



## 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, September 16, 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, 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. Receive a Presentation by the County of Monterey on their draft Community Resilience Plan

2. Review and provide comments on the Draft List of Adaptation Strategies for Carmel
3. Provide an Update on Community Outreach
4. Receive a presentation on the 2022 California Energy Code Update.
5. Receive a Presentation on the Firewise Community Certification Process

## **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

September 16, 2021  
ORDERS OF BUSINESS

**TO:** Climate Committee Members

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

**SUBJECT:** Review and provide comments on the Draft List of Adaptation Strategies for Carmel

#### RECOMMENDATION:

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

#### BACKGROUND/SUMMARY:

The City retained Rincon Consultants as our on-call environmental consultant. Rincon assembled the Draft List of Adaptation Strategies included in Attachment 1 based on the opportunities identified in the Vulnerability Assessment, as well as other potential strategies to address the resilience gaps identified in the recently completed Climate Change Vulnerability Assessment. The Draft List of Adaptation Strategies includes considerations for developing and selecting adaptation goals, policies and actions that are implementable.

The Committee should review the Draft List of Adaptation Strategies and provide feedback on the proposed policies and actions, as well as any identified gaps. The Draft List of Adaptation Strategies will be revised based on the Committee's feedback and will return for further review at the Committee's October meeting before it is used to elicit public input at the Public Workshop in November.

#### FISCAL IMPACT:

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

#### ATTACHMENTS:

Attachment 1: Draft List of Adaptation Strategies

# 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 in Carmel-by-the-Sea, 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, and infrastructure and built environment. The potential adaptation goals, policies, and actions were developed based on the results of the City's Vulnerability Assessment, including the opportunities identified to build on existing adaptation strategies.

## **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 while also responding 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 needed funding mechanisms, and allocate adequate funding to support adaptation policy development and implementation.
4. Ensure meaningful and active **engagement** with the most impacted communities.
5. Employ adaptive and flexible governance approaches by utilizing collaborative **partnership** across scales and between sectors to accelerate effective problem solving.
6. Prioritize actions that promote **equity**, foster community resilience, and protect the City's most vulnerable populations including the elderly. Explicitly prioritize 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.

# 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. Provide effective emergency preparedness and response following a climate-related disaster</b>							
<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 spread information at critical times 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. Maintain and Publicize Local Evacuation Plans.</b> Review the city evacuation plan and publicize both the city evacuation plan and the Monterey County evacuation plan 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. Evacuation Access.</b> 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 1.1.5. Update City Planning Guidelines in the VHFHSZ.</b> Update City Planning guidelines to reflect and/or not conflict 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 1.1.6. Defensible Space.</b> Incorporate 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 1.1.7. Increase Resistance to Wildfire Structural Damage.</b> Evaluate the feasibility of gaining Firewise Community Certification in 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. Focus adaptation efforts and engagement on the most vulnerable populations.</b>							
<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 Public Library, is available during extreme heat events, poor air quality, severe weather events, and other highly hazardous conditions. 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>Policy 1.3. Minimize health impacts of climate change.</b>							
<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 cooling in addition to heating 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	TBD	TBD	TBD	<a href="#">Adapted from the Southern California Adaptation Planning Guide, Appendix B Matrix of Adaptation Strategies and Actions</a>

Attachment 1

Goal/Policy/Action	Climate Hazard	Asset	Potential Metric	Timeframe	Potential Lead	Cost	Source
<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 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>
<b>Action 1.3.6. Electrify Fireplaces.</b> Explore the feasibility of incentivizing electric fire places for existing and new development. Develop outreach materials explaining the health, environmental, and potential cost benefits of switching to an electric fireplace.	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 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>							<a href="#">Adapted from the Southern California Adaptation Planning Guide, Appendix B Matrix of Adaptation Strategies and Actions</a>
<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.	All	Service Industry Workers, Local Businesses		TBD	TBD - Monterey County Workforce	TBD	<a href="#">Adapted from the Southern California Adaptation Planning Guide, Appendix F - General Plan and Local Coastal Plan Model Policies</a>
<b>Action 1.4.2. 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 for temporary or permanent job dislocation due to climate change hazards.	All	Service Industry Workers, Local Businesses		TBD	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 1.4.1. 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 and/or Visit Carmel	TBD	<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>							<a href="#">Adapted from the Southern California Adaptation Planning Guide, Appendix B Matrix of Adaptation Strategies and Actions</a>
<b>Action 2.1.1. Increase Resilience to Stronger Storms.</b> When designing projects 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	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. Address transitioning the urbanized forest to tree species that can withstand the projected temperatures of the second half of the century 2. Include planting 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 Funding for Climate Adaptation.</b> Earmark Capital Improvement Program (CIP) funding for design, permitting, and implementation of 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		TBD	TBD	TBD	<a href="#">Carmel-by-the-Sea Vulnerability Assessment (July 2021)</a>

