"ResilientMas	s Metrics" - All Res	ilientMass Priority	Metrics	All metrics Currently Being Development.	g Tracked (includi	ng Climate Report	Card) and Prioritized
				CONTRIBUTING	UPDATE		YEAR APPROVED AS
SECTOR	GOAL	INDICATOR	METRIC	AGENCIES	FREQUENCY	PRIORITY BIN	PRIORITY METRIC
	Describe what a Massachusetts	Statements that could point to					
Groupings of goals,	resilient to climate change would	(indicate) success or progress ;	Measurable (quantitatively) or	Agencies presently assumed to	How often metric		This column identifies the y
indicators, and metrics	look like; highlight priority	often includes	trackable (qualitatively)	conduct work or track data	would be reported;		the metric was approved a
that address similar	impacts that need to be	a direction (e.g., more/less,	outcomes that represent an	related to the metric;. Will need	Will need to be	See "bin" descriptions	priority metric and added t
themes	addressed in order to succeed	increased/decreased)	indicator (or multiple indicators)	to be confirmed.	confirmed.	on README sheet	list.
	The government is able to minimize						
	interruptions to the services it	SERVICE CONTINUITY: State					
	provides amid threats from coastal	government services experience			annually (once 100% of		
	3 , , , ,	minimal disruptions and losses from	% of state agencies with up-to-date		agencies, check		
4 Services	and extreme heat.	climate change and extreme events	"Continuity of Operations Plans"	MEMA, all agencies involved	periodically)	Currently being tracked	
	5	GOVERNMENT PLANNING CAPACITY:					
	capacity to meet the increase in	Increased availability of personnel to					
		plan and implement climate-					
Government Systems and	maintenance, public health resources, and emergency services	resilience projects across all regions and communities, at the state and	Number of communities with updated MVP 2.0 or Hazard	EOEEA MVP Program; EOPPS MEMA			
7 Services	caused by climate stressors.	local levels	Mitigation Plans (HMPs)	Mitigation Unit, DER	annually	Climate report card	
					annaany		
	The government has enough	GOVERNMENT SERVICE CAPACITY:					
		Increased availability of state government resources to meet					
	maintenance, public health	increased demand for all	Number of state agencies with				
Government Systems and	resources, and emergency services	government services due to climate	climate vulnerability assessments of				
8 Services	caused by climate stressors.	change*	assets and operations	EEA, all agencies involved	every 5 years	Climate report card	
	The government has enough	GOVERNMENT SERVICE CAPACITY:					
		Increased availability of state					
	demand for infrastructure	government resources to meet					
	maintenance, public health	increased demand for all					
Government Systems and	resources, and emergency services	government services due to climate	Amount of federal and state				
9 Services	caused by climate stressors.	change*	resilience funding	EEA, all agencies involved	annually	Climate report card	
	The government has enough	GOVERNMENT SERVICE CAPACITY:					
		Increased availability of state					
		government resources to meet					
Covernment Systems and	maintenance, public health	increased demand for all	Percent of 2023 ResilientMass Plan				
Government Systems and 0 Services	resources, and emergency services caused by climate stressors.	government services due to climate change*	actions in progress or complete	EEA, all agencies involved	annually	Climate report card	
	, State-owned buildings, facilities*,	GOVERNMENT FACILITIES SAFETY:				· · ·	
	_	State government facilities					
		experience minimal damages from	% of new state facility construction				
	local governments) are resilient to	climate change and extreme events	projects that consider projected				
	coastal flooding, inland flooding,	due to climate-safe design standards,	flooding, heat, drought, wildfire,				
Government Systems and	wind, extreme heat, and extreme	operational practices and siting	and wind risks throughout the		_	Prioritized for	
1 Services	storms.	decisions	project's lifespan.	MEPA, EEA, DOT, DOER, MBTA	every 5 years	Development	
	State-owned buildings, facilities*,						
	and assets as well as key facilities						
	used in partnership with the state or						
	local governments) are resilient to	INVESTMENT: Increasing portion of					
Government Systems and	coastal flooding, inland flooding, wind, extreme heat, and extreme	State infrastructure project designs that account for future climate	\$ of state funding for state facility			Prioritized for	
Sovernment systems and	wind, extreme near, and extreme		resilience improvements		1		1

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SECTOR	GOAL	INDICATOR	METRIC	CONTRIBUTING AGENCIES	UPDATE FREQUENCY	PRIORITY BIN	YEAR APPROVED AS PRIORITY METRIC
Groupings of goals, indicators, and metrics that address similar themes	Describe what a Massachusetts resilient to climate change would look like; highlight priority impacts that need to be addressed in order to succeed	Statements that could point to (indicate) success or progress ; often includes a direction (e.g., more/less, increased/decreased)	Measurable (quantitatively) or trackable (qualitatively) outcomes that represent an indicator (or multiple indicators)	Agencies presently assumed to conduct work or track data related to the metric;. Will need to be confirmed.	<i>How often metric would be reported; Will need to be confirmed.</i>		This column identifies the ye the metric was approved as priority metric and added to list.
Government Systems and 18 Services	Emergency planning at the state and municipal level accounts for climate change-driven extremes, including changes in frequency, intensity of events, and the possible occurrence of serial and compound events.	LOCAL EMERGENCY READINESS: More communities have trained Certified Emergency Response Teams (CERTs) available to assist in extreme events	% of municipalities covered by Community Emergency Response Teams (CERTs) registered with FEMA that have participated in a training with MEMA in the last two years	мема	annually	Currently being tracked	
25 Food and Water Security	Food distribution networks provide uninterrupted access to healthy foods, even during extreme weather events and climate-driven supply chain disruptions.	RELIABLE FOOD ACCESS: More reliable food access during extreme events	Amount of state funding for climate resilient food distribution systems	MVP, BCHAP, MDAR, DFW, DMF	annually	Climate report card	
30 Food and Water Security	Local food production provides reliable access to healthy foods, day- to-day and in an emergency.*	FOOD SAFETY: Decreased infections from food-born illnesses (e.g., vibriosis) that are sensitive to climate change.*		DPH, DMF	every 5 years	Prioritized for Development	
33 Food and Water Security	Local food production provides reliable access to healthy foods, day- to-day and in an emergency.*	LOCAL FOOD SOURCING: Increase proportion of diets coming from locally grown food sources*	Acres of land protected for agricultural use	EOEEA, MDAR	annually	Currently being tracked	
38 Food and Water Security	People have access to safe and affordable drinking water via wells or public water supply in face of potential drought or water quality issues driven by climate change.	SUFFICIENT PUBLIC WATER SUPPLIES: Increased or maintained buffer between water used and water available in public surface water supplies	# (or %) of municipalities with up-to- date water supply protection plans (incl. drought plans, protection against contamination)	DEP DWP (Drinking Water Program), DCR	every 5 years	Prioritized for Development	
41 Food and Water Security	People have access to safe and affordable drinking water via wells or public water supply in face of potential drought or water quality issues driven by climate change.	WATER QUALITY MAINTENANCE: Decreased impacts of harmful algal blooms and other water quality issues worsened by climate change at water supply sources	Acres of drinking water supply watersheds protected through state programs	EOEEA DCS	annually	Climate report card	
43 Food and Water Security	People have access to safe and affordable drinking water via wells or public water supply in face of potential drought or water quality issues driven by climate change.	WATER QUALITY MAINTENANCE: Decreased impacts of harmful algal blooms and other water quality issues worsened by climate change at water supply sources	# of public health advisories in public water supplies attributed to harmful algal blooms	DEP	annually	Prioritized for Development	
48 Infrastructure	People have access to housing that is safe from flooding and other climate hazards and is affordable, even as demand for safe housing increases and resilience projects make some areas more desirable.	CLIMATE-SAFE HOUSING: Reduced damage from flooding and other climate-driven extreme events to private and public housing (incl.	% of state-aided housing developments, identified as highly vulnerable to multiple climate hazards, that have received climate	HLC, DCAMM(?)	annually	Climate report card	

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SECTOR	GOAL	INDICATOR	METRIC	CONTRIBUTING AGENCIES	UPDATE FREQUENCY	PRIORITY BIN	YEAR APPROVED AS PRIORITY METRIC		
Groupings of goals, indicators, and metrics that address similar themes	Describe what a Massachusetts resilient to climate change would look like; highlight priority impacts that need to be addressed in order to succeed	Statements that could point to (indicate) success or progress ; often includes a direction (e.g., more/less, increased/decreased)	,,	Agencies presently assumed to conduct work or track data related to the metric;. Will need to be confirmed.	How often metric would be reported; Will need to be confirmed.		This column identifies the y the metric was approved as priority metric and added to list.		
51 Infrastructure	People have access to housing that is safe from flooding and other climate hazards and is affordable, even as demand for safe housing increases and resilience projects make some areas more desirable.	DECARBONIZED HOUSING: More housing is retrofitted or built to maintain safe conditions with minimized energy use.	# of residential heat pump installations (annual and cumulative)	Mass Save	annually	CRC-Decarb			
53 Infrastructure	People have access to housing that is safe from flooding and other climate hazards and is affordable, even as demand for safe housing increases and resilience projects make some areas more desirable.	DECARBONIZED HOUSING: More housing is retrofitted or built to maintain safe conditions with minimized energy use.	# of residential energy audits and weatherization projects (annual and		annually	CRC-Decarb			
61 Infrastructure	areas with fewer climate risks or driven from their homes by climate	CLIMATE MIGRATION PLANNING: Increased comprehensive planning for potential population fluctuations driven by climate change (inmigration and outmigration)	% of local hazard mitigation plans, comprehensive plans, and/or climate action plans that consider the potential for population changes driven by climate change (in/outmigration)	MEMA, MVP/EEA, municipal/regional planning staff	every 5 years	Prioritized for Development			
65 Health	People are safe and healthy during extreme heat events.	HEAT MORBIDITY: Fewer cases of illness linked to extreme heat events	Number of emergency department visits and hospitalizations attributable to extreme heat (normalized to the number of events/year and population)	DPH	annually	Prioritized for Development			
66 Health	People are safe and healthy during extreme heat events.	ACCESS TO COOL SPACES: Increased and sustained access to public and/or private cool spaces	\$ for projects that focus on reducing negative extreme heat health outcomes	MVP, DPH, MEMA	annually	Prioritized for Development			
67 Health	People are safe and healthy during extreme heat events.	ACCESS TO COOL SPACES: Increased and sustained access to public and/or private cool spaces	# and % of relevant projects requiring MEPA review that implement best practices for climate resilience solutions for heat	МЕРА	every 5 years	Prioritized for Development			
69 Health	People are safe and healthy during extreme heat events.	ACCESS TO COOL SPACES: Increased and sustained access to public and/or private cool spaces	Percent of population with public outdoor recreation opportunities for cooling within half mile of home	DCR	annually	Climate report card			
70 Health	People are safe and healthy during extreme heat events.	ACCESS TO COOL SPACES: Increased and sustained access to public and/or private cool spaces	# of shade structures (including tree plantings) implemented in areas scoring high in the DCR's Shade Suitability Assessment (e.g. in EJ communities, in areas with low existing canopy cover)	DCR	every 5 years	Prioritized for Development			

