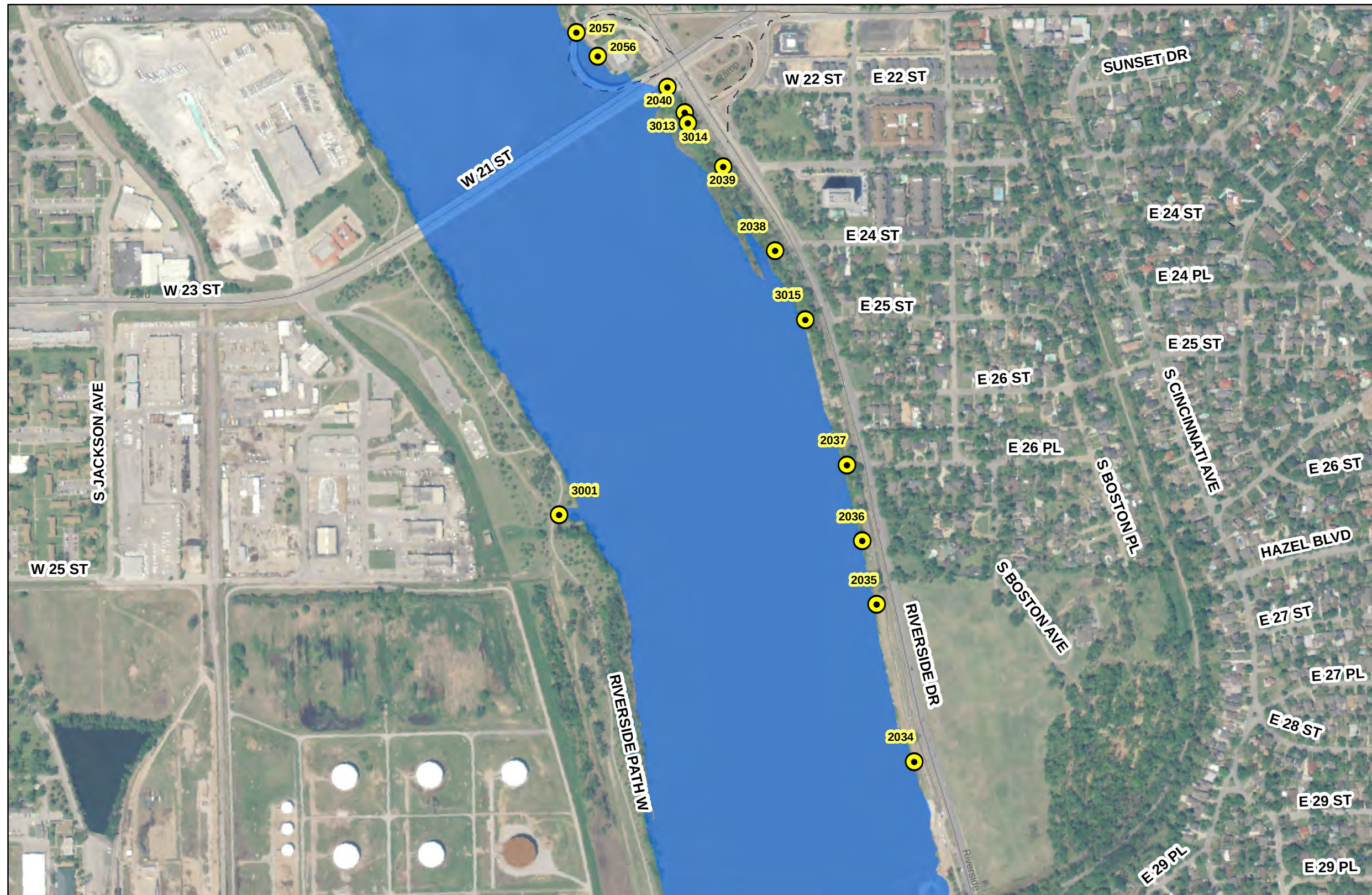


ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN SURVEYED OUTFALLS



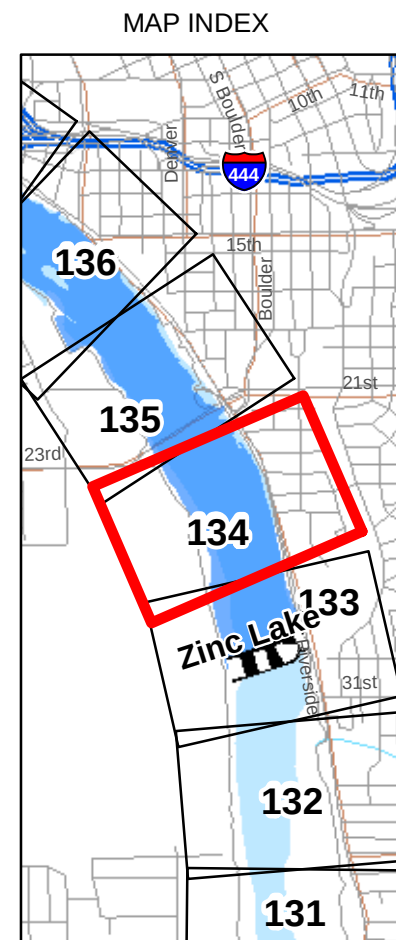
Date: Oct 27, 2009





Legend

- Proposed Low Water Dams
- Surveyed Outfalls
- Proposed / Existing Lake



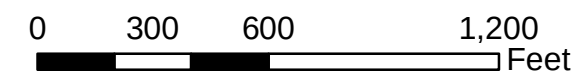
Map134

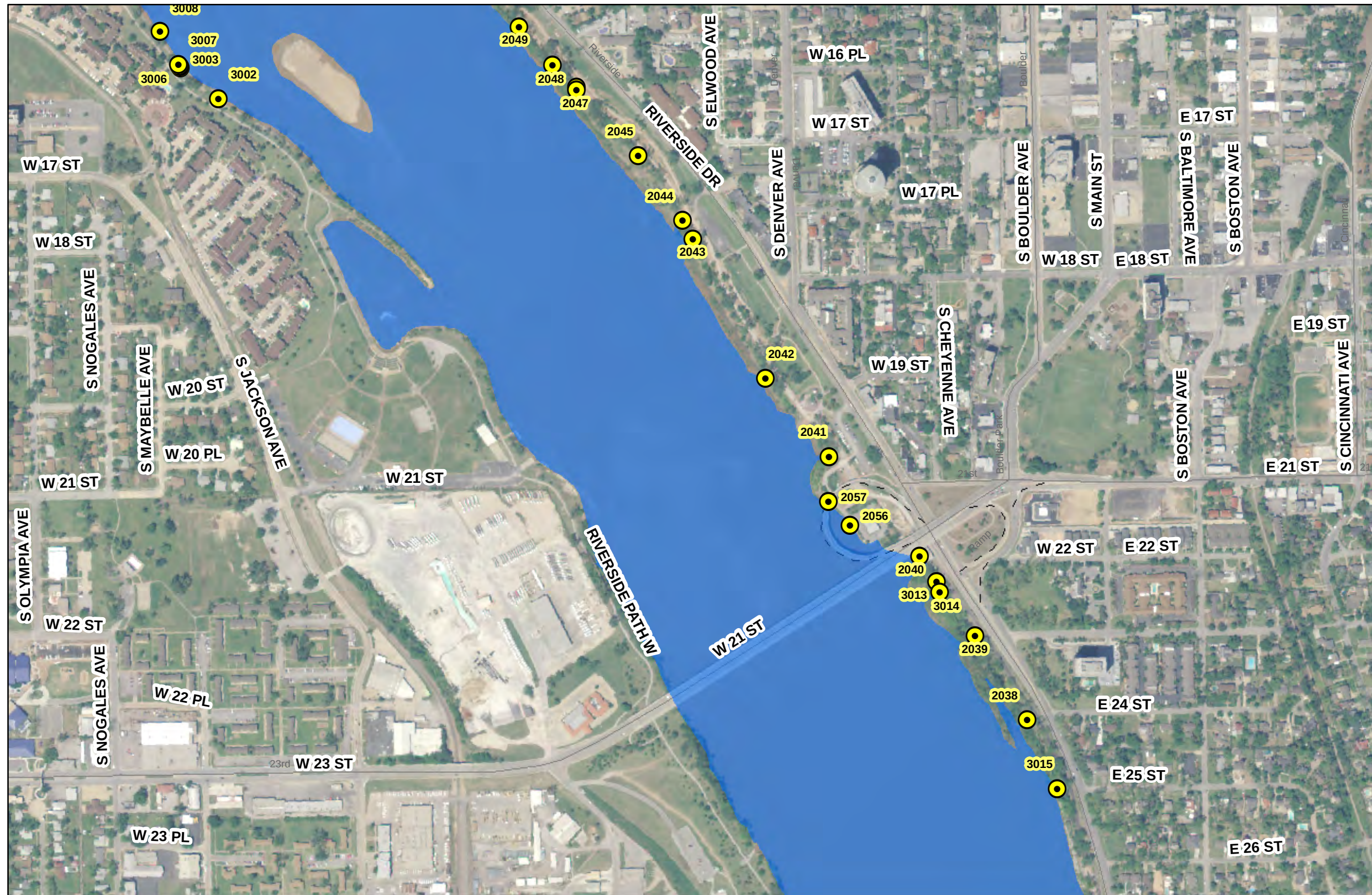


ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN SURVEYED OUTFALLS



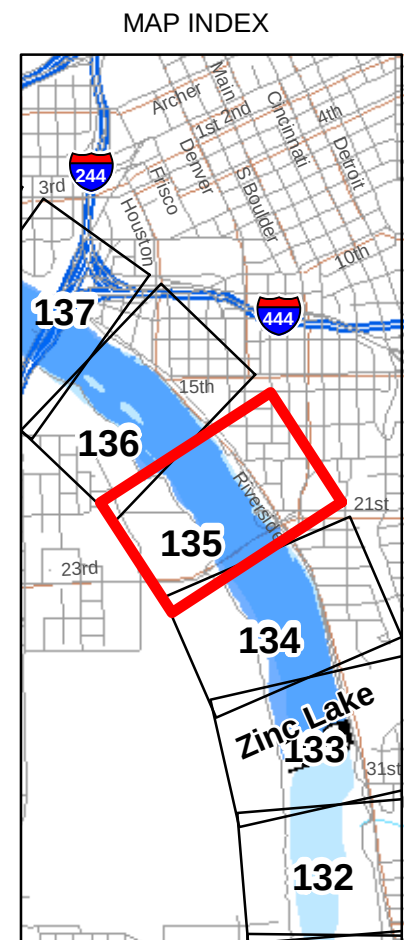
Date: Oct 27, 2009





Legend

- Proposed Low Water Dams
- Surveyed Outfalls
- Proposed / Existing Lake



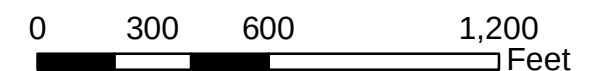
Map135

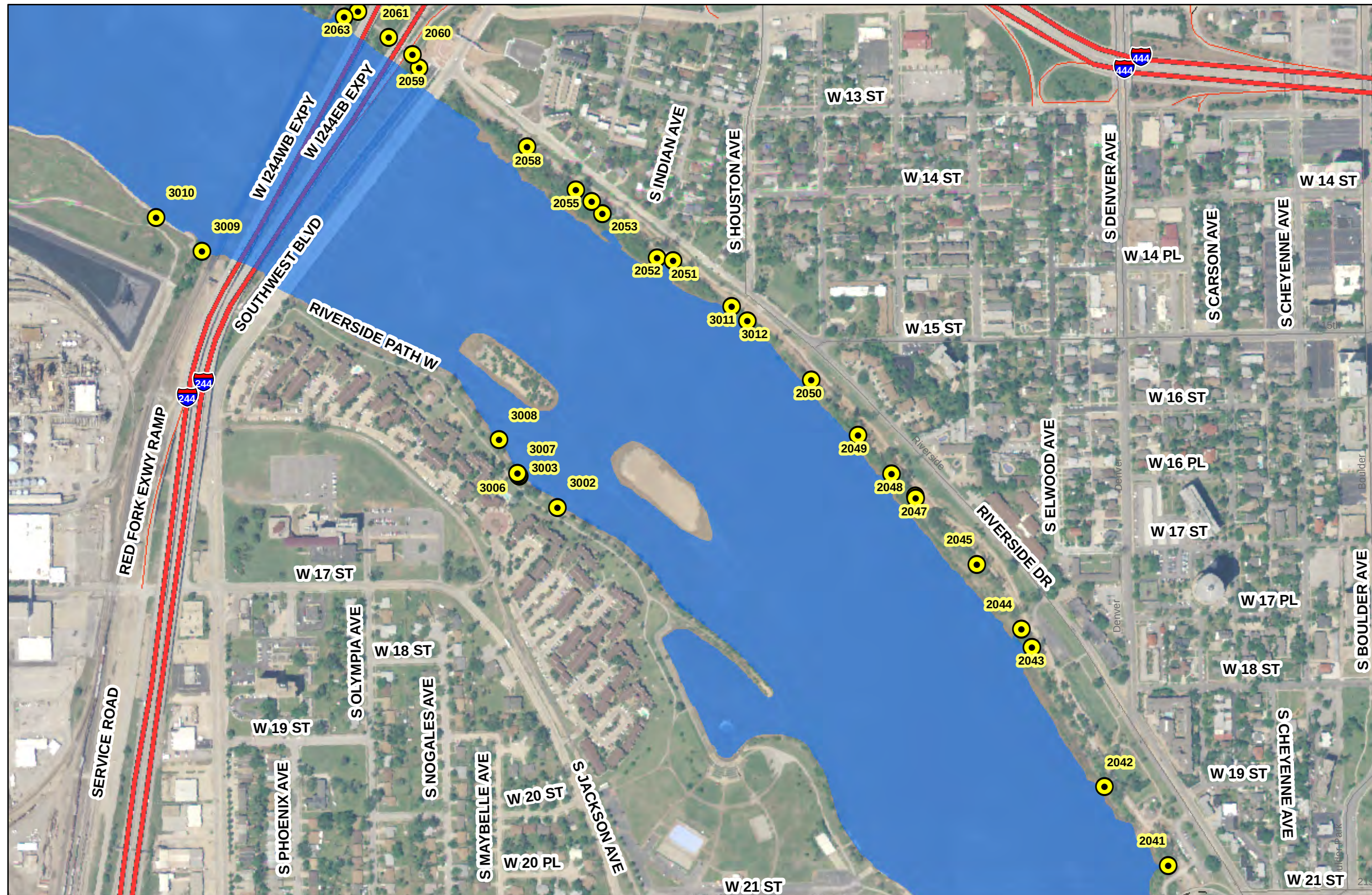


ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN **SURVEYED OUTFALLS**



