Green Stormwater Infrastructure - Stormwater Harvesting and Reuse: Rain Barrels, UF/IFAS Extension Alachua County

[00:06] Mark Clark: Hi, I'm Mark Clark.

Eban Bean: And I'm Eban Bean.

[00:07] Eban Bean: And we're here today to talk about rainwater harvesting. Think about it, when about a quarter inch of rainfall falls on your rooftop, if it's a thousand square feet, that'll generate about 150 gallons of water that usually would go, either run off into your lawn or maybe it runs off into your driveway and into the stormwater management system.

[00:28] Eban Bean: That water is, then, you know, lost. We can kind of let it flow in those directions or we can look at options for being able to capture that and use it, maybe instead of drinking water, as a means for conservation and runoff reduction.

[00:42] Eban Bean: Today we have with us Denise DeDusk from the Alachua County Extension Office.

[00:46] Mark Clark: Can you tell us a little bit about what the components are of a rain barrel, and just a little bit about the process on how to construct one?

[00:53] Denise DeBusk: Sure. It's a food grade container. Main components for the rain barrel is the spigot, the top, and the overflow here. And there can be several different types of overflow. So first, with the spigot, you of course want to be able to get some water, and that brings you to the point of, it needs to be high enough in order for the water to be able to flow very easily. You want to have it propped up on bricks, or I've even seen things made out of wood, but it has to be really sturdy because this is going to be very, very heavy. So, you can just put it under here and turn it on and off you go.

[01:29] Denise DeBusk: For the overflow, there's two different types of overflows, or actually you can have several different sizes, but the barrels we have here are two different types. Here's a small one, and you can see, you can actually put a hose on there to run it out to something. And we have our larger one over here. And this one has a drain pipe connected to it. So, this is a much larger one, and actually has some cool components that come out. This is kind of a homemade version, but it has this large drain pipe that can go out to the plants.

[02:04] And the last component is the top. So there needs to be some kind of hole on the top so the water can come in. And it's important to have a screen on there to reduce mosquitoes in there, because mosquitoes will go right into that water. And this will also collect some debris that will need to be cleaned off.

[02:24] Mark Clark: So, you put these rain barrels right underneath your downspout, so the water is directed into the top. And you can only capture as much as one volume, but if you have multiple barrels you can catch more volume, but the overflow is important, just in case your storm event is bigger than the volume, you can essentially still let that water run by. And you mentioned about maintenance, because that's probably a big factor. And so, collecting the debris off the top is one component, but is there any other maintenance requirements for these barrels?

[02:52] Denise DeBusk: Yes, there is another maintenance component. You actually can take off the top of the barrel.

[02:60] Eban Bean: There you go.

[03:00] Denise DeBusk: Okay, and you have your screen, you take your screen off, and at the bottom of the barrel there's often sludge that gets in the bottom of the barrel.

[03:10] Mark Clark: So, the fines that get through the screen can still collect in the bottom.

[03:13] Denise DeBusk: Right, and algae still gets in there, especially if you're in a sunny spot, the algae with the sun coming down, it can be produced in the water. There's all kinds of minerals in this water, but that is really good for your plants, but I don't recommend for your edibles, or washing your dog, or drinking out of it, because it can get pretty nasty after it sits for quite a while.

[03:35] Denise DeBusk: So, rinsing this out every so often, even scrubbing a little bit will help keep it nice and clean.

[03:40] Mark Clark: But you mentioned using the water, that's really important, because if you have a full barrel, you don't use the water and it rains again, you don't store anything, it just flushes out, so kind of finding a way to constantly be using that. And it sounds like the main benefit is for landscaping use and what not, not so much gardening but around your house.

[03:59] Denise DeBusk: Right, yeah, so it's good to have your higher maintenance, higher water required plants such as azaleas, which are very popular around here, to be closer to your house where it's close to a rain barrel, because during these really dry times, if they don't get enough water, they'll start to die off. So, if you're going to have anything that needs a little bit more water than others, it would be good to plant it close to these rain barrels.

[04:22] Mark Clark: Well, thank you very much, Denise. This is a great guide to essentially rain barrels and how we can capture water and reuse it wisely in the landscape.