SDG Goal 6	**Clean water and sanitation**
SDG Target 6.6	**By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes**
SDG Indicator 6.6.1	**Change in the extent of water-related ecosystems over time**
Time series	**Lakes and Rivers permanent water area**

1. General information on the time series

- Date of national metadata: 04 May 2022
- National data: http://sdg-indikatoren.de/en/6-6-1/
- Definition: The time series measures the extent of lakes and rivers based on the Ecosystem Extent Account. For lakes, the ecosystem classes "large, natural lakes" (B01.21) and "other, small lakes" (B01.29) have been taken into account. The ecosystem classes "large, heavily modified lakes" (B01.22) and "large, artificial lakes" (B01.23) are considered to be reservoirs following the definition in the global metadata and therefore not inlcuded here. For water courses, all ecosystem classes of the ecosystem group "water courses" (B01.1) are taken into account. These inlcude "large, natural water courses" (B01.11), "large, heavily modified water courses" (B01.12), "large, artificial water courses" (B01.13) and "other, small water courses" (B01.19).
- Disaggregation: Not available.

2. Comparison with global metadata

- Date of global metadata: July 2021
- Global metadata: https://unstats.un.org/sdgs/metadata/files/Metadata-06-06-01a.pdf
- The time series is compliant with the global metadata.

3. Data description

- Data stems from the Ecosystem Extent Account that is part of the Environmental-Economic Accounting for Germany.

4. Accessibility of source data

- Area balance sheet of ecosystems: Freshwater:
  https://www.destatis.de/EN/Themes/Society-Environment/Environment/Environmental-Economic-Accounting/ecosystem-account/Tables/b01-freshwater.html

5. Metadata on source data

- Methods of the Ecosystem Extent Account:
  https://www.destatis.de/EN/Themes/Society-Environment/Environment/Environmental-Economic-Accounting/ecosystem-account/Methods/methods-ecosystem-extent-account.pdf?__blob=publicationFile
- National Ecosystem Classification for Germany:
  https://www.destatis.de/EN/Themes/Society-Environment/Environment/Environmental-Economic-Accounting/ecosystem-account/Methods/national-ecosystem-classification-5852206219004.pdf

6. Timeliness and frequency

- Timeliness: t + 14 months
- Frequency: Every 3 years

7. Calculation method

- Unit of measurement: km²
- Calculation method:

$$\textbf{Lakes and Rivers permanent water area} = \text{Water Courses (B01.1)[km²]} + \text{Lakes (B01.2)[km²]} - \text{Large artificial lakes (B01.23)[km²]} - \text{Large, heavy modified lakes (B01.22)[km²]}$$

SDG Goal 6	**Clean water and sanitation**
SDG Target 6.6	**By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes**
SDG Indicator 6.6.1	**Change in the extent of water-related ecosystems over time**
Time series	**Lakes and rivers permanent water area as a proportion of total land area**

1. General information on the time series

- Date of national metadata: 04 May 2022
- National data: http://sdg-indikatoren.de/en/6-6-1/
- Definition: The time series measures the extent of lakes and rivers as a proportion of total land area based on the Ecosystem Extent Account. For lakes, the ecosystem classes "large, natural lakes" (B01.21) and "other, small lakes" (B01.29) have been taken into account. The ecosystem classes "large, heavily modified lakes" (B01.22) and "large, artificial lakes" (B01.23) are considered to be reservoirs following the definition in the global metadata and therefore not inlcuded here. For water courses, all ecosystem classes of the ecosystem group "water courses" (B01.1) are taken into account. These inlcude "large, natural water courses" (B01.11), "large, heavily modified water courses" (B01.12), "large, artificial water courses" (B01.13) and "other, small water courses" (B01.19). For the calculation of the total land area, all terrestrial areas (included in the ecosystem division A "Terrestrial areas") and the freshwater area (included in ecosystem group B01 "Freshwater") are taken into account.
- Disaggregation: Not available.

2. Comparison with global metadata

- Date of global metadata: July 2021
- Global metadata: https://unstats.un.org/sdgs/metadata/files/Metadata-06-06-01a.pdf
- The time series is compliant with the global metadata.

3. Data description

- Data stems from the Ecosystem Extent Account that is part of the Environmental-Economic Accounting for Germany.

