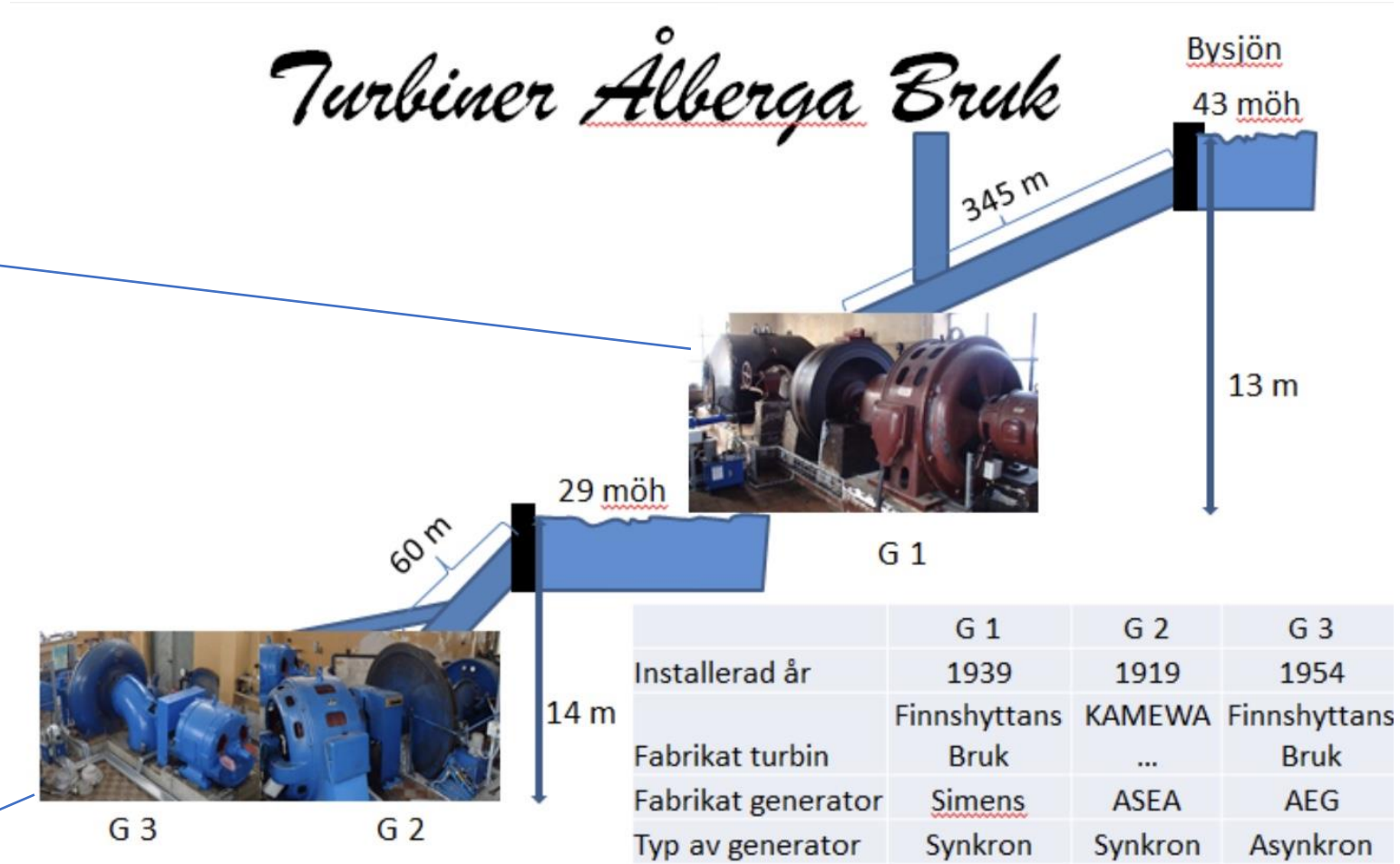
Ålberga Bruk 1919

Hydro Power station



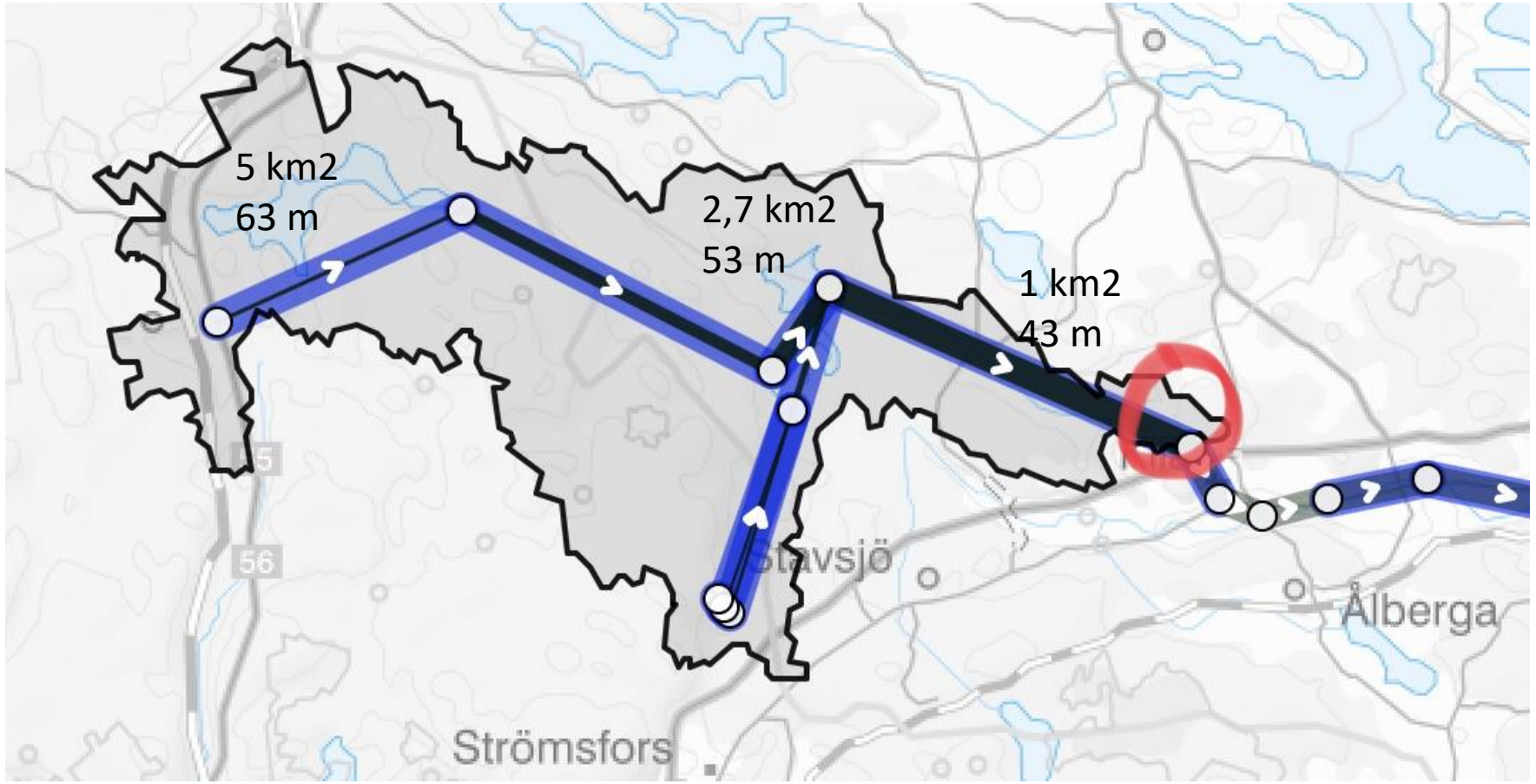
	G 1	G 2	G 3
Installerad år	1939	1919	1954
Fabrikat turbin	Finnshyttans Bruk	KAMEWA ...	Finnshyttans Bruk
Fabrikat generator	Simens	ASEA	AEG
Typ av generator	Synkron	Synkron	Asynkron
Varv/minut	500	600	500
Spänning	3 KV	3 KV	3 KV
Effekt	200 KW	160 KW	90 KW

Data Hydro Power Plant

- Effekt total 450 (400) → 9600 kWh/ 24 h
- Height 27 m
- Waterflow 1,8 m3/s = 140 000 m3/24 h = 1 milj m3/week
- Efficiency 80-85 %

Water suply


Baggetorp
Katrineholm
Blacksta
Bettna
Lid
Ludgo
Strångsjö
Yngaren
Runtuna
Svärta
Björkvik
Stigtomta
Simonstorp
Sjösa
Nyköping
Arnö
Alberga
Kolmården
Åby
Krokek
Buskhyttan
Oxelösund
Kvarsebo
Nävekvarn
Glan
Lindö
Hävringe övre
Ljunga
Husby
Kimstad
Norrköping
Jonsberg
124
80
53
56
E4



