APPENDIX A

CLIMATE VULNERABILITY ASSESSMENT

City of Benicia

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1. Introduction and Methodology

The City of Benicia Climate Vulnerability Annex includes a detailed Climate Vulnerability Assessment (CVA) conducted for each climate change-related vulnerability identified in the City annex. The CVA builds off the detailed climate vulnerability assessment in Volume 1 of the County's hazard mitigation plan. This appendix provides a more detailed CVA and can be used in conjunction with hazard mitigation planning documents or as a reference for the General Plan Safety Element of a municipality when required.

This annex considers whether vulnerabilities to specific hazards contain a nexus with climate change. For purposes of this planning effort, hazard vulnerabilities are identified as "areas of concern" or "problem description." An area of concern has a climate nexus if climate change is worsening or predicted to worsen impacts or increase frequencies of the hazard to the population or asset in question.

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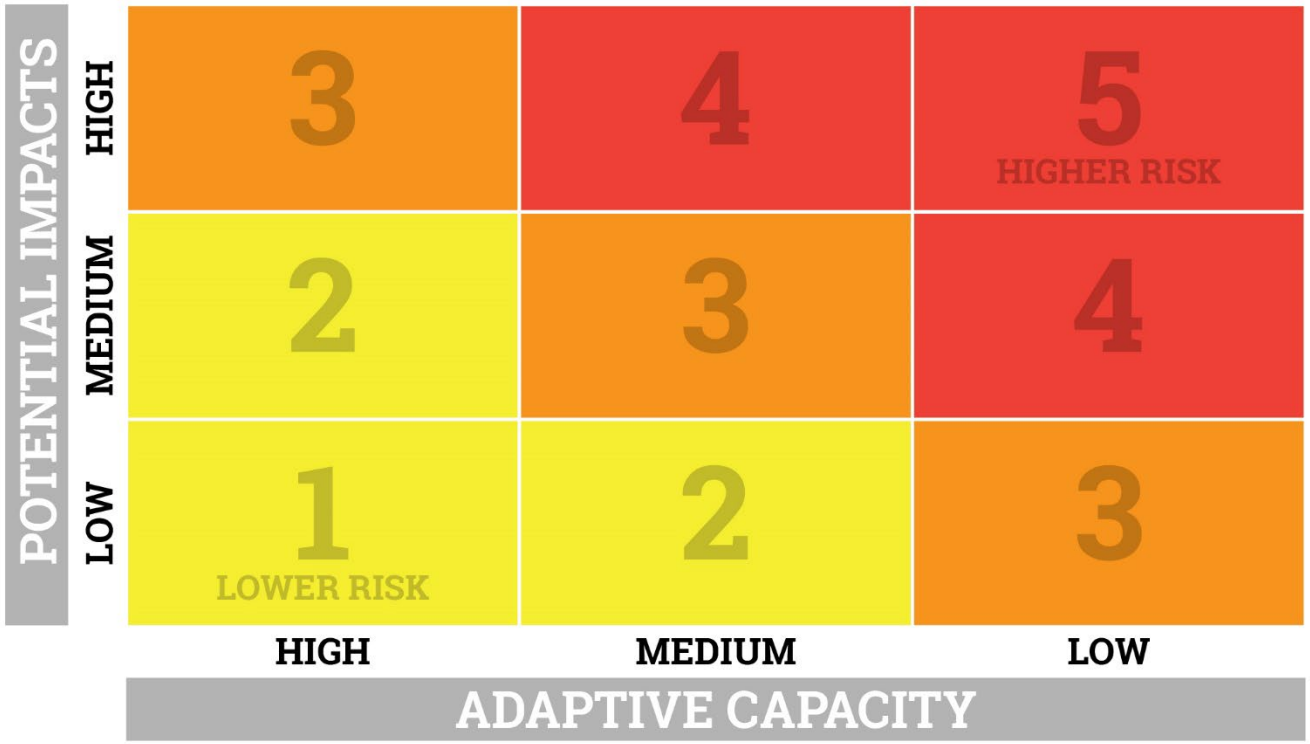
The planning team evaluated potential climate change impacts and jurisdictional adaptive capacity according to the matrix in Figure 1-1, where impacts range from low to high, and adaptive capacity ranges from high to low. These rankings are qualitative and incorporate jurisdictional feedback, existing studies and resources, and an understanding of population demographics and vulnerabilities (see Vol. 1, Section 4.3).

In this assessment, impact and adaptive capacity rankings are combined to give the *climate change vulnerability score*. The scoring is then used to prioritize mitigation actions based on vulnerability to climate change. This assessment has been completed as a part of Solano County's hazard mitigation planning effort in 2021; jurisdictions may want to complete a more detailed CVA as part of in-depth and or standalone climate adaptation planning effort at a later date.



CLASSIFICATIONS DEFINED

ADAPTIVE CAPACITY

HIGH	The population or asset has **high capacity** to manage climate impact; **minimal to no changes** are required.
MEDIUM	The population or asset has **some capacity** to manage climate impact; **some changes** would be required.
LOW	The population or asset **lacks capacity** to manage climate impact; **major changes** would be required.

POTENTIAL IMPACTS

LOW	Impact is **unlikely based** on projected exposure; would result in **minor consequences** to public health, safety, and/or other metrics of concern.
MEDIUM	Impact is **somewhat likely** based on projected exposure; would result in **some consequences** to public health, safety, and/or other metrics of concern.
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CLIMATE CHANGE VULNERABILITY SCORING

Source: CalOES Adaptation Planning Guide, 2020

Figure 1-1. Climate Change Vulnerability Scoring Matrix

2. Climate Vulnerability Assessment

The following table captures the City of Benicia's vulnerabilities with a climate nexus identified in the Solano County 2021 Multi-Jurisdictional Hazard Mitigation Plan. The table summarizes the climate vulnerability score based on the impact to the community and the adaptive capacity to respond to the specific vulnerability.