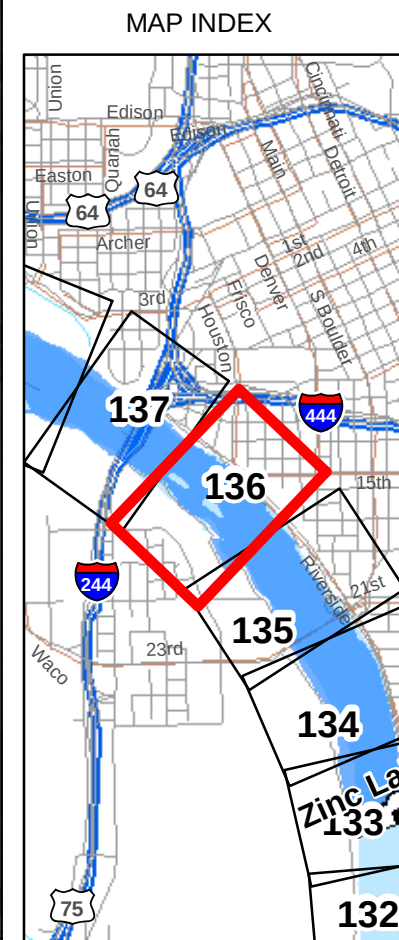
Date: Oct 27, 2009





Legend

- Proposed Low Water Dams
- Surveyed Outfalls
- Proposed / Existing Lake



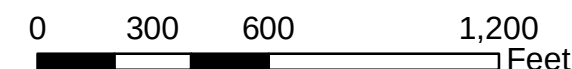
Map136

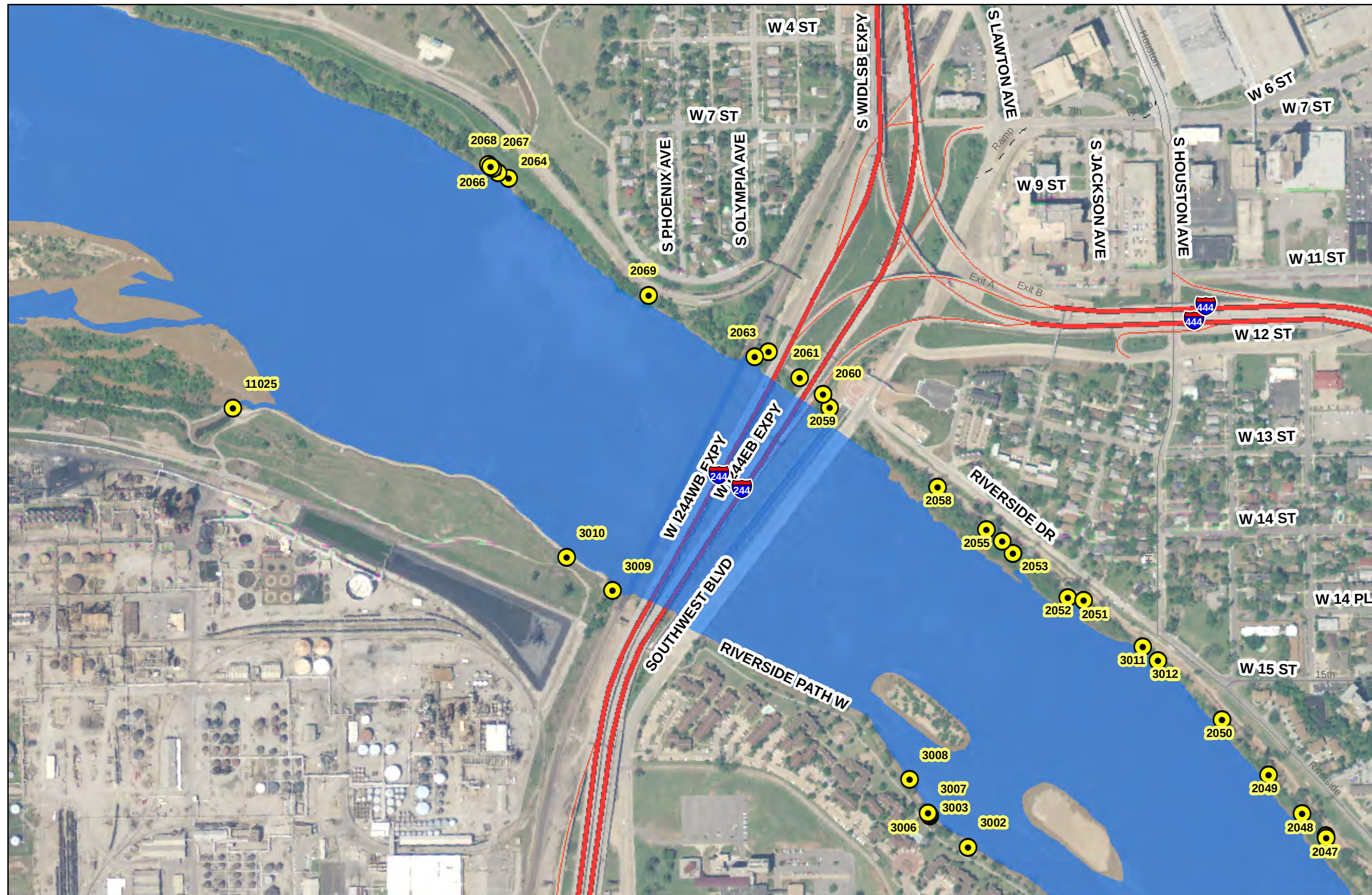


ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN SURVEYED OUTFALLS



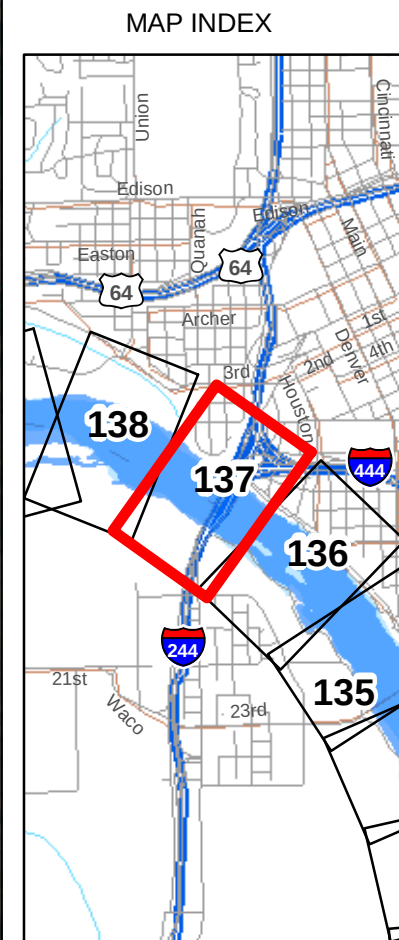
Date: Oct 27, 2009





Legend

- Proposed Low Water Dams
- Surveyed Outfalls
- Proposed / Existing Lake



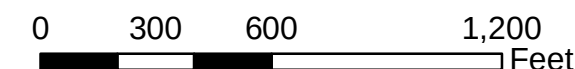
Map137

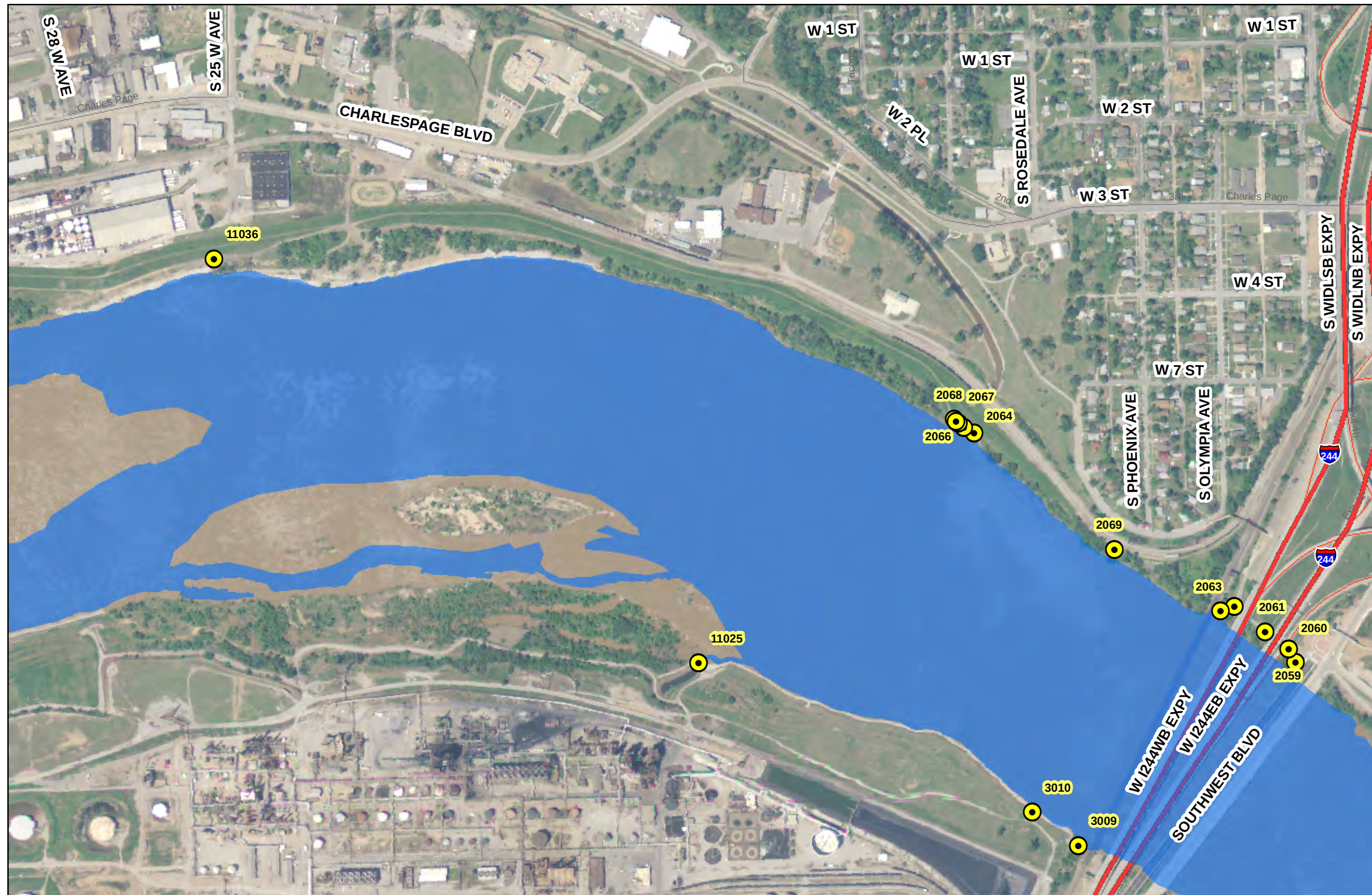


ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN SURVEYED OUTFALLS



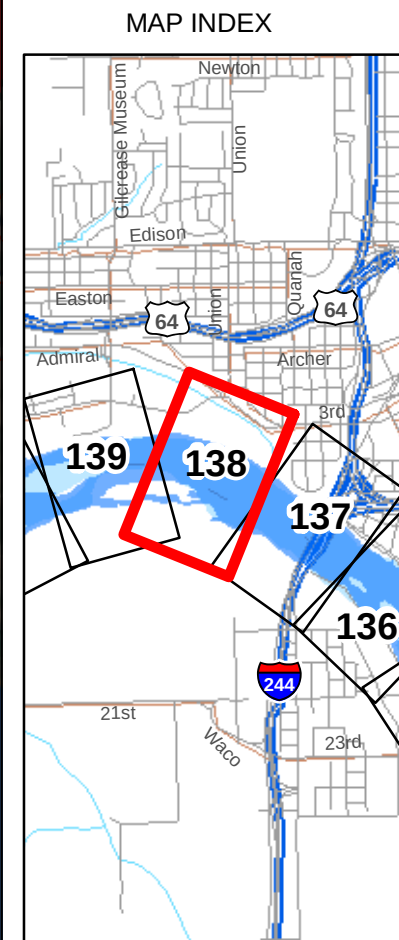
Date: Oct 27, 2009





Legend