Attachment 1

Goal/Policy/Action	Climate Hazard	Asset	Potential Metric	Timeframe	Potential Lead	Cost	Source
<b>Action 2.1.4. 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 the Carmel and 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 2.1.5. 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>Goal 3. Resilient Infrastructure and Built Environment</b>							
<b>Policy 3.1. Protect and enhance reliability of utility infrastructure.</b> <a href="#">Adapted from the Southern California Adaptation Planning Guide, Appendix B Matrix of Adaptation Strategies and Actions</a>							
<b>Action 3.1.1. Encourage Energy Generation.</b> Ensure reliability of essential facilities, such as first-responder buildings, by developing alternative power supplies for the Fire Department, Police Department, and City buildings. Work to implement on-site generation through photovoltaic systems and battery storage.	Increased Temp, Wildfire	Emergency Response Facilities – Fire station, EOC, PD, PW, City Hall, etc.	# of facilities with photovoltaic systems and # of facilities	TBD	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 3.1.2. Increase Resilience of Utilities in the Fire Hazard Zones.</b> Consider updating the General Plan's Safety Element policy P8-17 to include "move or remedy existing" utilities in high severity fire hazard zones.	Wildfire	Water Supply, Sanitary Sewer System, Power Grid, Overhead Communication, PG&E/Communication Underground Lines- gas, cable		TBD	TBD	TBD	<a href="#">Carmel-by-the-Sea Vulnerability Assessment (July 2021)</a>
<b>Action 3.1.3. CIP Funding for Carmel Projects in the IRWMP.</b> Incorporate the Carmel projects included in the Integrated Regional Water Management Plan (IRWMP) into the City's 5-year Capital Improvement Program (CIP). Seek potential regional or State funding for projects.	Drought	Water Supply		TBD	TBD	TBD	<a href="#">Carmel-by-the-Sea Vulnerability Assessment (July 2021)</a>
<b>Action 3.1.4. Undergrounding Power Lines.</b> Determine the feasibility of undergrounding power lines in the Mission Trail Nature Preserve and in priority transportation corridors in the VHFHSZ.	Wildfire	Power Grid		TBD	TBD	TBD	<a href="#">Carmel-by-the-Sea Vulnerability Assessment (July 2021)</a>
<b>Policy 3.2. Support greater resilience, redundancy, and reliability of local and regional infrastructure.</b> <a href="#">Adapted from the Southern California Adaptation Planning Guide, Appendix B Matrix of Adaptation Strategies and Actions</a>							
<b>Action 3.2.1. Stormwater Infiltration.</b> Encourage stormwater infiltration features as part of street Capital Improvement Program (CIP) projects to reduce runoff volume and increase groundwater infiltration, based on projected changes in precipitation amounts due to climate change.	Stronger Storms	Storm Drainage System	projects using infiltration features.	TBD	TBD	TBD	<a href="#">Carmel-by-the-Sea Vulnerability Assessment (July 2021)</a>
<b>Action 3.2.2. 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 capture and infiltrate stormwater 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	TBD	TBD	<a href="#">Adapted from the Carmel-by-the-Sea Vulnerability Assessment (July 2021)</a>
<b>Action 3.2.3. Storm Drain Repair Funding.</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.	Stronger Storms	Storm Drain System		TBD	TBD	TBD	<a href="#">Carmel-by-the-Sea Vulnerability Assessment (July 2021)</a>
<b>Action 3.2.4. Storm Drain Improvements.</b> Upsize Storm Drain Master Plan (SDMP) improvements, especially when making repairs in the lower reaches of watersheds, to handle larger storms.	Stronger Storms	Storm Drain System		TBD	TBD	TBD	<a href="#">Carmel-by-the-Sea Vulnerability Assessment (July 2021)</a>
<b>Action 3.2.5. 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.	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>
<b>Action 3.2.6. Retrofit Existing Critical Buildings and Related Infrastructure.</b> Require 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.	All	Emergency Response Facilities – Fire station, EOC, PD, PW, City Hall, etc., Hospital and Emergency Medical Care Facilities		TBD	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 3.2.7. 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, and Shoreline Management Plan, to promote climate change resilience as new information is available.	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>