Area=140 km2

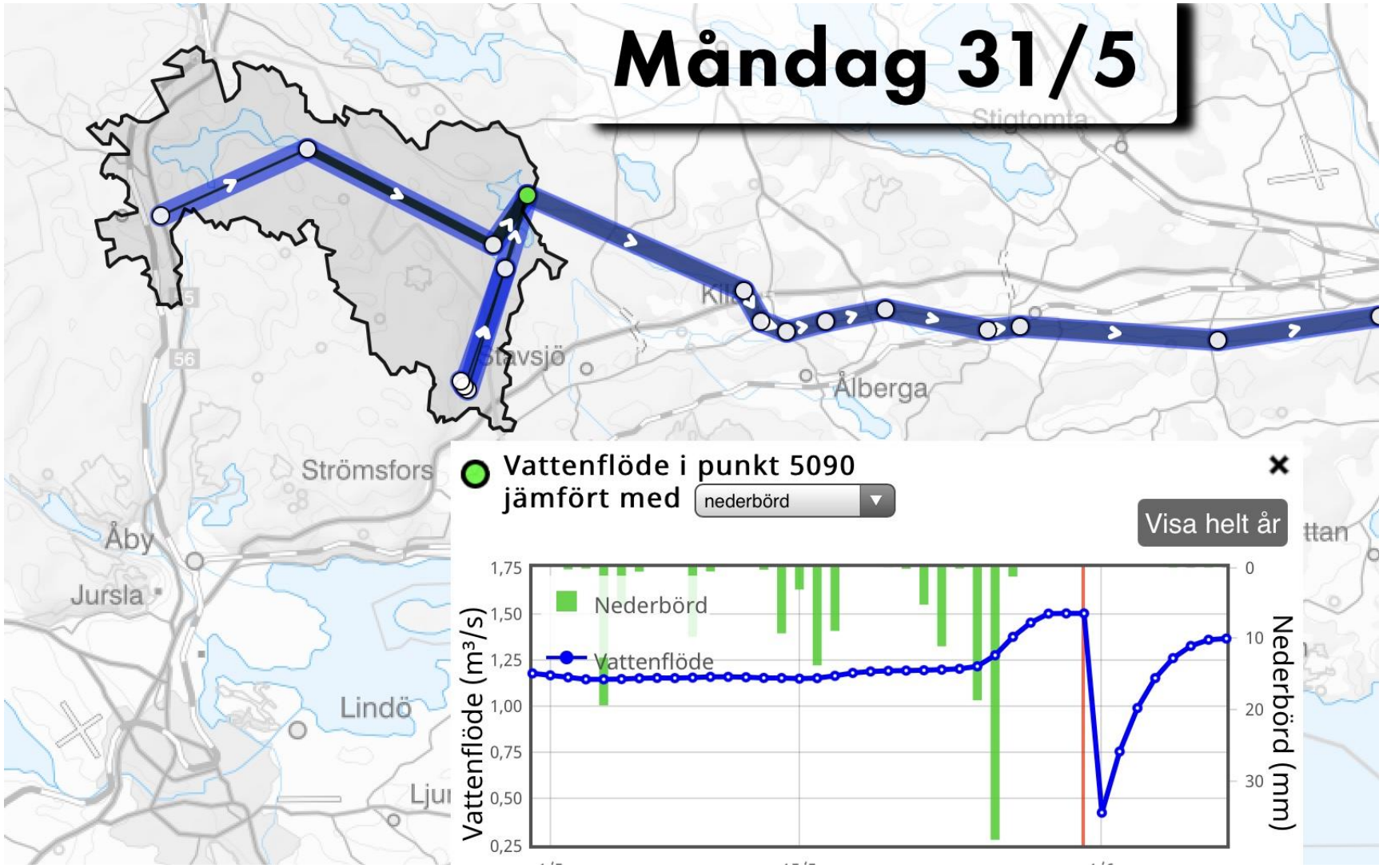
Area lakes 12 km2 = 8,6 %

Regulated lakes (3)=9 km2

Waterflow average = 0,97 m3/s (if not evaporation, veg, etc 2,6 m3/s)

