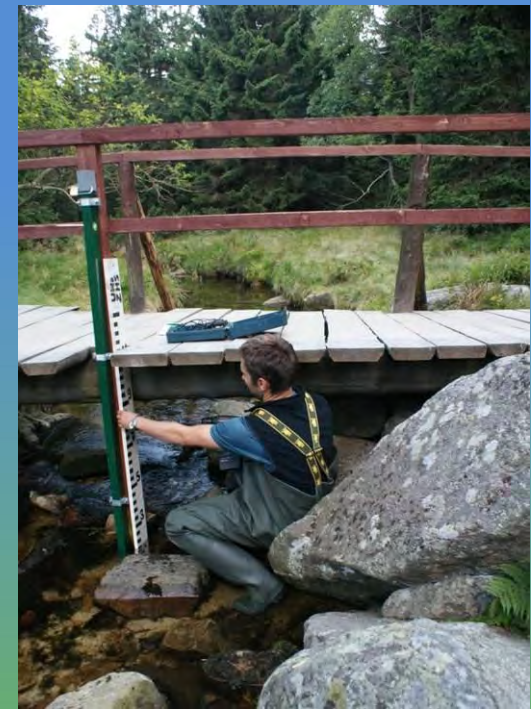
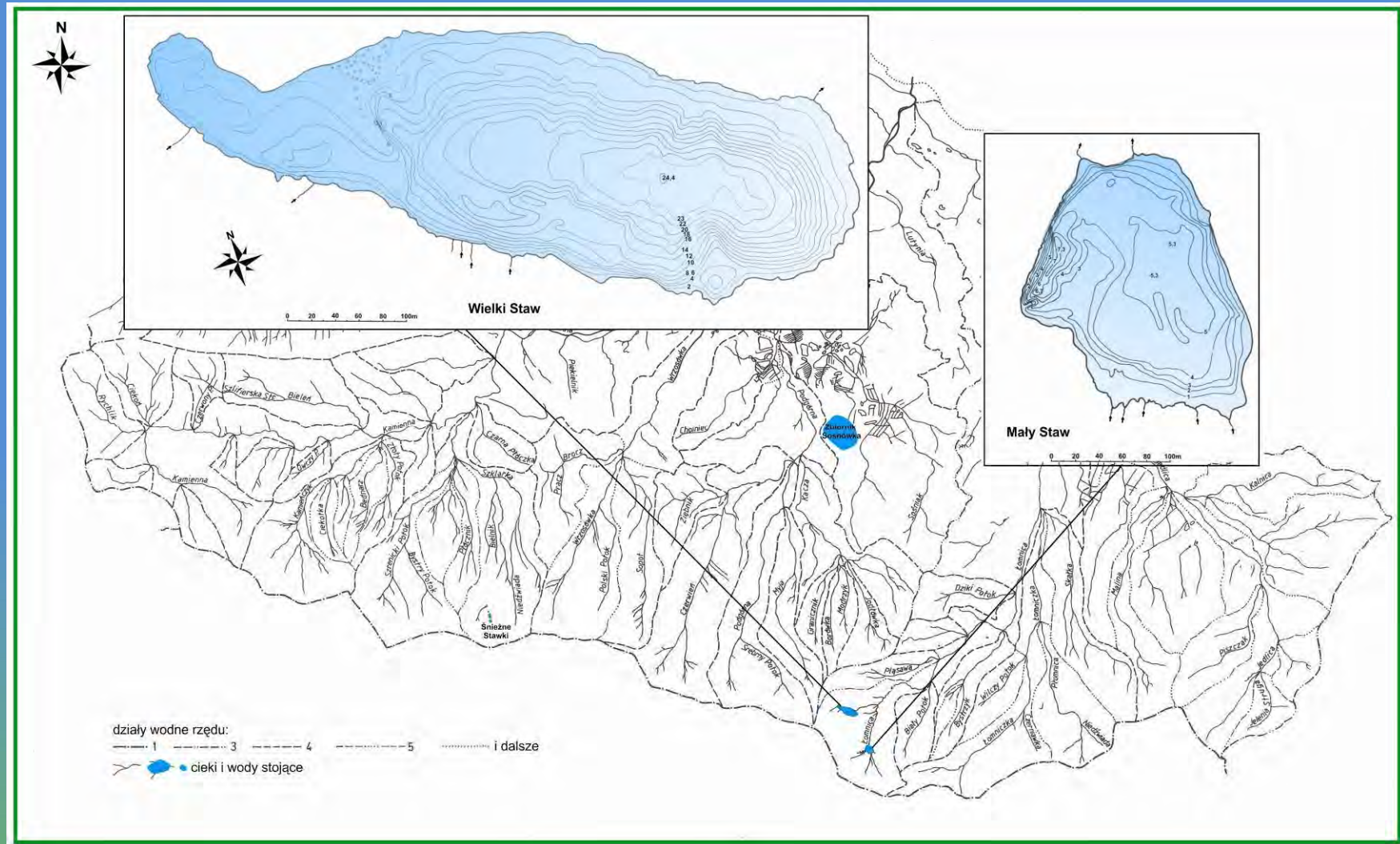


