

Caughlin Ranch Homeowners Association
Taking Proactive Measures to Address Water Conservation
May 20, 2015

Caughlin Ranch believes water conservation requires proactive programs in several related areas:

- Addressing environmental issues pertaining to natural water sources
- Minimizing the use of potable water to irrigate the landscape
- Reducing overall water consumption

In each of the above areas significant progress has been achieved over the last ten years. Additional programs have been approved to further enhance water conservation in the Caughlin Ranch community.

- In the environmental area, a major project was initiated in the spring of 2014 to evaluate the water quality of Alum Creek which flows through the heart of Caughlin Ranch and is a major tributary of the Truckee River. In cooperation with the Nevada Land Trust, the Nevada Department of Environmental Protection and the City of Reno Public Works Department, water samples were collected at multiple locations throughout the year to evaluate the presence of pollutants. For factors exceeding threshold levels (suspended solids and phosphorus levels), the study examined probable causes (creek erosion and residential fertilizer practices) and potential mitigation measures (additional wetlands and homeowner outreach). Implementation of these corrective actions is already underway.
- Fish and aquatic life are under stress during drought events. Aeration systems have been purchased to enhance oxygen levels in the many ponds that support fish.
- The greenbelt and other common areas in Caughlin Ranch are irrigated throughout the summer. Prior to 2013, potable water was utilized to water all of the common areas. In 2011 a project was approved by the Board of Directors to construct a system of multiple pumps and piping in order to capture non-potable water flowing from Steamboat Ditch to utilize the water rights held by the Association for irrigation. The project was completed in 2013 at a cost of almost \$800,000 and in the first year alone, reduced consumption of potable water by over 35 million gallons. Future savings are expected to be in the range of 40 to 50 million gallons annually.
- Leaky pipes and sprinklers can be major sources of water waste. In order to quickly address leaks, the maintenance and lawn mowing crews work in concert every week to identify and repair problem areas on the spot. The office also maintains a 24-hour hotline for homeowners to report leaks on weekends and evenings so an on-duty crew member can address problems immediately.
- The primary program to reduce water consumption is the conversion of grass to xeriscape in the common areas. Since 2004, 49 separate projects have been implemented resulting in the removal of approximately 500,000 square feet of grass, resulting in a net water reduction of over 10 million gallons annually. Over the coming five years, the plan is to double the conversion to xeriscape to over 1 million square feet.
- Given the extreme drought conditions in 2015, Caughlin Ranch has implemented additional water conservation measures. Watering of the common areas will be limited to two days per week, primarily during nighttime hours and will be shut down whenever possible on rainy or windy days. Mower heights will be raised to enhance moisture retention. The goal is to reduce consumption by much more than the currently mandated 10%.
- In addition, the UNR Cooperative Extension and the Nevada Landscape Association have been contacted to review irrigation practices throughout Caughlin Ranch. The objective is to obtain advice on improving the conservation program in general and the efficiency of the irrigation program in particular.
- The Homeowner's Association has subscribed to the Audubon Sustainable Communities Program. Completion of the program will result in recognition as a "sustainable community". Caughlin Ranch is committed to achieving this accomplishment.