



DGC Committee Hearing Meeting Minutes # 2

February 17, 2022

2 p.m. – 5 p.m.

City and County of Denver ([via Zoom](#))

1. Roll Call and Introductions: 18/21 (17/21 as of 3:30pm) Quorum Achieved, 13/21 (not 2/3 of attendees present, quorum is not met) at 5:10pm

Name of Committee Member		In Attendance?
Cheryl Hoffman		
Christy Collins		X
Courtney Anderson		X
Don Larsen		
Eric Browning		X
Daniel Krausz		X
Josh Radoff		X
Paul Hutton		
Adam Meltzer		X
Jason Crowell		X
Chris Gorham		x
Travis Hendrix		X
Tom Hootman		X
Eric Entlich		X, left at 3:30
Jonathan Fertig		X
Jeff Tejral	Non-Voting	
Austin Krcmarik		X
Renee Azerbegi		X
Laura London		MOVED TO IECC COMM
Darcie O’Conner Chinnis		X
Keith Fox		X
Scott Rank		X
Stephen Sanderson	Non-Voting	X
Antonio Navarra		X

2. Discussion and voting on **DGC**
 - a. [#52](#) 501.3.3.5 Rock Mulch Allowances
 - Support (Committee)

- Opposition (Committee)
- Committee Questions/Comments
 - Renee- how common is rock mulch provided, and is dark? Is it common enough to be a policy. Very specific request.
 - Christy – see rock mulch quite a bit. Not sure about color variation.
 - Daniel – clarifying this is reduce rock mulch altogether not to monitor SRI, correct? Yes. Overall reduction in amount, and then require SRI for 20% where it’s allowed.
 - Support with a change of “appropriately” as it is not a defined term.
 - Kristen- we provide diameters and will remove word
 - Austin: why capped at 2”. Seems like rock mulch up to boulders are coming through. Would like to see rocks reduced as anti-homelessness tactic.
 - Is high traffic defined anywhere?
 - Kristen: it’s below.
- Motion: Motion to Modify
 - Daniel: amend to remove appropriately. Shall be limited to instead of ~~permitted. Cannot make up more than~~ to no greater than.

Vote: Motion to modify 16 votes yes, 0 opposed, 0 abstain
- Motion: Motion to Approve as-is, with modifications – Eric B motion to second amendment and approve as modified.
 - **Vote: Motion to Approve with modifications: Passed (16 votes yes, X vote no, X abstained)**
 - Passes with modifications
- Motion: Motion to approve as written on screen:
 - **Vote: Motion to Approve with modifications: Passed (X votes yes, X vote no, X abstained)**
-

b. [#38](#) 501.4 Bird safe glazing

- Support (Committee)

- Travis: NYC has two exceptions, which should be considered for this proposal.
- Christy: Struggling with impact of this proposal for monitoring. Study that was done was difficult to find evidence of bird collisions. Difficult to fine unless early morning/middle of the night

- Opposition (Committee)

- Tom: Hesitant on amendment with monitoring. Largely achieve through design, has value but may not have that much additional value. Adam: Would like to mention it is a reporting mechanism.
- Travis: Monitoring would be challenging on SFR and homeowners. Exclude from residential? Amended to only be for commercial?

- Committee Questions/Comments

- No comments from the general public
- Scott Rank: Question- does this apply to residential buildings. Elective measure.
- Daniel: Bird traps- dangers of a,b,c- enclosed balcony, skyway with covered walk, handrails/guardrails. 501.4.1- within 90'
- Jason: Data or examples for cost differences? Christy: 3.5 years ago on this topic, added frit/pattern, less visible glazing x2 as much per SF. Dot fit not that expensive.
- Travis: Asking for more information. Christy: Denver specific study, limited to downtown. Size of glass is determining factor. Proximity to the take off zone, esp an issue for residential/townhomes. Would frosted glazing meet requirements? Christy/Kyra: Not sure. 25 value, down to 15 in high risk areas.
- Daniel: 501.4.1.3: clarify within 50' in ANY direction
- Scott: ASTM standards number. Add that to track products and results. Kyra: Could be added.
- Jason: High risk, initial construction, or 15 years down the road for

tree? (Christy offered: mature height of the tree)

- Adam: Modeled off of LEED pilot credit. Any performance monitoring component to be added to see if this is working in real life? Kyra: Modeled after NYC's ordinance/code. Bird conservancy has language. Recommended to start with LEED performance requirements- 3 year monitoring plan.
- Daniel: 501.4.1 Exterior wall envelope: limiting glass, 90' above grade vs 45' from grade. Need to mirror 45' from grade+ 45' from elevated landscape amenities deck language from first sentence.
- Josh: other places in green code where these is monitoring involved? Ongoing tracking/ maintenance plan. Later benchmarking. Doesn't want to make it too onerous for tracking. Christy: Wanting to move away from design guide to performance and outcome-based code.
- Tom: Does NY have a performance monitoring component to their code. Kyra: Not that she saw.

