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INTRODUCTION

This report summarizes an open water creel survey of Lake Zumbro and a 24-mile reach of the Zumbro River, Olmsted and Wabasha Counties, during the summer of 2007 by the Minnesota Department of Natural Resources (MNDNR), Section of Fisheries. The surveys were conducted to provide additional information regarding the special regulations and fishery on the Zumbro River and to provide baseline data on the open water angling effort, catch and harvest for Lake Zumbro. A secondary goal was to obtain angling information on the muskellunge fishery. The creel survey was originally scheduled to run through the Labor Day weekend (Sept. 1, 2007), but due to heavy rainfall and extensive flooding on the lake and river, the survey was terminated early, on August 21, 2007.

LAKE ZUMBRO

Lake Zumbro is a 606-acre impoundment on the South Fork of the Zumbro River in Wabasha and Olmsted counties (Figure 1). The Lake Zumbro dam was built in 1919 and is a hydroelectric generating facility operated by Rochester Public Utilities. The Middle Fork Zumbro River is a tributary, entering the lake near the upper end. The lake is located within 15 miles of Rochester, MN, a large urban area with very little surface water available for recreation. Lake Zumbro is one of the few bodies of water in the area large enough to offer recreational boating and fishing, so it receives high levels of recreational use for boating and angling. Dense residential development on the lake adds to high recreational surface use.

STUDY AREA

## METHODS

The creel survey began on May 11, 2007, just prior to the opening of walleye/northern pike season and two weeks prior to open season for bass species. The creel design was a stratified random type that included a portion of each sampling day spent on the river and the lake with differences in how each was sampled. Only one seasonal strata (summer), was defined. Strata were further defined by day type (Weekday or Weekend/Holiday). All Weekend days were sampled, but only one of two

Holidays during the survey period was sampled (Memorial Day). Fourth of July was not sampled due to scheduling problems. The creel survey ended before the Labor Day holiday. The weekdays sampled were randomly selected, usually two days per week.

The fishing day was based on hours of daylight available and was defined as a 14-hour period. One of two time periods was sampled each selected day. Creel shift times were 7 hours long and were either Early (7:00 a.m. to 2 p.m.) or Late (2 p.m. to 9 p.m.). Early or late shift times were randomly selected. One 3-hour period during each sampling day was spent on the lake doing counts and interviews and the other 4 hours were spent on the river. The time period spent at each site was determined by a random start location and travel pattern (up or downstream). All sites were given an equal probability for start times. The clerk measured total length (TL) of harvested fish to the nearest 0.1 inch during interviews. Fish lengths were converted to millimeters (mm) for data entry and analysis with the Creel Analysis Software (CAS; Soupir and Brown, 2002).

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Lake Zumbro provides a quality fishery for black crappie and bluegill, as well as largemouth and smallmouth bass. Northern pike are available in fair numbers with some quality size fish present. Walleye and sauger are not present in the lake. Muskellunge have been stocked on a regular basis since 1994. Very little is known about the existing muskellunge population, as standard fisheries techniques have not been effective in sampling them. Angling pressure and success for muskellunge was believed to be low.

### Zumbro River

The study area included approximately 24 miles of the Zumbro River, beginning immediately downstream of the Lake Zumbro dam and continuing downstream to Millville, MN. The river reach immediately below the dam is commonly referred to as the "Plunge Pool." The study area is popular for angling, canoeing and tubing. A wide variety of game and non-game fish are available for anglers, but smallmouth bass are the primary gamefish species sought by anglers. A catch-and-release regulation for smallmouth bass is in effect from the Lake Zumbro dam downstream to the State Highway 63 road crossing in Zumbro Falls (approx. 12 miles). Muskellunge are also present in the river, having moved downstream after being stocked in Lake Zumbro. Most of the shoreline is privately owned. Public access sites are available at the CSAH 7 bridge crossing, and in Zumbro Falls, Hammond, and Millville. Private access sites are located at the Plunge Pool and a campground near Zumbro Falls. Canoe and tube rental is available at several private campgrounds within the study area.

### Lake Zumbro

The lake was treated as a roving type survey, with interviews and counts conducted by boat. Counts and interviews included "boat" and "bank" anglers. Interviews could be conducted for either incomplete or complete trips. On the lake, the clerk completed a count in either an up or down lake pattern during each sampling day. Counts were conducted either at the beginning or end of the shift, determined by either a late or early shift start. Each count took approximately 20 minutes to complete. A summary of strata statistics for the lake is presented in Table 2. Data from the lake creel survey were entered into the CAS program and analyzed as a "Roving" type survey.

### Zumbro River

The river portion of the creel utilized an access-based design. Five access sites, or "stations" were identified, including the plunge pool below the dam. All stations were sampled each sampling day. The plunge pool has historically been a very high use fishing area but recent changes in ownership significantly curtailed public fishing access. Because of the limited public access, no sampling time was assigned for conducting interviews at the plunge pool. However, angling use was observed from an overlook owned by Rochester Public Utilities property at the dams' electrical generating station. Therefore, the only information collected from the plunge pool was counts of angler use (bank and boat anglers). Ten minutes each day were allotted to conduct counts at the plunge pool. The creel clerk spent approximately 50 minutes at each of the other four stations each day and counted and interviewed boat and bank anglers at each site. Boat anglers were counted if they started or ended their trip at that station or passed by it during the time spent at each site. Bank anglers were only counted if they were within

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sight of the access point during the time period. This creel design likely underestimated bank angling pressure compared to previous creel surveys that included bank anglers anywhere they were observed along the river (Hayes 1988, Schmidt 2000). Interviews were conducted for either incomplete or complete trips. All anglers observed during the time spent at each site were included in the count, and the counts at each site were considered "instantaneous counts" for analysis purposes. Pressure estimates were calculated for each individual sampling site and summed for total pressure estimates. The river survey data was entered in the CAS program and analyzed as an "Aerial" type survey.

## RESULTS AND DISCUSSION – Lake Zumbro

### Angling Effort

Angling effort on Lake Zumbro was estimated for "boat" and "bank" angling (Table 3). Total estimated boat angling pressure (angler hours) during the creel survey period was 25,158 hours and estimated bank angling pressure was 6,312 hours. Total estimated fishing pressure per acre (boat and bank) on Lake Zumbro for the creel season was 50.3 hours/acre. For comparison, the statewide mean on similar lakes (Lake Class 25, 1951 - 2003) for the "summer" period is 33.1 hours/acre (Cook and Younk 1994). Bank anglers were not separated by type (i.e. residential docks versus public fishing areas). The lake has a high number of homes with docks and only a few public shore-angling areas, so it is assumed most bank angling pressure was from homeowner's docks.

Anglers targeting "Any species" accounted for most of the fishing pressure (28%), followed by anglers targeting bluegill and black crappie specifically (22% and 19%, respectively). Anglers targeting "panfish" collectively accounted for an additional 12%

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of pressure. Anglers targeting "bass" (smallmouth and largemouth combined) accounted for an additional 12% of the targeted pressure. Only one angler was targeting muskellunge at the time of the interview, although other anglers indicated they have fished for them in the lake. One party of anglers indicated they were targeting walleye, which are not present in the lake. Primary and secondary species sought are presented in Tables 4 and 5.

#### Catch and Harvest

Catch rates of all anglers for bluegill and black crappie were 0.61 and 0.25 fish per hour, respectively. Catch rates for anglers specifically targeting bluegill were 3.77/hr and 1.48/hr for anglers targeting black crappie. Anglers often lumped smallmouth and largemouth bass species together during interviews and catch rates of all anglers for "bass spp." was 0.13 fish per hour. Catch rates of all anglers for smallmouth and largemouth individually were 0.12 and 0.05 fish per hour, respectively. Catch rates of anglers targeting "bass spp." were 1.41 fish per hour. Catch rates of anglers specifically targeting bass were higher for smallmouth bass (1.24/hr) than for largemouth bass (0.61/hr). Catch rates were generally higher for boat anglers than bank anglers. Angler catch, harvest and release rates and comparison to the Lake Class 25 "summer" mean are presented in Tables 6 - 8.

Bluegill and black crappie accounted for the largest portion of the harvest during the summer creel season (Tables 9, 10). Anglers caught an estimated 18,329 bluegill during the creel season, of which an estimated 9,275 (51%) were harvested. Mean length of harvested bluegill was 186 mm (7.3 inches). An estimated 6,980 black crappie were caught and the harvest estimate was 3,717 fish (53%). Mean length of harvested black

crappie was 250 mm (9.8 inches). Length distribution and mean lengths and weights of harvested fish are presented in Tables 11 and 12.

#### Angler Demographics

Information was collected regarding angler age, gender and distance traveled (Appendix A). Males comprised 80% of anglers and nearly 70% of the anglers were between the ages of 21 and 50. Nearly 50% of the anglers were from Rochester, MN.

#### Angling Questions

Anglers were asked a series of questions regarding the muskellunge fishery in Lake Zumbro (Appendix B). Question 1 asked if the anglers knew muskellunge were present/stocked in Lake Zumbro. A "No" response resulted in no further questions. If anglers responded "Yes", they were then asked if they had ever fished for muskellunge in Lake Zumbro. Approximately 23 of the anglers interviewed knew that muskellunge had been stocked. Of the anglers who knew they were present, approximately 10% had fished for muskellunge. Anglers that indicated they had fished for muskellunge were then asked if they had ever caught a muskellunge in Lake Zumbro. Nine percent of anglers who said they had specifically fished for muskellunge indicated they had caught at least one muskellunge in Lake Zumbro.

### RESULTS AND DISCUSSION – Zumbro River

#### Angling Effort

Angling effort by "boat" and "bank" anglers was estimated for each station on the surveyed reach of the Zumbro River. Total estimated fishing pressure (all stations)

during the creel survey period was 2,625 angler-hours from boat anglers and 2,789 angler-hours from bank anglers. Bank angling estimates only included anglers in the immediate vicinity of each sampling station. Since the clerk was unable to contact anglers in the plunge pool the only information available from that site were angler counts. To calculate a pressure estimate for boat angling in the plunge pool, we used the mean number of anglers per boat calculated from a 1999 creel survey of that area (Schmidt 2000). Total fishing pressure estimated in the plunge pool station was 1,948 angler-hours, which was higher than estimates at all other creel stations (Table 14). However, the estimated fishing pressure in the plunge pool station was substantially lower than observed in previous creel surveys. Hayes (1988), estimated fishing pressure in the plunge pool station during the late 1980's ranging from 6,000 to 9,000 angler-hours for the creel season. A creel survey in 1999 estimated total fishing pressure in the plunge pool of 5,247 angler-hours (Schmidt 2000). The reduction in fishing pressure in the plunge pool is the result of ownership changes and operating procedures at the private campground bordering this area. The total fishing pressure estimate for the entire surveyed reach for the season was 5,414 hours.

Anglers targeting smallmouth bass accounted for most of the fishing pressure (52%), and anglers fishing for "Any species" accounted for an additional 25%. Of the anglers that indicated they were fishing for a secondary species, 67% indicated they were targeting channel catfish. Angler's species preferences are presented in Table 15.

#### Catch and Harvest

Catch, harvest, and release rates were calculated for all stations except the plunge pool (Table 16). Overall catch rates for all fish ranged from 0.17 to 1.33 fish per hour.

Catch rates of smallmouth bass for all anglers ranged from 0.17 to 1.15 fish per hour. Catch rates of anglers specifically targeting smallmouth bass ranged from 2.17 to 4.72 fish per hour. Anglers caught an estimated 1,917 smallmouth bass during the survey, with another 450 "bass spp." reported (Table 17). Largemouth bass are present in low numbers in the river, but it's likely that most of the "bass spp." reported were smallmouth bass. An estimated 31 muskellunge were caught during the survey period. Of the anglers interviewed, only sucker species were reported harvested during the creel survey.

#### Angler Demographics

Information was collected regarding angler age, gender and distance traveled (Appendix D). Angler demographics were similar to those on the lake. Males comprised 86% of the anglers, 81% of the anglers were between the ages of 21 and 50, and a high number were from the local area. Over 40% of the anglers were from Rochester, MN.

#### Angling Questions

Anglers were asked a series of questions regarding the fishery in the Zumbro River (Appendix E). Question #1 asked if the anglers were aware of the catch and release regulation for smallmouth bass from the dam downstream to Zumbro Falls. If anglers responded "Yes", they were then asked their opinion of the regulation (Like, Dislike, Don't care). In response to Question 1, 76% of the anglers surveyed were aware of the regulation. Of the anglers that were asked Question 2 (only anglers that were aware of the regulation), 95% responded that they "Liked" the regulation. No anglers "Disliked" it and 5% "Didn't Care". Question 3 asked anglers if they have ever fished for muskellunge in the Zumbro River. Nearly one-third of the anglers indicated they had fished for muskellunge.

Figure 1. Map of Study Area. Lake Zumbro and Zumbro River Creel Survey.

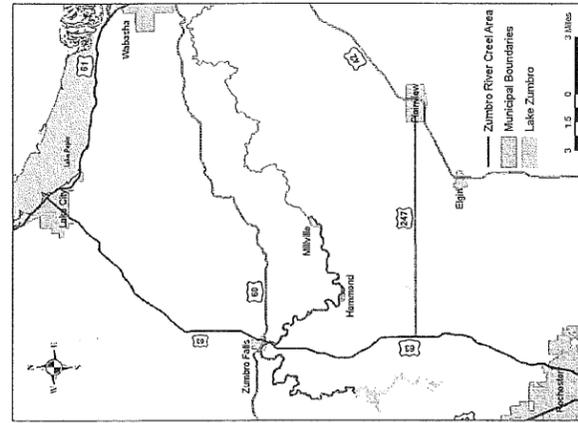


Figure 2. Lake Zumbro.

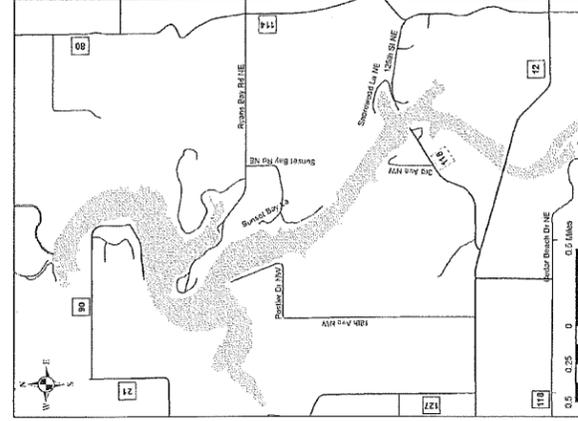


Figure 3. Zumbro River Creel Area and Station Locations

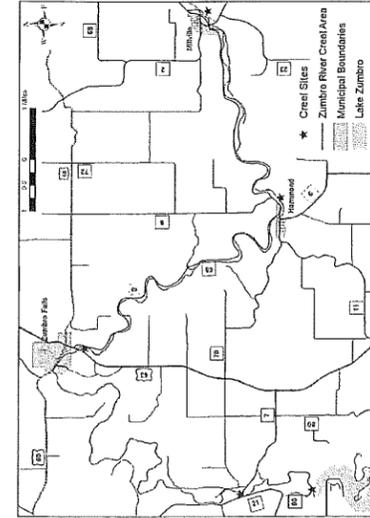


Table 1. Selected characteristics of Lake Zumbro, MN.