Attachment 1

Goal/Policy/Action	Climate Hazard	Asset	Potential Metric	Timeframe	Potential Lead	Cost	Source
<b>Action 3.2.8. 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.	Drought	Water Supply		TBD	TBD	TBD	<a href="#">Carmel-by-the-Sea Vulnerability Assessment (July 2021)</a>
<b>Action 3.2.9. Beach Sand Monitoring Program.</b> Reinstate beach sand monitoring program described in the Shoreline Management Plan.	Sea Level Rise	Carmel Beach		TBD	TBD	TBD	<a href="#">Carmel-by-the-Sea Vulnerability Assessment (July 2021)</a>
<b>Action 3.2.10. Bluff Structural Monitoring Program.</b> Implement bluff structural monitoring program and do follow-up monitoring post-storm to identify additional footing stability issues.	Sea Level Rise	Carmel Beach		TBD	TBD	TBD	<a href="#">Carmel-by-the-Sea Vulnerability Assessment (July 2021)</a>
<b>Action 3.2.11. 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	TBD	<a href="#">Carmel-by-the-Sea Vulnerability Assessment (July 2021)</a>
<b>Action 3.2.12. Hire Coastal Engineer.</b> Hire coastal engineer with experience in planning for climate change to conduct: 1. Conduct research and prepare a Sea-Level Rise Vulnerability Study to further assess the risks to our coastal assets, including the beach, sea walls, revetments, bluffs, stairs and access, public bathrooms, parking areas, drainage infrastructure, and utilities. 2. Determine adaptation measures and Local Coastal Program policy options. 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). 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.	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>
<b>Action 3.2.13. Update Shoreline Management Plan.</b> Update Shoreline Management Plan and Local Coastal Program based on results of coastal engineering analysis.	Sea Level Rise	Carmel Beach		TBD	TBD	TBD	<a href="#">Carmel-by-the-Sea Vulnerability Assessment (July 2021)</a>
<b>Action 3.2.14. 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.	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

September 16, 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 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

**Community Organizations and Regional Partners to Engage**  
**City of Carmel-by-the-Sea Climate Project**  
**August 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		
2	Central Coast Community Energy (was Monterey Bay Community Power)	Energy supply	Dan Bertoldi J.R. Killigrew	Evan Kort, Agnes Martelet	Y		
3	Cal Am	Water supply		Michael LePage			
4	Monterey Peninsula Water Management District	Water supply	Stephanie Locke	Michael LePage	Y		
5	GreenWaste Recovery	Waste management and recycling	Jim Moresco	Carrie Theis, Agnes Martelet			
6	Monterey Regional Waste Management District	Waste management and recycling	Tim Flanagan	Carrie Theis	Y		
7	PG&E	Energy supply	Jeana Arnold Teri Vetere	Carrie Theis, Jeff Baron	Y		
	<b>Professional Organizations</b>						
1	California AIA	Built environment resilience	Libby Barnes	John Hill	Y	X	
2	Chamber of Commerce	Local business, tourism	Jenny McMurdo	Carrie Theis	Y	X	
3	Monterey County Association of Realtors	Sea Level Rise Wildfire risk	Scott Dick	Scott Lonergan	Y	X	
4	MCCVB	Visitors		Carrie Theis			
5	Visit Carmel	Visitors / local business	Amy Herzog	Carrie Theis	Y	X	
6	Sunset Center	Resilience	Christine Sandin	LaNette Zimmerman			

