



## CITY OF CARMEL-BY-THE-SEA CLIMATE COMMITTEE

Contact: 831.620.2000 [www.ci.carmel.ca.us/carmel](http://www.ci.carmel.ca.us/carmel)

All meetings are held in the City Council Chambers  
East Side of Monte Verde Street  
Between Ocean and 7th Avenues

### REGULAR MEETING Thursday, October 21, 2021

3:30 PM

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 Zoom [https://ci-carmel-ca-us.zoom.us/j/93340805428? Meeting ID 93340805428](https://ci-carmel-ca-us.zoom.us/j/93340805428?MeetingID=93340805428), Passcode 669209; or to attend via telephone dial 1-312-626-6799. The public can also email comments to [amartelet@ci.carmel.ca.us](mailto: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 Chair. Matters not appearing on the agenda will not receive action at this meeting and may be referred to staff. Persons are not required to provide their names, and it is helpful for speakers to state their names so they may be identified in the minutes of the meeting.

#### ANNOUNCEMENTS

#### ORDERS OF BUSINESS

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

1. Review the Revised Draft List of Adaptation Strategies for Carmel
2. Update on Greenhouse Gas Forecasting and Review of First Draft List of

## Greenhouse Gas Reduction Measures

3. Receive a Presentation on the Central Coast Community Action Campaign
4. Provide an Update on Community Outreach

### **FUTURE AGENDA ITEMS AND 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).



# CITY OF CARMEL-BY-THE-SEA

## Climate Committee

### Staff Report

October 21, 2021  
ORDERS OF BUSINESS

**TO:** Climate Committee Members

**SUBMITTED BY:** Agnes Martelet, Environmental Compliance Manager

**SUBJECT:** Review the Revised Draft List of Adaptation Strategies for Carmel

#### RECOMMENDATION:

Review and provide comments on the revised Draft List of Adaptation Strategies for Carmel

#### BACKGROUND/SUMMARY:

Rincon Consultants assembled a Draft List of Adaptation Strategies that was reviewed by the Climate Committee at their September meeting. Committee members and the public provided feedback on the proposed policies and actions, which are listed in Attachment 1.

The Draft List of Adaptation Strategies was revised based on the Committee's feedback, as described in Attachment 1. The revised List of Adaptation Strategies is included in Attachment 2.

#### FISCAL IMPACT:

Costs to implement the adaptation strategies will be determined at a later date.

#### ATTACHMENTS:

Attachment 1: Comments Received and Responses  
Attachment 2: Revised List of Potential Adaptation Strategies

Attachment 1

Climate Committee Comments Received and Responses  
21-Oct-21

Commenter	Comment	Response
Scott Lonergan	Reducing polluted runoff from going into the Bay (even if just in the form of investigation). Might be able to use Rio Park as a settling pond to capture some urban runoff	<b>Added the following action:</b>  <b>Action 3.1.3. Reduce Stormwater Runoff.</b> Reduce stormwater runoff through implementation of a stormwater diversion project to divert all dry weather flows and first flush runoff to the large sanitary sewer that runs along San Antonio Avenue, such that they can be directed to the Wastewater District.
Scott Lonergan	Electrification, how will these be reconciled with CAP, maybe adaptation plan is not the place for these sorts of actions.	<b>The electrification actions will remain in the list of potential adaptation strategies to share with the public, but it is noted that some Climate Committee Members would prefer to move these types of strategies to the Climate Action Plan.</b>
Scott Lonergan	3.2.2. consider including traffic congestion/pedestrian (add here or create new item)	<b>Updated policy below to include investigation of congestion issues in the event of an evacuation. Additional evacuation policies added. More transportation (including active and public transportation) will be included in the Climate Action Plan.</b>  <b>Action 1.1.5. Evacuation Access.</b> Investigate potential congestion issues in the event of an evacuation and develop and maintain a list of residents who may have difficulty evacuating and provide evacuation options for residents with mobility challenges.  <b>Action 1.1.6. Evaluate Evacuation Route Capacity.</b> Evaluate evacuation route capacity, safety, and viability under a range of emergency scenarios and identify and implement mitigating actions.  <b>Action 1.1.7. Evacuation Alternatives.</b> Develop and employ evacuation alternatives and/or alternative emergency access routes in neighborhoods that have single ingress/egress.
Scott Lonergan	2.1.2. including planning AND maintenance	<b>Added "maintenance" to action 2.1.2.</b>  <b>Action 2.1.2. Increase Forest Resilience.</b> Update the Forest Management Plan to: 1. Review and consider modifications to the preferred urbanized tree species that would result in improved resilience in the context of the expected climate of the second half of the century, reduce wildfire hazard, and that takes into account aesthetics and the ecological benefits of natives or near-native (e.g. native species from the Southwestern US or Mexico would likely be preferred to European species). 2. Include planting and maintenance guidelines to improve tree health, particularly in the public right-of-way 3. Incorporate tree species that have greater drought and wildfire resistance 4. In addition to drought-tolerant landscaping, include landscaping guidelines that reduce wildfire hazard on private property. 5. Enhance carbon sequestration potential
Linda Smith + Scott Lonergan	Suggest re-writing Action 2.1.2. Action 2.1.2. Increase Forest Resilience. Update the Forest Management Plan to: 1. Review and consider modifications to the preferred urbanized tree species that would result in improved resilience in the context of the expected climate of the second half of the century, reduce wildfire hazard, and that takes into account aesthetics and the ecological benefits of natives or near-native e.g. native species from the Southwestern US or Mexico would likely be preferred to European species. 2. Include planting and maintenance guidelines to improve tree health particularly in the public right-of-way 3. In addition to drought-tolerant landscaping, include landscaping guidelines that reduce wildfire hazard on private property. 4. Enhance carbon sequestration potential	<b>Action 2.1.2. updated to reflected recommended changes.</b>  <b>Action 2.1.2. Increase Forest Resilience.</b> Update the Forest Management Plan to: 1. Review and consider modifications to the preferred urbanized tree species that would result in improved resilience in the context of the expected climate of the second half of the century, reduce wildfire hazard, and that takes into account aesthetics and the ecological benefits of natives or near-native (e.g. native species from the Southwestern US or Mexico would likely be preferred to European species). 2. Include planting and maintenance guidelines to improve tree health, particularly in the public right-of-way 3. Incorporate tree species that have greater drought and wildfire resistance 4. In addition to drought-tolerant landscaping, include landscaping guidelines that reduce wildfire hazard on private property. 5. Enhance carbon sequestration potential
Salme Moghimi	Wood-burning smoke falls under the umbrella of supporting climate change and should be considered as it contributes to air pollution and GHG emissions	<b>Action 1.3.6., shown below, is maintained in the list of potential adaptation strategies to address the health risk of wood-burning fire places.</b>  <b>Action 1.3.6. Electrify Fireplaces.</b> Explore the feasibility of incentivizing electric fire places and induction ranges for existing and new development. Develop outreach materials explaining the health, environmental, and potential cost benefits of switching to electric fire places and induction ranges.
Jeff Baron	Emission from wood smoke, is an environmental issue, but is not within the scope of the climate change committee. That's more likely to be the Planning commission, for one, and failing that, the city council, though the Forest and Beach commission does manage some (other) aspects of the environment. My fear is that if the climate committee begins to take on items that are outside of our specific purview, it will begin to dilute the strength of the climate change message that we are endeavoring to deliver.	<b>Action 1.3.6., shown below, is maintained in the list of potential adaptation strategies to address the health risk of wood-burning fire places. However, it is noted that Climate Committee members believe this is out of the scope of adaptation.</b>  <b>Action 1.3.6. Electrify Fireplaces.</b> Explore the feasibility of incentivizing electric fire places and induction ranges for existing and new development. Develop outreach materials explaining the health, environmental, and potential cost benefits of switching to electric fire places and induction ranges.

