

Equipment Wash Water Recycling

Maple Leaf Golf and Country Club
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Issue

Washing clippings and dirt off mowers and other golf course equipment is a part of daily golf course maintenance and requires the use of hundreds of gallons of water. The wastewater generated from washing equipment carries clippings and other organic debris that could eventually reach natural water bodies, increasing the nitrogen content of downstream waters and encouraging algae blooms. Equipment washing areas also tend to emit the foul odor of decaying clippings.

The equipment wash area at Maple Leaf Golf and Country Club was an uncovered concrete pad that drained into a small, unlined pond nearby that smelled of decaying clippings. Equipment was washed using irrigation water, diverting it from potential use on the golf course and increasing the club's overall water usage. The wash area and drainage pond were not environmentally compatible with the club's status as a member of the Audubon Cooperative Sanctuary Program.



The new equipment wash area collects wastewater, filters it and stores it for future use. Covering the facility protects staff and equipment from the elements, improving morale and washing quality.

Action

A new equipment washing facility that matched the club's environmental and resource management goals was constructed in October 2014. It included a shelter over both the equipment wash area and refueling area, compressed air hoses for blowing debris off equipment, and an ESD Waste2Water recycling unit. Before equipment is washed, most of the clippings are blown off and collected. As a piece of equipment is being washed, the recycling unit collects the wastewater, filters it, and stores it for future use.

Results

The new wash area has been a huge success and the facility now exceeds environmental regulations for wastewater disposal. An estimated 100,000 gallons of water will be saved each year by recycling wastewater. In addition, the nearby pond no longer collects clippings and the odor of decaying grass has been eliminated. Covering the entire wash area protects the staff from rain and heat, which equates to improved morale and better equipment washing. Less direct sunlight on the fuel tanks should also reduce loss from evaporation, although this has not been fully measured yet.

The new equipment wash area required a significant investment, but Superintendent Nancy Miller, CGCS, and everyone at Maple Leaf Golf and Country Club feel that it was very worthwhile.