Characteristic	DOW #
Lake class	65-0004-00
Total surface area (acres)	25
Maximum depth (ft)	606
Percent littoral area	43
	43

Table 2. Summary of strata statistics for the summer creel survey of Lake Zumbro, MN. May 11 – August 21, 2007. Standard errors are in parentheses.

	Stratum (Season)
Start date of stratum	05/11/07
End date of stratum	08/21/07
Length of fishing day (hr)	14
Number of anglers	41
Number of fish sampled	30
Number of fish sampled	71
Number of counts	71
Best surface	25, 198 (2,735)
Angler hours	2,2 (0,2)
Mean party size	260
Number of interviews	3
Number of completed trips	4, 89 (0,69)
Mean completed trip length (hrs)	
Bank anglers	5,312 (71,0)
Angler hours	1,8 (0,4)
Number of interviews	0 (-)
Number of completed trips	---
Mean completed trip length (hrs)	---

Table 3. Creel season fishing pressure estimates for Lake Zumbro, MN, May 11 – August 21, 2007.

Angler Type	Season	
	Angler-hours	SE
Boat anglers	26,168	2,735
Bank anglers	5,312	710
All anglers	30,470	3,005
Angler-hours per acre		
Boat anglers	41.5	4.5
Bank anglers	8.8	1.2
All anglers	50.3	5.0

Table 4. Primary and secondary species sought by anglers (%) in Lake Zumbro, MN, May 11 – August 21, 2007.

Species	Percent (%)	
	Primary	Secondary
Any species	38	4
Black crappie	12	10
Bluegill	19	34
Channel catfish	22	30
Common carp	0	1
Largemouth bass	1	1
Northern pike	<1	0
Panfish	12	7
Smallmouth bass	2	6
Sucker spp.	1	1
Walleye	<1	0
Interviews (n)	682	217
Secondary Responses	217	899
Total Responses	899	899

Table 5. Primary and secondary species sought (%) by angler type (boat and bank) in Lake Zumbro, MN, May 11 – August 21, 2007.

Species	Boat anglers		Bank anglers	
	Primary	Secondary	Primary	Secondary
Any spp.	28	4	18	5
Black crappie	13	10	15	29
Bluegill	19	34	5	42
Channel catfish	<1	1	8	8
Common carp	-	<1	3	29
Largemouth bass	1	1	31	-
Northern pike	<1	0	15	-
Panfish	10	6	-	-
Smallmouth bass	2	1	-	-
Sucker spp.	1	5	-	-
Interviews (n)	643	39	39	7
Secondary Responses	210	7	7	26
Total Responses	853	46	46	46

Table 6. Angler catch, harvest and release rates (fish/hour) for Lake Zumbro, MN, May 11 – August 21, 2007.

Estimate Type	Species	Catch			Harvest			Release		
		Catch/hour	SE	N	Harvest/hour	SE	N	Release/hour	SE	N
All Anglers	Black crappie	0.135	0.045	0.002	0.001	0.133	0.045	0.001	0.133	0.045
	Black bullhead	0.015	0.009	0.001	0.002	0.012	0.002	0.012	0.002	0.005
	Bluegill	0.229	0.108	0.122	0.053	0.107	0.076	0.297	0.066	0.066
	Channel catfish	0.602	0.160	0.304	0.094	0.001	0.031	0.031	0.013	0.013
	Largemouth bass	0.043	0.018	0.002	0.002	0.041	0.017	0.002	0.010	0.006
	Northern pike	0.013	0.008	0.003	0.002	0.010	0.002	0.010	0.002	0.002
	Panfish	0.032	0.032	0.000	0.000	0.032	0.032	0.032	0.032	0.032
	Smallmouth bass	0.119	0.031	0.002	0.001	0.117	0.031	0.117	0.031	0.031
	Sucker spp.	0.018	0.011	0.000	0.000	0.018	0.011	0.018	0.011	0.011
	Walleye	1.238	0.295	0.438	0.127	0.801	0.175	0.801	0.175	0.175
Overall										
Targeting anglers	Black crappie	1.408	2.831	0.000	0.000	1.408	2.831	0.000	0.000	1.408
	Black bullhead	1.463	1.362	0.798	1.137	0.665	0.722	0.665	0.722	0.665
	Bluegill	3.770	3.881	2.083	3.059	1.687	2.269	1.687	2.269	1.687
	Channel catfish	0.401	0.711	0.134	0.237	0.267	0.474	0.267	0.474	0.267
	Largemouth bass	0.611	1.303	0.000	0.000	0.611	1.303	0.000	0.000	0.611
	Northern pike	0.127	0.231	0.016	0.012	0.111	0.230	0.111	0.230	0.111
	Smallmouth bass	1.242	1.988	0.031	0.046	1.212	2.022	1.212	2.022	1.212
	Sucker spp.	0.064	0.076	0.000	0.000	0.064	0.076	0.064	0.076	0.064
	Walleye									

Table 7. Catch, harvest and release rates (fish/hour) by angler type for Lake Zumbro, MN, May 11 – August 21, 2007.

Type of Fishing	Species	Catch			Harvest			Release		
		Catch/hour	SE	N	Harvest/hour	SE	N	Release/hour	SE	N
Boat anglers	Black crappie	0.16	0.06	0.03	0.00	0.16	0.06	0.03	0.16	0.06
	Black bullhead	0.02	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.01
	Bluegill	0.37	0.19	0.14	0.08	0.32	0.12	0.05	0.32	0.12
	Channel catfish	0.02	0.01	0.00	0.00	0.02	0.01	0.01	0.01	0.01
	Largemouth bass	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.01
	Northern pike	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.01
	Panfish	0.03	0.04	0.00	0.00	0.04	0.04	0.04	0.04	0.04
	Smallmouth bass	0.14	0.04	0.00	0.00	0.14	0.04	0.14	0.04	0.04
	Sucker spp.	0.02	0.02	0.00	0.00	0.02	0.02	0.02	0.02	0.02
Overall		1.46	0.38	0.22	0.15	0.94	0.25	0.94	0.25	0.25
Bank anglers	Black crappie	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.01
	Black bullhead	0.02	0.01	0.00	0.00	0.02	0.01	0.02	0.01	0.01
	Bluegill	0.06	0.06	0.01	0.01	0.06	0.06	0.06	0.06	0.06
	Channel catfish	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.01
	Largemouth bass	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.01
	Northern pike	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.01
	Smallmouth bass	0.01	0.01	0.00	0.00	0.01	0.01	0.01	0.01	0.01
Overall		0.18	0.07	0.01	0.01	0.14	0.02	0.14	0.02	0.02

Table 8. Comparison of angler catch and harvest rates (fish/hour) for Lake Zumbro, MN, May 11 – August 21, 2007, to Statewide Lake Class 25 Summer Mean.

Estimate Type	Species	Lake Zumbro mean		Lake class mean	
		Catch/hour	Harvest/hour	Catch/hour	Harvest/hour
All Anglers	Black crappie	0.043	0.001	0.001	0.012
	Black bullhead	0.020	0.000	0.000	0.002
	Bluegill	0.132	0.007	0.007	0.002
	Channel catfish	0.053	0.004	0.004	0.004
	Largemouth bass	0.002	0.002	0.122	0.026
	Northern pike	0.013	0.003	0.140	0.091
	Smallmouth bass	0.119	0.002	0.012	0.002
Targeting Anglers	Black crappie	1.463	0.788	0.841	0.677
	Bluegill	3.770	2.083	2.059	1.324
	Channel catfish	0.401	0.134	0.369	0.305
	Largemouth bass	0.611	0.134	0.369	0.305
	Northern pike	0.127	0.016	0.323	0.129
	Smallmouth bass	1.242	0.031	0.172	0.004

Table 9. Estimated numbers of fish caught, harvested and released for creel season, Lake Zumbro, MN, May 11 – August 21, 2007.

Estimate Type	Species	Catch			Harvest			Release		
		N	SE	N	N	SE	N	N	SE	
All Anglers	Black crappie	4,109	1,146	49	36	4,060	1,144	4,109	1,146	
	Black bullhead	386	215	21	21	365	214	386	215	
	Bluegill	6,741	1,277	3,591	975	3,144	778	6,741	1,277	
	Channel catfish	18,210	3,751	9,195	2,312	9,015	1,857	18,210	3,751	
	Largemouth bass	371	169	74	38	497	157	371	169	
	Northern pike	128	117	91	47	1,164	404	128	117	
	Panfish	882	932	0	0	882	932	882	932	
	Smallmouth bass	3,835	811	53	30	3,629	895	3,835	811	
	Sucker spp.	547	176	0	0	547	176	547	176	
	White bass	21	21	0	0	21	21	21	21	
	Yellow perch	37	37	0	0	37	37	37	37	
Overall		37,726	5,556	13,333	2,819	24,333	2,679	37,726	5,556	

Table 10. Estimated numbers of fish caught, harvested and released by angler type for creel season, Lake Zumbro, MN, May 11 – August 21, 2007.

Type of Fishing	Species	Catch			Harvest			Release		
		N	SE	N	N	SE	N	N	SE	
Boat anglers	Black crappie	4,109	1,146	49	36	4,060	1,144	4,109	1,146	
	Black bullhead	386	215	21	21	365	214	386	215	
	Bluegill	6,741	1,277	3,591	975	3,144	778	6,741	1,277	
	Channel catfish	18,210	3,751	9,195	2,312	9,015	1,857	18,210	3,751	
	Largemouth bass	371	169	74	38	497	157	371	169	
	Northern pike	128	117	91	47	1,164	404	128	117	
	Panfish	882	932	0	0	882	932	882	932	
	Smallmouth bass	3,835	811	53	30	3,629	895	3,835	811	
	Sucker spp.	547	176	0	0	547	176	547	176	
	White bass	21	21	0	0	21	21	21	21	
	Yellow perch	37	37	0	0	37	37	37	37	
Overall		36,765	5,656	13,134	2,739	23,631	2,653	36,765	5,656	
Bank anglers	Black crappie	370	218	119	73	119	152	370	218	
	Bluegill	119	50	80	30	440	152	119	50	
	Channel catfish	443	302	0	0	443	302	443	302	
	Largemouth bass	80	83	0	0	80	83	80	83	
	Northern pike	40	16	0	0	40	16	40	16	
	Smallmouth bass	40	53	0	0	40	53	40	53	
Overall		960	419	199	62	761	301	960	419	



APPENDICES

Appendix A. Angler demographics: Angler Gender (%) and % per Age Group, Lake Zumbro, MN. May 11 – August 21, 2007.

Male	Female
80	20

Age group	% of Total
0-10	8
11-20	12
21-30	31
31-40	21
41-50	17
51-60	10
61+	1

Appendix B. Questions/responses (% of Total) to muskellunge angling questions, Lake Zumbro, MN. May 11 – August 21, 2007. N = 381.

Q. 1). Are you aware that muskellunge have been stocked into Lake Zumbro?  
 Yes – 67%  
 No – 33%

Q. 2). If yes, have you ever fished for muskellunge in Lake Zumbro?  
 Yes – 10%  
 No – 90%

Q. 3). If yes, have you ever caught a muskellunge in Lake Zumbro?  
 Yes – 9%  
 No – 91%

Appendix C. Regression parameters for length-weight regression equations used to estimate fish weight from total length measurements. Equation takes the form:  $\log_{10}W = a + b \log_{10}TL$ , where  $W$  is weight (gm) and  $TL$  is total length (mm).

Species	Factor a	Factor b
Black crappie *	-5.1776	3.1708
Bluegill *	-5.4755	3.3894
Channel catfish	-5.9654	3.3485
Largemouth bass	-5.2614	3.1966
Northern pike	-4.9535	2.9241
Smallmouth bass	-5.2390	3.1549

\* Bluegill and black crappie parameters were calculated from fish captured in Lake Zumbro during a survey in summer 2007. Regression parameters for other species are from Lake Pepin, MN. Sample size from Lake Zumbro was considered to low for other species.

Appendix D. Angler demographics: Angler Gender (%) and % per Age Group, Zumbro River, MN. May 11 – August 21, 2007.

Male	Female
86	14

Age group	% of Total
0-10	5
11-20	11
21-30	31
31-40	39
41-50	11
51-60	3
61+	-

Appendix E. Responses to angling questions on the Zumbro River, MN. May 11 – August 21, 2007

Q. 1) Are you aware of the catch and release regulation for smallmouth bass on the Zumbro River from the dam downstream to Zumbro Falls? (Yes or No)

Q. 2) If Yes, What do you think of the regulation? (Like, Dislike, Don't Care)

Q. 3) Have you ever fished for muskellunge in the Zumbro River? (Yes or No)

	% (n)		% (n)	
	N	Yes	No	Don't Care
Question #1	25	76 (19)	24 (6)	
Question #2	19	95 (18)	0	5 (1)
Question #3	25	32 (8)	68 (17)	

ACKNOWLEDGEMENTS

I would like to thank the creel clerk, Jessica Schein for collecting the survey data and Kevin Stauffer for editorial assistance and review. Jon Meerbeek's assistance with set-up and use of the CAS program was invaluable. I would especially like to thank Alan Schmidt for designing and initiating this creel survey.

Minnesota  
F-29-R(P)-27  
Study IV  
Job 796  
March 2008

**REFERENCES**

Cook, Mark F., and Younk, Jerry A. A Historical Examination of Creel Surveys from Minnesota's Lakes and Streams. Minnesota Department of Natural Resources, Section of Fisheries Investigational Report 464, St Paul.

Hayes, Michael. 1988. Evaluation of Special Regulations for Smallmouth Bass on the Zumbro River. Minnesota Department of Natural Resources, Section of Fisheries Completion Report. Study 5, Job 106.

Schmidt, Alan E. 2000. Zumbro River Creel Survey, Lake Zumbro Dam to Hammond, May 29 to October 12, 1999. Minnesota Department of Natural Resources, Section of Fisheries Completion Report. Study 4, Job 504.

Soupir, C. A., and M.L. Brown. 2002. Creel Application Software (CAS). Creel survey data entry and analysis software. Pages 42 - 101 in Comprehensive evaluation and modification of the South Dakota angler creel program. South Dakota Department of Game, Fish, and Parks, Wildlife Division, Completion Report 02-10, Pierre.