Attachment 1

Commenter	Comment	Response
John Hill	Action 1.1.7. add "neighborhoods within" before "Carmel-by-the-Sea"	<b>Recommended changes made to Action 1.1.7. (now 1.1.10.)</b> <b>Action 1.1.10. Increase Resistance to Wildfire Structural Damage.</b> Evaluate the feasibility of gaining Firewise Community Certification in neighborhoods within Carmel-by-the-Sea.
John Hill	Action 1.3.2. Replacing cooling with "water heating and space heating" and heating with "cooling"	<b>Recommended changes made to Action 1.3.2.</b> <b>Action 1.3.2. Initiate a Heat Pump Retrofit Program.</b> Create a program to aid homeowners in converting to heat pumps, which provide water heating and space heating in addition to cooling and can improve indoor air quality.
John Hill	Action 1.3.4. add "reducing or" before eliminating and words like "incentivize" instead of require. Softer language would be better.	<b>Recommended changes made to Action 1.3.4.</b> <b>Action 1.3.4. Conduct a Feasibility Study for Existing Building Electrification.</b> Perform an electrification feasibility study/existing building analysis in order to understand the potential for, and associated costs of, electrification retrofitting, including heat pumps, on-site energy generation, and battery storage, in the City of Carmel-by-the-Sea and establish a plan for reducing or eliminating natural gas from existing buildings and building resilience to potential electrical grid shutoffs.  <b>Recommended changes made to Action 3.2.5 from "require" to "provide incentives" (this is the only action that included the term "require") (now 3.1.5.)</b> <b>Action 3.1.5. Retrofit Existing Critical Buildings and Related Infrastructure.</b> Provide incentives to ensure that all first responder and municipal facilities are properly retrofitted for existing and future climate change hazards including sea-level rise related flooding and erosion, increased wind/storm events, an increase in high heat days, and/or wildfire depending upon location and risk factors.
John Hill	Action 1.3.6. add "and induction ranges" after electric fire places	<b>Recommended changes made to Action 1.3.6.</b> <b>Action 1.3.6. Electrify Fireplaces.</b> Explore the feasibility of incentivizing electric fire places and induction ranges for existing and new development. Develop outreach materials explaining the health, environmental, and potential cost benefits of switching to electric fire places and induction ranges.
John Hill	Action 2.1.1 add "for downtown and" before in the Mission Trail...	<b>Recommended changes made to Action 2.1.5. - made broader by saying designing projects in the city (rather than just downtown or Mission Trail).</b> <b>Action 2.1.5. Increase Resilience to Stronger Storms.</b> When designing projects in the city, including those recommended in the Mission Trail Stream Stability Study, size improvements to handle larger storms consistent with best available climate change projections.
John Hill	Action 2.1.4. Reword second sentence to: "Coordinate with CAL FIRE, Carmel, and the Monterey Fire Departments to..."	<b>Recommended changes made to Action 2.1.3.</b> <b>Action 2.1.3. Increase Resilience of the Mission Trail Nature Preserve.</b> Update the Mission Trail Nature Preserve Master Plan to consider the potential impacts of climate change and to reduce wildfire risk for neighboring private properties. Coordinate with CAL FIRE and the Monterey Fire Departments to incorporate Best Practices into an annual maintenance plan, including cost estimates for implementation and revenue sources for implementation.
John Hill	Action 3.1.1 (and maybe others) be clearer about whether we are talking about city owned buildings or all buildings (could provide incentives for residential and commercial buildings too.	<b>Action 3.1.1. removed as it was redundant with 1.3.3.</b>
John Hill	3.1.2 and 3.1.4 are redundant - can combine	<b>Policies 3.1.2. and 3.1.4. combined. Now 3.1.1.</b> <b>Action 3.1.1. Underground Utilities in Fire Hazard Zones.</b> Determine the feasibility of undergrounding power lines in the Mission Trail Nature Preserve and designated evacuation routes.
Jeff Baron	Would like to see more details for each action.	<b>More details not added to action list but can be provided for select measures in the report development phase.</b>
Jeff Baron	Concerns with banning gas fire places	<b>Electrification actions are kept in the list of potential adaptation strategies sheet, but it has been noted that some Climate Committee members prefer not to include these types of actions in the adaptation report</b>
Jeff Baron	1.1.3. publicize evacuation routes, not evacuation plans, issues with publicizing plans because it all depends on the type of hazard/event what evacuation will be possible. Only 1 or 2 main way out, big issue here.	<b>Recommended changes made to Action 1.1.3. Policy was split up as shown below.</b> <b>Action 1.1.3. Publicize Local Evacuation Routes.</b> Publicize both City and Monterey County evacuation routes for the community, especially among the most vulnerable, in the event of a wildfire or other disaster. <b>Action 1.1.4. Maintain and Update Evacuation Plan.</b> Maintain and update an Evacuation Plan every 8 years at a minimum to account for all types of emergencies.  <b>Evacuation concern addressed with new policy</b> <b>Action 1.1.5. Evacuation Access.</b> Investigate potential congestion issues in the event of an evacuation and develop and maintain a list of residents who may have difficulty evacuating and provide evacuation options for residents with mobility challenges. <b>Action 1.1.6. Evaluate Evacuation Route Capacity.</b> Evaluate evacuation route capacity, safety, and viability under a range of emergency scenarios and identify and implement mitigating actions. <b>Action 1.1.7. Evacuation Alternatives.</b> Develop and employ evacuation alternatives and/or alternative emergency access routes in neighborhoods that have single ingress/egress.

Attachment 1

Commenter	Comment	Response
Jeff Baron	1.2 - more emphasis. Carmel foundation - serves the elderly	<p><b>Two new actions added to address vulnerable populations.</b></p> <p><b>Action 1.2.4. Social Support Network.</b> Collaborate with the Carmel Foundation and other community-based organizations to develop an inventory of locations with isolated seniors and people with disabilities and develop a plan for a social support network to increase resilience to climate change.</p> <p><b>Action 1.2.5. Back-up Power for Vulnerable Populations.</b> Coordinate with 3CE, PG&amp;E, and emergency management services to establish backup power and emergency grid shutdown protocols that protect the most vulnerable populations.</p>
Jeff Baron	Goal 3 issue with water and sewer system, make sure city takes an active role. The City has one seat on water board and wastewater district elector - use these better. Evaluate Carmel's own drought risk/SLR rather than relying on these larger districts (CAWD etc.) Call out relationships in the plan.	<p><b>New action added related to wastewater treatment.</b></p> <p><b>Action 3.1.9. Wastewater Treatment.</b> Collaborate with the Carmel Area Wastewater District (CAWD) to increase the facility's resilience to sea level rise and stronger storms, and incentivize reduction of water use in the community and transitioning to reclaimed water use for irrigation. Maintain staff/council personnel as liaisons to CAWD.</p>
Jeff Baron	Suggest moving Action 1.1.2, 1.1.5, 1.1.6, 1.1.7 (fire prevention strategies) to Goal 3, since Policy 1.1 says "... following a climate-related disaster"	<p><b>Fire prevention actions are maintained under Goal 1 and Policy 1.1. because these are related to emergency preparedness as well as response following a disaster. See updated Policy 1.1. language below.</b></p> <p><b>Policy 1.1.</b> Provide effective emergency preparedness and response in anticipation of potential climate-related disasters</p>
Jeff Baron	Policy 1.3.4 belongs in the CAP, not this document (concern about access to enough power generation to be part of a micro-grid. More education needed before taking it further – concerns about batteries as well.)	<p><b>The electrification actions will remain in the list of potential adaptation strategies to share with the public, but it is noted that some Climate Committee Members would prefer to move these types of strategies to the Climate Action Plan.</b></p> <p><b>Modified Action 1.3.7. to address resilience concerns regarding power generation.</b></p> <p><b>Action 1.3.7. Identify Funding and Financing.</b> Work with partners like 3CE and PG&amp;E to identify and promote potential resilience opportunities and accessible funding and financing mechanisms to pay for home electrification, weatherization, and battery backups.</p>
Jeff Baron	Policy 1.3.6 also does not belong in this document	<p><b>The electrification actions will remain in the list of potential adaptation strategies to share with the public, but it is noted that some Climate Committee Members would prefer to move these types of strategies to the Climate Action Plan.</b></p>
Jeff Baron	Policy 1.4 - like this but it will be a sell - especially 1.4.1, and 1.4.2., and 1.4.3 (people that work in Carmel don't live in the City – needs more exploration of who is responsible – maybe not the City)	<p><b>Noted, this could be a good policy to focus more discussion around in the plan, and it will be important to identify a lead (likely not the City).</b></p>
Jeff Baron	Action 2.1.1 seems to refer to 2.1.4. Recommend keeping the policy unchanged, have the "overall funding action" first, and then three actions, one corresponding to MTNP, the urban forest, and the North Dunes. Consider adding one for the beach itself	<p><b>Actions were reorganized as recommended. A new action for Carmel Beach was not created, but two actions (previously 3.2.9, and 3.2.11) regarding Carmel Beach were moved to this section.</b></p> <p><b>Action 2.1.6. Beach Sand Monitoring Program.</b> Reinstate beach sand monitoring program described in the Shoreline Management Plan.</p> <p><b>Action 2.1.7. Carmel Cove Sand Supply.</b> Reach out to local researchers (e.g., California State University Monterey Bay) or other sources to conduct Carmel Cove sand supply dynamics analysis.</p>
Jeff Baron	Action 3.1.1. Encourage Energy Generation. Text seems to imply PV and other green systems, but that's biased towards green energy and implies discounting of generators, which probably have an important part in this action.	<p><b>Action 3.1.1. removed as it was redundant with 1.3.3.</b></p>
Jeff Baron	Action 3.1.2 - Updating the GP is not strong enough. "allocating monetary resources" is stronger, and probably belongs in more policies than just this one. Money should be more prominent in the report, I think, as should policies that require more than a simple GP update. In general, actions 3.1.2, 3.1.3, and 3.1.4, should refer to the same "type of thing" (like comment above about Action 2.1.1.) rather than being more	<p><b>Action 3.1.2 updated to include feasibility study, which would include cost. Reference to GP updates removed because it is too specific (and there are many more updates that will be required). In addition, Action 2.1.1. is to increase adaptation funding.</b></p> <p><b>Action 3.1.1. Underground Utilities in Fire Hazard Zones.</b> Determine the feasibility of undergrounding power lines in the Mission Trail Nature Preserve and designated evacuation routes.</p> <p><b>Action 2.1.1. Increase Funding for Climate Adaptation.</b> Earmark Capital Improvement Program (CIP) funding for design, permitting, and implementation of adaptation projects, including stream stability study projects. Include strategies in the 2021 Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) and Integrated Regional Watershed Management Program (IRWMP) for potential regional funding.</p>

