

MINISTRY OF INTERIOR
HUNGARY

Waste water solutions
for settlements under 2000 PE in Hungary

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Video-workshop on rural wastewater management

ICPDR

19. January 2020



CONTENT

- Introduction of Hungary – waste water
- Hungarian settlement structure
- Waste water agglomerations
- Status in figures under 2000 PE
- Technical solutions under 2000 PE
- Legal regulation
- Main future plans

„Life as a Member State in the EU”



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Population: 9,8 million people
Area: 93.036 km²

Accession Treaty to the EU: 1st May 2004

Urban Waste Water Treatment Directive: 91/271/EEC

Obligatory deadlines for Hungary 31. 12. 2008, 2010 and 2015.

National Waste Water Implementation Program

Continuous reporting every second year:

latest: 30 June 2020; with reference date of 31. 12. 2018

Member State – duty: settlements above 2000 PE

- country responsibility: settlements under 2000 PE

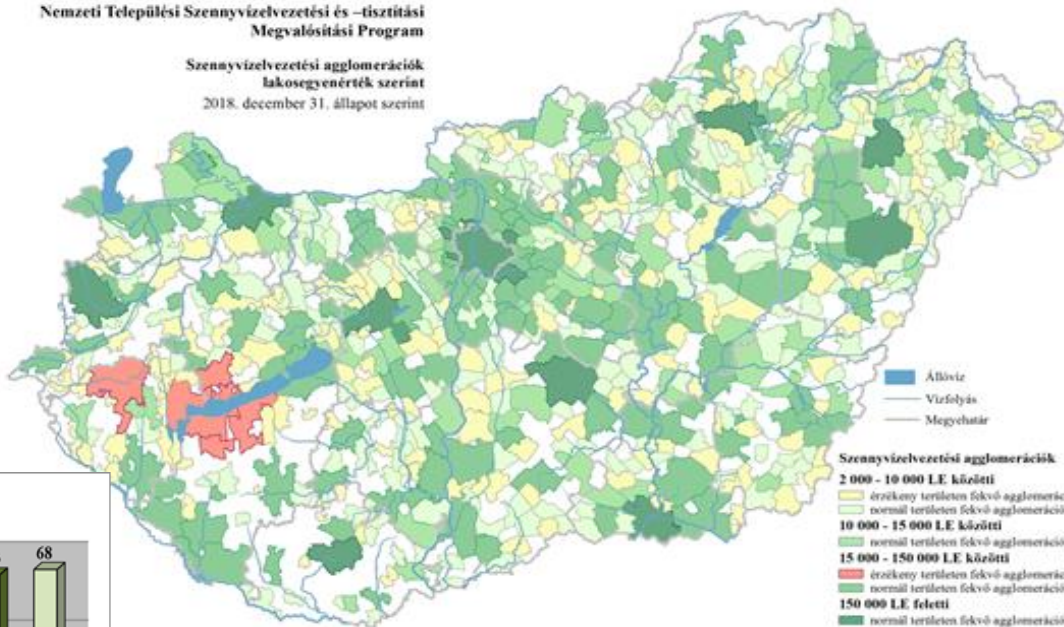
Waste Water Agglomerations



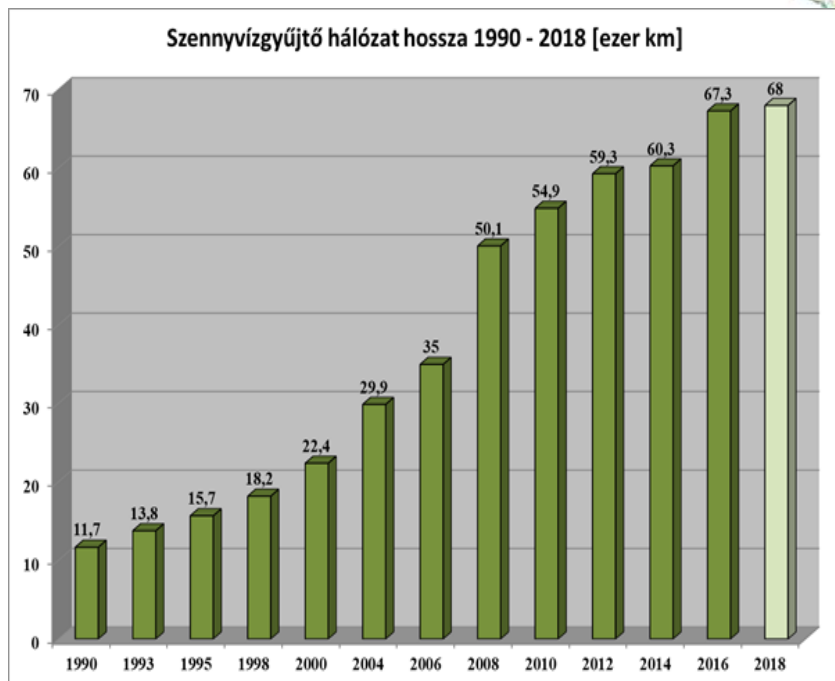
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Nemzeti Települési Szennyvízelvezetési és -tisztítási
Megvalósítási Program

