

## Facility Adoption of Water Quality & Management BMP's

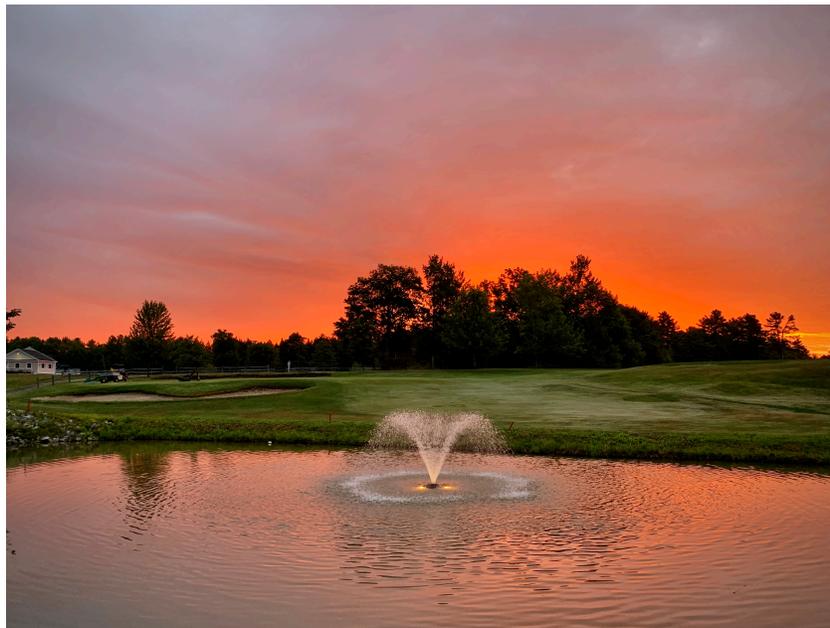
### Stormwater Plan

Val Halla worked with Integrated Environmental Engineering to establish strict facility guidelines to prevent stormwater run off and fresh water contamination. We have an oil spill prevention control and countermeasure plan (SPCC) in place at the maintenance facility. All drums and containers of liquid solvents and oils are placed on secondary containment bins in the event of a spill. All floor drains in the maintenance bays have been filled with concrete and the concrete floors pitch in a way that in the event of a sizable spill, no liquids can escape the building. All drums and secondary containers are checked monthly for leaks and inspections are recorded. The fuel island is constructed of concrete and both fuel tanks are double walled. Fuel tanks have leak detectors in place and are also inspected regularly for leaks. Staff completes Tank Smart training every two years as required by the Maine DEP Bureau of Remediation & Waste Management and is certified in numerous categories under the Oil Storage Tank Class A/B Operator designation. Chemical storage facilities are constructed in accordance with state regulations; comprised of concrete and able to contain all liquids in the event of a spill. Chemical spray equipment is stored in a dedicated bay. This bay is also where all mixing and loading takes place. The floor of the sprayer bay is pitched and capable of holding over 300 gallons (the capacity of the sprayer) in the event of a spill. Should a spill occur, a floor drain can be opened and product can be recovered at the rear of the building a reused. All mowing equipment is blown off with air prior to washing; washing is done with clean water only. Gray water that exits the wash bay is filtered through a large, vegetative buffer ensuring that any remaining nutrients from grass clippings are absorbed by the soil and used by turfgrass, rather than leaching into fresh water resources.



## **Pond Management**

Val Halla has two main ponds on the property. The largest pond, located on the 11th hole, has continuous flow in and out and naturally stays weed free. The smaller of the two ponds, located on the 9th hole, only has moving water immediately following a rain event and remains stagnant otherwise. Still water promotes significantly more aquatic weeds and algae, which can be detrimental to water quality. Aquatic weeds containing chlorophyll, through photosynthesis will release oxygen during the daytime. However, at night when photosynthesis slows to almost nothing, algae and aquatic plants can pull oxygen directly from the water. This causes dissolved oxygen levels to drop to less than desirable levels; levels that can't sustain fish and other aquatic creatures. To offset this situation, an aerating fountain was installed. The fountain runs 24/7 in the growing season and keeps the surface water moving enough to dissuade aquatic plant and algae growth without the use of aquatic herbicides.



## **Buffers & Shoreline Management**

All water bodies on the golf course are surrounded by vegetative, “no-mow” buffers. These areas are maintained once or twice a year but otherwise, are kept at a much higher height than other maintained turfgrass. These buffers act as one more filter for run off and also aid in shoreline stabilization. By keeping heavy, riding mowers away from these areas and allowing shoreline plants to establish, we prevent the banks from eroding into the waterbodies.

