Permitting and Implementation of a Living Facade and Green Roof on the Experimental Studies Pavilion in campus of Czech University of Life Sciences Prague

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1. How your team officially obtained the necessary technical approvals for installing this type of façade and green system

The installation of the vertical garden and green roof was included in the official construction documentation (DPS) for the extension of the Faculty of Environmental Sciences (FŽP III). The design was prepared by certified professionals (e.g., Ing. Petr Vacek, Ph.D., ČKAIT 0012197 – vertical garden; Ing. Petr Zrník – green roof).

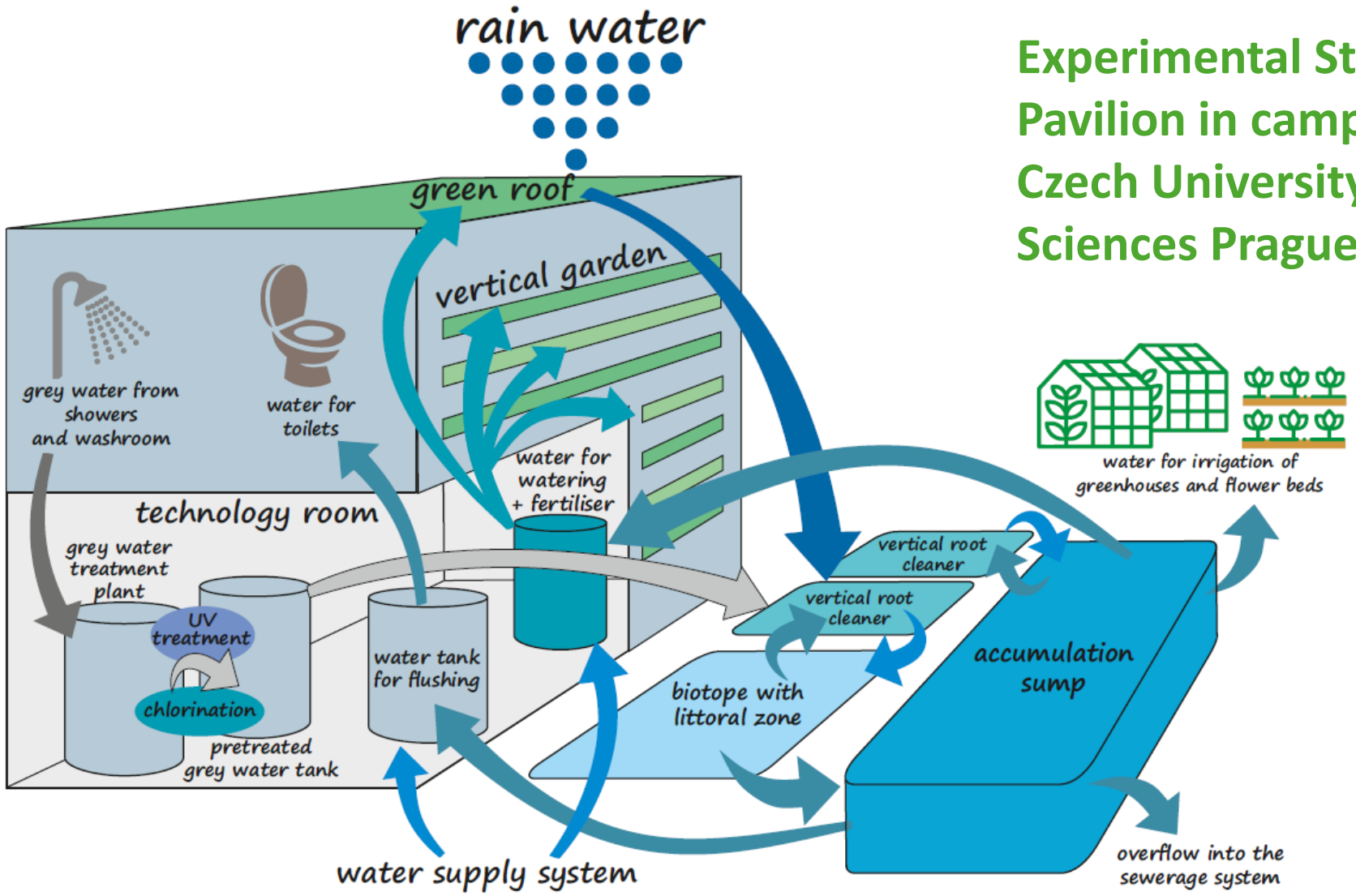
The project underwent a complete permitting process, which included:

- a coordinated binding approval from the Fire Rescue Service of Prague,

The fire assessment of the green façade (report No. S25C-923062614260) concluded that the system does not significantly increase fire risk under standard conditions. The used materials achieved at least reaction to fire class B-s3, d0 according to EN 13501-1, and the vertical and horizontal separation strips of 1.5 m and 0.3 m respectively reduce the risk of fire spread. Overall, the green façade is considered safe from a fire protection perspective when installed as designed.

- a conditional approval from the Public Health Authority (Hygiene Station),
- consents from the Prague City Hall and Prague 6 District Office (including conditions for air protection, waste management, and greenery),
- and the incorporation of conditions from the Heritage Protection Office (due to archaeological findings).
- Additionally, demolition of an existing structure was approved in a separate procedure prior to the new construction permit.

Experimental Studies Pavilion in campus of Czech University of Life Sciences Prague



2. Which technical guidelines or standards you followed and respected during the planning and execution

The following standards and guidelines were observed:

- **Prague Building Regulations** (Decree No. 10/2016 Coll. of the Capital City of Prague) – several paragraphs were applied (e.g., §§39–61), covering requirements for structural safety, hygiene, acoustic protection, energy efficiency, and fire safety.

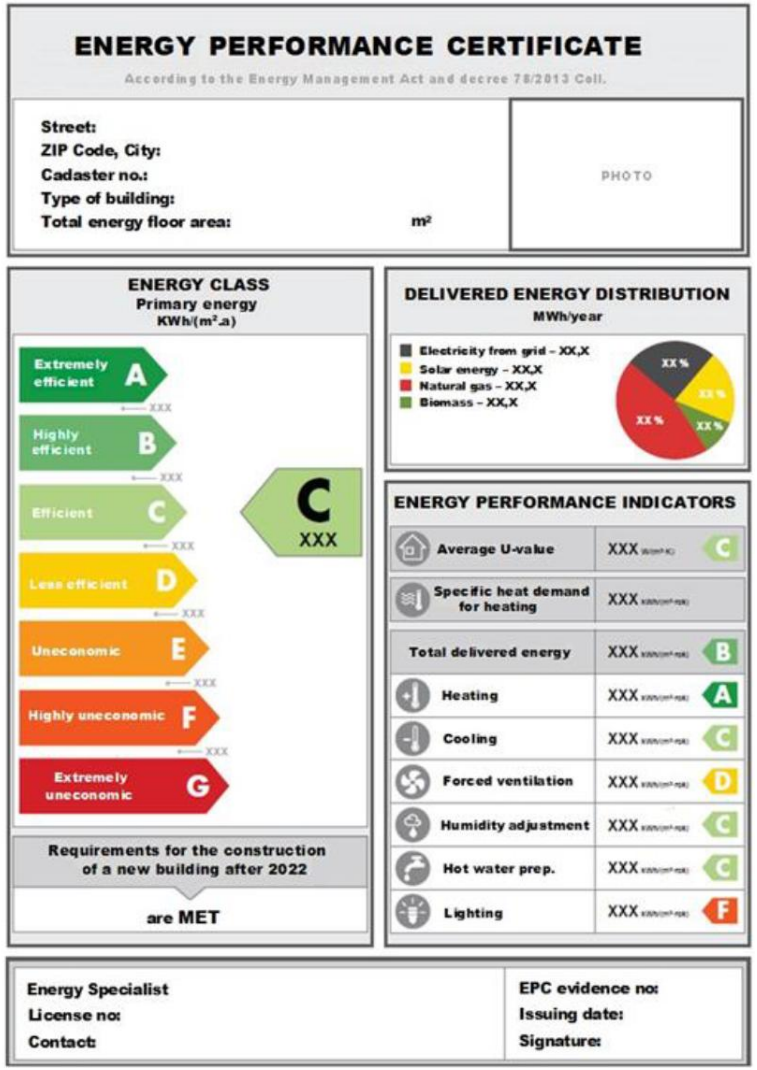
- **Czech Technical Standards (ČSN)**, such as:
  - ČSN 73 6056 – parking and road design,
  - ČSN 73 6005/Z4 – minimum distances between underground utility lines,
  - ČSN 75 7143 – water quality for irrigation (relevant for greywater and rainwater reuse),
  - ČSN EN 297 – gas boilers (relevant to heating system design).