Table 2-1: Climate Vulnerability Scoring

Problem No.	Problem Description	Impact Score	Adaptive Capacity Score	Climate Change Vulnerability Score	Related Mitigation Actions
ps-DR-BN-54	County buildings and facilities have irrigated landscaping including turf grass.	Low	Medium	**2**	ma-DR-BN-67, ma-DR-BN-93
ps-EW-BN-47	The Industrial Park area (Bayshore and E Channel Rd.) experiences flooding from heavy rain events.	Medium	High	**2**	ma-FL-BN-95, ma-FL-BN-148
ps-EW-BN-48	Heavy rain events can lead to overtopping of Lake Herman and downstream flooding.	High	Medium	**4**	ma-FL-BN-95, ma-AH-BN-76
ps-EW-BN-50	W 9th St. City Pier is routinely impacted by storm events and lacks a breakwater to protect it.	Medium	Medium	**3**	ma-EW-BN-77, ma-FL-BN-84
ps-EW-BN-51	Most households in Benicia lack Air Conditioning systems.	Medium	High	**2**	ma-EW-BN-78, ma-EW-BN-96
ps-EW-BN-52	Benicia has a high number of senior citizens who are vulnerable to high heat events.	High	High	**3**	ma-EW-BN-78, ma-EW-BN-96
ps-EW-BN-53	High mortality of pine and redwood trees throughout the City creating a hazard for high wind events, especially around roads and buildings.	Medium	Medium	**3**	ma-EW-BN-79

Problem No.	Problem Description	Impact Score	Adaptive Capacity Score	Climate Change Vulnerability Score	Related Mitigation Actions
ps-FL-BN-33	The City's wastewater treatment facility is located in the 100-year flood zone.	High	High	**3**	ma-FL-BN-80, ma-FL-BN-95, ma-FL-BN-147
ps-FL-BN-34	3 City Bridges are located in the 100-year flood zone.	Medium	High	**2**	ma-FL-BN-95, ma-FL-BN-88
ps-FL-BN-35	Portions of the Vallero Benicia Refinery are located in the 100-year flood zone.	Medium	Medium	**3**	ma-FL-BN-80, ma-FL-BN-95
ps-FL-BN-38	Sulphur Creek routinely floods. Further investigation is needed to determine mitigation.	Low	Medium	**2**	ma-FL-BN-88
ps-FL-BN-39	1401 people live in the 100-year flood zone.	High	Medium	**4**	ma-FL-BN-95, ma-FL-BN-88, ma-AH-BN-82
ps-FL-BN-40	Rancho Benicia Mobile Home Park is senior oriented community that is located in the 100-year flood zone.	High	Medium	**4**	ma-FL-BN-95, ma-FL-BN-88
ps-SR-BN-55	W 2nd St., west of E 2nd St. down to B St. is vulnerable to flooding sea level rise and king tide events.	Medium	Medium	**3**	ma-FL-BN-84, ma-SR-BN-101, ma-SR-BN-102
ps-SR-BN-56	The City's wastewater treatment facility is located in a low sea level rise scenario area.	Medium	Medium	**3**	ma-SR-BN-101
ps-SR-BN-57	There is a concern for impacts of sheet flow on 9th and 10th St. due to sea level rise.	Low	Medium	**2**	ma-SR-BN-101, ma-SR-BN-102
ps-SR-BN-58	Fitzgerald Field is routinely flooded during high tide.	Low	Medium	**2**	ma-SR-BN-103

Problem No.	Problem Description	Impact Score	Adaptive Capacity Score	Climate Change Vulnerability Score	Related Mitigation Actions
ps-SR-BN-59	Approximately 1571 people live in a low sea level rise scenario area.	High	Medium	**4**	ma-SR-BN-101, ma-SR-BN-102, ma-SR-BN-103
ps-WF-BN-41	The City's Water Treatment Plant is located in the middle of open space and at an increased risk of wildfire.	High	High	**3**	ma-WF-BN-90, ma-WF-BN-90, ma-WF-BN-114
ps-WF-BN-42	Almost the entire City of Benicia is located in a moderate designated wildfire risk area.	High	Medium	**4**	ma-AH-BN-82, ma-AH-BN-98, ma-WF-BN-114, ma-WF-BN-115
ps-WF-BN-44	Approximately 24,861 people live in a moderate or high wildfire risk area.	High	Medium	**4**	ma-AH-BN-98, ma-WF-BN-90, ma-WF-BN-115
ps-WF-BN-46	The City has 2200 acres of open spaces, located between residential areas, which increase the risk of wildfire.	Medium	High	**2**	ma-WF-BN-90, ma-WF-BN-105

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APPENDIX A

CLIMATE VULNERABILITY ASSESSMENT

City of Dixon

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1. Introduction and Methodology

The City of Dixon Climate Vulnerability Annex includes a detailed Climate Vulnerability Assessment (CVA) conducted for each climate change-related vulnerability identified in the City annex. The CVA builds off the detailed climate vulnerability assessment in Volume 1 of the County's hazard mitigation plan. This appendix provides a more detailed CVA and can be used in conjunction with hazard mitigation planning documents or as a reference for the General Plan Safety Element of a municipality when required.

