

EQUINOX DEVELOPS SUSTAINABLE COMMUNITY AT TODD CREEK
-Adams County

Imagine a residential community, nestled north of Denver, where trees, plants and people thrive. Then envision living in a 4,000-6,000 square foot home on an acre or two of land with all the amenities of a big city in your backyard and spectacular views. Now here's the best part of the vision; it's a water sustainable community! Sound like a dream? Not anymore.

At a time when we must protect our limited water resources, but still want to enjoy Colorado's spectacular views and lifestyles, developer Gene Osborne, (CEO of Equinox Land Group), created Todd Creek Village. It is a community that proves with advanced technology, experienced water engineers and a responsible developer, people can have the Colorado lifestyle without compromising limited water resources.

The original vision for Todd Creek Village began when Osborne visited the 6,000-acre parcel of land just north of Denver (Adams County). As he walked the picturesque landscape with skyline views and backdoor amenities, he saw an opportunity. "It was like you were in the country, yet as I looked around, there was Denver, Thornton and DIA – all right there. It was beautiful," said Osborne, adding, "I grew up on a farm and still love the calm of country life, but I also know that people like what the city offers. So, I came up with a plan to develop a community where people would enjoy open space, yet have city amenities within reach."

Yes, the development was visionary from the beginning. Todd Creek was designed with 1-2 acre lots, homes for the country life feel, a championship golf course and whole backyard of amenities. But, what really made the original plan unique was Osborne's plan for a two-pipe water system. What's that? It is literally a two-pipe water system that separates the irrigation water from the potable (drinkable) water. The idea behind the dual-pipe system is to not treat the water used for landscaping. It saves the homeowners money and actually provides more nutrients to the landscape.

"Normally a dual-pipe water system wouldn't be difficult", said Takeda, the water engineer for the development, TST of Denver. "But, the initial groundwater supply for the area was limited and the actual water yields were insufficient to provide enough water to the community. Add into that equation poor quality groundwater (high mineral and iron content) and you realize a unique water engineering situation. Thus, in order for us to solve the water concerns, we had to address the reliability and the quality of the existing water resources. Neither looked promising," said Takeda.

That was the point when the TST water engineers coupled decades of engineering experience with advanced technology to come up with a solution; not only for the immediate water situation, but for the future of the community's water.

Advanced technology was required. Thus the most technologically advanced water filtering process called reverse osmosis (RO) was designed. Reverse osmosis is a separation process that uses high pressure to force the untreated water through a membrane and retain the water "brine" on one side while allowing the pure "drinking" water to pass to the other side.

To reach an optimal solution, the Colorado School of Mines Environmental Department (CSM) was retained to conduct detailed water quality assessments to identify contaminants in the alluvial water supply. The CSM also provided technical input into the design and development of the water treatment systems. After over a year of pursuit with the Colorado Department of Public Health and Environment, the project qualified and was awarded a permit allowing it to discharge and reuse the water (brine) from the treatment plant.

So, how does the water re-use system work? Water Systems Operator for Todd Creek's Metropolitan District No. 1, Ken Gee, explains it this way: "We are able to take the water (brine) from the water treatment plant and blend it back into the irrigation water where it is then recycled in the reservoirs to be used again. It works naturally with the environment and plants love it. This is where the concept of a second pipe system is now coming back to bear fruit. Without the second pipe, there would be no way of reusing the water to irrigate the properties."

How good is this water quality? Says Ken, "The RO water filtration system delivers treated water to the home that literally exceeds the State of Colorado's water quality standards. The filtration system used at Todd Creek is so technologically advanced, it even takes out high levels of alkaline, iron, manganese and other particulates or contaminants including viruses, traces of pharmaceuticals, and organisms that can sometimes pass through in other water sources. As a result, homeowners don't need any additional water filter systems or softeners."

At this time, Todd Creek Village is the **only** community in the State of Colorado to have an approved discharge permit for its brine water. And it is one of the only communities in the state to use RO to filter its drinking water.

“In the beginning, some people called me crazy to spend an extra \$2.5 million to implement a dual-pipe water system. But, growing up on the family ranch, we always had our house water separated from our irrigation water”, said Osborne. “And with today’s high cost of treating water, the way we developed the Todd Creek water system was the right thing to do.”

Jan, a 6 year resident in Todd Creek Farms says, “The irrigation water is like pure Liquid Gold on the plants. In just one season, all the vegetation really took off.” Jan says she loves the mountain-like open feel of the community and nearby wildlife. Like others who had heard mixed reviews about using separate irrigation water for landscape purposes, Jan adds, “It’s really a ‘piece of cake’ to use this system.”

Another resident, Pete, whose household has 4 adults, also gives the dual-pipe water system a high grade. Originally from California, the family wanted an open space neighborhood with a bigger lot and says the price and timing were just right for them.

“I have great respect for Gene not giving up on his dream,” said Takeda. “The development had water challenges from the beginning that required advanced technology, engineering creativity, countless hours of meetings and the leadership of a guy like Gene. So, in my mind, Gene deserves credit for having the tenacity to stick with his vision through the challenges and additional costs of development. It just goes to show what develops when the ethics of a cattle rancher are coupled with the tenacity of a real estate developer.”

Today, Todd Creek is considered as one of the finest developments in Adams County. The championship golf course and club house are beautiful and in a few years, direct access to E-470 and the north spur of the light rail will make it an even more desirable place to live. Now with a sustainable water system in place, the community is expected to not only grow, but thrive.

Added Osborne, “Even though the development was a struggle at times, it’s great to see it finally come together. Give it another ten years, and it will be the Cherry Hills North!”

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For more information on Equinox Land Group, call 303-799-6000. For TST of Denver, call 303-792-0557.