MINNESOTA DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF FISH AND WILDLIFE

LAKE ZUMBRO AND LOWER ZUMBRO RIVER CREEL SURVEY

MAY - AUGUST 2007

Prepared by: Randy Demmer Fisheries Specialist 5-28-08 Date  
 Approved by: [Signature] Area Fisheries Supervisor 5-28-08 Date  
 Approved by: [Signature] Regional Fisheries Supervisor 06/09/08 Date

**Lehman, Nicole**

**From:** Lee Terry [lee.terry@CO.OLMSTED.MN.US]  
**Sent:** Friday, April 22, 2011 12:54 PM  
**To:** Nicole Lehman (nlehman@mcghiebetts.com)  
**Subject:** Lake Zumbro  
**Attachments:** Lake Zumbro Use.pdf; Zumbro Creel Study IV Job 796.pdf

Nicole – this is the stuff I have related to Lake Zumbro and recreational use. The attached creel study is the basis for the summer fishing calculations. Terry

**From:** Lee Terry  
**Sent:** Friday, November 06, 2009 3:14 PM  
**To:** 'rfr9@pitel.net'; 'Bill Angerman'  
**Cc:** 'Ron Fuller'  
**Subject:** RE: Calculating a financial value for Lake Zumbro recreation

I calculated a value using the MN DNR numbers for the state averages and the Lake Zumbro report:

MN acres of lake:	3,800,000
MN anglers:	2,300,000
MN angler expenditures:	\$1,800,000,000
MN acres/angler:	1.7
MN angler hrs/ac:	33.1
MN hrs/angler:	20.03
MN \$/angler/yr:	\$782
MN \$/angler/yr:	\$1,086 (also from DNR – from the same paragraph that estimates \$1.8B/yr/MN)

Lake Zumbro acres of lake:	606
LZ angler hrs/ac:	50.3
LZ angler hours:	30,482
LZ anglers (20.03hrs ea):	1521
LZ \$/yr (\$1,086 ea):	\$1,651,806

The analysis suggests that fishing alone accounts for \$1.6M in recreation each year and using the Trout Unlimited re-circulating dollars calculation, this represents more than \$3M of economic stimulus to local economies. Note that doesn't include the other recreational values. I would guess that boating and skiing would be at least double the fishing value. A conservative estimate for those might be \$6M, and we would have to add the camping and dining that aren't related to either fishing or boating. That might put the economic stimulus to local economies in the range of about \$10M/yr. Terry

**From:** Lee Terry  
**Sent:** Friday, November 06, 2009 2:22 PM  
**To:** 'rfr9@pitel.net'; 'Bill Angerman'  
**Cc:** 'Ron Fuller'  
**Subject:** Calculating a financial value for Lake Zumbro recreation

Ray and Bill -- Randy Demmer posed an important question today regarding the calculated value of recreation on Lake Zumbro. I would suggest that we calculate a value and use that value in all of our future correspondence. The trout folks have been very successful using that approach and while there appears to be a wide discrepancy between the DNR and Trout Unlimited estimates for regional trout streams, I've yet to hear anyone challenge the larger value that TU uses. Since the two estimates 4/28/2011

are stated differently, I'm not sure which number to use for comparison but the TU may be as much as 5 times greater (\$30M-\$48M vs \$150M) – see the summaries below.

From: DNR Division of Fisheries Strategic Plan for coldwater resources management in southeast Minnesota, 2004 – 2015.

August 8, 2003

Today, southeast Minnesota has 788 miles of cold water in 181 streams (MNDNR 2003). This resource provides a popular fishery, where an estimated 520,879 angler-days were recorded on these streams in 2001 (Vlaming and Fulton 2002). The economic value statewide of trout fishing in Minnesota streams, of which a major portion occurs in the southeast, accounts for over \$30 million in sales, with another \$18 million in income (Gartner, et al., 2002)

- Vlaming, J., and D. C. Fulton. 2002. Trout Angling in Southeastern Minnesota: A Study of Trout Anglers. Minnesota Cooperative Fish and Wildlife Research Unit, University of Minnesota, St. Paul. 103 pp.
- Gartner, W. C., L. L. Love, D. Erkkila, and D. C. Fulton. 2002. Economic Impact and Social Benefits Study of Coldwater Angling in Minnesota. Final Report for the Minnesota Department of Natural Resources, St. Paul, Minnesota. 126 pp.

From: 2009 LCCMR grant application for work on trout streams in SE MN.

Minnesota has more than 680 designated trout streams that represent a valuable natural resource with high economic, sport and esthetic importance. Fishing activities in trout streams annually provide more than \$150 million dollars in direct expenditures to local economies in Minnesota and \$654 million throughout the Driftless Region of MN, WI, IL and IA (Trout Unlimited, 2008). With re-circulating dollars this represent more than one-billion dollars of economic stimulus to local economies.

The recent Lake Zumbro report from DNR might provide the information needed for a calculation of fishing value for the lake (see below and attached).

From MN DNR Division Of Fish And Wildlife, Lake Zumbro And Lower Zumbro River Creel Survey May – Aug 2007, Randy Binder Results And Discussion – Lake Zumbro, Angling Effort

Angling effort on Lake Zumbro was estimated for “boat” and “bank” angling. Total estimated boat angling pressure (angler hours) during the creel survey period was 25,158 hours and estimated bank angling pressure was 5,312 hours. Total estimated fishing pressure per acre (boat and bank) on Lake Zumbro for the creel season was 50.3 hours/acre. For comparison, the statewide mean on similar lakes (Lake Class 25, 1951 - 2003) for the “summer” period is 33.1 hours/acre (Cook and Younk 1994). Bank anglers were not separated by type (i.e. residential docks versus public fishing areas). The lake has a high number of homes with docks and only a few public shore-angling areas, so it is assumed most bank angling pressure was from homeowner’s docks.

That report suggests that Lake Zumbro has an estimated fishing pressure per acre that is half again greater than the state-wide average, 3 times greater than Lake Bemidji, and 37 times greater than Lake of the Woods. Those comparisons are from <http://www.dnr.state.mn.us/volunteer/mayjun99/biting.html>.

I couldn't find a value per acre hour or the total acre hours but assume it is either out there somewhere or something we could calculate with the available information. This also was on the DNR Fisheries website :

“On average, an angler spends \$1,086 on fishing in Minnesota each year. ...each year anglers spend more than \$1.8 billion in Minnesota on fishing-related recreation. That's billion, with a B. The big money goes to boats, gas, and lodging. But the little items add up too. For example, each year anglers in Minnesota spend:

- \$50 million on bait
- \$34 million on lures, line, and tackle
- \$8 million on ice.

The figures come from a federal government study on 1996 spending.

Note that the fisheries number doesn't include boating, the Waterski show, etc. The boating industry may also have some general estimates that we could use based on summer boating hours.

4/28/2011

Let me know if you have any suggestions for pursuing this.

Thanks

Terry

Terry Lee

Olmsted County Env. Resources

2117 Campus Drive SE, Ste 200 (*new address*)

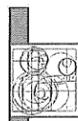
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[lee.terry@co.olmsted.mn.us](mailto:lee.terry@co.olmsted.mn.us)



**ATTACHMENT F**

**Minnesota Land Economics: Estimated Land Values Summary**



*The one-stop source for the land data you need*

**Estimated Land Values Summary**

The results of your request are listed below. You can print directly from this screen, or you can download it as a comma-separated file. If you download these results, you'll want to enter a descriptive name for your dataset, especially if you plan to download more than one. Be careful--we'll overwrite any previous dataset on your file that carries the default name! Choose a name that will help you keep track of the area and/or the time period which you selected.

No data showing? That's because there were no estimated land values for your selection(s). To edit your selection, use the BACK button on your browser and then click on the appropriate tab. Please be patient if you selected a large geographic area for which to retrieve data; even machines need time to think.

To see a chart of your data, press the "Chart-It!" or "Plot-It!" buttons, whichever is displayed. The former will give you a bar chart, the latter a scatter plot. The graphs will summarize the results for the whole area you selected.

**Here are the statistics you requested for green acres market value:**

[Click here to download](#)

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County	Township/City	Year	Number of jurisdictions reporting	Total acres	Total estimated value	Estimated value per acre
Wabasha	Zumbro township	2009	1	239	627,224	2,624
Wabasha	Zumbro township	2010	1	239	623,228	2,608

[« Generate a new report](#)



The one-stop source for the land data you need

---

**Estimated Land Values Summary**

The results of your request are listed below. You can print directly from this screen, or you can download it as a comma-separated file. If you download these results, you'll want to enter a descriptive name for your dataset, especially if you plan to download more than one. Be careful—we'll overwrite any previous dataset on your file that carries the default name! Choose a name that will help you keep track of the area and/or the time period which you selected.

No data showing? That's because there were no estimated land values for your selection(s). To edit your selection, use the BACK button on your browser and then click on the appropriate tab. Please be patient if you selected a large geographic area for which to retrieve data; even machines need time to think.

To see a chart of your data, press the "Chart-It!" or "Plot-It!" buttons, whichever is displayed. The former will give you a bar chart, the latter a scatter plot. The graphs will summarize the results for the whole area you selected.

**Here are the statistics you requested for green acres market value:**

[Click here to download](#)

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County	Township/City	Year	Number of jurisdictions reporting	Total acres	Total estimated value	Estimated value per acre
Olmsted	Oronoco township	2009	1	9,457	61,556,151	6,509
Olmsted	Oronoco township	2010	1	9,212	53,352,506	5,792

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Last modified on May 5, 2010

**32A.**

As has been discussed in various locations within the EIS, the effects of transmission lines on human health, property values, and urban growth have not been definitively established as either positive or negative. In addition, please see Section 7.4.1 of the EIS (Local Land Use Control Preempted).

**32B.**

The comment requesting additional information instead of general assurances of mitigation is acknowledged; however, the comment is not specific enough to respond to.

**32C.**

The listed criteria are included as part of the criteria for the state permit process. See Minn. Stat. 216E.03, Subd. 7.

**32D.**

Your objection/preference of the specified route is noted. The comment is part of the record in this matter by its inclusion in the EIS, and will be submitted to the OAH and Commission for consideration.

**32E.**

The process and schedule was set by the Commission and the administrative law judge (ALJ) overseeing the hearings. Process extensions would have to be approved by the ALJ.

**32F.**

The comment is part of the record in this matter by its inclusion in the EIS, and will be submitted to the OAH and PUC for consideration.

**32G.**

The comment is part of the record in this matter by its inclusion in the EIS, and will be submitted to the OAH and Commission for consideration.

**32H.**

The comment is part of the record in this matter by its inclusion in the EIS, and will be submitted to the OAH and Commission for consideration.

**32I.**

As noted in the EIS, The term "route" refers to the pathway that a HVTL follows between end points. Under the Minnesota Power Plant Siting Act (PPSA), a route granted to a utility may have a variable width of up to 1.25 miles. For this project, the requested route is typically 500 feet on either side of the proposed transmission centerline (1,000 feet total; See Section 2.7). Areas where a wider route width has been requested to allow more flexibility in routing, for example in areas where future highway projects are planned, are identified in the EIS.

**32J.**

Alternative routes in this area were proposed by members of the public. The review of these routes does make the analysis substantially more complicated or difficult to follow. Inclusion of these route alternatives and their analysis is responsive to citizen concerns and suggestions, and is not intended as a means to frustrate citizen reviewers of the EIS.

**32K.**

The EIS is meant to primarily provide information that allows the public and decision makers to weigh the benefits and drawbacks of each route. The weighing of these factors is primarily part of the ongoing hearing process.

**32L.**

There are many ways to present the complex information presented by a Project like this. However, the information is in fact aligned by subject matter and geography. There are numerous ways the information could be presented and we selected one that was meant to be helpful, not intentionally confusing as suggested by the comment.

**32M.**

The cost to conduct the requested field surveys for the proposed routes outweighs its relevance to a reasoned choice among alternatives. Therefore, the additional data requested in this comment was not collected. See Minn. Rule 4410.2300, Subpart. H.

**32N.**

The data can be provided electronically if requested, but the maps were meant to try to simplify the thousands of data points and layers involved in such a large and complex project. While acknowledging that some of the maps contain large amounts of potentially confusing information, we also question whether providing hundreds of additional maps showing individual features on each would have facilitated route comparisons.

**32O.**

These data would be burdensome to collect for the final EIS and are not relevant to a reasoned decision between alternatives.

**32P.**

Your objection/preference of the specified route is noted. The comment is part of the record in this matter by its inclusion in the EIS, and will be submitted to the OAH and Commission for consideration.

**32Q.**

Although there is little or no evidence that electric or magnetic fields associated with transmission lines are a health concern, the EIS does contain detailed data on the number of residences with various distances from routes under consideration. Avoiding residences is one consideration in the final route selection.

**32R.**

Health risks are discussed in Section 7.1 of the EIS. The information included in the EIS targeted a level of detail relevant to a reasoned choice among alternatives. See Minn. Rule 4410.2300, Subpart. H.

**32S.**

Citations for census data used are provided in Section 10.0 of the EIS.

**32T.**

While avoiding residences is one method to reduce human impact, it is not the only consideration.

**32U.**

While some routes do cross through areas in Oronoco township and elsewhere in Olmstead County that are zoned suburban or other residential, the applicable zoning ordinance does not appear to prohibit utility distribution or transmission lines in these areas. There is no generally acceptable model of property value impacts due to high-voltage lines, and impacts are generally minor compared to other factors. Therefore, the detailed analysis requested would not provide information essential to a reasoned evaluation of route alternatives.

**32V.**

While some routes do cross through areas in Oronoco township and elsewhere in Olmstead County that are zoned suburban or other residential, the applicable zoning ordinance does not appear to prohibit utility distribution or transmission lines in these areas. Also, however, the research reviewed for the EIS does not indicate a clear trend supporting the broad conclusion that transmission lines reduce property values more in suburban or semi-rural areas than they do on primarily agricultural areas. As summarized in Section 7.2, there are so many factors that affect property values that it is difficult to separate out the relatively small affect that transmission lines have compared to these other factors.

**32W.**

For reasons summarized in response to comment #340, a detailed inventory of land values throughout the Project area would not provide essential information relevant to a reasoned route selection decision.

**32X.**

The EIS acknowledges that Lake Zumbro is a regionally important recreational resource. More detailed data on exact boat usage would not provide information that is relevant to an informed route selection decision.

**32Y.**

Impacts to transportation are discussed in Section 7.11 of the EIS. The information included in the EIS targeted a level of detail relevant to a reasoned choice among alternatives. See Minn. Rule 4410.2300, Subpart. H.

**32Z.**

IEEE Standard 1651-2010 standard (Guide for Reducing Bird-Related Outages) is targeted toward methods, techniques, and designs to mitigate bird-related power interruptions and equipment damage resulting from avian interactions with transmission and distribution. The standard is not primarily meant to be used to reduce mortality to birds, so it was not included as a primary reference.

**32AA.**

Potential risks of exposure to EMF are discussed in Section 7.1 of the EIS. Your comment and provided study are part of the record in this matter by its inclusion in the EIS, and will be submitted to the OAH and PUC for consideration.

