SOVAK
SDRUŽENÍ OBORU VODOVODŮ A KANALIZACÍ ČR

Czech Republic

climate impacts on the water environment and water industry

EurEau congress 20-22/10/2026 Zurich

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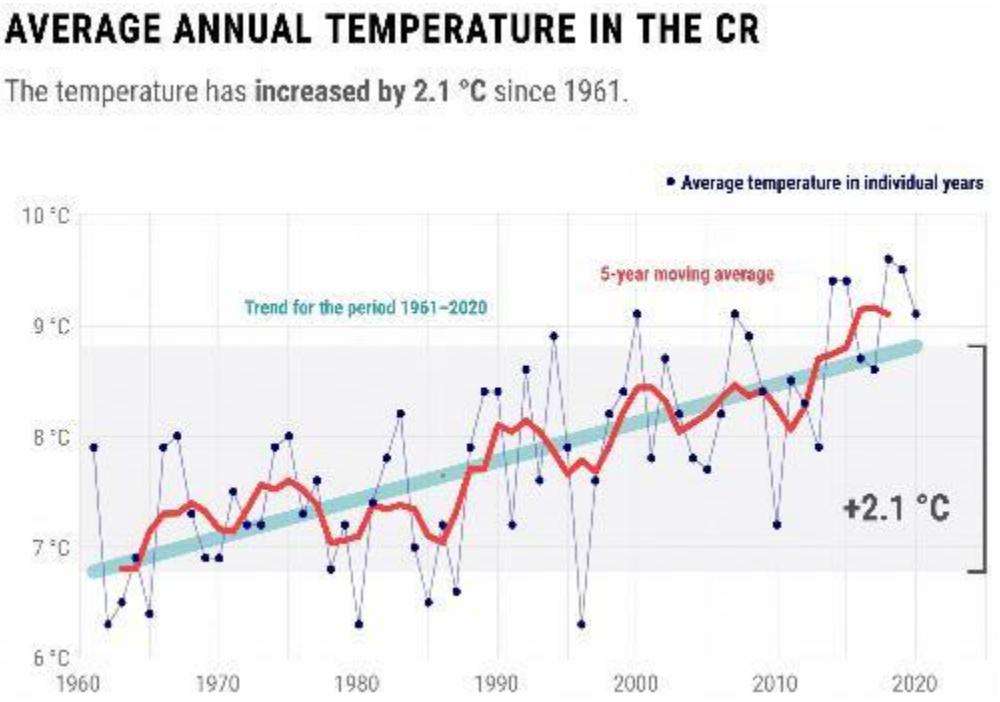
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01
Changing climate and its impacts



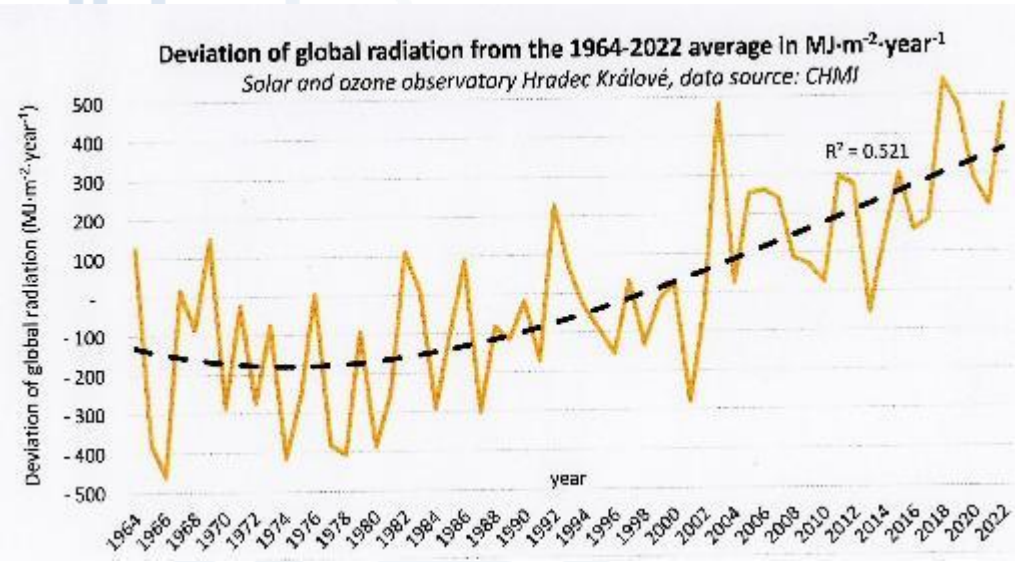
Global to local – the multiplication of climate change impacts

