

## Napa Valley Country Club Irrigation Report October, 2007

- The NVCC golf course irrigation system is over 30 years old on the front nine holes and almost 20 years old on the back nine
- Based on usage in 2006, the front nine used **79.93 acre feet** of water and the back nine used **116.79 acre feet** of water
- The front nine is irrigated with water taken from a well located at the corner of the property. The back nine is irrigated by runoff water channeled and pumped into the holding ponds located on the back nine
- The current system suffers from poor spacing of the sprinkler heads, pipe failures and control problems---all of these lead to over watering, breaks and wasted water
- Because of the above, NVCC has decided to install a new irrigation system in the winter of 2008-2009

## And

- Because the ground water supply in the Coombsville area is waning and the main well at NVCC is diminishing, the club has decided to install a new irrigation system that will accommodate recycled water
- Accommodating recycled water in the new irrigation system will increase the cost of the system by 30%
- According to Russ Mitchell Associates, our new irrigation system
  designer, the new irrigation system will reduce the amount of water
  used by 18-20% on the front nine and 12-15% on the back nine
- This means that water usage with the new irrigation system will be reduced by 28.04 to 33.41 acre feet
- To prepare the course for recycled water, it is necessary to have the ability to store water on both the front nine and the back nine

- Currently, the back nine has storage ponds, the front nine does not
- A small pond (12-15 acre feet) is necessary, as a surge pond, to receive recycled water for the front nine from the Sanitation District recycled water line which is planned to go along Hagen Road
- It is important in our construction planning to excavate and tie the new pond into the new front-nine irrigation system as one project. This will probably be in the spring construction cycle of 2009
- Although the new pond will be used as a surge pond when recycled water becomes available, until that time we would like route the water from our existing well through the pond instead of the tank we now use
- This will require a one time filling of the new pond, which will be done during the winter
- Our hope is that the front nine pond can be done under NVCC's existing use permit