Arkansas Basin or the South Platte Basin. Augmentation water is usually required to replace any of the Denver or Dawson aquifer groundwater that is lost during use and not returned to the water basin.

A total of 300,000 people from Greeley to Colorado Springs depend on the Denver Basin's four aquifers for their water supply. It is not sustainable to rely on this one source. The basin is a non-renewable supply of water because it is being used up at a faster rate than the aquifers can be replenished, Koger said.

Monument heavily depends on this Denver Basin groundwater, with a total of nine wells currently producing 580 acre-feet per year. However, Koger said the town has 1,300 acre-feet available in water rights that it could use for production. Broome explained that Monument's current well production would suffice for meeting demand until about 2020, but then more water would need to be produced, either by using more of the water rights the town owns, by other means, or by a combination of both.

The rule of diminishing returns and cascading reduction in well yields applies as more wells are drilled. Over time, the production of any single well diminishes,



and as more wells are drilled in an area to try to maintain production of a given level of water, the total possible yield per new well decreases, making it uneconomical to produce more Denver Basin water. Koger said renewable water from reuse and from regional water supplies is needed to supplement the Denver Basin Water the town currently relies on. He recommended diversification of the town's water portfolio.

Broome's suggestions for water supply improvements in the new water master plan included:

- 1. Upgrade Well 4 and 5 water treatment plant (WTP). This plant is older and needs upgrades so that it can treat alluvial well water for iron and manganese and help with the proposed water reuse project (below). It has not been used for two or three years due to operations issues. Cost \$2.25 million.
- 2. Construct a new Arapahoe well to allow town to utilize more water available according to the water decree. Creating Well 10 would cost about \$1.3 million.
- 3. Increase Wells 1 and 3 production up to the level the water decree allows. Cost \$1 million for Well 3.
- 4. Develop and implement the water reuse project. This would recycle treated ef uent from the Tri-Lakes Wastewater Treatment Facility. This water would be treated again, pumped upstream to incorporate it with the groundwater and the surface water, and





Above: July 4th appreciation of volunteers from Monument. Madeline VanDenHoek right, community relations specialist for the town recognized businesses and organizations for their support during the July 4 activities including from left: Herb Wetzel, Wayne Hammerstadt, Terri Hayes and R.F. Smith *Photo by Lisa Hatfield*

pumped out through the Wells 4/5 treatment plant. (See www.ocn.me/v14n2.htm#bot0106 for more information on the reuse project.)

- 5. Develop Beaver Creek Ranch Water, also known as the Forest Lakes Metro District area, where the town also has some water rights.
- 6. Add more renewable sources to supplement into Monument's system. No costs were estimated for this option since no plans have been started.

Suggested water quality and treatment improvements in the new water master plan:

- Replace Well 4/5 treatment plant as mentioned above to deal with iron and manganese and be able to accomplish water reuse. The timeline provided in the water master plan calls for this to be done by 2016.
- 2. Plan for Well 7 and 8 replacement by 2035. Cost \$2.4 million.
- 3. Well 6, which is of ine right now, has usoride and radium present. It will not be used until those issues can be resolved. Cost \$30,000.

Suggested storage and distribution improvements in the new water master plan included:

 Add one more 1.2 MGAL tank storage to provide redundancy for the town zone, and keep first tank on high zone, helping with water pressure. Cost \$1.8



Lewis-Palmer School District #38 SCHOOL NEWS

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September 2014



Students and teacher Diane DeLoux in Marine Biology lab



Second graders at Bear Creek Elementary work on language arts with teacher Jennifer

Board of Education Meeting Rescheduled

The Board of Education meeting has been rescheduled for the month of September only. The meeting will be held on Wednesday, September 17th at 6:00 p.m. in the Learning Center, 146 Jefferson in Monument.

Highest School Performance Scores EVER

Lewis-Palmer School District has received its best-ever state performance ratings! The Colorado Department of Education has distributed the District Performance Framework (DPF) reports to schools, issuing District 38 the highest score it has achieved since the reporting system was established five years ago.

The DPF is a combination of performance evaluation including several areas: Academic Achievement, Postsecondary/Workforce Readiness, Academic Growth, and Growth Gaps (areas where some groups of students are progressing at different rates from the entire population).

In the reports for the 2013-2014 school year, Lewis-Palmer School District scored an overall 87.7%. That's up from 86% last year, which was also an all-time record for the district. This maintains the Accredited with Distinction status of the district, usually awarded to fewer than the top ten percent of districts in Colorado.

Superintendent Karen Brofft is pleased with the report, as schools head into new testing requirements this year, "Our district and Board of Education are very proud of the hard work and commitment to excellence that our performance demonstrates. As the expectations and outcomes change with new State assessments this year, we will work to continue this trend in the future."

Director of Assessment Dr. Lori Benton presented the preliminary report to the Board of Education. She said the district exceeded the State's expectations in Academic Achievement and Postsecondary/Workforce Readiness, and it meets or exceeds expectations in Academic Growth and Growth Gaps.

The new report also identifies areas for improvement, and in most of those areas the district is closing the gap compared to previous performance reports. For example, math scores for low income students and students with disabilities improved six percent, bringing the district closer to exceeding expectations.

"We always ensure that we determine opportunities for continuous improvement. Even with the outstanding overall performance rating of "Accredited with Distinction," we recognize that there are still areas that we will target for improvement in the future."

Friday Night – The Lights Are Back!

Football is back beginning this week at Don Breese District Stadium. There's a home game just about every Friday night. On September 12th, Palmer Ridge will face Lewis-Palmer in the return of the cross-town game! Check school websites for the complete athletic schedule for all sports.



photo by: Hunter T Photography

Donors Adopt Classrooms, Grades, Programs

The Adopt D38 Program has provided more than \$91 thousand to directly support teachers, providing materials and activities for students. It allows anyone to make donations, 100% of which go directly to a specific recipient chosen by the donor: a classroom, a grade, a program, or an entire school.

The donation program is entering its fifth year, coordinated by community volunteer Georgina Gittins. She brought the idea to the District and implemented it as a way to support teachers and students.

Gittins explains that, on average, teachers spend about \$500 of their personal funds each year on supplies or equipment for their students. The Adopt D38 program was established to help teachers with those expenses. It is operated entirely by volunteers and the Lewis-Palmer Education Foundation provides funding for supplies.

A few educational items for the classroom funded through adoptions have an impact on many students through shared use, such as iPads, iPad apps, SMART board lessons, audio books, Time for Kids magazine, calculators, motivational speakers, weather and water cycle models, rocket kit, class novels, and much more.

All donations are tax deductible. Anyone may make an adoption and payments may be made on-line. Visit any school website for more information.