

Addendum 1: May 27, 2016 update of original April 6, 2010 document entitled: “Estimate of Recreational Fishing Losses Due to Fish Consumption Guidelines in the Waters of the Turtle River, Buffalo River, South Brunswick River, Purvis Creek, and Gibson Creek, Georgia”

Purpose

This addendum serves to update the calculations of the recreational fishing damages associated with fish consumption guidelines published by the State of Georgia for waterways near the LCP facility in Glynn County, Georgia. The update accounts for inflation of the US dollar from April 2007 (the previous base year), through April 2016 (the new base year), using the US Bureau of Labor Statistics’ *Consumer Price Index for All Urban Consumers: All Items* (CPI). The update also includes applying the discount rate of 3%, (same rate as in the original document), to account for the newbase year. The overall approach and the other values remain unchanged from the 2010 report, with the exception of the recovery scenarios. For purposes of this update, a single 30 year recovery scenario is used, beginning in 2012. In the April 6, 2010 report two 30 year recovery scenarios were used: one beginning in 2012 and the other in 2018. Thus, there is no longer a range for the estimated value of lost recreational fishing.

Results

This update for a single scenario, with a 30 year recovery, beginning in 2012 results in a total estimated loss of \$7,949,912. This update applies the CPI to the Breffle *et al.* per-trip loss values as shown in Table 1.1. Table 1.1 should be compared with Table 4 from the April 6, 2010 report. Here, the dollar values in the right-most column of 1.1 are in April 2016 dollars rather than the 2007 values in Table 4. As in the April 6, 2010 report, the values used for loss calculations are FCG levels 1, 3, and 6. Table 1.2 provides updated discounted estimated trips by reach along with respective per-trip losses along with total losses by year.

Table 1.1. Description of fish consumption guidelines used by Breffle *et al.*

FCA Group	Fish Guild	FCA Recommendation	Per-Trip Loss for Trip to FCG Site (α_1/β)	
			Reported (1998\$)	Inflated (2016\$)
FCG Level 1	Yellow perch	Unlimited	\$0.00	\$0.00
	Trout/salmon	Unlimited		
	Walleye	Unlimited		
	Smallmouth bass	Unlimited		
FCG Level 2	Yellow perch	Unlimited	\$1.81	\$2.66
	Trout/salmon	Eat no more than 1 meal a week		
	Walleye	Eat no more than 1 meal a week		
	Smallmouth bass	Unlimited		
FCG Level 3	Yellow perch	Unlimited	\$4.86	\$7.13
	Trout/salmon	Eat no more than 1 meal a month		
	Walleye	Eat no more than 1 meal a month		
	Smallmouth bass	Eat no more than 1 meal a week		
FCG Level 4	Yellow perch	Eat no more than 1 meal a week	\$9.75	\$14.31
	Trout/salmon	Eat no more than 1 meal a month		
	Walleye	Eat no more than 1 meal a month		
	Smallmouth bass	Eat no more than 1 meal a month		
FCG Level 5	Yellow perch	Unlimited	\$11.22	\$16.47
	Trout/salmon	Eat no more than 1 meal a month		
	Walleye	Do not eat		
	Smallmouth bass	Eat no more than 1 meal a month		
FCG Level 6	Yellow perch	Unlimited	\$9.91	\$14.55
	Trout/salmon	Do not eat		
	Walleye	Eat no more than 1 meal a month		
	Smallmouth bass	Eat no more than 1 meal a month		
FCG Level 7	Yellow perch	Unlimited	\$14.32	\$21.02
	Trout/salmon	Do not eat		
	Walleye	Do not eat		
	Smallmouth bass	Eat no more than 1 meal a month		
FCG Level 8	Yellow perch	Eat no more than 1 meal a week	\$19.78	\$29.03
	Trout/salmon	Do not eat		
	Walleye	Do not eat		
	Smallmouth bass	Eat no more than 1 meal a month		
FCG Level 9	Yellow perch	Eat no more than 1 meal a month	\$21.71	\$31.87
	Trout/salmon	Do not eat		
	Walleye	Do not eat		
	Smallmouth bass	Do not eat		

Table 1.2. Estimated discounted recreational trips to affected reaches, applicable per-trip welfare losses, and total recreational loss damages assuming improvement in FCAs beginning in 2012 and a 30-year linear recovery timeframe.