- Motion: Motion to Modify (Adam)

- Adding: 501.4.1.5 Performance Monitoring Plan
Develop a three-year post-construction monitoring plan to routinely monitor the effectiveness of the building and site design in preventing bird collisions. Include methods to identify and document locations where repeated bird strikes occur, the number of collisions, the date, the approximate time, and features that may be contributing to collisions. List potential design solutions and provide a process for voluntary corrective action. Report to the City and County of Denver annually on bird collision causes.
- Adam, after discussion, will withdraw motion.

- Motion: Motion to to Approve as-is, with modifications (Daniel), Christy to second.

- 501.4.1: Motion to amend for clarification purposes, up to or within 90', Make second sentence an exception, not exceeding.
- Kyra: friendly modification of adding ASTM standard WK47853

- Kristen: Question about 50' in all directions and mature height of trees. Eric in support.
- Daniel to support clarifications.
- Jonathan: would exclude roof deck with exception- it that the intent?
 - Above 90' there is no bird safe risk?
- Christy: Above 90', inconclusive data on higher heights. Focus on big impact. Kyra confirmed. Bird conservancy most stringent requirements are at or lower than 100'.

Vote: Motion to modify 16 votes yes, 0 opposed, 1 abstain

- Motion: Motion to approve as written on screen with modifications, Eric Browning. Second: Courtney. Modify language to clarify as needed in subcommittee.
 - Vote: Motion to Approve with modifications: Passed (15 votes yes, 1 vote no, 1 abstained)**
 - Subcommittee Members: Daniel Kraus, Antonio Navarra

c. [#43](#) 501.X Declining species support

- Public Support: Christy Briles: Ecosystems sciences, professor at CU Denver.
 - CU Denver, pollinator support. Invasive species are not in this proposal and could disrupt declining species.
- Support (Committee)
 - Travis: Like the pollinator support. Wondering how you get a credit or not. 501.X.3, don't know if it is needed. Consider striking entire section. Want to clean up 501.X.4 to be more universal- large building, would exclude wider adoption.
 - Tom: Flip focus to pollinator support amendment, can't develop within protected area as a sub section.
 - Daniel: aside from 501.X.5, language in this is too flexible to enforce. Lots of loose language, needs some clean up. Really want to see the pollinator separated for wider adoption.
- Opposition (Committee)
- Committee Questions/Comments

- Jonathan: Is there a map as to where this may apply? Does this cover half the city or fringes? Denver Parks and Rec has a map, few corridors throughout the city. Share map with the committee.
- Josh: applicability and how this would work, voluntary measure or is it mandatory? Christy: Choose for typical commercial project, full Denver code may need to meet this if pursuing DGC, as written. If mandatory, would every project need to do a study, yes in all areas. Over time, the areas of species would change so limiting this to the current areas wouldn't make sense. Kyra: Sharing "Resources Supporting Wildlife in the City and County of Denver" map
- Renee: Love the pollinator part, wanting to know of 75% is appropriate- any landscape architect input? DEN guidelines are not pollinator friendly, because of high strikes.
 - Austin: works in Denver Water for small areas. 75% is totally reasonable.
 - Kyra: Some crossover in the landscaping requirements subcommittee from last hearing.
- Travis: Map helps. Thresholds withing 501.X.3, trying to make sure those are reasonable. Fencing off individual trees during construction. Christy: just during construction. Concern about elective vs mandatory, particularly for single family residential.
- Daniel: How does this work as mandatory. Concern for free credit if this doesn't apply to them. Throws the code? Can it be only to pertain to projects where this applies? New construction and additional in a site that is designated by study or third party. Limited to these projects. Christy: Intention, is so they only apply to projects. Daniel wants to make 501.X.5 as separate stand alone credit. Kyra: amenable to that separation. Eric- probably not a separate proposal, but will consider how it is put into DGC.
- Tom: Questions- generally supportive, going in circles on how to implement or prohibiting in these zones. Christy: Developable land, priority for owner in these areas to straddle zones in property. Kyra:

Create VSPZ for outside these non-development zones. Tom:

Referring to same condition, species list... Adam: Avoid it but if you can't avoid it, this is what you can do. Confusing language/ statements.