**32AB.**

See Section 7.3 of the EIS. Electrical interference issues are addressed generally for all route segments in the EIS because impacts would be similar no matter which route is selected. The cost and time to complete modeling within 1.25 miles for noise or electrical interference would not provide any information that would assist with a reasoned evaluation of alternative routes.

**32AC.**

As described in the route permit application and in EIS Section 7.9, transmission lines can produce interference to an amplitude-modulated (“AM”) signal such as a commercial AM radio audio signal (i.e., radio noise) or the video portion of a TV station (i.e., TV noise). Frequency modulated (“FM”) radio stations and the audio portion of a TV station signal (which is also frequency modulated) are generally not affected by noise from a transmission line. There is no evidence of potential impacts on the other communication frequencies listed in the comment. Mitigation will follow IEEE and other applicable requirements. There are residential and agriculture areas along all routes under consideration, so additional modeling would not provide information that is essential to a reasoned decision on which route to select.

**32AD.**

Engineering and design strategies have been developed to accommodate a wide range of challenges presented by the physical conditions encountered in field allowing power to be distributed to people living in regions with different types of terrain and geologic conditions. Specific strategies will be identified and implemented during the detailed design phase of the proposed Project.

**32AE.**

Engineering and design strategies have been developed to accommodate a wide range of challenges presented by the physical conditions encountered in field allowing power to be distributed to people living in regions with different types of terrain and geologic conditions. Specific strategies will be identified and implemented during the detailed design phase of the proposed Project.

**32AF.**

The requested information is not in a public database. The cost to independently develop this information for all of the routes outweighs its relevance to a reasoned choice among alternatives. Therefore, the additional data requested in this comment was not collected. See Minn. Rule 4410.2300, Subpart. H.

**32AG.**

**It is the responsibility of a property owner to report any instances of stray voltage and/or phenomena that they believe could be linked stray to their local power provider. It is the responsibility of the power provider to investigate the situation and mitigate stray voltage occurrences.**

**32AH.**

The EIS includes maps and discusses the general occurrence of bird migration through the region, using reputable independent sources (Audubon, Birdlife International). Mapped migratory routes are regional approximations of the path traveled by migrating birds, taking into account annual variation, and cannot be analyzed at the specific level of a linear transmission line route. The cost to conduct the requested field assessment for the proposed route outweighs its relevance to a reasoned choice among alternatives. Therefore, the additional data requested in this comment was not collected. See Minn. Rule 4410.2300, Subpart. H.

**32AI.**

The EIS considers all routes equally and is intended to evaluate the human and environmental impacts of each route under consideration. The EIS does not state a preference for any route alternative.

**32AJ.**

See Section 2.7 of the EIS.

**32AK.**

All maps in the EIS have been updated to include all of the route alternatives under consideration.

**32AL.**

See Section 2.7 of the EIS.

**32AM.**

Specific structure types and structure placement have not been finalized and will be addressed in greater detail during permitting and final design.

**32AN.**

A general comparison of the benefits and drawbacks of the underground high-voltage transmission option is provided in the EIS Section 4.5.1. Undergrounding is a mitigation option that is available for HVTLs in all areas of the line. Costs and technical issues for crossing under the Zumbro River are approximately equivalent to, and can be extrapolated from, those discussed for the crossing of the Mississippi River in Section 4.5.1. The cost of further analysis would outweigh its relevance to a reasoned choice among alternatives.

**32AO.**

Text discussing the Zumbro River and potential impacts associated with the crossing of the river has been added to the FEIS in Sections 6.3.1, 8.2.4.8, 8.3.4.7 and 8.3.4.8. In addition, existing text in Section 8.4 includes the Zumbro River in the discussion of the Mississippi River crossing.

**32AP.**

Expected impacts to pacemakers are discussed in Section 7.1.1.4 of the EIS. The number of people with pacemakers along each of the routes is not available public information and is not reviewed as part of this EIS.

**32AQ.**

The reduction in electric field is due to phase cancellation. When two circuits are placed on the same pole they are installed in a manner that takes advantage of the cancellation effects. Having the second circuit in service reduces the electric field.

**32AR.**

Magnetic field standards are presented in milliGauss (mG) and are not related to voltage. Magnetic field is solely dependent upon the electrical current in a conductor, the voltage of the line is irrelevant. Standards for specific voltages do not exist.

**32AS.**

At distances of 300 feet EMF levels drop off to background levels. See Tables 7.1.1.1-3, 7.1.1.2-1 and 7.1.1.2-2.

**32AT.**

Expected impacts to pacemakers are discussed in Section 7.1.1.4 of the EIS. The number of people with pacemakers along each of the routes is not available public information and is not reviewed as part of this EIS.

**32AU.**

Potential human health impacts associated with HVTLs are discussed in Section 7.1 of the EIS. The information included in the EIS targeted a level of detail relevant to a reasoned choice among alternatives. See Minn. Rule 4410.2300, Subpart. H.

**32AV.**

The requested information is not in a public database. The cost to independently develop this information for all of the routes outweighs its relevance to a reasoned choice among alternatives. Therefore, the additional data requested in this comment was not collected. See Minn. Rule 4410.2300, Subpart. H.

**32AW.**

Stray voltage mitigation is discussed in Section 7.1.2. of the EIS. The information included in the EIS targeted a level of detail relevant to a reasoned choice among alternatives. See Minn. Rule 4410.2300, Subpart. H.

**32AX.**

The EIS includes house counts within 75, 150, 300, and 500 feet of each of the proposed routes. The cost to count, verify and analyze house counts at even more distances from each of the proposed routes outweighs its relevance to a reasoned choice among alternatives. Therefore, the additional data requested in this comment was not collected. See Minn. Rule 4410.2300, Subpart. H.

**32AY.**

See Appendices H, I, and J of the EIS.

**32AZ.**

The statement is part of a general summary of the results of some of the studies cited in EIS Section 7.2.2.

**32BA.**

Powerline towers, particularly the custom engineered monopole structures proposed to be used on this Project, are designed to withstand extreme wind and weather conditions and to meet or exceed the requirements of the NESC. In the past five years, no steel poles have failed in Minnesota due to tornados or other weather conditions. Two of the Applicant's 10,350 structures failed during a tornado in Colorado. In Minnesota, an F3 tornado with wind speeds of up to 150-200 miles per hour passed through the Hugo, Minnesota area, but the wood pole structures and conductors did not fail. See ALJ finding for the route Permit for the Hiawatha Transmission Line Project (OAH Docket No. 15-2500-20599-2, PCU No ET2/TL-09-38) for additional information.

**32BB.**

**The house counts to 500 feet in the EIS were selected as the best method to quantify impacts on residences most affected by the proposed Project. The additional data requested for all routes would require extensive reanalysis of data and would not provide information essential to an informed decision between routes. See, e.g., Minn. Rule. 4410.2300, Subp. H.**

**32BC.**

Please see the revised text in Section 7.3.2 of the EIS.

**32BD.**

See Section 7.3.2 of the EIS.

**32BE.**

All additional homes identified in comments received during the comment period on the EIS have been incorporated into the EIS. The EIS includes house counts within 75, 150, 300, and 500 feet of each of the proposed routes. The cost to count, verify and analyze house counts at even more distances from each of the proposed routes outweighs its relevance to a reasoned choice among alternatives. Therefore, the additional data requested in this comment was not collected. See Minn. Rule 4410.2300, Subpart. H.

**32BF.**

The comment is part of the record in this matter by its inclusion in the EIS, and will be submitted to the OAH and Commission for consideration. Please see the footnote to Table 7.3.2-1.

**32BG.**

The cost to conduct preconstruction soil mapping analysis for each of the proposed routes outweighs its relevance to a reasoned choice among alternatives. Therefore, the additional data requested in this comment was not collected. See Minn. Rule 4410.2300, Subpart. H.

**32BH.**

This route was not evaluated in the EIS because it was never proposed during the scoping process.

**32BI.**

While some routes are in areas in Oronoco township and elsewhere in Olmstead County that are zoned suburban or other residential, the applicable zoning ordinance does not appear to prohibit utility distribution or transmission lines in these areas.

**32BJ.**

While some routes are in areas in Oronoco township and elsewhere in Olmstead County that are zoned suburban or other residential, the applicable zoning ordinance does not appear to prohibit utility distribution or transmission lines in these areas.

**32BK.** One study does indicate that high-voltage transmission lines may affect the resale value of luxury homes more than they affect middle-class tract housing. Overall, however, the research does not indicate a clear trend. For example, the statistical studies do not support the broad conclusion that transmission lines reduce property values more in suburban or semi-rural areas than they do on primarily agricultural areas. As summarized in Section 7.2, there are so many factors that affect property values that it is difficult to separate out the relatively small affect that transmission lines have compared to these other factors.

**32BL.**

The NHIS data have been provided in a table format in Appendix F. The species of greatest conservation need and non-status species are listed in the table, however, under Minnesota Administrative Rules 4410.2300, discussion of every species is beyond the scope of the EIS. General mitigation is discussed for species in Section 7.7.2.

**32BM.**

Field surveys to obtain more route specific biological survey data would be completed once a route is permitted.

**32BN.**

The Minnesota route permit process does not require detailed pole placement design, staging area locations, and other final design details until after the final route selection.

**32BO.**

The cost to conduct the requested field assessment for the proposed route outweighs its relevance to a reasoned choice among alternatives. Therefore, the additional data requested in this comment was not collected. See Minn. Rule 4410.2300, Subpart. H.

**32BP.**

Placement of structures will be determined after a route is permitted. Placement of structures will be further determined through consultation with landowners and resource agencies, using additional field data collection as needed to identify potential specific impacts to resources. A detailed quarterly construction schedule is beyond the scope of the EIS. The cost to conduct the requested bird counts for the placement of structures outweighs its relevance to a reasoned determination of an appropriate structure location.

**32BQ.**

The cost to conduct the requested assessment of habitat fragmentation for the proposed routes outweighs its relevance to a reasoned choice among alternatives. Therefore, the additional mapping and data requested in this comment were not collected. See Minn. Rule 4410.2300, Subpart. H.

**32BR.**

Clearing of trees would occur within the ROW regardless of the ease or difficulty of equipment passage. Trees are cleared not only to allow passage of equipment, but also to remove trees within the ROW. See Section 4.4 of the EIS.

**32BS.**

APLIC and limiting impacts to avian species are not discussed in the referenced location of the EIS. However, the Applicant is working with the USFWS and other agencies to determine structure configurations that would minimize avian impacts in critical areas such as the McCarthy Lake WMA and the Mississippi River Crossing. In these and other areas, bird diverters could also be used to reduce the incidence of avian collisions with the transmission line.

**32BT.**

Bird collisions with transmission lines are not discussed in the referenced location of the EIS. However, the EIS discusses avian collisions and electrocutions in Sections 7.7.2.1 and 8.4. In these discussions, it is conceded that avian collisions and electrocutions occur. However, mitigation strategies to reduce these events are also discussed. The cost to conduct the requested assessment of a quantitative risk factor for bird collisions and electrocutions along the proposed routes outweighs its relevance to a reasoned choice among alternatives.

**32BU.**

Both new routes and routes following existing routes would follow field and property lines OR go cross-country. Both the commenter's implication and the EIS statement are correct in noting that routes that create new corridors have higher wildlife impacts.

**32BV.**

Figures in Sections 8.1.4.7, 8.2.4.7 and 8.3.4.7 show relative vegetation cover types along route alternatives. Inspection of Figures 8.1.4.6-1, 8.2.4.6-1 and 8.3.4.6-1 (Native Plant Community acreage) and of Figures 8.1.4.4-1, 8.2.4.4-1 and 8.3.4.4-1 (land cover) show that impacts to native plant communities and to forested cover are virtually identical between all route alternatives, with exceptions that are clearly indicated in the referenced graphs. All tabular data upon which the graphs are based is found in Appendices H, I, and J. The cost to conduct the requested evaluation of forested native plant community impacts for the proposed routes outweighs its relevance to a reasoned choice among alternatives. Therefore, the additional data requested in this comment was not collected. See Minn. Rule 4410.2300, Subpart. H.

**32BW.**

See Section 8.3.4.7 of the EIS.

**32BX.**

Electronic device interference is discussed in Section 7.9 of EIS. The information included in the EIS targeted a level of detail relevant to a reasoned choice among alternatives. See Minn. Rule 4410.2300, Subpart. H.

**32BY.**

Additional information can be obtained from the cited sources in Section 7.9.5. For full citations see Section 10.0 of the EIS.

**32BZ.**

Corona produced on a transmission line can be reduced by the design of the transmission line and the selection of hardware and conductors used for the construction of the line. For instance the use of conductor hangers that have rounded rather than sharp edges and no protruding bolts with sharp edges will reduce corona. The conductors themselves can be made with larger diameters and handled so that they have smooth surfaces without nicks or burrs or scrapes in the conductor strands. The transmission lines proposed here are designed to reduce corona generation. The complex details regarding design parameters used to reduce this effect can be provided by the Applicant during final design. However, the potential impacts would occur on any route, and the complex details regarding final design are not essential to a decision regarding which route to select.

Regarding interference with digital reception, this is not likely, but if it occurs it can be evaluated and addressed by the local utility on a case by case basis.

**32CA.**

Appendix G of the Final EIS has been updated to more clearly describe which sites have been formally evaluated for eligibility on the NRHP. To help avoid currently undiscovered sites, archeological surveys will be required prior to construction as part of compliance with Section 106 of the NHPA. An overview of the procedures used to do these surveys and other mitigation is provided in EIS Section 7.10.2. As described in that section, the detailed mitigation plan will be completed after route selection but prior to construction. The applicant is also required to follow protocols in Minn. Stat. 307.08 regarding any discoveries of human remains.

**32CB.**

Future construction road construction activities have been addressed in Section 7.11, 8.1.4.11, 8.2.4.11, and 8.3.4.11 through coordination with DOT and a review of readily available county highway planning documents.

**32CD.**

Aesthetic impacts are discussed generally in Section 7.3 of the EIS. Impacts to roadways recognized by the National Scenic Byway program are discussed in Section 7.11 of the EIS.

**32CE.**

Shared ROW with roadways is provided for the various routes under consideration in Section 8. Specific structure placement and final design is not required as part of the Minnesota Route Permit process, but for efficiency reasons is only required after final selection as pole placement is negotiated with land owners.

**32CF.**

These issues have been addressed to the extent practicable in Section 7.11 of the EIS. Where the cost of obtaining information outweighs its relevance to a reasoned choice among alternatives, the additional data requested in this comment was not collected. See Minn. Rule 4410.2300, Subpart. H.

**32CG.**

Lake Zumbro seaplane base is discussed in Section 7.11.3 and 8.3.4.11 of the EIS. However, Lake Zumbro seaplane base is not listed with the FAA as a public use airport. FAA obstruction restrictions apply to FAA listed public use airports, and have been discussed in the EIS.

**32CH.**

These structures would be a shorter version of structures shown in Section 4.0 of the EIS.