Water magazine 13 milj m3

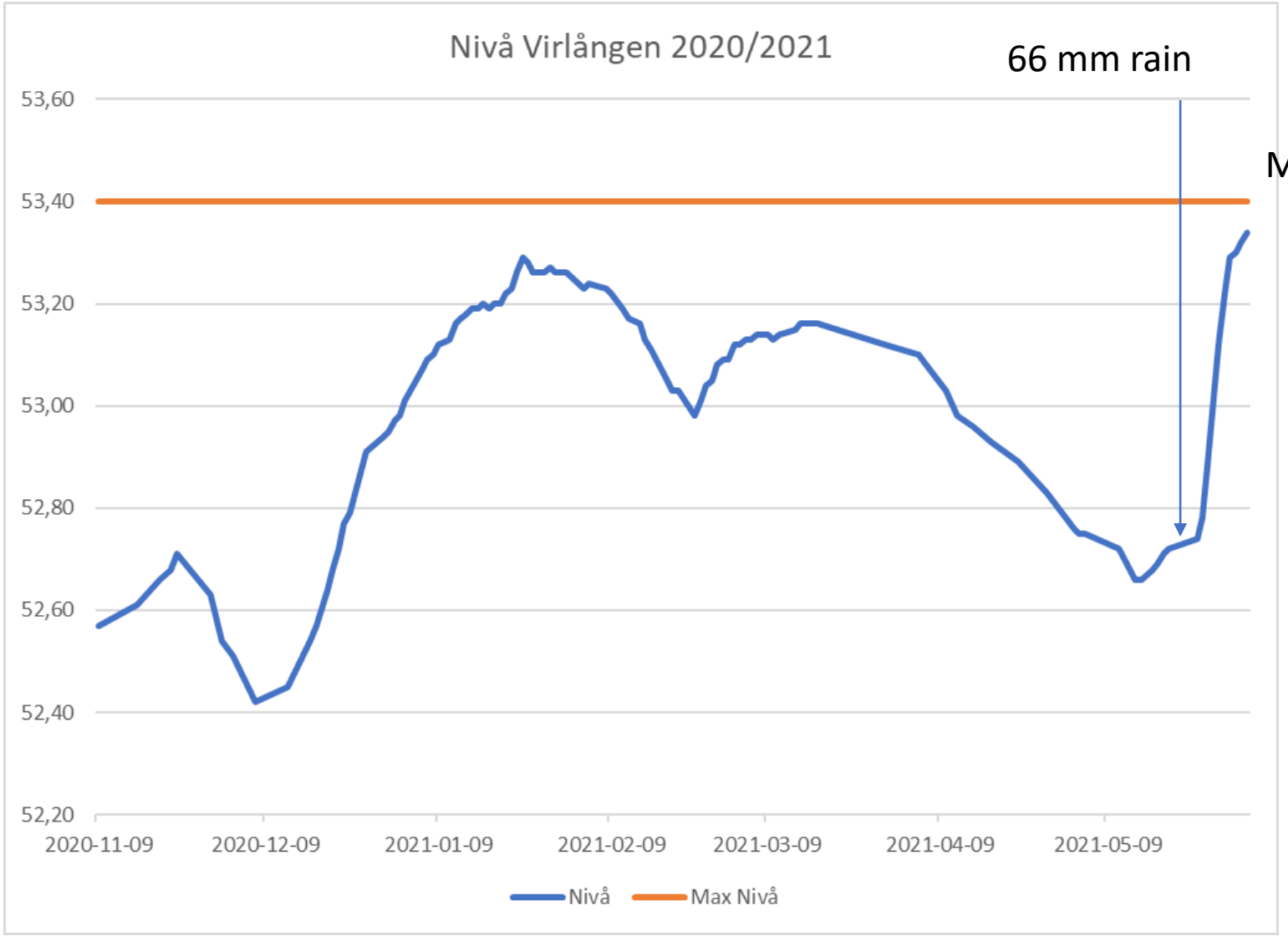
SMHI modelation



Generic model
SMHI do not consider regulation
SMHI estimated Flow 31/5 1,5 m3/s

Real flow to Virlången
31/5 calcutated to 4,1 m3/s
(next Picture)