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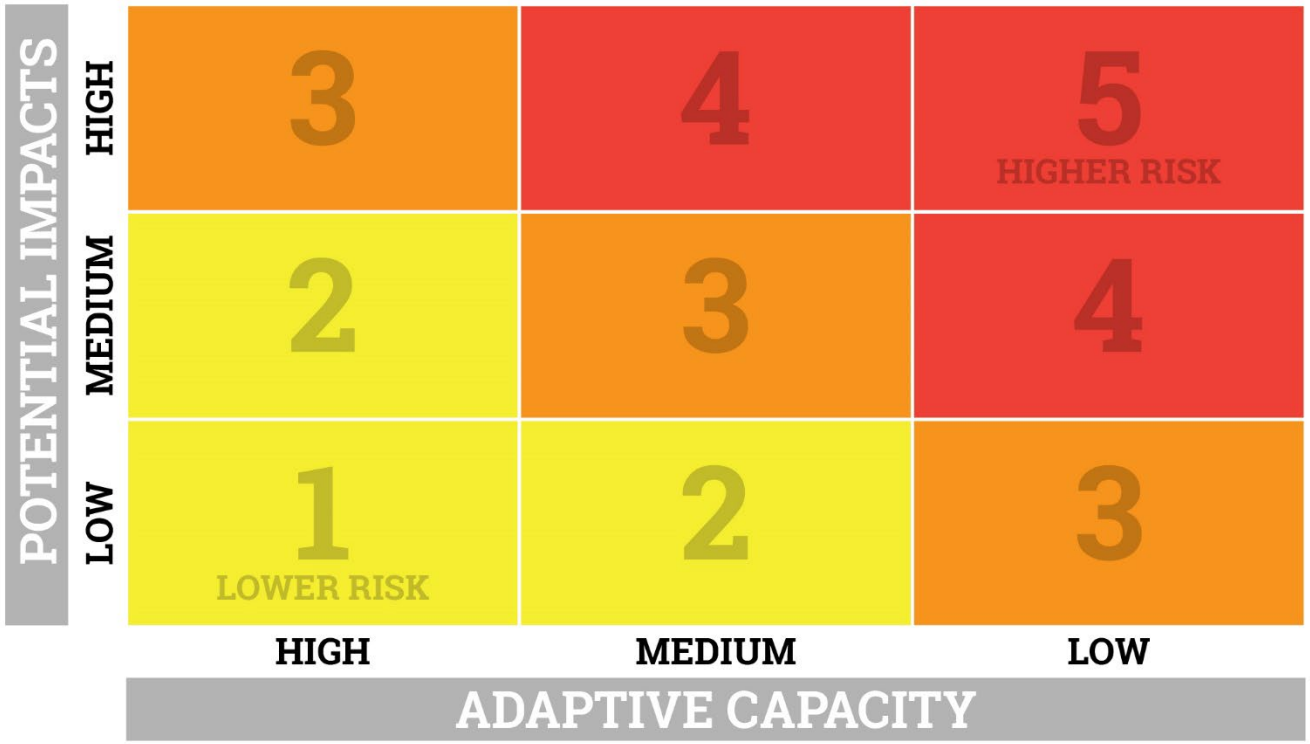
The planning team evaluated potential climate change impacts and jurisdictional adaptive capacity according to the matrix in Figure 1-1, where impacts range from low to high, and adaptive capacity ranges from high to low. These rankings are qualitative and incorporate jurisdictional feedback, existing studies and resources, and an understanding of population demographics and vulnerabilities (see Vol. 1, Section 4.3).

In this assessment, impact and adaptive capacity rankings are combined to give the *climate change vulnerability score*. The scoring is then used to prioritize mitigation actions based on vulnerability to climate change. This assessment has been completed as a part of Solano County's hazard mitigation planning effort in 2021; jurisdictions may want to complete a more detailed CVA as part of in-depth and or standalone climate adaptation planning effort at a later date.



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POTENTIAL IMPACTS

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CLIMATE CHANGE VULNERABILITY SCORING

Source: CalOES Adaptation Planning Guide, 2020

Figure 1-1. Climate Change Vulnerability Scoring Matrix

2. Climate Vulnerability Assessment

The following table captures the City of Dixon's vulnerabilities with a climate nexus identified in the Solano County 2021 Multi-Jurisdictional Hazard Mitigation Plan. The table summarizes the climate vulnerability score based on the impact to the community and the adaptive capacity to respond to the specific vulnerability.

Table 2-1: Climate Vulnerability Scoring

Problem No.	Problem Description	Impact Score	Adaptive Capacity Score	Climate Change Vulnerability Score	Related Mitigation Action
ps-CC-DX-180	Climate Change/ Sea Level Rise predicted to increase the intensity of storms, drought, flooding, and wildfire.	High	Medium	**4**	ma-FL-DX-126, ma-FL-DX-186
ps-EQ-DX-151	Earthquakes can cause major damage to the jurisdiction causing liquefaction throughout the city.	Low	Low	**3**	ma-EQ-DX-119
ps-EQ-DX-153	Most of the City's water is produced from wells, however if pumps are damaged during an earthquake, this may cause major water supply issues.	High	Medium	**4**	ma-EQ-DX-121
ps-EQ-DX-155	Sewer lines are vitrified clay pipes, there is potential for failure when shaking.	High	Medium	**4**	ma-EQ-DX-123
ps-EW-DX-158	70 mile per hour wind gusts have become more frequent presenting potential damage opportunity to infrastructure and increased susceptibility to damaging wildland fires.	High	Medium	**4**	ma-EW-DX-124
ps-FL-DX-156	Sandbagging is required annually to address flooding.	Medium	Medium	**3**	ma-FL-DX-126, ma-FL-DX-186

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APPENDIX A

CLIMATE VULNERABILITY ASSESSMENT

City of Fairfield

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1. Introduction and Methodology

The City of Fairfield Climate Vulnerability Annex includes a detailed Climate Vulnerability Assessment (CVA) conducted for each climate change-related vulnerability identified in the City annex. The CVA builds off the detailed climate vulnerability assessment in Volume 1 of the County's hazard mitigation plan. This appendix provides a more detailed CVA and can be used in conjunction with hazard mitigation planning documents or as a reference for the General Plan Safety Element of a municipality when required.