Hydrological monitoring in the Karkonosze National Park



Water in the Karkonosze National Park





No. 637 Krkonoská rašelinište
(Krkonose mountains mires)
2 November 1993

No. 1566 Subalpine peatbogs in Karkonosze
29 October 2002



21 September 2009
Szklarska Poręba, Poland

Water intakes

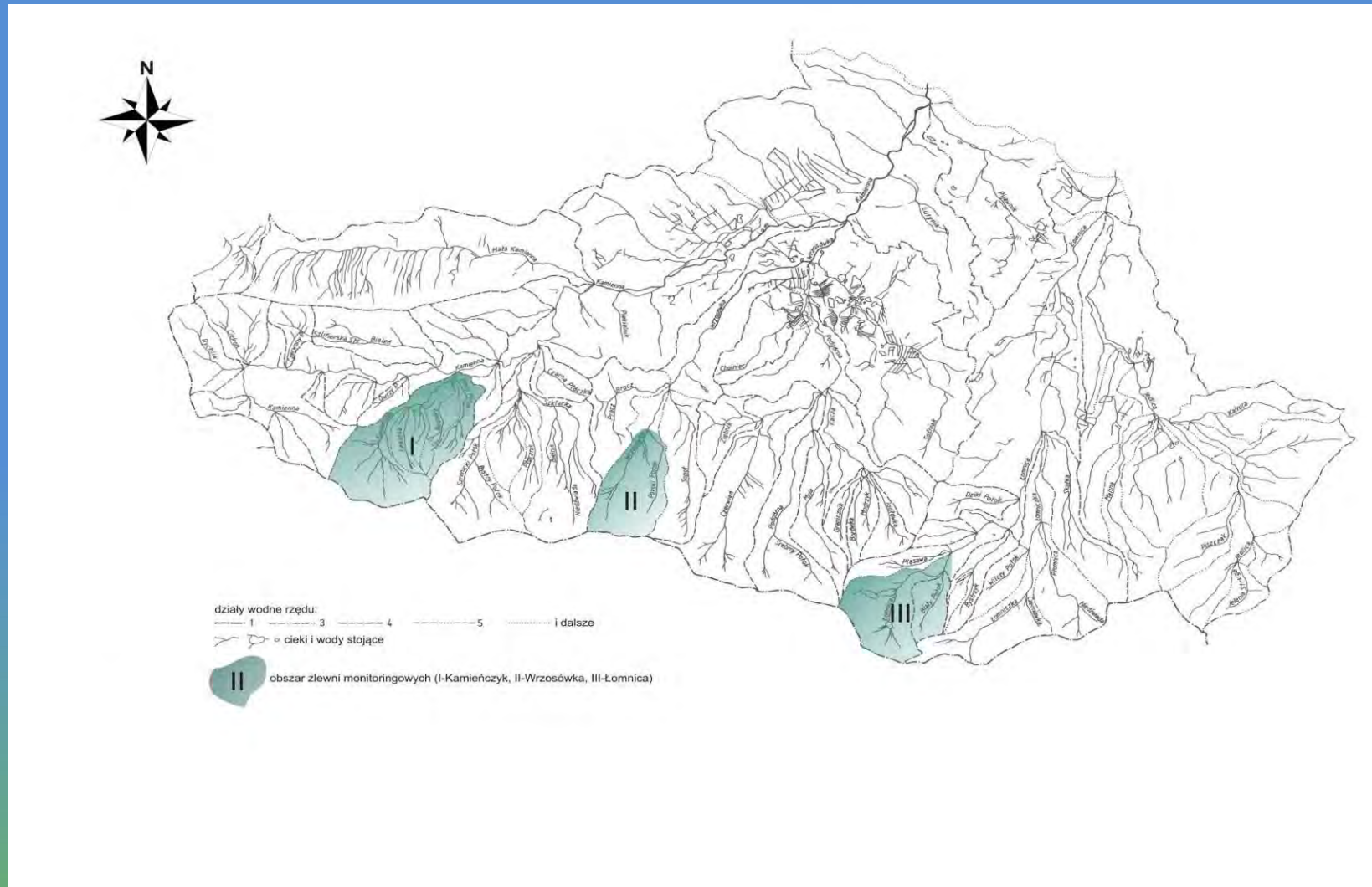
22 water intakes
with maximum amount of water 4 744 888 m³/year



