Governor Newsom’s Executive Order N-29-20 has allowed local legislative bodies to hold public meetings via teleconference and to make public meetings accessible telephonically or otherwise electronically to all members of the public seeking to observe and to address the local legislative body. Also, see the Order by the Monterey County Public Health Officer issued March 17, 2020. The health and well-being of our residents is the top priority for the City of Carmel-by-the-Sea. To that end, this meeting will be held via teleconference and web-streamed on the City’s website ONLY.

To attend via Teleconference; Dial in number 1 617-675-4444 PIN: 521 334 402 8704#. The public can also email comments to amartelet@ci.carmel.ca.us. Comments must be received 2 hours before the meeting in order to be provided to the committee. Comments received after that time and up to the beginning of the meeting will be added to the agenda and made part of the record.

CALL TO ORDER

PUBLIC APPEARANCES

Members of the public are entitled to speak on matters of municipal concern not on the agenda during Public Appearances. Each person’s comments shall be limited to 3 minutes, or as otherwise established by the Committee. Matters not appearing on Committee’s agenda will not receive action at this meeting but may be referred to staff for a future meeting. Persons are not required to give their names, but it is helpful for speakers to state their names so that they may be identified in the minutes of the meeting.

COMMITTEE MEMBER ANNOUNCEMENTS

ORDERS OF BUSINESS

Orders of Business are agenda items that require Committee discussion, debate, direction to staff, and/or action.

1. Receive a Presentation from the Monterey County Office of Emergency Services on the 2021 Update to the Multi-Jurisdictional Hazard Mitigation Plan

2. Receive a Presentation from Greg D’Ambrosio and David Shonman on Carmel’s
Coastal Processes and Lessons Learned from the Damage Caused by Previous Storms along the Carmel Coastline

3. Provide Updates on the Outreach to Community Organizations and Regional Partners Conducted to Date

4. Review, provide comments, and/or approve Hazard and Asset Summary Sheets of Carmel Area Wastewater District, American Institute of Architects, Monterey Fire, and City Forester Presentations

FUTURE AGENDA ITEMS

ADJOURNMENT

This agenda was posted at City Hall, Monte Verde Street between Ocean Avenue and 7th Avenue, outside the Park Branch Library, NE corner of Mission Street and 6th Avenue, the Carmel-by-the-Sea Post Office, 5th Avenue between Dolores Street and San Carlos Street, and the City's webpage http://www.ci.carmel.ca.us in accordance with applicable legal requirements.

SUPPLEMENTAL MATERIAL RECEIVED AFTER THE POSTING OF THE AGENDA
Any supplemental writings or documents distributed to a majority of the Climate Committee regarding any item on this agenda, received after the posting of the agenda will be available at the Public Works Department located on the east side of Junipero Street between Fourth and Fifth Avenues during normal business hours.

SPECIAL NOTICES TO PUBLIC
In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the City Clerk's Office at 831-620-2000 at least 48 hours prior to the meeting to ensure that reasonable arrangements can be made to provide accessibility to the meeting (28CFR 35.102-35.104 ADA Title II).
TO: Climate Committee Members

SUBMITTED BY: Agnes Martelet, Environmental Compliance Manager

SUBJECT: Provide Updates on the Outreach to Community Organizations and Regional Partners Conducted to Date

RECOMMENDATION:

Each Committee member will provide an update on the outreach to community organizations and regional partners they have conducted over the past month, and any notable feedback they have received.

BACKGROUND/SUMMARY:

On February 20, 2020, the Climate Committee started assembling the list of community organizations and regional partners to engage. Included in this process, the Committee assigned outreach leads for each organization.

At the July 16, 2020 Climate Committee meeting, members agreed to start conducting outreach to community organizations and regional partners about the City’s project. The updated outreach list is included in Attachment 1. The updated Climate Committee presentation schedule is included in Attachment 2.

