TABLE S5 | Association of fish species abundance with the axes of Distance-based Redundancy Analysis (db-RDA). Significance was assessed with 9,999 permutations. Statistically significant associations (r^2 with $P \leq 0.05$) are highlighted in bold.

Species	dbRDA1	dbRDA2	r^2	Pr(>r)
Astyanax sp.	0.96405	0.26573	0.0602	0.1335
Acaronia nassa	-0.97039	0.24153	0.0212	0.6214
Aequidens sp.	0.2324	0.97262	0.015	0.6911
Aequidens tretamerus	-0.99	0.14105	0.0638	0.1889
Anablepsoides sp.	0.97226	0.23392	0.0398	0.3705
Anablepsoides sp. 1	-0.72483	-0.68892	0.0122	0.7404
Anablepsoides sp. 2	-0.66121	-0.7502	0.0581	0.1672
Anablepsoides sp. 3	-0.94562	0.32529	0.0298	0.5683
Anablepsoides urophthalmus	-0.63632	-0.77143	0.2869	**0.0005**
Ancistrus sp. 1	-0.98072	0.1954	0.1576	**0.0132**
Apistogramma agassizi	0.54315	0.83963	0.0698	0.1641
Apistogramma cf. *vielfleck*	0.90993	0.41476	0.0385	0.3789
Apistogramma gr. *regani*	0.46971	0.88282	0.1351	**0.0252**
Apistogramma sp.	0.91808	0.39639	0.0352	0.4144
Apistogramma sp. 1	-0.32844	0.94452	0.0069	0.8607
Brachyhypopomus brevirostris	0.75379	-0.65711	0.0625	0.1902
Brachyhypopomus sp.	-0.92794	-0.37273	0.005	0.8922
Brachyhypopomus sp. 1	-0.12238	0.99248	0.0041	0.9117
Brachyhypoppomus beebei	0.98501	0.17252	0.0106	0.7906
Bryconops caudomaculatus	-0.98418	0.17714	0.3736	**0.0001**
Bryconops sp.	0.98894	-0.14832	0.0041	0.911
Bunocephalus coracoideus	0.72667	0.68699	0.2245	**0.0023**
Callichthys callichthys	-0.49807	0.86714	0.005	0.8829
Carnegiella strigata	0.62069	0.78405	0.3858	**0.0001**
Characidium sp.	0.94841	-0.31705	0.1852	**0.0055**
Copella arnoldi	-0.9894	-0.14523	0.1854	**0.0053**
Crenicichla sp.	0.54265	0.83996	0.0997	0.066
Crenicichla macrophthalma	0.9509	-0.3095	0.1391	**0.0226**
Crenicichla saxatilis	-0.99964	0.02669	0.0384	0.4714
Crenicichla sp. 1	-0.76366	-0.64562	0.0175	0.6583
Crenicichla sp. 2	-0.94647	0.3228	0.0988	0.0689
Crenuchus spilurus	-0.75849	0.65168	0.0267	0.516
Curimatella sp.	0.62814	-0.7781	0.0785	0.1116
Denticetopsis sp.	-0.39273	-0.91966	0.0174	0.6555
Eigemmania aff. *trilineata*	0.9037	-0.42818	0.148	**0.0146**
Eigenmannia pavulagem	-0.96151	0.27475	0.0491	0.2843
Erythrinus erythrinus	0.14671	-0.98918	0.2338	**0.0023**
Erythrinus sp.	0.04651	-0.99892	0.0533	0.2521
Farlowella amazona	-0.00921	0.99996	0.0741	0.1445

TABLE S5 | (Continued)