**Wielki Staw =
790 573 m³**

River basins

Kamieńczyk (2010), Wrzosówka (2012), Łomnica (2011)



Quantity of water

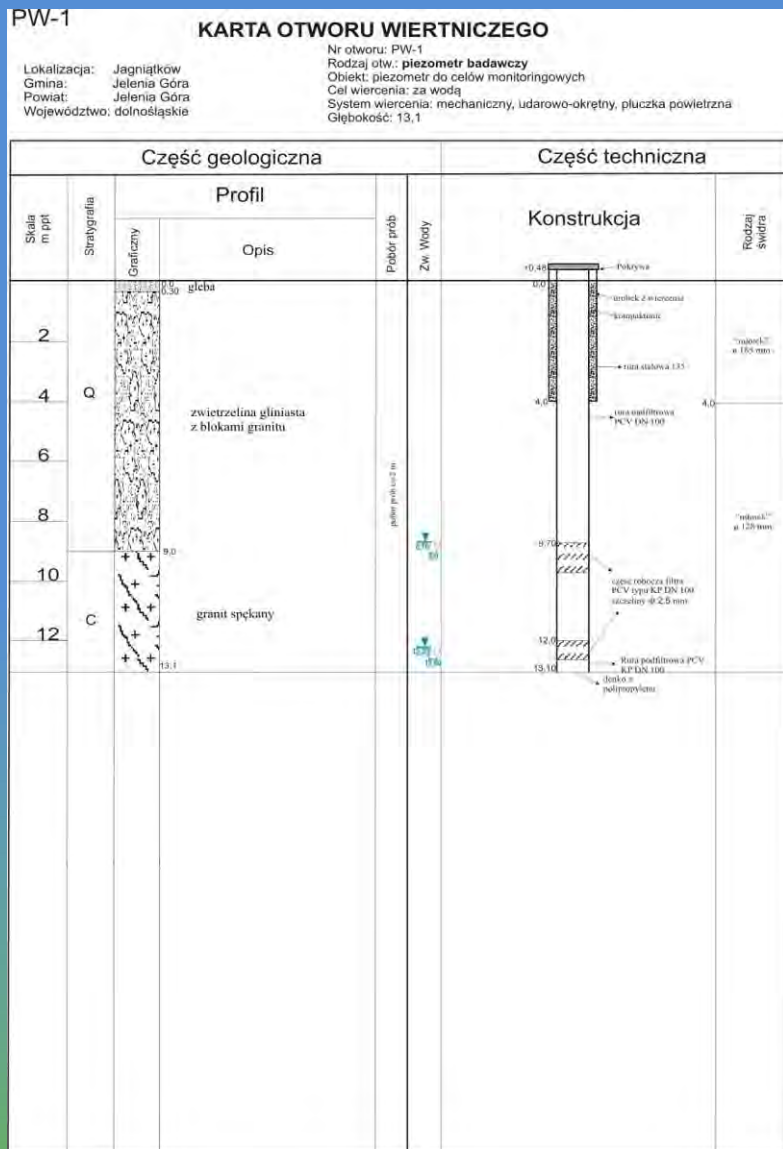
- surface water: measurements of water level and flow velocity in rivers
- underground water: measurements of water level in piezometers and springs efficiency
- meteorological data