- Adam: Exchange between Daniel and Christy, sees this as not a free credit. Encourage development but not greenspace development. Should get credit.
- Austin: Circle back to Daniel- pollinator support, hear honeybee proposal would be within pollinator support
- **Motion:** (Adam) Motion to Approve as-is, with modifications, with invasive plant species Add to 501.X.2.1 f: Avoid planting regional invasive plant species. Daniel to second. When found onsite, treat or removing them. Annual, pervasive. **(only 17 voting members, Eric left at 3:30pm)**
 - Austin: Removing or treating. Caveat with mature trees (DOTI)
 - Christy: Need to identify plant selection list. Austin: CU plant list offers this.
 - Travis: Only applicable to VSPZ areas, this should apply to all.
 - Daniel: Add to modification for mature trees per approval of BO. Eric: City Attorneys not a favor of a single approver.
 - Vote: Motion to Approve with modifications: Passed (15 votes yes, 0 vote no, 0 abstained)**
- Motion: (Daniel): Motion to modify, 501.Y.5 as it is own credit. Renee Second.
 - Vote: Motion to Approve with modifications: Passed (15 votes yes, 0 vote no, 0 abstained)**
 - Christy: could expand to include invasive animals.
 - Daniel: Pollinator support only applies to plants.
 - Coordination with WRA: Invasive species covered.
 - Courtney- agree with having it in this proposal.
- Motion: Motion to approve as written on screen (amendment 1 and 2) Eric, Motion, Daniel second.
 - Vote: Motion to Approve with modifications: Passed (14 votes yes, 0 vote no, 0 abstained)**

BREAK- 10 Mins.

- d. [#45](#) 501.X Define allowable pesticides, fertilizers, herbicides, organic choices
- On specific sites, define procedures, support plant selection to avoid chemicals. Listed allowable and prohibited pesticides.
 - Committee Questions/Comments
 - Adam: Parks and Recs don't want to limit one specific pesticide. IF there is a conflict between DGC and Parks and Rec, there is not a direct conflict. But there are ongoing conversations with DPR to get aligned.
 - Motion: Motion to approve as written on screen: Christy, Eric to second
 - **Vote: Motion to Approve with modifications: Passed (14 votes yes, 0 vote no, 0 abstained)**
- e. [#P1](#) 501.3 Restoration and Maintenance of Honeybee Populations (David Mathais)- optional, not mandatory
- Public comment:
 - David: work with companies to build health and wellness programs. And with a collective of beekeepers.
 - Lose about 40-50% of honeybee colonies annually. Want to support developers to gain credit in green code. As a corporation. Not a bee versus bee environment. It's bee versus human. We disrupt habitats with development.
 - Noah Wilson-Rich: PhD in biology with a focus on honeybee immunology. Cofounder and chief scientific officer of Best Bees Company. Want to better understand bee health. Some ecological definitions are murky. While honeybees are not native, they were established about 100 years ago. Do not want honeybee banned, not that this is proposed but was discussed. Want to make sure we work with the facts as we understand them. Have published in National Geographic and Ted Denver about bee habitat.
 - Support (Committee)

- Opposition (Committee)

- Christy Briles: CU Denver. Have hives placed all around Denver. For honeybees and native bees, there is a big decline in urban center. Stated this project w interest in honeybees. Data suggests that honeybees do not have a lot of resources available to them. So amazing to see wind pollen coming in which is not nutritious. Using radar(?) Data. Have native species on endangered list. Bumble bees are declining. Honeybees are considered a domesticated agricultural commodity. Research out compete native bees. 949 or ¼ of native bees in CO. Important to protect them.
- Liz Kuhn: environmental science student. Study honeybees and forage patterns. While they are not necessarily invasive, do support them but studies show that they compete with native bee species and low amounts of pollination plants out there. When looking at this proposal. Lot of studies were outdated. And there is not an upper limit on hives. Only lower limit. There are over 900 native species in CO competing for resources. If only supporting honeybees, then not supporting other species. Important to keep in mind that adding more of 1 species still biologically compete with other species. Suggest to add native species in proposal.
- Hillary Hillam: environmental science student. Honeybees and native study – this proposal bothers me. Data from food and agriculture of UN came out to say worldwide bee populations declined ____ since 1961. Will never go extinct because of veterinary care. Need to be managed more than what is proposed here. Should have a max not a min. how to feed these animals is not addresses at all in this proposal. What do we do when they start to swarm? Needs to be addressed. Disease needs to be managed. Foul brood and mites both need addressed.

- Committee Questions/Comments

- Daniel: heard a lot of concerns over level of detail in proposal. Would general user of this code need to know those details or would the

provider know this?

- David: with our business, we are very knowledgeable.
Would do any supplemental feeding or disease treatment if needed.

□ Austin: how many buildings went through the code the first time around. Even if every new building went through this, how many potential bee hives would there be?