- Proposed Low Water Dams
- Surveyed Outfalls
- Proposed / Existing Lake



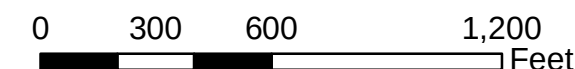
Map138



ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN SURVEYED OUTFALLS



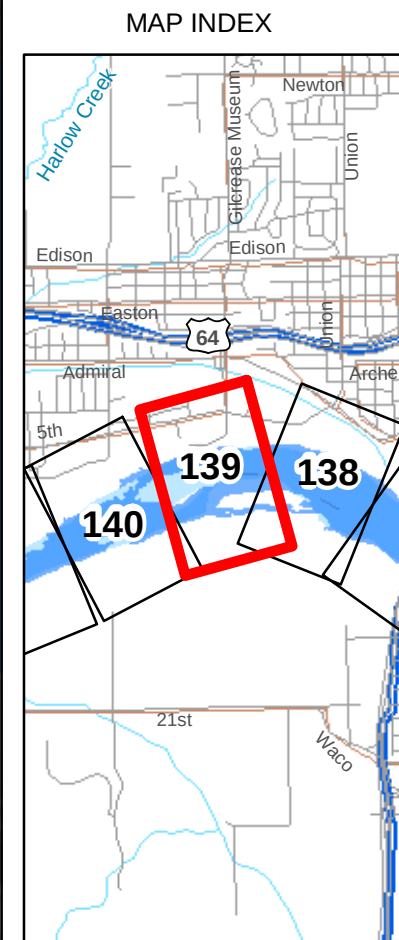
Date: Oct 27, 2009





Legend

- Proposed Low Water Dams
- Surveyed Outfalls
- Proposed / Existing Lake



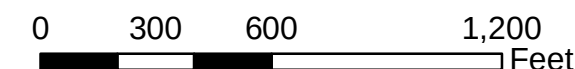
Map139



ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN **SURVEYED OUTFALLS**



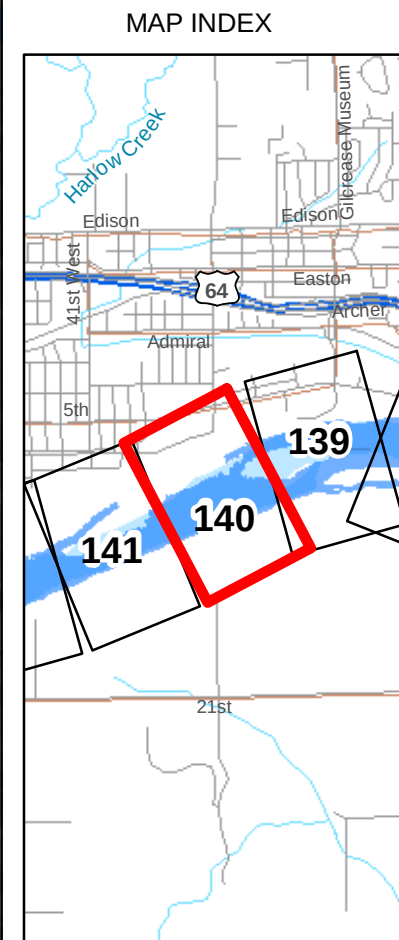
Date: Oct 27, 2009





Legend

- Proposed Low Water Dams
- Surveyed Outfalls
- Proposed / Existing Lake



Map140



ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN **SURVEYED OUTFALLS**



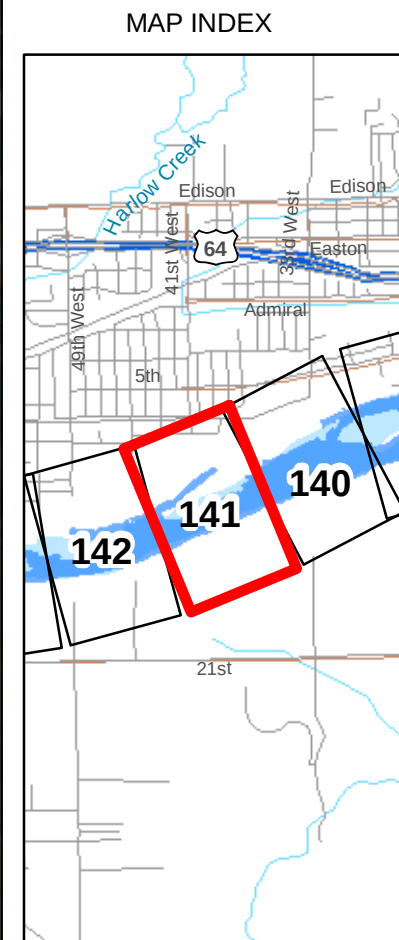
