



CITY OF CARMEL-BY-THE-SEA CLIMATE COMMITTEE

Contact: 831.620.2000 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, February 20, 2020

4:00 PM

CALL TO ORDER AND ROLL CALL

PUBLIC APPEARANCES

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

ANNOUNCEMENTS

ORDERS OF BUSINESS

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

1. Review of Revised Priority Hazards and Assets Matrix, Data Sources and Gaps
2. Consideration of Consultant Support Services
3. Review of the Draft List of Community Organizations and Regional Partners for the Climate Action and Adaptation Plan Project
4. Review of the Draft Work Plan for Developing a Climate Action Plan

AGENDA ITEMS FOR NEXT MEETING

ADJOURNMENT

This agenda was posted at City Hall located on Monte Verde Street between Ocean and 7th Avenues, Harrison Memorial Library located on the NE corner of Ocean Avenue and Lincoln Street, and the Carmel-by-the-Sea Post Office located on 5th Avenue between Dolores Street and San Carlos Street, and the City's webpage <http://www.ci.carmel.ca.us/carmel/> on in accordance with the 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

February 20, 2020
ORDERS OF BUSINESS

TO:	Climate Committee Members
SUBMITTED BY:	Agnes Martelet, Environmental Compliance Manager
SUBJECT:	Review of Revised Priority Hazards and Assets Matrix, Data Sources and Gaps

RECOMMENDATION:

Review and provide comments on the revised matrix of priority hazards and assets at risk, and on the draft list of data sources and data gaps.

BACKGROUND/SUMMARY:

A draft list of priority hazards and assets at risk was provided at the previous Climate Committee meeting for review. Comments from the Committee have been incorporated in the revised matrix included in Attachment 1.

The matrix of priority hazards and assets at risk was used as the basis to develop a draft table of data sources and data gaps, which is included in Attachment 2. Data sources identified in the table include locally-created documents and publicly available regional and statewide data sources. Important assets and hazards for which no information source was identified were included on the list of data gaps.

FISCAL IMPACT:

N/A

ATTACHMENTS:

- Attachment 1 - Priority Hazards and Assets
- Attachment 2 - Data Sources and Data Gaps

City of Carmel-by-the-Sea
 Priority Hazards and Assets
 February 20, 2020

Priority Assets at Risk	Priority Hazards						
	Sea Level Rise	Ocean Warming	Wildfires	Stronger Storms & Higher Windspeeds	More Variable Rainfall	Increased Temperature	Fog changes
Natural Assets							
Mission Trail Nature Preserve			X	X	X	X	X
North Dunes	X				X	X	X
Urban Forest			X	X	X	X	X
Marine Sanctuary		X		X	X	X	X
Carmel Beach	X	X		X			X
Community							
Persons with disabilities			X	X	X	X	
Elderly Population			X	X	X	X	
Visitors	X	X	X	X			
Local Businesses	X	X	X	X		X	
Utilities							
Water Supply (Drought Tolerance)			X		X	X	
Electrical Energy Transmission (Electric Vehicles, safety power shutoffs, outages)			X	X		X	
Sanitary Sewer System	X				X		
PG&E underground infrastructure	X		X				
Storm drainage system	X			X	X		
Regional Infrastructure							
Wastewater Treatment Facility	X			X	X	X	
Transportation Infrastructure	X		X	X	X		
Hospital and emergency medical care facilities			X	X		X	
Landfill & Waste Management				X	X		
Local Infrastructure							
Scenic coastal trail, public restrooms and beach access infrastructure	X		X	X	X	X	X
Coastal roadways and parking	X			X	X	X	
Seawalls and revetments	X			X	X		
Other city streets				X	X		
Private property (including many second homes)	X		X	X	X	X	