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SECTOR	GOAL	INDICATOR	METRIC	AGENCIES	FREQUENCY	PRIORITY BIN	PRIORITY METRIC	
	Describe what a Massachusetts	Statements that could point to						
Groupings of goals,	resilient to climate change would	(indicate) success or progress ;	Measurable (quantitatively) or	Agencies presently assumed to	How often metric		This column identifies the	
indicators, and metrics	look like; highlight priority	often includes	trackable (qualitatively)	conduct work or track data	would be reported;		the metric was approved a	
that address similar themes	impacts that need to be addressed in order to succeed	a direction (e.g., more/less, increased/decreased)	outcomes that represent an indicator (or multiple indicators)	related to the metric;. Will need to be confirmed.	Will need to be confirmed.	on README sheet	priority metric and added list.	
			% of MA residents who report					
			having a cool space they are					
		ACCESS TO COOL SPACES: Increased	comfortable using (public or					
	People are safe and healthy during	and sustained access to public	private) during the day and during			Prioritized for		
'1 Health	extreme heat events.	and/or private cool spaces	the night	DCR, DCS, MOOR	every 5 years	Development		
		PUBLIC HEAT AWARENESS: Increased awareness of heat events and						
			# of state employees and local					
		and guardians, camp counselors,	health officials who complete					
	People are safe and healthy during	coaches, teachers) about signs and	climate and health trainings from					
'3 Health	extreme heat events.	treatment of heat-related illness.	ОРН	DPH	annually	Currently being tracked		
		CLASSROOM HEAT SAFETY: Increase						
		in the number of schools (K-12),						
			% of public K-12 schools with low-					
	People are safe and healthy during	designed and equipped to provide safe temperatures for students and	emission cooling systems (including back-up power, passive			Prioritized for		
5 Health	extreme heat events.	teachers		EOE, MA School Building Authority	every 5 years	Development		
		WORKER HEAT SAFETY: Decrease in	# of worker injuries and illnesses					
		the incidence of job-related illness	occurring during extreme heat					
	People are safe and healthy during	and injuries during extreme heat	events (normalized to the number			Prioritized for		
9 Health	extreme heat events.	events.	of events/year and population)	DPH, MDAR	annually	Development		
			# of morbidity incidences (injuries,					
	People are safe and healthy during		diseases) attributable to a specific					
	and following coastal and inland flooding and windstorm events and	Fewer emergency department visits	flood and storm event (normalized			Prioritized for		
1 Health	related power interruptions.	during flooding, storms, and related power outages.	to the number of events/year and population)	DPH	annually	Development		
	People are safe from and healthy					Development		
	during climate-driven air quality							
	events, like wildfire smoke,							
	allergens, and general pollution that							
	is made worse by climate change							
	(for example, faster ozone formation with warmer temperatures and less	AIR QUALITY MAINTENANCE:						
	frequent flushing of particulate	Decreased exposure to poor air						
	matter with changing precipitation		\$ state funding toward improving					
9 Health	patterns).	change)	school ventilation and air quality	DESE	every 5 years	Currently being tracked		
	Local agriculture, forestry, marine							
	fisheries, and aquaculture industries	CONTINUITY OF NATURAL RESOURCE	\$ of loss to farms per drought event					
	remain productive in the face of	ECONOMIES: Minimized losses from	(defined by the Palmer Drought					
	climate threats to support the local		Severity Index (PDSI)) and flood		_			
6 Economy	economy and food security.	resource-based local businesses	event (2 or more inches in 24 hours)	MDAR	every 5 years	Currently being tracked		

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	SECTOR	GOAL	INDICATOR	METRIC	AGENCIES	FREQUENCY	PRIORITY BIN	PRIORITY METRIC		
1	Groupings of goals, indicators, and metrics that address similar themes	Describe what a Massachusetts resilient to climate change would look like; highlight priority impacts that need to be addressed in order to succeed	Statements that could point to (indicate) success or progress ; often includes a direction (e.g., more/less, increased/decreased)	Measurable (quantitatively) or trackable (qualitatively) outcomes that represent an indicator (or multiple indicators)	Agencies presently assumed to conduct work or track data related to the metric;. Will need to be confirmed.	<i>How often metric would be reported; Will need to be confirmed.</i>	See "bin" descriptions on README sheet	This column identifies the ye the metric was approved as priority metric and added to list.		
98	Economy	Businesses experience limited disruption due to extreme events and climate-driven supply chain issues.	GENERAL BUSINESS CONTINUITY: Massachusetts businesses experience minimal disruptions and damages from climate change and extreme events	\$ of state funding for climate resilience improvements for businesses	A&F, DLS, MVP, DPH, EOED, MassDev, MOBD	annually	Prioritized for Development			
104	Economy	Local workforces are skilled and trained to implement resilience projects and initiatives.	PROFESSIONAL TRAININGS: Increase in the quantity and diversity of professional trainings for climate resilience jobs	# of workers trained in climate resilience-related skills via MassHire programs and other relevant state agency initiatives	DLS (MassHire), EOED, DEP, MVP, EORI, EOE, OEJE, DFG, EEA (MassCEC)	annually	Prioritized for Development			
106	Economy	Local workforces are skilled and trained to implement resilience projects and initiatives.	CLIMATE-RESILIENCE JOBS: Increase in the number of people employed in businesses supporting climate resilience	# of jobs supporting climate resilience (e.g. jobs specific to climate adaptation research, development, and product manufacturing, and adaptation equity, etc.) (direct, indirect, and induced)	EOED, EEA (MassCEC), DLS (MassHire), DFG (BioEO)	every 5 years	Prioritized for Development			
	Infrastructure	All infrastructure development minimizes impacts on the natural environment and incorporates nature-based solutions to protect and enhance the climate resilience- building qualities of the natural environment.	NATURE-BASED SOLUTIONS: Increasing proportion of development and resilience solutions include nature-based solutions	\$ of state funding for projects that include implementing nature-based solutions (NbS) for resilience	DEP, DER, CZM, MVP, DCR, MDAR, DCAMM, MEMA, DFW, DFG	annually	Prioritized for Development			
110	Infrastructure	Critical facilities such as hospitals, fire and police stations, resilience hubs, and shelters, are protected from flooding and other climate hazards, are accessible, and remain functional during extreme events.	RELIABLE CRITICAL FACILITIES AND SERVICES: Decreased damage to critical infrastructure from extreme events due to climate-safe design standards, operational practices and siting decisions, and decreased related service interruptions	% of new and existing critical facilities with backup electricity supplies	MEMA	every 5 years	Prioritized for Development			
	Infrastructure	Critical facilities such as hospitals, fire and police stations, resilience hubs, and shelters, are protected from flooding and other climate hazards, are accessible, and remain functional during extreme events.	RELIABLE CRITICAL FACILITIES AND SERVICES: Decreased damage to critical infrastructure from extreme events due to climate-safe design standards, operational practices and siting decisions, and decreased related service interruptions	% of new and existing critical infrastructure facilities that consider projected flooding, heat, wildfire, drought, and wind risks throughout the project's lifespan.		every 5 years	Prioritized for Development			
116	Infrastructure	Ports experience minimal infrastructure damage and minimal closures due to sea level rise, coastal erosion, and storm surge, as well as high wind events from tropical and ex-tra-tropical storms.	CLIMATE-SAFE PORT INFRASTRUCTURE INVESTMENT: Increasing funding for port-related infrastructure projects that account for future climate change	\$ of state funding for resilience improvements for port operators, port business suppliers, and other port-related businesses	A&F, CZM, MVP, EOED, DEP	annually	Prioritized for Development			

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#	SECTOR	GOAL	INDICATOR	METRIC	AGENCIES	FREQUENCY	PRIORITY BIN	PRIORITY METRIC
	Groupings of goals, indicators, and metrics that address similar themes	Describe what a Massachusetts resilient to climate change would look like; highlight priority impacts that need to be addressed in order to succeed	Statements that could point to (indicate) success or progress ; often includes a direction (e.g., more/less, increased/decreased)	Measurable (quantitatively) or trackable (qualitatively) outcomes that represent an indicator (or multiple indicators)	Agencies presently assumed to conduct work or track data related to the metric;. Will need to be confirmed.	<i>How often metric would be reported; Will need to be confirmed.</i>	See "bin" descriptions on README sheet	This column identifies the year the metric was approved as a priority metric and added to the list.
119) Infrastructure	Public transit and rail networks face minimal disruptions from sea- level rise driven flooding and inland flooding, storms and other extreme climate events.	TRANSIT & RAIL RELIABILITY: Reduced frequency and duration of weather-related outage events for public transit and railroad networks due to climate-safe design standards, operational practices and siting decisions	# of hours of weather-related transit service disruprtion (average per event and cumulatively per year)	DOT, MBTA	annually	Prioritized for Development	202
120.2	2 Infrastructure	Public transit and rail networks face minimal disruptions from sea- level rise driven flooding and inland flooding, storms and other extreme climate events.	TRANSIT & RAIL RELIABILITY: Reduced frequency and duration of weather-related outage events for public transit and railroad networks due to climate-safe design standards, operational practices and siting decisions	Amount of capital funds for MBTA projects with resilience benefits	МВТА	annually	Climate report card	202
121	L Infrastructure	Public transit and rail networks face minimal disruptions from sea- level rise driven flooding and inland flooding, storms and other extreme climate events.	TRANSIT & RAIL RELIABILITY: Reduced frequency and duration of weather-related outage events for public transit and railroad networks due to climate-safe design standards, operational practices and siting decisions	% of public transit and rail organizations (Regional Transit Authorities, Amtrak etc.) that have completed systemwide resilience assessments and plans	MBTA, DOT, Regional transit authorities	annually (until complete, then every time there is an updated one)	Prioritized for Development	202-
129) Infrastructure	Reliable and affordable electricity access, and minimal repair costs to the Commonwealth, related to damages caused by extreme events that directly affect the transmission and distribution system and demand surges during high temperatures.	RELIABLE ELECTRICITY: Reduced frequency and duration of weather- related electricity outage events due to climate-safe design standards, operational practices and siting decisions	electricity outages, measured with the System Average Interruption	DPU	annually	Prioritized for Development	202
	5 Infrastructure	Roads and bridges remain accessible and safe for travel despite potential damage from extreme precipitation, flooding, windstorms and temperature increases, with minimal government spending on reactive repairs.	ROAD SAFETY AND RELIABILITY: Minimal disruption to transportation	# of stream crossings built to	Likely DEP, DFG, DER, CZM, DOT, UMass Amherst, USGS	every 5 years	Prioritized for Development	2024
	7 Infrastructure	Roads and bridges remain accessible and safe for travel despite potential damage from extreme precipitation, flooding, windstorms and		\$ of state funding for climate-	A&F, DOT, CZM, DEP, DPH, DFG, MVP	annually	Prioritized for Development	202

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138	Infrastructure	Water and wastewater treatment infrastructure are resilient to flood damage and drinking water supply sources remain affordable and protected from bacteria (surface water), saltwater intrusion (groundwater), and drought (both).	CLIMATE-SAFE WATER INFRASTRUCTURE INVESTMENT: Increasing funding for water treatment-related infrastructure projects that account for future climate change	\$ of state funding for making drinking and waste water treatment infrastructure climate-resilient	MVP, CZM, MEMA MVP, MassWildlife/DFW;	annually	Currently being tracked	2	
138.2	Infrastructure	Dams and Culverts	RESILIENT DAMS & CULVERTS: Increased capacity for dams and culverts.	\$ awarded/budgeted for dam maintenance, repair, or removal that support climate resilience	EEA/Resilient MA Dam Grants; additional technical assistance (EEA); DCR ; DER; MEMA	annually	Currently being tracked	2	
140	Infrastructure	Water and wastewater treatment infrastructure are resilient to flood damage and drinking water supply sources remain affordable and protected from bacteria (surface water), saltwater intrusion (groundwater), and drought (both).	RELIABLE WATER TREATMENT: Fewer treatment plants are located in high- risk areas, and/or protected against climate-driven extremes	consider projected flooding, heat, wildfire, and drought, wind risks	MEPA, DEP, CZM, DPU, MVP	every 5 years	Prioritized for Development	2	
	Environmental Justice, Equity, and Collaboration	People in Environmental Justice populations, Indigenous peoples, and other priority populations are meaningfully involved in resilience planning.	ENGAGEMENT ACCESSIBILITY: Increased accessibility (e.g., location, timing, and all other accommodations) of resilience planning meetings	% of public meetings, listening sessions, and hearings regarding climate resilience held in EJ communities for projects impacting EJ communities	OEJE, MEPA, all agencies	annually	Prioritized for Development	2	
	Environmental Justice, Equity, and Collaboration	Strong community relationships and organizational networks provide resources and support day-to-day and in climate-related emergencies.	COMMUNITY NETWORK PARTICIPATION: More people belong to a community network they trust and would turn to before, during, and after extreme weather-related events	Number of community members being compensated for their efforts	MVP, CZM	annually	Prioritized for Development	2	
	Environmental Justice, Equity, and Collaboration	Strong community relationships and organizational networks provide resources and support day-to-day and in climate-related emergencies.	COMMUNITY NETWORK PARTICIPATION: More people belong to a community network they trust and would turn to before, during, and after extreme weather-related events	# of Community-Based Organizations (CBOs) that received state/EEA grants for climate resilience and % of CBOs receiving	OEJE, EEA (MVP, CZM) EOHLC, MassDevelopment (potentially),	every 5 years	Prioritized for Development		
	Environmental Justice, Equity, and Collaboration	State, Tribal, and local partnerships create a diverse network with robust capacity that shares resources and best practices for climate resilience initiatives and implement regional solutions.	JOINT MVP APPLICATIONS: More regional/joint applications for MVP grants	% of MVP planning and action grants and Coastal Resilience Grants that are regional/joint.	MVP, CZM	annually	Currently being tracked	2	