Szennyvízelvezetési agglomerációk
lakosegyenérték szerint
2018. december 31. állapot szerint



Length of collecting systems 1990-2018 (th. km)



Total: load: 12. 770.00 PE

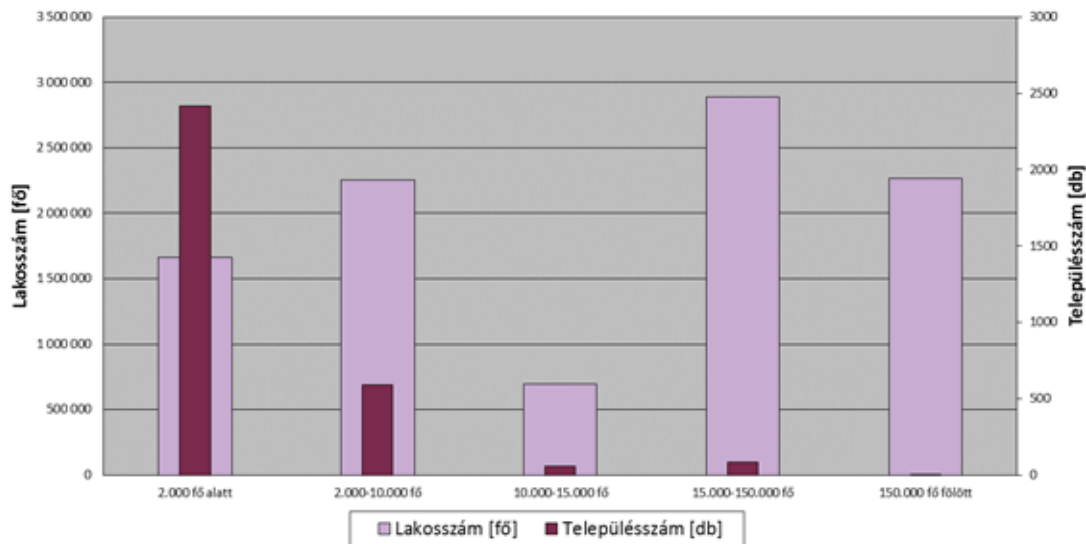
Hungarian Settlement Structure



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Inhabitants

Magyarország településszerkezete
Településcsoportok mérete szerint
2018. december 31.



Settlements (pcs)

Ref. date: 31. 12. 2018.

Settlements	Number of settlements	Ratio [%]	Inhabitants (people)	Ratio [%]
Below 2.000 inhabitants	2 419	76,7	1 662 064	17
Above 2000 inhabitants	736	23,3	8 110 692	83
Total:	3 155	100	9 772 756	100

Status in Figures under 2000 PE



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Type of solution	Number of settlements	Inhabitants (people)
Sewer (existing or under construction) with regional WWTP	1142	990.767
Sewer with WWTP under 2000 PE	231	176.236
Rural Development OP (2007-2013)	107	83.632
Rural Development OP (2014-2020)	53	12.690
Waiting for a regional project	221	13.144
Under a preliminary analysis	665	313.747



Technical Solutions under 2000 PE

- Sewer network and local or regional WWTP
- Closed tanks - cesspools - no treatment on site - and transportation to a WWTP
- Local and decentralized solutions below 50 PE
 - Septic tank
 - Biological treatment unit
 - Units with „Green ideas”, artificial filter plant, lakes, etc.

Legal Regulation I.



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- Technical regulation, monitoring and Municipal Waste Water Plan (147/2010. (IV. 29.) Gov. Decree)
- Creating agglomerations, data-base (379/2015. (XII. 8.) Gov. Decree)
- Effluent standards for WWTP-s and surface water receivers (220/2004 (VII. 21.) Gov. Decree and 28/2004. (XII. 25.) KVVM Decree)
- Soil receiver (219/2004. (VII. 21.) Gov. Decree)
- Effluent standards for individual solutions (30/2008. (XII. 31.) KVVM Decree)
- Compulsory public service for not-connected dwellings (378/2015. (XII. 8.) Gov. Decree)
- EN 12566-1 for septic tank and EN 12566-3 for biological treatment unit

Further relevant: Kvassay Jenő Plan, as Water Strategy (2017.)

Legal Regulation II.



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- Water authority (Disaster Management Authority, county level)
- Environmental and soil protection authority (Governmental Office, county level)
- Settlement level (assembly, notary)
- Data base (settlement level)
- Main questions to be cleared when planning/creating new systems:
 - receiver,
 - sensitive area, karst area, drinking water base, ...
 - soil conditions for infiltration,
 - groundwater level,
 - effluent amount is above or below 500 m³/year,
 - is it a unique project, or based on a settlement level?



Main Future Plans

- Helping the settlements to find the appropriate and sustainable technical solution.
- Find a long term financing solution: Recovery and Resilience Facility, 2021- 2027 GIOP, and beyond 2028.
- Upgrading the informatics system, and the data quality, the scope of monitoring data.



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THANK YOU FOR YOUR KIND ATTENTION!