

EUTROPHICATION ASSESSMENT IN RIVER BASIN SAVA IN REPUBLIC OF SRPSKA

METHODOLOGY

WB>100 m² pressures (population, industry,
land use, waste landfield)

WB<100 m² pressures (population and land
use)

POINT SOURCE POLUTION

POPULATION

Parametar	ES	t/a		
	gr/pop/day	Drainage	UWWTP	Septic tanks
N	10	0,003650	0,002373	0,003103
P	2	0,000730	0,000584	0,000657

INDUSTRY first and second category

WASTE LANDFIELD

DIFFUSE POLUTION

POPULATION-not conected

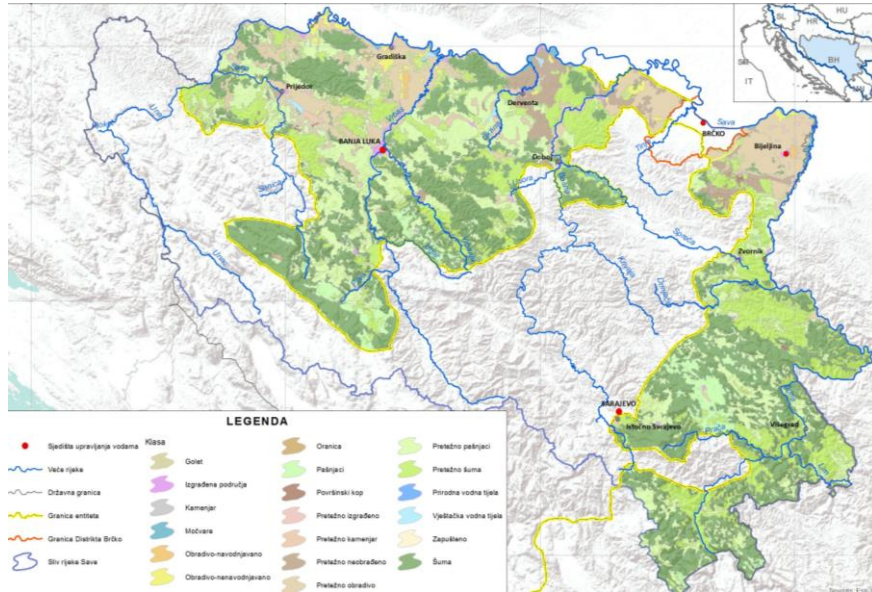
N 0,00365 t/god x 0,85 = 0,0031025 t/god
 P 0,00073 t/god x 0,9 = 0,000657 t/god

AGRICULTURE

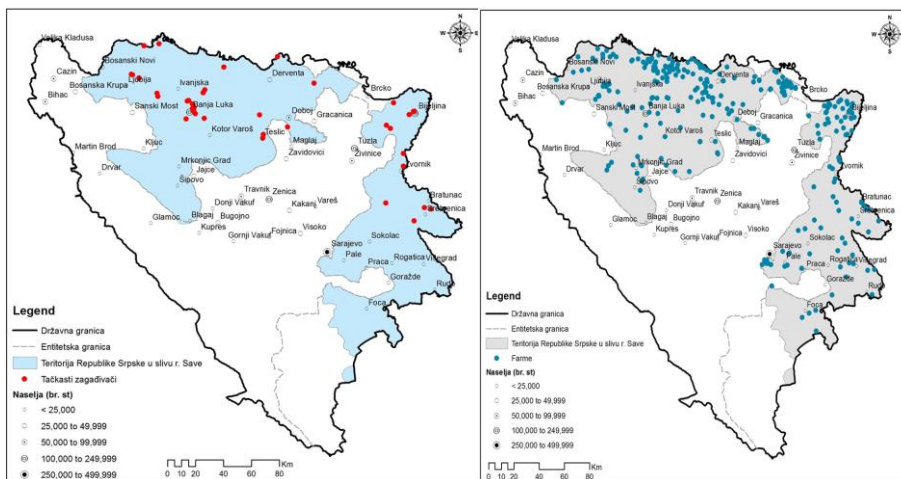
No	Area	N (kg/ha/a)	P (kg/ha/a)
1.	Urban area	6,6	1,0
2.	Agricultural land	8,0	1,0
3.	Pasture	2,2	0,1
4.	Forest	1,1	0,06
5.	Other	0	0

FARMS

LAND USE



INDUSTRY FARMS



RISK ASSESMENT

R.br	Podsliv	NPR		VPR		PR		Ukupno	
		Br. VT	Dužina (km)	Br. VT	Dužina (km)	Br VT	Dužina (km)	Br. VT	Dužina (km)
1	Una	50	438.33	14	78.86	49	342.00	113.00	859.19
2	Vrbas	71	649.79	14	140.02	20	155.63	105.00	945.44
3	Ukrina	18	138.25	9	150.16	22	197.81	49.00	486.22
4	Bosna	87	543.32	20	148.10	32	197.75	139.00	889.17
5	Drina	166	1,232.53	24	147.13	43	272.27	233.00	1,651.93
	Nep.								
6	Sava	7	220.52	9	48.39	63	626.60	79.00	895.51
	Ukupno	399	3,222.74	90	712.66	229	1,792.06	718.00	5,727.46

Comparison of calculation –diffuse polution

Results	N (t/a)	P (t/a)
SRBMP	79.582	10.553
MONERIS	114.000	8.900
MONITORING	38.000- 85.000	1.800-6.900

First Plan – SRBMP

Next Plan- Monitoring

Comparison of calculation and measured the concentration of pollution			
Comparative parameters	BPK5 (g/m ³)	N (g/m ³)	P (g/m ³)
Measured average concentration(g/m ³)	3,0825	2,11	0,056
Calculation of concentration Qav=20,35 m ³ /s	2,4648	0,711	0,123
Comparison of calculation and measured pollution loads			
Comparative parameters	BPK5 (t/a)	N (t/a)	P (t/a)
Total measured transport pollution	1.978,22	1.354,11	35,94
The total pollution load calculation	1,581.78	456.26	78.78
Procent (measured/calculation– 1)*100 %	25,1	196,8	-54,4
Comment on the result for the computational burden	less 25%	2 time less	Lager 54%