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Groupings of goals, indicators, and metrics that address similar themes		Statements that could point to (indicate) success or progress ; often includes a direction (e.g., more/less, increased/decreased)	Measurable (quantitatively) or trackable (qualitatively) outcomes that represent an indicator (or multiple indicators)	Agencies presently assumed to conduct work or track data related to the metric;. Will need to be confirmed.	How often metric would be reported; Will need to be confirmed.		This column identifies the ye the metric was approved as priority metric and added to list.		
Environmental Justice, 163 Equity, and Collaboration	Climate resilience funding, and the benefits of climate resilience investment, is equitably distributed.	EQUITABLE FUNDING: Equitable funding for resilience going to priority populations	% of state resilience funding to Environmental Justice Populations and Other Priority Populations	EOEEA - MVP, OEJE, CZM	annually	Currently being tracked			
Environmental Justice, 169 Equity, and Collaboration	The inequitable distribution of climate impacts is reduced.	EQUITABLE CLIMATE BURDEN: Reduced inequitable burden of climate change across all tracked impacts (as measured for other indicators in this framework)	\$, #, and/or % of (a) all households statewide and (b) environmental justice and priority population groups who report they are experiencing (for example): Health and labor impacts: -Unable to get to work or school due to weather -Health impacts due to climate change and extreme events -Business disruptions Problems with housing: -Loss and damages to homes, affordability of safe homes -Affordable energy costs Food insecurity: -Trouble paying for food	DPH, MVP, OEJE	every 5 years	Prioritized for Development			
Environmental Justice, 170 Equity, and Collaboration	Climate resilience solutions are based on science and Traditional Ecological Knowledge (TEK) or	RESTORATIVE JUSTICE IN RESPECT FOR IK/TEK: Increase in the proportion of climate resilience planning efforts that respectfully invite and integrate IK/TEK	% of state-agency and state-funded resilience projects that incorporate or are based on traditional ecological knowledge (i.e., the evolving knowledge acquired by indigenous and local peoples over hundreds or thousands of years through direct contact with the environment)	OEJE, all agencies	every 5 years	Prioritized for Development			
Environmental Justice, 172 Equity, and Collaboration	Climate resilience solutions are based on science and Traditional Ecological Knowledge (TEK)- informed decision-making.	KNOWLEDGE PARTNERSHIPS: Increase in the collaboration between scientists and Indigenous wisdom holders to support climate resilience planning and decisions with integrated knowledge	Number of resilience projects conducted in collaboration with Tribal Nations and Tribally serving (Native serving) organizations	MVP, CZM, EmPower, DCR, DFW, MEMA, DER, DFG	annually	Climate report card			
177 Natural Environment	Everyone has safe and easy access to public green space, tree cover, aquatic recreational areas, and natural open space.	URBAN GREEN SPACE: Increase in urban green space and tree cover	Percent tree canopy cover within developed areas	EEA	annually	Climate report card			

"ResilientMa	ss Metrics" - All Res	silientMass Priority	Metrics	All metrics Currently Being Tracked (including Climate Report Card) and Prioritized for Development.					
				CONTRIBUTING	YEAR APPROVED AS				
SECTOR	GOAL	INDICATOR	METRIC	AGENCIES	FREQUENCY	PRIORITY BIN	PRIORITY METRIC		
Groupings of goals, indicators, and metrics that address similar themes	Describe what a Massachusetts resilient to climate change would look like; highlight priority impacts that need to be addressed in order to succeed	Statements that could point to (indicate) success or progress ; often includes a direction (e.g., more/less, increased/decreased)	Measurable (quantitatively) or trackable (qualitatively) outcomes that represent an indicator (or multiple indicators)	Agencies presently assumed to conduct work or track data related to the metric;. Will need to be confirmed.	<i>How often metric would be reported; Will need to be confirmed.</i>		This column identifies the ye the metric was approved as priority metric and added to list.		
180 Natural Environment	Freshwater ecosystems are resilient to rising temperatures and changing precipitation patterns.	FRESHWATER HABITAT MANAGEMENT AND RESTORATION FOR RESILIENCE: Restored habitats, improvements to surrounding conditions, and adaptive management such that the habitats are more resilient to climate change stressors	% change in impervious cover and acres of reduction	DCR	every 5 years	Currently being tracked			
182 Natural Environment	Freshwater ecosystems are resilient to rising temperatures and changing precipitation patterns.	5	% of freshwater wetlands, streams, other freshwater habitats protected or restored added/year	DFG/DER; DFW/DFG; DEP; MVP	every 5 years	Prioritized for Development			
184 Natural Environment	-	FRESHWATER ECOSYSTEM SERVICES: Maintained or improved provision of ecosystem services (e.g., biodiversity and carbon storage)		DFG	variable	Prioritized for Development			
186 Natural Environment	Marine and coastal ecosystems, including beaches, dunes, and coastal wetlands, are resilient to sea level rise and the effects of increased temperatures, precipitation, and storms.	COASTAL AND MARINE HABITAT AVAILABILITY: Maintained and increased area of healthy coastal habitats (e.g., salt marsh, beaches, dunes, swamps)	# of acres of coastal habitat and resources protected and restored (acres or % protected and increased/year)	DCR, DER, CZM, DFW, DFG	annually	Currently being tracked			
189 Natural Environment	Marine and coastal ecosystems, including beaches, dunes, and coastal wetlands, are resilient to sea level rise and the effects of increased temperatures, precipitation, and storms.	COASTAL AND MARINE HABITAT MANAGEMENT AND RESTORATION FOR RESILIENCE: Restored habitats, improvements to surrounding conditions, and adaptive management such that habitats are more resilient to climate change stressors	# of combined sewer overflow events in inland and coastal areas (normalized by precipitation events)	DEP	annually	Prioritized for Development			
191 Natural Environment	Marine and coastal ecosystems, including beaches, dunes, and coastal wetlands, are resilient to sea level rise and the effects of increased temperatures, precipitation, and storms.	COASTAL AND MARINE HABITAT MANAGEMENT AND RESTORATION FOR RESILIENCE: Restored habitats, improvements to surrounding conditions, and adaptive management such that habitats are more resilient to climate change stressors	# of acres of land acquired and/or protected for saltmarsh migration with state funding	DCR, CZM, DFW, DFG, DEP	every 5 years	Currently being tracked			

	ResilientMas	s Metrics" - All Res	ilientMass Priority	Metrics	All metrics Currently Being Tracked (including Climate Report Card) and Prioritized fo Development.					
					CONTRIBUTING	UPDATE		YEAR APPROVED AS		
S	ECTOR	GOAL	INDICATOR	METRIC	AGENCIES	FREQUENCY	PRIORITY BIN	PRIORITY METRIC		
in th	roupings of goals, dicators, and metrics aat address similar eemes	resilient to climate change would look like; highlight priority impacts that need to be	often includes	Measurable (quantitatively) or trackable (qualitatively) outcomes that represent an indicator (or multiple indicators)	Agencies presently assumed to conduct work or track data related to the metric;. Will need to be confirmed.	<i>How often metric would be reported; Will need to be confirmed.</i>	See "bin" descriptions on README sheet	This column identifies the year the metric was approved as a priority metric and added to list.		
195 Na	atural Environment	spaces, are resilient and maintain biodiversity and biomass despite increasing pests, storms, and	through (but not limited to) reforestation, species management	# of total acres (and acres increase/year) of connected forested areas (per UMass Amherst Critical Linkages Conservation Assessment and Prioritization System or BioMap)	DFG/DFW (MassWildlife), DCR	every 5 years	Prioritized for Development			
197 Na	atural Environment	Forests and other native inland ecosystems, including urban green spaces, are resilient and maintain biodiversity and biomass despite increasing pests, storms, and	surrounding conditions, and adaptive management such that habitats are more resilient to climate change	# of acres of land acquired by Tribal Nations using state funding and/or returned to Tribal Nations from state ownership, for purposes of land management using traditional methods	DCR, MVP	every 5 years	Currently being tracked			
198 In	frastructure	and enhance the climate resilience- building qualities of the natural	development and resilience solutions	# of nature-based solutions (NbS) projects implemented through MA grant programs	DEP, DER, CZM, MVP, DCR, MDAR, DCAMM, MEMA, DFW, DFG	every 5 years	Prioritized for Development			
202 Na	atural Environment	· · · · · · · · · · · · · · · · · · ·	Maintained or improved forest and	Natural and working lands conserved, expressed as area and percent of MA	MDAR, DCS, DEP, EEA	annually	CRC-Decarb			
	atural Environment	, , ,	FOREST HABITAT AVAILABILITY: Maintained or improved forest and urban forest habitat	Natural and working land area and forest land area	MDAR, DCS, DEP, EEA	annually	CRC-Decarb			
[P 204 m	laceholder for wildfire etric]	[Placeholder for wildfire metric]	[Placeholder for wildfire metric]	[Placeholder for wildfire metric]	ТВD	TBD	Prioritized for Development			
<i>с</i> ,	overnment Systems and	capacity to meet the increase in demand for infrastructure maintenance, public health	GOVERNMENT SERVICE CAPACITY: Increased availability of state government resources to meet increased demand for all government services due to climate				Prioritized for			
	ervices		-	Total resilience investment	TBD	TBD	Development			

Metrics for Futher Consideration

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				CONTRIBUTING			YEAR ADDED TO 'FURTHER
SECTOR	GOAL	INDICATOR	METRIC	AGENCIES	UPDATE FREQUENCY	PRIORITY BIN	CONSIDERATION' LIST
Groupings of goals, indicators, and metrics that address similar themes	Describe what a Massachusetts resilient to climate change would look like; highlight priority impacts that need to be addressed in order to succeed	Statements that could point to (indicate) success or progress ; often includes a direction (e.g., more/less, increased/decreased)	Measurable (quantitatively) or trackable (qualitatively) outcomes that represent an indicator (or multiple	Agencies presently assumed to conduct work or track data related to the metric;. Will need to be confirmed.	How often metric would be reported; Will need to be confirmed.	See "bin" descriptions on README sheet	This column identifies the ye the metric was added to this
		SERVICE CONTINUITY: State government services experience minimal disruptions and losses from climate change and extreme events	\$ of state funding for municipal facilities to mitigate climate risks		annually	Outcome-oriented (gap- filling)	
	capacity to meet the increase in demand for infrastructure	GOVERNMENT PLANNING CAPACITY: Increased availability of personnel to plan and implement climate-resilience projects across all regions and communities, at the state and local levels	# of positions at the state and municipal level with "climate resilience,", "climate adaptation", or "climate preparedness" in job description		every 5 years	Outcome-oriented (gap- filling)	
	State-owned buildings, facilities*, and assets as well as key facilities used in partnership with the state or local governments) are resilient to coastal flooding, inland flooding, wind, extreme heat, and extreme storms.	GOVERNMENT FACILITIES SAFETY: State government facilities experience minimal damages from climate change and extreme events due to climate-safe design standards, operational practices and siting decisions	% of existing state facilities with "low" inland and coastal flood risk		every 5 years	Context Information	
	•	GOVERNMENT FACILITIES SAFETY: State government facilities experience minimal damages from climate change and extreme events due to climate-safe design standards, operational practices and siting decisions	weather events)		every 5 years	Agency-specific management relevance	
	State revenue streams remain stable through property tax loss following structure damage from any hazard (particularly sea level rise), and income and sales tax losses associated with climate impacts on local economies.*		state revenue streams (sales, property, and income taxes) can be compensated for through alternative or additional revenue streams (% decrease due to impacts is matched by % increase from another source)	Unknown	every 5 years	Action Toward Goal not Begun	
	State revenue streams remain stable through property tax loss following structure damage from any hazard (particularly sea level rise), and income and sales tax losses associated with climate impacts on local economies.*	diversification of state revenue base	Assessment of climate risk on state revenues (not started, in progress, completed)	Unknown	every 5 years	Action Toward Goal not Begun	

athering data from private entities).

The remaining metrics that have been identified and reviewed through the metrics development process, but did not rank as highly on the prioritization criteria for a variety of reasons (e.g., action toward goal not begun, need for gathering data from private entities).