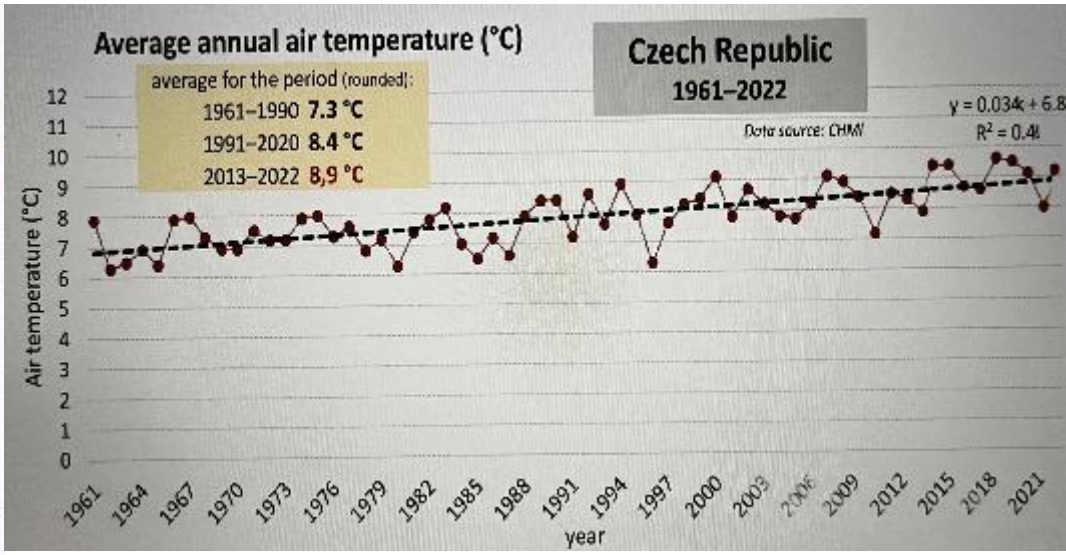




- **Global warming impacts doubled in the CZ (+2,1 deg. C against 1,2 deg. C).**
- **The worst impact in winter period – no accumulation in the snow – lower heat reflection, lower replenishment of underground resources + higher evaporation.**
- **Multiplication of effects. Drying landscape increases warming and boosts evaporation and evapotranspiration. By 2070 the country expects water balance deficiency.**

We need to be carefull when interpreting the climate trends





- **Some of the impacts are accountable to <u>depollution of the European atmosphere</u> rather than growing concentrations of CO_2. A good news for the solar industry, bad for the water industry.**
- **Up until 2015, the Czech Republic faced only occasional periods of droughts (e.g. 1947 and 1953) frequently followed by inundation events but only since 2015 there is clear evidence of continuous deficit of water resources represented e.g. by the water storage in soil index (www.chmi.cz)**

Summer 2026 – an evidence that speaks for itself

- **This year broke some of the long-term records. The current regulation of discharge from individual water reservoirs aims at preserve the minimal flows in river bodies to assure a good ecological status. The results?**