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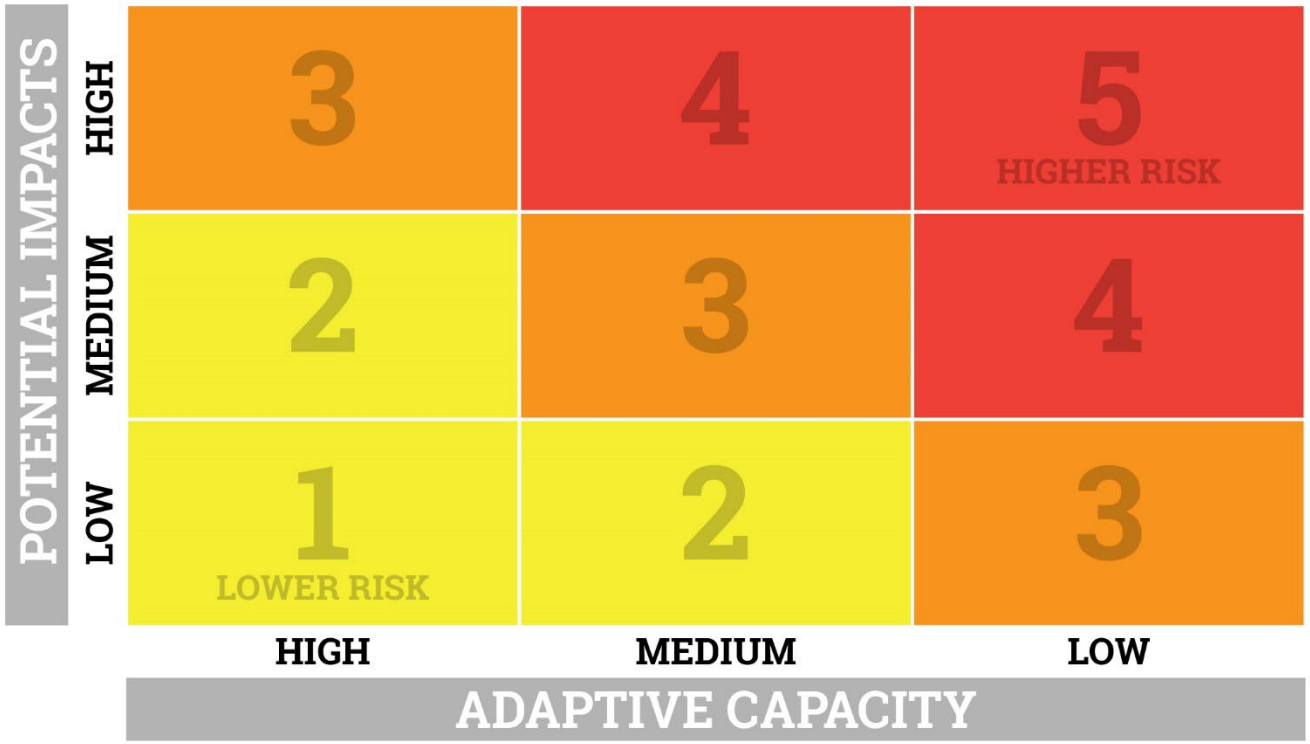
In this assessment, impact and adaptive capacity rankings are combined to give the *climate change vulnerability score*. The scoring is then used to prioritize mitigation actions based on vulnerability to climate change. This assessment has been completed as a part of Solano County's hazard mitigation planning effort in 2021; jurisdictions may want to complete a more detailed CVA as part of in-depth and or standalone climate adaptation planning effort at a later date.



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CLIMATE CHANGE VULNERABILITY SCORING

Source: CalOES Adaptation Planning Guide, 2020

Figure 1-1. Climate Change Vulnerability Scoring Matrix

2. Climate Vulnerability Assessment

The following table captures the City of Fairfield's vulnerabilities with a climate nexus identified in the Solano County 2021 Multi-Jurisdictional Hazard Mitigation Plan. The table summarizes the climate vulnerability score based on the impact to the community and the adaptive capacity to respond to the specific vulnerability.

Table 2-1: Climate Vulnerability Scoring

Problem No.	Problem Description	Impact Score	Adaptive Capacity Score	Climate Change Vulnerability Score	Related Mitigation Action
ps-EQ-FF-145	The city has new and old subgrade and above grade infrastructure with gravity + direct fed water systems. Tanks are all secure however, major earthquakes could significantly damage pumps, storage tanks, and could cause small flooding, resulting in water loss for the fire district.	High	Medium	**4**	ma-EQ-FF-144
ps-EQ-FF-147	The city has a Clorox chemical plant in the 39th district, a major earthquake could cause a hazardous material spill(s).	High	Low	**5**	ma-EQ-FF-182, ma-EQ-FF-183
ps-EW-FF-139	High wind events have been causing tree failure within the jurisdiction.	Medium	Medium	**3**	ma-EW-FF-139, ma-AH-FF-193
ps-EW-FF-141	Heavy rain concerns with flooding in downtown are exacerbated by climate change.	High	Medium	**4**	ma-FL-FF-146, ma-FL-FF-138, ma-EW-FF-187
ps-FL-FF-138	King tide events are causing more flooding and worsening with climate change.	High	Medium	**4**	ma-FL-FF-138

Problem No.	Problem Description	Impact Score	Adaptive Capacity Score	Climate Change Vulnerability Score	Related Mitigation Action
ps-WF-FF-143	Small fires have been jumping into people's backyards causing enhanced risk and potential structural damage.	Medium	High	**2**	ma-WF-FF-142

APPENDIX A

CLIMATE VULNERABILITY ASSESSMENT

City of Rio Vista

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1. Introduction and Methodology

The City of Rio Vista Climate Vulnerability Annex includes a detailed Climate Vulnerability Assessment (CVA) conducted for each climate change-related vulnerability identified in the City annex. The CVA builds off the detailed climate vulnerability assessment in Volume 1 of the County's hazard mitigation plan. This appendix provides a more detailed CVA and can be used in conjunction with hazard mitigation planning documents or as a reference for the General Plan Safety Element of a municipality when required.

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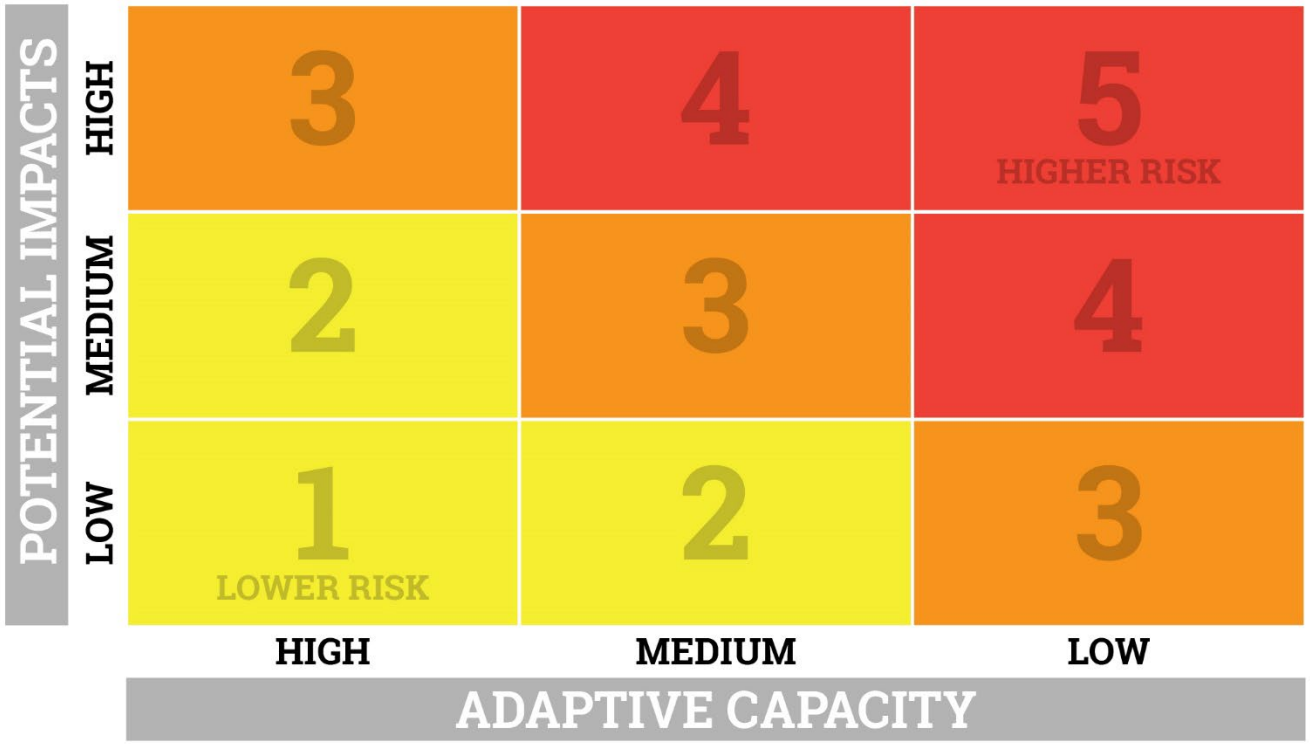