In addition, British Standards were used for the greywater system:

- **BS 8525-1 and BS 8525-2** – codes of practice for greywater systems and monitoring.

https://praha.eu/

Implementation of the EPBD in the Czech Republic - 2020



3. The national legislation or specifications you based your implementation on

The implementation was based on the following Czech legislative frameworks:

- **Building Act No. 183/2006 Coll.** and related decrees (especially Decree No. 499/2006 Coll. – content of project documentation),
- **Act No. 201/2012 Coll. on Air Protection**, for regulating emissions during construction and operation,
- **Waste Act No. 541/2020 Coll.**, for excavation material and construction waste handling,
- **Water Act No. 254/2001 Coll.**, particularly concerning rainwater management,
- **Act No. 20/1987 Coll. on State Monument Care**, due to archaeological site conditions,
- **Government Decree No. 272/2011 Coll.**, setting noise limits for indoor and outdoor environments.
- **Act No. 299/2021 Coll.**: Amends the Fertilizers Act to enable the use of auxiliary soil substances such as **biochar**, supporting its legal application in green roof substrates.

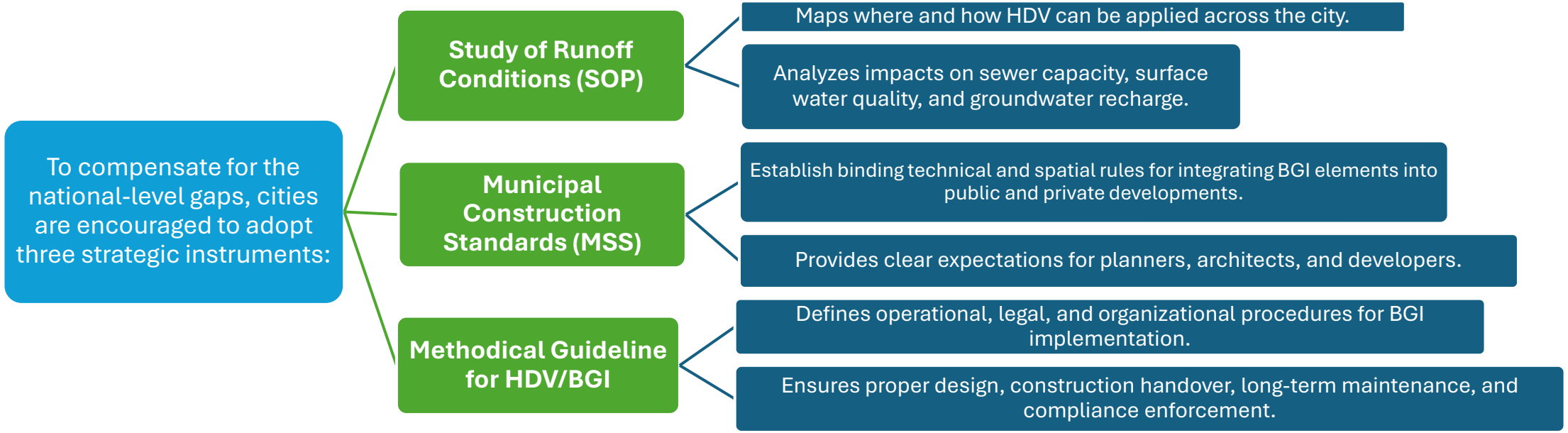
Legal and Technical Preconditions for Blue-Green Infrastructure (BGI) Implementation in the Czech Republic

The Czech Republic currently lacks a comprehensive and coherent legal and technical framework for the application of blue-green infrastructure (BGI) and sustainable drainage systems/Stormwater Management (SWR). While responsibility for water management lies with the Ministry of Agriculture, the ministry does not sufficiently prioritize BGI as a key climate adaptation measure.

