

1. Call to Order/Roll Call and Announcements

The meeting was called to order at 3:04 p.m. There were 9 members present at roll call.

Chair Torres announced that the draft Climate Action Plan urban heat island, tree, and shade recommendations made at last month meeting have been sent to EQSC and city staff for consideration during the public comment period. Chair Torres thanks subcommittee members for their hard work.

2. Review and approval of July 7, 2021 Minutes

Subcommittee member Esposito noted that she was unable to review the meeting minutes due to technical difficulties and would abstain from voting.

ACTION:

Subcommittee member Chandler made a motion to approve the July 7, 2021 minutes. Subcommittee member Myers seconded the motion. The motion carried 8:0.

3. Public Comments

There were two public comment speakers.

Scott Mills and Leah Bosworth informed the subcommittee about their woodworking company where they rescue fallen trees and turn them into lumber. They asked the subcommittee members to consider discussing end of life plans for the new tree planting plans in the city where the tree is used for lumber instead of chipped and disposed. They would like to see future plans for the full life cycle of trees, so the wood is harvested and used for new purposes. They are open to future conversations in the future and wanted to start with this initial comment as an introduction.

4. Phoenix Art and Culture Upcoming Projects Presentation

The Office of Arts and Culture Public Art Project Manager Barry Sparkman presented the upcoming projects the office is working on including a "Let's Talk Heat" booklet and sunBLOCK projects. The sunBLOCK projects include grants and hiring artists to design umbrellas and bus shelter shade screens. The "Let's Talk Heat" booklet will be available soon and includes background on urban heat in Phoenix, heat safety information, tree and shade plans in the city, and resources for additional information.

Chair Torres asked if the umbrella will be provided to residents and community organizations free or charge or will be used for fundraising and asked if the artists for the bus shade shelters will come from communities of color and from diverse backgrounds. Sparkman confirmed the umbrella will be free and will also be used as a community outreach tool to communicate with organizations and residents about other available resources from the city. He stated that the call for artists follows the procurement rules set by the city which requires a blind jury and selection panels will not be able to see names, website, or photos of the artists. The selection is made by reviewing the art portfolio and artists statement submitted in the application which contain no personal identifying information.

Subcommittee member Esposito asked if all of the artists in both projects are local artists. Sparkman stated all of the artists in the umbrella contest are from Arizona, with one from

Tucson. However, the call for artists on the bus shelter project is open to international submissions. There are requirements for community engagement which would be difficult to accomplish if they were not local.

Subcommittee member Myers asked how the heat booklet would be distributed and which organizations would be targeted. Sparkman is open to partnerships and workshops with organizations to distribute the umbrellas and booklets. There is a growing list of heat-focused organizations to share it with, but no formal connections just yet. There is budget for advertising and billboards, so they are open to ideas on how to share. Subcommittee member Esposito suggested a connection with schools on sharing the projects.

5. Cool Roofs Discussion and Policy Recommendations

Chair Torres asked subcommittee members to engage in discussion and come up with policy recommendations for cool roofs similar to previous recommendation document. Subcommittee member Hondula asked city staff to summarize the city's cool roof policy as of now. His understanding is that Phoenix encourages voluntary participation with the National Green Building Standards and the Phoenix Green Construction Code. Chief Sustainability Officer Mark Hartman stated that cool roof policy is important and thanks the subcommittee for these conversations. The City of Phoenix adopted the 2018 International Building Code which requires cool roofs for low-slope roofs in commercial buildings. There is increased interest in residential roofs, which is where additional policy may be needed.

Subcommittee member Rodriguez noted that currently requirements for the city planning process require developer to go through additional applications and permits to add cool roofing and other sustainable elements to their design. This needs to be changed so it is easier for people to adopt these kinds of practices.

Chair Torres asked if anyone knew how solar panels and cool roofs interacted together and if it was possible to include both and they benefit each other or if it doesn't make sense to have both on a single rooftop. Subcommittee member Hondula stated that certain sample code requires one or the other and not both.

Chair Torres asked what the adoption rate of cool roofs on city facilities. Subcommittee member Hondula noted that a 2013 study stated that the city had painted 70,000 square feet of its own roofs and expected the number be higher by now. Chief Sustainability Officer Hartman stated that most commercial buildings already have cool roofs as it is in the building code and standards. The opportunity for cool roofs lies in residential buildings. Environmental Quality Specialist Potzler stated that Public Works reported using Energy Star cool roof building standards on city buildings and since 2005 installed 1.8 million square feet of cool roofs. They are also in the process of replacing old cool roofs with newer cool roofs.

