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PUBLIC SEWAGE SYSTEM, 2022

In 2022, the total volume of waste waters amounted to 354 519 thousand m³, which was a negligible decrease of 0.6% compared to 2021.

Out of the total volume of waste waters, 189 504 thousand m³ were from households and economic activities (decrease of 0.7%), while 165 015 thousand m³ were other waste waters (precipitations, etc.).

The volume of waste waters discharged from households decreased by 1.3%, while those from economic activities increased by 0.8% compared to the previous year.

In 2022, the volume of treated waste waters amounted to 297 915 thousand m³, which was 0.4% more than the total volume of treated waste waters in 2021.

The volume of untreated waste waters amounted to 56 604 thousand m³, which was 5.3% less than in the previous year.

The public sewage network in 2022 was 14 179 km long, which was 3.8% more than in 2021.

The total number of waste water treatment plants was 186 in 2022. The number of secondary and tertiary treatment plants increased, while the number of primary treatment plants decreased, by 10.8%.

More detailed data will be available in the database on 21 July 2023.

1 SOURCE, TREATMENT AND DISCHARGE OF WASTE WATERS, 2021 AND 2022

'000 m³

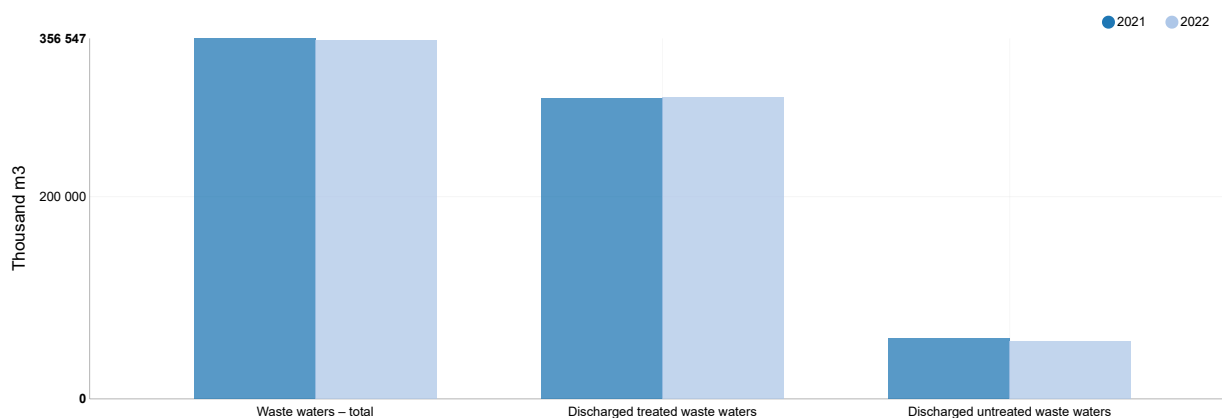
	2021	2022	Indices 2022 2021
Waste waters – total	356 547	354 519	99,4
From households	129 386	127 682	98,7
From economic activities	61 358	61 822	100,8
Other waters	165 803	165 015	99,5
Discharged treated waste waters – total	296 783	297 915	100,4
Primary treatment	60 118	63 064	104,9
Secondary treatment	207 538	200 854	96,8
Tertiary treatment	29 127	33 997	116,7
Discharged untreated waste waters	59 764	56 604	94,7