Date: Oct 27, 2009





Legend

- Proposed Low Water Dams
- Surveyed Outfalls
- Proposed / Existing Lake



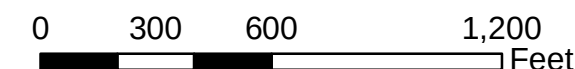
Map141

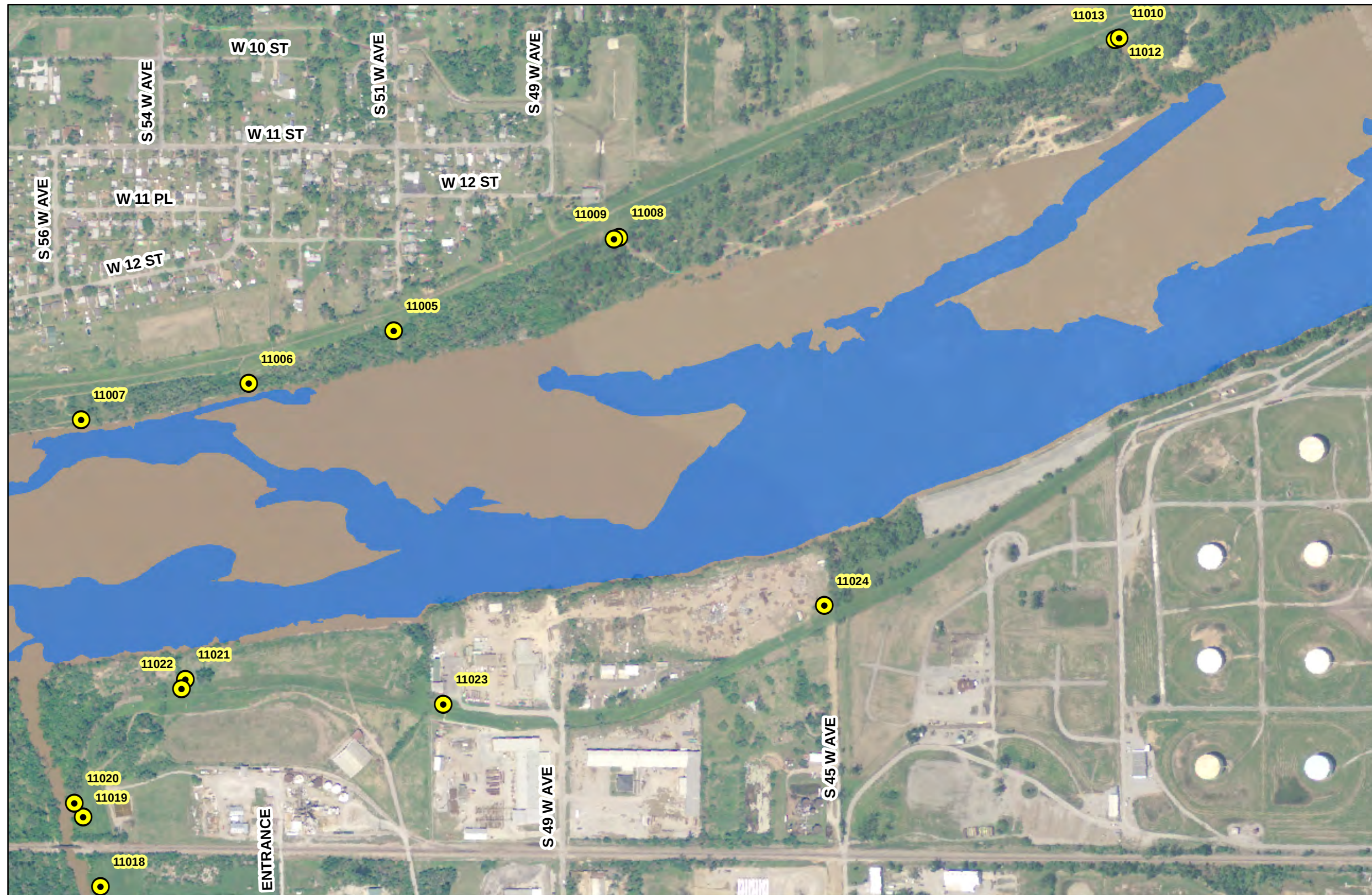


ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN **SURVEYED OUTFALLS**



Date: Oct 27, 2009

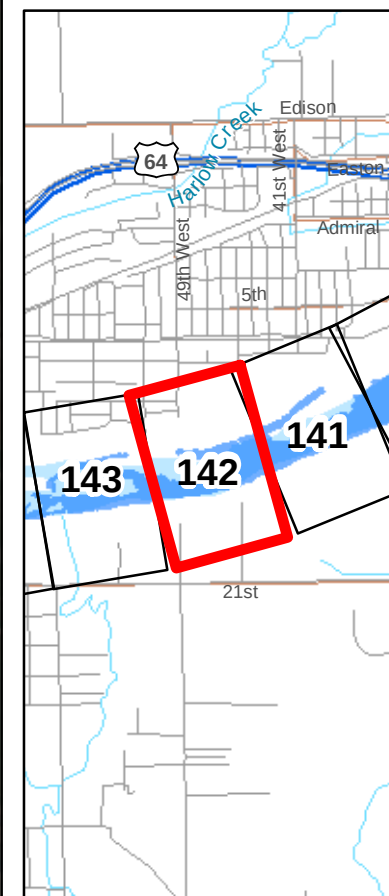




Legend

- Proposed Low Water Dams
- Surveyed Outfalls
- Proposed / Existing Lake

MAP INDEX



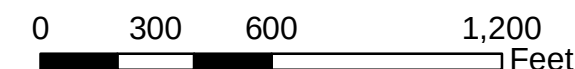
Map142



ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN SURVEYED OUTFALLS



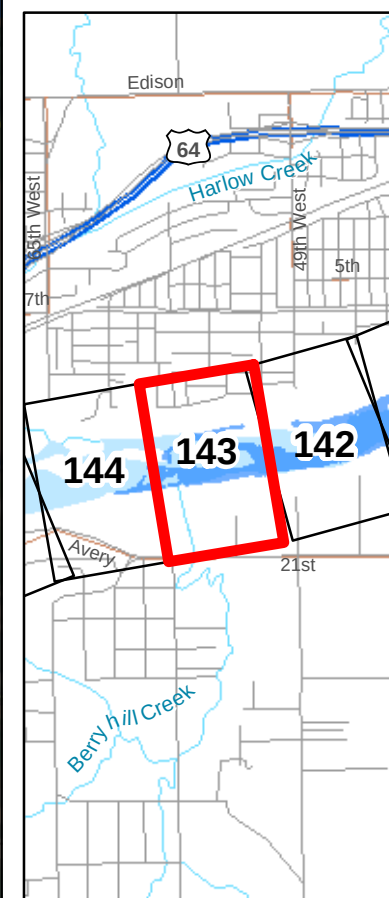
Date: Oct 27, 2009





- Legend**
- Proposed Low Water Dams
 - Surveyed Outfalls
 - Proposed / Existing Lake