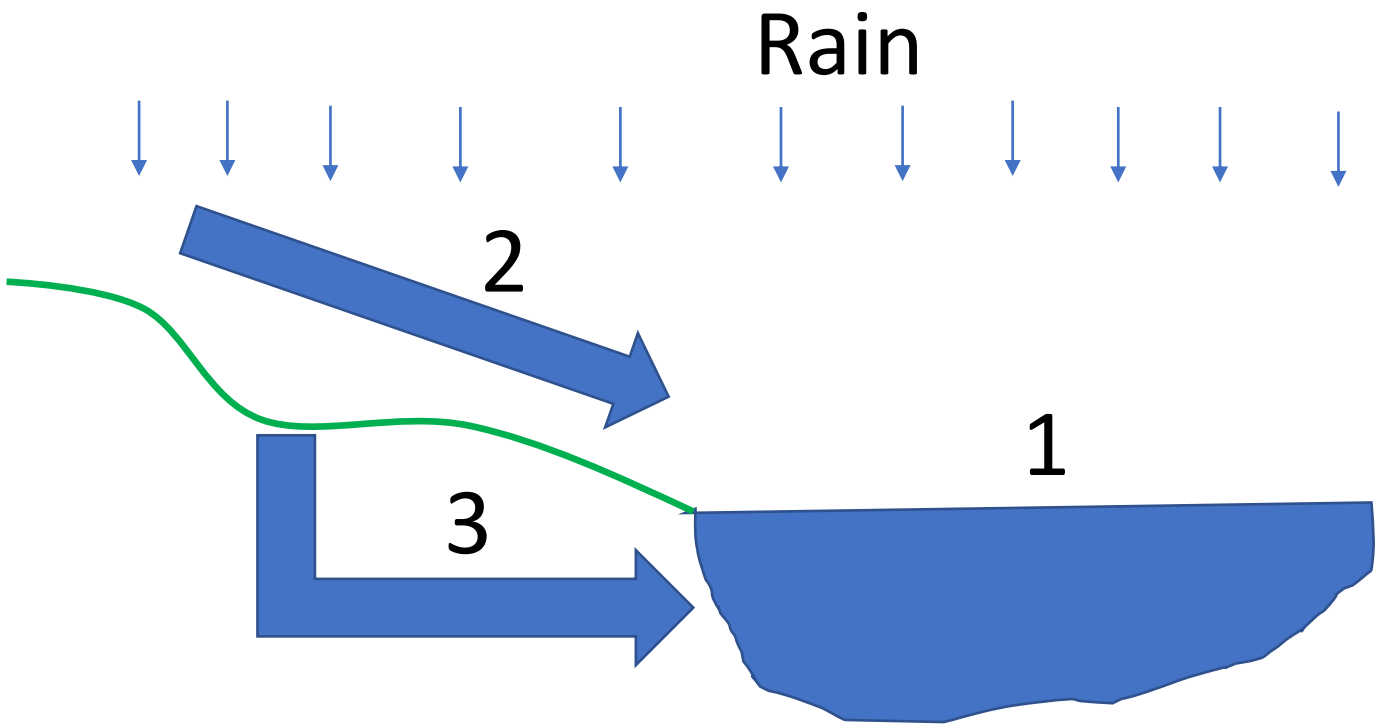
Level Virlången winter 2020/21



66 mm rain

Max Level

650 mm = 1 750 000 m3

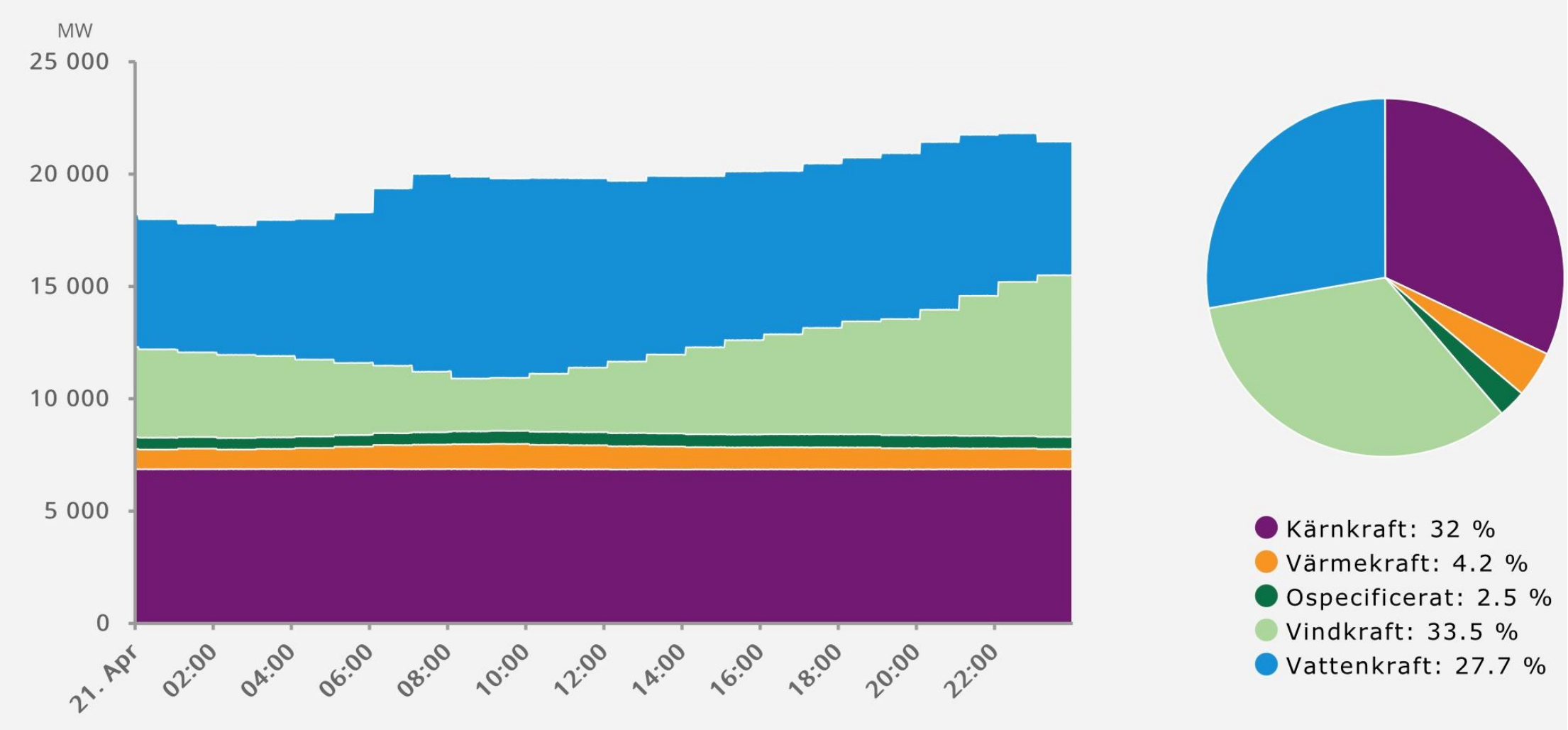


Rain last week (66 mm): ca 40 % of the water was in the lake after 3 days.
(Heavy rain in may, ground saturated)