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CLIMATE CHANGE VULNERABILITY SCORING

Source: CalOES Adaptation Planning Guide, 2020

Figure 1-1. Climate Change Vulnerability Scoring Matrix

2. Climate Vulnerability Assessment

The following table captures the City of Rio Vista's vulnerabilities with a climate nexus identified in the Solano County 2021 Multi-Jurisdictional Hazard Mitigation Plan. The table summarizes the climate vulnerability score based on the impact to the community and the adaptive capacity to respond to the specific vulnerability.

Table 2-1: Climate Vulnerability Scoring

Problem No.	Problem Description	Impact Score	Adaptive Capacity Score	Climate Change Vulnerability Score	Related Mitigation Actions
ps-DR-RV-8	The city depends on groundwater for domestic water use, which could be impacted by drought.	Medium	Medium	**3**	ma-DR-BN-106
ps-EW-RV-6	The City experiences high winds, which could exacerbate fires.	High	Medium	**4**	ma-EW-RV-108, ma-WF-RV-112
ps-FL-RV-10	Edgewater Drive is a residential area with a high flood risk.	High	Medium	**4**	ma-FL-RV-110, ma-FL-RV-109
ps-FL-RV-11	The city has some floodwalls, but its not certain whether they are certified or they would be sufficient in the event of a large flood.	High	High	**3**	ma-FL-RV-109
ps-FL-RV-12	The stormwater system is not holding up well and a heavy flood could compromise it.	High	Medium	**4**	ma-FL-RV-110
ps-FL-RV-9	Flooding from the Sacramento River is a particular concern, especially to the city hall area; the boat ramp just behind city hall is susceptible to floodwaters.	High	Medium	**4**	ma-FL-RV-109
ps-WF-RV-7	There is a threat of wildfire around the city due to standing grain, a prevalent fuel.	Medium	Medium	**3**	ma-WF-RV-112, ma-WF-RV-113

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APPENDIX A

CLIMATE VULNERABILITY ASSESSMENT

City of Suisun City

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1. Introduction and Methodology

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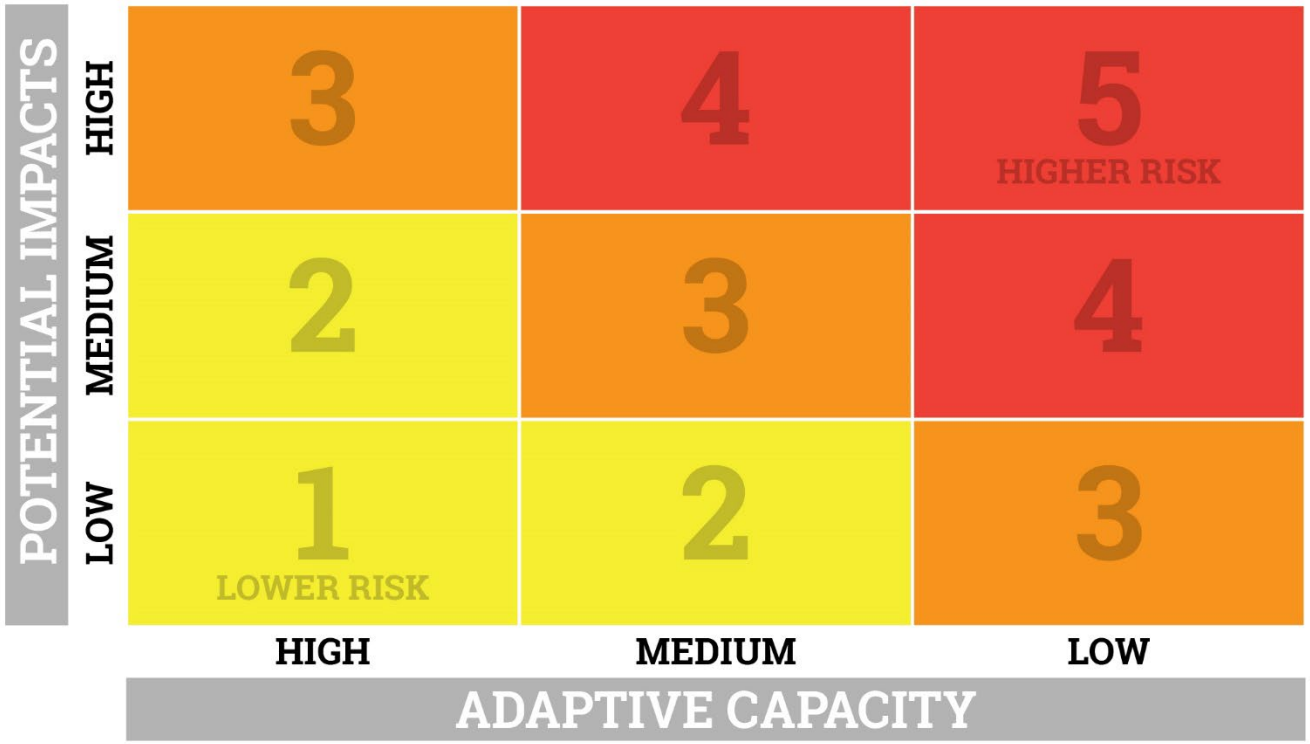

