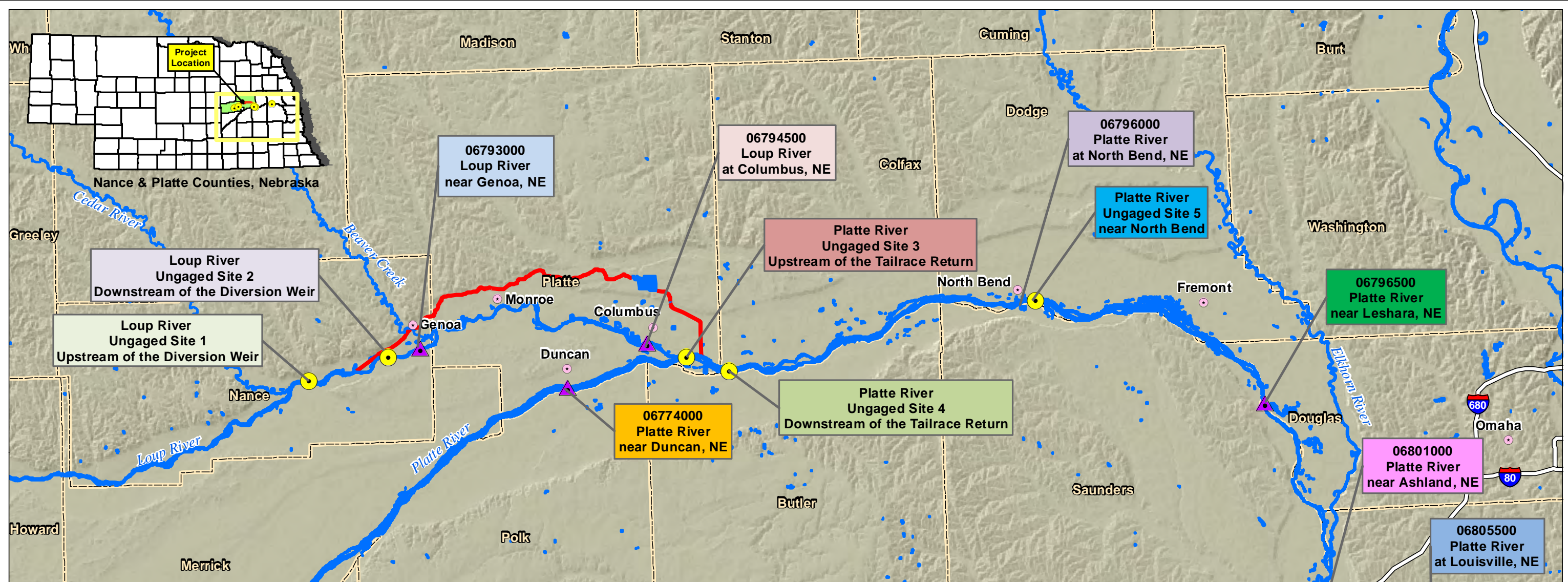


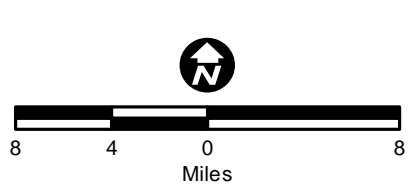
Z:\Projects\Loup_Power_District\37104_LPD_FERC_Relicensing\map_docs\mxd\Supplemental_Spatial_Analysis.mxd



Supplemental Spatial Analysis

	Loup River								Platte River														Flow (cfs)			
	Ungaged Site 1 U/S of Diversion ³		Ungaged Site 2 D/S of Diversion ³		Genoa ¹		Columbus ²		Duncan ¹		Ungaged Site 3 D/S of Loup Confluence U/S of Tailrace ³		Ungaged Site 4 D/S of Tailrace ³		North Bend ¹		Ungaged Site 5 Near North Bend ³		Leshara ¹		Ashland ¹			Louisville ¹		Flow (cfs)
	Qe	Qd	Qe	Qd	Qe	Qd	Qe	Qd	Qe	Qd	Qe	Qd	Qe	Qd	Qe	Qd	Qe	Qd	Qe	Qd	Qe	Qd		Qe	Qd	
Flow (cfs)	2,300	2,500	1,700	1,100	1,700	1,200	1,800	1,300	900	1,200	2,100	2,400	3,600	3,900	3,400	4,100	3,500	3,650	4,400	4,400	7,300	6,400	7,000	7,700	Flow (cfs)	
Flow Depth (ft)	1.4	1.5	1.5	1.2	1.6	1.5	1.8	1.6	0.7	0.8	1.3	1.4	1.7	1.7	1.6	1.7	1.5	1.6	1.8	1.8	2.6	2.5	2.8	2.9	Flow Depth (ft)	
Mean Velocity (ft/sec)	2.2	2.3	2.1	1.8	2.8	2.3	2.8	2.5	1.6	1.7	1.9	2.0	2.3	2.3	2.2	2.3	2.4	2.4	2.3	2.3	2.7	2.6	2.5	2.6	Mean Velocity (ft/sec)	
Flow Width (ft)	740	750	540	520	350	340	360	320	930	1,140	860	870	1,020	1,060	1,030	1,080	960	990	1,070	1,070	1,020	1,060	1,090	1,020	Flow Width (ft)	
Flow Area (ft ²)	1,040	1,100	800	600	500	390	460	360	670	950	1,110	1,210	1,720	1,800	1,600	1,810	1,480	1,540	1,880	1,880	2,950	2,620	2,750	2,950	Flow Area (ft ²)	

NOTES:
¹ USGS Gage Flows 2003 - 2009
² Synthetic Flows 2003 - 2009
³ Synthetic Flows 2003 - 2009 - From cross section measurements taken only in 2010



- Legend**
- City
 - ▲ USGS Gaging Station and Study Site
 - Ungaged Study Sites
 - Interstate
 - Stream/River
 - Loup Power Canal
 - Waterbody
 - County



Supplemental Spatial Analysis

Loup River Hydroelectric Project
 FERC Project No. 1256
 Study 1.0 - Sedimentation

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DATE	August 26, 2011
FIGURE	5-13