2 PUBLIC SEWAGE NETWORK AND WASTE WATER TREATMENT PLANTS, 2021 AND 2022

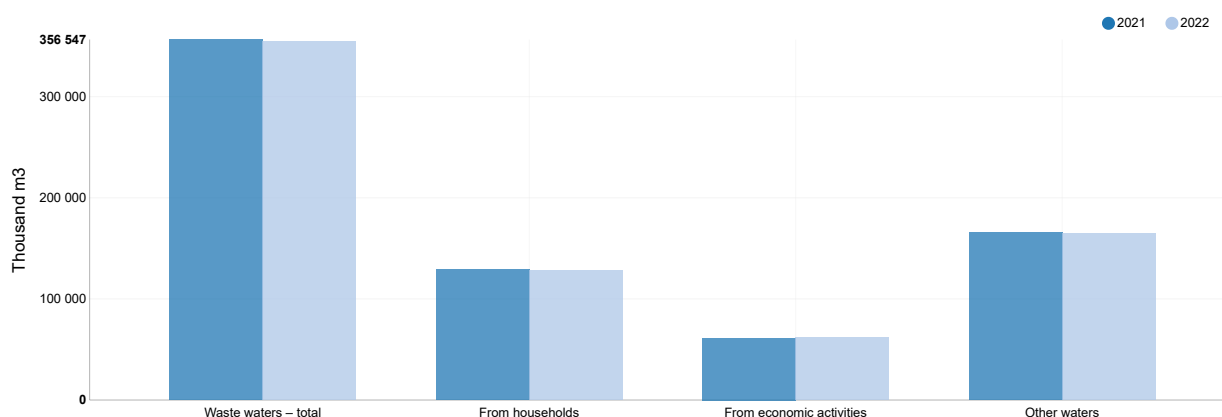
'000 m³

	2021	2022	Indices 2022 2021
Total length of public sewage network, km	13 664	14 179	103,8
Waste water treatment plants	183	186	101,6
Number of primary treatment plants	74	66	89,2
Number of secondary treatment plants	84	90	107,1
Number of tertiary treatment plants	25	30	120,0

G-1 WASTE WATERS, 2021 AND 2022



G-2 WASTE WATERS, BY ORIGIN, 2021 AND 2022



NOTES ON METHODOLOGY

Sources and methods of data collection

The data on the public sewage system are collected by using the annual statistical survey entitled the Annual Survey on Public Sewage System (VOD-2K form) on the basis of the Official Statistics Act (NN, No. 25/20).

Reporting units are public suppliers of public sewage system services. According to the Water Act (NN, No. 47/23), the public supplier of sewage system services is a company in which all shares or equity shares are held by local self-government units or companies in which all shares or equity shares are held directly by local self-government units, that is, an institution founded by a local self-government unit.

The report is filled in by legal entities and parts thereof that are registered, according to the NKD 2007 (NN, Nos 58/07 and 72/07), in section E Water supply; sewerage, waste management and remediation activities, class 37.00 Sewerage.

Coverage and comparability

The source for the address list is the Statistical Business Register.

The survey provides basic data on waste waters, their treatment and discharge as well as on the public sewerage network and waste water treatment plants.

Definitions

Public sewerage means the activity of collection of waste waters, their transport to a waste water treatment plant, treatment and direct or indirect discharge into surface waters, treatment of sludge generated in the process of waste water treatment, if the above is conducted through public sewerage facilities, and management of these facilities; public sewerage also includes pumping and transport of waste water from sump pits.

Waste waters are all potentially polluted industrial, sanitary, rainwater and other waters.

Treated waste waters comprise all amounts of waste waters treated by using either primary (mechanical), secondary (biological) or tertiary (combined) treatment method.

The primary treatment includes the application of physical and/or chemical processes by which at least 50% of suspended solids are removed from the waste water, while the BOD₅ value decreases by as much as 20%, as compared to the BOD₅ value of influent waters.

The secondary treatment includes the application of biological and/or other treatment processes by which the concentration of suspended solids and BOD₅ decreases by 70% to 90% and the concentration of COD by at least 75%.

The tertiary treatment includes the application of physical and chemical, biological and other treatment processes by which the concentration of nutritious matters of influent in waste waters decreases by as much as 80%, or other pollutants, which could not be removed to that extent in the secondary treatment, are now removed as well.

Discharged waste waters consist of discharges of treated and untreated waters. The waters can be discharged into ground waters, waterflows, reservoirs, lakes and the sea.

Public sewage network is a network of enclosed public drains and sewers used either for draining of both waste and atmospheric waters together (general water sewage system), or for separate draining of waste and atmospheric waters (separation water sewage system).

Total length of the public sewage network is the length of the sewerage network of enclosed public drains and pipes for wastewater and atmospheric waters from settlements, without connections and networks within buildings.

Waste water treatment plants are devices for the treatment of waste water. They are divided to devices for the primary, secondary and tertiary treatment.

Abbreviations

BPK ₅	biochemical oxygen demand
COD	chemical oxygen demand
km	kilometre
m ³	cubic metre
NKD 2007	National Classification of Activities, 2007 version
NN	Narodne novine, official gazette of the Republic of Croatia
'000	thousand

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