Key issues include:

- Fragmented and uncoordinated legal regulations (Building Act, Water Act).
- Ambiguity about the scope of obligations to retrofit existing buildings.
- Lack of integration of Stormwater Management / Blue-Green Infrastructure requirements into technical norms (e.g., ČSN 73 6005 does not reflect spatial requirements for decentralized drainage systems).
- Municipalities must take initiative by creating their own standards and guidance.

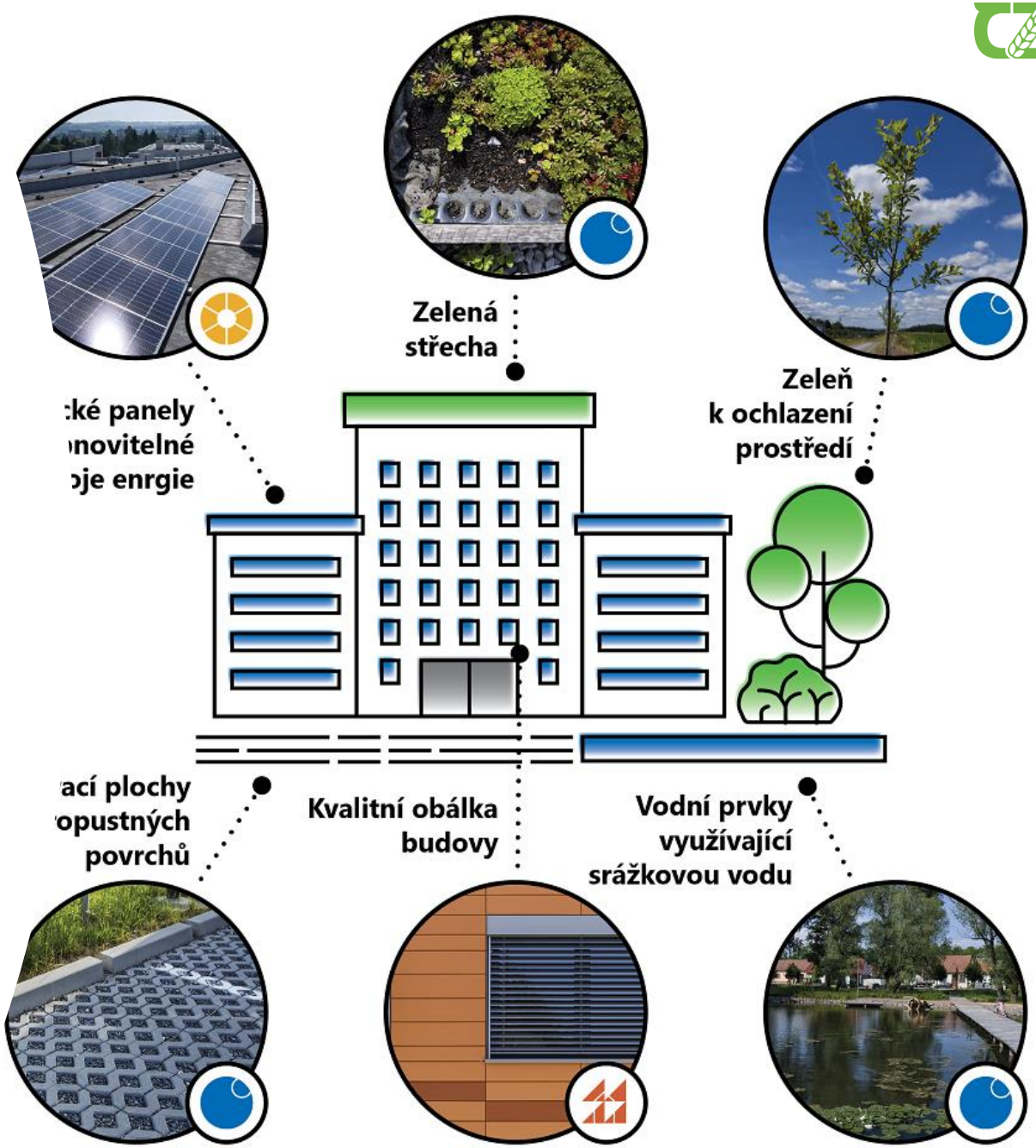
Essential Planning Tools for Municipal BGI Implementation



