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## Courses seek purer water for irrigation

[Ari Cohn](#), Tribune

North Scottsdale golf courses are pushing for more than \$20 million in upgrades to get cleaner irrigation water, before golfers start seeking greener pastures.

Rising salt content in the water has begun to slow growth and kill grass on greens and fairways, said Tim Bray, a consultant who represents 25 golf courses using treated wastewater for irrigation. The courses use up to 24 million gallons of treated wastewater per day, according to Bray.

"There's not enough water to dilute the salt, so you get higher concentrations. If it reaches a certain point, it will kill the grass," said Bray, a consultant with Southwest Community Resources. "It affects almost every golf course in north Scottsdale. That would, obviously, have huge economic impact on the city."

The golf courses submitted a request to the city in mid-March that an estimated \$25 million expansion at the Scottsdale Water Campus, 8787 E. Hualapai Drive, be sped up, and that the scale of the project be enlarged to the tune of about \$23 million.

"We're trying to get out ahead of this issue before it becomes a serious impact. It's getting there," Bray said.

A city-released study of the economic impact of north Scottsdale golf courses — conducted last year by consultant Rich Wetzel — shows they generated more than \$6.2 million in tax revenue for Scottsdale in the peak January-to-April golf season.

Wetzel, former tourism director for Scottsdale, predicted if the courses are allowed to deteriorate because of salt issues, up to a third of that revenue could be lost.

Marshall Brown, planning and engineering director at the water campus, said current plans call for a reverse osmosis facility to be built in about five years to serve the needs of a growing north Scottsdale. Reverse osmosis removes salt, among other things.

Brown said officials are looking at whether it's possible to speed up the project.

"To some degree, it should be feasible. We're looking at the timing," he said.

In the meantime, the city has been blending reverse osmosis water into the golf courses' irrigation supply to reduce salt content during the 60-90 day period in the fall when the courses over-seed, Brown said. The blending comes at an additional cost to the golf courses.

"Likely, what we'll end up doing is coming up with some plan that involves continued blending in the interim," Brown said.

Art Nunez, water and wastewater treatment director at the water campus, said rising salt content of the irrigation water can be attributed to Scottsdale's increased use of Colorado River water over the last two decades, and to the proliferation of water softeners in the city's north.

The river water has a higher salt content than the groundwater the city previously relied upon, raising the baseline level of salt in the city's supply, Nunez said. At this point, though, the level of salt contributed by the river water has probably peaked, he said.

"It's not a health concern," he said.

Increased use of water softeners also has contributed to the level of salt in wastewater, Nunez said. Many homeowners use the softeners to remove minerals like calcium and magnesium from their water.

Each softener consumes about 40 pounds to 50 pounds of salt per month, which is flushed into the wastewater system, he said.

"It depends on your water usage, the size of your home," Nunez said.

The salt then becomes a problem for the golf courses, which use the treated sewage for irrigation, he said. The current treatment process for the irrigation water was instituted in the early 1990s at a cost to the golf courses of about \$14 million. In total, the courses pay the city about \$2.2 million annually to operate the system, Nunez said, but it does not remove the salt.

Hence their request to speed up construction of the expanded reverse osmosis facility.

Nunez said that if the project proceeds, the golf courses likely will have to pay to install the extra capacity needed to remove salt from their irrigation water. Preliminary estimates put that cost at about \$23 million.

The courses also would have to pay an additional \$2 million a year to operate the expanded system, Nunez said. Golf course representatives plan to meet with city officials during budget discussions in mid-April to discuss the proposal, costs and timing.