Attachment 1

Commenter	Comment	Response
Jeff Baron	Action 3.2.2. and 3.2.1 overlap. Both are good but overlap should be removed and actions more fleshed out.	<b>Actions combined to eliminate overlap and a new action to reduce stormwater runoff was developed.</b>  <b>Action 3.1.2. Increase Green Infrastructure.</b> Modify CIP project design and review approach to consistently evaluate the potential for green infrastructure to be incorporated in CIP projects in the public right-of-way and on public lands. Identify and develop a green infrastructure pilot project that will reduce runoff volume and capture and infiltrate stormwater, based on projected changes in precipitation amounts due to climate change, and incorporates tree and shrub planting to increase carbon sequestration in the city.  <b>Action 3.1.3. Reduce Stormwater Runoff.</b> Reduce stormwater runoff through implementation of a stormwater diversion project to divert all dry weather flows and first flush runoff to the large sanitary sewer that runs along San Antonio Avenue, such that they can be directed to the Wastewater District.
Jeff Baron	Action 3.2.3. and 3.2.4. closely related, might be better to have one action related to the storm drain, with a few sentences underneath it.	<b>Actions combined as recommended.</b>  <b>Action 3.1.4. Storm Drain Repair Funding and Improvements.</b> Earmark Capital Improvement Program (CIP) funding for design, permitting and implementation of storm drain repairs. Include strategies in the 2021 Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) for potential regional funding. Upsize Storm Drain Master Plan (SDMP) improvements, especially when making repairs in the lower reaches of watersheds, to handle larger storms.
Jeff Baron	Action 3.2.9,3.2.10,3.2.11., and 3.2.12, aren't "infrastructure" though 3.2.10 and 3.2.12 might be. Recommend moving these to the natural environment section, with a nod to the revetments etc. in the section of "infrastructure"	<b>Actions previously labeled 3.2.9 and 3.2.11 were moved to the natural environment section, the rest remain in the infrastructure section as they refer to coastal infrastructure.</b>
Jeff Baron	Don't see anything related to CAWD. Nor to regional roads (possible evacuation routes) or to regional electrical infrastructure or to waste management. Should be added.	<b>Actions related to CAWD, evacuation, and electrical infrastructure are included. Waste management actions should be included in the Climate Action Plan.</b>  <b>Action 3.1.9. Wastewater Treatment.</b> Collaborate with the Carmel Area Wastewater District (CAWD) to increase the facility's resilience to sea level rise and stronger storms, and incentivize reduction of water use in the community and transitioning to reclaimed water use for irrigation. Maintain staff/council personnel as liaisons to CAWD. <b>Action 1.1.5. Evacuation Access.</b> Investigate potential congestion issues in the event of an evacuation and develop and maintain a list of residents who may have difficulty evacuating and provide evacuation options for residents with mobility challenges. <b>Action 1.1.6. Evaluate Evacuation Route Capacity.</b> Evaluate evacuation route capacity, safety, and viability under a range of emergency scenarios and identify and implement mitigating actions. <b>Action 1.1.7. Evacuation Alternatives.</b> Develop and employ evacuation alternatives and/or alternative emergency access routes in neighborhoods that have single ingress/egress. <b>Action 3.1.1. Underground Utilities in Fire Hazard Zones.</b> Determine the feasibility of undergrounding power lines in the Mission Trail Nature Preserve and designated evacuation routes.
Jeff Baron	Would prefer if the policies and actions and goals more closely resembled the vulnerability matrix - it would be easier to track from that document to this one.	<b>The spreadsheet addresses all priority assets at risk identified in the vulnerability assessment (as described in the introduction tab of the adaptation strategy spreadsheet). At this stage, the policies, actions, and goals will not be reorganized given budget and timeline constraints, but can be organized differently for the report. To be discussed with the Committee.</b>
LaNette	Big jump – who's doing what?	<b>After the public workshop - a final list of adaptation actions will be developed and timeframe, lead agency/group, and cost will all be determined. The City will not be responsible for doing everything, but rather for coordinating with other agencies/groups.</b>
LaNette	1.4.1 workers – service workers are a huge asset to the City – no discussion currently on the impacts of climate change on them. Chamber of Commerce can be very helpful here.	<b>Chamber of Commerce added as potential lead for actions related to service workers (1.4.1., 1.4.2., 1.4.3.).</b>
LaNette	1.2. more on vulnerable populations	<b>Two new actions added to address vulnerable populations.</b>  <b>Action 1.2.4. Social Support Network.</b> Collaborate with the Carmel Foundation and other community-based organizations to develop an inventory of locations with isolated seniors and people with disabilities and develop a plan for a social support network to increase resilience to climate change.  <b>Action 1.2.5. Back-up Power for Vulnerable Populations.</b> Coordinate with 3CE, PG&E, and emergency management services to establish backup power and emergency grid shutdown protocols that protect the most vulnerable populations.
Carrie	Resilience Hub (Youth Center?) Police Chief could be a good resource, this might be a continuum, rather than a new action.	<b>Added the Youth Center to Action 1.2.1 (Establish a Resilience Hub).</b>

Attachment 1

Commenter	Comment	Response
Carrie	Incentivize rather than mandate	<p><b>Mandate and require have been replaced with incentivize (Action 3.2.6.), and reduce was added to Action 1.3.4.</b></p> <p><b>Action 1.3.4. Conduct a Feasibility Study for Existing Building Electrification.</b> Perform an electrification feasibility study/existing building analysis in order to understand the potential for, and associated costs of, electrification retrofitting, including heat pumps, on-site energy generation, and battery storage, in the City of Carmel-by-the-Sea and establish a plan for reducing or eliminating natural gas from existing buildings and building resilience to potential electrical grid shutoffs.</p> <p><b>Recommended changes made to Action 3.2.6 (now numbered 3.1.5.) from "require" to "provide incentives" (this is the only action that included the term "require")</b></p> <p><b>Action 3.1.5. Retrofit Existing Critical Buildings and Related Infrastructure.</b> Provide incentives to ensure that all first responder and municipal facilities are properly retrofitted for existing and future climate change hazards including sea-level rise related flooding and erosion, increased wind/storm events, an increase in high heat days, and/or wildfire depending upon location and risk factors.</p>



# City of Carmel-by-the-Sea Potential Adaptation Strategies

## **Background**

Carmel-by-the-Sea (City) is currently experiencing, and will continue to experience, climate change impacts, including stronger storms, increased wildfire risk, sea level rise, extended drought conditions, and increased temperature. The City is in the process of developing a Climate Action and Adaptation Plan (CAAP). In September 2019, a Climate Committee was convened to develop and guide the preparation of the CAAP. The City published a Climate Change Vulnerability Assessment in July 2021. The Vulnerability Assessment characterizes climate hazards that will impact the community and City-owned assets, describes the community's major climate vulnerabilities, and identifies work that has already been done by the City to improve resilience.

The purpose of this workbook is to identify potential climate adaptation goals, policies, and actions that the City can take to improve the resilience of its community members, natural environment, infrastructure and built environment. The potential adaptation goals, policies, and actions were developed to address all priority assets at risk in the City's Vulnerability Assessment.

## **Considerations for Selecting Adaptation Goals, Policies, and Actions**

When developing adaptation goals, policies, and actions, it is Rincon Consultants' experience that selecting actions that address the following six principles leads to implementable adaptation policies that increases a community's resilience.

1. Actions that result in **measurable increase in resilience** and reduction in climate change risks.
2. Actions that respond to continual changes in climate, ecology, and economics using **adaptive management** that incorporates regular monitoring.
2. Establish policies, institutional **structures**, and monitoring processes to implement adaptation actions.
3. Identify needed **funding**, establish funding mechanisms, and allocate adequate funding to support adaptation implementation.
4. Ensure meaningful and continuous **engagement** with the most impacted communities.
5. Employ adaptive and flexible governance approaches by utilizing collaborative **partnership** across jurisdictional boundaries and between institutional sectors to accelerate effective problem solving and implementation.
6. Prioritize actions that promote **equity**, foster community resilience, and protect the City's most vulnerable populations. Explicitly prioritize the needs of communities that are disproportionately vulnerable to climate impacts.

## **Definitions**

**Goals:** Broad statements describing community desires. The Carmel-by-the-Sea adaptation goals are modeled after the Adaptation Vision and Principles developed by the California Governor's Office of Planning and Research (OPR) Integrated Climate Adaptation & Resiliency Program (ICARP). Each goal is focused on increasing the resilience of one of the following broad asset categories: community, natural assets, and infrastructure and the built environment.

**Policies:** Specific position statements that support the achievement of goals and serve as guides to City Council, Planning Commission, and city staff, when making decisions.