City of Carmel-by-the-Sea
 Data Sources and Data Gaps
 February 20, 2020

Priority Hazard	Priority Assets at Risk from Hazard	Data Sources for Hazards			Data sources for assets at risk	Data Gaps
		Source	Data Precision	Reliability		
Sea Level Rise	<ul style="list-style-type: none"> - North Dunes - Carmel Beach - Visitors - Local businesses - Sanitary sewer system - PG&E underground infrastructure - Storm drainage system - Wastewater treatment facility - Transportation infrastructure - Scenic coastal trail, public restrooms and beach access infrastructure - Coastal roadways and parking - Seawalls and revetments - Private property 	<ul style="list-style-type: none"> - USGS CosMos - State of California Sea-Level Rise Guidance, 2018 Update - Cal-Adapt 	Regional	Moderate	<ul style="list-style-type: none"> - Del Mar Master Plan, 2009 - Shoreline Management Plan, 2003 (seawalls & revetments, Scenic Coastal Trail) - CAWD WWTP Sea Level Rise Study, 2018 (WWTP and sewer system) - North Dunes Restoration Plan, 2016 (North Dunes) - Storm Drain Master Plan, in process (Storm drainage system) - Conserving California's Coastal Habitats, A Legacy and a Future with Sea Level Rise (regional data, The Nature Conservancy) 	<ul style="list-style-type: none"> - PG&E infrastructure resilience and potential issues - Evaluation of coastal infrastructure based on new sea level rise modeling - Critical transportation infrastructure at risk
Ocean warming & acidification	<ul style="list-style-type: none"> - Marine Sanctuary - Carmel Beach - Visitors - Local businesses 				<ul style="list-style-type: none"> - Projected impacts of ocean warming/acidification on local marine life and health of Sanctuary 	
Wildfires	<ul style="list-style-type: none"> - Mission Trail Nature Preserve - Urban forest - Persons with disabilities - Elderly population - Visitors - Local businesses - Water supply - Electrical energy supply - Transportation infrastructure - Hospital and emergency medical care - Scenic coastal trail, rr, and beach access - Private property, incl. 2nd homes 	<ul style="list-style-type: none"> - California 4th Climate Assessment - Cal-Adapt - Climate Change and Health Profile Report, Monterey County, 2017 - Living with Fire in California's Coast Ranges, Promoting Fire-Resistant Communities and Landscapes in an Era of Global Change, Symposium Proceedings, May 2018 	Regional	Moderate	<ul style="list-style-type: none"> - MTNP Baseline Biological Assessment, 2016 - MTNP Master Plan - Forest Management Plan, 2000 - Climate Change and Health Profile Report, Monterey County, 2017 (sensitive populations) - City of Carmel-by-the-Sea Emergency Operations Plan, 2015 	<ul style="list-style-type: none"> - Water supply resilience to wildfires - PG&E infrastructure resilience - Emergency response and medical care resilience

City of Carmel-by-the-Sea
 Data Sources and Data Gaps
 February 20, 2020

Priority Hazard	Priority Assets at Risk from Hazard	Data Sources for Hazards			Data sources for assets at risk	Data Gaps
		Source	Data Precision	Reliability		
Stonger storms and higher windspeeds	<ul style="list-style-type: none"> - Mission Trail Nature preserve - Urban forest - Marine sanctuary - Carmel Beach - Persons with disabilities - Elderly population - Visitors - Local businesses - Electrical energy transmission - PG&E underground infrastructure - Storm drainage system - Transportation infrastructure - Hospital and emergency medical care - Landfill and waste management - Scenic coastal trail, public restrooms and beach access infrastructure - Coastal roadways and parking - Seawalls and revetments - Other city streets 	<ul style="list-style-type: none"> - California 4th Climate Assessment - Cal-Adapt 	Regional	Moderate	<ul style="list-style-type: none"> - MTNP Baseline Biological Assessment, 2016 - MTNP Stream Stability Study, 2019 - Storm Drain Master Plan, in progress - Shoreline Management Plan, 2003 	<ul style="list-style-type: none"> - Resilience of urban forest to stronger storms - Resilience of PG&E infrastructure - Resilience of waste management operations to stronger storms and variable rainfall - Emergency response and medical care resilience - Combined effects of erosion from stronger storms and sea level rise on coastal infrastructure
More variable rainfall	<ul style="list-style-type: none"> - Mission Trail Nature Preserve - North Dunes - Urban forest - Marine Sanctuary - Water supply - Sanitary sewer system - Storm drainage system - Wastewater treatment facility - Transportation Infrastructure - Landfill and waste management - Scenic coastal trail, public restrooms and beach access infrastructure - Coastal roadways and parking - Seawalls and revetments - Other city streets - Private property, incl. second homes 	<ul style="list-style-type: none"> California 4th Climate Assessment Cal-Adapt 	Regional	Low	<ul style="list-style-type: none"> - North Dunes Restoration Plan, 2016 - North Dunes Restoration Project Update, 2019 - Monterey Peninsula, Carmel Bay and South Monterey Bay Integrated Regional Water Management Plan Update, August 2019 (Water supply, habitats) - 2010 Urban Water Management Plan, Monterey County District, California American Water, September 2012 (Water supply) 	<ul style="list-style-type: none"> - Water supply resilience to droughts - Emergency response and medical care resilience - Combined effects of erosion from stronger storms and sea level rise on coastal infrastructure

