

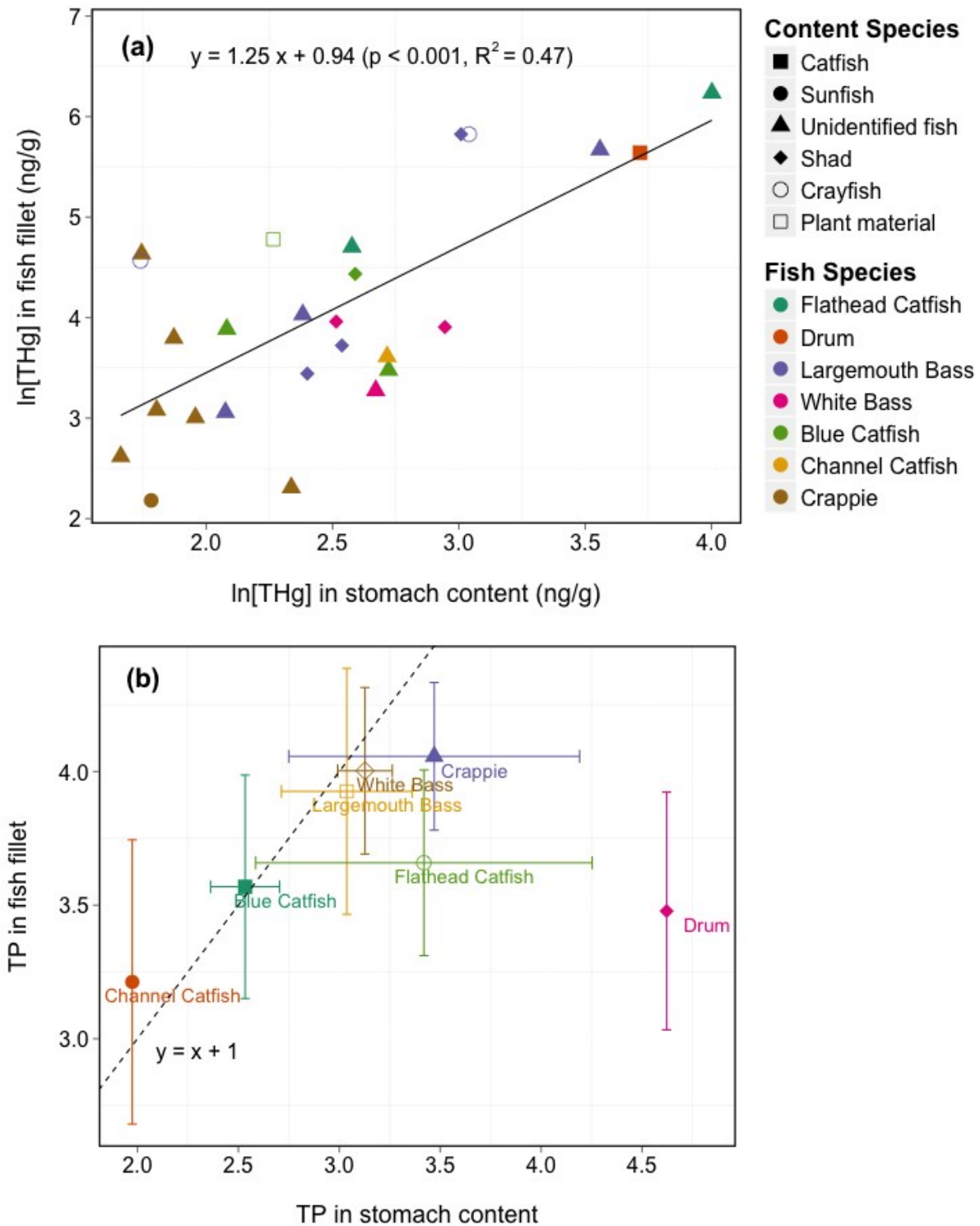
Supplementary Data

Table S1. Data used for the inter-system analysis, containing bottom water quality, biological and watershed data for 61 reservoirs in Oklahoma (in a Microsoft Excel spreadsheet).

Table S2. Number of samples tested for MeHg by species, with results for [THg] (ng/g, wet weight), [MeHg] (ng/g, wet weight) and percentage of MeHg (%). The [THg] values were measured at the Dartmouth College Trace Element Analysis Laboratory at the same time as the MeHg analysis.