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CLIMATE CHANGE VULNERABILITY SCORING

Source: CalOES Adaptation Planning Guide, 2020

Figure 1-1. Climate Change Vulnerability Scoring Matrix

2. Climate Vulnerability Assessment

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Table 2-1: Climate Vulnerability Scoring

Problem No.	Problem Description	Impact Score	Adaptive Capacity Score	Climate Change Vulnerability Score	Related Mitigation Action
ps-CC-SU-161	King tide events are causing worsened flooding events. Exposure to sea level rise, increased risk.	High	Medium	**4**	ma-CC-SU-127, ma-SR-SU-197
ps-EQ-SU-167	Tsunami risk will be growing with sea level rise.	High	Medium	**4**	ma-EQ-SU-180
ps-EW-SU-171	High wind events cause more consistent power outages.	High	Medium	**4**	ma-EW-SU-131, ma-EW-SU-132
ps-FL-SU-168	Highway 12 suffers major impacts from large flood events.	High	Medium	**4**	ma-FL-SU-133
ps-FL-SU-169	Old town is vulnerable to flooding and flood damage, especially during king tide events.	High	Medium	**4**	ma-FL-SU-134, ma-AH-SU-198, ma-FL-SU-200

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APPENDIX A

CLIMATE VULNERABILITY ASSESSMENT

City of Vacaville

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1. Introduction and Methodology

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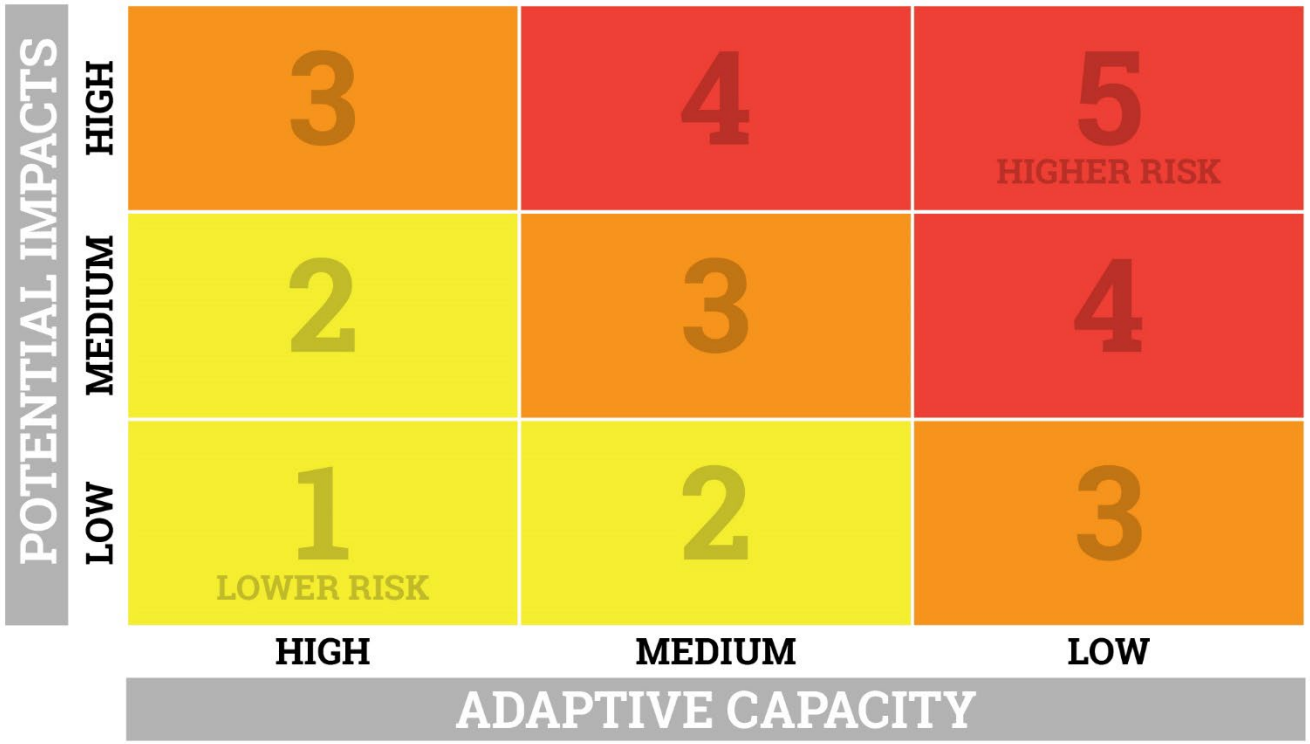

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LOW	The population or asset **lacks capacity** to manage climate impact; **major changes** would be required.

POTENTIAL IMPACTS

LOW	Impact is **unlikely based** on projected exposure; would result in **minor consequences** to public health, safety, and/or other metrics of concern.
MEDIUM	Impact is **somewhat likely** based on projected exposure; would result in **some consequences** to public health, safety, and/or other metrics of concern.
HIGH	Impact is **highly likely** based on projected exposure; would result in **substantial consequences** to public health, safety, and/or other metrics of concern.

CLIMATE CHANGE VULNERABILITY SCORING

Source: CalOES Adaptation Planning Guide, 2020

Figure 1-1. Climate Change Vulnerability Scoring Matrix

2. Climate Vulnerability Assessment

The following table captures the City of Vacaville vulnerabilities with a climate nexus identified in the Solano County 2021 Multi-Jurisdictional Hazard Mitigation Plan. The table summarizes the climate vulnerability score based on the impact to the community and the adaptive capacity to respond to the specific vulnerability.