Funding Instruments and Incentives through OP Environment

The **Operational Programme Environment (OPŽP)** offers significant financial support for BGI under **Priority Axis 1.3**:

- Eligible measures include infiltration systems, retention tanks, green roofs, and greywater reuse systems.
- Support covers up to **85% of eligible costs** for public projects (e.g., schools, hospitals, municipal buildings).
- Projects must be well-prepared with detailed design and permitting documentation.
- Pilot projects can demonstrate climate adaptation in practice and offer substantial savings (e.g., annual stormwater fees).



Závlaha šedou vodou

Česká zemědělská univerzita v Praze

Fakulta životního prostředí

dekonta

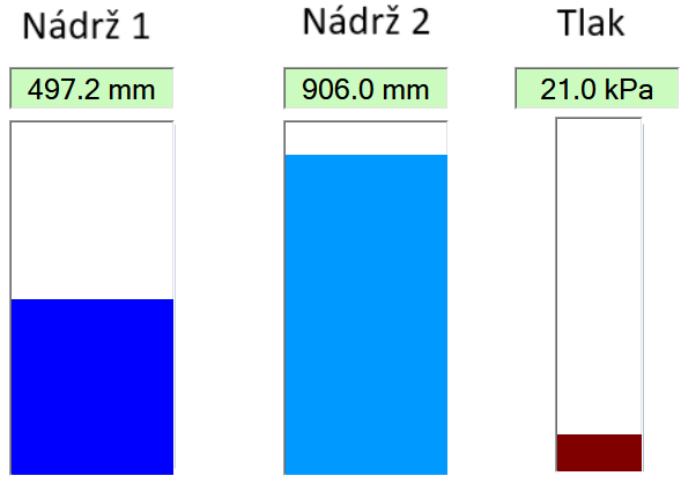
Režim závlahy

- Zapnuto
- Časovač
- **Auto**
- Vypnuto

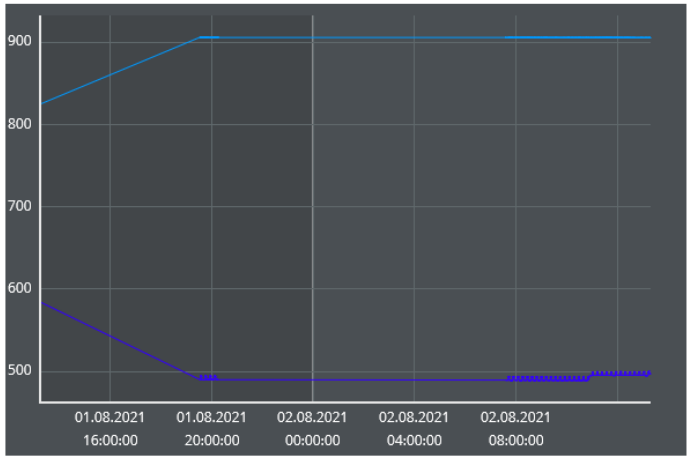
Stav systému

- Zálivka
- Manuální odběr
- **Provozní stav**
- Vypouštění
- Potrubí bez vody
- Záplava v tech. místnosti
- Čidlo záplavy
- Překročen denní limit

Datum, čas	02/08/2021 Mon 13:17:32
Vnější teplota	21.6 °C
Spotřeba vody	4077.8 l
Spotřeba energie	802.8 kWh
Nádrž 1	497.2 mm
Nádrž 2	906.0 mm
Tlak v potrubí	0.21 bar
Srážky za minulou hod.	0.0 mm
Plánovaná zálivka	0.00 l
Korigovaná zálivka	0.00 l



Spotřeba vody	D-2	D-1	Dnes
Zálivka (l)	6.5	0.0	0.0
Srážky (mm)	0.0	24.6	0.0
Man. odběr (l)	0.0	0.0	0.0
Energie (kWh)	1.4	1.5	0.8
Doba chodu(min)	25	0	0



"We’d love to hear from you — let’s connect and explore potential collaboration!"

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