4. Accessibility of source data

- Area balance sheet of ecosystems: Freshwater:
  https://www.destatis.de/EN/Themes/Society-Environment/Environment/Environmental-Economic-Accounting/ecosystem-account/Tables/b01-freshwater.html

5. Metadata on source data

- Methods of the Ecosystem Extent Account:
  https://www.destatis.de/EN/Themes/Society-Environment/Environment/Environmental-Economic-Accounting/ecosystem-account/Methods/methods-ecosystem-extent-account.pdf?__blob=publicationFile
- National Ecosystem Classification for Germany:
  https://www.destatis.de/EN/Themes/Society-Environment/Environment/Environmental-Economic-Accounting/ecosystem-account/Methods/national-ecosystem-classification-5852206219004.pdf

6. Timeliness and frequency

- Timeliness: t + 14 months
- Frequency: Every 3 years

7. Calculation method

- Unit of measurement: Percentage
- Calculation method:

$$\textbf{Lakes and Rivers permanent water area as a share of total land area} = \frac{\text{Water Courses (B01.1)}\,[\text{km}^2] + \text{Lakes (B01.2)}\,[\text{km}^2] - \text{Large artificial lakes (B01.23)}\,[\text{km}^2] - \text{Large, heavy modified lakes (B01.22)}\,[\text{km}^2]}{\text{Terrestrial area (A)}\,[\text{km}^2] + \text{Freshwater (B01)}\,[\text{km}^2]} \cdot 100\,[\%]$$

SDG Goal 6	**Clean water and sanitation**
SDG Target 6.6	**By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes**
SDG Indicator 6.6.1	**Change in the extent of water-related ecosystems over time**
Time series	**Wetlands area**

1. General information on the time series

- Date of national metadata: 04 May 2022
- National data: http://sdg-indikatoren.de/en/6-6-1/
- Definition: The time series measures the extent of wetlands based on the Ecosystem Extent Account. For wetlands, the ecosystem classes "Marshes" (A04.21) , "Peatbogs with active cutting" (A04.22), "Natural or renaturalized peatbogs" (A04.23) and "Natural or renaturalized fens" (A04.24) are taken into account.
- Disaggregation: Not available.

2. Comparison with global metadata

- Date of global metadata: July 2021
- Global metadata: https://unstats.un.org/sdgs/metadata/files/Metadata-06-06-01a.pdf
- The time series is compliant with the global metadata.

3. Data description

- Data stems from the Ecosystem Extent Account that is part of the Environmental-Economic Accounting for Germany.

4. Accessibility of source data

- Area balance sheet of ecosystems: Semi-natural open areas: https://www.destatis.de/EN/Themes/Society-Environment/Environment/Environmental-Economic-Accounting/ecosystem-account/Tables/a04-open-areas.html

5. Metadata on source data

- Methods of the Ecosystem Extent Account: https://www.destatis.de/EN/Themes/Society-Environment/Environment/Environmental-Economic-Accounting/ecosystem-account/Methods/methods-ecosystem-extent-account.pdf?__blob=publicationFile
- National Ecosystem Classification for Germany: https://www.destatis.de/EN/Themes/Society-Environment/Environment/Environmental-Economic-Accounting/ecosystem-account/Methods/national-ecosystem-classification-5852206219004.pdf

6. Timeliness and frequency

- Timeliness: t + 14 months
- Frequency: Every 3 years

7. Calculation method

- Unit of measurement: km²
- Calculation method:

$$\textbf{Wetland area} = \underset{\text{(A 04.21) [km²]}}{\text{Marshes}} + \underset{\text{(A 04.22) [km²]}}{\text{Peatbogs with active cutting}} + \underset{\text{(A 04.23) [km²]}}{\text{Natural or renaturalized peatbogs}} + \underset{\text{(A 04.24) [km²]}}{\text{Natural or renaturalized fens}}$$

SDG Goal 6	**Clean water and sanitation**
SDG Target 6.6	**By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes**
SDG Indicator 6.6.1	**Change in the extent of water-related ecosystems over time**
Time series	**Wetlands area as a proportion of total land area**

1. General information on the time series

- Date of national metadata: 04 May 2022
- National data: http://sdg-indikatoren.de/en/6-6-1/
- Definition: The time series measures the extent of wetlands as a proportion of total land area based on the Ecosystem Extent Account. For wetlands, the ecosystem classes "Marshes" (A04.21) , "Peatbogs with active cutting" (A04.22), "Natural or renaturalized peatbogs" (A04.23) and "Natural or renaturalized fens" (A04.24) are taken into account. For the calculation of the total land area, all terrestrial areas (included in the ecosystem division A "Terrestrial areas") and the freshwater area (included in ecosystem group B01 "Freshwater") are taken into account.
- Disaggregation: Not available.