**32CI.**

The EIS generally assesses the potential for economic impacts or revenue loss in Sections 7.5 and 7.12.

**32CJ.**

See revised text in Section 7.12.9 of the EIS.

**32CK.**

These areas are best shown on the maps provided in Appendix A.

**32CL.**

NO<sub>x</sub> and ozone emissions due to the corona effect from high-voltage transmission lines are so low that the resulting concentrations are generally below detection limits. Typically, studies have indicated that concentrations of ozone at ground level for transmission lines even during heavy rain are significantly less than the most sensitive instruments can measure (which is about one ppb), and thousands of times less than ambient levels. The ozone concentrations in the EIS are based on theoretical modeled calculations. In addition, the air quality impacts expected due to the Project will not vary notably between routes.

**32CM.**

NO<sub>x</sub> and ozone emissions due to the corona effect from high-voltage transmission lines are so low that the resulting concentrations are generally below detection limits. Typically, studies have indicated that concentrations of ozone at ground level for transmission lines even during heavy rain are significantly less than the most sensitive instruments can measure (which is about one ppb), and thousands of times less than ambient levels. The ozone concentrations in the EIS are based on theoretical modeled calculations. In addition, the air quality impacts expected due to the Project will not vary notably between routes.

**32CN.**

See revised text in Section 8.3.2 of the EIS.

**32CO.**

Relative to the decidedly urban character of the City of Rochester and the Twin Cities Metropolitan Area, most of the area crossed by the North Rochester to Mississippi River segment in Goodhue, Olmsted and Wabasha Counties is sparsely populated.

**32CP.**

See Section 7.1 of the EIS.

**32CQ.**

Section 7.1 describes in detail the expected magnetic and electric field strengths expected along each possible voltage and structure combination to be used on the Project. As stated in Section 8.4.3.1, the field strengths would be the same along all routes with the same structure/voltage configuration, so detailed modeling for each route would not provide any new information essential to a decision between alternatives.

**32CR.**

The studies, in summary, do not indicate a clear enough relationship between proximity to powerlines and property values for us to provide the simple equation that the comment requests. Some studies have found a relationship in some conditions, and others have found no statistically significant relationship.

**32CS.**

While property values in Olmstead County are higher than in Wabasha County, we do not see this as a factor that is essential to a reasoned evaluation of the various alternatives. First, there is not clear evidence that the line would significantly affect property value along any route. Second, it is not likely that the Commission would as a general rule prefer to route transmission lines through lower property value areas versus high property value areas.

**32CT.**

It is not possible to complete the analysis until final design. We can provide a qualitative comparison of cover types, etc, but final tree removal calculations would require final or near final design on all routes under consideration. Trees will be avoided as much as possible during final design on the selected route.

**32CU.**

As noted in Section 8.3.4.3, for electrical safety code and maintenance reasons, utilities would not generally allow residences or other buildings within the actual ROW easement for a high-voltage transmission line (HVTL). Displacement would occur where any occupied structure (residence or business) is located within the ROW of the proposed route alternatives. Route alternatives 3P-Kellogg, 3P-006, 3P-009, 3A-Kellogg, 2C3-001- 3a, and 2C3-001- 3b all have houses located within the ROW and may result in displacement. Your objection/preference of the specified route is noted. Your comment is now part of the record in this matter by its inclusion in this EIS, and will be submitted to the Office of Administrative Hearings (OAH) and Commission for consideration.

**32CV.**

Although the statute cited contains certain routing criteria, there is no mathematical formula that dictates which route is "best." The Applicant used its best judgment and their own internal guidelines and factors to propose what they thought was the best route.

**32CW.**

Your objection/preference of the specified route is noted. The comment is part of the record in this matter by its inclusion in the EIS, and will be submitted to the OAH and Commission for consideration.

**32CX.**

The zoning ordinances and land use plans for all communities crossed by one of the route alternatives under consideration were reviewed for the EIS, including those listed in this comment and the plans provided in the Route Permit Application (Appendix N). Specific potential land use conflicts are addressed in the EIS in the applicable land use sections. General potential conflicts with suburban or other residential development plans or general business zoning are reviewed in EIS Section 7.4.

While the proposed transmission line would have different impacts on, for example, residential-suburban areas than on agricultural areas, the various ordinances did not prohibit transmission lines per se. A detailed review of compatibility of the proposed project with each land use plan based on specific (but not defined) criteria as suggested in the comment was not completed. The cost and time required to do this analysis would exceed its relevance to the final route decision.

**32CY.**

See Figure 8.3.4.4-1 and Appendix J to the EIS.

**32CZ.**

Your objection/preference of the specified route is noted. The comment is part of the record in this matter by its inclusion in the EIS, and will be submitted to the OAH and Commission for consideration.

**32DA.**

See Appendix E of the EIS.

**32DB.**

See Figure 8.3.4.5-1 and Appendix J of the EIS.

**32DC.**

Impacts to forestry are discussed in Section 7.5.2 of the EIS. The information included in the EIS targeted a level of detail relevant to a reasoned choice among alternatives. See Minn. Rule 4410.2300, Subpart. H.

**32DD.**

See Section 8.3.4.12 of the EIS.

**32DE.**

The NHIS data have been provided in a table format in Appendix F. The species of greatest conservation need and non-status species are listed in the table, however, under Minnesota Administrative Rules 4410.2300, discussion of every species is beyond the scope of the EIS. General mitigation is discussed for species in Section 7.7.2.

**32DE.**

The cost to conduct the requested assessment of impacts on migratory birds and bats for the proposed routes outweighs its relevance to a reasoned choice among alternatives. Therefore, the additional data requested in this comment was not collected. See Minn. Rule 4410.2300, Subpart. H.

**32DG.**

See updated text in Section 8.3.4.6 of the EIS.

**32DH.**

See revised text in Section 8.3.4.6 of the EIS.

**32DI.**

Moist was the word intended to be used in the sentence the commenter is referring to.

**32DJ.**

The conservation easement data in the EIS has been updated to show conservation easements recorded by the Minnesota Board of Water and Soil Resources. Easements include those lands currently enrolled in the following programs: (RIM, RIM/WRP, RIM/WRP II, PWP, CREP, CREP II and ACUB). This data was evaluated at 500 feet and 1 mile from the proposed center lines and is discussed in Sections 8.1.4.7, 8.2.4.7, and 8.3.4.7. USDA CRP data was requested but was not available for this project as Section 1619(b) of the Food, Conservation and Energy Act of 2008 (farm bill) prohibits disclosure of this information.**32DK.** The comment is part of the record in this matter by its inclusion in the EIS, and will be submitted to the OAH and Commission for consideration.

**32DL.**

The Zumbro River crossing is identified in Section 8.3.4.7, in the second paragraph of the section titled "Wildlife Resources on A Route Alternatives".

**32DM.**

Erosion/runoff are discussed throughout the EIS including Sections 5.5, 7.5.1, 7.6, and 7.8. The construction stormwater permit requires a pollution prevention plan that identifies controls and practices that would be implemented during construction.

**32DN.**

Detailed structure design for the crossing of the Zumbro will be completed following approval of a route. Avian collision and other potential wildlife impacts would be an important factor in the selection of structures carrying the transmission line over the Zumbro River. Structures at the Zumbro River crossing may also include mitigation measures for further reducing the incidence of avian collisions.

**32DO.**

The comment is part of the record in this matter by its inclusion in the EIS, and will be submitted to the OAH and Commission for consideration.

**32DP.**

See Section 7.8.6. Wetlands were identified using the USFWS National Wetlands Inventory and there are some inaccuracies with these data. During the permitting phase, the wetlands in the route will be delineated and avoided as possible.

**32DQ.**

Detailed structure design for the crossing of the Zumbro will be completed following approval of a route. Avian collision and other potential wildlife impacts would be an important factor in the selection of structures carrying the transmission line over the Zumbro River. Structures at the Zumbro River crossing may also include mitigation measures for further reducing the incidence of avian collisions

**32DR.**

See revised text in Section 8.3.4.8 of the EIS.

**32DS.**

The methods to be used to evaluate and avoid transmission structure interference with microwave communication are generally provided in EIS Section 7.9.4. A detailed microwave beampath analysis will not be completed until final design, when exact structure locations can be moved to avoid any potential conflicts. Also, since impacts would be similar on all projects and can generally be avoided during final design, this detailed conflict analysis and mitigation design won't be done for the EIS, but after final route selection.

**32DT.**

SHPO provided a list of archaeological and historic sites within the project area based on a request by Barr Engineering in July 2010. The location of these sites are mapped by section and shown on maps 8.1-25, 8.2-23 and 8.3-38 A comparison of the number of archaeological and historic sites within one half-mile are discussed in Sections 8.1.4.10, 8.2.4.10 and 8.3.4.10. A summary of historic and archaeological sites is available in Appendix G.

**32DU.**

First, this EIS text simply means that a full survey for archeological artifacts is only normally required for the selected route because such artifacts can almost always be avoided during detailed design. It would not be cost effective to require full surveys on all routes under consideration; the cost would greatly outweigh its relevance in the final route decision. Also, the Final EIS does not include a recommended route. That recommendation is done by the administrative law judge in a report prepared following the ongoing hearing process.

**32DV.**

The cost to evaluate NHRP eligibility for all sites along all the routes under consideration would be very high in relation to its relevance to a reasoned choice among alternatives. Therefore, evaluation of any potentially affected sites for eligibility on the NRHP will be completed as part of the Section 106 compliance process after the route is selected.

**32DW.**

See Section 7.11, 8.1.4.11, 8.2.4.11, 8.3.4.11, and Appendices I, J, and K of the EIS.

**32DX.**

See the references listed in Section 7.11, 8.1.4.11, 8.2.4.11, and 8.3.4.11 of the EIS. Full references for the cited documents are available in Section 10.0 of the EIS.

**32DY.**

See revised text in Section 8.3.4.11 of the EIS. Lake Zumbro seaplane base is discussed in Section 7.11.3 and 8.3.4.11 of the EIS. However, Lake Zumbro seaplane base is not listed with the FAA as a public use airport. FAA obstruction restrictions apply to FAA listed public use airports, and have been discussed in the EIS.

**32DZ.**

See revised Section 7.11 of the EIS. Lake Zumbro seaplane base is discussed in Section 7.11.3 and 8.3.4.11 of the EIS. However, Lake Zumbro seaplane base is not listed with the FAA as a public use airport. FAA obstruction restrictions apply to FAA listed public use airports, and have been discussed in the EIS.

**32EA.**

The recreational value of Lake Zumbro is acknowledged in EIS Section 7.12.6 and other sections of the EIS.

**32EB.**

This section of the EIS implies that the listed route options would minimize visual impacts in general, and in relation to specific recreational resources. The data requested on which route would have the fewest impact on snowmobile trail views is shown right below the text, in Figure 8.3.4.12-2.

**32EC.**

Text discussing the Zumbro River and potential impacts associated with the crossing of the river has been added to the FEIS in Sections 6.3.1, 8.2.4.8, 8.3.4.7 and 8.3.4.8. In addition, existing text in Section 8.4 includes the Zumbro River in the discussion of the Mississippi River crossing.

**32ED.**

Text discussing the Zumbro River and potential impacts associated with the crossing of the river has been added to the FEIS in Sections 6.3.1, 8.2.4.8, 8.3.4.7 and 8.3.4.8. In addition, existing text in Section 8.4 includes the Zumbro River in the discussion of the Mississippi River crossing.

**32EE.**

This error occurred in the original route permit application submitted by the applicant. Technical issues due to the use of unsupported fonts made it impossible to correct the missing text.

**32EF.**

Google Earth kmz files are available at the applicant's website [www.capx2020.com](http://www.capx2020.com)

**32EG.**

The state can provide shapefiles for homes within 500 feet and within 75 feet of route alternatives. The state does not have shapefiles for homes beyond 500 feet from route centerlines.

8720 75<sup>th</sup> Ave. NW  
 Oronoco, MN 55950  
 April 28, 2011

Matthew Langan  
 State Permit Manager  
 Minnesota Office of Energy Security  
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 St. Paul, MN 55101

Subject: 09-1448: Comments on CAPX2020 Draft EIS

Matthew, here are my comments on the subject draft. Once again, thanks for your help in locating the correct online draft EIS to review the Hwy 52 alternate route.

**1. Allowable comments**

At the April 13, 2011 meeting at Pine Island you stated, and showed on your slides that the only comments to be accepted on the draft EIS should pertain to errors or omissions in the document. I pointed out that the notice of the meetings which we received stated no such restriction.

Section 3.2 Route Permit Process, under Draft EIS Comments states, "All timely, substantive comments received will be included in a final EIS along with responses to these comments, including revision of the draft EIS." Nothing is said here about limiting comments to errors or omissions. I feel that the statement at the meeting was misleading, and probably discouraged some people from looking at the draft EIS and making their comments. This does not seem like you've given the public a fair hearing on this matter.

Can I assume that the paragraph in the EIS is indeed the case, and that all substantive comments will be included in the final EIS?

**2. Map omission**

(It appeared to me that the numbering has changed with the inclusion of new material. Unless otherwise specified, any section or map number references I make are to the original draft EIS numbers, prior to the inclusion of the Hwy 52 route.)

Map 8.2-20 (or -22 in the revised document) doesn't show the small wetland in route 2-A, on 75<sup>th</sup> Avenue, at the low spot behind the dam on our pond. The map in Appendix A, Sheet NH9 shows the part of this wetland on the east side of the road, but stops just before the road and doesn't show the part on the west.

**3. Property value impact**

I admit that the following is classic NIMBY. But no one wants to have high voltage transmission lines right in his or her face.

***Property description***

Our property is on 75<sup>th</sup> Ave. NW, adjacent to alternate routes 2A (on 75<sup>th</sup> Ave) and 2A-001 (on the Douglas Trail). It is comprised of two parcels:

House and adjacent land

This includes about 17 acres bordering the road and the Douglas Trail, with a large house, outbuilding, extensive perennial beds professionally designed and installed by Sargent's Nursery, a huge lawn, and a 1+ acre stocked pond. We estimate very conservatively that we have invested over \$770,000 on this property. (Aside: if you make comments such as these public, please do not release this figure. Instead say, "...invested a considerable sum..." Thanks.)

Our Pasture

This includes over 40 acres south of our house. It is rented out for grazing, with cattle on the premises from May to December each year.

Property across the road

Across the road from our property is that of our neighbors, Ray and Nancy Salvo. Pastures for cattle are on both sides of their driveway, adjacent to the road and spanning about the same distance as our yard.

***Current impacts***

House and adjacent land, Salvo's property

If 2A is selected and sited on the east side of 75<sup>th</sup> Ave., we will no doubt have at least two poles right in our yard. This would be unacceptable. The alternative is to site the line across the road, on the west side of 75<sup>th</sup>, in the Salvo's pasture. This also is not desirable for us, since we now still have the view of the poles and lines. And it is certainly not desirable for them, since the poles and lines will be right in their faces. Also, if the lines are in the Salvo's pasture, there seems to be a possibility of stray voltage affecting Ray's cows; his barn is within the 500' limit, and he has feeding structures in the pastures, too.