	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	X
2	Carmel Rotary Club	Community resilience Climate action	Susan Prest	Carrie Theis, Jeff Baron	Y	X
3	Carmel Lions Club	Community resilience Climate action	Heidy Mozingo	Carrie Theis		X
4	Friends of Carmel Forest	Urban forest	Ramie Allard	Scott Lonergan	Y	X
5	Friends of MTNP	Wildfire risk Sensitive habitats	Karen Ferlito Greg D'Ambrosio	Scott Lonergan	Y	X
6	Del Monte Forest Conservancy	Wildfire risk		Scott Lonergan		
7	Landwatch	Transportation, housing	Mike DeLapa	Jeff Baron	Y	X
8	Sustainable Carmel	Climate action	Ellen Gannon	Agnes Martelet		X
9	Church auxiliaries	Community resilience		LaNette Zimmerman	Y	X
10	Heritage Society	Community resilience	Karl Iverson	Michael LePage		X
11	Forest Theater Guild	Community resilience	Steven Moore	LaNette Zimmerman Carrie Theis		
12	PacRep	Community resilience	Steven Moore	LaNette Zimmerman Carrie Theis		
13	Carmel Women's Club	Community resilience Climate action	Nancy Twomey	Jeff Baron		X
14	Carmel Foundation	Community resilience		LaNette Zimmerman	Y	X
<b>City Departments</b>						
1	Police	Emergency preparedness Transportation	Paul Tomasi	Agnes Martelet	Y	X
2	Fire	Emergency preparedness	Carmyn Prew, Sichel Young	John Hill	Y	X
3	Forestry Division (PW)	Urban forest Sensitive habitats	Sara Davis	Agnes Martelet	Y	X
4	Public Works	Storm Drain Master Plan	Bob Harary	Agnes Martelet	Y	X
5	Library	Historic events	Katie O'Connell	Evan Kort	Y	

	ORGANIZATION	Topic (s)	Contact Persons	Committee Lead	Contacted?	Contact for Strategy Outreach?
<b>City Commissions</b>						
1	Forest & Beach Commission	Sea Level Rise Urban forest Sensitive habitats Climate action		Scott Lonergan	Y	X
2	Planning Commission	Built environment resilience Climate action		Michael LePage		X
3	City Traffic Safety Committee	Transportation		Agnes Martelet	Y	
<b>Federal / State / Regional Agencies</b>						
1	AMBAG	Climate Action Transportation	Amaury Berteaud	Agnes Martelet	Y	X
2	USGS	Sea Level Rise	Patrick Barnard	Agnes Martelet	Y	
3	CalFire	Wildfire risk and resilience Urban forest management	John Reynolds	John Hill	Y	
4	CA Department of Insurance	Wildfire risk / home insurability	Ricardo Lara	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	Y	X
9	Monterey County	Sustainability Climate Action	Ashley Paulsworth	Agnes Martelet	Y	X
10	Monterey Bay National Marine Sanctuary (NOAA)	Marine Sanctuary impacts Carmel Beach	Karen Grimmer	Agnes Martelet	Y	X
11	Transportation Agency of Monterey County	Transportation		Jeff Baron		
12	MST	Transportation		Jeff Baron		X
13	US Navy / Coast Guard	Coastal impacts		Carrie Theis		

	ORGANIZATION	Topic (s)	Contact Persons	Committee Lead	Contacted?	Contact for Strategy Outreach?
<b>Educational Groups</b>						
1	Carmel High School Environmental Club	Internships Climate Action partnership / Green Schools	Ellen Gannon	LaNette Zimmerman Scott Lonergan	Y	
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		
<b>Regional Non-Profit Organizations</b>						
1	Monterey Bay Aquarium	Marine Sanctuary impacts Climate Action Support		Carrie Theis		
2	Ecology Action	Climate Action Support	Kirsten Liske	Agnes Martelet		
<b>Other Stakeholders</b>						
1	Pebble Beach Company	Bluffs / Seawalls / Beach Regional transportation Emergency response		Jeff Baron, Carrie Theis		
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		



# CITY OF CARMEL-BY-THE-SEA

## Climate Committee

### Staff Report

September 16, 2021  
ORDERS OF BUSINESS

**TO:** Climate Committee Members

**SUBMITTED BY:** Evan Kort, Associate Planner

**SUBJECT:** Receive a presentation on the 2022 California Energy Code Update.

#### RECOMMENDATION:

Receive a presentation by Committee Member Evan Kort on the 2022 California Energy Code Update.