Surface water



Underground water



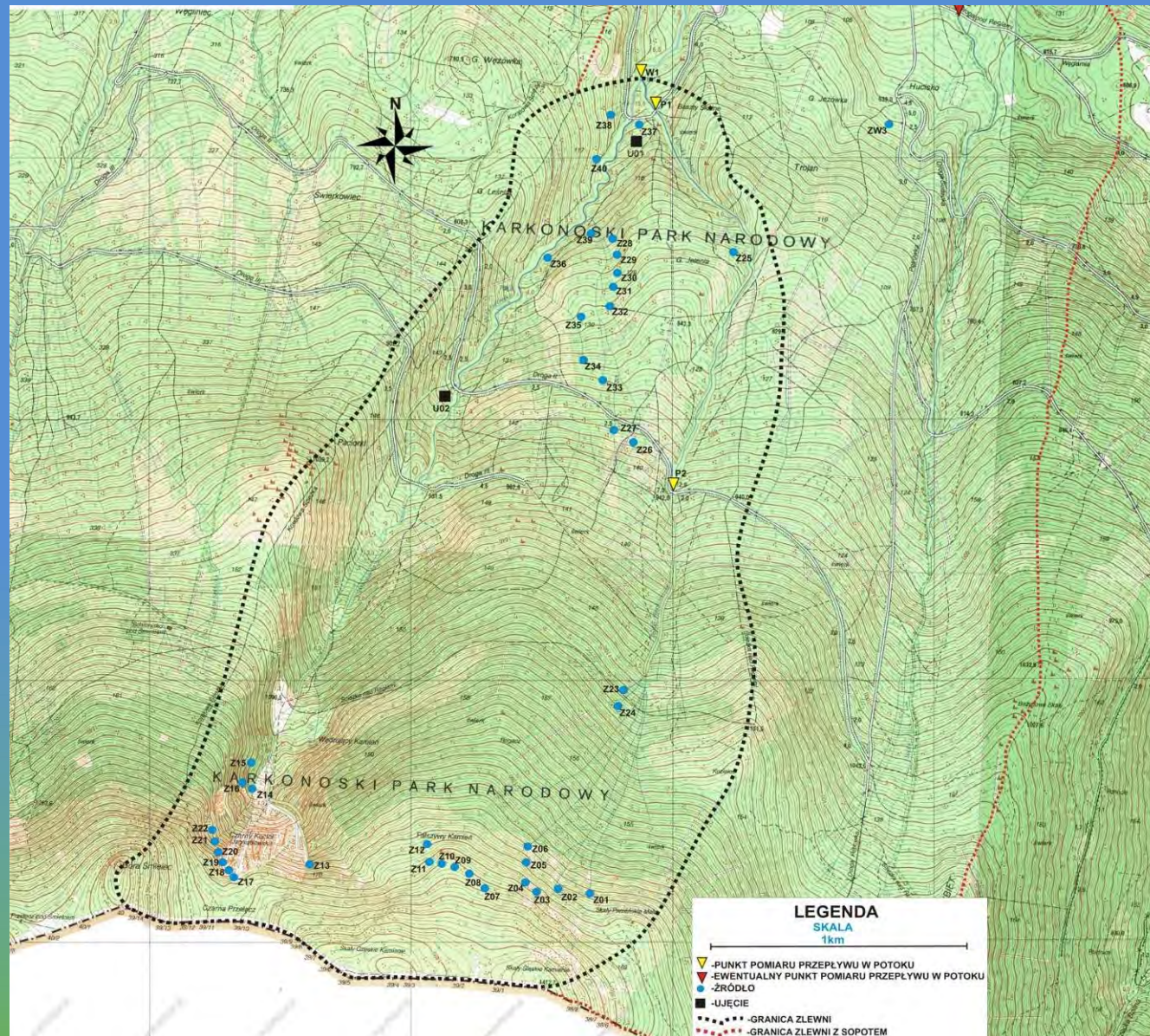
Meteorological data



Kamieńczyk river basin



