

Wakefield Conservation Commission (Commission) – Minutes – April 29, 2021

Attendance: Chairman Jim Luciani, Vice Chairman Bob Romano; Teresa Belmonte; Silvana Bouhlal; Ken Alepidis, Frank Calandra

Absent: Peter Miller

Elaine Vreeland, Rebecca Davis, Judy Green

Offshoots, Inc. – Bioretention systems presentation – presenter Kate Kennon, author of the book “Phyto”.

The focus of bioretention systems is a productive landscape. These systems are designed to treat both organic and inorganic contaminants. Organic contaminants such as carbon and nitrogen can be broken down and degraded by the plants. Inorganic contaminants such as arsenic and cadmium however cannot be broken down. They are instead extracted and stabilized in the soil.

A well-designed system will include a forebay for a water settling area. Sediment removal through regular street sweeping, catch basin maintenance and clearing of the basin are key to decreasing the contaminant load. Native plants and self-feeding plants are the most successful. Small systems are also possible as long as the forebay can be maintained. A hard-bottomed forebay is suggested. Gravel bases can be used, however would need to be replaced regularly based upon sediment deposition level. The education of Department of Public Works employees on best management practices for these systems is key to their success.

Mr. Luciani asked if phosphorus in water attaches to the water column.

Ms. Kennon stated that it does, both dissolved and attached to particulate.

Ms. Davis asked the best way to keep weeds to a minimum.

Ms. Kennon stated that the use of “green mulch”, filling areas between plants and trees with other flowering plants or grasses. This helps push out area for weed growth. Fast growing cover crops should be installed immediately. Weeds should not be pulled, simply cut down. She added that the use of bark mulch around plantings actually increases contamination of bioretention systems and should be avoided.

Ms. Bouhlal asked the success rate of these systems.

Ms. Kennon stated that it is based largely on the level of ongoing maintenance.

The Commission’s next scheduled public meeting will be held Thursday May 6, 2021 at 7:00 via Zoom.

Mr. Alepidis made a motion to adjourn.

Ms. Bouhlal made a second to the motion. After polling the members individually, the motion passed unanimously.