					CONTRIBUTING			YEAR ADDED TO 'FURTHER
#	SECTOR	GOAL	INDICATOR	METRIC	AGENCIES	UPDATE FREQUENCY	PRIORITY BIN	CONSIDERATION' LIST
	Groupings of goals, indicators, and metrics that address similar	resilient to climate change would look like; highlight	(indicate) success or progress ;	Measurable (quantitatively) or trackable (qualitatively) outcomes that represent an indicator (or multiple indicators)	Agencies presently assumed to conduct work or track data related to the metric;. Will need to be confirmed.	How often metric would be reported; Will need to be confirmed.	See "bin" descriptions on README sheet	This column identifies the year the metric was added to this list.
17	Government Systems and Services	changes in frequency, intensity of events, and the possible occurrence	PLANNING: Increase in emergency planning efforts that address simultaneous, serial and/or	\$ of state and federal support to municipalities for climate change- related emergency preparedness		annually	Context Information	2024
19		changes in frequency, intensity of events, and the possible occurrence	More communities have trained Certified Emergency Response	# of state and municipal trainings that practice for simultaneous, serial, and compound weather- related events		annually	Quality-based	2024
20			support from the state to maintain community hubs that provide	\$ from state to support CBO/NGO	Unknown	annually	Action Toward Goal not Begun	2024
21		during extreme storms, wildfires,	out of high-risk flood areas and	Average travel time from warning delivered to exiting the area under evacuation order	Unknown	every 5 years	Action Toward Goal not Begun	2024
22		during extreme storms, wildfires,	ESCAPE TIME: Reduced travel times	Development of tracking system to monitor average escape times during evacuation orders (not begun, in planning/development, in implementation, completed)	Unknown	every 5 years	Action Toward Goal not Begun	2024
23		evacuate from high-risk areas, even during extreme storms, wildfires,	response times during and after	Average response time from 911 call placed to arrival at emergency site (during weather extremes only)	Unknown	every 5 years	Action Toward Goal not Begun	2024

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Metrics for Futher Consideration

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÷	SECTOR	GOAL	INDICATOR	METRIC	AGENCIES	UPDATE FREQU
	Groupings of goals, indicators, and metrics that address similar themes	Describe what a Massachusetts resilient to climate change would look like; highlight priority impacts that need to be addressed in order to succeed	Statements that could point to (indicate) success or progress ; often includes a direction (e.g., more/less, increased/decreased)	Measurable (quantitatively) or trackable (qualitatively) outcomes that represent an indicator (or multiple	Agencies presently assumed to conduct work or track data related to the metric;. Will need to be confirmed.	How often meti would be report Will need to be confirmed.
24	Government Systems and Services	Emergency service providers are able to respond in a timely manner and people are able to safely evacuate from high-risk areas, even during extreme storms, wildfires, and flooding events.	EMERGENCY RESPONSE CAPACITY: Increase in ability to rapidly deploy emergency response teams in cases of extreme weather events*	\$ of state funding provided to municipalities for incident command staffing		annually
26	Food and Water Security	Food distribution networks provide uninterrupted access to healthy foods, even during extreme weather events and climate-driven supply chain disruptions.	SECURE FOOD DISTRIBUTION HUBS: Reduced risk of damage to food or food storage facilities from floods and other climate risks		DPH, private sector partners	every 5 years
27	Food and Water Security	Food distribution networks provide uninterrupted access to healthy foods, even during extreme weather events and climate-driven supply chain disruptions.	SECURE FOOD DISTRIBUTION HUBS: Reduced risk of damage to food or food storage facilities from floods and other climate risks	\$ of state funding to food distribution centers in "high" inland or coastal flood risk areas to improve resiliency		annually
28	Food and Water Security	Local food production provides reliable access to healthy foods, day-to-day and in an emergency.*	FOOD SECURITY: Incidence of chronic and periodic hunger among MA residents minimized*	% of household income spent on food		every 5 years
29	Food and Water Security	Local food production provides reliable access to healthy foods, day- to-day and in an emergency.*	FOOD SECURITY: Incidence of chronic and periodic hunger among MA residents minimized*	% of households facing food insecurity (USDA threshold)		annually
31	Food and Water Security	Local food production provides reliable access to healthy foods, day- to-day and in an emergency.*	LOCAL FOOD SOURCING: Increase proportion of diets coming from locally grown food sources*	\$ of state funding for community gardens and local food forests		annually
32	Food and Water Security	Local food production provides reliable access to healthy foods, day- to-day and in an emergency.*	LOCAL FOOD SOURCING: Increase proportion of diets coming from locally grown food sources*	% of food sold in Massachusetts that is grown in New England		every 5 years
34	Food and Water Security	Local food production provides reliable access to healthy foods, day- to-day and in an emergency.*	LOCAL FOOD SOURCING: Increase proportion of diets coming from locally grown food sources*		Unknown, private sector partners	every 5 years
35	Food and Water Security	Local food production provides reliable access to healthy foods, day- to-day and in an emergency.*	LOCAL FOOD SOURCING: Increase proportion of diets coming from locally grown food sources*	% of purchases through state food assistance programs from local producers		annually

EREQUENCY	PRIORITY BIN	YEAR ADDED TO 'FURTHER CONSIDERATION' LIST
TREQUENCI		
en metric		
e reported;	See "bin"	
to be	descriptions on	This column identifies the year
d.	README sheet	the metric was added to this list.
	Agency-specific	
	management relevance	2024
ars	Private Data	2024
	Agency-specific	
	management relevance	2024
ars	Context Information	2024
	Context Information	2024
	Agency-specific	
	management relevance	2024
ars	Context Information	2024
ars		2024
ars	Private Data	2024
	Context Information	2024

Metrics for Futher Consideration

INDICATOR		CONTRIBUTING			YEAR ADDED TO 'FURTHER
	METRIC	AGENCIES	UPDATE FREQUENCY	PRIORITY BIN	CONSIDERATION' LIST
(indicate) success or progress ; often includes	Measurable (quantitatively) or trackable (qualitatively) outcomes that represent an indicator (or multiple	Agencies presently assumed to conduct work or track data related to the metric;. Will need to be confirmed.	, , ,	See "bin" descriptions on README sheet	This column identifies the year the metric was added to this list.
buffer between water used and			annually	Context Information	2024
buffer between water used and water available in public surface			annually	Agency-specific management relevance	2024
GROUNDWATER AVAILABILITY: Increased knowledge of groundwater	about groundwater availability		annually	Agency-specific management relevance	2024
Reliable, dense network of water			annually	Agency-specific management relevance	2024
blooms and other water quality	-		annually	Agency-specific management relevance	2024
AFFORDABLE WATER ACCESS: All MA residents can afford to access			every 5 years	Context Information	2024
safe locations and buildings designed/built to state-set resilience	flooding, heat, drought, wildfire, and wind risks throughout the		every 5 years	Ouality-based	2024
	 (indicate) success or progress ; often includes a direction (e.g., more/less, increased/decreased) SUFFICIENT PUBLIC WATER SUPPLIES: Increased or maintained buffer between water used and water available in public surface water supplies SUFFICIENT PUBLIC WATER SUPPLIES: Increased or maintained buffer between water used and water available in public surface water supplies GROUNDWATER AVAILABILITY: Increased knowledge of groundwater availability in areas reliant on wells WATER QUALITY SURVEILLANCE: Reliable, dense network of water quality testing sites and testing capacity at water supply sources WATER QUALITY MAINTENANCE: Decreased impacts of harmful algal blooms and other water quality issues worsened by climate change at water supply sources AFFORDABLE WATER ACCESS: All MA residents can afford to access safe drinking water supplies chrinker of the recommender of the supply sources AFFORDABLE WATER ACCESS: All MA residents can afford to access safe drinking water supplies chrinker of the recommender of the climate-driven extreme events to private and public housing (incl. more building permits in climate- safe locations and buildings designed/built to state-set resilience 	(indicate) success or progress ; often includes a direction (e.g., more/less, increased/decreased)trackable (qualitatively) outcomes that represent an indicator (or multiple indicators)SUFFICIENT PUBLIC WATER SUPPLIES: Increased or maintained buffer between water used and water available in public surface water suppliesRatio between water use and sum of surface and groundwater supply available by water districtSUFFICIENT PUBLIC WATER SUPPLIES: Increased or maintained buffer between water used and water available in public surface water supplies# of drought guidance workshops for public water suppliersSUFFICIENT PUBLIC WATER SUPPLIES: Increased or maintained buffer between water used and water available in public surface water supplies# of drought guidance workshops for public water suppliersSUFFICIENT PUBLIC WATER SUPPLIES: Increased of groundwater availability in areas reliant on wells# of drought guidance workshops for public water suppliersWATER QUALITY SURVEILLANCE: Reliable, dense network of water quality testing sites and testing capacity at water supply sources\$ of state funding for water quality testing at drinking water sites and upstream locationsWATER QUALITY MAINTENANCE: Decreased impacts of harmful algal blooms and other water quality issues worsened by climate change at water supply sources\$ of state funding for watershed protection around drinking water sourcesAFFORDABLE WATER ACCESS: All M residents can afford to access safe drinking water supplies% of MA residents that have access to affordable, safe drinking waterSum mut- osci Errorownov - Neurosci damage from flooding and other climate-driven extreme eve	Statements that could point to (indicate) success or progress ; often includes a direction (e.g., more/less, increased/decreased) Measurable (quantitatively) or trackable (quantitatively) or indicator (or multiple indicator (or multiple indicators) assumed to conduct werk or track data related to the metric; Will need to be confirmed. SUFFICIENT PUBLIC WATER SUPPLIES: Increased or maintained buffer between water used and water available in public surface water available in public surface water available in public surface water available in public surface water supplies Ratio between water use and sum of surface and groundwater supply available by water district SUFFICIENT PUBLIC WATER SUPPLIES: Increased or maintained buffer between water used and water available in public surface water supplies # of drought guidance workshops for public water suppliers GROUNDWATER AVAILABILITY: Increased knowledge of groundwater quality testing sites and testing capacity at water supply sources # of educational outreach events to homeowners reliant on wells WATER QUALITY SURVEILLANCE: Reliable, dense network of water quality testing sites and testing at water supply sources \$ of state funding for water quality testing at drinking water sites and upstream locations WATER QUALITY MAINTENANCE: Decreased impacts of harmful algat blooms and other water quality issues worsened by climate change at water supply sources \$ of state funding for watershed protection around drinking water sources AFFORDABLE WATER ACCESS: All MA residents can afford to access safe drinking water supplies climate-driven extreme events to private and public housing (incl. more building permits in climate- sale locations and	Statements that could point to (Indicate) success or progress; offen includes a direction (e.g., more/less, increased/decreased) Measurable (qualititatively) outcomes that represent an indicator (or multiple indicators) assumed to conduct work or track data metric; Will need to be confirmed. SUFFICIENT PUBLIC WATER SUPPLES: Increased or maintained buffer between water used and water available in public surface water available in public surface water available in public surface water available in public surface water supplies Ratio between water use and sum of surface and groundwater supply available by water district annually SUFFICIENT PUBLIC WATER SUPPLES: Increased or maintained buffer between water used and water available in public surface water supplies f of ought guidance workshops for public water suppliers annually SUFFICIENT PUBLIC WATER SUPPLES: Increased or maintained buffer between water used and water available in public surface water supplies # of drought guidance workshops for public water suppliers annually SUFFICIENT PUBLIC WATER SUPPLES: Increased for maintained buffer between water used and water availability in areas reliant on wells # of drought guidance workshops for public water supplies annually WATER QUALITY SURVEILLANCE: Reliable, dense network of water quality testing sites and testing capacity at water supply sources \$ of state funding for water sites and upstream locations annually WATER QUALITY MAINTENANCE: Decreased inpacts of harmful algal bioms and other water guality sustes supply sources \$ of tate funding for water sites and upstream locations	Statements that could point to (Indicate) success or progress; often inclues Messurable (qualitatively) or indicator (or multiple indicator (or multiple indicator (or multiple indicators) see "bin" work or track data work or track data weld be reported; Will need to be confirmed. See "bin" descriptions on README sheet SUFFCIENT PUBLIC WATER SUFFLIES: Increased or maintained buffer between water used and water available in public surface water supplies Ratio between water use and sum of surface and groundwater supply available by water district annually Context Information SUFFCIENT PUBLIC WATER SUFFLIES: Increased or maintained buffer between water used and water available in public surface water supplies e of drought guidance workshops for public water supplies annually Context Information SUFFLIES: Increased or maintained buffer between water used and water available in public surface water supplies f of ducational outreach events to homeowners reliant on wells annually Agency-specific management relevance GROUNDWATER AVAILABILITY: Increased knowledge of groundwater availability in areas reliant on wells s of state funding for water sites and ugator tracking water sites and user availability availability in areas reliant on wells S of state funding for water sites and user availability annually annually Agency-specific management relevance WATER QUALITY SURVELLANCE: Beliable, dense network of water gaugity esting sites and testing cavacity at water supply sources S of state funding for watershed protection around drinking water annually