Whether on the east or west side, from what the draft EIS indicates, we would be close enough that we could experience noise. Our home is 112' from the centerline of the ROW (center of the road as documented). If the lines are placed on the east side of the road, on our property, the house would certainly be within 75 feet.

If 2A-001 is selected, I see no reason why you would site it in our lawn adjacent to the west side of the trail. However, if this were to happen, again the house would be within 75 feet of the lines.

Our Pasture

If 2A continues beyond our yard to the south, on the east side of 75<sup>th</sup>, it will go right through our pasture. Again, my concern is with potential stray voltage. There is electrical equipment there to power the fence, and there are some feeding structures and temporary metal corrals. Even though you say that the chance of stray voltage affecting the cattle is minimal, perception is significant, as I'm sure you know. I wouldn't want to lose our very good renter because of the Capx2020 project. In addition to the income from rent, the maintenance of the land performed

33A

33B

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33H

by the renter is very important to us, to keep it in shape for sale sometime in the hopefully distant future.

33I

If 2A-001 is selected and sited on the west side of the trail, we will again have the lines and poles in our pasture, this time if not in wetlands, then in the flood plain further south which is under water after very heavy rains.

#### ***Future impacts***

##### House and adjacent land

We would love to stay here forever, but we're in our late 60's. At some point we will be unable to maintain such an extensive property. It consumes us now, but we love it. So some day we will have to sell. I've reviewed all the studies cited in the draft EIS on the impact of transmission lines on property values. These studies did not convince me that we won't have a problem when we try to sell. With two exceptions, the studies were done in the 1990's, when real estate markets were booming. And one of the two done in the 2000's was a rehash of old data. One common theme was that the nearer a property is to the lines, the greater the impact. And we are right on both route 2A and route 2A-001. The analyses seemed to focus on the effect on suburban neighborhoods. There was nothing I saw in these analyses that looked at the value impact on a unique, high value rural home such as we have. We're not naïve enough to expect that we will necessarily even get out of it what we've invested in it. But having the transmission lines right in our faces will surely make prospective buyers hesitate, lower their offers considerably, or just not offer at all..

33J

##### Pasture

Olmsted County's property assessment for the pasture, when it is sold, assumes that we will sell it for residential, not agricultural use: that is, as a 5 acre lot and a 35+ acre lot. The assessment for the property is now \$202,500, down from \$224,500 the previous year. When we do sell, we will have to pay three years back taxes based on the then last three assessments.

Even without power lines along the road or on the east side of the pasture, we do not believe we can begin to get this much for two lots on a gravel road which include wetlands, flood plain, and an unusable gully. If the lines are on route 2A, at least the 5 acre parcel will undoubtedly not be saleable for a residence if the lines are on our side, in the pasture. The value of the 35+ acre parcel will no doubt be diminished. If the lines are on the other side of the road, values will still be diminished, though hopefully not as much.

#### ***Summary***

So in summary, I'd request that those who are choosing the route please consider these concerns when making the selection.

33K

#### **4. Advantages of other routes**

##### ***Route 2P***

I noted the following advantages for route 2P, over routes 2A or 2A-001:

- The estimated cost of 2P is \$1 million less than 2A.
- There are fewer rare species near or in the ROW in 2P than in 2A.

- There are the fewest wetlands to cross.
- There is greater than 90% ROW sharing.
- 2P crosses the Zumbro 2 times; all other routes cross it 4 or 5 times.
- 2P keeps away from the Douglas Trail.

We drove down 65<sup>th</sup> Ave., where there are a couple of pinch points. It looks to us like these could be addressed by going outside the road ROW, cross country behind these residences or buildings. The areas behind appear to be scrub woods and fields. True, this would diminish ROW sharing, but just in a couple of places. (This sort of approach for 2A along 75<sup>th</sup> Ave. wouldn't work, because houses in proximity across the road from one another here alternate between close to the road and back from the road.

##### ***Route 2P-002***

Just a thought on the Hwy 52 route; I haven't had time to study it thoroughly. It looks like the problem (houses marked as red, not yellow) is around the former Lake Shady. I'm not familiar with the roads or residences there, so I can't comment on alternatives. But you might consider that Hwy 52 is planned to become a limited access highway in the future. It is already that from Rochester up to 75<sup>th</sup> Street. Construction is beginning for an interchange near Pine Island for Elk Run, and the people of Oronoco want an interchange to minimize the accidents that are all too common there. So it would seem that Rochester to Pine Island would be most likely to become limited access in the near, rather than in the more distant future. This would mean that homes close to the highway may well be affected, with new frontage roads developed to avoid direct crossings. If these properties are going to be disturbed and affected anyway, perhaps you could consider more seriously choosing the 2P-002 route. This would align the transmission lines along a highway where residences are not desirable and avoid the more rural areas.

33L

Thank you so much for your consideration.

Art and Lynne Brooks

Cc: Raymond Kirsch  
MN Dept. of Commerce  
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**33A.**

This EIS includes and responds to all timely, substantive comments on the draft EIS. Citizen comments are not limited to errors or omissions in the draft EIS. This said, the intent of having a comment period for the draft EIS is to improve the document through constructive criticism, including the identification of errors and omissions.

**33B.**

See Section 7.8.6. Wetlands were identified using the USFWS National Wetlands Inventory and there are some inaccuracies with these data. During the permitting phase, the wetlands in the route will be delineated and avoided as possible.

**33C.**

See Section 7.2 of the EIS.

**33D.**

See Section 7.3.1 of the EIS.

**33E.**

See Section 7.1 of the EIS.

**33F.**

See Section 7.3.2 of the EIS.

**33G.**

See Section 7.3.3 of the EIS

**33H.**

See Section 7.5 of the EIS.

**33I.**

See Section 7.8 of the EIS.

**33J.**

We are not aware of any evidence that transmission lines affect property values on expensive homes more than less expensive ones.

**33K.**

Your comment regarding your route preference and reasoning is part of the record that will be available to the Administrative Law Judge for the final routing decision.

**33L.**

See Section 7.11 of the EIS.

April 12, 2011

Matthew Langan, OES State Permit Manager  
Minnesota Department of Commerce, Office of Energy Security  
85 7th Place East, Suite 500  
St. Paul, MN 55101

Re: Draft Environmental Impact Statement PUC Docket # TL-09-1448

Dear Mr. Langan:

This comment relates to route 2B-001 pictured on Maps 8.2-062 and 8.2-16.

According to Table 8.2.4.3-2 "Pinch Points" and Map 8.2-16, there is only one pinch point on route 2B-001, located near its southern end.

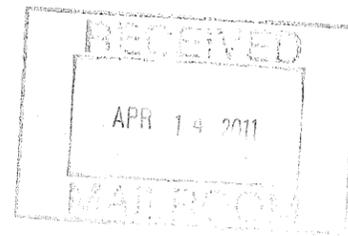
My comment is that there is at least one other pinch point that should be added to the DEIS, as described in my previous letter to you, dated January 6, 2011. The pinch point occurs on County Road 31 just south of its intersection with 117th Street NW, Oronoco. A residence is located just to the west of CR 31 and my art studio and tree plantings are located just to the east of the same point. One or the other must come uncomfortably close to a transmission line along route 2B-001.

Please add this "pinch point" to the draft of the impact statement.

Thank you very much.

Sincerely yours,

  
Richard F. Brubaker  
601 Memorial Pkwy SW  
Rochester, MN 55902



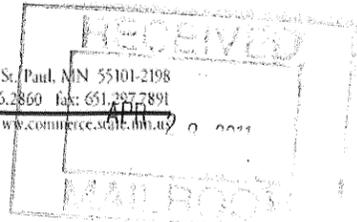
### 34A.

The definition of a "pinch point" as that term is used in the EIS is "a location where two residences are within 75 feet of the edge of a road, and more or less opposite each other." This makes it difficult or impossible to locate the transmission line without putting one of the residences within the right-of-way. Both of these houses are located more than 75 feet outside of the road ROW; therefore it is not designated as a pinch point in the EIS.

34A



85 7th Place East, Suite 500, St. Paul, MN 55101-2198  
 main: 651.296.4026 fax: 651.297.7891  
 www.commerce.state.mn.us



**PUBLIC COMMENT SHEET**

**CapX Hampton-Rochester-La Crosse Transmission Line Project**

PUC Docket Number: E002/TL-09-1448

Name: DAVID J. BUCK Representing: DAVID + KATHY BUCK

Address: 4505 CTY 9 BLVD DENNISON MN 55018 Email:

**Comments:**

In regard to the DEIS and my property I would like to make a few points. In the first place Co 9 BLVD IS NOT a utility corridor. Our dairy operation is located at an extreme pinch point. See Appendix A Sheet NR12. You can't use Co 9 BLVD without creating a stray voltage issue for us. As far as moving the Electrical Service line. See Section 7.1.2 there isn't anywhere to move it to. Unless you are planning on clearing forest & moving earth. All of this makes me wonder if anyone came out here to look this over. If Great Energy uses Co. 9 They are looking at replacing our dairy. The only logical choice is Hwy 52

- 35A
- 35B
- 35C
- 35D
- 35E

Please submit comments by **4:30pm, April 29, 2011** to:

Matthew Langan  
 Minnesota Dept. of Commerce  
 85 7th Place East  
 Suite 500  
 St. Paul, MN 55101-2198  
 Email: [matthew.langan@state.mn.us](mailto:matthew.langan@state.mn.us)  
 Phone: 651-296-2096  
 Fax: 651-297-7891

35A.

The comment is part of the record in this matter by its inclusion in the EIS, and will be submitted to the OAH and Commission for consideration.

35B.

See Section 7.1 of the EIS.

35C.

The comment is part of the record in this matter by its inclusion in the EIS, and will be submitted to the OAH and Commission for consideration.

35D.

Yes, the routes were driven by OES between July 26th and August 3rd 2010. The routes were also driven by the applicant several times.

35E.

Your objection/preference of the specified route is noted. The comment is part of the record in this matter by its inclusion in the EIS, and will be submitted to the OAH and Commission for consideration.



85 7th Place East, Suite 500, St. Paul, MN 55101-2198  
 main: 651.296.4026 tty: 651.296.2860 fax: 651.297.7891  
 www.commerce.state.mn.us

**PUBLIC COMMENT SHEET**

**CapX Hampton-Rochester-La Crosse Transmission Line Project**

PUC Docket Number: E002/TL-09-1448

Name: SOLORRO Budezsiak Representing: \_\_\_\_\_

Address: 15065 SHERWOOD TRAIL - ZUMBROTA, MN. 55992 Email: \_\_\_\_\_

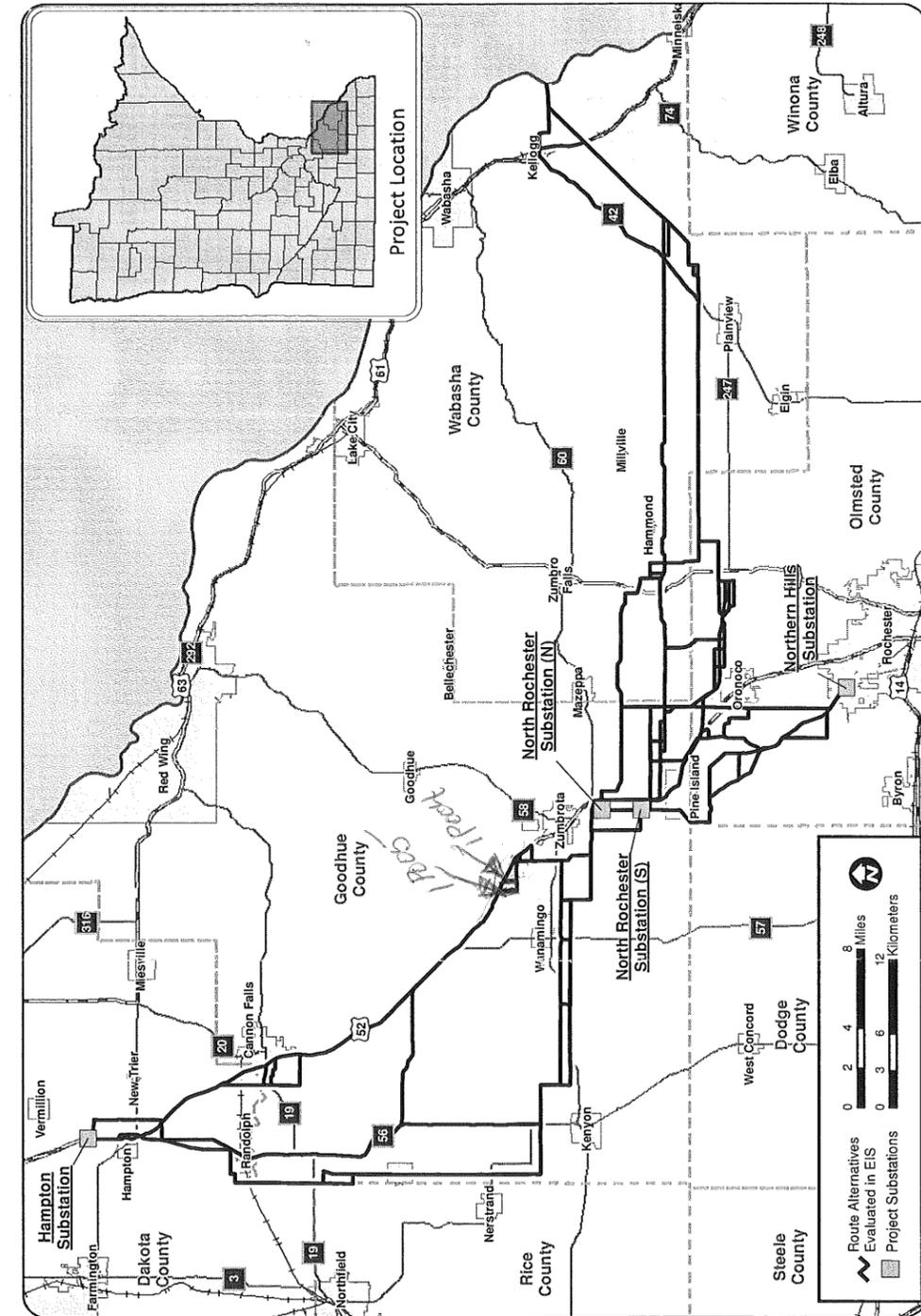
Comments:

1 P005 - 1 P004  
the line should follow Hwy 52 as already  
own right away!  
1 P005 close to house one not even showed on map  
also section 21 Cristal Salame house less than 200  
feet from proposed route cutting thru wild life  
area etc, also TV interference etc.  
1 P004 too close to new home right off Hwy 52 also  
ruin wild life refuge section 21 22 municipal township  
close to Eagle Nest also cuts thru prime ag land!