Wrzosówka river basin



Łomnica river basin



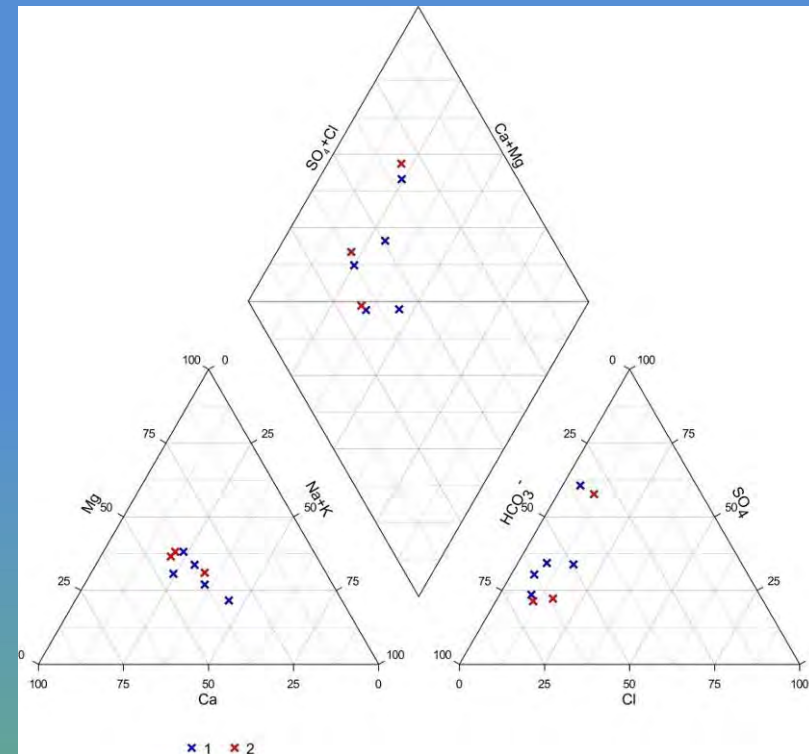
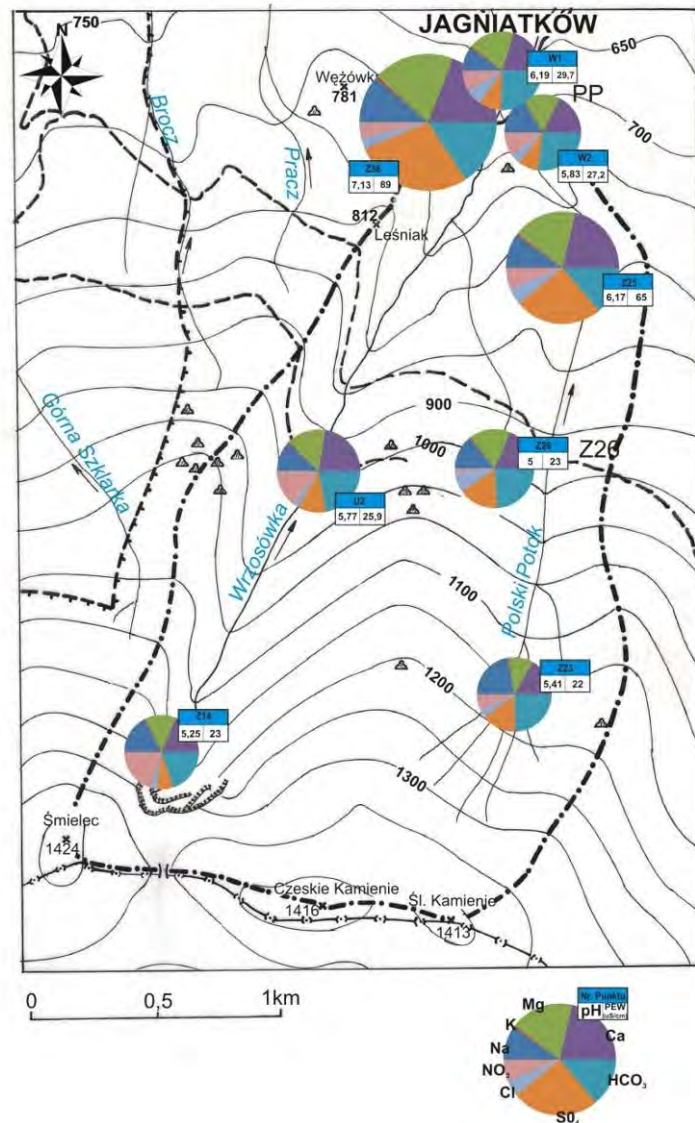
Quality of water