				CONTRIBUTING			YEAR ADDED TO 'FURTHER
SECTOR	GOAL	INDICATOR	METRIC	AGENCIES	UPDATE FREQUENCY	PRIORITY BIN	CONSIDERATION' LIST
Groupings of goals, indicators, and metrics that address similar themes	resilient to climate change would look like; highlight	Statements that could point to (indicate) success or progress ; often includes a direction (e.g., more/less, increased/decreased)	Measurable (quantitatively) or trackable (qualitatively) outcomes that represent an indicator (or multiple indicators)	Agencies presently assumed to conduct work or track data related to the metric;. Will need to be confirmed.	How often metric would be reported; Will need to be confirmed.	See "bin" descriptions on README sheet	This column identifies the year the metric was added to this li
36 Food and Water Security	People have access to safe and affordable drinking water via wells or public water supply in face of potential drought or water quality issues driven by climate change.	SUFFICIENT PUBLIC WATER SUPPLIES: Increased or maintained buffer between water used and water available in public surface water supplies	Ratio between water use and sum of surface and groundwater supply available by water district		annually	Context Information	2
37 Food and Water Security	People have access to safe and affordable drinking water via wells or public water supply in face of potential drought or water quality issues driven by climate change.	SUFFICIENT PUBLIC WATER SUPPLIES: Increased or maintained buffer between water used and water available in public surface water supplies	# of drought guidance workshops for public water suppliers		annually	Agency-specific management relevance	2
39 Food and Water Security	People have access to safe and affordable drinking water via wells or public water supply in face of potential drought or water quality issues driven by climate change.	GROUNDWATER AVAILABILITY: Increased knowledge of groundwater availability in areas reliant on wells	# of educational outreach events to homeowners reliant on well water about groundwater availability tracking data		annually	Agency-specific management relevance	2
40 Food and Water Security	People have access to safe and affordable drinking water via wells or public water supply in face of potential drought or water quality issues driven by climate change.	WATER QUALITY SURVEILLANCE: Reliable, dense network of water quality testing sites and testing capacity at water supply sources	\$ of state funding for water quality testing at drinking water sites and upstream locations		annually	Agency-specific management relevance	
42 Food and Water Security	People have access to safe and affordable drinking water via wells or public water supply in face of potential drought or water quality issues driven by climate change.	WATER QUALITY MAINTENANCE: Decreased impacts of harmful algal blooms and other water quality issues worsened by climate change at water supply sources	\$ of state funding for watershed protection around drinking water sources		annually	Agency-specific management relevance	2
44 Food and Water Security	People have access to safe and affordable drinking water via wells or public water supply in face of potential drought or water quality issues driven by climate change.	AFFORDABLE WATER ACCESS: All MA residents can afford to access safe drinking water supplies	% of MA residents that have access to affordable, safe drinking water		every 5 years	Context Information	2
	People have access to housing that is safe from flooding and other climate hazards and is affordable, even as demand for safe housing increases and resilience projects	damage from flooding and other climate-driven extreme events to private and public housing (incl. more building permits in climate- safe locations and buildings designed/built to state-set resilience	% of new housing construction projects that consider projected flooding, heat, drought, wildfire, and wind risks throughout the				
45 Infrastructure	make some areas more desirable.	standards)	project's lifespan.		every 5 years	Quality-based	2

Metrics for Futh					te entities). YEAR ADDED TO 'FURTHER		
SECTOR	GOAL	INDICATOR	METRIC	CONTRIBUTING AGENCIES	UPDATE FREQUENCY	PRIORITY BIN	CONSIDERATION' LIST
Groupings of goals, indicators, and metrics that address similo themes	Describe what a Massachusetts resilient to climate change would look like; highlight priority impacts that need to be addressed in order to succeed	Statements that could point to (indicate) success or progress ; often includes a direction (e.g., more/less, increased/decreased)	Measurable (quantitatively) or trackable (qualitatively) outcomes that represent an indicator (or multiple indicators)	Agencies presently assumed to conduct work or track data related to the metric;. Will need to be confirmed.	How often metric would be reported; Will need to be confirmed.	See "bin" descriptions on README sheet	This column identifies the y the metric was added to th
46 Infrastructure	People have access to housing that is safe from flooding and other climate hazards and is affordable, even as demand for safe housing increases and resilience projects make some areas more desirable.	CLIMATE-SAFE HOUSING: Reduced damage from flooding and other climate-driven extreme events to private and public housing (incl. more building permits in climate- safe locations and buildings designed/built to state-set resilience standards)	% of existing housing stock with "low" inland and coastal flood risk		every 5 years	Context Information	
47 Infrastructure	People have access to housing that is safe from flooding and other climate hazards and is affordable, even as demand for safe housing increases and resilience projects make some areas more desirable.	CLIMATE-SAFE HOUSING: Reduced damage from flooding and other climate-driven extreme events to private and public housing (incl. more building permits in climate- safe locations and buildings designed/built to state-set resilience standards)	# of housing units in the floodplain relocated outside of the floodplain via voluntary buyouts		every 5 years	Outcome-oriented (gap filling)	-
49 Infrastructure	People have access to housing that is safe from flooding and other climate hazards and is affordable, even as demand for safe housing increases and resilience projects make some areas more desirable.	CLIMATE-SAFE HOUSING: Reduced damage from flooding and other climate-driven extreme events to private and public housing (incl. more building permits in climate- safe locations and buildings designed/built to state-set resilience standards)	\$ of funding for household resilience to climate-driven indoor air quality issues (e.g. mold, allergens)		annually	Agency-specific management relevance	
50 Infrastructure	People have access to housing that is safe from flooding and other climate hazards and is affordable, even as demand for safe housing increases and resilience projects make some areas more desirable.	CLIMATE-SAFE HOUSING: Reduced damage from flooding and other climate-driven extreme events to private and public housing (incl. more building permits in climate- safe locations and buildings designed/built to state-set resilience standards)	# of households in MA permanently or temporarily displaced due to climate-driven events that have been helped by state assistance	Unknown	every 5 years	Action Toward Goal not Begun	
54 Infrastructure	People have access to housing that is safe from flooding and other climate hazards and is affordable, even as demand for safe housing increases and resilience projects make some areas more desirable.	DECARBONIZED HOUSING: More housing is retrofitted or built to maintain safe conditions with minimized energy use.	% of housing units that have updated weatherization/ insulation		annually	Outcome-oriented (gap filling)	

	toward g	ioal not begun, ne	ed for gathering a	lata from private	entities).
	METRIC	CONTRIBUTING AGENCIES	UPDATE FREQUENCY	PRIORITY BIN	YEAR ADDED TO 'FURTHER CONSIDERATION' LIST
nat could point to cess or progress ; g., more/less, creased)	Measurable (quantitatively) or	Agencies presently assumed to conduct work or track data related to the metric;. Will need to be confirmed.	How often metric would be reported; Will need to be confirmed.	See "bin" descriptions on README sheet	This column identifies the year the metric was added to this list.
D HOUSING: More fitted or built to onditions with gy use.	% of households spending more than 5% of income on energy		every 5 years	Context Information	2024
PRDABILITY: acement due to ce improvements sing prices*	% of households spending less than 1/3 of income on housing, for renters and homeowners		every 5 years	Context Information	2024
PRDABILITY: acement due to ce improvements sing prices*	% of large-scale climate resilience projects that consider the risk of displacement due to changes in housing prices	Unknown	every 5 years	Action Toward Goal not Begun	2024
NESS OF HOUSING	# of households receiving technical assistance for climate-safe housing (e.g. information on relocation, retrofitting for resilience, etc.)		annually	Agency-specific management relevance	2024
NESS OF HOUSING education and ance to the public to using and home- s	\$ spent on public communication and outreach on resilient housing options (e.g. choosing where to live, how to improve your homes resiliency, etc.)	Unknown	annually	Action Toward Goal not Begun	2024
ATION PLANNING: prehensive planning pulation fluctuations te change d outmigration)	# of educational outreach events to municipalities on climate migration planning	Unknown	annually	Action Toward Goal not Begun	2024
NITY: Increased esion during shifts in en by climate	% of households relocated due to climate change that report feeling welcome in their community and % of existing residents of receiving communities that feel welcome in their community	Unknown	every 5 years	Action Toward Goal not Begun	2024

					CONTRIBUTING			YEAR ADDED TO 'FURTHER
S	SECTOR	GOAL	INDICATOR	METRIC	AGENCIES	UPDATE FREQUENCY	PRIORITY BIN	CONSIDERATION' LIST
C	Groupings of goals, indicators, and metrics that address similar	would look like; highlight priority impacts that need to be	(indicate) success or progress ; often includes		Agencies presently assumed to conduct work or track data related to the metric;. Will need to be confirmed.	How often metric would be reported; Will need to be confirmed.	See "bin" descriptions on README sheet	This column identifies the year the metric was added to this li
55		even as demand for safe housing increases and resilience projects	DECARBONIZED HOUSING: More housing is retrofitted or built to maintain safe conditions with minimized energy use.	% of households spending more than 5% of income on energy		every 5 years	Context Information	2
		even as demand for safe housing increases and resilience projects	HOUSING AFFORDABILITY: Minimized displacement due to climate resilience improvements	% of households spending less than 1/3 of income on housing, for				
56 I	Infrastructure	make some areas more desirable.	increasing housing prices*	renters and homeowners		every 5 years	Context Information	
57		even as demand for safe housing increases and resilience projects	HOUSING AFFORDABILITY: Minimized displacement due to climate resilience improvements increasing housing prices*	% of large-scale climate resilience projects that consider the risk of displacement due to changes in housing prices	Unknown	every 5 years	Action Toward Goal not Begun	
58		climate hazards and is affordable, even as demand for safe housing increases and resilience projects	PUBLIC AWARENESS OF HOUSING OPTIONS: More education and technical assistance to the public to inform their housing and home- building choices	# of households receiving technical assistance for climate-safe housing (e.g. information on relocation, retrofitting for resilience, etc.)		annually	Agency-specific management relevance	
		People have access to housing that is safe from flooding and other climate hazards and is affordable, even as demand for safe housing		\$ spent on public communication and outreach on resilient housing options (e.g. choosing where to live, how to improve your homes			Action Toward Goal not	
59		Communities are prepared to support new residents relocating to areas with fewer climate risks or		resiliency, etc.) # of educational outreach events to municipalities on climate migration		annually	Begun Action Toward Goal not	
60 I	Infrastructure	residents feel supported.	(inmigration and outmigration)	planning	Unknown	annually	Begun	2
		Communities are prepared to support new residents relocating to areas with fewer climate risks or driven from their homes by climate disasters, and both existing and new	COMMUNITY UNITY: Increased community cohesion during shifts in	% of households relocated due to climate change that report feeling welcome in their community and % of existing residents of receiving communities that feel welcome in their community	Unknown	every 5 years	Action Toward Goal not Begun	

	toward g	oal not begun, ne	ed for gathering a	lata from private	entities).
		CONTRIBUTING			YEAR ADDED TO 'FURTHER
R	METRIC	AGENCIES	UPDATE FREQUENCY	PRIORITY BIN	CONSIDERATION' LIST
is that could point to success or progress ; ides h (e.g., more/less, 'decreased)	Measurable (quantitatively) or trackable (qualitatively) outcomes that represent an indicator (or multiple	related to the	How often metric would be reported; Will need to be confirmed.	See "bin" descriptions on README sheet	This column identifies the year the metric was added to this list.
cohesion during shifts in	# of grants that address social cohesion in receiving or sending communities, related to climate migration		every 5 years	Outcome-oriented (gap- filling)	2024
ALITY: Fewer deaths treme heat	# of deaths attributable to extreme heat (normalized to the number of events/year and population)	DPH	annually	Agency-specific management relevance	2024
COOL SPACES: nd sustained access to or private cool spaces	Reduction in the Urban Heat Island (UHI) effect (in degrees F from historical baseline of UHI effect [temperature difference between urban and ex-urban areas])		every 5 years	Outcome-oriented (gap- filling)	2024
COOL SPACES: nd sustained access to or private cool spaces	# of residents reached by municipal outreach (digital or reverse-911) that alerts residents to the availability and location of cooling spaces		annually	Agency-specific management relevance	2024
AT AWARENESS: wareness of heat events ion to caregivers (e.g. guardians, camp coaches, teachers) and treatment of heat- ss.	# of people aware of the Extreme Heat alert system		every 5 years	Agency-specific management relevance	2024
M HEAT SAFETY: Increase ber of schools (K-12), d university that are nd equipped to provide ratures for students and	decline in # of half-day and school cancellations during extreme heat conditions for public K-12 schools (because school conditions are safer)		annually	Outcome-oriented (gap- filling)	2024
EAT SAFETY: Decrease in ce of job-related illness during extreme heat	# of employees reached with outreach materials for heat illness prevention		annually	Agency-specific management relevance	2024
EAT SAFETY: Decrease in ce of job-related illness during extreme heat	% of employers complying with OSHA worker heat standards		annually	Agency-specific management relevance	2024