Please submit comments by **4:30pm, April 29, 2011** to:

Matthew Langan Email: [matthew.langan@state.mn.us](mailto:matthew.langan@state.mn.us)  
 Minnesota Dept. of Commerce Phone: 651-296-2096  
 85 7th Place East Fax: 651-297-7891  
 Suite 500  
 St. Paul, MN 55101-2198

- 36A
- 36B
- 36C
- 36D
- 36E
- 36F
- 36G
- 36H



**36A.**

Your objection/preference of the specified route is noted. The comment is part of the record in this matter by its inclusion in the EIS, and will be submitted to the OAH and Commission for consideration.

**36B.**

The house locations was updated in the GIS shapefile and is shown in updated Appendix A maps. The house location update does not change the numbers in Table 8.1.4.3-1 in the EIS.

**36C.**

Your objection/preference of the specified route is noted. The comment is part of the record in this matter by its inclusion in the EIS, and will be submitted to the OAH and Commission for consideration.

**36D.**

See Section 7.7 of the EIS.

**36E.**

See Section 7.9 of the EIS.

**36F.**

Your objection/preference of the specified route is noted. The comment is part of the record in this matter by its inclusion in the EIS, and will be submitted to the OAH and Commission for consideration.

**36G.**

Your objection/preference of the specified route is noted. Your comment is now part of the record in this matter by its inclusion in this EIS, and will be submitted to the Office of Administrative Hearings (OAH) and Commission for consideration. See Section 7.7 of the EIS.

**36H.**

See Section 7.5.1 of the EIS.



85 7th Place East, Suite 500, St. Paul, MN 55101-2198  
 main: 651.296.4026 tty: 651.296.2860 fax: 651.297.7891  
 www.commerce.state.mn.us

**PUBLIC COMMENT SHEET**

**CapX Hampton-Rochester-La Crosse Transmission Line Project**

PUC Docket Number: E002/TL-09-1448

Name: Wm J. Budetsiel Representing: MINNEOLA TOWNSHIP

Address: 15065 SHERWOOD TRAIL ZTA MN 55992 Email:

Comments: alternate routes 1P004 & 1P005 go past  
to many houses and would require  
acquiring new right away for transmission lines!

why not go along HWY 52 less houses &  
already have right away!

also 1P004 - 1P005 routes would affect  
wildlife deer turkeys eagles etc.

**Please submit comments by 4:30pm, April 29, 2011 to:**

Matthew Langan Email: [matthew.langan@state.mn.us](mailto:matthew.langan@state.mn.us)  
 Minnesota Dept. of Commerce Phone: 651-296-2096  
 85 7<sup>th</sup> Place East Fax: 651-297-7891  
 Suite 500  
 St. Paul, MN 55101-2198

**37A.**

Your objection/preference of the specified route is noted. The comment is part of the record in this matter by its inclusion in the EIS, and will be submitted to the OAH and Commission for consideration.

**37B.**

Your objection/preference of the specified route is noted. The comment is part of the record in this matter by its inclusion in the EIS, and will be submitted to the OAH and Commission for consideration.

**37C.**

Your objection/preference of the specified route is noted. The comment is part of the record in this matter by its inclusion in the EIS, and will be submitted to the OAH and Commission for consideration. See Section 7.7 of the EIS.

37A

37B

37C

**Langan, Matthew (COMM)**

**From:** Richard & Karen Carlson [springhill.mn@hughes.net]  
**Sent:** Thursday, April 28, 2011 9:35 PM  
**To:** Langan, Matthew (COMM)  
**Subject:** Public Comment - CapX Hampton-Rochester-La Crosse Transmission Line Project

Public Comment

CapX Hampton-Rochester-La Crosse Transmission Line Project

PUC Docket Number: E002/TL-09-1448

Richard Carlson

35003 568<sup>th</sup> ST

Rochester, MN 55906

Zumbro Township, Wabasha County

Email: [springhill.mn@hughes.net](mailto:springhill.mn@hughes.net)

Mr. Langan:

I am writing to express my concern about the proposed electric transmission line with an alternate route to pass through Zumbro Township in Wabasha County. I ask that this route NOT be use and instead, use the southern route through Olmsted County.

- 38A The route through Zumbro Township will pass through a portion of the Richard J. Dorer Hardwood Forest and will cause considerable environmental damage. This route crosses steep terrain of the bluffs along the Zumbro River valley where clear-cutting forest will cause erosion and damage habitat for many wild bird species.
- 38B Important bird species observed in the path of the proposed route include Bald Eagles that roost in the tall hardwood trees and the Pileated Woodpecker - a timid and elusive resident of these woods. It will also damage habitat for protected wild flower species observed in this area including the Yellow Lady's-slipper orchid, a close cousin of the Pink Lady's-slipper - our State Flower. A Department of Natural Resources documented trout stream exists within the proposed route as well which will likely be damaged by erosion caused by the forest clear-cutting.
- 38C
- 38D
- 38E
- 38F Clearly, south route in Olmsted County is a better choice with flat terrain and fewer environment issues.

Sincerely,

Richard Carlson

**38A.**

See Section 8.3.4.7 of the EIS.

**38B.**

As noted in Section 7.8.7 of the EIS, the construction stormwater general permit (MN R 100001) was re-issued by the PCA on August 1, 2008. Under the re-issued permit an NPDES/State Disposal permit would be required for the construction of this transmission line. The types of activities associated with the construction of powerlines which trigger the need for a stormwater construction permit include ROW clearing, staging areas, access roads, landings for storage of equipment and timber, and other types of activities which disturb soil.

The construction stormwater permit requires the preparation of a project specific pollution prevention plan that identifies controls and practices that would be implemented during construction to prevent erosion. Specific strategies and requirements for controlling erosion will be developed during permitting and will be tailored to the unique erosion challenges that the permitted route presents.

**38C.**

See Section 7.7 of the EIS.

**38D.**

See Section 7.6 of the EIS.

**38E.**

See Section 7.8 of the EIS.

**38F.**

Your objection/preference of the specified route is noted. The comment is part of the record in this matter by its inclusion in the EIS, and will be submitted to the OAH and Commission for consideration.

**Langan, Matthew (COMM)**

**From:** Karen & Richard Carlson [springhill.mn@att.net]  
**Sent:** Friday, April 29, 2011 6:54 AM  
**To:** Langan, Matthew (COMM)  
**Subject:** CapX Hampton-Rochester-LaCrosse Transmission Line Project

Karen Carlson  
 35003 568th St  
 Rochester, MN 55906  
 Zumbro Township, Wabasha County  
 Email: [springhill.mn@att.net](mailto:springhill.mn@att.net)

Public Comment  
 PUC Docket Number E002/TL-09-1448

Dear Mr. Langan:

I live in the area of the alternate route of the transmission line and am writing to voice my concerns. Please do not use this alternate northern route because it will pass through a beautiful forest area that is home to so much wildlife.

- |     |   |
|-----|---|
| 39A | This area is part of the Richard Dorer Memorial Hardwood Forest. It contains beautiful oak, walnut, and black cherry trees. This year is its 50th anniversary! We know there are American Bald Eagles nesting in this area...it is very common for us to see them soaring overhead this area and perched in the trees. Also, we have seen White Egret roosting in the trees and Blue Heron flying about as we are close to the Zumbro River. The Pileated Woodpecker is another one that inhabits the forest here. He is a shy one! And every November, the Trumpeter Swans take their migratory route right over us! This forest is very important to the environment. |
| 39B |   |
| 39C |   |
| 39D | Zumbro Township is like a gateway to the scenic "bluff country" of SE Minnesota. It would clearly be a better choice to use the southern route because it would disrupt a lot less of precious habitat, beautiful forests, and scenic bluffs.   |
| 39E |   |
| 39F | The DNR also has a trout stream mapped in the vicinity of the northern alternate route! The preferred southern route is the obvious choice to make for this transmission line...please don't disrupt a portion of SE Minnesota that supports so much wildlife.  |

Sincerely,  
 Karen Carlson

**39A.**

See Section 8.3.4.7 of the EIS.

**39B.**

See Section 7.6 of the EIS.

**39C.**

See Section 7.7 of the EIS.

**39D.**

The comment is part of the record in this matter by its inclusion in the EIS, and will be submitted to the OAH and Commission for consideration.

**39E.**

**Your objection/preference of the specified route is noted. The comment is part of the record in this matter by its inclusion in the EIS, and will be submitted to the OAH and Commission for consideration.**

**39E.**

See Section 7.8 of the EIS.

April 28, 2011

Dear Mr. Langan,

I am writing regarding the DEIS for Docket# TL-09-1448 the CAPX2020 Hampton – Alma Route.

40A

➤ We live on the North Alternate Route Segment 3. On Appendix A Sheet MR28 our house is not shown within the 500 foot ROW, also our neighbor Beau Kennedy's house is not shown. I'm including two maps (MR28 and a map that shows our houses).

40B

➤ Also on our property we have Yellow Lady Slippers, Showy Orchis, Nodding Trillium and Grandiflora Trillium. We have Bald Eagles in the winter time that live in the area and fly through our valley.

40C

➤ The area around our home is wooded, hilly land that is subject to erosion. I have been working for the past 30 years that we have owned the land to slow this erosion, but if you clear cut a 150 foot Right of Way through this area you will increase the potential for extreme damage.

40D

➤ Why is the magnetic fields data different between the Hampton- LaCrosse application, Chapter 3, Table 3.3-2 and the CAPX Fargo line with the same configuration?

40E

➤ The North Alternate Route Segment 3 does not following existing Right Of Ways. It goes through agricultural land on property lines that are not considered Right of Ways.

40F

➤ The North Alternate Route Segment 3 would have to cross the Zumbro River where there is currently no crossing.

40G

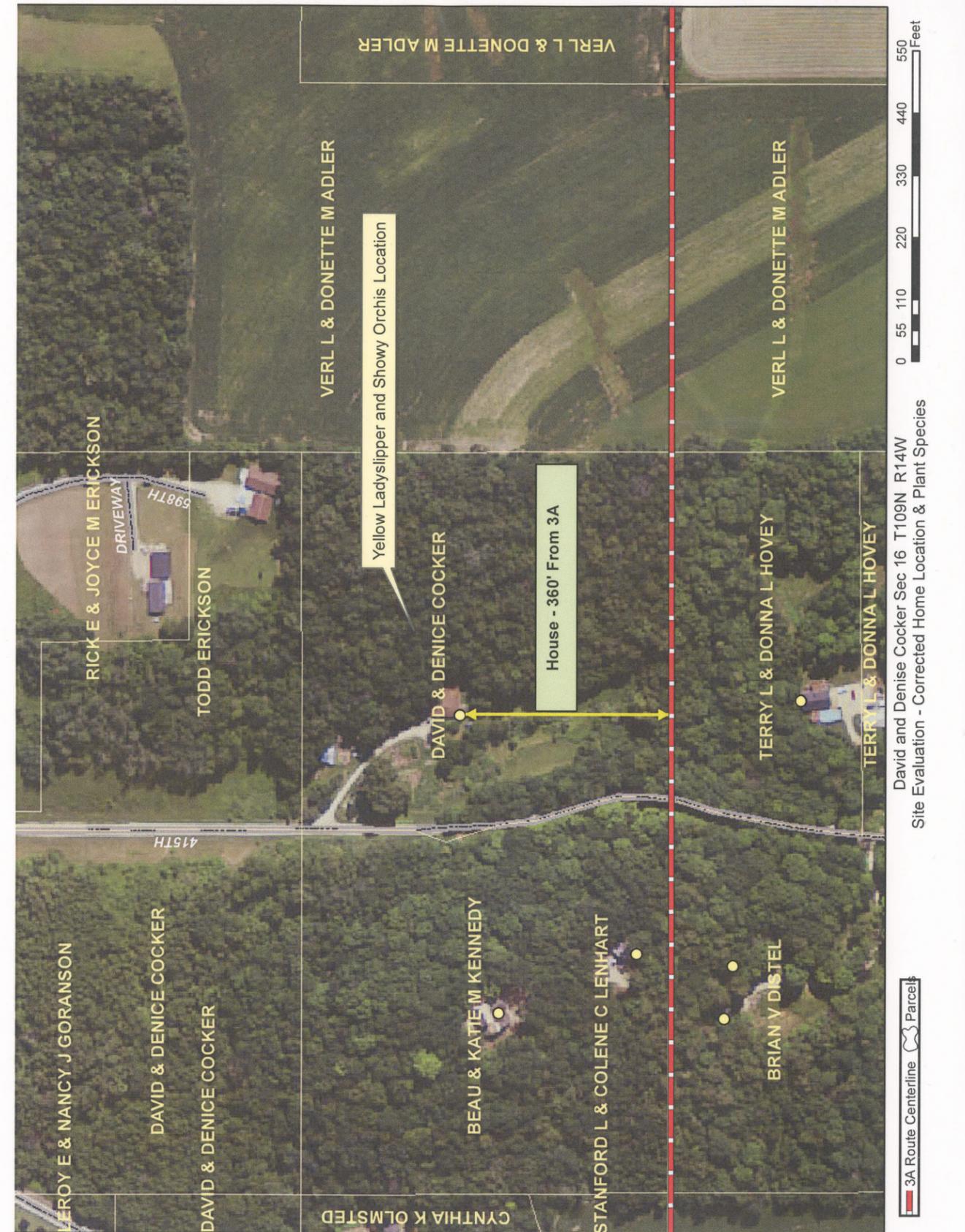
➤ The North Alternate Route Segment 3 goes through thousands of acres of the Richard J. Dorer Memorial Hardwood Forest. The land was set aside to preserve natural resources and to keep highly susceptible areas from eroding. If you clear cut a 150 foot Right of Way through it, you will defeat that purpose. This is the 50<sup>th</sup> anniversary of the Richard J. Dorer Memorial Hardwood Forest. This would not be a good way to honor his hard work to preserve this land.

Please consider these points of concern.

