



**Citizen Advisory Committee
To the Spokane Urban Forestry Tree Committee
WebEx virtual meeting
Call in: 408-418-9388
Access code: 2498 544 8794
November 2021 meeting: Nov. 2, 2021, at 3:00 PM**

Notice is hereby given that, pursuant to Gov. Inslee's Proclamation 20-28, dated March 24, 2020, all public meetings subject to the Open Public Meetings Act, Chapter 42.30 RCW, are to be held remotely and that the in-person attendance requirement in RCW 42.30.030 has been suspended until the termination of the COVID-19 State of Emergency.

The meeting of the City of Spokane Park Board Citizen Advisory Committee will be held virtually via WebEx teleconferencing at 3 p.m. Tuesday, Nov. 2, 2021. The public will be able to listen to the meeting by calling 408-418-9388 and entering the access code 2498 544 8794 when prompted.

Written public comment may be submitted via email or mail. Comments must be received no later than 11 a.m. Nov. 2 by email to: spokaneparks@spokanecity.org or mail to: Park Board Citizen Advisory Committee, 5th floor City Hall, 808 West Spokane Falls Blvd., Spokane, Washington 99201. Submitted public comments will be presented to meeting attendees prior to the meeting.

MEETING AGENDA

CALL TO ORDER

ROLL CALL

APPROVAL OF LAST MEETING MINUTES

CEREMONIES, APPOINTMENTS, ANNOUNCEMENTS

- Discussion re: Chairperson Role

PUBLIC COMMENT

COMMITTEE AND REPORTS

- Community Assembly
- Staff Report

OLD BUSINESS

- Heritage Tree Nomination - 1118 W Cleveland (info only)
- [Watering trees educational messaging](#)

NEW BUSINESS

ADJOURNMENT

Agenda Subject to Change

AMERICANS WITH DISABILITIES ACT (ADA) INFORMATION: The City of Spokane is committed to providing equal access to its facilities, programs and services for persons with disabilities. Individuals requesting reasonable accommodations or further information may call, write, or email Human Resources at (509) 625-6363; 808 W. Spokane Falls Blvd., Spokane, WA 99201; or erahrclerks@spokanecity.org. Persons who are deaf or hard of hearing may contact Human Resources through the Washington Relay Service at 7-1-1. Please contact us forty-eight (48) hours before the meeting date.

VIDEO SCRIPT: DRAFT 1

Determining Soil Moisture

Is my soil too dry?

Plants take in water passively meaning they can not go grab it and place it in cells and vascular tissue to be transported elsewhere in the plant. Water moves into and through plants due to the chemical structure and nature of water molecules, partly due to positive and negative charges on the molecules.

[Optional: Movement of water through the plant is via osmosis, adhesion and cohesion. Adhesion is the water molecules staying attached to each other through positive and negative charges and the attraction of positive to negative. Cohesion is the sticking of water molecules to other things. As water is moved into cells, more is needed and the chemical properties of water cause it to move up in the plant. As water is lost through transpiration (breathing) it causes more to move up in the vascular tissue of the plant. You can see this a little bit in a straw. The water will be ever so slightly higher on the sides of the straw than in the glass. The water level will be higher if the straw is very thin.]

When soil moisture is low, then the water available to plants is less and it is harder and harder for the plant to get. Moisture may still be present in the soil but it becomes unavailable to the plant because the chemical bond that the water has with the soil particles is stronger than the physical properties in the plant and the plant cannot passively pull it into the cells of its' roots.

Let's look at how we determine soil moisture.

- **First:**
 - Vegetation on the soil
 - Is it green or brown?
 - If green – maybe some available water -further investigation needed
 - If brown – little or no available soil moisture likely
 - Bare Ground – soil particles (clay, loam or sand) will influence the color of the soil. Some particles are lighter in color as clay often is. Organic matter can make the soil darker in color as will other minerals.
 - Color:
 - Light or pale
 - Consider soil type
 - Clay soil is often light in color.
 - Medium or brown

- This is often a combination of soil particle sizes and organic matter. What it feels like and how it holds moisture will vary.
- Dark
 - Consider soil type – Organic matter is often dark color
 - OM will often hold more moisture and release it slowly to plants.
- **Second**
 - Touch Test- what does the soil feel like?
 - Grab a handful of soil
 - Feel – rub some between your fingers and hold a palm-full in your hand. You are checking the soil particles and the moisture content.
 - **Soil is light and dry** – does it crumble, sift out of your hand
 - This is very dry
 - **Soil is a hard clump**
 - Squeeze it. Does it crumble apart sift out of your hand or does it squish about and change shape but stay together?
 - **Falls apart** and does not leave palm damp. – Soil moisture low.
 - Soil reshapes, not dusty, is crumbly, does not leave palm damp.
 - Some soil moisture is present –. Think about the particles clay, sand and loam and the presence of organic matter. Moisture is better and may be adequate for some plants but may still not have enough available soil moisture for all plants.
 - **Compact moldable ball** with good adherence of particles (they don't crumble all over the place).
 - Good moisture is present and the soil has a good particle structure. This should have water available to plants. If there is a high clay content, it may make it more difficult for plants to get the water.
 - **Crumbly and moist-particles stick to hand.**
 - Soil has some good structure and organic matter. Moisture is present, adequate for most plants but not all.
 - **Puddling, sticky to muddy consistency**

- This soil is too wet and/or poorly drained. Changes need to be made to watering, timing, or drainage of area.
 - **Rocks, cobble and sand** – These affect how quickly water drains from the soil.
- Third
 - Dig a small hole in the ground. What are you seeing?
 - Color, rockiness, organic matter -sticks, leaves other decaying plant matter.
 - Where does the color change? This gives some indication of the depth of dryness of the soil and if there is moisture in the zone where roots are.
 - Needed depth of water will depend on whether you are watering grass – 1-2”; shrubs 2-12”; trees areas beyond their canopy and a depth of at least 3 feet but not much more than 4ft.
 - Feel of soil
 - Consider soil type
 - Water content
 - Dusty and dry- too dry
 - Not dusty but not sticking to fingers – still too dry
 - Sticks lightly to fingers- good water content
 - Makes hands muddy – too much water, poor drainage, or high clay content
 - Standing water
 - There is something going wrong here.
 - Broken sprinkler system
 - Some type of flooding from septic or sewer system
 - Poor drainage from roof gutters
 - Overwatering of area.
 - Thoughts
 - Sprinkler systems
 - Water needs change throughout the year
 - size
 - production of plants
 - type of plant
 - heat
 - rain
 - Adjustments are needed
 - Example – reduce watering in August to stress tomatoes a little and encourage ripening of set fruit
 - Change again in two weeks by reducing water or cutting roots. This encourages ripening of set fruit.
 - Grass
 - Spring and fall -.5 to .75 inches per week

- Summer watering - 1" of water per week
 - Excess heat 2" per week
 - Don't keep doing that when it cools or we start getting rain.
Wasteful and costly.
- Trees – deep watering
 - Depends on how your soil drains
 - Hole you dug – fill with water and see if it spreads out or goes straight down.
 - How long does it take to drain?
 - Leave hose running at a rate that does not create puddling.
 - In loamy soil, water penetrates about 6 inches per hour so we are looking at needing 3-4 hours for loam soil, more in clay soil and less in sandy soils.
 - Hose is set at the drip line of the tree and should be done monthly and in several different location around the tree.