FISCAL IMPACT:

N/A

ATTACHMENTS:

Attachment 1: Community Organizations and Regional Partners
Attachment 2: Updated Climate Committee Presentation Schedule
# Community Organizations and Regional Partners to Engage

## City of Carmel-by-the-Sea Climate Project

**November 2020**

<table>
<thead>
<tr>
<th>ORGANIZATION</th>
<th>Topic (s)</th>
<th>Contact Persons</th>
<th>Committee Lead</th>
<th>Present to</th>
<th>Hear from</th>
<th>Contacted?</th>
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<tr>
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<tr>
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<td>Sewer system</td>
<td>Barbara Buikema, Daryl Lauer</td>
<td>Jeff Baron, Agnes Martelet</td>
<td>X</td>
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<tr>
<td>2 Central Coast Community Energy (was Monterey Bay Community Power)</td>
<td>Energy supply</td>
<td>Dan Bertoldi (<a href="mailto:dbertoldi@mbcommunitypower.org">dbertoldi@mbcommunitypower.org</a>), J.R. Killigrew (<a href="mailto:jkilligrew@mbcommunitypower.org">jkilligrew@mbcommunitypower.org</a>)</td>
<td>Evan Kort, Agnes Martelet</td>
<td>X</td>
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<td>3 Cal Am</td>
<td>Water supply</td>
<td>Michael LePage</td>
<td></td>
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<tr>
<td>4 Monterey Peninsula Water Management District</td>
<td>Water supply</td>
<td>Stephanie Locke</td>
<td>Michael LePage</td>
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<tr>
<td>5 GreenWaste Recovery</td>
<td>Waste management and recycling</td>
<td>Jim Moresco</td>
<td>Carrie Theis, Agnes Martelet</td>
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<td><strong>Professional Organizations</strong></td>
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<td>John Hill</td>
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<td>Jenny McMurdo</td>
<td>Carrie Theis</td>
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<td>Scott Lonergan, LaNette Zimmerman</td>
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**Local Community Groups**

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<tr>
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*Note: The table includes contact information and indicates whether the contact person was present to hear from.
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**City Departments**

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<td>Agnes Martelet</td>
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<td>Fire</td>
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<td>Carmyn Priew, Sichel Young</td>
<td>John Hill</td>
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<td>Forestry Division (PW)</td>
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<td>Sara Davis</td>
<td>Agnes Martelet</td>
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<td>Katie O'Connell</td>
<td>Evan Kort</td>
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**City Commissions**

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<td>Scott Lonergan</td>
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<td>ORGANIZATION</td>
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| 2 Planning Commission                            | Built environment resilience  
Climate action                    |                             | Michael LePage               | X          |           | Y          |
| 3 City Traffic Safety Committee                   | Transportation                                                        | Agnes Martelet              |                             |            |           |            |

**Federal / State / Regional Agencies**

| 1 AMBAG                                           | Climate Action  
Transportation                          | Elisabeth Bertrand           | Agnes Martelet               | X          | X         | Y          |
| 2 USGS                                            | Sea Level Rise                        | Patrick Barnard             | Agnes Martelet               | X          | X         | Y          |
| 3 CalFire                                         | Wildfire risk and resilience  
Urban forest management                    | John Reynolds               | John Hill                    | X          |           | Y          |
| 4 CA Department of Insurance                      | Wildfire risk / home insurability    | Ricardo Laura               | John Hill                    |            |           | Y          |
| 5 Fire Safe Council for Monterey County           | Michael Emmett                        | John Hill                   |                             |            |           | Y          |
| 6 California Coastal Commission                   | Sea Level Rise                        | Jeff Baron / Agnes Martelet  |                             | X          |           |            |
| 7 IRWMP Group                                     | Water supply  
Watershed / storm water projects            |                             | Michael LePage               |            |           |            |
| 8 Monterey County (OES)                           | Resilience planning                  | Kelsey Scanlon              | Agnes Martelet               | X          | Y         |            |
| 9 Monterey County                                 | Sustainability  
Climate Action                          | Ashley Paulsworth           | Agnes Martelet               | X          | Y         |            |
| 10 Monterey Bay National Marine Sanctuary (NOAA)  | Marine Sanctuary impacts  
Carmel Beach                                | Karen Grimmer               | Agnes Martelet               |            |           | Y          |
| 11 Transportation Agency of Monterey County       | Transportation                        | Jeff Baron                  |                             |            |           |            |
| 12 MST                                            | Transportation                        | Jeff Baron                  |                             | X          |           |            |
| 13 US Navy / Coast Guard                           | Coastal impacts                      | Carrie Theis                |                             |            |           |            |