**Actions:** Specific methods to implement and achieve policies and goals.

Attachment 2

## City of Carmel-by-the-Sea Potential Adaptation Strategies

Goal/Policy/Action	Climate Hazard	Asset	Potential Metric	Timeframe	Potential Lead	Cost	Source
<b>Goal 1. A Healthy, Safe, and Resilient Community</b>							
<b>Policy 1.1.</b> Provide effective emergency preparedness and response in anticipation of potential climate-related disasters <a href="#">Adapted from the Southern California Adaptation Planning Guide, Appendix F - General Plan and Local Coastal Plan Model Policies</a>							
<b>Action 1.1.1. Improve Emergency Preparedness.</b> Incorporate climate change risk and impact considerations into Carmel CERT programming and materials to promote emergency preparedness at a neighborhood block-by-block scale.	All	Residents, Local Businesses, Second Homes	# of block captains formed	TBD	TBD	TBD	<a href="#">Adapted from the Southern California Adaptation Planning Guide, Appendix B Matrix of Adaptation Strategies and Actions</a>
<b>Action 1.1.2. Collaborate with Monterey Fire.</b> Collaborate with Monterey Fire on its inspection and outreach efforts to reduce fire risks. Help distribute information to increase resident awareness and knowledge of how to prepare for emergencies.	Wildfire	Residents, Local Businesses, Second Homes		TBD	TBD	TBD	<a href="#">Carmel-by-the-Sea Vulnerability Assessment (July 2021)</a>
<b>Action 1.1.3. Publicize Local Evacuation Routes.</b> Publicize both City and Monterey County evacuation routes for the community, especially among the most vulnerable, in the event of a wildfire or other disaster.	All	Elderly Population and People with Disabilities, Residents		TBD	TBD	TBD	<a href="#">Carmel-by-the-Sea Vulnerability Assessment (July 2021)</a>
<b>Action 1.1.4. Maintain and Update Evacuation Plan.</b> Maintain and update an Evacuation Plan every 8 years at a minimum to account for all types of emergencies.	All	Disabilities, Residents, Service Industry Workers		TBD	TBD	TBD	Suggested by Climate Committee Members
<b>Action 1.1.5. Evacuation Access.</b> Investigate potential congestion issues in the event of an evacuation and develop and maintain a list of residents who may have difficulty evacuating and provide evacuation options for residents with mobility challenges.	All	Elderly Population and People with Disabilities, Residents		TBD	TBD	TBD	<a href="#">Adapted from Safeguarding California Plan: 2018 Update (page 108)</a>
<b>Action 1.1.6. Evaluate Evacuation Route Capacity.</b> Evaluate evacuation route capacity, safety, and viability under a range of emergency scenarios and identify and implement mitigating actions.	All	Elderly Population and People with Disabilities, Residents, Service Industry Workers		TBD	TBD	TBD	Assembly Bill 747 Requirement
<b>Action 1.1.7. Evacuation Alternatives.</b> Develop and employ evacuation alternatives and/or alternative emergency access routes in neighborhoods that have single ingress/egress.	All	Elderly Population and People with Disabilities, Residents, Service Industry Workers		TBD	TBD	TBD	Senate Bill 99 Requirement
<b>Action 1.1.8. Update City Planning Guidelines in the Fire Hazard Zones.</b> Update the City's municipal code to maintain consistency with current California codes (California Building Code Chapter 7 and California Residential Code R337) in the Very High Fire Hazard Severity Zone (VHFHSZ).	Wildfire	Residents, Local Businesses, Second Homes		TBD	TBD	TBD	<a href="#">Carmel-by-the-Sea Vulnerability Assessment (July 2021)</a>
<b>Action 1.1.9. Development Standards in the Fire Hazard Zones.</b> Evaluate City's development standards for consistency with best practices for reducing wildfire risk for both new and existing development, including but not limited to incorporating defensible space design in landscaping guidelines.	Wildfire	Residents, Local Businesses, Second Homes		TBD	TBD	TBD	<a href="#">Carmel-by-the-Sea Vulnerability Assessment (July 2021)</a>
<b>Action 1.1.10. Increase Resistance to Wildfire Structural Damage.</b> Evaluate the feasibility of gaining Firewise Community Certification in neighborhoods within Carmel-by-the-Sea.	Wildfire	Residents, Second Homes		TBD	TBD	TBD	<a href="#">Carmel-by-the-Sea Vulnerability Assessment (July 2021)</a>
<b>Policy 1.2.</b> Focus adaptation efforts and engagement on the most vulnerable populations. <a href="#">Adapted from the Southern California Adaptation Planning Guide, Appendix F - General Plan and Local Coastal Plan Model Policies</a>							
<b>Action 1.2.1. Establish a Resilience Hub.</b> Ensure that a resilience hub, such as the Youth Center or Public Library, is available during extreme heat events, poor air quality, severe weather events, and other highly hazardous conditions for use by the community. The resilience hub should have essential resources such as health programming and resources, food, refrigeration, charging stations, basic medical supplies, and other emergency supplies. Electrified heating and cooling paired with backup power sources like battery storage provides redundancy and continues services in the event of a power outage.	All	Elderly Population and People with Disabilities, Residents, Service Industry Workers		TBD	TBD	TBD	<a href="#">Adapted from the Southern California Adaptation Planning Guide, Appendix B Matrix of Adaptation Strategies and Actions</a>
<b>Action 1.2.2. Limit the Impacts of Climate Change on the Most Vulnerable Populations.</b> Develop a framework to define equity in Carmel-by-the-Sea and ensure adaptation approaches are equitably developed and implemented.	All	Elderly Population and People with Disabilities, Residents, Service Industry Workers		TBD	TBD	TBD	<a href="#">Inspired by the City of Berkeley Existing Building Electrification Strategy</a>
<b>Action 1.2.3. Educate the Community.</b> Ensure the community knows about the resilience hub and how to access it by sharing updates across city and community channels. Partner with the CERT program and block captains to prioritize disadvantaged/marginalized communities including the elderly and individuals with disabilities.	All	Elderly Population and People with Disabilities, Residents, Service Industry Workers		TBD	TBD	TBD	<a href="#">Adapted from the Southern California Adaptation Planning Guide, Appendix B Matrix of Adaptation Strategies and Actions</a>
<b>Action 1.2.4. Social Support Network.</b> Collaborate with the Carmel Foundation and other community-based organizations to develop an inventory of locations with isolated seniors and people with disabilities and develop a plan for a social support network to increase resilience to climate change.	All	Elderly Population and People with Disabilities		TBD	TBD	TBD	<a href="#">Adapted from the Southern California Adaptation Planning Guide, Appendix B Matrix of Adaptation Strategies and Actions</a>
<b>Action 1.2.5. Back-up Power for Vulnerable Populations.</b> Coordinate with 3CE, PG&E, and emergency management services to establish backup power and emergency grid shutdown protocols that protect the most vulnerable populations.	All	Elderly Population and People with Disabilities		TBD	TBD	TBD	<a href="#">Adapted from the Southern California Adaptation Planning Guide, Appendix B Matrix of Adaptation Strategies and Actions</a>
<b>Policy 1.3.</b> Minimize health impacts of climate change. <a href="#">Adapted from the Southern California Adaptation Planning Guide, Appendix F - General Plan and Local Coastal Plan Model Policies</a>							
<b>Action 1.3.1. Partner with Monterey County Health Department.</b> Coordinate with Monterey County Health Department to develop and enhance disaster and emergency early warning systems to incorporate objective data and information for potential health threats such as heat-illness, and illnesses complicated by low air quality due to climate change hazards.	All	Elderly Population and People with Disabilities, Residents, Local Businesses, Service Industry Workers		TBD	TBD	TBD	<a href="#">Adapted from the Southern California Adaptation Planning Guide, Appendix B Matrix of Adaptation Strategies and Actions</a>
<b>Action 1.3.2. Initiate a Heat Pump Retrofit Program.</b> Create a program to aid homeowners in converting to heat pumps, which provide water heating and space heating in addition to cooling and can improve indoor air quality.	Wildfire, Increased Temperature	Elderly Population and People with Disabilities, Residents, Local Businesses, Service Industry Workers	# of heat pumps installed	TBD	TBD	TBD	<a href="#">Inspired by the City of Berkeley Existing Building Electrification Strategy</a>
<b>Action 1.3.3. Improve Resilience in Critical Facilities.</b> Invest in sustainable backup power sources to provide redundancy and continued services for critical facilities, including City Hall, Carmel Police Department, Carmel Fire Department, the Libraries, and assisted living facilities, in the event of a power outage triggered by a climate event.	All	Elderly Population and People with Disabilities, Residents	# critical facilities with sustainable backup power sources.	TBD	TBD	TBD	<a href="#">Adapted from the Southern California Adaptation Planning Guide, Appendix B Matrix of Adaptation Strategies and Actions</a>
<b>Action 1.3.4. Conduct a Feasibility Study for Existing Building Electrification.</b> Perform an electrification feasibility study/existing building analysis in order to understand the potential for, and associated costs of, electrification retrofitting, including heat pumps, on-site energy generation, and battery storage, in the City of Carmel-by-the-Sea and establish a plan for reducing or eliminating natural gas from existing buildings and building resilience to potential electrical grid shutoffs.	Wildfire, Increased Temp	Elderly Population and People with Disabilities, Residents		TBD	TBD	TBD	<a href="#">Inspired by the City of Berkeley Existing Building Electrification Strategy</a>
<b>Action 1.3.5. Improve Resilience in Housing Stock.</b> Develop a program for identifying funding and incentives to weatherize homes that addresses severe weather protection, energy efficiency, indoor air quality improvements, and other housing improvements.	All	Elderly Population and People with Disabilities, Residents		TBD	TBD	TBD	<a href="#">Adapted from the Southern California Adaptation Planning Guide, Appendix F - General Plan and Local Coastal Plan Model Policies (City of Placentia policy)</a> <a href="#">Passive House Principles</a>

