System Control

Several solutions are available that allow you to either control your rainwater harvesting systems back-up water supply or simply monitor the status of it. When it comes to controlling whatever valve is responsible for your back-up supply you can use either a float switch or a digital rainwater system controller. A float switch is the simplest, cheapest solution to system control. The way it works is quite simple. As the tank is drained, the float switch will begin to lower with the water level. Once the float switch has dropped 45° below parallel it will turn on your back-up water supply. If you are using a tank back-up system (where you refill the tank with municipal water) this means that will open the solenoid valve that is attached to your domestic water line allowing the tank to fill with municipal water. If you are using a direct back-up system (where you use a 3-way valve to switch directly to municipal water) it will rotate the valve to the position of the municipal water. As the tank fills with water the float switch will raise with the water level. Once it rises 45° above parallel it will close your fill valve or switch the 3-way valve back to rainwater.

The only problem with using a float switch is that it does not allow you to have precise control over the switching points (the point where you switch to or stop your back-up water supply). By using a digital rainwater system controller you are given precise control over when you use each source of water. The device uses a transducer that sits near the bottom of the tank and constantly provides a water level reading. Using the device you can precisely program each switching point that you want to have for your system. Additionally, it allows you to monitor the water level in your tank and provides a simple indication of which water source your system is currently using. This device is the best way to keep a watchful eye on how your system is running.