**Educational Groups**

| 1 Carmel High School Environmental Club            | Internships  
Climate Action partnership / Green Schools   | Ellen Gannon                  | LaNette Zimmerman, Scott Lonergan | Y          |           |            |
<p>| 2 Stevenson, York, Santa Catalina                  | Climate Action partnership / Green Schools |                             |                             |            |           | Y          |</p>
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<tr>
<td>NPS</td>
<td>Climate Action partnership / Green Schools Ann E. Rondeau (ret.) (<a href="mailto:pao@nps.edu">pao@nps.edu</a>)</td>
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**Regional Non-Profit Organizations**

1. Monterey Bay Aquarium
   - Marine Sanctuary impacts Climate Action Support
   - Carrie Theis

2. Ecology Action
   - Climate Action Support Kirsten Liske
   - Agnes Martelet

**Other Stakeholders**

1. Pebble Beach Company
   - Bluffs / Seawalls / Beach Regional transportation Emergency response
   - Jeff Baron / Carrie Theis
   - X

2. Principals Involved in 1983 response; authors of the CBTS Shoreline Management Plan
   - Bluffs / Seawalls / Beach
   - Greg D'Ambrosio (past Assistant City Administrator); David Shonman (Coastal Biologist)
   - Evan Kort, Scott Lonergan
   - X
   - Y

3. Cities with similar challenges (e.g. PG, Monterey, Seaside, Pacifica, Del Mar, Malibu, Dana Point, Imperial Beach)
   - Jeff Baron / Carrie Theis

*Grey italics denote presentations that have already occurred*
# Climate Committee
## Presentation Schedule
### 11/19/2020

<table>
<thead>
<tr>
<th>Climate Committee Meeting Date</th>
<th>Presenters</th>
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| 10/15/2020                    | Sara Davis – Forestry Science and Adapting Carmel’s Urban Forest to Climate Change  
**Monterey Fire** – Defensible Space Inspection Program, community resilience to wildfires |
| 11/19/2020                    | **Monterey County Office of Emergency Services** (confirmed) – Multi-jurisdictional Hazard Mitigation Plan  
**Greg D’Ambrosio, David Shonman** – Carmel coastal processes and damage caused by previous storms |
| 12/17/2020                    | **United States Geological Survey** (confirmed) – CosMos Modeling of Sea Level Rise and storm impacts on Carmel coast  
**Carmel Public Works** (confirmed) – Storm Drain Master Plan and readiness of drainage system for climate change |
| 1/21/2021                     | **Monterey Regional Waste Management District** (confirmed)  
PG&E (pending confirmation) – Power grid resilience  
**Monterey Peninsula Water Management District** (confirmed) – Water supply resilience |
| 2/18/2021                     | **Association of Monterey Bay Area Governments** (pending confirmation) – results of 2018 greenhouse gas inventory  
**Central Coast Community Energy** (was Monterey Bay Community Power, pending confirmation) – Central Coast Community Energy’s climate action efforts and new procurement policy, and how that will affect our Climate Action Plan |

Not yet on the schedule
- PG&E
- Landwatch
- California Coastal Commission
- Monterey-Salinas Transit
- Monterey Bay Sanctuary
CITY OF CARMEL-BY-THE-SEA
Climate Committee
Staff Report

November 19, 2020
ORDERS OF BUSINESS

TO: Climate Committee Members

SUBMITTED BY: Agnes Martelet, Environmental Compliance Manager

SUBJECT: Review, provide comments, and/or approve Hazard and Asset Summary Sheets of Carmel Area Wastewater District, American Institute of Architects, Monterey Fire, and City Forester Presentations

RECOMMENDATION:
Review, provide comments, and/or approve the hazard and asset summary sheets prepared by Committee members to summarize presentations received at the September 17, 2020 and October 15, 2020 Climate Committee meetings.

