

Priority Area Number: 21		Priority Area Name: Mud Lake		
Ranking Criteria			Score	Comments
1) POPULATION				
	Points	Select One		
a) Within Degraded Area				
<1000	1	X	1	Population = 523
1000 to 10,000	2			
10,000 to 100,000	3			
		Subtotal	1	
b) Source Water Protection Areas or Public Water System wells in Priority Area				
0	0			
1 to 20	1	X	1	3 PWS
>20	2			
		Subtotal	1	
c) Number of Wells with Nitrate (NO₃) ≥ 10 mg/l				
0	0			
1 to 2	1	X	1	2 Wells
3 to 5	2			
6 to 9	3			
10 to 15	4			
>15	5			
		Subtotal	1	
		Population Score	3	
		Max Possible Score = 10		
2) WATER QUALITY				
	% wells	Nitrate Concentration Criteria		
Percent of wells with Nitrate (NO ₃) ≥ 2 mg/l	68%	2	1.36	
Percent of wells with Nitrate (NO ₃) ≥ 5 mg/l	41%	5	2.05	
Percent of wells with Nitrate (NO ₃) ≥ 10 mg/l	5%	10	0.50	
		Water Quality Total	3.91	
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	11.91	

**NITRATE PRIORITY AREA # 21
MUD LAKE**

Nitrate Concentrations: (mg/l)

Minimum Value	0
Maximum Value	14
Average Value	3.9
No. Samples ≥ 10	2
No. Samples 5 – 9.99	13
No. Samples 2 – 4.99	10
No. Samples < 2	12
No. Samples ≥ 2	25
No. Samples ≥ 5	15
No. Samples ≥ 10	2
% Samples ≥ 2	68%
% Samples ≥ 5	41%
% Samples ≥ 10	5.4%
Total Samples	37
No. PWS Samples	3
No. SMN Samples	21
No. IDAG Samples	13
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

1999 - 2000 GROUP 1 NITRATE PRIORITIZATION MUD LAKE AREA 21* (RANKED)

POPULATION (Est.) = 523
 AREA (Est.) = 36,417 Acres
 LAND USE = Predominantly Irrigated Agriculture,
 Minor Amount of Range Land

Analytical Results for Nitrate Data Sources:
 Statewide Monitoring Network (USGS/IDWR), 21 sites, most recent analysis used
 IDEQ Drinking Water Information System (DWIMS), 3 PWS, 1999-2000 data, highest value used
 IDAG studies, 13 sites, most recent analysis used



Nitrate Values (mg/l)	Number of Sites
>=10	2
5 - 9.99	13
2 - 4.99	10
< 2	12

MAXIMUM VALUE = 14.0
 MINIMUM VALUE = 0.0
 MEDIAN = 4.1
 AVERAGE = 3.9

TOTAL NUMBER OF SAMPLING SITES = 37
 TOTAL NUMBER OF PWS SITES = 3

No. Sites Nitrate >= 2 mg/l = 25
 No. Sites Nitrate >= 5 mg/l = 15
 No. Sites Nitrate >=10 mg/l = 2

Nitrate Analytical Results -
 Statewide, USGS, IDAG, PWS

- ▲ >= 10 mg/l
- 5 - 9.99 mg/l
- 2 - 4.99 mg/l
- <2 mg/l

■ Nitrate Priority Area 21
 Mud Lake

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



*Previously referred to as Area 22 for trend analysis