- Christy: 2019 DGC was a 5 pilot program that went to 6 projects. No count to offer.

□ Jonathan: why this proposal requires honeybee maintainers from CO? don't req anywhere else in code. Why would it need sustainability specialist familiar w Green Code?

- David: reference to CO provider is to address the idea that beekeeping is a complex practice differing from region to region. Local keepers will have knowledge of weather patterns, etc. If you are a beekeeper and your bees die in the winter, having an understanding of the complexity of beekeeping plus knowledge of city code is needed. Heard that dev's find this code difficult to understand. Hope this will make an easy and affordable solution.

□ Adam: problem with sustainability expert. Want to see beekeeping expert. On #3, do third party providers typically replace a hive, what is loss? Destroyed, stolen, etc?

- David: more than open to modifying. Leaves a lot to interpretation. As a bus practice in our company we do guarantee hives for anything from being taken, disease, bee bringing pesticide or other poison back into hive. Replace it for any reason.

□ Antonio: how is it going to be suitable to achieve regulations when rules require to allow 2 hives max. Think it should have a max not minimum.

- David: assume that's only for residential not commercial
- Antonio: how will we demonstrate we can enforce regs to citizens.
 - David: we install for a variety of reasons 2 hives. Typically don't install single hives. Like to have at least 2. Our understanding of city reg is that for a commercial enterprise it's okay to have 3.
- Tom: what is the overall purpose? Why aren't there pollinator requirements within the proposal?
 - David: good question. wrote about a year ago. Wanted beehives to be option for Green Code. Maybe would be good to add something like that. Open to adding it.
- Eric B: purpose and supporting information indicates that this could be an alternative to more expensive sustainability improvements and practices?
 - David: heard from developers that having a waterproof membrane and other roof gardens or solar are very costly.
- Eric B: does the business financially benefit if this is passed?
 - David: we are a for profit business so would have a business relationship with hive hosts. Think it is beneficial to all pollinators.
- Support from public:
 - John Rosol: with Dave, Free Range Beehives. Has been a significant amount of research. Shows bees have a beneficial effect on environment. Those that show negative typically cover agricultural plots with thousands of hives.
 - Noah: incentivize pollinator health. Disagree that honeybees will not go extinct. Don't think DGC is best place to detail this. Published with National Geographic and Ted. Would like to hear back from opposers their reasoning.
 - Hillary: Axel Hockinsridge and Isabel Dajotz? Are reporting on this

research. The way the hives are attached to building. If there is any foulbrood then how to move the hives. Needs addressing.

- Christy Briles: Thank you Noah, appreciate input. Have this research for 6 years. Surprised to see this data. Not currently published. But do have Denver urban ecosystem published data that shows a paradigm shift in how we go about keeping bees. We are in semi-arid environment. CO in general. Don't have a lot of resources here.
- David rebuttal: Did not say hives were hard to remove. When installed for customer, make sure they are secure. Not in any way difficult to remove but take precautions to remain safe and healthy.
- Emily O'Neil. Staff scientist at Best Bee Company. Two types of American foulbrood. Only time to burn down equipment is through American. Have instituted practices to inspect hives before installation. Do all we can to support pollinators around hives.
- Mike Rosol: Freer Range beehives. We are dealing with 100 years of published information, well studied topics. Highly inconclusive, hearing opinions from unpublished data. Hard to judge it other than an opinion.

- Opposition:

- Liz: Contention with studies on whether native bees are affected by honeybees. Older articles that there is little affect. Recent scholarly articles show that honeybees have an affect on native. Replacement of green roof, this would not mitigate what a green roof helps (aridness).

- Jason: are we voting on this as a replacement for a green roof? Or just a separate option to pick?

- Christy C: not voting on it as a replacement. Originally proposed as a Green Building Ordinance alternative path. This is not either/or. Proposed for DGC.
- Jonathan: would like to propose taking a vote to see how it advances since we are not experts.

- Daniel: feel uncomfortable with vote without modification. Don't think it would be very difficult to change problematic language.
- Christy: read recent research.
- Travis: happy to hear more information. Initial move is to follow Jonathan but want to hear from others.
- Jonathan: would love to see the proponents and opposers get together to make something they all agree on. Don't feel I'm in a position. Can we table it?
- Daniel: does public get to speak again if we table it? Wasn't my intention to come up as fresh proposal with new comment? Yes, would be heard again.
- Kristen: we have less than 2/3 for quorum. So we can't vote on it.
 - Eric B: if no quorum, then would be tabled. Nothing would be reheard.
 - Kevin: that doesn't give them a chance to get together.
 - Jonathan: could the opposers make amendments?
 - Kevin: no, they could send suggestions to committee members to propose on their behalf.
- Reopen on March 24th.