BACKGROUND/SUMMARY:
At the September and October Climate Committee meetings, the Committee heard presentations on several different topics associated with City assets and Climate Change hazards, including:

- A presentation from the Carmel Area Wastewater District on the wastewater treatment facility’s vulnerability to storms and sea level rise.
- A presentation from the American Institute of Architects on designing homes for fire resilience.
- A presentation from the Monterey Fire Department on Community Wildfire Preparedness.
- A presentation from the City Forester on Carmel’s Urban Forest and adapting to Climate Change.

At the October 15, 2020 Climate Committee meeting, Committee members reviewed a template summary sheet for recording information gathered during the presentation. Committee members used this template to create summary sheets for the four presentations. The four summary sheets are included as Attachments 1 through 4.

FISCAL IMPACT:
None.

ATTACHMENTS:
Attachment 1 - Hazard and Asset Summary Sheet for Wastewater Treatment Facility
Attachment 2 - Hazard and Asset Summary Sheet for the AIA’s Designing for Fire Presentation
Attachment 3 - Hazard and Asset Summary Sheet for Community Wildfire Preparedness
Attachment 4 - Hazard and Asset Summary Sheet for the Urban Forest
CITY OF CARMEL-BY-THE-SEA
Hazard and Asset Summary Sheet for Wastewater Treatment Facility
and Associated Underground Infrastructure

September 17, 2020

TO: Climate Committee Members
SUBMITTED BY: Jeff Baron, Councilmember

SUMMARY

Asset: Wastewater treatment facility and associated underground infrastructure (CAWD)
Hazard(s): Sea level rise, Stronger Storms, More variable rainfall
Version: 2

General Comments and Outlook: The Carmel Area Wastewater District treatment facility (and underground infrastructure) will be under increasing environmental pressure as sea level rises and storms (and hence rainfall drainage down the Carmel River watershed) increase in intensity. CAWD's prediction is that the facility will need to be relocated by 2062, which is approximately 40 years in the future. The long term options for the facility seem to be
1. Retreat up the valley
2. Pump to Monterey One Water

Identified Issues:
- Both long term projects are said to be expensive, in the neighborhood of $100,000,000.
- It will take a significant amount of time to make the decision as to which path to take.
- The value (cost) of the current facility (which may have to be abandoned) is approximately $200,000,000
- The lagoon situation will become increasingly precarious as time passes.

Outstanding Issues:
- Do not understand (yet) an overrun scenario if the move is not completed in time. What are the consequences and/or costs if the plant is flooded during an extreme weather event?
- Of lesser visibility but still important are possible mitigation measures required for the CAWD underground and pumping infrastructures, particularly along the coastline.

Possible Committee Comments or Actions for Final Report
- The committee could/should recommend that the Carmel City Council pass a resolution on this topic, ensuring that the city monitors the transition towards a relocated plant, and perhaps has formal, written input into this process. The resolution might:
  o Document the asset and the various hazards
  o Assign staff/council personnel as liaisons to CAWD, with an eye towards resolution of this asset's vulnerability
  o Urge CAWD to take specific actions
REFERENCES

- The CAWD Sea Level Rise Study can be found at https://www.cawd.org/2018-sea-level-rise-study
- The CAWD presentation to the Committee: https://ci.carmel.ca.us/sites/main/files/file-attachments/ccc_presentation_v3.pptx?1600365293
- Recording of the September 17, 2020 Meeting at which CAWD presented: https://drive.google.com/file/d/1PZK0tP8b2jB_XoTtBJLPcXmLVEI9kY1Z/view

