Who knew that water conservation and athletes’ safety were interconnected? Since 1997, the Sports Athletic Field Education program (SAFE) has been evaluating athletic fields and parks across Texas to determine ways to make them safer and more water-efficient.

A program of the Texas AgriLife Extension Service, the SAFE program offers turfgrass management assistance to sports field maintenance personnel who want to maintain the highest quality fields through proper irrigation. Initial funding for the program was provided by the Rio Grande Basin Initiative through the Texas Water Resources Institute.

Ron Leps, former AgriLife Extension agent for Williamson County, created the concept for the program in 1997 with the help of Ron Woolley, now regional program director of Agriculture and Natural Resources for AgriLife Extension, said Dr. James McAfee, associate professor and Extension turfgrass specialist at the Texas AgriLife Research and Extension Center at Dallas.

“Currently approximately 50 counties are participating in the SAFE program,” McAfee said.

The program worked well with the comprehensive water legislation Texas Senate Bill 1, which was passed in June 1997 around the same time the SAFE program began, McAfee said. According to the Texas Water Development Board’s website, “This comprehensive water legislation enacted by the 75th Texas Legislature was an outgrowth of increased awareness of the vulnerability of Texas to drought and to the limits of existing water supplies to meet increasing demands as population grows.”

Irrigation, fertilization, mowing practices, aeration, and water conservation are examined during the audit process. If necessary, a soil sample is taken to determine soil pH, nutrient availability, and problems such as salinity or sodium, McAfee said.
“The key aspect is water conservation,” he said. “It is important to look at the field and see if there is anything that would prevent water from moving off the field. Athletic fields are seeing a 34 percent savings on water after participating in the program.”

Besides improving the quality of the field, McAfee said that the program also improves its safety.

“One of the major causes of player injuries is excess hardness of the playing surface,” he said. “Getting the schools or city parks staff to aerate their fields on a regular basis will significantly reduce the hardness of the playing surface. Also, with improved cultural practices, the fields develop a much denser stand of turfgrass, which adds some cushion to the field surface.

“In the past, one of the main methods used to soften the field was applying excess water, which was one of the main causes of over-irrigation of these sports fields,” McAfee said.

The program has expanded in recent years to include city parks. “When we audit parks, we look at weed problems, compaction, and irrigation issues,” he said.

There is no charge for the service. The program asks participants to implement the recommendations and display a sign that shows the city or school is participating in the educational program.

McAfee said the program has been a success so far and hopes to one day expand it to include home lawns.

The city of El Paso is the most active participant in the program. Dr. Ray Bader, county Extension director for El Paso County, brought the program to El Paso in 1999.

“In the beginning, we worked with one school district and one school,” Bader said. “It grew from there, and now four independent school districts’ athletic fields are a part of the program, along with the El Paso City Parks and Recreation Department.”

Originally, Bader conducted the audits himself, but a few years into the program the Texas A&M School of Irrigation began training personnel from the school districts, parks, and water utilities service to be certified landscape irrigation auditors.

“By participating in the SAFE program, you are using your resources responsibly and efficiently,” he said. “You are using all the information you have, such as soil type, turf type, soil tests, irrigation audit, compaction, and field use to build the management plan specific to the field so there is no guesswork involved.”

Participants in the El Paso County SAFE program have found a great deal of community pride in these good quality playing fields, Bader said. “For example, one of the school districts’ athletic directors showcased the field crew at the halftime of a football game and presented them with a certificate as the crowd gave them a standing ovation.”

“I feel that the SAFE program is vital for our water issues,” Bader said. “It is an appropriate program for not just the El Paso area but all others, especially at this time when using resources more efficiently is important, as well as making sure students and residents have the use of good quality playing fields.”