Wrzosówka river basin

I.p.	OZNACZ.	Na	K	Mg	Ca	HCO3	Cl	SO4	NO3
		mg/dm	mg/dm	mg/dm	mg/dm	mg/dm	mg/dm	mg/dm	mg/dm
1	Z-14	1,72	0,11	0,72	1,68	5,80	0,47	1,61	6,01
2	Z-23	1,34	0,06	0,35	0,90	4,52	0,39	2,14	1,28
3	Z-26	1,19	0,06	0,75	1,39	5,98	1,16	3,21	0,44
4	Z-25	2,14	0,24	2,13	4,19	8,30	1,64	11,92	3,79
5	Z-38	3,49	0,35	3,17	5,34	13,00	1,16	18,19	3,22
6	W-1	1,02	0,14	1,05	1,88	7,51	1,16	2,14	2,55
7	W-2	1,97	0,14	1,01	1,94	8,60	0,81	2,14	3,19
8	U-2	1,21	0,13	0,86	2,11	6,22	0,39	2,37	4,14

I.p.	OZNACZ.	pH	Przewodn.	PO4	NO2	NH4+	Fe	Mn
			uS/cm	mg/dm	mg/dm	mg/dm	mg/dm	mg/dm
1	Z-14	5,39	25,3	0,017	0,009	0	0,024	0,030
2	Z-23	4,94	22,3	0,011	0,021	0	0,001	0,097
3	Z-26	5,13	24,7	0,022	0,007	0	0,285	0,124
4	Z-25	6,15	58,2	0,121	0,021	0	0	0,010
5	Z-38	6,78	81,6	0,088	0,009	0	0,057	0,033
6	W-1	6,19	29,7	0,011	0,003	0	0	0,039
7	W-2	5,83	27,2	0,022	0,017	0	0	0,026
8	U-2	5,77	25,9	0,011	0,000	0	0,041	0,064
I.p.	OZNACZ.	Cu	Pb	Zn	Cd	Al	As	
		ug/dm	ug/dm	ug/dm	ug/dm	ug/dm	ug/dm	
1	Z-14	0,08	0	0,74	0,08	14,49	0	
2	Z-23	0,40	0	0,10	0,06	23,75	0	
3	Z-26	0,14	0	0,13	0,04	22,05	0	
4	Z-25	0,00	0	0,44	0,05	16,76	0	
5	Z-38	0,53	0	0,00	0,00	13,61	0	
6	W-1	0,17	0	0,16	0,05	4,01	0	
7	W-2	0,00	0	0,00	0,01	19,39	0	
8	U-2	0,13	0	0,00	0,10	7,60	0	

Quality of water Wrzosówka river basin



Finances

Kamieńczyk river basin – Sudety LIFT

Wrzosówka river basin – funds of State Forests

*Łomnica river basin - funds of State Forests
and Karkonosze National Park*

Thank you!!!