Species	N	Mean [THg] ± SD	Mean [MeHg] ± SD	Mean %MeHg ± SD
Blue Catfish	4	32.1 ± 20.2	31.4 ± 19.9	97.6 ± 2.6
Buffalo	4	47.3 ± 30.9	46.9 ± 30.7	98.9 ± 0.4
Channel Catfish	4	19.9 ± 5.9	19.7 ± 5.8	99.4 ± 0.9
Common Carp	2	20.0	19.6	101.8
Crappie	6	15.7 ± 6.9	15.7 ± 6.6	101.0 ± 3.4
Drum	2	26.9	26.0	95.9
Gar	2	81.6	80.5	97.8
Largemouth Bass	3	37.2 ± 29.8	37.6 ± 29.4	102.3 ± 2.4
Shad	6	6.5 ± 1.3	5.3 ± 1.1	82.1 ± 11.2
Spoonbill	7	44.0 ± 20.6	42.1 ± 20.1	95.5 ± 2.6
Sunfish	1	24.3	23.0	94.6
White Bass	4	45.0 ± 44.4	45.2 ± 44.0	103.0 ± 4.4

Figure S1. (a) $\ln[\text{THg}]$ (ng/g, wet weight) in stomach content samples versus $\ln[\text{THg}]$ (ng/g, wet weight) in corresponding fillet by species. Each point represents an individual fish, colors represent fish species and shapes represent species identified in stomach content. (b) TP in stomach content samples versus TP in fillet of corresponding species. (c) lipid-normalized $\delta^{13}\text{C}$ ($\delta^{13}\text{C}_{\text{adj}}$) in stomach content samples versus $\delta^{13}\text{C}_{\text{adj}}$ in fillet of corresponding species. In (b) and (c) each point represents mean value of the species, since stable isotopes were not measured in all corresponding individuals of fish; error bars represent standard deviations within the species.



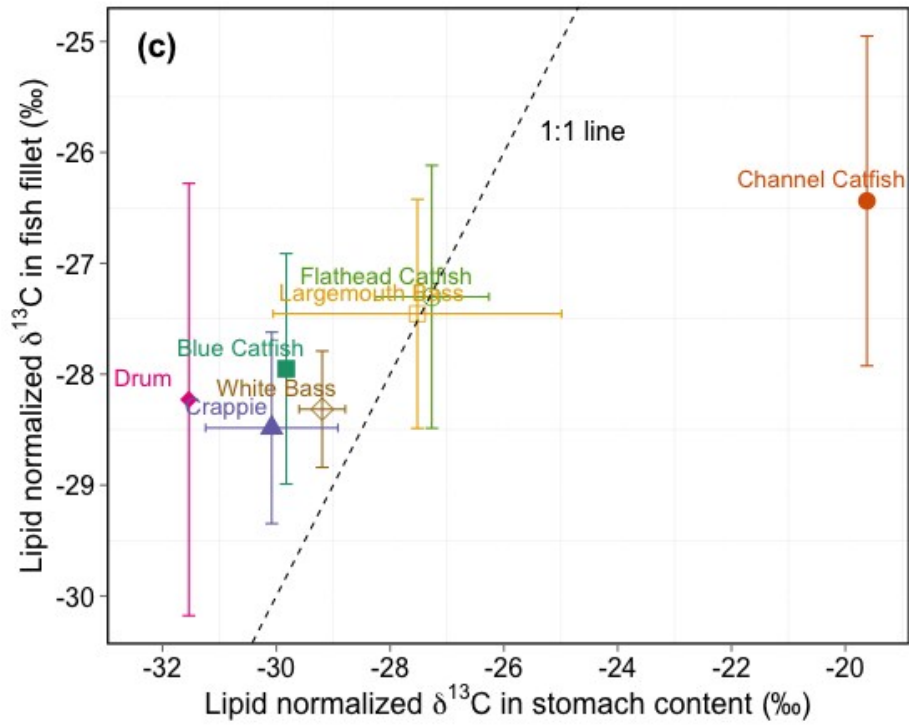


Figure S2. Scatterplots of modeled $\ln[\text{THg}]$ ($\mu\text{g/g}$) in 14" largemouth bass against pH, annual rainfall, true color and total phosphorus, among studied reservoirs in Oklahoma. Solid lines represent fitted lines from simple linear regressions, and dashed lines correspond to the EPA fish TRC of 300 ng/g.