MAP INDEX



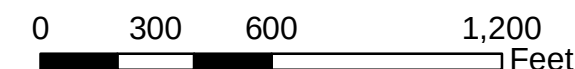
Map143



ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN SURVEYED OUTFALLS



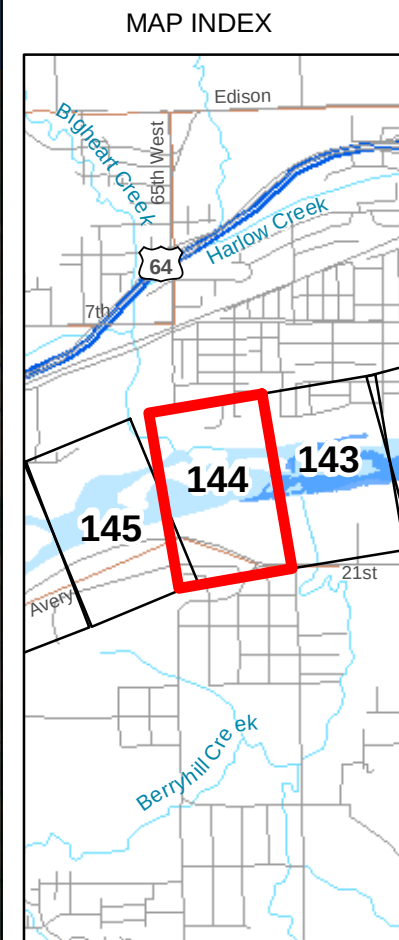
Date: Oct 27, 2009





Legend

- Proposed Low Water Dams
- Surveyed Outfalls
- Proposed / Existing Lake



Map144



ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN SURVEYED OUTFALLS



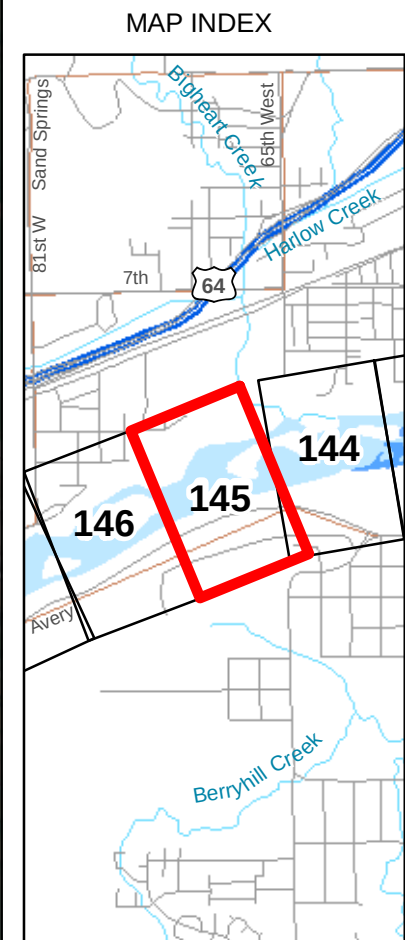
Date: Oct 27, 2009





Legend

- Proposed Low Water Dams
- Surveyed Outfalls
- Proposed / Existing Lake



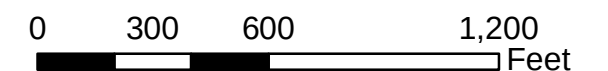
Map145



ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN SURVEYED OUTFALLS



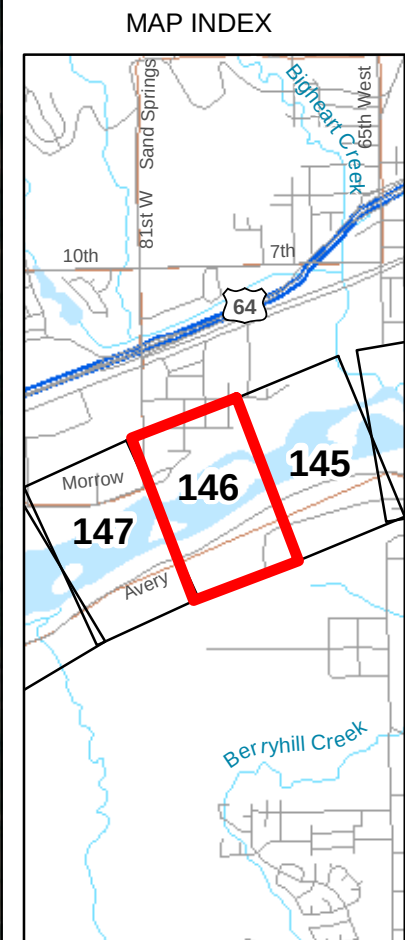
Date: Oct 27, 2009





Legend

- Proposed Low Water Dams
- Surveyed Outfalls
- Proposed / Existing Lake



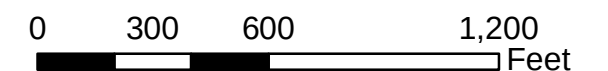
Map146



ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN SURVEYED OUTFALLS



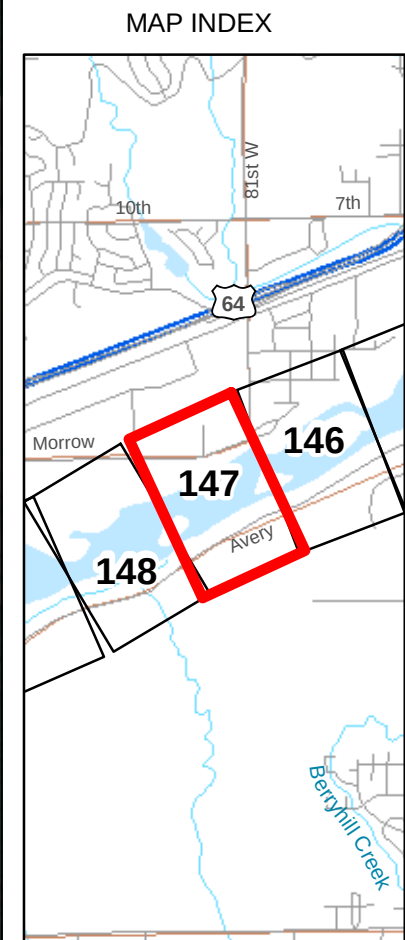
Date: Oct 27, 2009





Legend

-  Proposed Low Water Dams
-  Surveyed Outfalls
-  Proposed / Existing Lake



Map147

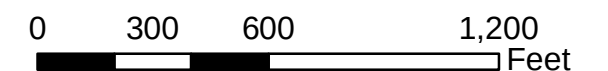


ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN

SURVEYED OUTFALLS



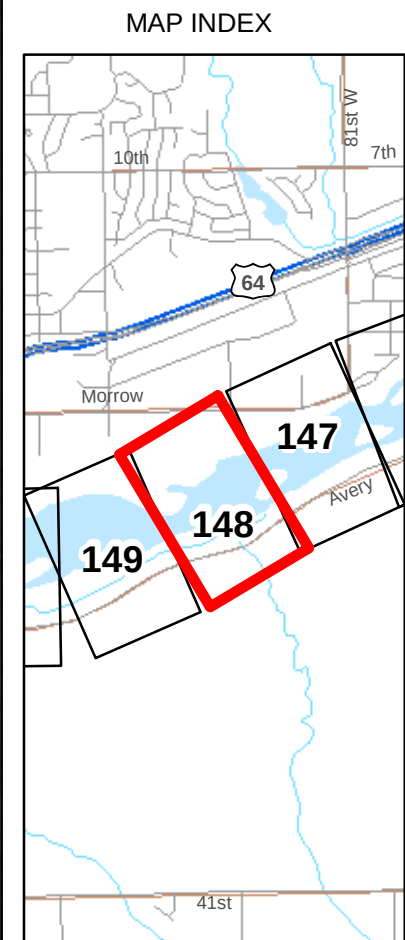
Date: Oct 27, 2009





Legend

- Proposed Low Water Dams
- Surveyed Outfalls
- Proposed / Existing Lake



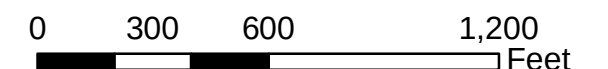
Map148



ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN SURVEYED OUTFALLS



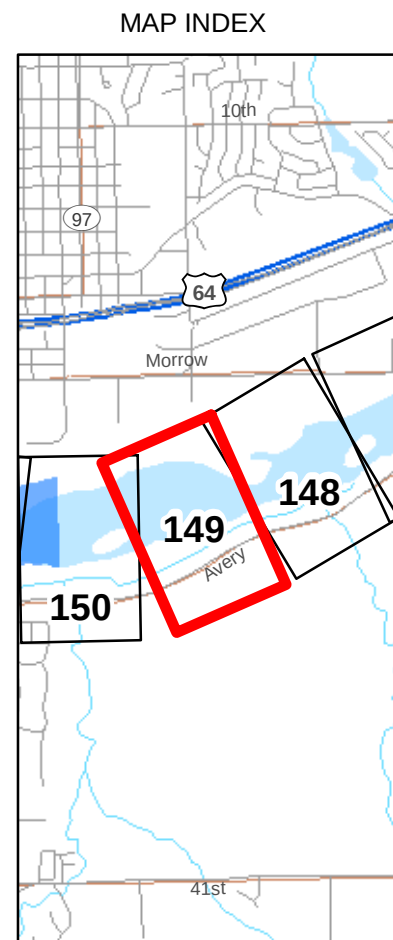
Date: Oct 27, 2009





Legend

- Surveyed Outfalls
- Proposed Low Water Dams
- Proposed / Existing Lake



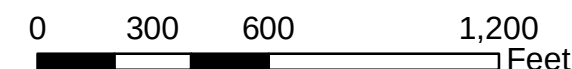
Map149



ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN SURVEYED OUTFALLS



