



COMPREHENSIVE PLAN Appendices

Appendix H – City of Henderson 2012 All Hazard Emergency Operations Plan

Table H-12. City of Henderson, Mitigation Action Plan

No.	Selected (Y/N)	Description	Prioritization Criteria	Facility to be Mitigated (if known)	Department or Agency	Timeframe To be Implemented	UPDATE SINCE Mitigation Action Plan Approval
1	Y	Create a GIS-based pre-application review for new construction and major remodels of residential and/or non-residential structures in hazard areas, such high and/or very high wildfire areas.	B, D, E	Not Applicable	Community Development, Public Works	5 yrs	The City of Henderson uses webpages and GIS applications during the entitlement review for all new construction and substantial redevelopment of residential and non-residential structures. The information contained on the webpages and applications allows the City to identify sites in Special Flood Hazard Areas (SFHA) at the entitlement stage to inform the developer and engineers on the proposed project that certain design criteria must be met. The City continues to work on creating GIS databases for other hazard areas.
2	Y	Integrate the Clark County HMP, in particular the hazard analysis and mitigation strategy sections, into local planning documents, including general plans, emergency operations plans, and capital improvement plans.	A, B, D, E	Not Applicable	Fire Department- Emergency Management	5 yrs	The Clark County Hazard Mitigation Plan (CCHMP) has been integrated into the 2012 City of Henderson All-Hazard Emergency Operation Plan and is integrated into appropriate Fire, Police and department plans. As appropriate new plans are developed, the CCHMP will be included.
3	Y	Add mitigation actions to each jurisdiction's website.*	A, B, C, D	Not Applicable	Emergency Management, Public Works, Utilities	3-5 yrs	The Clark County Hazard Mitigation Plan has been added to the City of Henderson official website under the department tab of Fire Department, Emergency Management.
4	Y	Develop a public outreach program that informs property owners located in the dam inundation areas about voluntary flood insurance.	A, B, D	Not Applicable	Public Works	1-3 yrs	PW has developed GIS shape files of the dam inundation for the detention basins as part of the Emergency Action Plans (EAPs). An update of the EAPs is scheduled, which will include a review of the inundation areas for each basin and revisions as necessary. Once the update is complete the City will work with the Clark County Regional Flood Control District (RFCD) to incorporate the shape files onto the FloodView Advanced web page and include information regarding inundation areas into the flood zone determination letters. The City has started coordinating with the RFCD on updating the public outreach program to meet the requirements in the current CRS Coordinators Manual.

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5	Y	Develop a drought contingency plan to provide an effective and systematic means of assessing drought conditions, develop mitigation actions and programs to reduce risks in advance of drought, and develop response options that minimize hardships during drought.	A, B, C, D	Not Applicable	Utilities	1-3 yrs	The City of Henderson, Department of Utility Service (DUS) follows the Southern Nevada Water Authority's (SNWA) "Drought Contingency Plan". With current Lake Mead water levels continuing to decrease, DUS is coordinating with SNWA to secure additional water through the existing network should Basic Water Company's (BWC) ability to deliver water be compromised (DUS receive approximately 15% of its water from BWC. DUS processes this water at its Water Treatment Plant).
11	Y	Acquire, relocate, elevate, and/or flood proof critical facilities that are located within the 100-year floodplain.	B, C, D	Unknown	Public Works	3-5 yrs	The City does not have any critical facilities located within the 100-year floodplain. The critical facilities inventory will be revised as part of the 5-year update of the EAPs. Once the updates are completed the privately owned critical facilities locations will be compared to the 100-year floodplain within City jurisdiction. Facilities will be reviewed to ensure that they meet current design criteria for development in the 100-year floodplain. Any facilities that do not will be monitored for substantial improvement as defined in the City ordinance and required to come into compliance a prior to permits being issued.