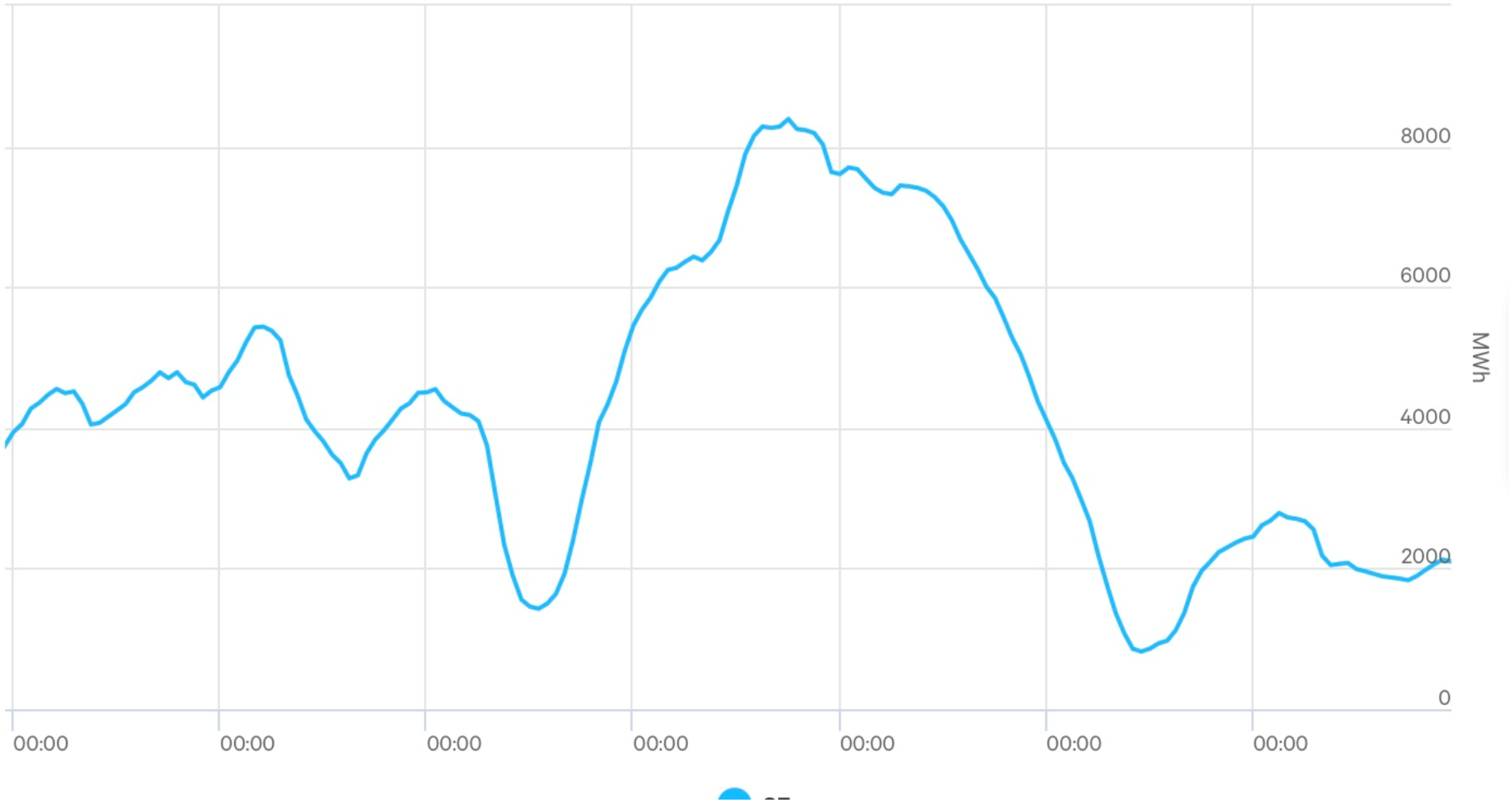
Road in the vally downstreams

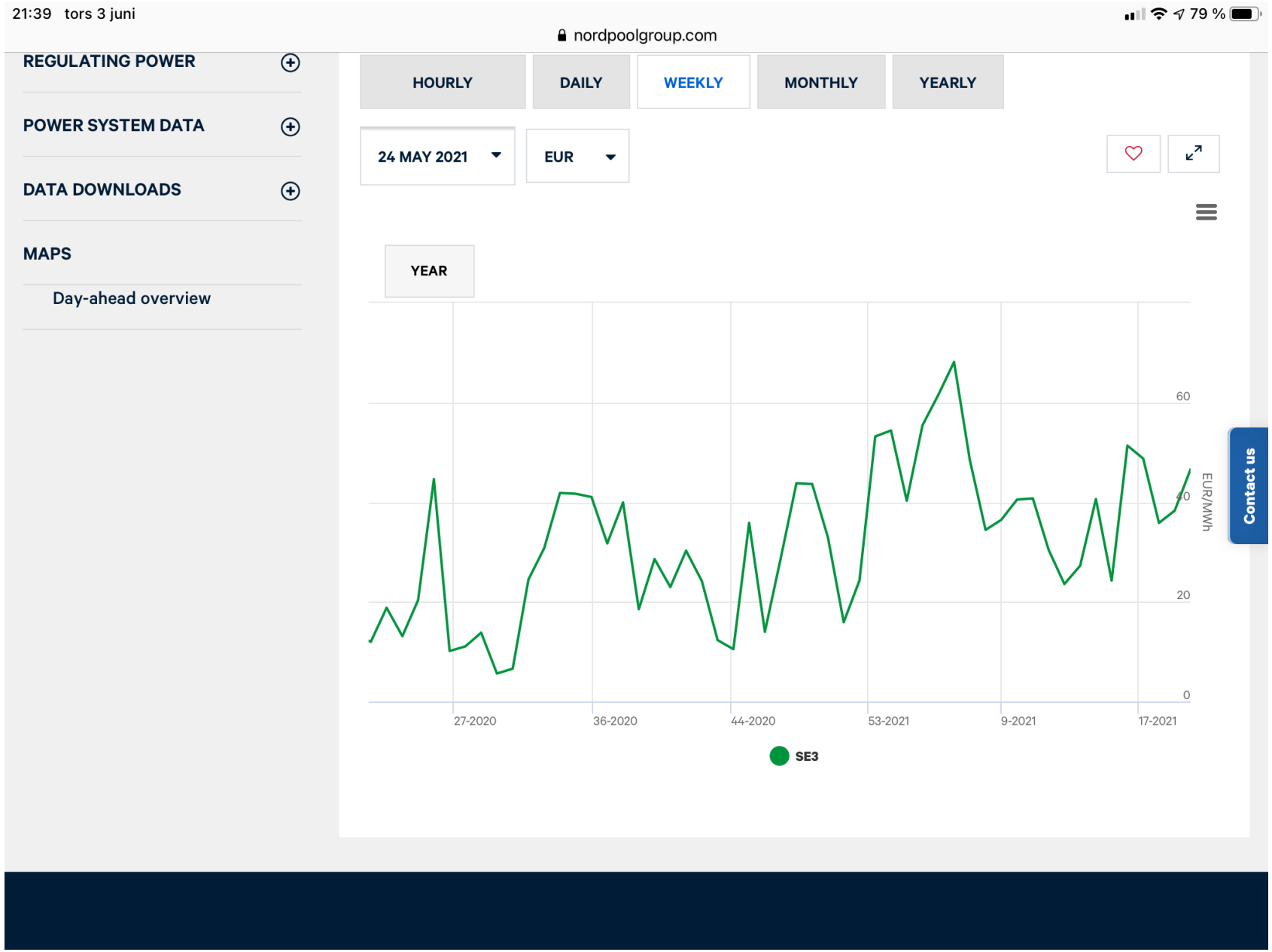