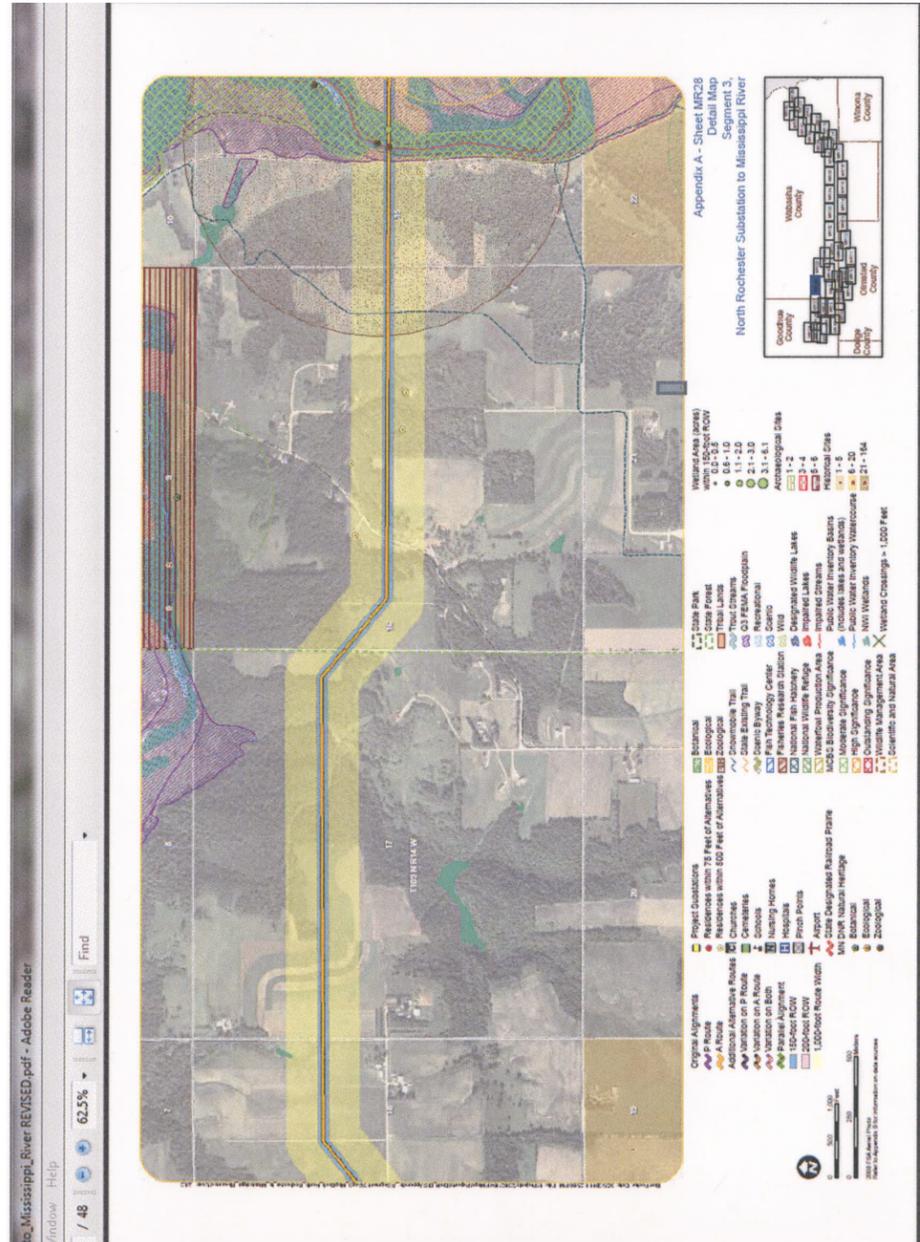
Sincerely,

David and Denice Cocker  
59684 415<sup>th</sup> Ave.  
Mazeppa, MN 55956

1-507-843-5281



David and Denice Cocker Sec 16 T109N R14W  
Site Evaluation - Corrected Home Location & Plant Species



## 40A.

Houses were added to the GIS shapefile and are shown in updated Appendix A maps and Table 8.3.4.3-1

## 40B.

See Section 7.7 of the EIS.

## 40C.

As noted in Section 7.8.7 of the EIS, the construction stormwater general permit (MN R 100001) was re-issued by the PCA on August 1, 2008. Under the re-issued permit an NPDES/State Disposal permit would be required for the construction of this transmission line. The types of activities associated with the construction of powerlines which trigger the need for a stormwater construction permit include ROW clearing, staging areas, access roads, landings for storage of equipment and timber, and other types of activities which disturb soil.

The construction stormwater permit requires the preparation of a project specific pollution prevention plan that identifies controls and practices that would be implemented during construction to prevent erosion. Specific strategies and requirements for controlling erosion will be developed during permitting and will be tailored to the unique erosion challenges that the permitted route presents.

## 40D.

Based on Amanda King's direct testimony, the applicant considered potential flows on the 345 kV line facilities that could occur under the highest anticipated loading conditions at some point in the future. High line loading conditions could occur during off-peak demand periods if significant generation were to be located in the area and if there were an unplanned outage of a major Twin Cities 345 kV transmission source such as Byron—Prairie Island or King—Eau Claire. These off-peak demand periods generally occur for about six hours per day. Based on this scenario, planning engineers determined that the highest flow that could reasonably be expected to occur on the facilities would be on the North Rochester—Mississippi River segment of the line; flows on the Hampton—North Rochester segment would be lower. The North Rochester—Mississippi River segment could potentially experience approximately 600 MVA for short periods of time. Planning engineers also assessed whether there was a scenario could result in flows higher than 600 MVA. Planning engineers determined that assuming load levels above 600 MVA would not be a reasonable assumption given the limited local generation that may develop in the area.

Levels above 600 MVA were not considered in the Hampton – Rochester – La Crosse 345 kV Project as they were in the Fargo - St. Cloud 345kV Project because a key difference between the projects is the impact of generation connections on anticipated load flows. It is likely that smaller generator projects would interconnect with the electrical system in the Hampton – Rochester – La Crosse 345 kV Project area. In contrast, larger generators are expected to interconnect with the electrical system on the north end of the Fargo Project area. In the Fargo case, planning engineers estimated the highest loading levels that might

## FEIS ID #40

occur on the line at some point in the future, considering a hypothetical high generation scenario where several thousands of megawatts (> 4,000 MW) of new generation is developed in North Dakota, South Dakota and Manitoba. Under this scenario, in any year, loading values of 600 MVA and 1,500 MVA would only potentially occur on the Fargo 345 kV line for up to six hours per day, for up to several days in a row.

It's also important to note that there is a network of bulk transmission lines in Minnesota that is set up like a hub and spoke where major facilities connect to the 345 kV ring around the Twin Cities. Generally, flows head from the west and the north toward the Twin Cities, the state's largest load center, and then move east and south. In the Twin Cities, power is drawn down from the lines to meet customer demand. Therefore, load flows "out" of the Twin Cities is lower than load flows headed "in" to the Twin Cities. Due to this general load flow and the lack of large generators in southeast Minnesota, load flows on the Hampton – Rochester – La Crosse line will be lower than those on the Fargo line.

**40E.**

See Section 7.11 of the EIS.

**40F.**

Your comment is part of the record that will be available to the Administrative Law Judge for the final routing decision.

**40G.**

See Section 8.3.4.7 of the EIS.



April 19, 2011

Mr. Matthew Langan  
Minnesota Department of Commerce  
85 7<sup>th</sup> Place East Suite 500  
St. Paul MN 55101-2198

Re: CAPX Hampton-Rochester-LaCrosse Project

Dear Mr. Langan:

I have been attending meetings with regard to the above since their beginning. I have listened to many who will be affected by this project. Never once have I heard any citizen state that they are in favor of this power line project.

This proposed power line will negatively affect all of whom it will encroach upon and benefit no citizens in Minnesota. This electrical power, the lines and towers will adversely affect the health and well being of all Minnesotans in its path. It will unnecessarily desecrate the landscape where easements have not been previously granted and should never be granted. This includes the Richard J. Dorer hardwood forests area also known has being one of the nations only driftless areas noted for its deeply carved river valleys caused by retreating glaciers thousands of years ago. This area is now surrounded by thousands of acres of prime farmland, woodlands, rivers and bluffs.

A mega power line project such as the one proposed, cutting through its heart to benefit citizens in Chicago and eastward is tragic and crime against all Minnesotans. Other than representatives from Excel Energy and those paid government employees from the Office of Energy and Security in St. Paul Minnesota there is not one single Minnesotan that wants this power line. Furthermore, the proposed routes for this power line are a scandal of epic proportions and a black eye for the citizens in its path. This will be a pathetic legacy to our new Governor and his cabinet and all of our elected officials should this project come to fruition.

Sincerely,

Michael H. Collins  
12036 11<sup>th</sup> Ave. NE  
Rochester MN 55906  
507-272-6471 – Cell  
Email:

41A  
41B  
41C  
41D

41A

41A.

The need for this transmission line has been previously determined by the Minnesota Public Utilities Commission (Docket No. CN-06-1115). Questions of need for this project cannot be addressed in this document, Minn. Stat. 216E.02, Subp. 2.

41B.

See Section 7.1 of the EIS.

41C.

See Section 7.11 of the EIS.

41D.

See Section 8.3.4.7 of the EIS.

41E.

The need for this transmission line has been previously determined by the Minnesota Public Utilities Commission (Docket No. CN-06-1115). Questions of need for this project cannot be addressed in this document, Minn. Stat. 216E.02, Subp. 2.

**Langan, Matthew (COMM)**

**From:** Kevin Collins [kevcollins@aol.com]  
**Sent:** Friday, April 29, 2011 12:01 AM  
**To:** Langan, Matthew (COMM)  
**Cc:** Paige Collins  
**Subject:** CapX2020 Hampton-Rochester-La Crosse 345kV and 161kV Transmission Line Project (PUC Docket No. E002/TL-09-1448) Draft Environmental Impact Statement Comments Regarding Segment 3

Office of Energy Security, MN Department of Commerce  
 Matt Langan, State Permit Manager  
 85 7th Place East, Suite 500  
 St. Paul, MN 55101-2198

Dear Mr. Langan,

We are a homeowner directly impacted by the proposed 3P "preferred" transmission route. The location of our home is immediately adjacent to the 3P "preferred route" and is shown by the red "X" in the map below. The proposed 3P "preferred route" would run just a few hundred feet off our back deck, permanently and irreparably destroying the natural and peaceful view we regularly enjoy today.

42A

We have reviewed the Draft EIS for this issue and **oppose** the findings regarding the 3P-001 to 3P-010 routes. Specifically, this DEIS does not adequately factor in the effects to present home values in our mostly residential township; nor does it factor in the effect such a project will have on future land uses in areas that are easily seen as being prime home sites in the coming decades. In fact, the entire 3P route is ill-advised because it will affect far more homes than the other route options, as demonstrated in the DEIS itself. The DEIS does not fit with the land-use plans of the local government agencies, including the City of Pine Island, City of Oronoco, Oronoco township, or Olmsted County.

42B

42C

42D

42E

We request the final EIS comprehensively address the impact to home values along this route along with describing how this proposal closes with the Olmsted County and Oronoco Township land use plans. Given the high density of residential homes along the proposed 3P "preferred route", we strongly urge the final EIS provide more detailed information regarding specific impacts of stray voltage to households, properties and health along these routes. We also request the final EIS provide information regarding the impact to nesting eagles and other migratory birds that frequent the 3P route, including mitigation for each route or route alternatives.

42F

42G

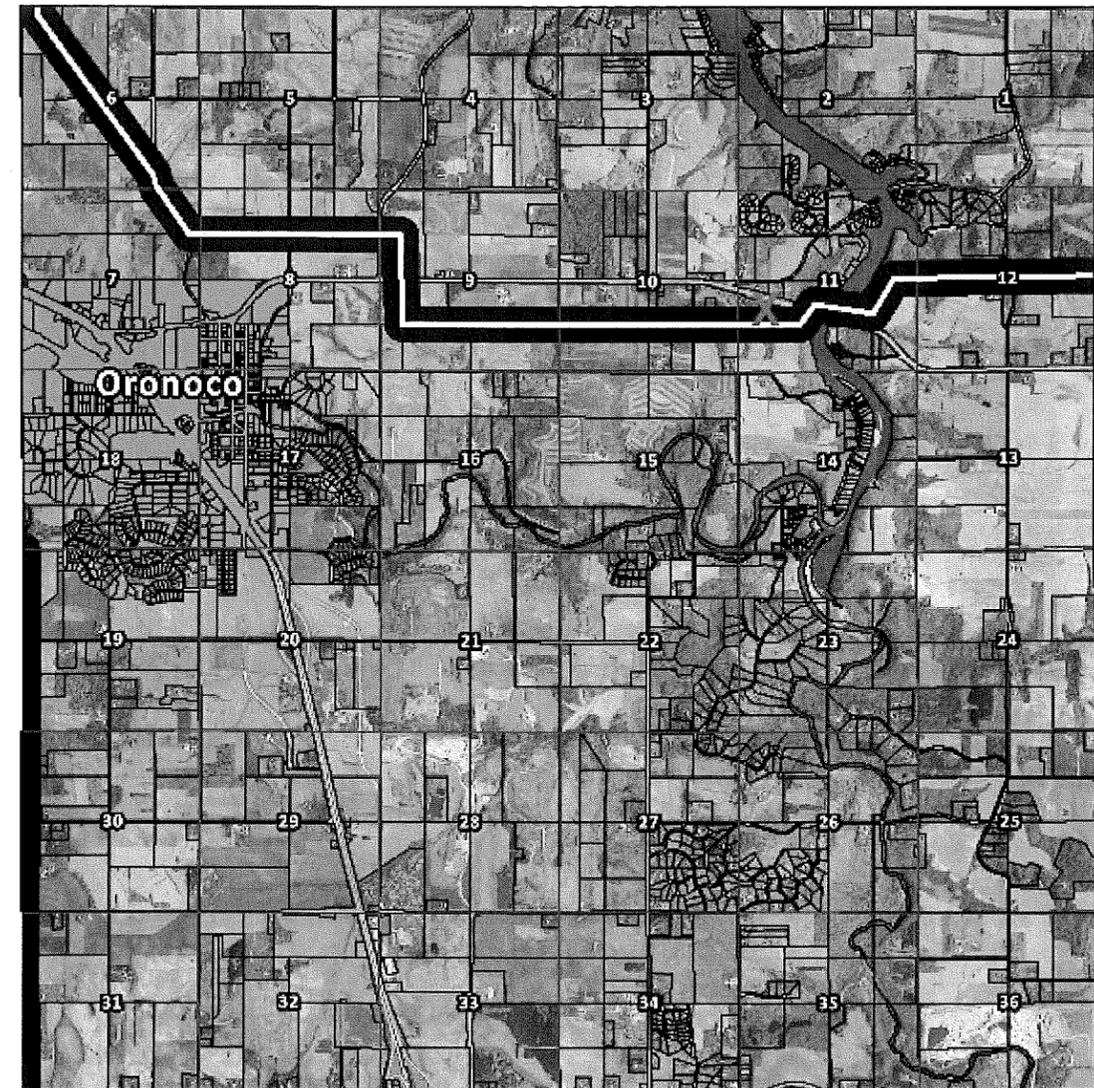
42H

We strongly urge this usage should be proposed aligned with existing major right-of-ways or located in an alternate route that has far fewer impacted homes, both today and per the planned growth over upcoming decades.

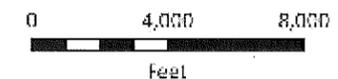
Sincerely,

Kevin and Paige Collins  
 1082 White Bridge Road NW  
 Oronoco, MN 55960  
[kevcollins@aol.com](mailto:kevcollins@aol.com)  
 507-367-2307

# ORONOCO TOWNSHIP



Date: 4/12/2011



 Preferred Route

