| River | Description | Climate | $CO_2$ $\mu gCL^{-1}$ | $FCO_2$ $gCO_2$ $m^2d^{-1}$ | $CH_4$ $\mu gC$ $L^{-1}$ | $FCH_4$* $gCO_2eq$ $m^2d^{-1}$ | $N_2O$ $\mu gN$ $L^{-1}$ | $FN_2O$** $gCO_2eq$ $m^2d^{-1}$ | $F_{total}$*** $gCO_2eq$ $m^2d^{-1}$ | Reference |
|---|---|---|---|---|---|---|---|---|---|---|
| Saigon River (Vietnam) | Dominated by urban, 10M inhabitants | Tropical | 3174 | 35.56 | 5.89 | 0.64 | 3.03 | 8.79 | 45.0 | This study |
| Adyar River, India | Dominated by urban, 8M inhabitants | Tropical | NA | NA | 756 | 28.3 | 0.42 | 0.13 | NA | Rajkumar et al. 2008 |
| Zambezi River, Africa | Mainly mining, industrial and agricultural activities | Tropical | 3600 | 12.4 | 11.2 | 1.36 | 0.33 | NA | NA | Teodoru et al. 2015 |
| Saribas rivers, Malaysia | Non-urban, dominated by oil palm plantations | Tropical | NA | 13.7 | 0.75 | 0.08 | 0.23 | 0.03 | 13.9 | Müller et al. 2016 |
| Nanfei River, China | Dominated by urban, 10M inhabitants | Subtropical | 8052 | 39.6 | 66 | 3.14 | 5.7 | 2.24 | 45.0 | Zhang et al. 2021 |
| Shark River estuary, USA | Mangrove-dominated estuary | Subtropical | NA | 4.048 | NA | 0.03 | NA | 0.03 | 4.1 | Reithmaier et al. 2020 |
| Guadalete Estuary, Spain | Receive discharge of urban effluents and agriculture crop | Mediterran-ean | NA | NA | 5.7 | 0.22 | 3.84 | 1.22 | NA | Burgos et al. 2015 |
| Bay of Cádiz (SW Spain) | A tidal creek receiving waters of fish farm | Mediterran-ean | 864 | 5.5 | 0.59 | 0.04 | 0.384 | 0.56 | 6.1 | Ferrón et al. 2007 |
| Lower Seine River, France | Heavily urbanized and industrialized | Temperate | 2500 | NA | 2.75 | NA | 2.5 | NA | NA | Marescaux et al. 2018 |
| Duliujian River, China | Natural river | Warm temperate | 480 | 0.56 | 1.2 | 0.12 | 0.001 | 0.36 | 1.0 | Hu et al. 2018 |
| Po River, Italy | Nitrate pollution. Intensive farming, 16M inhabitants | Continental temperate | 5483 | 22.7 | 2.54 | 0.28 | 4.69 | 22.35 | 45.3 | Laini et al. 2011 |

* $CH_4$ flux in $gCO_2eq/m2/d$ = $FCH_4$ $gCH_4$ $m^2d^{-1}$ x 28

** $N_2O$ flux in $gCO_2eq/m2/d$ = $FN_2O$ $gN_2O$ $m^2d^{-1}$ x 298

***$F_{total}$ is total $CO_2$ equivalent flux = $FCO_2$ + $FCH_4$ + $FN_2O$

NA is not available