Other aspects of waterflow

Power produktion Sweden



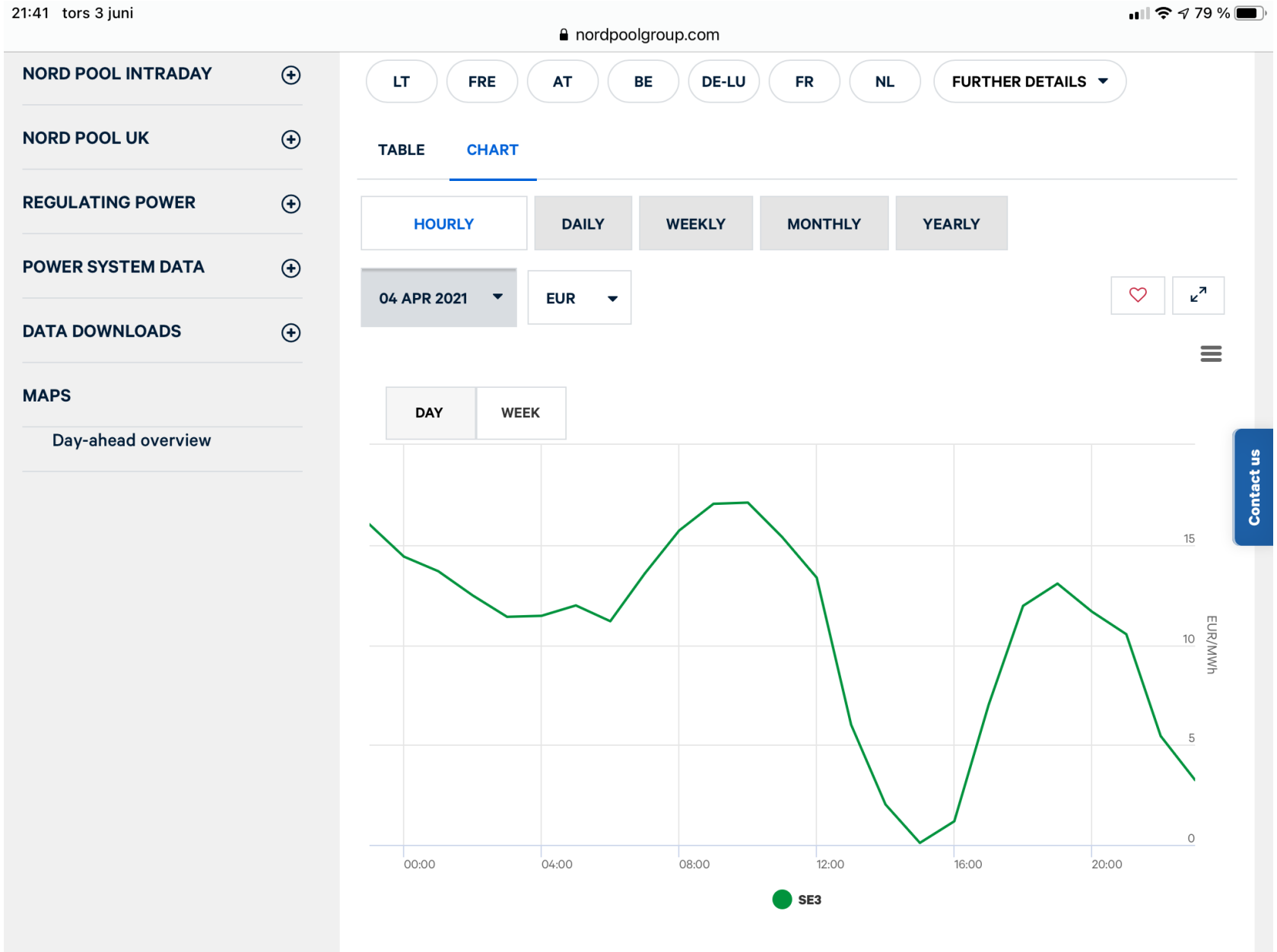
Wind prognos (One week)