## Attachment 2

<b>Action 1.3.6. Electrify Fireplaces.</b> Explore the feasibility of incentivizing electric fire places and induction ranges for existing and new development. Develop outreach materials explaining the health, environmental, and potential cost benefits of switching to electric fire places and induction ranges.	All		Elderly Population and People with Disabilities, Residents, Second Homes	TBD	TBD	TBD	<a href="#">Inspired by the City of Pacifica All-Electric Reach Code</a>
<b>Action 1.3.7. Identify Funding and Financing.</b> Work with partners like 3CE and PG&E to identify and promote potential resilience opportunities and accessible funding and financing mechanisms to pay for home electrification, weatherization, and battery backups.	All		Elderly Population and People with Disabilities, Residents, Local Businesses	TBD	TBD	TBD	N/A - added to increase feasibility of above actions.
<b>Policy 1.4. Increase Economic Resilience</b>							
<b>Action 1.4.1. Support Displaced Workers.</b> Work in partnership with the Monterey County Workforce Development Board to establish education and training partnerships for workers displaced or negatively impacted by climate change or climate adaptation policies.						TBD - Monterey County Workforce Development Board and/or Chamber of Commerce	
<b>Action 1.4.2. Establish Partnerships to Develop a Resilient Economy.</b> Partner with the County of Monterey Economic Development Department, Carmel Chamber of Commerce, and the Monterey County Workforce Development Board, to develop more integrated strategies for protection of jobs, economic sustenance, and for the protection of vulnerable populations more at-risk of temporary or permanent job dislocation due to climate change.	All		Service Industry Workers, Local Businesses	TBD		TBD	<a href="#">Adapted from the Southern California Adaptation Planning Guide, Appendix F - General Plan and Local Coastal Plan Model Policies</a>
<b>Action 1.4.3. Business Resilience Outreach Program.</b> Collaborate with businesses in the city to better understand shared climate risks and identify opportunities to advance shared climate resilience priorities. Pilot and implement a local business resilience initiative to build small business capacity before a time of crisis by increasing the awareness of, and preparedness for, business continuity risks faced by the city's local businesses, providing a toolkit of intervention to help local businesses manage risks and enhance business resilience, and conducting outreach campaigns to engage leaders from the business, government, and community sectors to enhance preparedness for economic resilience.	All		Service Industry Workers, Local Businesses	TBD		TBD - Chamber of Commerce	<a href="#">Adapted from the Southern California Adaptation Planning Guide, Appendix F - General Plan and Local Coastal Plan Model Policies</a>
	All		Service Industry Workers, Local Businesses	TBD		TBD - Chamber of Commerce and/or Visit Carmel	<a href="#">Adapted from Gateway Cities Climate Adaptation Model General Plan Language (December 2018)</a>
<b>Goal 2. A Natural Environment Resilient to Climate Hazards</b>							
<b>Policy 2.1. Protect and restore climate-vulnerable habitat and ecosystems.</b>							
<b>Action 2.1.1. Increase Funding for Climate Adaptation.</b> Earmark Capital Improvement Program (CIP) funding for design, permitting, and implementation of adaptation projects, including stream stability study projects. Include strategies in the 2021 Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) and Integrated Regional Watershed Management Program (IRWMP) for potential regional funding.	All		Urban Forest, Mission Trail Nature Preserve, North Dunes, Carmel Beach, Water Supply	TBD	TBD	TBD	<a href="#">Carmel-by-the-Sea Vulnerability Assessment (July 2021)</a>
<b>Action 2.1.2. Increase Forest Resilience.</b> Update the Forest Management Plan to: 1. Review and consider modifications to the preferred urbanized tree species that would result in improved resilience in the context of the expected climate of the second half of the century, reduce wildfire hazard, and that takes into account aesthetics and the ecological benefits of natives or near-native (e.g. native species from the Southwestern US or Mexico would likely be preferred to European species). 2. Include planting and maintenance guidelines to improve tree health, particularly in the public right-of-way 3. Incorporate tree species that have greater drought and wildfire resistance 4. In addition to drought-tolerant landscaping, include landscaping guidelines that reduce wildfire hazard on private property. 5. Enhance carbon sequestration potential		Drought, Increased Temp, Wildfire	Urban Forest	TBD	TBD	TBD	<a href="#">Carmel-by-the-Sea Vulnerability Assessment (July 2021)</a>
<b>Action 2.1.3. Increase Resilience of the Mission Trail Nature Preserve.</b> Update the Mission Trail Nature Preserve Master Plan to consider the potential impacts of climate change and to reduce wildfire risk for neighboring private properties. Coordinate with CAL FIRE and the Monterey Fire Departments to incorporate Best Practices into an annual maintenance plan, including cost estimates for implementation and revenue sources for implementation.	All		Mission Trail Nature Preserve	TBD	TBD	TBD	<a href="#">Carmel-by-the-Sea Vulnerability Assessment (July 2021)</a>
<b>Action 2.1.4. Increase Resilience of the North Dunes.</b> Continue maintenance and monitoring at the North Dunes to determine how the changing climate will affect dune habitats. Implement enhancement efforts to improve resilience of the North Dunes.	All		North Dunes	TBD	TBD	TBD	<a href="#">Carmel-by-the-Sea Vulnerability Assessment (July 2021)</a>
<b>Action 2.1.5. Increase Resilience to Stronger Storms.</b> When designing projects in the city, including those recommended in the Mission Trail Stream Stability Study, size improvements to handle larger storms consistent with best available climate change projections.		Stronger Storms	Mission Trail Nature Preserve		# of projects sizing improvements to handle larger storms.	TBD	<a href="#">Carmel-by-the-Sea Vulnerability Assessment (July 2021)</a>
<b>Action 2.1.6. Beach Sand Monitoring Program.</b> Reinstate beach sand monitoring program described in the Shoreline Management Plan.		Sea Level Rise	Carmel Beach	TBD		TBD	<a href="#">Carmel-by-the-Sea Vulnerability Assessment (July 2021)</a>
<b>Action 2.1.7. Carmel Cove Sand Supply.</b> Reach out to local researchers (e.g., California State University Monterey Bay) or other sources to conduct Carmel Cove sand supply dynamics analysis.		Sea Level Rise	Carmel Beach	TBD		TBD	<a href="#">Carmel-by-the-Sea Vulnerability Assessment (July 2021)</a>
<b>Goal 3. Resilient Infrastructure and Built Environment</b>							
<b>Policy 3.1. Support greater resilience, redundancy, and reliability of local and regional infrastructure and the built environment.</b>							
<b>Action 3.1.1. Underground Utilities in Fire Hazard Zones.</b> Determine the feasibility of undergrounding power lines in the Mission Trail Nature Preserve and designated evacuation routes.		Wildfire	Water Supply, Sanitary Sewer System, Power Grid, Overhead Communication, PG&E/Communication Underground Lines-gas, cable	TBD		TBD	<a href="#">Carmel-by-the-Sea Vulnerability Assessment (July 2021)</a>
<b>Action 3.1.2. Increase Green Infrastructure.</b> Modify CIP project design and review approach to consistently evaluate the potential for green infrastructure to be incorporated in CIP projects in the public right-of-way and on public lands. Identify and develop a green infrastructure pilot project that will reduce runoff volume and capture and infiltrate stormwater, based on projected changes in precipitation amounts due to climate change, and incorporates tree and shrub planting to increase carbon sequestration in the city.	Stronger Storms, Increased Temp		Urban Forest, Storm Drain System		Change in impervious surface coverage.	TBD	<a href="#">Adapted from the Carmel-by-the-Sea Vulnerability Assessment (July 2021)</a>

## Attachment 2

<p><b>Action 3.1.3. Reduce Stormwater Runoff.</b> Reduce stormwater runoff through implementation of a stormwater diversion project to divert all dry weather flows and first flush runoff to the large sanitary sewer that runs along San Antonio Avenue, such that they can be directed to the Wastewater District.</p>	Stronger Storms	Storm Drain System, Carmel Beach	TBD	TBD	TBD	Suggested by Climate Committee Members
<p><b>Action 3.1.4. Storm Drain Repair Funding and Improvements.</b> Earmark Capital Improvement Program (CIP) funding for design, permitting and implementation of storm drain repairs. Include strategies in the 2021 Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) for potential regional funding. Upsize Storm Drain Master Plan (SDMP) improvements, especially when making repairs in the lower reaches of watersheds, to handle larger storms.</p>	Stronger Storms	Storm Drain System Emergency Response Facilities – Fire station, EOC, PD, PW, City Hall, etc., Hospital and Emergency Medical Care Facilities	TBD	TBD	TBD	<a href="#">Carmel-by-the-Sea Vulnerability Assessment (July 2021)</a>
<p><b>Action 3.1.5. Retrofit Existing Critical Buildings and Related Infrastructure.</b> Provide incentives to ensure that all first responder and municipal facilities are properly retrofitted for existing and future climate change hazards including sea-level rise related flooding and erosion, increased wind/storm events, an increase in high heat days, and/or wildfire depending upon location and risk factors.</p>	All		TBD	TBD	TBD	<a href="#">Adapted from the Southern California Adaptation Planning Guide, Appendix F - General Plan and Local Coastal Plan Model Policies</a>
<p><b>Action 3.1.6. Water Conservation.</b> Partner with the Monterey Peninsula Water Management District to reduce water demand and increase water recycling, such as stormwater capture and grey water reuse, through education and outreach. Provide information and incentives for residential water use reduction.</p>	Drought	Water Supply	TBD	TBD	TBD	<a href="#">Carmel-by-the-Sea Vulnerability Assessment (July 2021)</a>
<p><b>Action 3.1.7. Bluff Structural Monitoring Program.</b> Implement bluff structural monitoring program and do follow-up monitoring post-storm to identify additional footing stability issues.</p>	Sea Level Rise	Carmel Beach	TBD	TBD	TBD	<a href="#">Carmel-by-the-Sea Vulnerability Assessment (July 2021)</a>
<p><b>Action 3.1.8. Hire Coastal Engineer.</b> Hire coastal engineer with experience in planning for climate change to conduct:</p> <ol style="list-style-type: none"> <li>1. Conduct research and prepare a Sea-Level Rise Vulnerability Study to further assess the risks to the city's coastal assets, including the beach, sea walls, revetments, bluffs, stairs and access, public bathrooms, parking areas, drainage infrastructure, and utilities.</li> <li>2. Determine adaptation measures and Local Coastal Program policy options, including but not limited to: a) Mostly natural, unarmored North Dunes area; b) mostly armored bluffs along Scenic Roach south of 8th Avenue; c) Unarmored dunes along private property between 8th Avenue and Del Mar Parking Lot; d) Armored private properties on the bluffs at the north end of the City (Pescadero Canyon area).</li> <li>3. Evaluate feasibility and phasing, the use of thresholds for when different elements of these strategies are implement. For example, maintaining armory or other defenses up to a point, but then if a threshold is reached, embracing a new bluff line and different adaptive measure. Consider applying an adaptive pathways approach which establishes trigger thresholds for different adaptive measures based on the severity of the impact from flooding and erosion associated with sea-level rise.</li> </ol>	Sea Level Rise	Carmel Beach, Shoreline Access Infrastructure, Seawall and Revetments	TBD	TBD	TBD	<a href="#">Carmel-by-the-Sea Vulnerability Assessment (July 2021)</a>
<p><b>Action 3.1.9. Wastewater Treatment.</b> Collaborate with the Carmel Area Wastewater District (CAWD) to increase the facility's resilience to sea level rise and stronger storms, and incentivize reduction of water use in the community and transitioning to reclaimed water use for irrigation. Maintain staff/council personnel as liaisons to CAWD.</p>	Sea Level Rise, Stronger Storms	Water Supply, Storm Drain System	TBD	TBD	TBD	Suggested by Climate Committee Members
<p><b>Policy 3.2.</b> Incorporate climate change adaptation into relevant plans and standards. <a href="#">Adapted from the Southern California Adaptation Planning Guide, Appendix B Matrix of Adaptation Strategies and Actions</a></p>						
<p><b>Action 3.2.1. Develop a Guidance Project Checklist.</b> Develop a guidance project checklist for building and site adaptation measures. The checklist, included with permit applications, should serve to provide education to permit applicants on modifications to site plans and structures that can improve a project's resilience to existing and potential future climate change hazards.</p>	All	Residents, Local Businesses, Second Homes	# of projects implementing adaptation measures. TBD	TBD	TBD	<a href="#">Adapted from the Southern California Adaptation Planning Guide, Appendix F - General Plan and Local Coastal Plan Model Policies</a>
<p><b>Action 3.2.2. Incorporate Climate Change Adaptation into Local Plans.</b> Prioritize the update of local plans, including the Climate Change Vulnerability Assessment, Local Coastal Program, General Plan, Mission Trails Nature Reserve Master Plan, Del Mar Master Plan, Shoreline Management Plan, and drought planning to promote climate change resilience as new information is available.</p>	All	All	TBD	TBD	TBD	<a href="#">Adapted from the Southern California Adaptation Planning Guide, Appendix F - General Plan and Local Coastal Plan Model Policies</a>
<p><b>Action 3.2.3. Update Shoreline Management Plan.</b> Update Shoreline Management Plan and Local Coastal Program based on results of Sea-level Rise Vulnerability Study.</p>	Sea Level Rise	Carmel Beach	TBD	TBD	TBD	<a href="#">Carmel-by-the-Sea Vulnerability Assessment (July 2021)</a>
<p><b>Action 3.2.3. Multi-Jurisdictional Hazard Mitigation Plan.</b> Maintain a comprehensive list of projects, based on existing plans and gaps identified in the Vulnerability Assessment, to provide to Monterey County during updates to the Monterey County Multi-Jurisdictional Hazard Mitigation Plan in 2021 and beyond.</p>	All	All	TBD	TBD	TBD	<a href="#">Carmel-by-the-Sea Vulnerability Assessment (July 2021)</a>



# CITY OF CARMEL-BY-THE-SEA

## Climate Committee

### Staff Report

October 21, 2021  
ORDERS OF BUSINESS

**TO:** Climate Committee Members

**SUBMITTED BY:** Agnes Martelet, Environmental Compliance Manager

**SUBJECT:** Update on Greenhouse Gas Forecasting and Review of First Draft List of Greenhouse Gas Reduction Measures

#### RECOMMENDATION:

Receive an update on Greenhouse Gas forecasting and review and provide comments on the First Draft List of Greenhouse Gas Reduction Measures.