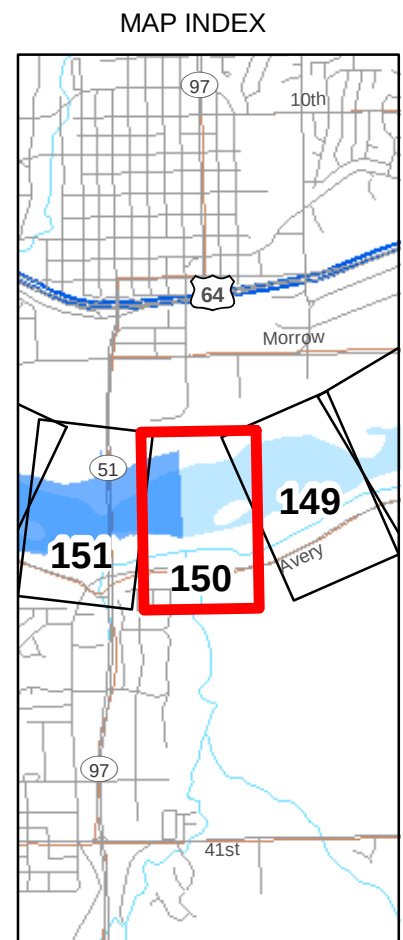
Date: Oct 27, 2009





Legend

- Surveyed Outfalls
- Proposed Low Water Dams
- Proposed / Existing Lake



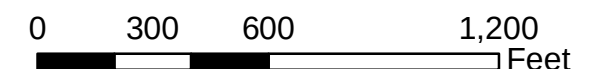
Map150

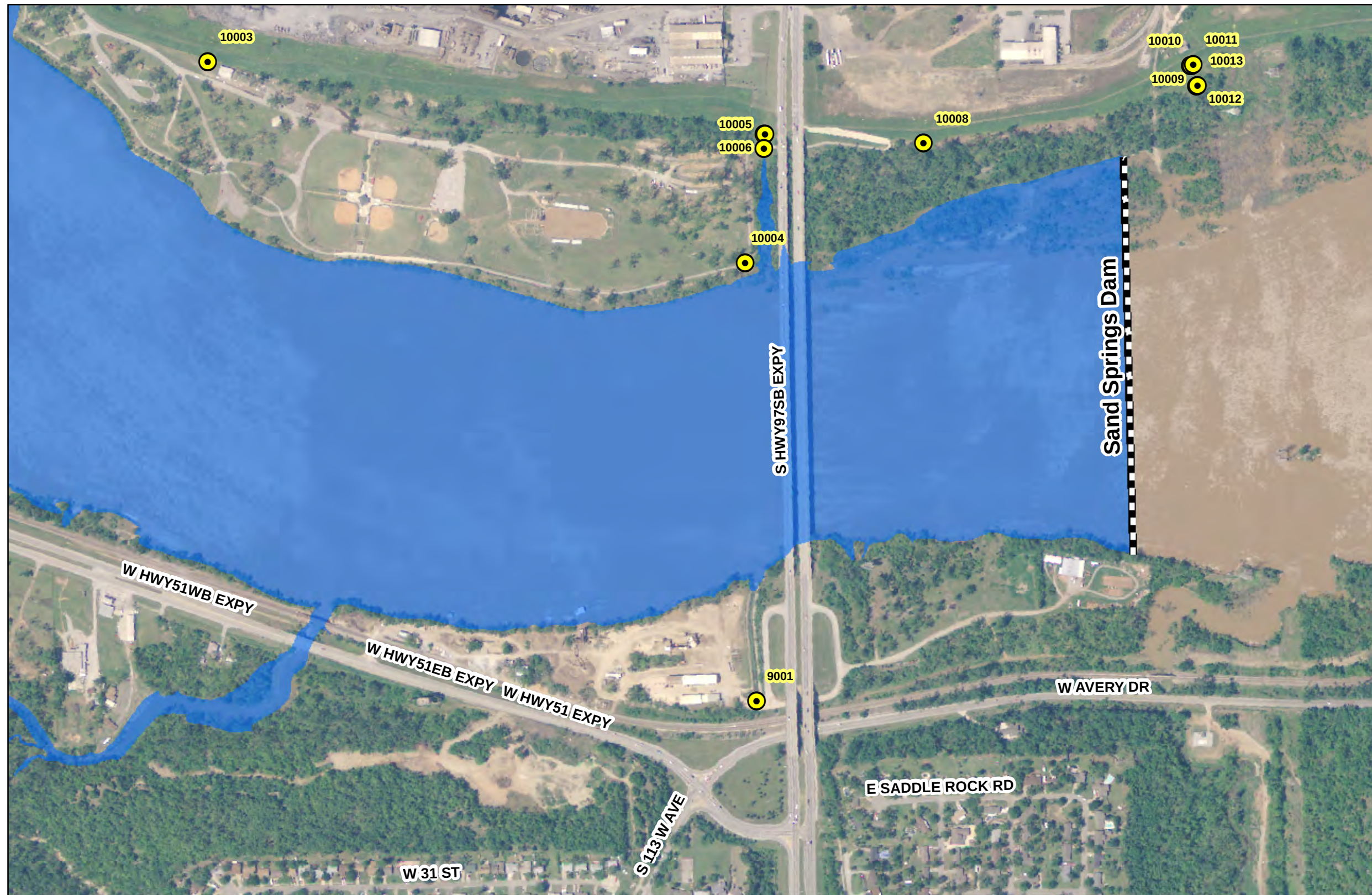


ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN SURVEYED OUTFALLS



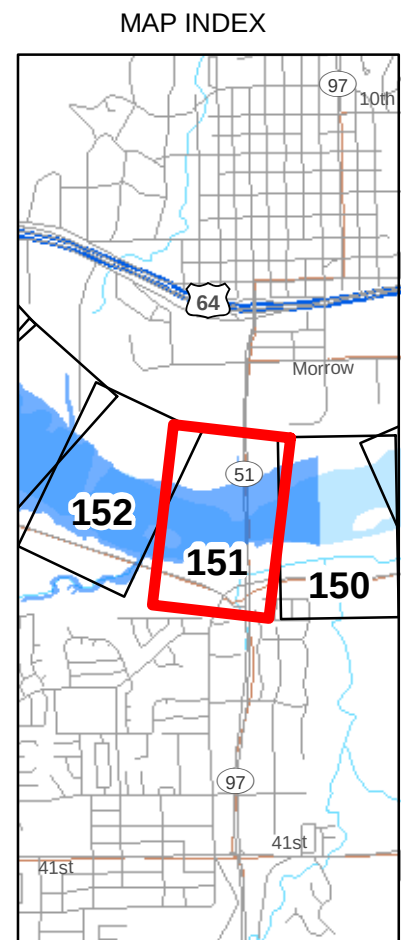
Date: Oct 27, 2009





Legend

- Surveyed Outfalls
- Proposed Low Water Dams
- Proposed / Existing Lake



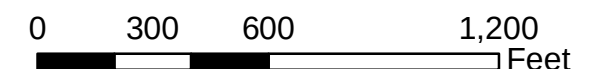
Map151



ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN SURVEYED OUTFALLS



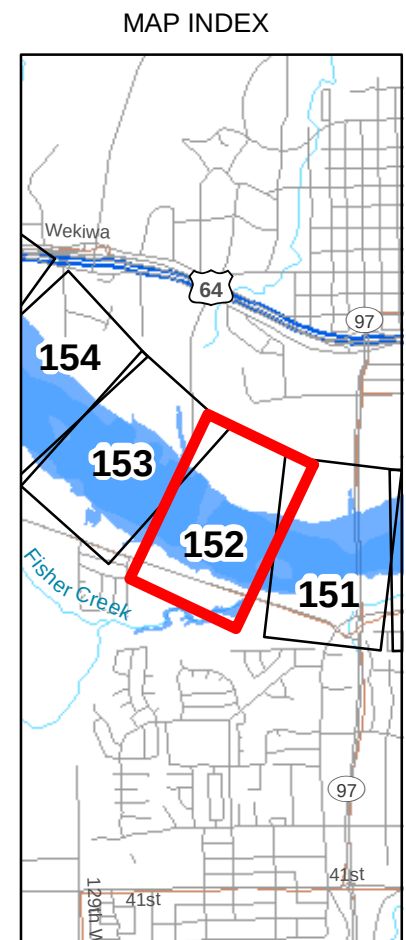
Date: Oct 27, 2009





Legend

- Proposed Low Water Dams
- Surveyed Outfalls
- Proposed / Existing Lake



Map152

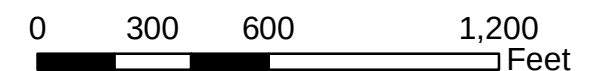


ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN

SURVEYED OUTFALLS



Date: Oct 27, 2009

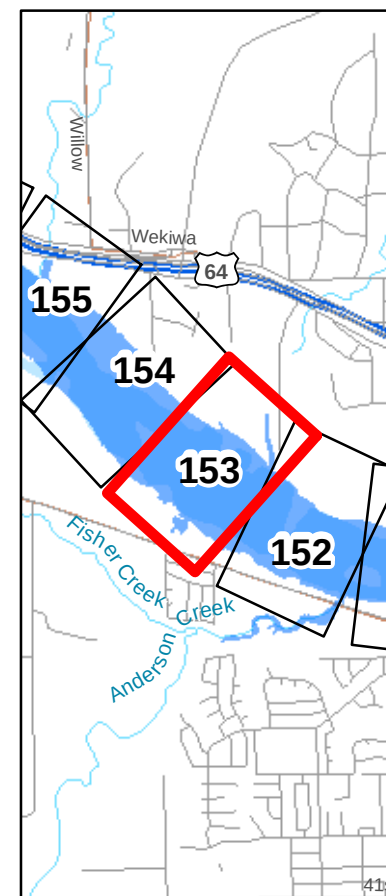




Legend

- Proposed Low Water Dams
- Surveyed Outfalls
- Proposed / Existing Lake

MAP INDEX



Map153

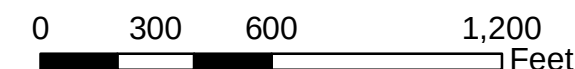


ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN

SURVEYED OUTFALLS



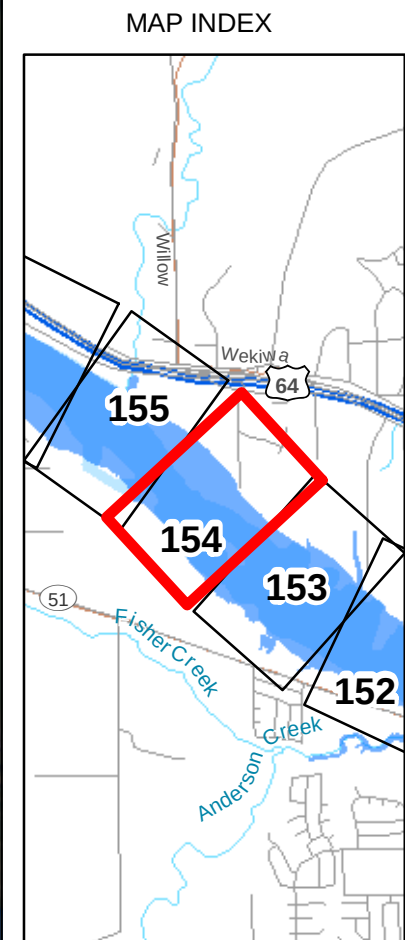
Date: Oct 27, 2009





Legend

- Proposed Low Water Dams
- Surveyed Outfalls
- Proposed / Existing Lake



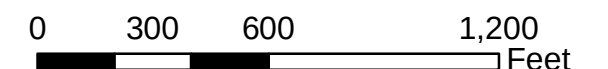
Map154



ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN **SURVEYED OUTFALLS**



Date: Oct 27, 2009

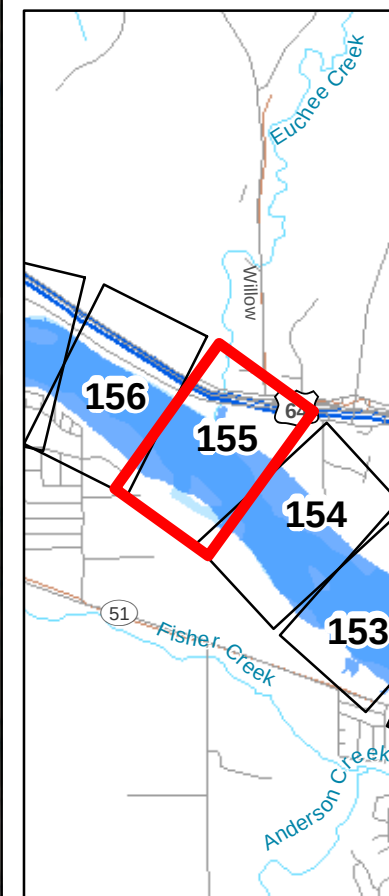




Legend

- Proposed Low Water Dams
- Surveyed Outfalls
- Proposed / Existing Lake

MAP INDEX



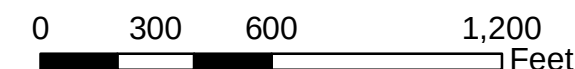
Map155



ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN SURVEYED OUTFALLS