Table 2-1: Climate Vulnerability Scoring

Problem No.	Problem Description	Impact Score	Adaptive Capacity Score	Climate Change Vulnerability Score	Related Mitigation Actions
ps-AH-VC-105	Loss of power in various hazard events (EQ, high wind, wildfire, high heat, etc) can impact vulnerable populations in City	Medium	Medium	**3**	ma-AH-VC-185
ps-CC-VC-80	City vulnerabilities and opportunities to address climate change haven't been documented in a city-wide climate action plan to date.	Medium	Low	**4**	ma-CC-VC-189
ps-CC-VC-81	Climate change will exacerbate the effects of other hazards including wildfire, drought, flood, and extreme weather	High	Medium	**4**	ma-CC-VC-189
ps-DR-VC-93	City continues steps to implement a reclaimed water system, in part to address drought resiliency	Medium	High	**2**	ma-DR-VC-56
ps-DR-VC-94	Public may not be aware of water efficiency and conservation methods to alleviate drought impacts.	Medium	High	**2**	ma-DR-VC-58

Problem No.	Problem Description	Impact Score	Adaptive Capacity Score	Climate Change Vulnerability Score	Related Mitigation Actions
ps-DR-VC-95	City may consider water efficient building, development, and outdoor landscaping that go beyond state standards.	Medium	High	**2**	ma-DR-VC-57
ps-EW-VC-86	Due to increasing windstorm intensity, residents have seen increase in power outages from downed trees and limbs.	High	Medium	**4**	ma-EW-VC-190
ps-EW-VC-87	While the City maintains trees to reduce power outages from high wind, many problematic trees are located on private property	Medium	Medium	**3**	ma-EW-VC-190
ps-EW-VC-88	Residents in the S. Woods Tulare neighborhood continue to see flooding from localized rain events	High	Medium	**4**	ma-FL-VC-41
ps-EW-VC-89	Residents experience loss of power during extreme weather events.	Medium	Medium	**3**	ma-EW-VC-60
ps-EW-VC-90	Residents continue to need cooling center support from City in high heat events.	High	Medium	**4**	ma-HH-VC-62, ma-HH-VC-63
ps-EW-VC-91	City has impervious surfaces as part of City facilities that contribute to urban heat island effect	Medium	Medium	**3**	ma-EW-VC-61
ps-EW-VC-92	Residential / industrial development includes impervious surfaces that contribute to urban heat island effect.	Medium	Low	**4**	ma-EW-VC-61

Problem No.	Problem Description	Impact Score	Adaptive Capacity Score	Climate Change Vulnerability Score	Related Mitigation Actions
ps-FL-VC-4	Flooding continues to affect residents in the S. Wood/ Tulare areas of the City.	Medium	Medium	**3**	ma-FL-VC-41, ma-FL-VC-44, ma-FL-VC-42, ma-FL-VC-46, ma-FL-VC-49, ma-WF-VC-53, ma-FL-VC-199
ps-FL-VC-96	A number of recreational paths near streams are blocked off due to erosion.	Low	Medium	**2**	ma-FL-VC-41, ma-FL-VC-192
ps-FL-VC-97	Streams and waterways are seeing significant erosion throughout the City. One major point of erosion is at a 90 degree bend in Ulatis Creek as it turns to parallel East Main.	High	Medium	**4**	ma-FL-VC-192
ps-SF-VC-82	City has zones that are more prone to landslide and may require additional mitigation work.	Medium	Medium	**3**	ma-SF-VC-66
ps-SF-VC-83	Homeowners in high landslide areas may not have means to implement mitigation efforts.	Low	Medium	**2**	ma-SF-VC-66
ps-SF-VC-84	Much of the landslide susceptibility in the City occurs on private property.	Low	Medium	**2**	ma-SF-VC-66
ps-SF-VC-85	Recently burned slopes may create landslide or mudslide hazards in the future.	High	Medium	**4**	ma-SF-VC-64, ma-SF-VC-65, ma-FL-VC-191
ps-WF-VC-100	Riparian areas are particularly vulnerable to wildfire because of environmental need for vegetation.	Medium	Low	**4**	ma-WF-VC-47

Problem No.	Problem Description	Impact Score	Adaptive Capacity Score	Climate Change Vulnerability Score	Related Mitigation Actions
ps-WF-VC-101	City residents may not know they are in high wildfire zones or how to properly mitigate	Medium	Medium	**3**	ma-DR-VC-57, ma-WF-VC-51
ps-WF-VC-102	Recently burned slopes may create landslide or mudslide hazards in the future.	High	Medium	**4**	ma-WF-VC-47, ma-WF-VC-52, ma-FL-VC-191
ps-WF-VC-5	Additional weed abatement/ vegetation removal is needed in key areas of the City	High	High	**3**	ma-DR-VC-57
ps-WF-VC-99	Some additional access points may be needed for future access during wildfire events	High	High	**3**	ma-WF-VC-47, ma-WF-VC-48

APPENDIX A

CLIMATE VULNERABILITY ASSESSMENT

City of Vallejo

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1. Introduction and Methodology