					CONTRIBUTING			YEAR ADDED TO 'FURTHER
	SECTOR	GOAL	INDICATOR	METRIC	AGENCIES	UPDATE FREQUENCY	PRIORITY BIN	CONSIDERATION' LIST
4	Groupings of goals, indicators, and metrics that address similar	resilient to climate change would look like; highlight priority impacts that need to be	(indicate) success or progress ; often includes a direction (e.g., more/less,	Measurable (quantitatively) or trackable (qualitatively) outcomes that represent an indicator (or multiple indicators)	Agencies presently assumed to conduct work or track data related to the metric;. Will need to be confirmed.	How often metric would be reported; Will need to be confirmed.	See "bin" descriptions on README sheet	This column identifies the year the metric was added to this h
63	Infrastructure	driven from their homes by climate disasters, and both existing and new	community cohesion during shifts in	# of grants that address social cohesion in receiving or sending communities, related to climate migration		every 5 years	Outcome-oriented (gap- filling)	
64	Health	People are safe and healthy during extreme heat events.	HEAT MORTALITY: Fewer deaths linked to extreme heat	# of deaths attributable to extreme heat (normalized to the number of events/year and population)	DPH	annually	Agency-specific management relevance	
68	Health	People are safe and healthy during	ACCESS TO COOL SPACES: Increased and sustained access to public and/or private cool spaces	Reduction in the Urban Heat Island (UHI) effect (in degrees F from historical baseline of UHI effect [temperature difference between urban and ex-urban areas])		every 5 years	Outcome-oriented (gap- filling)	-
72	Health	People are safe and healthy during	Increased and sustained access to	# of residents reached by municipal outreach (digital or reverse-911) that alerts residents to the availability and location of cooling spaces		annually	Agency-specific management relevance	
74	Health		PUBLIC HEAT AWARENESS: Increased awareness of heat events and education to caregivers (e.g. parents and guardians, camp counselors, coaches, teachers) about signs and treatment of heat- related illness.	# of people aware of the Extreme Heat alert system		every 5 years	Agency-specific management relevance	
76	Health	People are safe and healthy during	colleges and university that are designed and equipped to provide safe temperatures for students and	decline in # of half-day and school cancellations during extreme heat conditions for public K-12 schools (because school conditions are safer)		annually	Outcome-oriented (gap- filling)	
77			WORKER HEAT SAFETY: Decrease in the incidence of job-related illness and injuries during extreme heat events.	# of employees reached with outreach materials for heat illness prevention		annually	Agency-specific management relevance	
78		People are safe and healthy during		% of employers complying with OSHA worker heat standards		annually	Agency-specific management relevance	

CONTRIBUTING AGENCIES SECTOR GOAL INDICATOR METRIC UPDATE FRE Agencies presently Measurable (quantitatively) or Describe what a Massachusetts Statements that could point to assumed to conduct resilient to climate change work or track data How often m (indicate) success or progress ; trackable (qualitatively) Groupings of goals, indicators, would look like; highlight often includes outcomes that represent an related to the would be rep Will need to and metrics that address similar priority impacts that need to be a direction (e.g., more/less, indicator (or multiple metric;. Will need to themes addressed in order to succeed *increased/decreased*) indicators) be confirmed. confirmed. People are safe and healthy during # of deaths attributable to a and following coastal and inland FLOOD & STORM EVENT MORTALITY: specific flood and storm events flooding and windstorm events and Fewer deaths linked to flooding, normalized to the number of 80 Health related power interruptions. storms, and related power outages. events/year and population) annually People are safe and healthy during FLOOD & STORM EVENT MORBIDITY: and following coastal and inland Fewer emergency department visits # of worker injuries and deaths due flooding and windstorm events and during flooding, storms, and related to extreme weather and storm 82 Health related power interruptions. power outages. clean-up annually # of projects within state residential facilities that provide support in the event of extreme heat and power outages (sum of # of large capacity pumps for flooding, # of back up portable People are safe and healthy during FLOOD & STORM EVENT generators, # of heavy equipment PREPAREDNESS: Increase in and following coastal and inland for snow removal, wash-outs, etc., flooding and windstorm events and readiness for flood and storm events # of buildings to withstand severe 83 Health related power interruptions. to maintain health and safety. weather with reinforced concrete) every 5 years People are safe and healthy during FLOOD & STORM EVENT and following coastal and inland PREPAREDNESS: Increase in % of state residential facilities that flooding and windstorm events and readiness for flood and storm events retain power/safety during extreme related power interruptions. to maintain health and safety. 84 Health events every 5 years People are safe and healthy during FLOOD & STORM EVENT % of households with someone who and following coastal and inland PREPAREDNESS: Increase in relies on electronic medical flooding and windstorm events and readiness for flood and storm events devices with a backup power 85 Health related power interruptions. to maintain health and safety. source annually People are safe from and healthy during climate-driven air quality events, like wildfire smoke, allergens, and general pollution that is made worse by climate change # of illnesses and deaths attributable to climate-driven air (for example, faster ozone formation with warmer temperatures and less quality events (summed over AIR QUALITY MORTALITY: Fewer frequent flushing of particulate calendar year) (per 1,000 and matter with changing precipitation deaths linked to climate-driven air normalized to the number of 86 Health patterns). quality events events/year) annually

Metrics for Futher Consideration

	PRIORITY BIN	YEAR ADDED TO 'FURTHER CONSIDERATION' LIST
netric ported;	See "bin"	
be	descriptions on README sheet	This column identifies the year the metric was added to this list.
	READIVIE SNEEL	the metric was added to this list.
	Outcome-oriented (gap- filling)	2024
	Outcome-oriented (gap-	
	filling)	2024
	Agency-specific	
	management relevance	2024
	Outcome-oriented (gap-	
	filling)	2024
	Outcome-oriented (gap- filling)	2024
	Outcome-oriented (gap- filling)	2024
	nung)	2024

The remaining metrics that have been identified an process, but did not rank as highly on the prioritizat

toward goal not begun, need for gath

CONTRIBUTING INDICATOR AGENCIES SECTOR GOAL METRIC **UPDATE FRE** Agencies presently Measurable (quantitatively) or assumed to conduct Describe what a Massachusetts Statements that could point to resilient to climate change (indicate) success or progress ; trackable (qualitatively) work or track data How often m Groupings of goals, indicators, would look like; highlight often includes outcomes that represent an related to the would be rep Will need to and metrics that address similar priority impacts that need to be a direction (e.g., more/less, indicator (or multiple metric;. Will need to themes addressed in order to succeed increased/decreased) indicators) be confirmed. confirmed. People are safe from and healthy during climate-driven air quality events, like wildfire smoke, allergens, and general pollution that is made worse by climate change (for example, faster ozone formation with warmer temperatures and less frequent flushing of particulate AIR QUALITY MORBIDITY: Fewer # of emergency department visits matter with changing precipitation emergency department visits for for respiratory illness on high heat 87 Health patterns). respiratory illness annually days People are safe from and healthy during climate-driven air quality events, like wildfire smoke, allergens, and general pollution that is made worse by climate change # of projects requiring MEPA review (for example, faster ozone formation implementing best practices for greenhouse gas and air quality AIR QUALITY MAINTENANCE: with warmer temperatures and less frequent flushing of particulate Decreased exposure to poor air mitigation, specifically for reducing matter with changing precipitation quality (made worse by climate climate risks in environmental 88 Health change) justice populations patterns). annually People are safe from and healthy during climate-driven air quality events, like wildfire smoke, allergens, and general pollution that is made worse by climate change (for example, faster ozone formation % change in number of student with warmer temperatures and less AIR QUALITY MAINTENANCE: visits to the school nurse for Decreased exposure to poor air asthma-related issues following frequent flushing of particulate matter with changing precipitation quality (made worse by climate improvements in air quality within 90 Health patterns). change) school districts annually Mental health impacts from extreme events and chronic stressors related to climate change, including extreme heat, are minimized, readily treated, and adequate support resources are MENTAL HEALTH MORBIDITY: # of incidences of mental illness available to promote mental Minimized incidence of mental attributed to climate-driven Unknown 91 Health wellbeing. illness worsened by climate change stressors annually

nd reviewed through the metrics development
tion criteria for a variety of reasons (e.g., action
nering data from private entities).

	PRIORITY BIN	YEAR ADDED TO 'FURTHER CONSIDERATION' LIST
netric ported; be	See "bin" descriptions on README sheet	This column identifies the year the metric was added to this list.
	Outcome-oriented (gap- filling)	2024
	Agency-specific	
	management relevance	2024
	Agency-specific management relevance	2024
	Action Toward Goal not Begun	2024

toward goal not begun, need for gathering data from private entities).

CONTRIBUTING AGENCIES SECTOR GOAL INDICATOR METRIC **UPDATE FRE** Agencies presently Describe what a Massachusetts Statements that could point to Measurable (quantitatively) or assumed to conduct work or track data How often m resilient to climate change (indicate) success or progress ; trackable (qualitatively) Groupings of goals, indicators, would look like; highlight often includes outcomes that represent an related to the would be rep Will need to and metrics that address similar priority impacts that need to be a direction (e.g., more/less, indicator (or multiple metric;. Will need to themes addressed in order to succeed *increased/decreased*) indicators) be confirmed. confirmed. MENTAL HEALTH SERVICES Mental health impacts from extreme events and chronic stressors related CONTINUITY: Increased professional to climate change, including extreme and community-based mental health heat, are minimized, readily treated, support and resources in the and adequate support resources are aftermath of climate disasters and in % of MA mental health services that available to promote mental the face of the ongoing climate remain open during and DPH, HHS, private 92 Health wellbeing. crisis immediately after extreme weather sector partners annually Mental health impacts from extreme events and chronic stressors related to climate change, including extreme CLIMATE-INFORMED MENTAL HEALTH: Increased availability of heat, are minimized, readily treated, and adequate support resources are service providers that are trained in \$ of state funding for work toward available to promote mental appropriate approaches for climateimproved climate-aware mental 93 Health wellbeing. related mental health concerns health services annually CONTINUITY OF NATURAL Local agriculture, forestry, marine % of natural resource businesses fisheries, and aquaculture industries **RESOURCE ECONOMIES: Minimized** reached by state/climate extension remain productive in the face of losses from climate stressors for all with technical assistance or climate threats to support the local natural resource-based local trainings in developing business economy and food security. businesses continuity plans MDAR, EOED, MEMA 94 Economy annually Local agriculture, forestry, marine CONTINUITY OF NATURAL fisheries, and aquaculture industries RESOURCE ECONOMIES: Minimized remain productive in the face of losses from climate stressors for all % of private farms and forests natural resource-based local climate threats to support the local adopting climate-smart 95 Economy economy and food security. businesses management practices every 5 years CONTINUITY OF NATURAL Local agriculture, forestry, marine **RESOURCE ECONOMIES: Minimized** fisheries, and aquaculture industries remain productive in the face of losses from climate stressors for all \$ of economic impact driven by climate threats to support the local natural resource-based local outdoor recreation (i.e., recreation 97 Economy economy and food security. businesses impacted by climate) every 5 years GENERAL BUSINESS CONTINUITY: Businesses experience limited Massachusetts businesses disruption due to extreme events experience minimal disruptions and and climate-driven supply chain damages from climate change and # of local businesses with business Unknown, private sector issues. extreme events continuity plans partners 99 Economy every 5 years

	PRIORITY BIN	YEAR ADDED TO 'FURTHER CONSIDERATION' LIST
netric ported; be	See "bin" descriptions on README sheet	This column identifies the year the metric was added to this list.
	Private Data	2024
	Outcome-oriented (gap- filling)	2024
	(10016)	2024
	Agency-specific management relevance	2024
	Outcome-oriented (gap- filling)	2024
	Outcome-oriented (gap- filling)	2024
	Private Data	2024

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Metrics for Futher Consideration

SEC	CTOR	GOAL	INDICATOR	METRIC	AGENCIES	UPDATE FREQU
and	roupings of goals, indicators, ad metrics that address similar	resilient to climate change would look like; highlight priority impacts that need to be	Statements that could point to (indicate) success or progress ; often includes a direction (e.g., more/less, increased/decreased)	Measurable (quantitatively) or trackable (qualitatively) outcomes that represent an indicator (or multiple indicators)	Agencies presently assumed to conduct work or track data related to the metric;. Will need to be confirmed.	How often meti would be report Will need to be confirmed.
100 Eco		Businesses experience limited disruption due to extreme events	GENERAL BUSINESS CONTINUITY: Massachusetts businesses experience minimal disruptions and damages from climate change and extreme events	% of small businesses reached by state with technical assistance or trainings in developing business continuity plans	DLS, EOED	annually
101 Eco		Businesses experience limited disruption due to extreme events and climate-driven supply chain	PREPARED & PROTECTED FACILITIES: Increase in the number of businesses that are in secure locations, disaster prepared, and insured against potential climate- driven extreme event losses	# of new business construction projects, including # of projects proposed in floodplain, that consider projected flooding, heat, drought, wildfire, and wind risks throughout the project's lifespan.		every 5 years
102 Eco		disruption due to extreme events and climate-driven supply chain	PREPARED & PROTECTED FACILITIES: Increase in the number of businesses that are in secure locations, disaster prepared, and insured against potential climate- driven extreme event losses	% of existing business structure with "low" inland and coastal flood risk		every 5 years
103 Eco		Businesses experience limited disruption due to extreme events and climate-driven supply chain	SUPPLY CHAIN PLANNING: Increased planning to prepare for climate-driven supply chain issues that may occur outside of the Commonwealth	# of businesses that have completed a supply chain training with respect to climate change impacts	Unknown	annually
105 Eco		Local workforces are skilled and trained to implement resilience		# of participants in career pathway programs that support adding to the workforce for climate and clean energy jobs	DLS, EOED	annually
108 Infr		nature-based solutions to protect and enhance the climate resilience- building qualities of the natural	MINIMIZING INFRASTRUCTURE IMPACTS: Increase in consideration and avoidance of cumulative impacts to natural environment from new development	% of projects requiring MEPA review that consider cumulative impacts to surrounding natural environments		every 5 years
		nature-based solutions to protect and enhance the climate resilience-	NATURE-BASED SOLUTIONS: Increasing proportion of development and resilience solutions include nature-based	% of development projects that		
1001-5	frastructure	environment.	solutions	include nature-based solutions		every 5 years

		YEAR ADDED TO 'FURTHER
QUENCY	PRIORITY BIN	CONSIDERATION' LIST
netric	Coo IIInin II	
ported;	See "bin" descriptions on	This column identifies the year
be	descriptions on README sheet	This column identifies the year the metric was added to this list.
	NLADIVIL SHEEL	
	Agency-specific	
	management relevance	2024
	Quality-based	2024
		0004
	Context Information	2024
	Action Toward Goal not	0004
	Begun	2024
	Action Toward Goal not	0004
	Begun	2024
	Agency-specific	
	management relevance	2024
	<u> </u>	
	Agency-specific	
	management relevance	2024

toward goal not begun, need for gathering data from private entities).