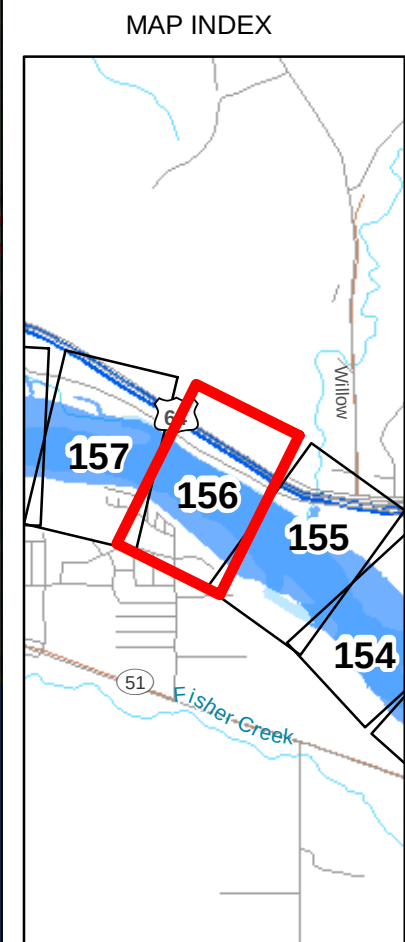
Date: Oct 27, 2009





Legend

- Proposed Low Water Dams
- Surveyed Outfalls
- Proposed / Existing Lake



Map156



ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN SURVEYED OUTFALLS



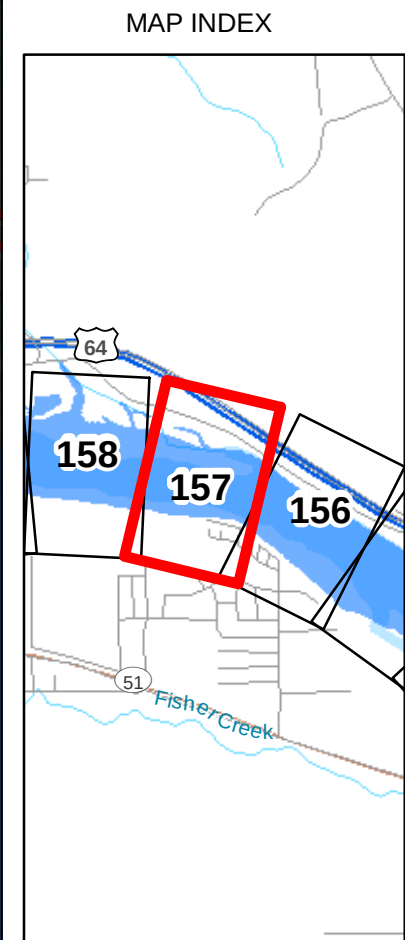
Date: Oct 27, 2009





Legend

- Proposed Low Water Dams
- Surveyed Outfalls
- Proposed / Existing Lake



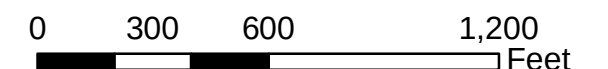
Map157



ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN SURVEYED OUTFALLS



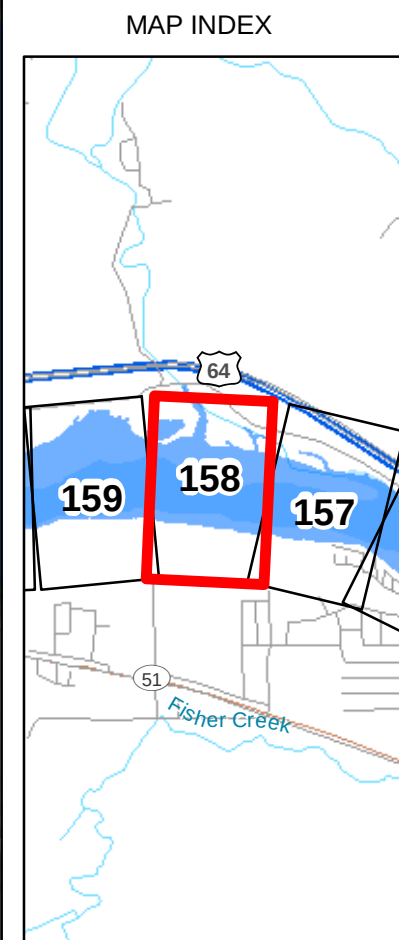
Date: Oct 27, 2009





Legend

- Proposed Low Water Dams
- Surveyed Outfalls
- Proposed / Existing Lake



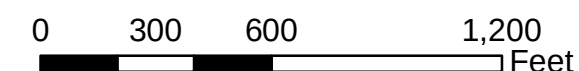
Map158



ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN SURVEYED OUTFALLS



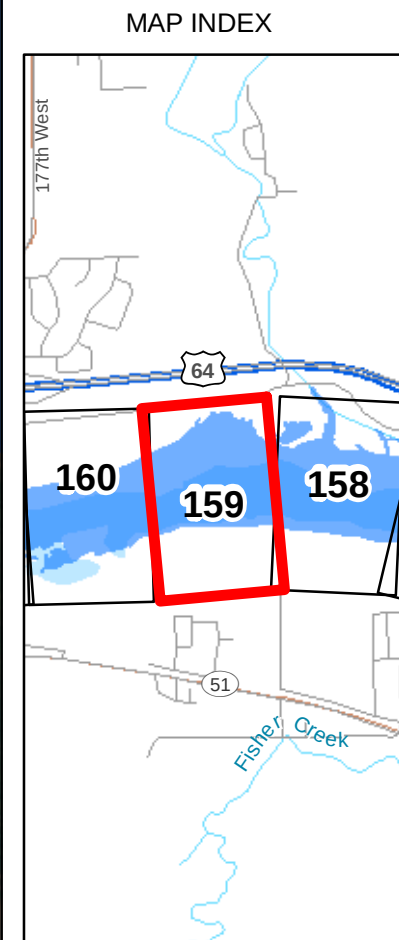
Date: Oct 27, 2009





Legend

-  Proposed Low Water Dams
-  Surveyed Outfalls
-  Proposed / Existing Lake



Map159



ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN SURVEYED OUTFALLS



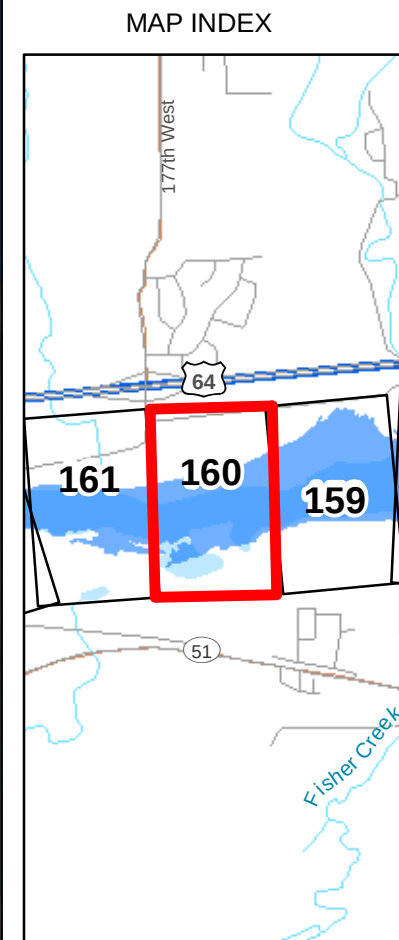
Date: Oct 27, 2009





Legend

- Proposed Low Water Dams
- Surveyed Outfalls
- Proposed / Existing Lake



Map160



ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN **SURVEYED OUTFALLS**



Date: Oct 27, 2009

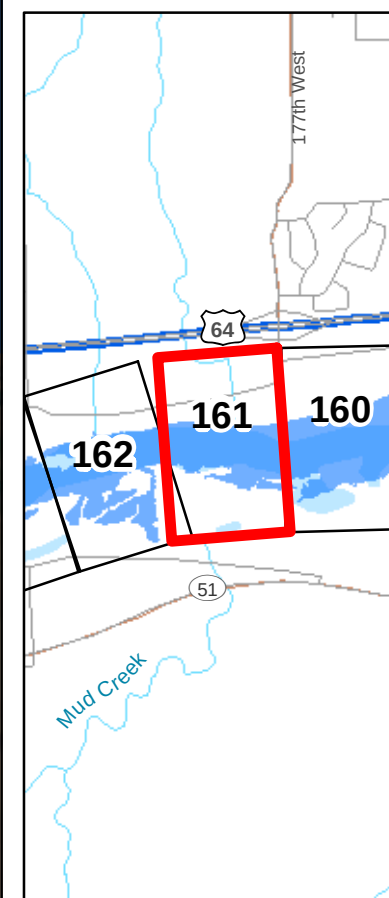




Legend

- Proposed Low Water Dams
- Surveyed Outfalls
- Proposed / Existing Lake

MAP INDEX



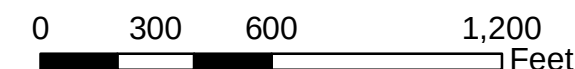
Map161



ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN SURVEYED OUTFALLS



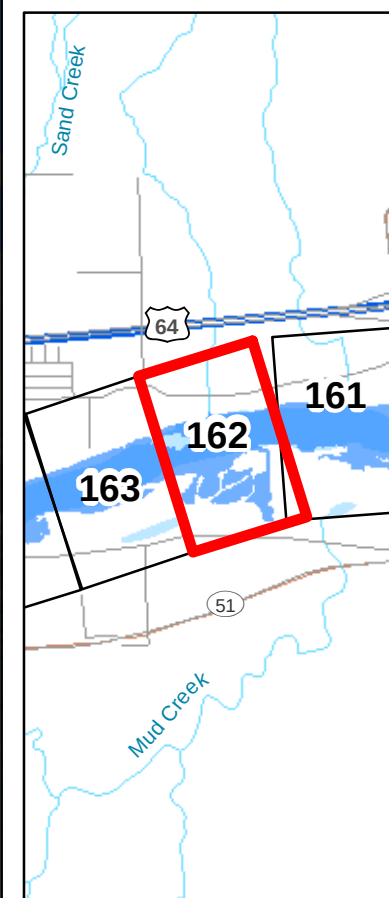
Date: Oct 27, 2009





- Legend**
- Proposed Low Water Dams
 - Surveyed Outfalls
 - Proposed / Existing Lake