Subcommittee Myers asked for a definition of cool roofs. Subcommittee member Hondula stated that EPA defines a cool roof as 65% or better reflectivity. Some definitions differ in evaluation strategies, but all definitions use a reflectivity index.

Subcommittee member Rodriguez asked Chair Torres to include the Planning and Development Department in future conversations as they are an important part of making cool roof requirements mandatory. She also mentioned that she's never heard of a commercial building cool roof requirement and wondered what the code states and how it is being enforced. Chief Sustainability Officer Hartman said that looking into compliance would be a good idea for all environmental standards, including insulation, energy

efficiency. City planners may need to provide a check in the plans review process for these building standards.

Subcommittee member Bettis mentioned that the Urban Heat Economic Assessment will be complete in late September which will include costs and benefits of various heat mitigation solutions. Cool roofs will be included in that analysis. The study will also include the cost of doing nothing to mitigate heat.

In response to a question at a previous subcommittee meeting, subcommittee member Hondula asked Director of the ASU Urban Climate Research Center, David Sailor, about any lifecycle concerns about cool roofs. There were no known concerns as most materials are recycled and a net benefit compared to traditional roofing materials.

Subcommittee member Hondula also offered that utility companies could serve a role in this conversation as cool roofs would help with load management. Chair Torres agreed and mentioned that her energy provider did an evaluation of her home and did not recommend cool roofs as a suggestion. Chief Sustainability Officer Hartman offered that roof replacements aren't usual recommendations as that is a large cost and project to undertake. The most useful way to increase cool roof adoption occurs during normal roof replacement processes.

Chair Torres stated that next steps are informing EQCS of their plan in further exploring cool roofs and asked for volunteers to begin the recommendation memo draft and to report back next meeting. Subcommittee members Hondula, Myers, Berisha, and Rodriguez volunteered.

6. Heat Equity Policy and Methodology Development

Chair Torres stated that EQSC Chair requested UHITS draft recommendation language for equity-based policy for future heat projects the city undertakes. This would include how to prioritize districts and neighborhoods to help guide city discussions. Chair Torres also reminded subcommittee members that the subcommittee will sunset at the end of the year so there are four more meetings remaining. There is a need to determine what remaining tasks they would like to take on in the remaining meetings.

Subcommittee member Esposito suggested separated urban heat and tree and shade into two subcommittees as there is upcoming work in both areas that will require focus. Chair Torres stated that subcommittees are set by EQSC and suggested she advocate for these subcommittees at those meetings. There also may be opportunity to include this in a recommendation document to suggest more detailed follow up on projects via subcommittees.

Subcommittee member Hondula shared some preliminary data using district and village level equity metrics. This included landcover characteristics, surface temperature, and tree and shrub cover. This data could be used to determine districts of need or how to prioritize which districts to provide heat mitigation strategies.

Subcommittee member Bettis asked if there was data about the range of temperatures in each district. This would be helpful to compare what a "hot" parcel or "cool" parcel is in each district.

Subcommittee member Esposito asked if there is an equity committee to include in discussion or add within the recommendations as this subcommittee may not be able to fully address these issues. Chair Torres suggested subcommittee members review the

Climate Action Plan Heat Workshop recording as there was a presentation on historical inequities in Phoenix. Chair Torres also suggested recommending incentives to adopt cooling strategies to help improve equity. There is a need for an overarching equity policy that is built on historical inequities. Subcommittee member Chandler offered inviting Union of Concerned Scientists Juan Declet-Barreto to present at a future meeting as could provide insight on historical equity concerns. Subcommittee member Bettis is working with Juan on the Urban Heat Academy resources that includes a timeline and agrees he is a great person to involved.

7. Review of Future Agenda Items

The next meeting is tentatively scheduled for September 7, 2021 at 3:00 p.m. to align with the EQSC meeting later that week. Future agenda items will include continue discussions on policy recommendations. Subcommittee members should email Chair Torres if they have suggestions for other agenda topics.

10. Adjournment – The meeting was adjourned at 5:04 p.m.

Respectfully Submitted,

Katrina Gerster, Environmental Quality Specialist