



**PREČIŠĆAVANJE I ISPUŠTANJE OTPADNIH VODA U 2019.  
/Prethodni podaci/**

**TREATMENT AND DISCHARGE OF WASTE WATERS IN 2019  
/Previous data/**

U 2019. ukupna količina otpadnih voda bila je 90 217 000 m<sup>3</sup>, što je za 1,0% više u odnosu na 2018.

*In 2019, the total volume of waste waters was 90 217 000 m<sup>3</sup> which less for 1.0% in relation to 2018.*

U 2019. prečišćenih otpadnih voda bilo je 54 040 000 m<sup>3</sup>.

*In 2019 treated waste water was 54 040 000 m<sup>3</sup>.*

U 2019. kanalizaciona mreža bila je duga 3 119 km. Broj kanalizacionih priključaka u 2019. godini iznosio je 241 662 priključaka.

*In 2019 the sewage network was 3 119 km long. In 2019 the number of sewage connections amounted 241 662 connections.*

**1. PORIJEKLO/PODRIJETLO I PREČIŠĆAVANJE/PROČIŠĆAVANJE OTPADNIH VODA**

**SOURCE AND TREATMENT OF WASTE WATERS**

u hilj./tis . m<sup>3</sup>

	2018	2019	Indeksi/indices <u>2019</u> 2018	
Otpadne vode – ukupno	89.317	90.217	101,0	Total waste waters
Domaćinstva/kućanstava	60.700	61.329	101,0	Households
Poljoprivreda, šumarstvo i ribolov	173	197	113,9	Agriculture, forestry and fishing
Industrija i građevinske djelatnosti	8.562	8.755	102,3	activities
Iz ostalih djelatnosti	19.882	19.936	100,3	Other activities
<b>Prečišćene otpadne vode – ukupno</b>	<b>51.214</b>	<b>54.040</b>	<b>105,5</b>	<b>Total purified waste waters</b>
Primarni tretman	731	732	100,1	Primary treatment
Sekundarni tretman	50.401	51.541	102,3	Secondary treatment
Tercijarni tretman	82	1.767	-	Tertiary treatment

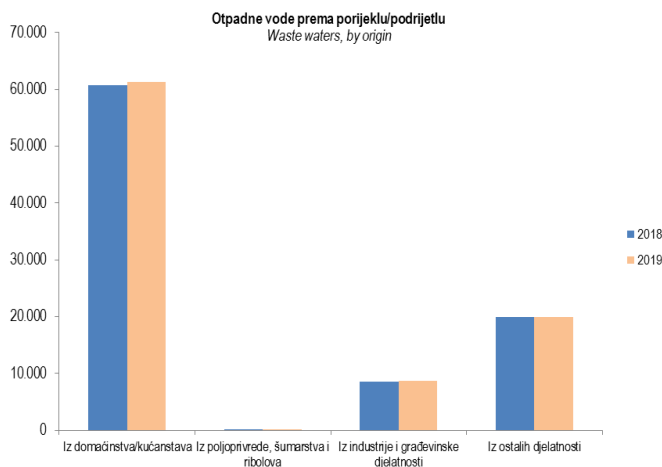
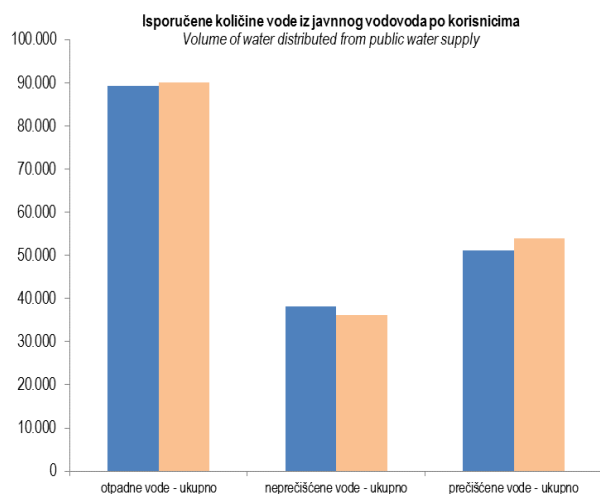
**2. ISPUŠTENE OTPADNE VODE**  
DISCHARGED WASTE WATER

u hilj./tis . m<sup>3</sup>

	2018	2019	Indeksi/indices <u>2019</u> 2018	
Ispuštene otpadne vode – ukupno	89.317	90.217	101,0	Total discharged waste water
Neprečišćene vode – svega	38.103	36.177	94,9	Total unpurified water
Ispuštene				Discharged
U podzemne vode	1.101	1.143	103,8	Ground water
U vodotoke	36.626	34.594	94,5	Watercourses
U akumulacije	376	440	117,0	Reservoirs
Prečišćene vode – svega	51.214	54.040	105,5	Total purified water
Ispuštene				Discharged
U podzemne vode	88	87	98,9	Ground water
U vodotoke	50.636	53.463	105,6	Watercourses
U more	490	490	100,0	Sea

