**Supplementary Materials:** Table S1. Summary of investigated lakes and reservoirs in Lithuania. Descriptive statistics of *in situ* measured SD, chlorophyll-a, CDOM and turbidity.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Location** | **Date** | **Secchi disk depth, m** | **CDOM m-1** | **Chl-a, µg l-1** | **Turbidity, NTU** |
| Germantas lake | 2021-09-11 | 4.00 | 2.06 | 7.40 | 0.96 |
| Mastis lake | 2021-09-11 | 0.50 | 1.62 | 47.11 | 16.90 |
| Kašučių lake | 2021-09-20 | 4.30 | 0.91 | 4.03 | 0.46 |
| Padvarių reservoir | 2021-09-20 | 1.10 | 2.00 | 20.23 | 9.88 |
| Prūsalių reservoir | 2021-09-20 | 2.20 | 1.53 | 7.86 | 1.63 |
| Tūbausių reservoir | 2021-09-20 | 1.50 | 3.15 | 26.91 | 4.78 |
| Balsys lake | 2021-09-26 | 4.70 | 0.37 | 4.61 | 1.33 |
| Gineitiškių lake | 2021-09-26 | 0.60 | 1.16 | 59.73 | 24.98 |
| Grabuostas lake | 2021-09-26 | 1.20 | 1.25 | 15.34 | 1.62 |
| Rėkyvos lake | 2021-09-27 | 0.30 | 2.21 | 77.30 | 8.54 |
| Dievytis lake | 2022-04-13 | 1.20 | 2.07 | 36.34 | 2.56 |
| Germantas lake | 2022-04-13 | 2.70 | 0.80 | 2.95 | 0.45 |
| Ilgis lake | 2022-04-13 | 0.30 | 20.01 | 35.02 | 2.09 |
| Mastis lake | 2022-04-13 | 1.50 | 2.05 | 18.61 | 3.32 |
| Salotas lake | 2022-04-13 | 1.50 | 6.01 | 4.86 | 1.33 |
| Viešvėnų reservoir | 2022-04-13 | 0.90 | 2.47 | 14.35 | 3.91 |
| Vembūtų reservoir | 2022-04-13 | 1.40 | 2.67 | 58.50 | 9.65 |
| Plateliai lake\_1 | 2022-05-02 | 5.10 | 0.75 | 3.22 | 0.04 |
| Plateliai lake\_2 | 2022-05-02 | 5.30 | 0.76 | 2.94 | 0.11 |
| Baltys lake | 2022-07-27 | 0.25 | 2.03 | 113.23 | 70.62 |
| Kupiškio reservoir | 2022-07-27 | 1.70 | 3.37 | 13.71 | 3.43 |
| Lampėdis career | 2022-07-27 | 2.40 | 0.72 | 9.04 | 3.06 |
| Rubikių lake | 2022-07-27 | 1.70 | 2.29 | 23.61 | 3.11 |
| Vostapas lake | 2022-07-27 | 1.80 | 3.91 | 23.61 | 1.79 |
| Linkmenas lake | 2022-07-28 | 3.10 | 1.44 | 2.76 | 0.39 |
| Mūšėjus lake | 2022-07-28 | 1.10 | 8.89 | 34.26 | 2.63 |
| Želvos lake\_2 | 2022-07-28 | 2.25 | 3.72 | 9.95 | 1.44 |
| Želvos lake\_1 | 2022-07-28 | 2.30 | 3.69 | 7.47 | 0.86 |
| Simnas lake | 2022-08-12 | 0.35 | 2.05 | 84.93 | 26.62 |
| Stebuliškių reservoir | 2022-08-12 | 0.80 | 2.93 | 65.69 | 9.72 |
| Sujainių reservoir | 2022-08-12 | 0.95 | 1.21 | 45.22 | 6.39 |
| Musia lake | 2022-08-13 | 0.90 | 4.29 | 39.18 | 8.62 |
| Pakapės reservoir | 2022-08-13 | 0.80 | 2.05 | 18.65 | 11.61 |
| Širvys lake | 2022-08-13 | 1.50 | 5.69 | 81.43 | 10.40 |
| Žalesas lake | 2022-08-13 | 1.25 | 7.36 | 10.88 | 3.11 |
| Ilgės lakež | 2022-08-19 | 1.00 | 2.09 | 29.66 | 3.91 |
| Kruminių reservoir | 2022-08-19 | 1.00 | 2.70 | 20.04 | 3.46 |
| Neveiglas lake | 2022-08-19 | 2.00 | 2.41 | 8.76 | 1.82 |
| Savistas lake | 2022-08-19 | 1.90 | 1.62 | 8.23 | 2.59 |
| Švenčius lake | 2022-08-19 | 0.60 | 3.08 | 21.84 | 18.16 |
| Duriai lake | 2023-05-07 | 1.83 | 2.85 | 17.96 | 2.41 |
| Luokesų lake | 2023-05-07 | 7.20 | 0.37 | 1.13 | 0.00 |
| Kirneilis lake | 2023-05-07 | 3.15 | 2.21 | 5.04 | 0.19 |