City of Carmel-by-the-Sea
 Data Sources and Data Gaps
 February 20, 2020

Priority Hazard	Priority Assets at Risk from Hazard	Data Sources for Hazards			Data sources for assets at risk	Data Gaps
		Source	Data Precision	Reliability		
Increased temperature	<ul style="list-style-type: none"> - Mission Trail Nature Preserve - North Dunes - Urban Forest - Marine Sanctuary - Persons with disabilities - Elderly population - Electrical energy transmission - Water supply - Wastewater treatment facility - Hospital and emergency medical care - Scenic coastal trail, rr, beach access - Coastal roadways and parking - Private property 	Cal-Adapt Climate Change and Health Profile Report, Monterey County, 2017	Regional	Moderate	Climate Change and Health Profile Report, Monterey County (Persons w disabilities, elderly population, health & vector borne illness impacts)	- Urban forest resilience to increased temperature
Fog changes	<ul style="list-style-type: none"> - Mission Trail Nature Preserve - North Dunes - Urban Forest - Marine Sanctuary - Carmel Beach - Scenic coastal trail, rr, beach access 	California 4th Climate Assessment	Regional	Low		- Future fog patterns



CITY OF CARMEL-BY-THE-SEA

Climate Committee

Staff Report

February 20, 2020
ORDERS OF BUSINESS

TO: Climate Committee Members

SUBMITTED BY: Carrie Theis, Council Member

SUBJECT: Consideration of Consultant Support Services

RECOMMENDATION:

Consider the option to retain a qualified consultant to support the Committee's efforts to prepare the Climate Action and Adaptation Plan.

BACKGROUND/SUMMARY:

The Climate Committee, with the help of City Staff, has developed a draft work plan for a Climate Adaptation Plan. This work plan contains four phases of tasks with a timeline to be completed by August of 2021. Additionally, staff has prepared and will present a Climate Action Plan at this February meeting which will have more phases and tasks and will coincide with the Climate Adaptation Plan. Between the two work plans, the work needed to accomplish all of the tasks is significant and could be aided with consulting support.

In the FY 2019/20 budget ending June 30, 2020, the City Council allocated \$55,000 towards the Climate Change project. When looking over the workload of both plans, the Committee could use these funds to hire a consultant to assist with the Phase II of the Climate Adaptation Plan, Assess Vulnerability.

If the Climate Committee agrees with this consulting support, then a small committee would need to be assembled to look over the qualifications of several environmental consultants, interview the most qualified firms, and make a hiring recommendation to the Climate Committee. The resulting Professional Services Agreement with the best qualified firm would be subject to approval by the City Council.

FISCAL IMPACT:

In the FY 2019/20 Capital Improvement budget ending June 30, 2020, the City Council allocated \$55,000 towards the Climate Change project. These funds could be fully or partially committed to retain a consultant to support the Committee's efforts. Any unused funds at the end of the fiscal year may be rolled over to the next fiscal year.