2. Comparison with global metadata

- Date of global metadata: July 2021
- Global metadata: https://unstats.un.org/sdgs/metadata/files/Metadata-06-06-01a.pdf
- The time series is compliant with the global metadata.

3. Data description

- Data stems from the Ecosystem Extent Account that is part of the Environmental-Economic accounting for Germany.

4. Accessibility of source data

- Area balance sheet of ecosystems: Semi-natural open areas: https://www.destatis.de/EN/Themes/Society-Environment/Environment/Environmental-Economic-Accounting/ecosystem-account/Tables/a04-open-areas.html

5. Metadata on source data

- Methods of the Ecosystem Extent Account: https://www.destatis.de/EN/Themes/Society-Environment/Environment/Environmental-Economic-Accounting/ecosystem-account/Methods/methods-ecosystem-extent-account.pdf?__blob=publicationFile
- National Ecosystem Classification for Germany: https://www.destatis.de/EN/Themes/Society-Environment/Environment/Environmental-Economic-Accounting/ecosystem-account/Methods/national-ecosystem-classification-5852206219004.pdf

6. Timeliness and frequency

- Timeliness: t + 14 months
- Frequency: Every 3 years

7. Calculation method

- Unit of measurement: Percentage
- Calculation method:

$$\textbf{Wetland area as share of total land area} = \frac{\text{Marshes (A 04.21) [km²]} + \text{Peatbogs with active cutting (A 04.22) [km²]} + \text{Natural or renaturalized peatbogs (A 04.23) [km²]} + \text{Natural or renaturalized fens (A 04.24) [km²]}}{\text{Terrestrial areas (A) [km²]} + \text{Freshwater (B 01) [km²]}} \cdot 100\,[\%]$$

SDG Goal 6	**Clean water and sanitation**
SDG Target 6.6	**By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes**
SDG Indicator 6.6.1	**Change in the extent of water-related ecosystems over time**
Time series	**Lakes and Rivers permanent water area change (compared to 2015)**

1. General information on the time series

- Date of national metadata: 04 May 2022
- National data: http://sdg-indikatoren.de/en/6-6-1/
- Definition: The time series measures the change in the extent of lakes and rivers based on the Ecosystem Extent Account. For lakes, the ecosystem classes "large, natural lakes" (B01.21) and "other, small lakes" (B01.29) have been taken into account. The ecosystem classes "large, heavily modified lakes" (B01.22) and "large, artificial lakes" (B01.23) are considered to be reservoirs following the definition in the global metadata and therefore not inlcuded here. For water courses, all ecosystem classes of the ecosystem group "water courses" (B01.1) are taken into account. These inlcude "large, natural water courses" (B01.11), "large, heavily modified water courses" (B01.12), "large, artificial water courses" (B01.13) and "other, small water courses" (B01.19).
- Disaggregation: Not available.

2. Comparison with global metadata

- Date of global metadata: July 2021
- Global metadata: https://unstats.un.org/sdgs/metadata/files/Metadata-06-06-01a.pdf
- The time series is partly compliant with the global metadata. The baseline year against which the change is measured differs from the global metadata.

3. Data description

- Data stems from the Ecosystem Extent Account that is part of the Environmental-Economic Accounting for Germany.

4. Accessibility of source data

- Area balance sheet of ecosystems: Freshwater: https://www.destatis.de/EN/Themes/Society-Environment/Environment/Environmental-Economic-Accounting/ecosystem-account/Tables/b01-freshwater.html

5. Metadata on source data

- Methods of the Ecosystem Extent Account: https://www.destatis.de/EN/Themes/Society-Environment/Environment/Environmental-Economic-Accounting/ecosystem-account/Methods/methods-ecosystem-extent-account.pdf?__blob=publicationFile
- National Ecosystem Classification for Germany: https://www.destatis.de/EN/Themes/Society-Environment/Environment/Environmental-Economic-Accounting/ecosystem-account/Methods/national-ecosystem-classification-5852206219004.pdf

6. Timeliness and frequency

- Timeliness: t + 14 months
- Frequency: Every 3 years

7. Calculation method

- Unit of measurement: Percentage
- Calculation method:

$$\textbf{Lakes and Rivers permanent water area change}_{t} = \frac{\text{Lakes and Rivers permanent water area [km²]}_{t} - \text{Lakes and Rivers permanent water area [km²]}_{2015}}{\text{Lakes and Rivers permanent water area [km²]}_{2015}} \cdot 100\,[\%]$$