# Sustainable water management

Devin

Report 2022

Redacted by:



Department: Water and Environment

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# Sustainable water management Devin Report 2022

## 1 Introduction

This report presents, for each Spadel water production site, the results of the key performance indicators defined to monitor and guarantee the sustainable management of the site's water resource.

It is based on the following data and results for the past year:

- Precipitation balance
- Water Extraction Index
- Water Use Ratio

The report also assesses:

- the risk of water scarcity in the area of the site
- the main risks to the sustainability of water resources and related actions

# 2 Data definition, Pl and KPIs

Precipitation balance: Total annual precipitation measured at the nearest weather station

Recharge analysis: Comparison of precipitation measured between October and February of the targeted year to the average precipitation over the same period over the reference period.

Water Extraction index (WEI): This indicator (PI) compares the annual volume exploited with the amount of useful water available in the watershed under consideration. Useful water is calculated on the basis of monthly rainfall and average monthly temperatures. This calculation is based on the "Water Scarcity and Droughts" standard published in 2007 by the Economic and Scientific Policy Department of the European Union. This document sets a WEI of maximum 20% to ensure sustainable use of water bodies. Spadel considers a stricter limit of 10%.

Water Use Ratio (WUR): This key indicator (KPI) is based on the industry standard and is defined by BIER. It has the amount of water needed to bottle 1 I of water or lemonade. It takes into account the use of industrial water for the regular cleaning of facilities and excludes water discharged to nature without treatment.

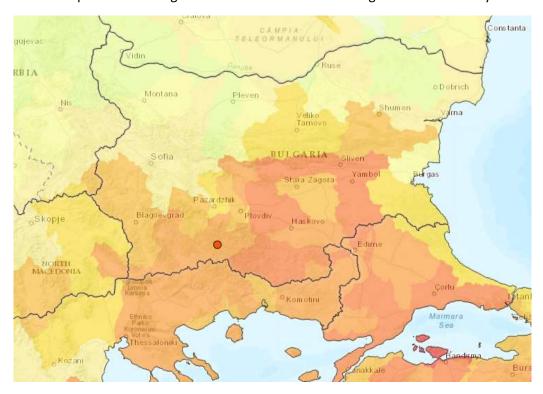


# 3 Water Scarcity

The Water Scarcity risk is assessed using the Water Risk Filter tool provided by WWF (https://riskfilter.org).

The Devin region of Bulgaria is considered to be at high risk of water scarcity (Score 7/10).

The company therefore implements the highest standards in order to manage water sustainably.



Source: WWF (https://riskfilter.org)

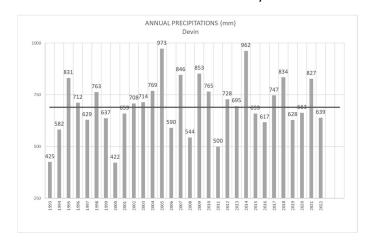
## 4 Rainfall

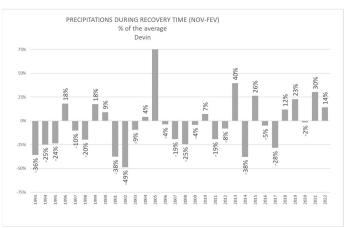
For the Devin site, precipitation is monitored at the Devin station closest to the site.

For 2022, the annual total rainfall is lower than in other years with a total of 628 mm against a 1992-2022 average of 690 mm.

The analysis of the recharge (precipitation from November to February) shows a quite favorable year with a increase of 14 % in precipitation during the useful months.

Rainfall situation for 2022 is thus relatively normal.



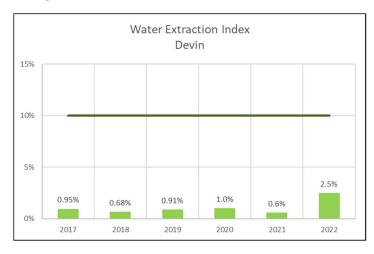


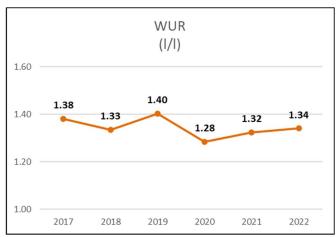


# 5 Water Extraction Index and Water Use Ratio

Devin's Water Extraction Index (WEI) in 2022 is 2.5 % and is well below the 10% limit set to ensure sustainable exploitation of water resources.

Devin's Water Use Ratio (WUR) in 2022 is 1.34 l/l. This result is very good compared to sector's good practices (average of 1.6 l/l).





#### 6 Risks to water resources

Devin's water resources face several types of risks related to potentially polluting activities taking place in the catchment area.

The water resource basin exploited by Devin is particularly well protected by several levels of protection. Natural mineral water boreholes are protected by legally defined catchment protection area. The basin is also located almost entirely in a Natura 2000 area, protection zone and/or nature reserve. Several activities potentially impacting the quality or quantity of water resources are prohibited in order to protect it as well as possible.

The table below presents the main risks and the actions implemented to manage them.

Risks	Actions taken	Actions to be implemented
Dangerous road - approach to production center entrance and exit	Laying of waterproof drainage along the road - asphalting	Installation of a protective barrier in an outdoor parking lot in front of the plant
Forest burns around protected area	Disaster and accident plan	Continuation
Devin mineral water fountains	Chemical control and quarterly maintenance of the taps	Continuation
Parking lot	On-site monitoring Sources emergency plan Farmer awareness	-

Actions related to risk management are studied and implemented in collaboration with the Municipality of Devin, which is the main partner of the Devin site for the management of risks on the resource.