Year	P&G Creeks		UpRiver		MidRiver		LowRiver		Total Damages
	Trips	Loss/Trip	Trips	Loss/Trip	Trips	Loss/Trip	Trips	Loss/Trip	
1992	1,304	\$14.55	0	\$0.00	2,132	\$14.55	0	\$0.00	\$49,982
1993	1,384	\$14.55	0	\$0.00	2,265	\$14.55	0	\$0.00	\$53,081
1994	2,172	\$14.55	0	\$0.00	3,553	\$14.55	0	\$0.00	\$83,278
1995	1,794	\$14.55	0	\$0.00	2,935	\$14.55	0	\$0.00	\$68,783
1996	1,615	\$14.55	16,807	\$7.13	2,641	\$7.13	47,615	\$7.13	\$501,906
1997	998	\$14.55	10,389	\$7.13	1,633	\$7.13	29,432	\$7.13	\$310,239
1998	714	\$14.55	7,431	\$7.13	1,168	\$7.13	21,053	\$7.13	\$221,921
1999	841	\$14.55	8,750	\$7.13	1,375	\$7.13	24,790	\$7.13	\$261,305
2000	1,010	\$14.55	10,515	\$7.13	1,653	\$7.13	29,791	\$7.13	\$314,018
2001	859	\$14.55	8,939	\$7.13	1,405	\$7.13	25,324	\$7.13	\$266,938
2002	961	\$14.55	10,005	\$7.13	1,572	\$7.13	28,346	\$7.13	\$298,790
2003	1,367	\$14.55	14,228	\$7.13	2,236	\$7.13	40,309	\$7.13	\$424,887
2004	1,497	\$14.55	15,581	\$7.13	2,449	\$7.13	44,143	\$7.13	\$465,303
2005	1,025	\$14.55	9,907	\$7.13	1,677	\$7.13	28,066	\$7.13	\$297,769
2006	995	\$14.55	9,618	\$7.13	1,628	\$7.13	27,249	\$7.13	\$289,096
2007	966	\$14.55	9,338	\$7.13	1,581	\$7.13	26,455	\$7.13	\$280,676
2008	938	\$14.55	9,066	\$7.13	1,535	\$7.13	25,685	\$7.13	\$272,501
2009	911	\$14.55	8,802	\$7.13	1,490	\$7.13	24,936	\$7.13	\$264,564
2010	884	\$14.55	8,546	\$7.13	1,447	\$7.13	24,210	\$7.13	\$256,858
2011	859	\$14.55	8,297	\$7.13	1,405	\$7.13	23,505	\$7.13	\$249,377
2012	834	\$14.06	8,055	\$6.90	1,364	\$6.90	22,820	\$6.90	\$234,043
2013	809	\$13.58	7,820	\$6.66	1,324	\$6.66	22,156	\$6.66	\$219,391
2014	786	\$13.09	7,593	\$6.42	1,285	\$6.42	21,510	\$6.42	\$205,394
2015	763	\$12.61	7,371	\$6.18	1,248	\$6.18	20,884	\$6.18	\$192,026
2016	741	\$12.12	7,157	\$5.94	1,212	\$5.94	20,276	\$5.94	\$179,262
2017	719	\$11.64	6,948	\$5.71	1,176	\$5.71	19,685	\$5.71	\$167,080
2018	698	\$11.15	6,746	\$5.47	1,142	\$5.47	19,112	\$5.47	\$155,454
2019	678	\$10.67	6,549	\$5.23	1,109	\$5.23	18,555	\$5.23	\$144,364
2020	658	\$10.18	6,359	\$4.99	1,077	\$4.99	18,015	\$4.99	\$133,789
2021	639	\$9.70	6,173	\$4.76	1,045	\$4.76	17,490	\$4.76	\$123,707
2022	620	\$9.21	5,994	\$4.52	1,015	\$4.52	16,981	\$4.52	\$114,098
2023	602	\$8.73	5,819	\$4.28	985	\$4.28	16,486	\$4.28	\$104,945
2024	585	\$8.24	5,650	\$4.04	956	\$4.04	16,006	\$4.04	\$96,228
2025	568	\$7.76	5,485	\$3.80	929	\$3.80	15,540	\$3.80	\$87,929
2026	551	\$7.27	5,325	\$3.57	902	\$3.57	15,087	\$3.57	\$80,033
2027	535	\$6.79	5,170	\$3.33	875	\$3.33	14,648	\$3.33	\$72,522
2028	520	\$6.30	5,020	\$3.09	850	\$3.09	14,221	\$3.09	\$65,380
2029	504	\$5.82	4,873	\$2.85	825	\$2.85	13,807	\$2.85	\$58,593
2030	490	\$5.33	4,731	\$2.62	801	\$2.62	13,405	\$2.62	\$52,146
2031	475	\$4.85	4,594	\$2.38	778	\$2.38	13,014	\$2.38	\$46,025
2032	462	\$4.36	4,460	\$2.14	755	\$2.14	12,635	\$2.14	\$40,216
2033	448	\$3.88	4,330	\$1.90	733	\$1.90	12,267	\$1.90	\$34,706
2034	435	\$3.39	4,204	\$1.66	712	\$1.66	11,910	\$1.66	\$29,483
2035	422	\$2.91	4,081	\$1.43	691	\$1.43	11,563	\$1.43	\$24,535
2036	410	\$2.42	3,963	\$1.19	671	\$1.19	11,226	\$1.19	\$19,851
2037	398	\$1.94	3,847	\$0.95	651	\$0.95	10,899	\$0.95	\$15,418
2038	387	\$1.45	3,735	\$0.71	632	\$0.71	10,582	\$0.71	\$11,227
2039	375	\$0.97	3,626	\$0.48	614	\$0.48	10,274	\$0.48	\$7,266
2040	364	\$0.48	3,521	\$0.24	596	\$0.24	9,974	\$0.24	\$3,527
2041	354	\$0.00	3,418	\$0.00	579	\$0.00	9,684	\$0.00	\$0
SUM									\$7,949,912