#### BACKGROUND/SUMMARY:

The California Energy Commission (CEC) is the state's primary energy policy and planning agency with a mission to lead the state to a 100 percent clean energy future. The CEC develops policy to reduce energy usage and costs, limit the environmental impacts of energy generation and use, and ensure a safe, resilient, and reliable supply of energy.

As California's energy policy agency, the CEC is mandated by the Warren Alquist Act to periodically update and adopt building standards to increase energy efficiency of buildings and reduce Greenhouse Gases (GHGs). Part 6 of Title 24 implemented this mandate so that every three years the CEC presents Building Energy Efficiency Standards (Energy Code) updates for new construction and renovations to existing buildings.

After the CEC adopts these standards, they are submitted to the California Building Standards Commission for approval and inclusion with other changes to the building code. The Energy Code is designed to be cost-effective so that implementation is affordable while helping California manage energy demand and advance the state's climate and clean air goals.

The proposed 2022 Energy Code update focuses on four key areas in new construction of homes and businesses:

- Encouraging electric heat pump technology and use;
- Establishing electric-ready requirements when natural gas is installed;
- Expanding solar photovoltaic (PV) system and battery storage standards;
- Strengthening ventilation standards to improve indoor air quality.

The California Building Standards Commission is scheduled to approve the code updates in December

2021 and the updated standards would go into effect on January 1, 2023. As the Energy Code updates have yet to be adopted, they are subject to change between now and the approval hearing in December 2021. Committee Member Evan Kort will provide a short summary of the proposed changes to the Energy Code.

**FISCAL IMPACT:**

N/A

**ATTACHMENTS:**



# CITY OF CARMEL-BY-THE-SEA

## Climate Committee

### Staff Report

September 16, 2021  
ORDERS OF BUSINESS

**TO:** Climate Committee Members

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

**SUBJECT:** Receive a Presentation on the Firewise Community Certification Process

#### RECOMMENDATION:

Receive a presentation by Committee Member John Hill on the Firewise Community Certification process

#### BACKGROUND/SUMMARY:

As a follow-up to research performed by Committee Member John Hill on wildfire hazard and resilience in Carmel, the Firewise Community Certification was identified as a potentially beneficial program for neighborhoods in Carmel-by-the-Sea. Mr. Hill will provide a short background on the program, its benefits, and the certification process. A summary of the Firewise program is included in Attachment 1.

#### FISCAL IMPACT:

N/A

#### ATTACHMENTS:

Attachment 1: Firewise Program Summary



**FIREWISE USA™**  
RESIDENTS REDUCING WILDFIRE RISKS



**Fire Safe Council**  
FOR MONTEREY COUNTY

## STEPS TO BECOMING A FIREWISE USA® COMMUNITY.

### 1. Form a Firewise Board or Committee

Form a board or committee that is comprised of residents and other applicable wildfire stakeholders. Consider inviting the local fire department, firesafe council, elected officials, emergency managers, and if applicable, the HOA, Neighborhood Association, or property management company to participate. This group will collaborate to develop the community's risk reduction priorities, develop a multi-year action plan based on the risk assessment and oversee the completion of the annual renewal requirements needed to retain an "in good standing" status.

### 2. Create a Wildfire Risk Assessment

Your Firewise committee will work together to write a wildfire risk assessment as the first step in becoming a nationally recognized Firewise USA® community. By following the template below, completing the assessment is a relatively easy process and will help your committee better understand the fire problem in your community. The assessment is an important piece of the Firewise USA® application process that will help identify and guide your priorities and activities. The risk assessment will be the board or committee's primary tool in determining the risk reduction priorities within your site's boundaries. Assessments need to be updated every five years.

The Firewise USA program is voluntary. Everyone within the site's boundary will benefit, whether they actively participate or not. While a community risk assessment is part of the requirement for a Firewise USA® application, individual home assessments by the Firewise committee are not mandatory. The community risk assessment is intended to document overall, global/neighborhood conditions visible from common areas, but the Firewise committee won't be looking over fences or into backyards. When visible from common areas, the assessment may look at roofing types, general building construction and condition, and general vegetation conditions to help come up with strategies to reduce neighborhood risk. While there are defensible space and vegetation management requirements in the fire code, this assessment is not about code enforcement and the assessment itself does not carry any penalties. It will be used only to help inform future risk reduction strategies.