ATTACHMENTS:



CITY OF CARMEL-BY-THE-SEA

Climate Committee

Staff Report

February 20, 2020
ORDERS OF BUSINESS

TO:	Climate Committee Members
SUBMITTED BY:	Agnes Martelet, Environmental Compliance Manager
SUBJECT:	Review of the Draft List of Community Organizations and Regional Partners for the Climate Action and Adaptation Plan Project

RECOMMENDATION:

Review and provide comments on the draft list of Community Organizations and Regional Partners for the Climate Action and Adaptation Plan Project.

BACKGROUND/SUMMARY:

Engaging community groups and regional organizations would help the Climate Action and Adaptation Plan Project by providing knowledge, information, and ideas that the Climate Committee may want to consider. Additionally, engaging various groups can help foster collaboration on solutions, which could result in more timely and effective implementation.

Attachment 1 provides a list of community organizations and regional groups that could be engaged regarding the Climate Project. The list includes potential topics of discussion and primary contacts for those organizations. The list also includes a column for Climate Committee members that could potentially take the lead on outreach to these organizations. Committee member names were only included in the potential outreach lead column if contact has already been made with an organization.

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

February 20, 2020

	ORGANIZATION	Topic (s)	Contact Persons	Potential Lead
Utilities				
1	Carmel Area Wastewater District	Sewer system Wastewater Treatment Facility	Barbara Buikema, Daryl Lauer	
2	Monterey Bay Community Power	Energy supply		
3	Cal Am	Water supply		
4	Monterey Peninsula Water Management District	Water supply	Stephanie Locke	
5	GreenWaste Recovery	Waste management and recycling	Jim Moresco	
6	Monterey Regional Waste Management District	Waste management and recycling	Tim Flanagan	
7	PG&E	Energy supply		
Professional Organizations				
1	California AIA	Built environment resilience		
2	Chamber of Commerce	Local business, tourism	Jenny McMurdo	
3	Monterey County Association of Realtors	Sea Level Rise Wildfire risk		
4	MCCVB	Visitors		
5	Visit Carmel	Visitors / local business	Amy Herzog	
6	Carmel Innkeepers Association	Visitors / local business		
7	Sunset Center		Christine Sandin	
Local Community Groups				
1	Carmel Residents Association	Community resilience Climate action	Barbara Livingston	
2	Carmel Advisory Board	Community resilience Climate action		
3	Carmel Rotary Club	Community resilience Climate action		Carrie, Jeff
4	Carmel Lions Club	Community resilience Climate action		
5	Friends of Carmel Forest	Urban forest	Ramie Allard	

6	Friends of MTNP	Wildfire risk Sensitive habitats	Skip Lloyd	
7	Del Monte Forest Conservancy	Wildfire risk		
8	Landwatch	Transportation, housing	Mike DeLapa	
9	Sustainable Carmel	Climate action	Ellen Gannon	
10	Church auxiliaries			
11	Heritage Society			
12	Forest Theater Guild			
13	PacRep			
City Departments				
1	Police and Fire	Emergency preparedness Transportation	Paul Tomasi	
2	Forestry Division (PW)	Urban forest Sensitive habitats	Sara Davis	
City Commissions				
1	Forest & Beach Commission	Sea Level Rise Urban forest Sensitive habitats Climate action		
2	Planning Commission	Built environment resilience Climate action		
3	City Traffic Safety Committee	Transportation		
4	Library Board	Climate action Community resilience		
Federal / State / Regional Agencies				
1	AMBAG	Climate Action Transportation	Elisabeth Bertrand	Agnes
2	USGS	Sea Level Rise	Patrick Barnard	Agnes
3	CalFire	Wildfire risk and resilience Urban forest management		
4	CA Department of Insurance	Wildfire risk / home insurability		
5	California Coastal Commission	Sea Level Rise		
6	IRWMP Group	Water supply Watershed / storm water projects		
7	Monterey County (OES)			
8	Monterey Bay National Marine Sanctuary (NOAA)	Marine Sanctuary impacts Carmel Beach	Bridget Hoover	
9	California Current Acidification Network	Ocean acidification and warming impacts		