HISTORY

- Version 1 presented at Committee meeting on 10/15/2020
- Version 2 presented at Committee meeting on 11/19/2020.
CITY OF CARMEL-BY-THE-SEA
Hazard and Asset Summary Sheet for the A.I.A.’s Designing for Fire Presentation
September 17, 2020

TO: Climate Committee Members
SUBMITTED BY: John Hill, Committee Member

SUMMARY

Asset: Public and Private Property, Public Safety
Hazards: Fire and Wildfire damage due to accumulated dry fuel & increasing wind and weather events.
Version: 1

General Comments and Outlook: The Monterey Bay Chapter of the American Institute of Architect’s Committee on the Environment (COTE) explores the way design responds to climate change as the severity of fires and wildfires in California continues to increase in intensity and occurrence. Fire is an essential component of our ecology, so in order to thrive our ecology must burn. Designers and the jurisdictions that oversee them should consider how fire affects property, and how to incorporate those factors without sacrificing the design, habitat, and the program. An integrated approach to fire resilience in the landscape along with hardening structures against fire are ways to mitigate fire impact on lives and property.

Identified Issues:
- Healthy, biodiverse sites are more fire resistant due to reduced fuel volume, native vegetation, avoiding erosion, and preserving trees, shrubs and watershed to create habitats.
- California had low intensity fires until the logging of old growth forests, grazing, introduction of invasive grasses, indigenous burning replaced by fire suppression, and urban sprawl invading wildlands.
- We now live where California needs to burn, in Wildland Urban Interface (WUI) zones.
- We can control fire resiliency by creating defensible space with Fire Defense Zones around structures, an ignition zone (5 feet), a defense zone (30 feet) and reduced fuel zone (100 feet).
- Fuel is affected by the height and placement of plants & their chemical content. Pine forests and Oak woodlands are resilient but dead material and limbed branches in the understory must be maintained.
- Fire retardant plants, trees, and ground covers can absorb heat and fire without burning, trap embers, reduce wind speed, and slow the travel of a fire.
- 9 out of 10 structures lost are due to low intensity ground fire and embers in the 5-foot zone around them. Combustible materials such as decks, wood chips, and plant material should not be located within 5 feet of, nor attached to the structure.
- Vents and windows are the most vulnerable areas in a house, gaps in vent screening should be no more than 1/8” maximum and plants should not be located near or below windows.

Remaining Issues to be understood:
- Maintenance or abatement status in reducing fuel levels in the City of Carmel by the Sea

Possible actions to be recommended in the committee’s Final Report
- Carmel City Council should consider monitoring the level of fire hazards within the community. Resolutions and/or Ordinances could include:
- Documenting existing hazards.
- City Forester consider fire retardant trees and plants in City controlled areas and for tree replacement requirements for private property.
- Updating City Planning guidelines to reflect or not conflict with WUI building requirements in the Very High Fire Hazard Severity (VHFHS) Zone.

REFERENCES


History

- Version 1 presented at committee meeting on 11/19/2020
CITY OF CARMEL-BY-THE-SEA
Hazard and Asset Summary Sheet for Community Wildfire Preparedness

October 15, 2020

TO: Climate Committee Members
SUBMITTED BY: John Hill, Committee Member

SUMMARY

Asset: Public and Private Property, Public Safety
Hazards: Local Fires and Wildfire damage due to accumulated dry fuel & increasing wind and weather events.
Version: 1

General Comments and Outlook: Community wildfire preparedness is supported by Monterey Fire’s Defensible Space Inspection Program and coordination with surrounding fire prevention organizations to limit fire and wildfire risk through planning, prevention, and mitigation. Monterey Fire and Carmel Public Works have working relationships with the Pebble Beach Services District for fire mitigation in Pescadero Canyon, and partner with the Friends of Mission Trail Nature Preserve for fuel reduction in Mission Trail Nature Preserve. CalFire’s Fire & Resource Assessment Program (FRAP) and Fire Hazard Severity Zone (FHSZ) maps are available online, along with information on forest assessment, fire severity zones, defensible space, and hardening a home or structure against fire. Monterey Fire personnel have inspected and graded all Carmel parcels as pass, pending, or fail. Grading criteria is evolving as knowledge on fire spread is developed. Current criteria is based on dry fuel accumulation, spark arrestors, overhanging tree limbs, etc.

