Community Irrigation Committee - Rocky Mansfield, Chair

In this article, we are featuring the community irrigation system pump house. The function of the pump house is to take water from the community irrigation system pond located at Osprey 5 and distribute it using any combination of three main pumps to the community through the 7 miles of pipeline that run throughout the community. The committee pays a lot of attention to the pump house as without it functioning properly there would be no water for the irrigation.

There are 3 main pumps used to pull the water from the pond and push it through the pipelines to the community. A smaller fourth pump maintains the pressure in the system during the daytime non-watering hours. It takes approximately the capacity of 2 of the main pumps to supply the system. The controller software optimizes which pumps are used at any given time to minimize their wear and tear. This allows us to run the system when one pump is out of service for maintenance, repairs, etc.

Assessing the condition of the pump house started before the purchase of the system was complete. For items discovered before the completion of the purchase, the repair costs were



deducted from the purchase price. During the assessment period, the committee discovered only one pump was fully functioning out of the three. Pump three had a bad check valve on the intake causing it to pump water back into the pond. The controller for pump one did not work. While pump two was

functioning, it was obvious the bearings were going bad from overuse. The noise from the bearings inside the building was louder than at a rock concert. Even simple items such as the building lighting did not work, and the electrical panels were rusted through and not up to code as seen in the before pictures on the left. Below are the after pictures.



The committee is happy to be able to say that all the items have been repaired/replaced as needed from within the irrigation committee's operations budget. The pump house is now functioning as intended delivering water as needed to the community.

A quick note on Hurricane Irma. The pump house was systematically shut down a couple of days before the hurricane struck our area. The system was restarted the Tuesday after Irma without any issues. The pump house had no damage from the hurricane. However, one tree next to well #1 was blown over. It is in the process of being removed.