

**fact sheet**

**Interpreting your results**

### What do your data mean?

Water monitoring measurements tell us about quality of a water supply.

It gives information on plants and animals that might live there, and if water is safe to drink.

Many plants and animals like special environmental conditions to survive. If these change they may not grow as well. If there are big changes most plants and animals will die.

Use the tables below to interpret your data. Compare each measurement to the best range for plants and animals.

## PHYSICAL CHARACTERISTICS

**Turbidity**

How turbid (cloudy) is your water sample? What does this mean?

|  |  |  |
| --- | --- | --- |
| **Turbidity (NTUs)** | | |
| **clean** | **may be polluted** | **pollution problem** |
| < 25 | 25 - 30 (moderate) | > 45 |
| 30 - 45 (high) |

## CHEMICAL CHARACTERISTICS

**Dissolved oxygen**

How much dissolved oxygen is in your water sample? What does this mean?

|  |  |  |
| --- | --- | --- |
| **Dissolved oxygen (ppm)** | | |
| **too low to support life** | **stressful for life** | **supports life** |
| < 3.0 | 3.0 - 5.0 | > 5.0 |

What is the salinity of your water sample? What does this mean?

**Salinity (ppm)**

|  |  |  |
| --- | --- | --- |
| **fresh**  < 500 | **brackish (slightly salty)** | **salty** |
| 480 -1500 (moderate)  1500- 6000 (very high) | > 6000 |

# pH

What is the pH of your water sample? What does this mean?

|  |  |  |
| --- | --- | --- |
| **normal** | **may be polluted** | **pollution problem** |
| 5.0 - 7.0 | 8.5 - 9.0 | < 4 |
| no limestone | or | or |
| 7.0 - 8.5 | 4.0 - 5.0 | > 9 |
| limestone |  |  |
|  |  |  |

# Phosphorus

How much phosphorus is in your water sample? What does this mean?

**Phosphorus (mg/ L)**

|  |  |  |
| --- | --- | --- |
| **low**  < 0.1 | **medium** | **high** |
| 0.5 | > 1.0 |

How much nitrate is in your water sample? What does this mean?

**Nitrate concentration (mg/L)**

|  |  |  |
| --- | --- | --- |
| **low**  < 50 mg/L | **medium** | **high** |
| 50 – 100 mg/L | > 100 mg/L |

## BIOLOGICAL CHARACTERISTICS - PLANTS AND ANIMALS

**BIOLOGICAL CHARACTERISTICS - PLANTS AND ANIMALS**

***E. coli***

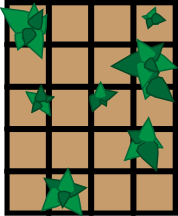
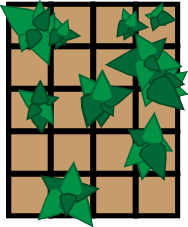
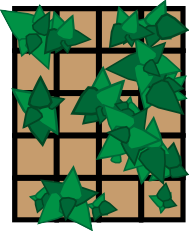
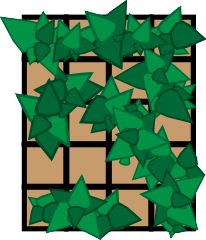
Was *E. coli* present in your water sample? What does this mean?

|  |  |
| --- | --- |
| ***E. coli* negative** | ***E. coli* positive** |
|  |  |

# Vegetation

What percentage vegetation cover did you find at your field site? What does this mean?

**0% 20% 40% 60% 80% 100%**

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

### poor fair good very good excellent

How many macroinvertebrates did you count at your field site?

What does this mean?

|  |  |
| --- | --- |
| **Number of macroinvertebrates** | **Water quality** |
| 0-40 | poor |
| 41-51 | fair |
| 52-69 | good |
| 70-106 | very good |
| 106+ | excellent |

How many different types of macroinvertebrate did you find at your field site?

What does this mean?

|  |  |
| --- | --- |
| **Different types of macroinvertebrates** | **Water quality** |
| 0-5 | poor |
| 6-10 | fair |
| 11-15 | good |
| 15-23 | very good |