#### BACKGROUND/SUMMARY:

LSA Associates (LSA) has been working with the Association of Monterey Bay Area Governments (AMBAG) to evaluate the 2005 through 2018 Greenhouse Gas (GHG) inventories provided by AMBAG for Carmel-by-the-Sea. LSA is working with the consultant team assisting Monterey County to resolve modeling issues that have impacted the on-road transportation GHG emissions. LSA recommends maintaining consistency with how the County is resolving on-road transportation in their GHG inventories. Once they have more details, LSA will update the Climate Committee.

Meanwhile, LSA has provided a preliminary set of forecasts and targets using the 2015 GHG Inventory as a baseline (Attachment 1). The 2015 GHG Inventory was chosen as a preliminary baseline until modeling inconsistencies with prior inventories are addressed. The preliminary forecasts, reduction targets, and baseline will be revised once the issues with the on-road transportation sector are resolved.

LSA has provided a list of Candidate Reduction Measures (Attachment 2) for the Climate Committee's review and comments. These measures, when further refined, will be the basis for achieving the City's GHG reduction goals.

#### FISCAL IMPACT:

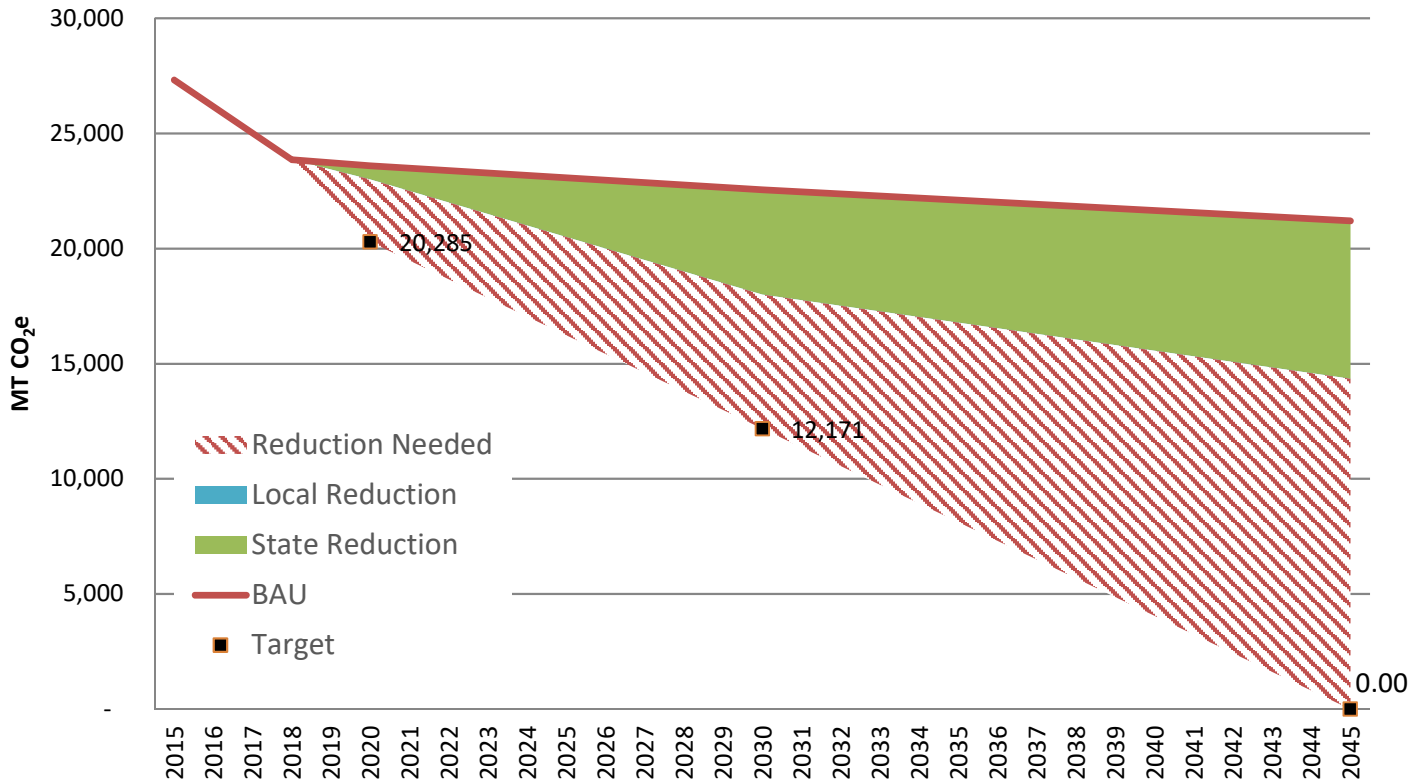
Costs of actions included in the Draft List of Greenhouse Gas Reduction Measures will be estimated once the Draft List is further refined.

#### ATTACHMENTS:

Attachment 1: Draft Carmel Greenhouse Gas Trends, Targets, and Reductions Needed

Attachment 2: Draft Carmel Candidate Reduction Measures List

**FIGURE 1: State and Local Reductions Comparison with Targets**  
**City of Carmel-By-The-Sea, 2015 - 2045**



State measures and reduction goals are estimated based on the 2015 *GHG Inventory and Population Forecasting* by AMBAG. Targets are set based on CARB recommendations using the 2015 GHG Inventory as a baseline (2020 target = 15% reduction from 2015 emissions, 2030 target = 40% reduction from the 2020 target, 2045 target = net zero emissions).

Attachment 2

Carmel By-The-Sea Community Reduction Measures

Responsibility/action needed for implementation, inventory update and Participation Rate need to be updated according to conversations with the city.

Goal	Measure	Action	Responsibility/ action needed for implementation	2030 GHG Reductions Achieved (MT CO2e)		GHG Reduction Potential	Participation Rate	Notes
				No Enhancing	With Enhancing			
<b>Goal 1. Increase Energy Efficiency in Existing Residential</b>								
	<b>Measure 1.1</b>	<b>Energy Efficiency Training, Education, and Recognition in the Residential Sector</b>						
		<b>Actions</b> Post links on website and/or social media and provide materials at public events Promote an annual energy efficiency fair Promote an energy efficiency resource center Invite building inspectors to hold trainings semi-annually on energy efficiency and Title 24 requirements		The actions taken by the City can increase participation levels of other measures.		Supporting Measure	A variety of studies were used to determine low to high rates possible (up to 85% in participation rates of Measure 1.4 if all of these actions are taken).	
	<b>Measure 1.2</b>	<b>Increase Community Participation in Existing Energy Efficiency Programs</b>				Low	CPUC EEstats data provides reductions achieved in utility programs. Reductions for the City were based on per-capita reductions.	
		<b>Actions</b> Partner with AMBAG and Central Coast Community Energy (3CE) for outreach events						
	<b>Measure 1.3</b>	<b>Home Energy Evaluations</b>				Supporting Measure	Similar to Measure 1.1, this measure augments participation level assumptions for Measure 1.4 up to 75% if all of these actions are taken. Assumptions used a	
		<b>Actions</b> Promote or provide energy audits such as through Energy Upgrade California		The actions taken by the City and COG can increase participation levels of other				
	<b>Measure 1.4</b>	<b>Residential Home Energy Renovations</b>				Medium-High	Energy renovations would be focused on total existing houses, pre-1980 houses or annual housing sales. Participation rate is based on CSI data, except for HERO which is assumed 1% per year of homeowners.	
		<b>Actions</b> Enhance enforcement of Title 24 compliance Promote existing home energy renovation programs Promote participation in green building programs, such as Leadership in Energy and Environmental Design (LEED) and Energy Upgrade California Promote financing programs for home upgrades, such as Home Energy Renovation Opportunity (HERO) and Property Assessed Clean Energy (PACE) Streamline online permitting to facilitate retrofits Provide incentives to homeowners to convert to all electric homes						
<b>Goal 2. Increase Energy Efficiency in New Residential</b>								
	<b>Measure 2.1</b>	<b>Exceed Energy Efficiency Standards</b>				Medium-High	Participation can be up to 100% depending on the number of actions and knowledge of staff, aggressiveness of promotion. Assumed per unit energy savings 14%.	
		<b>Actions</b> Educate City staff and developers on future Title 24 updates and new energy efficiency opportunities for new residential development Promote Tier 1 and Tier 2 green building ratings such as LEED, Build It Green, or Energy Star® certified buildings Streamline online permitting to facilitate new energy efficiency opportunities Require new residential buildings to be all electric homes						
<b>Goal 3. Increase Energy Efficiency in Existing Commercial Units</b>								
	<b>Measure 3.1</b>	<b>Energy Efficiency Training, Education, and Recognition in Commercial Sector</b>				Supporting Measure	A variety of studies were used to determine low to high rates possible (up to 85% in participation rates of Measure 3.4 if all of these actions are taken).	
		<b>Actions</b> Post links on website and/or social media and provide materials at public events Promote an annual energy efficiency fair Promote a resource center Invite building inspectors to hold trainings semi-annually on energy efficiency and Title 24		The actions taken by the City may increase participation levels of other programs by up to 85%				
	<b>Measure 3.2</b>	<b>Increase Business Participation in Existing Energy Efficiency Programs</b>				Medium	Assumption based on CPUC EEstats data. Participation rate is 62% if all the actions under this measure are taken.	
		<b>Actions</b> Partner with AMBAG and 3CE for outreach events						
	<b>Measure 3.3</b>	<b>Non-Residential Building Energy Audits</b>				Supporting Measure	Participation rate is determined by the permit process since renovations require permits from the City, and by renovation/additions proposed. Buildings that were	
		<b>Actions</b> Promote energy audits such as through Energy Upgrade California		The actions taken by the City and COG can increase participation levels of other				
	<b>Measure 3.4</b>	<b>Non-Residential Building Retrofits</b>				Medium-High	Market participation is based on Residential Rates for same programs. Assumes base size of 10,000 sf per participating building. Assume average kW capacity installed in the PG&E Region on a small commercial projects is 5.66 kW. Assumes an average renovation rate of 2 percent of commercial land uses, with a max renovation rate of 5 percent of commercial land uses under CEEO.	
		<b>Actions</b> Enhance enforcement of Title 24 compliance Promote existing non-residential building retrofits programs Promote green building programs, such as California Solar Initiative Promote financing programs such as PACE Streamline online permitting to facilitate retrofits						