MAP INDEX



Map162

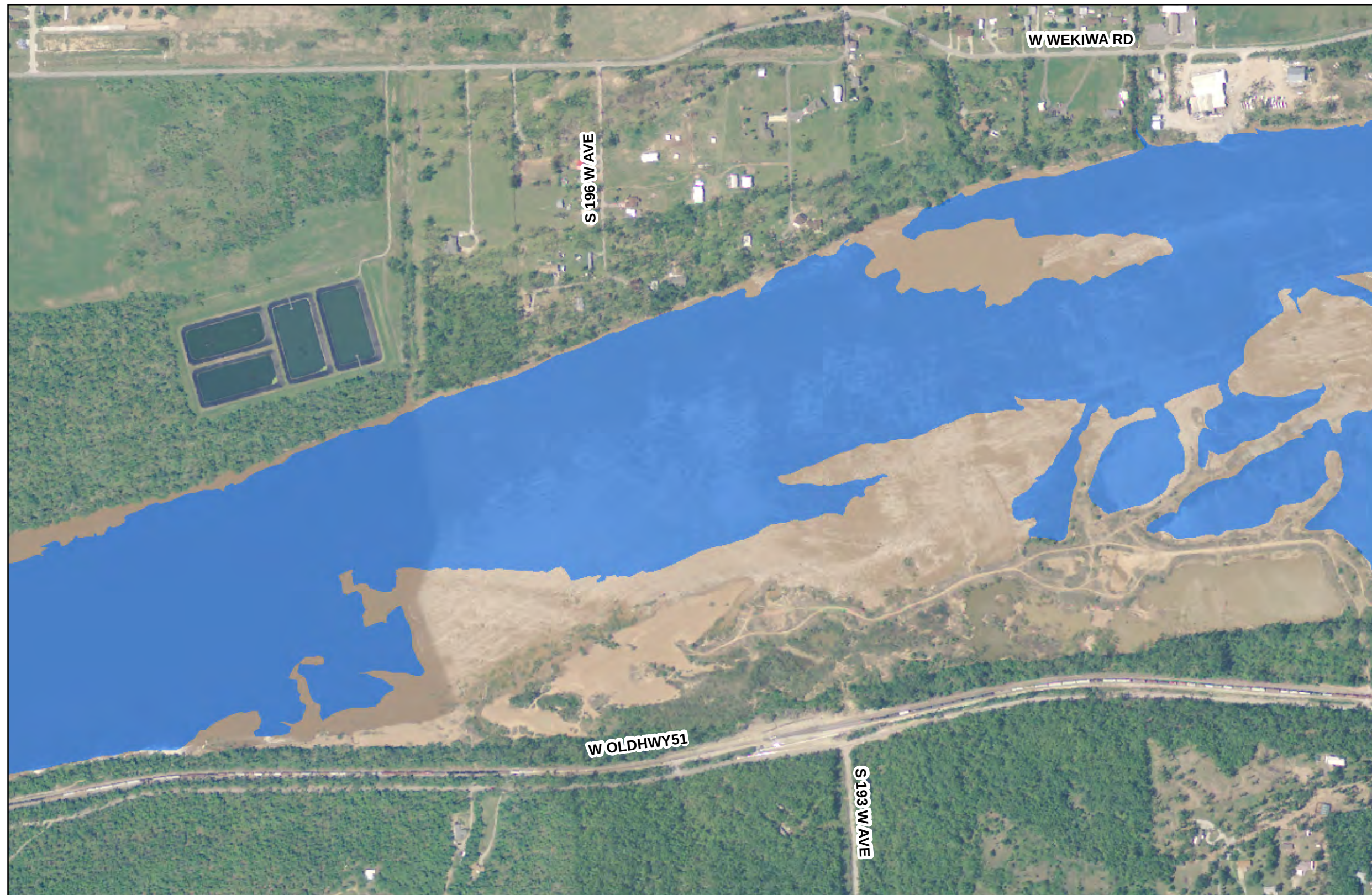


ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN SURVEYED OUTFALLS



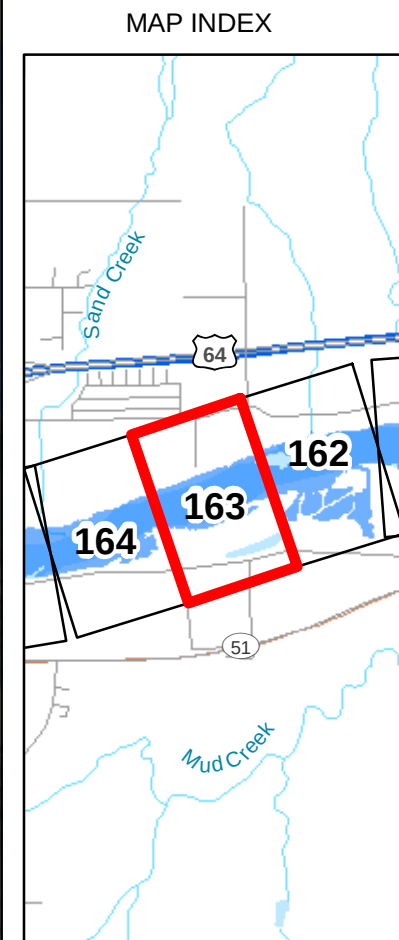
Date: Oct 27, 2009

0 300 600 1,200 Feet



Legend

- Proposed Low Water Dams
- Surveyed Outfalls
- Proposed / Existing Lake



Map163



ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN SURVEYED OUTFALLS



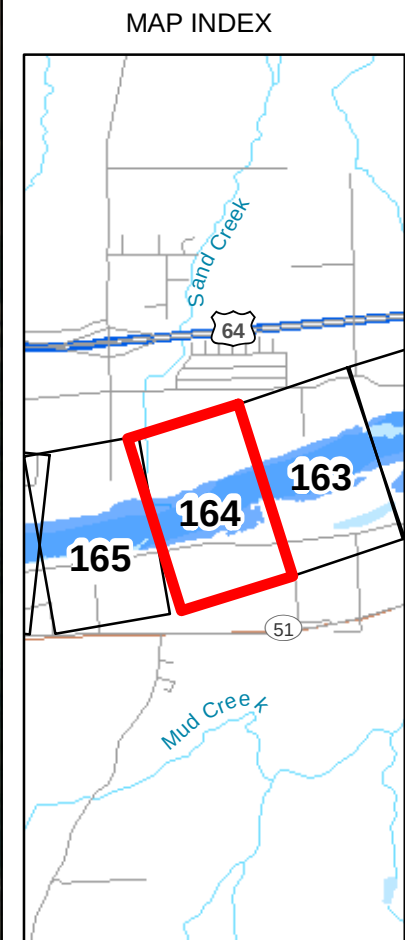
Date: Oct 27, 2009





Legend

- Proposed Low Water Dams
- Surveyed Outfalls
- Proposed / Existing Lake



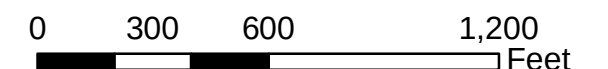
Map164



ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN SURVEYED OUTFALLS



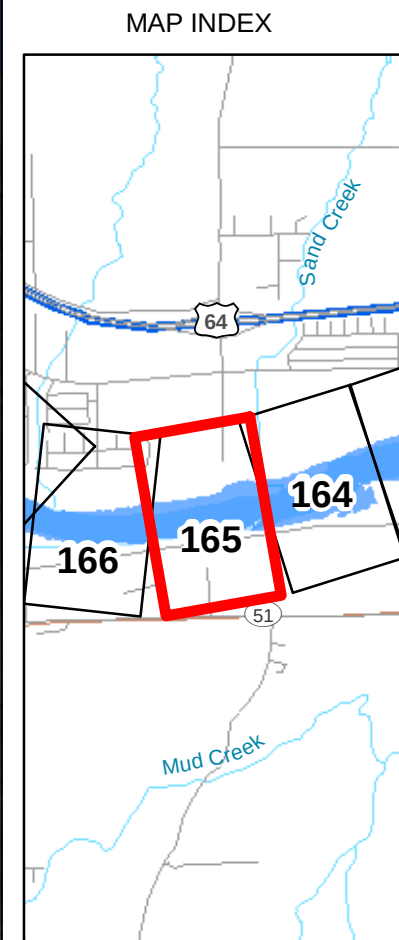
Date: Oct 27, 2009





Legend

- Proposed Low Water Dams
- Surveyed Outfalls
- Proposed / Existing Lake



Map165



ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN SURVEYED OUTFALLS

Date: Oct 27, 2009

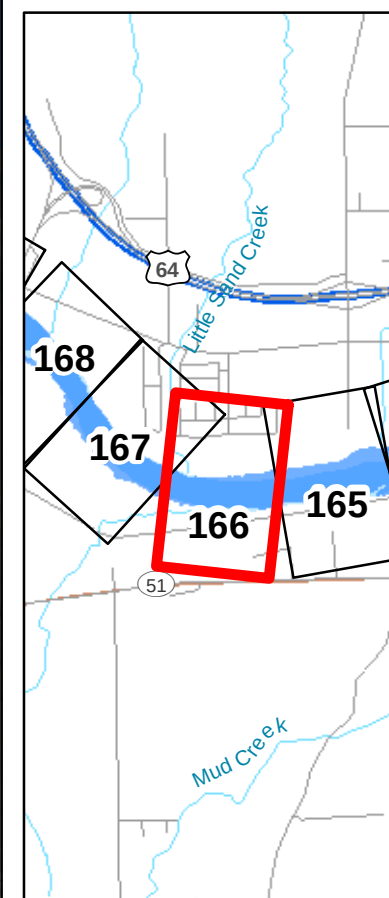
0 300 600 1,200 Feet



Legend

- Proposed Low Water Dams
- Surveyed Outfalls
- Proposed / Existing Lake

MAP INDEX



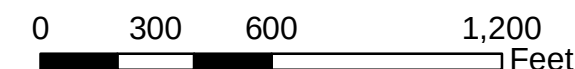
Map166



ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN SURVEYED OUTFALLS



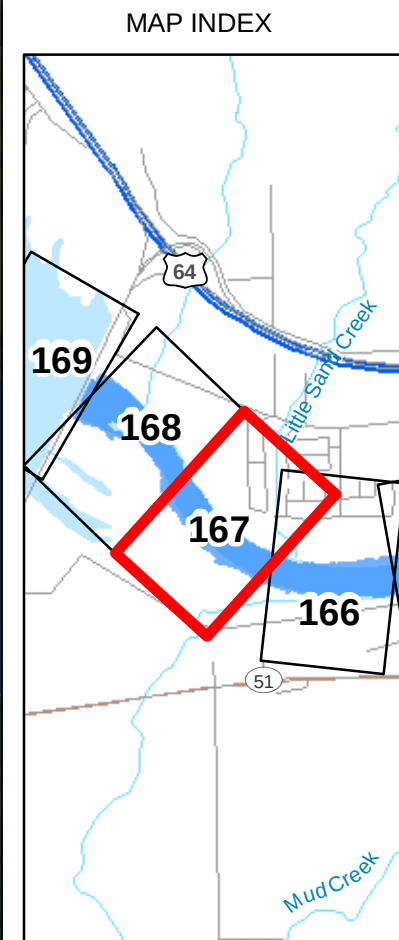
Date: Oct 27, 2009





Legend

- Proposed Low Water Dams
- Surveyed Outfalls
- Proposed / Existing Lake



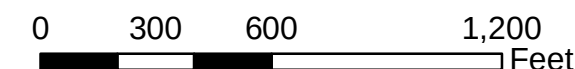
Map167



ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN **SURVEYED OUTFALLS**



Date: Oct 27, 2009

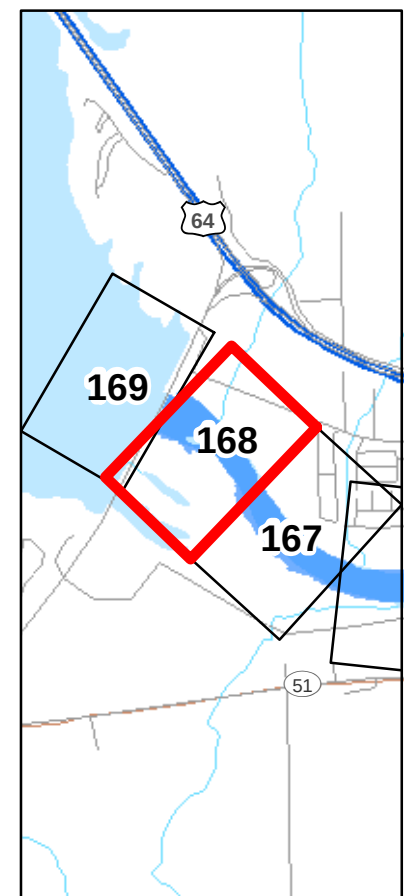




Legend

- Proposed Low Water Dams
- Surveyed Outfalls
- Proposed / Existing Lake

MAP INDEX



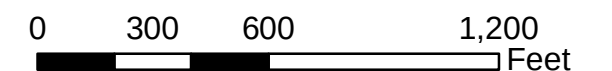
Map168



ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN SURVEYED OUTFALLS



Date: Oct 27, 2009

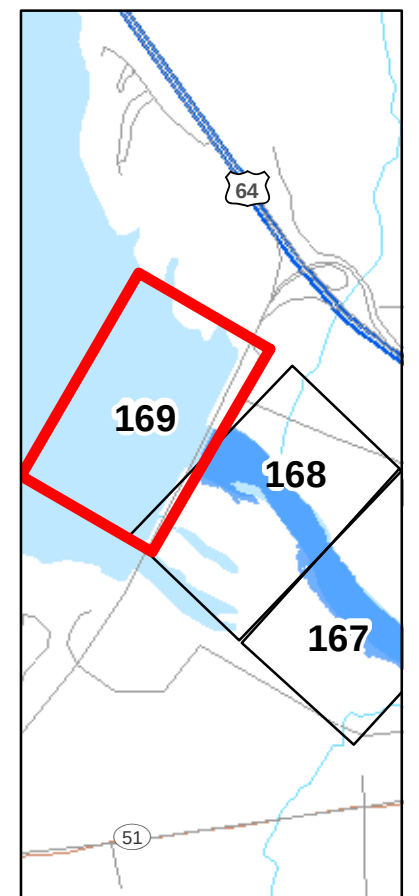




Legend

-  Proposed Low Water Dams
-  Surveyed Outfalls
-  Proposed / Existing Lake

MAP INDEX



Map169



ARKANSAS RIVER CORRIDOR STUDY - MASTER PLAN SURVEYED OUTFALLS



Date: Oct 27, 2009

