

## Golf course owners in Stillwater clean up Brown's Creek





A golfer chips to the green on one of the 'signature' holes on the course in July 2013. Restoration of the stream created major aesthetic improvements.

Golfers who played Oak Glen Golf Course in Stillwater this summer may have noticed the course looked different than in 2012 – more than 1,300 linear feet of native buffer was added to the greens, restoring water quality to Brown's Creek.

Made possible through a \$220,000 Clean Water Fund grant (from the Clean Water, Land and Legacy Amendment), the owners of Oak Glen partnered with the Brown's Creek Watershed District in 2012 to convert 2.5 acres of irrigated turf grass to native buffers, restoring one of the last trout streams in the metro area.

Caleb Turbett, Oak Glen's general manager said the selling point was to improve the look of the golf course through a grant that restores water quality. "There was no reason for us to say no to the project – aesthetically, it's a big improvement," Turbett said.

Karen Kill, Brown's Creek Watershed District administrator said fixing the water quality in the creek has been a goal of the District's for some time, adding, "It didn't take a rocket scientist to look at Brown's Creek and know it was not conducive for a trout stream anymore, or an amenity for the course. In order to keep the maintained look, course owners had to mow right to the water's edge and the stream widened, became shallower and warmer, and filled with sediment – it wasn't pretty anymore and certainly not a place that trout would want to live."

Kill worked with owners of the course, the Wilson Golf Group, to scope out the project, and said they spent a lot of time figuring out how to carry out construction without disturbing course play.

"The course owners didn't want to lose out on valuable green fees, so we came up with a plan to do the majority of the 'earth-moving' construction during the winter," Kill said. "While the vegetation was being planted in spring 2012, golfers received information with their score cards about the improvements being made to the course."

More than 11,500 native perennials, 400 native shrubs and 43 native trees were planted along the newly-constructed buffer to Brown's Creek and rock veins were installed to redirect flows back to center of stream.

"We saw an awesome response only 10 months after the project was completed," Kill said. "Now, a year later, when you look down in the stream, it's already cleaning itself out and narrowing to create pools of habitat for trout and other aquatic species. There's been more habitat created than we ever expected in such a short time."

Kill said the project also cools the creek by six degrees Farenheit, bringing the water temperature from lethal to tolerable for trout reproduction. The improvements to the creek will address the impairments, cleaning it up.

Each year, there are more than 22,000 rounds of golf that are played at Oak Glen – and all of those golfers will have the opportunity to be educated through interpretative signage throughout the course.

"The end result has been great – our golfers have noticed an improvement. Hole 16 is such a beautiful hole now – the rock wall in front of Brown's Creek has improved the visual, looking out from the tee box to the green," Turbett said.