

Priority Area Number: 18		Priority Area Name: Soda Springs/Bear River		
Ranking Criteria			Score	Comments
1) POPULATION				
	Points	Select One		
a) Within Degraded Area				
<1000	1			
1000 to 10,000	2	X	2	Population = 5942
10,000 to 100,000	3			
		Subtotal	2	
b) Source Water Protection Areas or Public Water System wells in Priority Area				
0	0			
1 to 20	1			
>20	2	X	2	22 PWS
		Subtotal	2	
c) Number of Wells with Nitrate (NO₃) ≥ 10 mg/l				
0	0			
1 to 2	1			
3 to 5	2	X	2	4 Wells
6 to 9	3			
10 to 15	4			
>15	5			
		Subtotal	2	
		Population Score	6	
		Max Possible Score = 10		
2) WATER QUALITY				
	% wells	Nitrate Concentration Criteria		
Percent of wells with Nitrate (NO ₃) ≥ 2 mg/l	62%	2	1.24	
Percent of wells with Nitrate (NO ₃) ≥ 5 mg/l	22%	5	1.1	
Percent of wells with Nitrate (NO ₃) ≥ 10 mg/l	5%	10	0.50	
		Water Quality Total	2.84	
3) WATER QUALITY TRENDS				
		Select One		
Increasing	10			
No Discernable Trend	5	X	5	
Decreasing trend	0			
		Trend Score	5	
		Max Possible Score = 10		
4) OTHER BENEFICIAL USES				
Other beneficial uses are impaired	2	Yes=2 No = 0	No	
		Beneficial use score	0	
		Max Possible Score = 2		
Total Score			13.84	

**NITRATE PRIORITY AREA # 18
SODA SPRINGS/BEAR RIVER**

Nitrate Concentrations: (mg/l)

Minimum Value	0
Maximum Value	24
Average Value	3.9
No. Samples \geq 10	4
No. Samples 5 – 9.99	13
No. Samples 2 – 4.99	30
No. Samples < 2	29
No. Samples \geq 2	47
No. Samples \geq 5	17
No. Samples \geq 10	4
% Samples \geq 2	62%
% Samples \geq 5	22%
% Samples \geq 10	5.3%
Total Samples	76
No. PWS Samples	22
No. SMN Samples	53
No. IDAG Samples	1
No. REG/LOC Samples	0

PWS = Public Water Systems

SMN = State Wide Monitoring Network

IDAG = Idaho Dept. of Agriculture Studies

REG/LOC = Regional/Local Monitoring DEQ and DEQ/IDAG Projects

The 1998 Nitrate Priority Area Ranking for this area included samples from a total of 55 wells: 34 from the SMN and 21 PWS wells. Of those, 40 (73%) samples were \geq 2 mg/l, 17 (31%) were \geq 5 mg/l, and 1 (2%) sample was \geq 10 mg/l.

The 1999-2000 ranking for this area includes samples from a total of 76 sites: 53 from SMN wells, 22 PWS sites (19 wells and 3 springs), and one IDAG well. This represents an increase in monitoring data within the area. The Group 1 criteria of 25% samples \geq 5 mg/l is not met in this ranking, as only 22% samples are \geq 5 mg/l.

For the 1999-2000 ranking period, DEQ will maintain the priority status for this area at the present time, with re-evaluation in the 2001 ranking period. Procedures to remove areas from priority status with a continual decline in nitrate contamination below minimum criteria will be developed with the Ground Water Monitoring Technical Committee.

1999 - 2000 GROUP 1 NITRATE PRIORITIZATION SODA SPRINGS/BEAR RIVER AREA 18* (RANKED)

POPULATION (Est.) = 5,942
 AREA (Est.) = 310,611 Acres
 LAND USE = Predominantly Dry Agriculture, Smaller Amount of Irrigated Agriculture,
 Minor Amounts of Riparian, Urban and Range Land

Analytical Results for Nitrate Data Sources:
 Statewide Monitoring Network (USGS-IDWR), 53 sites, most recent analysis used
 IDEQ Drinking Water Information System (DWIMS), 22 PWS (19 wells and 3 springs),
 1999-2000 data, highest value used
 IDAG, 1 site, most recent analysis used



Nitrate Values (mg/l)	Number of Sites
>=10	4
5 - 9.99	13
2 - 4.99	30
< 2	29

MAXIMUM VALUE = 24.0
 MINIMUM VALUE = 0.0
 MEDIAN = 3.2
 AVERAGE = 3.9
 MODE = 4.2

TOTAL NUMBER OF SAMPLING SITES = 76
 TOTAL NUMBER OF PWS SITES = 22

No. Sites Nitrate >= 2 mg/l = 47
 No. Sites Nitrate >= 5 mg/l = 17
 No. Sites Nitrate >=10 mg/l = 4

*Previously referred to as Area 21 for trend analysis

Nitrate Analytical Results - Statewide, PWS

- ▲ >= 10 mg/l
- 5 - 9.99 mg/l
- 2 - 4.99 mg/l
- < 2 mg/l
- Nitrate Priority Area 18
Soda Springs/Bear River

USGS = United States Geological Survey
 IDWR = Idaho Department of Water Resources
 IDEQ = Idaho Department of Environmental Quality
 PWS = Public Water Systems
 mg/l = milligrams per liter