Attachment 2

Goal	Measure	Action	Responsibility/ action needed for implementation	2030 GHG Reductions Achieved (MT CO2e)	GHG Reduction Potential	Participation Rate	Notes
Goal 4.	<b>Increase Energy Efficiency in New Commercial Units</b>						
	<b>Measure 4.1</b>	<b>Exceed Energy Efficiency Standards</b> <b>Actions</b> Educate City staff and developers on future Title 24 updates and additional energy efficiency opportunities for new non-residential development Promote Tier 1 and Tier 2 Green Building Ratings such as LEED, Build It Green, or Energy Star® certified buildings Streamline online permitting to facilitate new energy efficiency permits Create an energy award program for zero-net-energy businesses Require new commercial buildings to be all electric with exemptions for restaurants or other uses that can demonstrate a need for nat. gas.			Medium-High	Assumed per unit energy savings 14% to meet Title 24 and 10% to exceed Title 24. Participation rate is 100% if all the actions under this measure are taken.	
Goal 5.	<b>Increase Energy Efficiency through Water Efficiency</b>						
	<b>Measure 5.1</b>	<b>Water Efficiency through Continued Implementation of SB X7-7</b> <b>Actions</b> Post links on website or social media and provide materials at public events Require low-irrigation landscaping			Medium	Percentage volume reduction assumes half of water used is for outdoor use, and that measures would result in a 20% reduction in outdoor water use, for an overall 10% reduction in water consumption for participating households. For water used	
Goal 5.	<b>Measure 5.2</b>	<b>Exceed Water Efficiency Standards</b> <b>Actions</b> Conduct direct outreach to HOA, businesses, and other community groups  Allow recycled water for commercial, industrial and multi-family residential landscaping Allow grey water for community uses Promote rainwater harvesting rebates and demonstrations			Low-Medium	Up to 100% of outdoor water GHG emissions if outdoor water use is replaced completely with grey water. Assumed 5 rain events per year, 100 gallon capacity onsite, and emptied between rain events.	
	<b>Goal 6. Decrease Energy Demand through Reducing Urban Heat Island Effect</b>						
Goal 6.	<b>Measure 6.1</b>	<b>Tree Planting for Shading and Energy Saving</b> <b>Actions</b> Maintain the health of the Urban Forest tree canopy in the City Continue to work with the Friends of the Carmel Forest and the community to facilitate Urban Forest maintenance.  Update the City's Urban Forest Management Plan to include tree planting guidelines to promote tree health and maintain a healthy urban forest canopy.			Low	Assumed for 8,000 mature trees performance level equals 1,696 MT CO2e reduction from energy savings and 779 MT CO2e sequestration benefit. Assumed 2.5% reduction in cooling load for residential and nonresidential land uses due to reduced urban temperatures.	
	<b>Measure 6.2</b>	<b>Light-Reflecting Surfaces for Energy Saving</b> <b>Actions</b> Promote cool roofs on the residential, commercial, industrial or office buildings where feasible Promote Cool pavements in the City where feasible			Medium	Assumed 5.02 kWh per square meters nationwide energy savings for increased Albedo. Energy Savings is assumed to be 20% of the lighting energy, calculated as energy per person.	
Goal 7.	<b>Decrease GHG Emissions through Reducing Vehicle Miles Traveled and Electric Vehicles</b>						
	<b>Measure 7.1</b>	<b>Alternative Transportation Options</b> <b>Actions</b> Work with AMBAG to remove barriers to alternative transportation Create additional active transportation routes between schools, commercial areas and surrounding residential areas Work with Monterey Airport and AMBAG to explore feasibility of electric shuttle between Monterey Airport and City destinations			Low-Medium	CAPCOA Quantifying Greenhouse Gas Mitigation suggests 0.01-0.2% annual VMT reduction through creating urban non-motorized zones.	
	<b>Measure 7.2</b>	<b>Develop Bicycle Master Plan to Create Safe Bike Routes around the City</b> <b>Action</b> Expand bike routes to improve bike transit			Low-Medium	Participation rate is based on increase in Pedestrian Environment Factor, and high end is based on maximum reduction amount for pedestrian or bike factor. Assume	
	<b>Measure 7.3</b>	<b>Ride-Sharing and Bike-to-Work Programs within Businesses</b> <b>Action</b> Promote ride-sharing and facilitate air district incentives for ride-sharing Provide reserved preferential parking spaces for ride-sharing, carpooling, and ultra-low or zero-emission vehicles  Require businesses of a certain size to provide facilities such as bike racks and showers			Low-Medium	Experience indicates that ridesharing programs typically attract 5-15% of commute trips if they offer only information and encouragement, and 10-30% if they also offer financial incentives such as parking cash out or vanpool subsidies.	
Goal 7.	<b>Measure 7.4</b>	<b>Electrify the Fleet</b> <b>Actions</b> Promote electrical vehicle incentive programs at outreach meetings Promote neighborhood electric vehicles (NEV) Apply for grants to install e-chargers at public facilities Work with community groups and businesses to install additional e-chargers  Require or incentivize major commercial building expansions/remodels to install e-chargers			Medium-High	Market penetration is from Victoria Transport Policy Institute, which is the participation rate of 5-15% and enhancing rate of 10-25%. Reduction amount assumes all of market penetration VMT is switched to alternative Travel.	
	<b>Goal 8. Decrease GHG Emissions through Reducing Solid Waste Generation</b>						
Goal 8.	<b>Measure 8.1</b>	<b>Reduce Waste to Landfills</b> <b>Actions</b> Promote zero waste events, use of reusables rather than recyclable materials, and buy local to reduce waste. Promote home composting and community gardens within the community.  Educate the community on proper use of the city-provided grey/green/blue containers			Low-Medium	Reduction is from enhanced enforcement for AB 341, Mandatory Commercial Recycling, which is 60% recycling, composting or sources reduction. S GHG reduction from reduced waste is calculated from CalRecycle's WARM model.	

Attachment 2

Goal	Measure	Action	Responsibility/ action needed for implementation	2030 GHG Reductions Achieved (MT CO2e)	GHG Reduction Potential	Participation Rate	Notes
Goal 9.	<b>Decrease GHG Emissions through Increasing Clean Energy Use</b>						
	<b>Measure 9.1</b>	<b>Promote Clean Energy</b>					
		<b>Actions</b>	Promote clean energy incentives to the community Incentivize solar panels installation on existing residential buildings Require or incentivize solar panels installation on major commercial building expansion/retrofits and commercial parking lots Promote energy storage systems installation with solar panels		Medium-High		Reduction mainly comes from participation in Community Choice Aggregation. The City has not joined the program yet, but is actively exploring it. Clean energy percentage is decided by existing programs. The program is opt-out basis, and the national average opt-out rates range from 3-5%, so the participation rate is 95-97%.
	<b>Measure 9.2</b>	<b>Partner with the Central Coast Community Energy to increase the Renewable Generation Portfolio of Electricity in Carmel</b>					
		<b>Action</b>	Develop an agreement with 3CE to develop a program with higher renewable energy options in the City and encourage residents and businesses to participate in the program		Medium-High		



# CITY OF CARMEL-BY-THE-SEA

## Climate Committee

### Staff Report

October 21, 2021  
ORDERS OF BUSINESS

**TO:** Climate Committee Members

**SUBMITTED BY:** Agnes Martelet, Environmental Compliance Manager

**SUBJECT:** Receive a Presentation on the Central Coast Community Action Campaign

#### RECOMMENDATION:

Receive a Presentation on the Central Coast Community Action Campaign.

#### BACKGROUND/SUMMARY:

Kirsten Liske of Ecology Action will provide a presentation on the Central Coast Community Action Campaign for communities seeking to inspire and track action towards reducing greenhouse gas emissions among their residents.

#### FISCAL IMPACT:

The initial annual cost for the City to join this campaign would be \$750.

#### ATTACHMENTS:



# CITY OF CARMEL-BY-THE-SEA

## Climate Committee

### Staff Report

October 21, 2021  
ORDERS OF BUSINESS

**TO:** Climate Committee Members

**SUBMITTED BY:** Agnes Martelet, Environmental Compliance Manager

**SUBJECT:** Provide an Update on Community Outreach

#### RECOMMENDATION:

Based on the updated list of partners to engage, provide an update on community outreach status.

#### BACKGROUND/SUMMARY:

At the Committee's August meeting, the community outreach list was reviewed and updated to determine stakeholders that should be involved in the adaptation strategy development phase of the project. The revised list is provided in Attachment 1.

Climate Committee members should discuss any progress they made on reaching out to stakeholders to get feedback on potential adaptation strategies.