Identified Issues:

- A healthy forest that balances fuel suppression with environmental and ecological needs in our protected landscapes is very important.
- Some northern and eastern areas within City limits are within the Very High Fire Hazard Severity Zone.
- Some areas within the City limits and adjacent communities have accumulated fuel levels as well as overhead infrastructure (i.e. Mission Trail Park) that present fire and wildfire risks.
- The City’s Building Department has adopted the California Building Code requirements in the Very High Fire Hazard Zone but the City’s planning guidelines currently do not address them or may be in conflict with them.

Remaining Issues to be understood:

- Maintenance or abatement status in reducing fuel levels in the City of Carmel by the Sea (and adjacent communities which could threaten Carmel) in a wildfire, i.e. Del Monte forest in Pebble Beach, Monterey Regional Park District property east of Highway 1, etc.
- Extent of existing and problematic overhead Infrastructure in the City.
Possible actions to be recommended in the committee’s Final Report

- Carmel City Council consider updating the Safety Element of the General Plan to address fire hazards when the City updates the Housing Element in 2023, and monitors the level of fire hazards within and surrounding the community. Resolutions and/or Ordinances could include:
  - Documenting the various existing hazards.
  - Assign staff/council personnel as liaisons to Monterey Fire and CalFire (Cypress Fire District).
  - Assist Monterey Fire in its current efforts in inspecting and identifying fire risks.
  - Update City Planning guidelines to reflect or not conflict with current California codes (CBC Chapter 7 & CRC R337) in the Very High Fire Hazard Severity (VHFHS) Zone.

REFERENCES

- Fire and Resource Assessment Program (FRAP) ResilientCA.org
- Monterey Fire Defensible Space Inspection Program mry.maps.arcgis.com, monterey.org/fire
- CalFire Defensible Space/Home Hardening readyforwildfire.org
- CalFire Fire Severity Zone Viewer gis.data.ca.gov
- Wildland Urban Interface (WUI) frap.fire.ca.gov
- Every Building’s Wildfire Risk in Monterey County defensibleapp.com

History

- Version 1 presented at committee meeting on 11/19/2020
TO: Climate Committee Members
SUBMITTED BY: Scott Lonergan, Committee Member

SUMMARY

Asset: Urban Forest
Hazards: Stronger Storms & Wind, More Variable Rainfall, Increased Temperature, Wildfires
Version: 1

General Comments and Outlook:
- Carmel-by-the-Sea’s upper canopy trees impart a distinctive ambiance and identify to the City, and provide several climate adaptation benefits including reducing urban heat island effect, capturing stormwater runoff, improved air quality, and sequestering carbon
- Increased transpiration and water demand, coupled with less consistent water availability as a result of fewer, larger storms, and reduced fog, is increasing tree stress
- Tree species selection and density is a 50 to 100-year decision with implications for 1) tree resilience and ecology, 2) aesthetics, and 3) safety and maintenance cost

Identified Issues:
- Our urban forest lacks age and species diversity and is currently showing signs of stress.

Remaining Issues to be Understood:
- Urban forest consideration as part of Action Plan e.g. carbon capture, walkability and desirability of the environment

Possible actions to be recommended in the committee’s Final Report
- Update the CBTS Forest Management Plan, including a public process to determine tree canopy species and density objectives, and a process for ongoing monitoring and plan review.

REFERENCES
- Canopy.org including the 16-Jul-2020 Resilient Trees for a New Climate webinar, including presentations from Igor Lacan, and Dave Muffly: https://canopy.org/more-trees-please/

History
- Version 1 presented at committee meeting on 11/19/2020
- Sent for comments to Sara Davis (City Forester) on 11/10/2020