



**City of Spokane  
Citizen Advisory Committee to the  
Urban Forestry Tree Committee**

3 p.m. Tuesday, Nov. 2, 2021  
WebEx Virtual Meeting  
Katie Kosanke - Urban Forester

**Committee Members:**

- X Matt Ugaleda – Chair
- X Tim Kohlhauff (Left: 3:26 p.m.)
- X Beth LaBar
- X Guy Gifford
- X Toni Sharkey
- X Kris Neely
- X Catherine Olsen
- Cindy Deffe (Absent/excused)
- Joe Zubaly (Absent/excused)
- Caleb McIlraith (Absent)

**Parks Staff:**

Katie Kosanke  
Pamela Clarke  
Karin Cook

**Guest:**

Chelsea Updegrove

## **MINUTES**

The meeting was called to order at 3:08 p.m. by chairperson Matt Ugaleda.

**Consent Agenda:**

Guy moved to approve the October meeting minutes and Catherine Olsen Seconded the motion. Motion passed unanimously.  
Approval of the July meeting minutes will be placed on the next committee agenda.

**Discussion Items:**

1. Ceremonies, Appointments, Announcements

- Chairperson's Role – Matt Ugaleda announced he is resigning as chairperson of the Urban Forestry Citizen Advisory Committee. He said he has transitioned to a new position at Avista and will not have as much time to commit to the committee and therefore will not be able to continue to serve as chairperson. Matt said he has enjoyed his time as chair, would like to still be the utility representative on the committee and will continue to be involved as time permits. He encouraged others on the committee to talk to Katie if they are interested in becoming chairperson.

Katie said she will send a follow up email to the committee members regarding the position. Anyone interested may submit their name for consideration. Once all the names of interested people are submitted the committee will vote to elect the next chair.

- Catherine Olsen said she noticed in the Mayor's budget there is a position in fire being requested for a WUI (Wildland Urban Interface) planner. She said that would be great if that position got funded, that the city could really use that focus, and it is important for community and protecting urban forests. Matt said he would be interested in coordinating with that position if it is created. Katie said Parks and Urban Forestry are also excited to see that position proposed as they have a lot of fuel reduction projects lined up. She said fire also has a lot of different resources for grants and other opportunities which can assist in funding those projects. Having a specific person concentrated on those important fuel reduction efforts in addition to fire prevention, community awareness, and fire wise accreditation for communities would be helpful and is definitely a need with the landscape character and wildland interface in Spokane.

*Tim Kohlhauff left at 3:26 p.m.*

### **Public Comments:**

There was one comment regarding the Heritage Tree Nomination for a maple tree at 1118 W Cleveland. The person sent an email commenting they didn't believe the committee should accept the tree nomination due to the fact the application is incomplete. Katie let the person know that we are contacting the property owner to get more information; she also reiterated this is an informal educational voluntary program and staff is happy to see nominations come in and people valuing and treasuring their trees.

### **Standing Report Items:**

#### 1. Community Assembly

No Report.

#### 2. Staff Report

Katie Kosanke reported the Urban Forestry crew is wrapping up fall projects and will be transitioning to Fall/Winter work.

Among the completed fall projects is the planting of the first round of replacement trees for restoration after the Jan.13 storm. In partnership with the Lands Council, replacement trees were planted at Comstock and Audubon park. About 65 trees in total were planted with help from Lands Council volunteers and team leads, and the Spokane Central Lions Club. Kirsten Angell from the Down River/Audubon Neighborhood Council was instrumental in coordinating the Audubon park event including planning, coordination, and communication. A few educational booths were hosted by the Master Gardeners and neighborhood C.O.P.S., Bartlett Tree Service provided free tree seedlings and Art Salvage hosted a free art project at the parks.

SpoCanopy street tree fall plantings were just completed. The Lands Council and Master Gardeners coordinated the volunteers who planted over 48 trees in just three days. An additional 53 trees were planted by a tree service contractor, primarily in northeast Spokane this week to wrap up the project. More crew leaders are needed to help with overseeing volunteer plantings to ensure proper planting. Crew leaders oversee volunteer plantings, usually just 2-4 trees, and are available to answer questions and make sure trees are being planted at proper depths.

Five replacement trees will be planted at Fairview Park, located on the northeast side of town. A couple donation trees will be planted this fall, one at Cannon Hill and one at Corbin Park. Crews planted 1,000 ponderosa pine seedlings in the burn area at Camp Sekani. The Evergreen East Mountain Bike Club organized that event, and Guy Gifford helped with technical assistance and also trained the volunteers. This volunteer organization did an amazing job with this project and we are grateful for all their hard work.

The Ronald McDonald House removal and replacement project is wrapping up. This project removed five declining trees under the powerlines which had been reduced for some years and were uneven and would eventually decline. The replacement trees will be the appropriate size of trees for under the overhead powerlines, while still providing many environmental benefits.

Fall/Winter projects include removing eight trees that died at Comstock Park due to beetles. A few of the trees may also have been impacted by drought conditions, as well. The irrigation in the southeast corner of the park wasn't working for an extended period, due to impacts from the January storm and judicious hand watering had to be done for a full day once a week. A large planting project will be planned for next year to replace trees in the southeast section of Comstock Park.