10	Transportation Agency of Monterey County	Transportation		
11	US Navy / Coast Guards	Coastal impacts		
Educational Groups				
1	Carmel High School Environmental Club	Internships Climate Action partnership / Green Schools		
2	Stevenson, York, Santa Catalina	Climate Action partnership / Green Schools		
3	Youth Center	Climate Action partnership / Green Schools		
4	CSUMB	Internships Climate Action partnership / Green Schools		
5	MPCC	Internships Climate Action partnership / Green Schools		
6	MIISS	Climate Action partnership / Green Schools		
7	NPS	Climate Action partnership / Green Schools		
Regional Non-Profit Organizations				
1	Monterey Bay Economic Partnership	Climate Action Support		
2	Monterey Bay Aquarium	Marine Sanctuary impacts Climate Action Support		
3	Ecology Action	Climate Action Support		
Other Stakeholders				
1	Pebble Beach Company	Bluffs / Seawalls / Beach Regional transportation Emergency response		
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)	
3	Cities with similar challenges (e.g. PG, Monterey, Seaside, Pacifica, Del Mar, Malibu, Dana Point, Imperial Beach)			



CITY OF CARMEL-BY-THE-SEA

Climate Committee

Staff Report

February 20, 2020
ORDERS OF BUSINESS

TO: Climate Committee Members

SUBMITTED BY: Evan Kort, Assistant Planner

SUBJECT: Review of the Draft Work Plan for Developing a Climate Action Plan

RECOMMENDATION:

Review and provide comments on the draft work plan to develop a Climate Action Plan.

BACKGROUND/SUMMARY:

A draft work plan to develop the Climate Adaptation Plan was reviewed at the Committee's January meeting. This Climate Action Work Plan, which is included in Attachment 1, covers actions to reduce greenhouse gas emissions. This work plan is organized to have major milestones coordinated with those of the Climate Adaptation Plan so the two plans can be completed in tandem.

FISCAL IMPACT:

N/A

ATTACHMENTS:

Attachment 1 - Climate Action Plan Work Plan

**Climate Action Plan
DRAFT WORK PLAN**

February 20, 2020

Project Phase	Tasks	Suggested Lead(s)	Done?	Timeline																							
				Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21
Phase I - Project Definition and Initiation																											
	Create a Climate Action Plan Advisory Committee	Council	✓																								
	Identify desired project outcomes (mission)	Committee	✓																								
	Education: Background on GHG Inventory	Staff	✓																								
	Education: Climate Action Planning Guidance	Staff	✓																								
	Work Plan & Discuss the Scope of the Plan	Staff																									
**	Identify & make contact with community organizations to engage with for information sharing and coordination	Committee																									
**	Identify & make contact with regional partners to engage with for information and coordination	Council																									
**	Identify sources of support & timing of support where applicable (e.g. grants)	Staff																									
**	Identify opportunities for community workshops and educational outreach (continuous)	Council/Committee																									
**	Council Update on Phase I progress	Council																									
Phase II - Baseline Assessments & Target Adoption																											
	Develop Community Inventory Baseline (2015)	Staff																									
	Develop Municipal Inventory Baseline	Staff*																									
	Identify Goals and GHG Emissions Reduction Targets	Committee																									
	Estimate trends through an emissions forecast	Staff*																									
**	Council Update on Inventories, Forecasting, and preliminary strategies for GHG reduction	Council																									
	Identify opportunities for community workshops and educational outreach (continuous)	Council/Committee																									
Phase III - Develop Climate Action Plan																											
	Identify Greenhouse Gas Emissions Reduction Strategies	Committee*																									
	Review and prioritize strategies	Committee*																									
	Conduct Analysis and Assemble Plan Strategies	Staff*																									
	Create Implementation Framework and Timeline	Council*																									
**	Engagement and Outreach: workshops to develop and gather feedback on proposed strategies & implementation timeline	Council/Committee*																									
	Council Review of Prioritized Strategies	Council*																									
Phase IV - Action Plan Implementation & Adoption																											
**	Assemble Climate Action Plan Report	Staff*																									
**	Review and Finalize Report	Staff*																									
**	Council Review and Adoption of the Plan	Council																									

* denotes item that could be conducted by consultant

** shared task with Adaptation Plan