**Irrigation System Information for Home Owners**
**Annual Homeowners Association Meeting 2022** **April 6, 2022**

To all Country Club Heights home owners:

As some of you may know, at least one of our irrigation pumps has suffered complete failure, on average, each year. This year we are starting the season with one new pump. The other pump is functional, but was intermittently losing suction near the end of last season. We will test its performance when the irrigation system is commissioned. I have never seen a time when both pumps were available for normal use, but we do need two working pumps to reliably meet our watering needs.

In the worst case event that both pumps become disabled we will be without irrigation water for an extended period. Parts have long lead times and labor is tight. Replacing just one pump can cost up to $7000. It is my goal to get through this year without incurring another pump failure.

As expensive as pump replacements are, underground piping failures could cost even more. Our irrigation system is old. The Association is liable for piping failures upstream of the street valves. Repair costs and damage mitigation can be expensive. I hope to avoid piping failures by employing better operating practices.

During the off season we have done some work to get ready for a new year.

1. The perforated steel screen in the ditch has been cleaned and corrosion treated.
2. The underground piping has been roto-rooted to remove sludge and root growth.
3. A new foot valve was installed late last year (wear failure).
4. The low-pressure safety shut off switch has been replaced (age related failure).
5. Silt build up has been removed from the mud vault.
6. A new pump should be installed and ready for use soon.
7. The pump house has been modified to allow easier access.

Each of these is important in its own way to support a healthy irrigation system. About all we need now is a new coat of paint.

**What's next?**

We will all be watering again soon, and I believe we have a much better chance of making it through the year by working together.

The single most destructive event for a centrifugal pump is to run it dry, or with too little water flow to provide lubrication and cooling. Unfortunately, this has been overlooked in the past. Our system does have a pressure relief valve that might be able to maintain a safe minimum flow rate, but it isn't suited for the purpose as built. Hopefully we can address this weakness in due time. For now, we need to assure adequate flow 24 hours a day, every day. Knowing this, we can help a lot by working together to follow the watering schedule as best we can.

**Watering schedule information**:

Each home is assigned a six-hour window every other day (even or odd).
<u>At least</u> one zone must be flowing somewhere in the neighborhood "at all times" to avoid pump damage.
We want to improve by targeting watering of at least two homes at all times to provide a margin of safety. Note that the system should be able to support up to four homes all at once. We are not asking for anyone to compromise their usage.
***NEW**: Our request is to establish greater flow regularity. We ask that two of the four homes that share a watering block commit to watering either "early or later" (commit to a 3-hour block) within that 6-hour window.
You may water longer than the 3 hours if you want, up to the full 6 hours.

Prioritization times can be assigned by the Secretary, or each of the four affected members can work together to choose.

Please inform Kyle if your system is shut down for any reason, so that we can make adjustments as needed. If anyone wants to water for less than three hours, to avoid over-watering or to support conservation efforts, please let us know.

Please be aware these measures are part of an effort to avoid another expensive failure this year, and to provide us an opportunity to assess our system to determine if future improvements are needed.

We are aware of preliminary talk about regulations that may limit our water usage in the future. It would be prudent to anticipate such restrictions. Our system could be reengineered to support better efficiency based on optimal usage, instead of an essential baseline flow rate. It seems too early to discuss the scope and specifics of such regulation, but it seems reasonable to presume that change is coming.

**Control of Flooding (piping rupture):**

Everyone should know how to shut off the irrigation water to your yard. If you have a street valve on your property you should know how to access it and close it. Finally, all residents should know how to shut off the pumps themselves. Just flip off the switch on the side of the pump house building. It looks like a light switch under a protective cover near the door. You can try calling Kyle on his cell phone (707-362-0653). Please report any action you take.

For a piping break on your property just close your own supply valve.

In the event of flooding in the street or in your yard upstream of the street valve:

Notify Kyle or a board member immediately.
Close the street valve if you can.
Shut off the pump at the pump house.

**Loss of pressure (no water to sprinklers):**

Any time the sprinkler system loses pressure, and you suspect there might be a problem with the pumps, call Kyle. It is possible the pump may have lost suction and still be running. It is imperative that the pump be turned off as quickly as possible. **You** might be the only person that realizes we have a problem, please say something.

It is best to error on the side of safety. If in doubt, please shut off the pump yourself.
We can then investigate and restart the pump and pressurize the system properly.

I would love to have a couple people volunteer to help. I can't do this alone. Restarting the pumps isn't hard, but it must be done carefully.

If you have any questions, please call me.

Thanks for your cooperation,

Kyle Dickson
Irrigation and Pump Committee Member
(707) 362-0653