A row of smaller Austrian pines at AM Cannon Park will be removed and replaced due to beetle damage. A planting plan is being worked on and Katie is hoping to be able to get some replacement trees planted this fall if the weather holds. The neighbors have been very patient with this project and staff wants to get the removals wrapped up and the new trees started.

On the east side of Underhill Park, there are about 30 dead standing small diameter pine trees due to a beetle issue. Katie said they are working on verifying whose property the trees are on before moving forward with work, since they appear to be on the edge of the property. She indicated there is also some upcoming development proposed on private property to the east of the park. Toni Sharkey advised there is a petition to save the green space at Underhill Park near this area. Katie said communication will be key when doing any tree work at the park due to the nearby projects. She reiterated the work is only for forest health, removing the beetle killed trees and is not associated with the nearby proposed development.

A lot of miscellaneous pruning will be done throughout the winter months, including both structural and clearance pruning in selected park locations with the highest need.

Winter work in Riverfront Park includes taking care of four dead trees in the park, miscellaneous pruning, and work on a line of cottonwood trees near the forestry shelter. Beavers have caused considerable damage, and the trees are at risk of failing and possibly impacting the stability of the embankment. Katie said they are working with Avista to see if they can assist with that work due to the difficult placement and Avista's likely desire to prevent the trees from failing into the river and impacting the dam. Development Services will be consulted for shoreline permitting and any other mitigation that needs done to replace the trees after they are removed.

Arborist Lars Erpenbach has obtained his Tree Risk Assessor Qualifications through the International Society of Arboriculture. This is a great certification to have to be able to further determine levels of tree risk and mitigation methods to reduce risk without removal in many cases.

Katie will be presenting on Urban Forestry Resiliency at the upcoming Farm and Food Expo hosted by the Spokane County Conservation District and a virtual session for the Friends of Manito in November. She is also working on Spokane's annual application for accreditation for the City USA designation through The Arbor Day Foundation. This includes detailed reporting and minimum standards being met to receive accreditation.

The Pacific Education Institute will be continuing their grant project with DNR's Community Forestry Program. This great program takes Urban Forestry information and provides extended learning opportunities to teachers. Teachers get ideas on inserting tree-related curriculum into their classrooms and provides fun projects for students with a tree and environmental focus. Students will also incorporate a street tree planting project in the neighborhoods surrounding their school to increase canopy cover. The students will determine a good location for street trees and coordinate outreach, then will help in planting the trees together. They also expressed interest in hosting a free tree seedling drive thru giveaway event, as they did in spring 2021.

More replacement trees will be planted in the spring throughout the park system and to replace a number of trees to offset losses due to storm damage.

Katie said they are working with Engineering and Streets on updates for a standards manual conflict to assist in preventing and resolving tree and sign visibility conflicts. They are trying to address issues during the plan review stage, before signs or trees are installed. They are also working with Utilities and Streets on different ways to solve drainage issues due to trees being planted in limited planting strips, which in limited cases on flat streets is causing water to pool up. They are looking at how to solve these drainage issues without having to remove the trees. Staff will be reaching out to other cities for advice on how they may deal with these same issues in their communities.

Staff will be working on an educational brochure with Frequently Asked Questions to help tree services and abutting property owners understand ordinances and policies regarding street trees. This will reduce confusion as abutting property owners rely on tree services in many cases to give them accurate information which at times in the past has been miscommunicated or inaccurate.

Katie is planning a yearly summer route to inspect all traffic safety signage around school zones to make sure all tree branches and foliage are pruned to clearance and visibility standards prior to school starting. They are also looking at additional clearance pruning opportunities around town to prevent damage to trees and to street maintenance and refuse equipment too.

Katie is working on updates to the Urban Forestry webpage and invited input on items of improvement. Many of the resource links need to be corrected. She is also working with the Spokane Downtown Partnership on a possible education program for tree-monitoring and care program to catch issues downtown before trees decline. Removals in the downtown setting are incredibly challenging to do and this is a cost the abutting property owners are responsible for.

### **Old Business:**

- Heritage Tree nomination – 1118 W Cleveland, maple tree

Guy Gifford said they did go out and look at the tree and will report at the next meeting. The committee is checking with the property owners to see if they want to submit any additional information, and Tim Kohlhauff will reach out to them.

- Other educational programs/program ideas:

[Watering trees messaging](#) – Katie asked the committee members to review and provide feedback on the watering trees messaging and provide input on possibly putting together an educational video. She said she is also considering a short, catchy watering slogan that could be put on gator watering bags and other items to raise awareness of this issue to prevent tree decline and mortality. She asked that any ideas for a slogan be submitted to her for consideration and a sub-committee is recommended to assist with this programming.

Toni mention in a previous meeting that trees along the north and south sides of I-90 appeared to be water stressed over the summer. Katie advised she has sent an email to the Washington State Department of Transportation asking what their plan is for the trees along the north and south sides of I-90 and if they plan to retain the trees. Watering is going to be essential in keeping the trees alive. She will report to the committee and offer technical assistance to the State to assist in maintaining and improving canopy cover in this area where trees can provide maximum benefits for stormwater mitigation and pollution reduction in this heavily traveled corridor.

**New Business:**

None.

**Adjournment:** Meeting adjourned at 4 p.m.

The next regularly scheduled meeting is 3 p.m. Nov. 30, 2021, via WebEx meeting.

## 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.