CONTRIBUTING AGENCIES SECTOR GOAL INDICATOR METRIC **UPDATE FRE** Agencies presently Describe what a Massachusetts Statements that could point to Measurable (quantitatively) or assumed to conduct work or track data How often m resilient to climate change (indicate) success or progress ; trackable (qualitatively) Groupings of goals, indicators, often includes would look like; highlight outcomes that represent an related to the would be rep priority impacts that need to be Will need to and metrics that address similar a direction (e.g., more/less, indicator (or multiple metric;. Will need to themes addressed in order to succeed *increased/decreased*) indicators) be confirmed. confirmed. Critical facilities such as hospitals, CLIMATE-SAFE CRITICAL FACILITY INFRASTRUCTURE INVESTMENT: fire and police stations, resilience hubs, and shelters, are protected Increasing funding for critical DEP, MVP, CZM, EOEEA from flooding and other climate facility-related infrastructure \$ of state funding for making F&A, MEMA, DCAMM, hazards, are accessible, and remain projects that account for future critical facility infrastructure 111 Infrastructure climate-resilient DOT, MBTA, EOPSS functional during extreme events. climate change annually RELIABLE CRITICAL FACILITIES AND Critical facilities such as hospitals, SERVICES: Decreased damage to fire and police stations, resilience critical infrastructure from extreme hubs, and shelters, are protected events due to climate-safe design from flooding and other climate standards, operational practices and hazards, are accessible, and remair siting decisions, and decreased % of existing critical facilities with 112 Infrastructure functional during extreme events. related service interruptions "low" inland and coastal flood risk every 5 years RELIABLE CRITICAL FACILITIES AND SERVICES: Decreased damage to Critical facilities such as hospitals, fire and police stations, resilience critical infrastructure from extreme hubs, and shelters, are protected events due to climate-safe design from flooding and other climate standards, operational practices and hazards, are accessible, and remain siting decisions, and decreased % of days of uninterrupted service MEMA, private sector 114 Infrastructure functional during extreme events. related service interruptions from critical infrastructure partners annually PORT BUSINESS CONTINUITY: Massachusetts port facilities and Ports experience minimal businesses experience minimal infrastructure damage and minimal business disruptions and damages closures due to sea level rise, from climate change and extreme coastal erosion, and storm surge, a events due to climate-safe design # of port-related operators and businesses with business well as high wind events from standards, operational practices and MassPort, private sector 115 Infrastructure tropical and ex-tra-tropical storms. siting decisions continuity plans partners every 5 years TRANSIT & RAIL RELIABILITY: Reduced frequency and duration of Public transit and rail networks face weather-related outage events for public transit and railroad networks minimal disruptions from sea- level % of transit and rail line miles rise driven flooding and inland due to climate-safe design proactively prepared for runoff, flooding, storms and other extreme standards, operational practices and debris, and hazardous trees prior to 117 Infrastructure climate events. siting decisions forecasted storms annually

	PRIORITY BIN	YEAR ADDED TO 'FURTHER CONSIDERATION' LIST			
netric					
oorted;	See "bin"				
be	descriptions on	This column identifies the year			
	README sheet	the metric was added to this list.			
	Agency-specific management relevance	2024			
		2024			
	Context Information	2024			
	Private Data	2024			
	Private Data	2024			
		2024			
	Agency-specific				
	management relevance	2024			

process, but did not rank as highly on the prioritization criteria for a variety of reasons (e.g., action

Metrics for Futher Consideration

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CONTRIBUTING YEAR ADDED T			YEAR ADDED TO 'FURTHER					
	SECTOR	GOAL	INDICATOR	METRIC	AGENCIES	UPDATE FREQUENCY	PRIORITY BIN	CONSIDERATION' LIST
	Groupings of goals, indicators, and metrics that address similar	would look like; highlight priority impacts that need to be	(indicate) success or progress ; often includes a direction (e.g., more/less,	Measurable (quantitatively) or trackable (qualitatively) outcomes that represent an indicator (or multiple indicators)	Agencies presently assumed to conduct work or track data related to the metric;. Will need to be confirmed.	How often metric would be reported; Will need to be confirmed.	See "bin" descriptions on README sheet	This column identifies the year the metric was added to this lis
118		Public transit and rail networks face minimal disruptions from sea- level rise driven flooding and inland	TRANSIT & RAIL RELIABILITY: Reduced frequency and duration of weather-related outage events for public transit and railroad networks due to climate-safe design standards, operational practices and siting decisions	# of miles of MBTA tunnels that have mitigated flood risks		every 5 years	Agency-specific management relevance	20
120		minimal disruptions from sea- level rise driven flooding and inland	TRANSIT & RAIL RELIABILITY: Reduced frequency and duration of weather-related outage events for public transit and railroad networks due to climate-safe design standards, operational practices and siting decisions	% completion of systemwide resilience roadmap (MBTA only)		annually (until complete, then every time there is an updated one)	Agency-specific management relevance	20
122		Public transit and rail networks face minimal disruptions from sea- level rise driven flooding and inland	public transit and railroad networks	% of public transit providers that have adopted the state's flood design directive		every 5 years	Agency-specific management relevance	20
123		Public transit and rail networks face minimal disruptions from sea- level rise driven flooding and inland	public transit and railroad networks	# of weather-related transit/rail service disruptions/year (total and normalized by extreme events/year)		annually	Outcome-oriented (gap- filling)	20
124		information technology systems at risk of damages caused by extreme events that directly the infrastructure and during high demand during	weather-related communications systems outage events due to	% of new and existing communication infrastructure projects that consider projected flooding, heat, drought, wildfire, and wind risks throughout the project's lifespan.	DTC, MEPA, private sector partners	every 5 years	Private Data	20:
125		communications infrastructure and information technology systems at risk of damages caused by extreme events that directly the infrastructure and during high demand during	RELIABLE COMMUNICATIONS: Reduced frequency and duration of weather-related communications systems outage events due to climate-safe design standards, operational practices and siting decisions	# of annual communications network weather-related outages reported	DTC, private sector partners	annually	Private Data	20

The remaining metrics that have been identified and reviewed through the metrics development athering data from private entities).

process, but did not rank as highly on the prioritization criteria for a variety of reasons (e.g., action

Metrics for Futher Consideration

		2
INDICATOR	METRIC	

				CONTRIBUTING			YEAR ADDED TO 'FURTHER	
	SECTOR	GOAL	INDICATOR	METRIC	AGENCIES	UPDATE FREQUENCY	PRIORITY BIN	CONSIDERATION' LIST
		resilient to climate change would look like; highlight	Statements that could point to (indicate) success or progress ; often includes a direction (e.g., more/less, increased/decreased)	Measurable (quantitatively) or trackable (qualitatively) outcomes that represent an indicator (or multiple indicators)	Agencies presently assumed to conduct work or track data related to the metric;. Will need to be confirmed.	How often metric would be reported; Will need to be confirmed.	See "bin" descriptions on README sheet	This column identifies the year the metric was added to this list
126	Infrastructure	information technology systems at	RELIABLE COMMUNICATIONS: Reduced frequency and duration of weather-related communications systems outage events due to climate-safe design standards, operational practices and siting decisions	% of data servers in coastal and inland flood-, heat-, and fire-safe locations	DTC, DCAMM, private sector partners	every 5 years	Private Data	202
	Infrastructure	information technology systems at risk of damages caused by extreme events that directly the infrastructure and during high demand during	CLIMATE-SAFE COMMUNICATION INFRASTRUCTURE INVESTMENT: Increasing funding for	Development of vulnerability assessment and prioritized investment plan for communication infrastructure adaptation (completed/in progress/not begun)	DTC, private sector	annually (until complete, then every time there is an updated one)	Private Data	202
		Reliable and affordable electricity access, and minimal repair costs to the Commonwealth, related to damages caused by extreme events that directly affect the transmission and distribution system and demand	CLIMATE-SAFE ELECTRICITY INFRASTRUCTURE INVESTMENT: Increasing funding for electricity- related infrastructure projects that	\$ for electricity generation, transmission, distribution and storage grants to increase			Agency-specific	
	Infrastructure	the Commonwealth, related to damages caused by extreme events that directly affect the transmission and distribution system and demand		projected flooding, heat, drought, wildfire, and wind risks throughout		annually	management relevance	202
	Infrastructure	damages caused by extreme events that directly affect the transmission and distribution system and demand	decisions CLIMATE-SAFE ELECTRICITY INFRASTRUCTURE INVESTMENT: Increasing funding for electricity- related infrastructure projects that account for future climate change	the project's lifespan. Development of vulnerability assessment and prioritized investment plan for electricity infrastructure adaptation (completed/in progress/not begun)	DPU, private sector	every 5 years annually (until complete, then every time there is an updated one)	Quality-based Private Data	202

The remaining metrics that have been identified and reviewed through the metrics development toward goal not begun, need for gathering data from private entities).

toward goal not begun, need for gathering data from private entities).

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	PRIORITY BIN	YEAR ADDED TO 'FURTHER CONSIDERATION' LIST			
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The remaining metrics that have been identified and reviewed through the metrics development process, but did not rank as highly on the prioritization criteria for a variety of reasons (e.g., action toward goal not begun, need for gathering data from private entities).

CONTRIBUTING AGENCIES SECTOR GOAL INDICATOR METRIC **UPDATE FRE** Agencies presently Describe what a Massachusetts Statements that could point to Measurable (quantitatively) or assumed to conduct work or track data How often m resilient to climate change (indicate) success or progress ; trackable (qualitatively) Groupings of goals, indicators, would look like; highlight often includes outcomes that represent an related to the would be rep Will need to and metrics that address similar priority impacts that need to be a direction (e.g., more/less, indicator (or multiple metric;. Will need to themes addressed in order to succeed *increased/decreased*) indicators) be confirmed. confirmed. COMMUNITY NETWORK PARTICIPATION: More people belong to a community network they trust Strong community relationships and # of Community Based organizational networks provide and would turn to before, during, and Organizations (CBOs) engaged with resources and support day-to-day after extreme weather-related the Office of Environmental Justice Environmental Justice, Equity, and and in climate-related emergencies. OEJE, All agencies 156 Collaboration events and Equity every 5 years State, Tribal, and local partnerships create a diverse network with robust RESILIENCE COLLABORATIVES: More capacity that shares resources and regional working groups and best practices for climate resilience associations within Massachusetts initiatives and implement regional and across neighboring states Environmental Justice, Equity, and % of residents covered by standing 157 Collaboration formed to work on climate resilience **regional resilience working groups** OEJE, All agencies solutions every 5 years State, Tribal, and local partnerships create a diverse network with robust **RESILIENCE COLLABORATIVES: More** capacity that shares resources and egional working groups and best practices for climate resilience associations within Massachusetts initiatives and implement regional and across neighboring states # of regional Resilience Environmental Justice, Equity, and formed to work on climate resilience Collaboratives EEA 158 Collaboration solutions. every 5 years State, Tribal, and local partnerships create a diverse network with robust RESILIENCE COLLABORATIVES: More capacity that shares resources and regional working groups and best practices for climate resilience associations within Massachusetts initiatives and implement regional Environmental Justice, Equity, and and across neighboring states \$ of state funding for local/regional 159 Collaboration OEJE, All agencies solutions. formed to work on climate resilience **resilience partnerships** annually State, Tribal, and local partnerships **RESILIENCE COLLABORATIVES: More** create a diverse network with robust capacity that shares resources and regional working groups and best practices for climate resilience associations within Massachusetts # of locally/regionally-led Environmental Justice, Equity, and initiatives and implement regional and across neighboring states partnerships receiving technical OEJE, All agencies 160 Collaboration solutions. formed to work on climate resilience assistance from state programs annually \$ from Federal grants for resilience Climate resilience funding, and the EQUITABLE FUNDING: Equitable and/or adaptation to LIDACs, benefits of climate resilience funding for resilience going to priority following Justice40 Initiative Environmental Justice, Equity, and 164 Collaboration investment, is equitably distributed. populations definitions annually

