

## Know the Difference! Types of buildup in stormwater ponds

| Type  | Cause  | Appearance  | Impact   | Harmful   |
|---|--|---|--|---|
| <b>Pollen</b>                                 | Flowering plants expel pollen as part of their reproduction and fertilization process. | Green/yellow powder-like grains.  | When found in large quantities, pollen will create a floating film atop bodies of water.                   | No. Pollen will be naturally consumed by organisms in the body of water.  |
| <b>Excessive Algae</b>                        | Ecological area overloaded with nutrients like fertilizer.                             | Various. Green, brown, even red! Thick, slimy, plant-based.                   | When large amounts of algae dies, oxygen levels drop in the water where the algae had grown.               | Yes. Low oxygen levels are hazardous to fish and other organisms.   |
| <b>Muddy Water</b>                            | Erosion of bare soils being disturbed by moving water (drainage).                      | Opaque, brown water.  | Over time soil sediments in the water can create blockages in the storm drainage network and watercourses. | Yes. Sediments can cause blockages in the storm drainage network and watercourses.  |
| <b>Rainbow Sheens (Hydrocarbons and Oils)</b> | Breakdown of leaves, algae and other organic material.                                 | When disturbed, appear to be shattered, irregular fragments. Like thin glass. | Hydrocarbons and oils are toxic to aquatic organisms.  | No, IF shattered fragments don't reform.<br><br>Yes, IF disturbed and fragments reform into larger rainbow sheen, then. If sheen reforms, it is likely a man-made oil. Report to 3-1-1. |
| <b>Foams</b>                                  | A by-product of soap entering into a   | Bright white or artificially coloured   | Detergents and foams may be  | Only need to report artificial foams and  |

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| <p><b>Foams (continued)</b></p> | <p>watercourse.</p>  | <p>bubbles.<br/>Will consist of both small and large bubbles.</p> | <p>hazardous to aquatic organisms.</p>                     | <p>detergents to 3-1-1.</p>  |
| <p><b>Natural Foams</b></p>     | <p>When naturally dissolved organic materials are vigorously mixed by moving water. Bubbles are created and settle in an area where water movement is less vigorous.</p> | <p>Off-white or brown tinted, uniformly small bubbles.</p>        | <p>Natural foams are harmless to aquatic organisms.</p>    | <p>No, foams created from leaves and other vegetation are not harmful to aquatic life.</p>                 |
| <p><b>Coloured slimes</b></p>   | <p>Biological activity from bacteria or algae</p>  | <p>Various.<br/>Green, orange, brown, black.</p>                  | <p>Concrete outfalls and pipes may appear discoloured.</p> | <p>Possibly.<br/>Report slimes to 3-1-1 for City staff determine if there are pollutants in the water.</p> |