**3. KANALIZACIONA MREŽA**  
SEWAGE NETWORK

	2018	2019	Indeksi/indices <u>2019</u> 2018	
Ukupna dužina zatvorene kanalizacione mreže, km	3.021	3.119	103,2	Total length of sewage, km
Od toga prema vrsti:				Of that, by type:
Mješoviti sistem, km	1.363	1.382	101,4	Combined system, km
Separacijski sistem, km	1.658	1.737	104,8	Separation system, km
Od toga:				Of that:
Fekalni, km	1.000	1.049	104,9	Faecal, km
Atmosferski, km	658	687	104,4	Atmospheric, km
Dužina glavnog kolektora, km	531	550	103,6	Length of main sewage, km
Broj kanalizacionih priključaka	212.376	241.662	113,8	Number of connecting pipes



Podaci o javnoj kanalizaciji prikupljaju se redovnim godišnjim statističkim istraživanjem (VOD-2K) od komunalnih poslovnih subjekata i od općinskih službi koje upravljaju javnom kanalizacijom u promatranim naseljima.

**Otpadne vode** su one koje se poslije korištenja odvođe do uređaja za prečišćavanje ili se ispuštaju u prostor (u podzemne ili površinske vode). U količine otpadnih voda nisu uključene atmosferske kao ni protočne vode (npr. vode koje pokreću hidroelektrane).

**Prečišćene otpadne vode** su sve one količine otpadnih voda koje se u toku izvještajne godine pročišćavaju primarnim, sekundarnim i tercijarnim tretmanom.

Primarni tretman je primjena fizikalnih i/ili hemijskih postupaka čišćenja otpadnih voda u kojima se vrijednost BPK<sub>5</sub> ulaznih otpadnih voda reducira za najmanje 20% prije ispuštanja, a ukupne suspendirane tvari ulaznih otpadnih voda se reducira za najmanje 50%.

Sekundarni tretman je primjena bioloških i/ili drugih postupaka čišćenja kojima se u otpadnim vodama smanjuje koncentracija suspendirane tvari i BPK<sub>5</sub> influenta za 70 – 90%, a koncentracija KPK za najmanje 75%.

Tercijarni tretman je primjena fizikalno/hemijskih, bioloških i drugih postupaka kojima se u otpadnim vodama smanjuje koncentracija hranjivih tvari influenta za najmanje 80%, odnosno uklanjaju i drugi posebni pokazatelji otpadnih tvari u granicama vrijednosti koje nije moguće postići primjenom drugog stupnja prečišćavanja.

**Javna kanalizacija** je mreža zatvorenih uličnih kanala i kolektora kojima se odvođe bilo otpadne i atmosferske vode (opći sistem kanalizacije) bilo posebno otpadne vode, a posebno atmosferske vode (separacijski sistem kanalizacije).

**Glavni kolektor** je sabirni kanal koji odvodi vode iz jednog dijela ili cijelog grada do recipijenta ili uređaja za prečišćavanje.

**Kanalizacijski priključak** je spoj objekata s uličnom kanalizacijom.

#### Kratice

BPK<sub>5</sub> biološka potreba kisika  
KPK hemijska potreba kisika

Data on public sewage system are collected through regular annual report (VOD-2K) from municipal business entities and municipal services which run the public sewage system.

**Waste water** is water drained to the purification device after use, or discharged into the environment (into ground or surface waters). It does not include atmospheric or running water (i.e. waters that drive hydroelectric plants).

**Treated waste water** comprises all amounts of waste water that were purified during the reporting year, either primary, secondary or tertiary treatment method.

The primary treatment includes the application of physical and/or chemical processes by which the BOD<sub>5</sub> value of the incoming waste water is reduced by at least 20% before discharge and the total suspended solids of the incoming waste are reduced by at least 50%.

The secondary treatment includes the application of biological and/or other treatment processes by which the concentration of suspended solids and BOD<sub>5</sub> decreases by even 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 in influent waste waters decreases by as much as 80%, which means that other pollutants, which could not be removed to that extent in the secondary treatment, are now removed as well.

**Public sewage system** is a network of enclosed public drains and sewers used for draining of either waste or atmospheric waters (general water sewage system), or solely waste water and solely atmospheric waters (separational water sewage system).

**Main sewer** is a collecting drain, which drains water from one part or the whole city to the recipient or to the purification device.

**Connecting pipe** is a connection between the object and street drains.

#### Abbreviations

BOD<sub>5</sub> biochemical oxygen demand  
COD chemical oxygen demand

Izdaje Federalni zavod za statistiku FBiH, 71000 Sarajevo, Zelenih beretki 26  
Published by the Institute for Statistics of FBiH, 71000 Sarajevo, Zelenih beretki 26

Telefon/Phone: +387 (33) 20 64 52, Fax: +387 (33) 22 61 51  
Elektronska pošta/E-mail: [fedstat@fzs.ba](mailto:fedstat@fzs.ba), Internetska stranica/Web site: <http://www.fzs.ba>

Odgovara: Doc. dr. Emir Kremić, direktor  
Person responsible: Assist. Prof. Emir Kremić, PhD, Director General

Saopćenje pripremili: Fehrija Mehić, Milena Dragičević  
Prepared by: Fehrija Mehić, Milena Dragičević

**Molimo korisnike da prilikom korišćenja podataka navedu izvor**  
Those using data from this issue are requested to state the source

Podaci iz ovog saopćenja objavljuju se na internetu  
First Release data are published on the Internet