Species	dbRDA1	dbRDA2	r^2	Pr(>r)
Gladioglanis conquistator	-0.96301	0.26947	0.0536	0.2579
Gnathocharax sp.	0.48701	0.8734	0.1652	**0.0113**
Gymnotus gr. *carapo*	-0.25062	0.96808	0.0134	0.7431
Gymnorhamphichthys rondoni	0.58017	0.8145	0.0736	0.1438
Gymnotus coropinae	0.99492	0.10064	0.0773	0.1344
Helogenes marmoratus	0.72608	-0.68762	0.0241	0.5488
Hemigrammus bellottii	0.82145	0.57028	0.3934	**0.0001**
Hemigrammus cf. *guyanensis*	-0.91903	0.39418	0.0388	0.3985
Hemigrammus ocellifer	-0.66673	0.7453	0.0731	0.1443
Hemigrammus rodwayi	-0.89196	-0.45211	0.0809	0.1065
Hemmigrammus sp.	0.99998	-0.00706	0.2793	**0.0004**
Hemigrammus collettii	0.19053	0.98168	0.0556	0.2403
Heros sp. 1	-0.97588	0.21831	0.0346	0.4245
Hopilas malabaricus	-0.08613	-0.99628	0.0204	0.5991
Hoplosternum thorocata	-0.90167	0.43242	0.0476	0.2933
Hyphessobrycon cf. *moniliger*	-0.73206	0.68124	0.0123	0.7623
Hyphessobrycon heterorhabdus	-0.99581	-0.09149	0.7984	**0.0001**
Hyphessobrycon sp.	0.94837	0.31716	0.2062	**0.0027**
Hyphessobrycon sp. 1	0.95521	-0.29591	0.058	0.2208
Hyphessobrycon sp. 2	0.78173	0.62362	0.0119	0.7459
Hypopygus lepturus	0.10892	0.99405	0.007	0.8435
Iguanodectes rachovii	-0.96473	0.26325	0.4984	**0.0001**
Iguanodectes sp.	0.77381	-0.63342	0.2132	**0.0032**
Ituglanis amazonicus	0.80204	0.59727	0.1969	**0.0034**
Ituglanis sp. 1	-0.96993	0.2434	0.0576	0.2196
Jupiaba sp.	0.10229	-0.99475	0.1462	0.0385
Laemosimion sp. 1	-0.83444	-0.5511	0.0262	0.5305
Loricaria sp. 1	0.77322	0.63414	0.0333	0.4395
Loricaria sp. 2	0.42367	0.90582	0.0471	0.3052
Mastiglanis sp. 1	0.74122	0.67126	0.124	**0.029**
Mastiglanis sp. 2	0.853	0.5219	0.0571	0.2245
Mesonauta sp.	0.15926	0.98724	0.0009	0.9748
Microcharacidium sp.	-0.12789	0.99179	0.0035	0.929
Microglanis sp.	0.87579	-0.48269	0.056	0.1882
Microsternachus bilineatus	-0.79363	0.6084	0.0909	0.0867
Microsternachus sp.	0.99147	0.13034	0.0043	0.9458
Microsternachus sp. 1	-0.99687	0.07906	0.1152	**0.0444**
Microsternachus sp. 2	-0.94916	0.3148	0.0256	0.5417
Microsternarchus aff. *brevis*	0.91669	0.3996	0.1392	**0.0216**
Moenkhausia celibela	0.99092	-0.13442	0.0075	0.8498
Moenkhausia comma	0.94789	0.31861	0.0034	0.9616

TABLE S5 | (Continued)

Species	dbRDA1	dbRDA2	r^2	Pr(>r)
Moenkhausia cotinho	0.68767	-0.72602	0.0209	0.6112
Moenkhausia oligolepis	0.97359	0.22831	0.1857	**0.0058**
Moenkhausia sp.	0.58784	-0.80898	0.6775	**0.0001**
Moenkhausia sp. 1	-0.18547	0.98265	0.03	0.4933
Monocirrhus polyacanthus	-0.81547	0.57881	0.135	**0.0274**
Myloplus sp. 1	0.84058	0.54169	0.0079	0.8411
Nannostomus eques	0.74825	0.66342	0.2363	**0.0009**
Nannostomus marginatus	-0.9878	0.1557	0.0789	0.1207
Nannostomus unifasciatus	0.62859	-0.77774	0.0631	0.1827
Nannostumos trifaciatus	0.34811	0.93745	0.0447	0.3225
Pimelodella cristata	0.32162	-0.94687	0.0569	0.2257
Pimelodella sp.	0.92526	0.37933	0.1106	**0.0476**
Pimelodella sp. 1	-0.88955	-0.45684	0.0018	0.9593
Potamorrhaphis guianensis	0.60222	0.79833	0.0097	0.8182
Pristella maxillaris	0.8927	0.45066	0.1018	0.063
Pristella sp.	0.56901	0.82233	0.0191	0.6695
Pyrrhulina capim	0.5263	-0.8503	0.6195	**0.0001**
Rhamdia quelen	-0.98912	-0.1471	0.0755	0.1299
Rineloricaria cf. *teffeana*	0.93793	-0.34682	0.0618	0.1785
Rineloricaria lanceolata	-0.26584	0.96402	0.0188	0.6784
Rineloricaria parva	-0.90167	0.43242	0.0476	0.2933
Rivulidae sp.	-0.62463	0.78092	0.0355	0.4034
Steatogenys duidae	0.65297	0.75738	0.0593	0.208
Steatogenys sp.	0.95122	0.30852	0.0588	0.1499
Synbranchus marmoratus	-0.98803	0.15424	0.0065	0.8571
Tatia sp.	-0.6347	0.77276	0.0346	0.4428
Tetranematichthys quadrifilis	0.43765	0.89914	0.1052	**0.0478**

Neotropical Ichthyology

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Official Journal of the
Sociedade Brasileira de Ictiologia

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HOW TO CITE THIS ARTICLE

- **Penha ICS, Benone NL, Silva AJP, Silva RS, Michelan TS, Juen L, Montag LFA.** The ichthyofaunal composition of Amazonian streams reflects localized environmental changes associated with buried mining pipeline infrastructure. Neotrop Ichthyol. 2025; 23(4):e250011. https://doi.org/10.1590/1982-0224-2025-0011