	PRIORITY BIN	YEAR ADDED TO 'FURTHER CONSIDERATION' LIST
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	Agency-specific management relevance	2024
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				CONTRIBUTING			YEAR ADDED TO 'FURTHER
SECTOR	GOAL	INDICATOR	METRIC	AGENCIES	UPDATE FREQUENCY	PRIORITY BIN	CONSIDERATION' LIST
Groupings of goals, indicators, and metrics that address similar themes	Describe what a Massachusetts resilient to climate change would look like; highlight priority impacts that need to be addressed in order to succeed	Statements that could point to (indicate) success or progress ; often includes a direction (e.g., more/less, increased/decreased)	Measurable (quantitatively) or trackable (qualitatively) outcomes that represent an indicator (or multiple indicators)	Agencies presently assumed to conduct work or track data related to the metric;. Will need to be confirmed.	How often metric would be reported; Will need to be confirmed.	See "bin" descriptions on README sheet	This column identifies the year the metric was added to this lis
	benefits of climate resilience	EQUITABLE FUNDING: Equitable funding for resilience going to priority populations	# of awards and \$ awarded to community-based organizations, and % of climate resilience funding distributedd to community-based organizations	MVP, CZM	annually	Agency-specific management relevance	20.
Environmental Justice, Equity, and	Climate resilience solutions are based on science and Traditional Ecological Knowledge (TEK) or Indigenous Knowledge (IK)-informed decision-making.	RESTORATIVE JUSTICE IN RESPECT FOR IK/TEK: Increase in the proportion of climate resilience planning efforts that respectfully invite and integrate IK/TEK	% of communities who qualified for reduced match, received upfront funding for resilience planning and project implementation that receive a grant		every 5 years	Outcome-oriented (gap- filling)	20
	Climate resilience solutions seek restorative justice to address past disproportionate burdens.	INVESTMENT: State funding for climate resilience considers historical underinvestment (e.g., in EJ, small, rural or Indigenous communities)	% of state grants that implement strategies for equitable allocation of funding	OEJE, All agencies	annually	Action Toward Goal not Begun	20.
Environmental Justice, Equity, and Collaboration	Climate resilience solutions seek restorative justice to address past disproportionate burdens.	CUMULATIVE IMPACT CONSIDERATION: Increase in consideration of cumulative environmental burdens (e.g., facility siting, pollution) in resilience funding allocation		OEJE, All agencies	annually (until 100% is achieved)	Action Toward Goal not Begun	20
Environmental Justice, Equity, and	Climate resilience solutions are based on science and Traditional Ecological Knowledge (TEK) or Indigenous Knowledge (IK)-informed decision-making.	RESTORATIVE JUSTICE IN RESPECT FOR IK/TEK: Increase in the proportion of climate resilience planning efforts that respectfully invite and integrate IK/TEK	% of resilience projects receiving state funding or technical assistance that are led by Indigenous Peoples or Tribes and tribal organizations		annually	Outcome-oriented (gap- filling)	20
	displacement and increased	MINIMIZATION OF NEGATIVE CONSEQUENCES OF ADAPTATION: Increase in the proportion of climate resilience decisions/actions that are examined for ecological, social, health and economic negative side effects (incl. GHG emissions and displacement) prior to enactment	% of resilience programs/projects where siting or scoring criteria considered social, health, economic and ecological impacts including displacement	MVP, CZM, MEPA	annually (until 100% is achieved)	Agency-specific management relevance	20:
	Climate resilience actions and investments avoid negative unintended consequences, including displacement and increased greenhouse gas emissions.	GHG EMISSIONS: Minimized GHG emissions from climate resilience initiatives	% of resilience programs/projects where siting or scoring criteria considered greenhouse gas emissions	MVP, CZM, MEPA	annually (until 100% is achieved)	Agency-specific management relevance	20:

Metrics for Futher Consideration

toward goal not begun, need for ga

	SECTOR	GOAL	INDICATOR	METRIC	CONTRIBUTING AGENCIES	UPDATE FREQUENCY	PRIORITY BIN	YEAR ADDED TO 'FURTHER CONSIDERATION' LIST
		resilient to climate change would look like; highlight	Statements that could point to (indicate) success or progress ; often includes a direction (e.g., more/less, increased/decreased)	Measurable (quantitatively) or trackable (qualitatively) outcomes that represent an indicator (or multiple indicators)	Agencies presently assumed to conduct work or track data related to the metric;. Will need to be confirmed.	How often metric would be reported; Will need to be confirmed.	See "bin" descriptions on README sheet	This column identifies the yec the metric was added to this
175	Natural Environment	Everyone has safe and easy access to public green space, tree cover, aquatic recreational areas, and natural open space.	OPEN SPACE ACCESS: Increase in well-designed open spaces (terrestrial and aquatic) close to home	% of population with public open space within a half mile of home		every 5 years	Outcome-oriented (gap- filling)	
176	Natural Environment	Everyone has safe and easy access to public green space, tree cover, aquatic recreational areas, and natural open space.	OPEN SPACE ACCESS: Increase in well-designed open spaces (terrestrial and aquatic) close to home	\$ of state funding to create more access to outdoor recreation opportunities for marginalized groups		annually	Agency-specific management relevance	
178	Natural Environment	-	FRESHWATER HABITAT AVAILABILITY: Protected, connected, and available habitat				Outcome-oriented (gap- filling)	
179	Natural Environment	Freshwater ecosystems are resilient to rising temperatures and changing precipitation patterns.	FRESHWATER HABITAT QUALITY: Maintained or improved habitat quality in freshwater ecosystems	# of acres of healthy freshwater ecosystems (as indicated by diadromous fish populations and freshwater mussel populations)		every 5 years	Outcome-oriented (gap- filling)	
101		Freshwater ecosystems are resilient to rising temperatures and changing	are more resilient to climate change	# of stream restoration projects			Outcome-oriented (gap-	
181	Natural Environment		stressors FRESHWATER HABITAT MANAGEMENT AND RESTORATION FOR RESILIENCE: Restored habitats, improvements to surrounding conditions, and adaptive management such that the habitats	aimed at planting shade trees		every 5 years	filling)	
183	Natural Environment	to rising temperatures and changing precipitation patterns.	are more resilient to climate change stressors	improvements (e.g., dam removals, culvert upgrades)	,	annually	Agency-specific management relevance	
185	Natural Environment	Freshwater ecosystems are resilient to rising temperatures and changing precipitation patterns.	-	Carbon stored in vs. carbon lost from inland wetlands	Unknown	every 5 years	Action Toward Goal not Begun	

thering data from private entities).

Metrics for Futher Consideration

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	SECTOR	GOAL	INDICATOR	METRIC	AGENCIES	UPDATE FREQUENCY	PRIORITY BIN	CONSIDERATION' LIST
	Groupings of goals, indicators, and metrics that address similar	would look like; highlight priority impacts that need to be	(indicate) success or progress ; often includes a direction (e.g., more/less,	Measurable (quantitatively) or trackable (qualitatively) outcomes that represent an indicator (or multiple	Agencies presently assumed to conduct work or track data related to the metric;. Will need to	How often metric would be reported; Will need to be	See "bin" descriptions on	This column identifies the year
	themes	addressed in order to succeed	increased/decreased)	indicators)	be confirmed.	confirmed.	README sheet	the metric was added to this li
187	Natural Environment	including beaches, dunes, and coastal wetlands, are resilient to sea level rise and the effects of increased temperatures, precipitation, and storms.	-	% of MA shoreline that is in a natural state (incl. restored to natural state)		every 5 years	Outcome-oriented (gap- filling)	2
		including beaches, dunes, and coastal wetlands, are resilient to sea level rise and the effects of increased temperatures,	COASTAL AND MARINE HABITAT QUALITY: Maintained or improved	# of acres of healthy saltmarsh ('healthy' to be defined with			Outcome-oriented (gap-	
188	Natural Environment	precipitation, and storms.	coastal habitats	agencies)		every 5 years	filling)	20
190	Natural Environment	including beaches, dunes, and coastal wetlands, are resilient to sea level rise and the effects of increased temperatures,	management such that habitats are more resilient to climate change	# of resilience projects focused on nutrient management (e.g., Cape Cod Nutrient Management Plan, CZM Nonpoint Source Pollution Grants)		every 5 years	Agency-specific management relevance	2
192	Natural Environment	coastal wetlands, are resilient to sea level rise and the effects of increased temperatures,	(e.g., biodiversity and carbon	Progress toward state biodiversity goals for coastal and marine species (Phase, state of completion)		variable	Quality-based	20
193	Natural Environment	coastal wetlands, are resilient to sea level rise and the effects of increased temperatures,	provision of ecosystem services	Carbon stored in vs. carbon lost from coastal wetlands	Unknown	every 5 years	Action Toward Goal not Begun	20
		Forests and other native inland ecosystems, including urban green spaces, are resilient and maintain biodiversity and biomass despite increasing pests, storms, and	FOREST HABITAT AVAILABILITY: Maintained or improved forest and	% of state under forest cover (differentiated by old growth/mature versus younger		_		2
194	Natural Environment	wildfires.	urban forest habitat	stands)		every 5 years	Quality-based	

athering data from private entities).

The remaining metrics that have been identified and reviewed through the metrics development process, but did not rank as highly on the prioritization criteria for a variety of reasons (e.g., action toward goal not begun, need for gathering data from private entities).

CONTRIBUTING INDICATOR AGENCIES SECTOR GOAL METRIC UPDATE FRE Agencies presently Measurable (quantitatively) or assumed to conduct Describe what a Massachusetts Statements that could point to resilient to climate change (indicate) success or progress ; trackable (qualitatively) work or track data How often m Groupings of goals, indicators, would look like; highlight often includes outcomes that represent an related to the would be rep Will need to and metrics that address similar priority impacts that need to be a direction (e.g., more/less, indicator (or multiple metric;. Will need to themes addressed in order to succeed *increased/decreased*) indicators) be confirmed. confirmed. FOREST AND OTHER INLAND HABITAT MANAGEMENT AND RESTORATION FOR RESILIENCE: Forests and other native inland ecosystems, including urban green Restored habitats, improvements to spaces, are resilient and maintain surrounding conditions, and biodiversity and biomass despite adaptive management such that % of working forest land using increasing pests, storms, and habitats are more resilient to climate climate-smart management 196 Natural Environment wildfires. change stressors practices every 5 years FOREST AND OTHER INLAND HABITAT MANAGEMENT AND RESTORATION FOR RESILIENCE: Forests and other native inland ecosystems, including urban green Restored habitats, improvements to spaces, are resilient and maintain surrounding conditions, and biodiversity and biomass despite adaptive management such that \$ of state funding to private and increasing pests, storms, and habitats are more resilient to climate public landowners for protection of change stressors 199 Natural Environment wildfires. mature forested areas Unknown annually Forests and other native inland ecosystems, including urban green FOREST ECOSYSTEM SERVICES: spaces, are resilient and maintain **Progress toward state biodiversity** biodiversity and biomass despite Maintained or improved provision of goals for forest and other terrestrial increasing pests, storms, and ecosystem services (e.g., species (Phase, state of 200 Natural Environment wildfires. biodiversity and carbon storage) completion) variable Forests and other native inland ecosystems, including urban green spaces, are resilient and maintain FOREST ECOSYSTEM SERVICES: biodiversity and biomass despite Maintained or improved provision of increasing pests, storms, and ecosystem services (e.g., Carbon stored in vs. carbon lost 201 Natural Environment wildfires. biodiversity and carbon storage) from forests Unknown every 5 years

	PRIORITY BIN	YEAR ADDED TO 'FURTHER CONSIDERATION' LIST
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netric ported; be	See "bin" descriptions on README sheet	This column identifies the year the metric was added to this list.
	Outcome-oriented (gap- filling)	2024
	Action Toward Goal not	
	Begun	2024
	Quality-based	2024
	Quality-based	2024
	Action Toward Goal not	
	Begun	2024