Learn more about the risk assessment process by taking the online [Firewise Risk Assessment Training](#)

Ready to complete your assessment? Download the [Firewise USA® Risk Assessment Template](#) (PDF)

### 3. Develop an Action Plan

Your board/committee will develop an action plan – a prioritized list of risk reduction projects/ investments for the participating site, along with suggested homeowner actions and education activities that participants will strive to complete annually, or over a period of multiple years. Action plans should be updated at a minimum of at least every three years.

### 4. Conduct Educational Outreach

Host an outreach event and work with neighbors on addressing items in the action plan. These efforts will go towards your site's annual wildfire risk reduction investment. At a minimum, each site is required to annually invest the equivalent of one volunteer hour per dwelling unit in wildfire risk reduction actions. If your site has identified 100 homes within its boundary, 100 hours of work or the monetary equivalent value of volunteer time needs to be invested towards the Action Plan for that year.

[Find examples](#) (PDF) of activities that count towards your investment.

Use the [volunteer hourly worksheet](#) (PDF) to collect information from residents in your community.

NOTE – Firewise USA Sites are NOT required to invest or pay any cash to meet the risk reduction investment obligation. Your volunteer time, and the time spent by homeowners clearing their property, counts toward the investment. Look at it this way: each homeowner must invest and document ONE HOUR of work towards reducing wildfire risk. That's it!

### 5. Application

You may start an application at any point in the overall process by creating a site profile in the [Firewise USA™ portal](#). Once all the criteria have been completed, the electronic application can be submitted.

**[For additional information or assistance](#)**  
**Please contact Richard Bates at [firewise.fscmc@gmail.com](mailto:firewise.fscmc@gmail.com)**  
**or visit [www.firesafemonterey.org](http://www.firesafemonterey.org)**

## Why be Firewise?

In California, millions of homes sit precariously within wildfire risk areas. Last year alone, 9,917 incidents burned nearly 4.3 million acres and 10,488 structures — mostly in the state's remote, rural areas. No longer a seasonal event, the threat of wildfire is now yearlong in California. To help mitigate this increasingly urgent threat, the nonprofit Fire Safe Council For Monterey County (FSCMC) [firesafemonterey.org](http://firesafemonterey.org) serves local communities and individual property owners by creating awareness, presenting information, facilitating access to available resources and providing assistance with coordinating efforts to better prepare for wildfire. FSCMC has joined forces with the National Fire Protection Association's Firewise USA® recognition program to help neighbors to reduce wildfire risks at the local level. The Fire Safe Council congratulates two neighborhoods in Carmel Valley for becoming the first Firewise USA®-**recognized** communities in Monterey County, Robles del Rio and Rancho Tierra Grande. Benefits of becoming a Firewise Community include:

### **Get a framework for action**

A neighborhood will organize a board or committee to oversee the process, obtain a wildfire risk assessment with an action plan, and host an outreach event to inform neighbors on how to make their homes and properties safer during wildfire season. The criteria help get a community started toward annual, systematic action to reduce their risks from brush, grass and forest fires.

### **Learn about wildfire**

As people go through the process, they learn about wildfire risks in the community and the simple things they can do to reduce them. They connect with experts — local fire fighters, state forestry professionals, and national researchers — to continue to learn about fire and find resources to accomplish fire-safe actions.

### **Get peace of mind**

Knowing that they are using the best information available and actually taking steps to reduce the risk of damage from fire helps people start to feel safer in their environment and in their homes. Having a plan for what to do in the event of a fire helps people become calmer and more prepared to act quickly.

### **Community-building**

As neighbors get together to do work, often meeting one another for the first time, they build a stronger bond with each other. This strengthening of community ties can benefit residents in many ways and is especially helpful during an emergency or an evacuation.

### **Access to funding and assistance**

Preference is sometimes given to Firewise USA® sites over other candidates when allocations of grant money are made for wildfire safety or fuel mitigation. The reason is that there are invariably more requests than available funds when grants are available through state or federal agencies. If requests are equally worthy, some officials tend to have more confidence in communities that have demonstrated the foresight of becoming a recognized Firewise USA® site.

### **Insurance discount for USAA members in certain states**

The Departments of Insurance in the states of California, Colorado, Texas, Arizona, Oregon, New Mexico and Utah have approved filings to give homeowners insurance discounts to USAA members living in communities recognized by the Firewise USA® program [firewise.org](http://firewise.org)