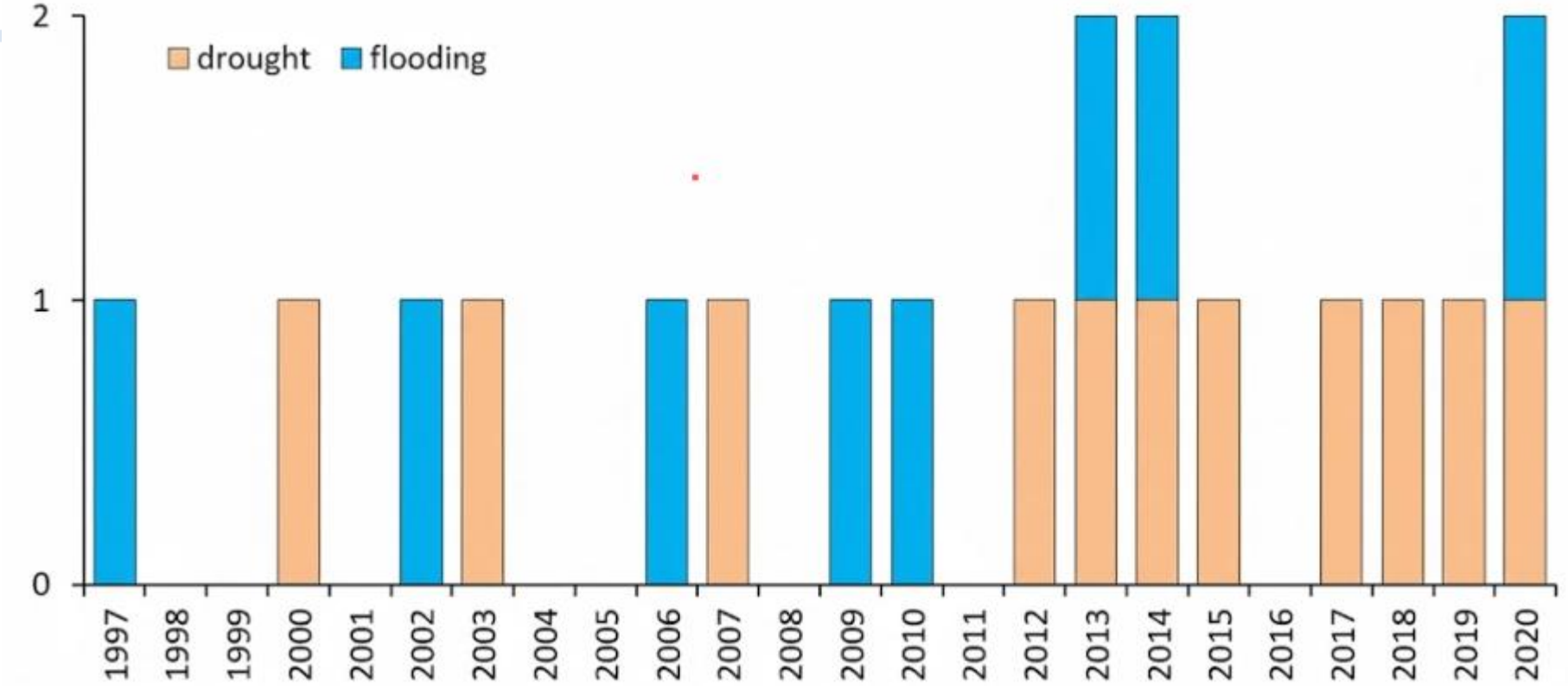


The first dry water reservoir Husinec 5/10/2026



The biggest WR Orlík (780 mil. m^3) semidry

The climate change impacts swings both ways



- **The occurrence of climate extremes steadily grows. Up until 2015, the Czech Republic faced only occasional periods of droughts (e.g. 1947 and 1953) frequently followed by inundation events but only since 2015 there is clear evidence of continuous deficit of water resources represented e.g. by the water storage in soil index (www.chmi.cz).**

02

Changing regulatory landscape



First comes the flood regulation, then drought rules, what next?

CZ main water regulation

- **2001 the Water Act introduced in Head IX the flood planning/defence rules.**
- **2021 the drouhgt management rules laid down in the Head X.**
- **The regulator´s position changes very slowly as the evidence mounts. Only recently (3/2023) the official CZ position towards European Commission stated that CZ shall opt out from the Directive 2020/741/EU as there is and is expected to be a very low demand for irrigation in agriculture☺.**
- **2026 gave us a new chance – the national implementation of 2024/3019/EU Directive will open and encourage the direct reuse of treated wastewater and annulate historical exceptions from payment for discharge of rainwater to the public sewer.**
- **The rules of rainwater management measures became an integral part of the urban planning – but the historical asset remains untouched.**

What was/is/will be done to mitigate the impacts?

- **We owe to communists one thing and this is the ability to centrally prepare and carry out significant infrastructural projects including construction of water reservoirs with various functions between 1948-1989. Now we have 47 dedicated potable water reservoirs and 118 multipurpose reservoirs with the total holding capacity of 3 360 000 000 m³.**



- **The lack of public support, funds and complicated permitting rules mean that since the fall of the iron curtain in 1989 only one significant water reservoir was built.**

- **CZ government however tries to find the way how to tackle the problem through the work of central Drought commission and implementation of soft/hard measures to increase the availability of water resources in CZ.**