#### FISCAL IMPACT:

N/A

#### ATTACHMENTS:

Attachment 1: Community Organizations and Regional Partners to Engage

## Community Organizations and Regional Partners to Engage

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

**September 16, 2021**

	<b>ORGANIZATION</b>	<b>Topic (s)</b>	<b>Contact Persons</b>	<b>Committee Lead</b>	<b>Previously Contacted?</b>	<b>Contact for Strategy Outreach?</b>
	<b>Utilities</b>					
1*	Carmel Area Wastewater District	Sewer system Wastewater Treatment Facility	Barbara Buikema, Daryl Lauer	Jeff Baron, Agnes Martelet	Y	<send draft report>
2	Central Coast Community Energy (was Monterey Bay Community Power)	Energy supply	Dan Bertoldi J.R. Killigrew	Evan Kort, Agnes Martelet	Y	<send intro letter soon; combine with CCCE, CC, MPWMD>
3	Cal Am	Water supply		Michael LePage		
4	Monterey Peninsula Water Management District	Water supply	Stephanie Locke	Michael LePage	Y	<send intro letter soon; combine with CCCE, CC, MPWMD>
5	GreenWaste Recovery	Waste management and recycling	Jim Moresco	Carrie Theis, Agnes Martelet		<send draft report>
6	Monterey Regional Waste Management District	Waste management and recycling	Tim Flanagan	Carrie Theis	Y	<send draft report>
7	PG&E	Energy supply	Jeana Arnold Teri Vetere	Carrie Theis, Jeff Baron	Y	<send draft report>

	ORGANIZATION	Topic (s)	Contact Persons	Committee Lead	Previously Contacted?	Contact for Strategy Outreach?
<b>Professional Organizations</b>						
1	California AIA	Built environment resilience	Libby Barnes	John Hill	Y	<send draft report> then solicit recs.
2	Chamber of Commerce	Local business, tourism	Jenny McMurdo	Carrie Theis	Y	On agenda for presentation to board at retreat in November.
3	Monterey County Association of Realtors	Sea Level Rise Wildfire risk	Scott Dick, Ben Beasley	Scott Lonergan, LaNette Zimmerman	Y	Keep informed re. progress in interested areas (point of sale mandates, disclosure requirements, etc.) then make plans as needed.
4	Visit Carmel	Visitors / local business	Amy Herzog	Carrie Theis	Y	Presenting climate change concept to Visit Carmel at their October meeting on October 14 <sup>th</sup> .
5	Sunset Center	Resilience	Beth Bowman (chair Wayne Moon)	LaNette Zimmerman		<send intro letter soon; combine with CCCE, CC, MPWMD>

	ORGANIZATION	Topic (s)	Contact Persons	Committee Lead	Previously Contacted?	Contact for Strategy Outreach?
	<b>Local Community Groups</b>					
1	Carmel Residents Association	Community resilience Climate action	Fred Bologna Nancy Twomey	Jeff Baron	Y	Meeting on September 23. More TBA.
2	Carmel Rotary Club	Community resilience Climate action	Susan Prest	Carrie Theis, Jeff Baron	Y	Announcement before the workshop. Meeting after the workshop.
3	Carmel Lions Club	Community resilience Climate action	Heidi Mozingo	Carrie Theis		In process of reaching out to Heidi. Possible workshop.
4	Friends of Carmel Forest	Urban forest	Ramie Allard	Scott Lonergan		<send draft report> (not much to do here other than ensure public process for draft forestry report)
5	Friends of MTNP	Wildfire risk Sensitive habitats	Karen Ferlito Greg D'Ambrosio	Scott Lonergan	Y	Email outreach strategy currently; on the lookout for areas of interest and/or further outreach.
6	Del Monte Forest Conservancy	Wildfire risk		Scott Lonergan	Y	Scott to reach out to determine DMFC efforts in this area.
7	Landwatch	Transportation, housing	Mike DeLapa	Jeff Baron	Y	X
8	Sustainable Carmel	Climate action	Ellen Gannon	Agnes Martelet		Try to reengage
9	Church auxiliaries	Community resilience		LaNette Zimmerman	Y	<send intro letter soon; combine with CCCE, CC, MPWMD> Possible shelter etc.
10	Heritage Society	Community resilience	Karl Iverson	Michael LePage		X
11	Carmel Women's Club	Community resilience Climate action	Nancy Twomey	Jeff Baron		X

	<b>ORGANIZATION</b>	<b>Topic (s)</b>	<b>Contact Persons</b>	<b>Committee Lead</b>	<b>Previously Contacted?</b>	<b>Contact for Strategy Outreach?</b>
	<b>City Departments</b>					
1	Police	Emergency preparedness Transportation	Brian Uhler	Agnes Martelet	Y	<send draft report> then start to reach out in earnest
2	Fire	Emergency preparedness	Carmyn Priew	John Hill	Y	<send draft report> then start to reach out in earnest
3	Forestry Division (PW)	Urban forest Sensitive habitats	Sara Davis	Agnes Martelet	Y	<send draft report> then start to reach out in earnest
4	Public Works	Storm Drain Master Plan	Bob Harary	Agnes Martelet	Y	<send draft report> then start to reach out in earnest
5	Library	Historic events	Katie O'Connell	Evan Kort	Y	



	<b>ORGANIZATION</b>	<b>Topic (s)</b>	<b>Contact Persons</b>	<b>Committee Lead</b>	<b>Contacted?</b>	<b>Contact for Strategy Outreach?</b>
<b>City Commissions</b>						
1	Forest & Beach Commission	Sea Level Rise Urban forest Sensitive habitats Climate action	Sara Davis	Scott Loneragan	Y	Meeting announcement at 11/11/2021 meeting. Add commissioners to email distribution list. TBD
2	Planning Commission	Built environment resilience Climate action	Brandon Swanson	Michael LePage		Meeting announcement at 11/10/2021 meeting. Add commissioners to email distribution list. X
3	City Traffic Safety Committee	Transportation	Bob Harary	Agnes Martelet	Y	<send draft report> then start to reach out in earnest

	ORGANIZATION	Topic (s)	Contact Persons	Committee Lead	Contacted?	Contact for Strategy Outreach?
<b>Federal / State / Regional Agencies</b>						
1	AMBAG	Climate Action Transportation	Amaury Berteaud	Agnes Martelet	Y	Constant outreach underway.
2	USGS	Sea Level Rise	Patrick Barnard	Agnes Martelet	Y	<remove>
3	CalFire	Wildfire risk and resilience Urban forest management	John Reynolds	John Hill	Y	<send draft report> then solicit recs.
4	CA Department of Insurance	Wildfire risk / home insurability	Ricardo Laura	John Hill	Y	<remove>
5	Fire Safe Council for Monterey County	Michael Emmett		John Hill	Y	
6	California Coastal Commission	Sea Level Rise		Jeff Baron, Agnes Martelet		<send intro letter soon; combine with CCCE, CC, MPWMD>
7	IRWMP Group	Water supply Watershed / storm water projects		Michael LePage		
8	Monterey County (OES)	Resilience planning	Kelsey Scanlon	Agnes Martelet	Y	Already involved. Potential partner. Keep well informed.
9	Monterey County	Sustainability Climate Action	Ashley Paulsworth	Agnes Martelet	Y	Already involved.
10	Monterey Bay National Marine Sanctuary (NOAA)	Marine Sanctuary impacts Carmel Beach	Karen Grimmer	Agnes Martelet	Y	<send intro letter soon; combine with CCCE, CC, MPWMD>
11	Transportation Agency of Monterey County	Transportation		Jeff Baron		<send intro letter soon; combine with CCCE, CC, MPWMD>
12	MST	Transportation		Jeff Baron		<send intro letter soon; combine with CCCE, CC, MPWMD>
13	US Navy / Coast Guard	Coastal impacts		Carrie Theis		<send report>

	<b>ORGANIZATION</b>	<b>Topic (s)</b>	<b>Contact Persons</b>	<b>Committee Lead</b>	<b>Contacted?</b>	<b>Contact for Strategy Outreach?</b>
	<b>Educational Groups</b>					
1	Carmel High School Environmental Club	Internships Climate Action partnership / Green Schools	Ellen Gannon	LaNette Zimmerman Scott Lonergan	Y	Brainstorm educational outreach strategies.
2	Stevenson, York, Santa Catalina	Climate Action partnership / Green Schools		LaNette Zimmerman Scott Lonergan	Y	
3	Youth Center	Climate Action partnership / Green Schools		LaNette Zimmerman, Scott Lonergan		
4	CSUMB	Internships Climate Action partnership / Green Schools		LaNette Zimmerman, Scott Lonergan	Y	
5	MPCC	Internships Climate Action partnership / Green Schools		LaNette Zimmerman, Scott Lonergan		
6	MIISS	Climate Action partnership / Green Schools		LaNette Zimmerman, Scott Lonergan	Y	
7	NPS	Climate Action partnership / Green Schools	Ann E. Rondeau (ret.) ( <a href="mailto:pao@nps.edu">pao@nps.edu</a> )	LaNette Zimmerman, Scott Lonergan		

	ORGANIZATION	Topic (s)	Contact Persons	Committee Lead	Contacted?	Contact for Strategy Outreach?
<b>Regional Non-Profit Organizations</b>						
1	Monterey Bay Aquarium	Marine Sanctuary impacts Climate Action Support		Carrie Theis		<send report, then have conversation>
2	Ecology Action	Climate Action Support	Kirsten Liske	Agnes Martelet		<presentation at 10/21 Climate Committee mtg>
<b>Other Stakeholders</b>						
1	Pebble Beach Company	Emergency response routes, Fire danger (also see their response re. Bluffs / Seawalls / Beach Regional transportation)	Mike Niccum	Carrie Theis		Carrie to contact soon; work on common points of interest.
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	Y	
3	Cities with similar challenges (e.g. PG, Monterey, Seaside, Pacifica, Del Mar, Malibu)			Jeff Baron, Carrie Theis		Start looking at other reports. Ask consultants ASAP for list of cities that are most relevant.