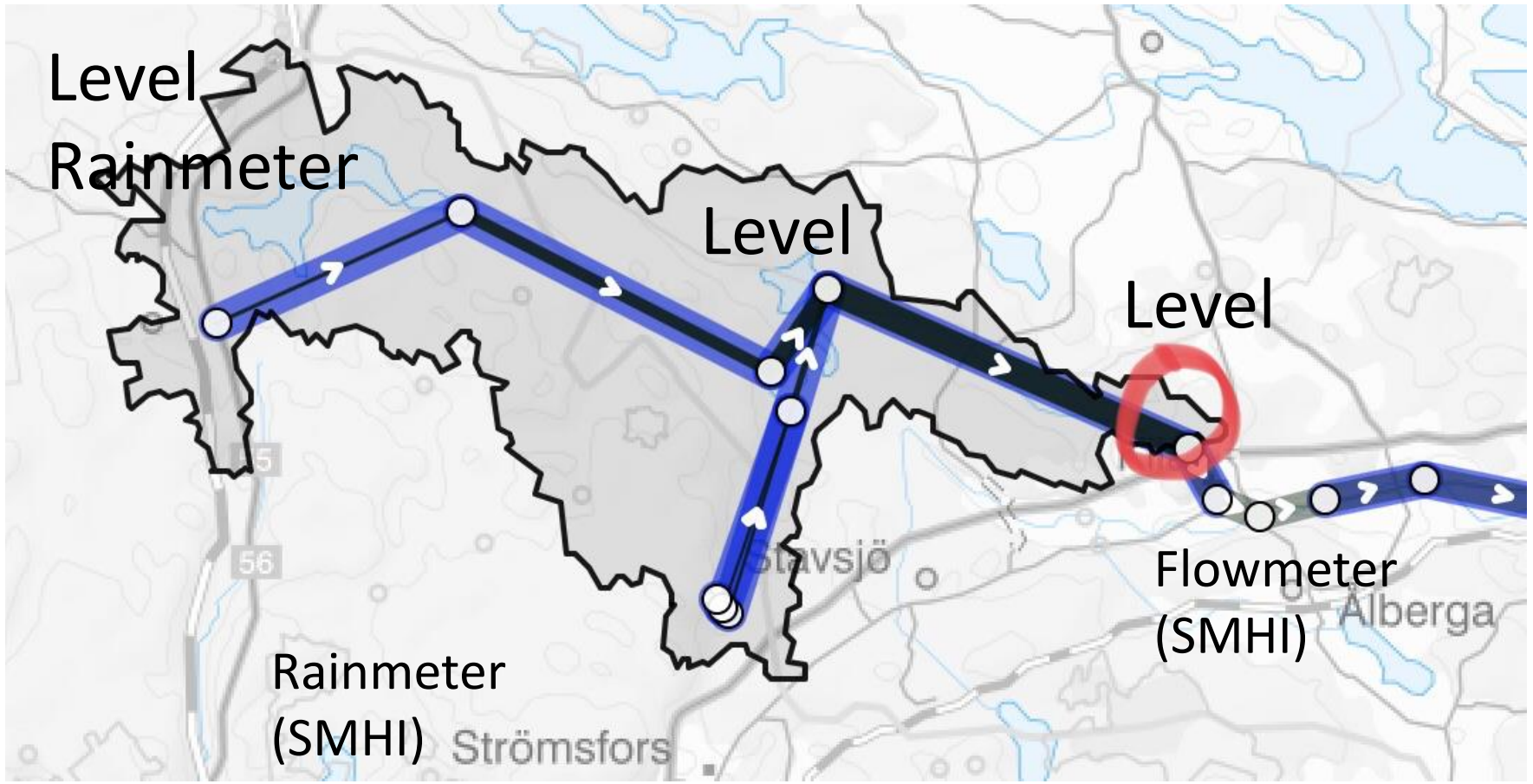




Price (MWh) 2020/2021

Price (MWh) Day





Available data

Power production, Wind production, Price (Nordpool)
Water flow, Rain, data/modulation (SMHI)