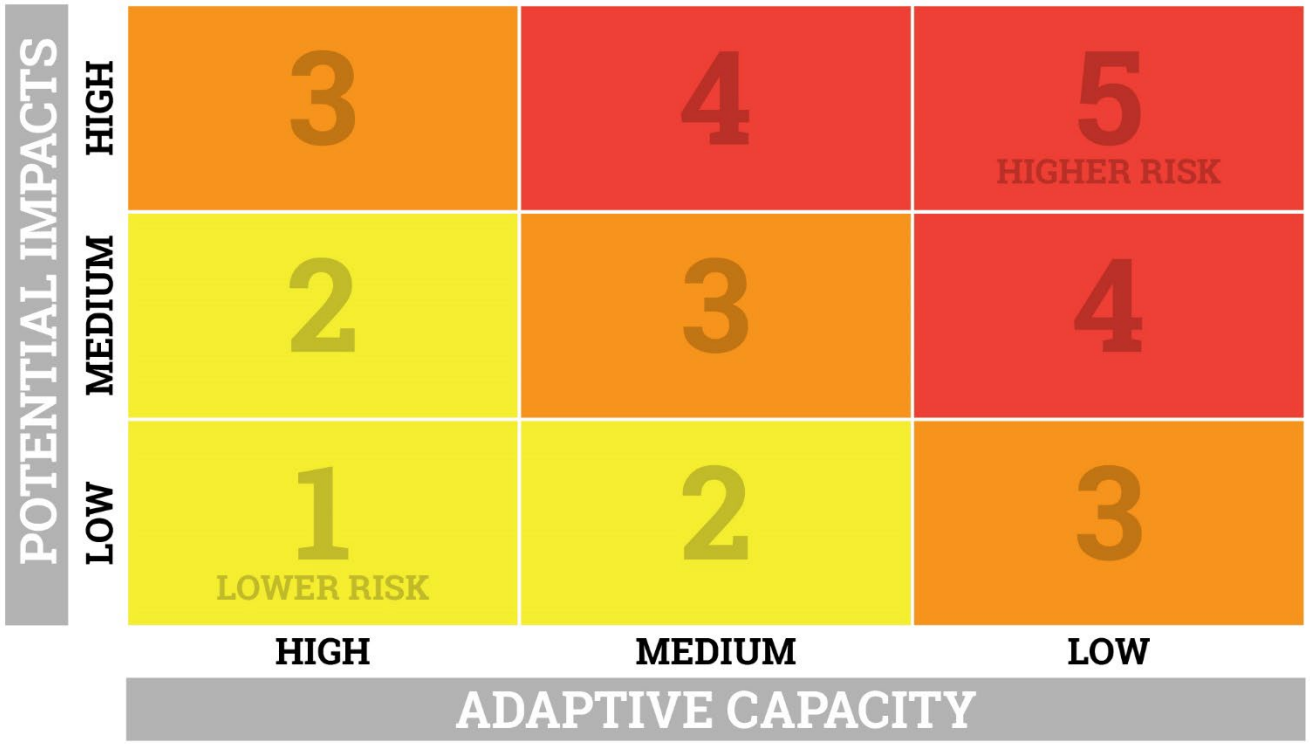
The City of Vallejo Climate Vulnerability Annex includes a detailed Climate Vulnerability Assessment (CVA) conducted for each climate change-related vulnerability identified in the City annex. The CVA builds off the detailed climate vulnerability assessment in Volume 1 of the County's hazard mitigation plan. This appendix provides a more detailed CVA and can be used in conjunction with hazard mitigation planning documents or as a reference for the General Plan Safety Element of a municipality when required.

This annex considers whether vulnerabilities to specific hazards contain a nexus with climate change. For purposes of this planning effort, hazard vulnerabilities are identified as "areas of concern" or "problem description." An area of concern has a climate nexus if climate change is worsening or predicted to worsen impacts or increase frequencies of the hazard to the population or asset in question.

If the area of concern identified by the planning team has a nexus with climate change, this CVA method estimates both the *impact* of climate change to the area of concern and the jurisdiction's capacity to adapt to the predicted future impact, also known as "*adaptive capacity*." Adaptive capacity is a community or region's existing ability to moderate climate change impacts. Assessing adaptive capacity includes analysis of policies, plans, programs, funding, and staffing capacity. (Cal. Adaptation Planning Guide, 2020, p. 94)

The planning team evaluated potential climate change impacts and jurisdictional adaptive capacity according to the matrix in Figure 1-1, where impacts range from low to high, and adaptive capacity ranges from high to low. These rankings are qualitative and incorporate jurisdictional feedback, existing studies and resources, and an understanding of population demographics and vulnerabilities (see Vol. 1, Section 4.3).

In this assessment, impact and adaptive capacity rankings are combined to give the *climate change vulnerability score*. The scoring is then used to prioritize mitigation actions based on vulnerability to climate change. This assessment has been completed as a part of Solano County's hazard mitigation planning effort in 2021; jurisdictions may want to complete a more detailed CVA as part of in-depth and or standalone climate adaptation planning effort at a later date.



CLASSIFICATIONS DEFINED

ADAPTIVE CAPACITY

HIGH	The population or asset has **high capacity** to manage climate impact; **minimal to no changes** are required.
MEDIUM	The population or asset has **some capacity** to manage climate impact; **some changes** would be required.
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CLIMATE CHANGE VULNERABILITY SCORING

Source: CalOES Adaptation Planning Guide, 2020

Figure 1-1. Climate Change Vulnerability Scoring Matrix

2. Climate Vulnerability Assessment

The following table captures the City of Vallejo's vulnerabilities with a climate nexus identified in the Solano County 2021 Multi-Jurisdictional Hazard Mitigation Plan. The table summarizes the climate vulnerability score based on the impact to the community and the adaptive capacity to respond to the specific vulnerability.

Table 2-1: Climate Vulnerability Scoring

Problem No.	Problem Description	Impact Score	Adaptive Capacity Score	Climate Change Vulnerability Score	Related MA
ps-CC-VL-181	The City has an estimated 2,500 parcels in areas that would be exposed to high and extreme levels of sea level rise.	High	Medium	**4**	ma-CC-VL-203
ps-DR-VL-74	Periods of drought can have an impact on the water supply for the City of Vallejo.	Medium	Medium	**3**	ma-DR-VL-149
ps-EW-VL-75	High wind events can increase the frequency of PSPS events, impacting City pump stations.	Medium	Medium	**3**	ma-EW-VL-156
ps-EW-VL-76	Heavy rains could create localized flooding issues around City infrastructure and roads, posing a threat to buildings and creating hazardous travel conditions.	Medium	Medium	**3**	ma-FL-VL-157
ps-EW-VL-77	High winds exacerbate the impacts of wildfire.	Medium	Medium	**3**	ma-EW-VL-158
ps-EW-VL-78	High winds can blow trees over presenting hazards for buildings, roads, and pedestrians/cars.	Medium	Medium	**3**	ma-EW-VL-159

Problem No.	Problem Description	Impact Score	Adaptive Capacity Score	Climate Change Vulnerability Score	Related MA
ps-WF-VL-61	There are approximately 51,227 people living in a moderate wildfire risk area in the City of Vallejo.	High	Medium	**4**	ma-WF-VL-160
ps-WF-VL-62	There are 91 child care facilities located in a moderate wildfire risk area in the City of Vallejo.	High	Medium	**4**	ma-WF-VL-160
ps-WF-VL-63	The City has a lot of open space with fuels that increase the risk of wildfire. Glenco Waterfront Park and Don Hunts park are areas of specific concern.	High	High	**3**	ma-EW-VL-158, ma-WF-VL-161