12	Y	Reinforce County and local ramps, bridges, and roads from	B, C, D	Unknown	Public	5	PW reviews and updates the Construction Improvement Program (CIP) annually. The City receives
		flooding through protection activities, including elevating the			Works	yrs	funding from various sources including the Clark County Regional Flood Control District
		road and installing culverts beneath the road or building a higher					(CCRCFD), Southern Nevada Regional Transportation Commission (RTC), and through other
		bridge across the area that experiences regular flooding.					sources. The following is a list of road and flood control projects currently under design or
							construction:
							<u>Design</u>
							Duck Creek, Sunset to Sandhill (Flood Control)
							Pittman North Detention Basin and Outfall (Flood Control)
							Anthem Parkway Channel, Horizon Ridge to Siena (Flood Control)
							C-1 Channel Replacement Drake to Burkholder (Flood Control)
							Pittman Wash Duck Creek @ US 95 (Flood Control)
							Pittman Wash, Horizon to Palm Hills (Flood Control)
							Horizon Ridge Detention Basin and Outfall (Flood Control)
							Volunteer Road, Executive Airport to Las Vegas Boulevard (Road)
							Arroyo Grande Rehabilitation, Horizon Ridge to Sunset (Road)
							Stephanie, Galleria to Patrick/US95 Bridge/ Stufflebeam (Road)
							Center Street, Burkholder to Lake Mead (Road and Flood Control)
							Warm Springs, Stephanie to Boulder Highway (Road)
							Pecos, Windmill to Robindale (Road)
							Gibson, Sunset to Warm Springs (Road)
							Racetrack Road, Boulder Hwy to Athens (Road and Flood Control)
							High View, Valle Verde to Green Valley (Road)
							Eastern Avenue Widening, Serene to Candelaria (Road)
							Pueblo, Newport to Warm Springs (Road)
							Under Construction
							Equestrian Tributary Phase II (Flood Control)
							Equestrian Detention Basin Expansion (Flood Control)
							Pittman Wash, UPRR to Santiago (Flood Control)
							Whitney Ranch, Sunset to Russell (Road)
							Galleria Road, Pabco to Lake Las Vegas (Road)
							Pioneer Detention Basin Inflow Channel (Flood Control)
							Warm Springs, Arroyo Grande to Stephanie (Road)
							Eastern Avenue, Silverado Ranch to Coronado Center (Road)
							Sandwedge Channel Miscellaneous Improvements (Flood Control)
							Water Street, Lake Mead to Boulder Hwy (Road)

12	Y	Reinforce County and local ramps, bridges, and roads from flooding through protection activities, including elevating the road and installing culverts beneath the road or building a higher bridge across the area that experiences regular flooding.	B, C, D	Unknown	Public Works	5 yrs	Continued from previous page) Construction Complete Pittman Park Detention Basin Weir (Flood Control) Mission/Calvert Drainage Improvements (Flood Control) Horizon Drive at Pacific/US 95-I515 Horizon Ridge Corridor Improvements (Road) Flores Avenue (Road and Flood Control) Hull Street Improvements (Flood Control)
13	Y	Work with FEMA Region IX to address any floodplain management issues that may have arisen/arise from the countywide Digital Flood Insurance Rate Map (DFIRM), Community Assessment Visits, and/or the Division of Water Resources (DWR).	B, C, D	Not Applicable	Public Works	3-5 yrs	The City continues to work with FEMA Region IX to address mapping issues on the Digital Flood Insurance Rate Maps (DFIRM) dated November 16, 2011. The City will coordinate with the Nevada Division of Water Resources during the 5-year update of the Detention Basin Emergency Action Plans.
28	Y	Acquire open space corridors to preserve in perpetuity for flood control conveyance and recreational purposes.	A, B, D	Not Applicable	Public Works	5 yrs	The City continues to work with developers to preserve open space for flood control and recreational purposes. Public works staff worked with the consulting engineer to establish setbacks, minimum criteria, and easements to ensure the safety of residents and preserve the corridor.

Prioritization Criteria

- A. Local jurisdiction department or agency champion
- B. Ability to be implemented during the 5-year lifespan of the HMP
- C. Ability to reduce expected future damages and losses (cost-benefit)
- D. Mitigates a high-risk hazard
- E. Mitigates multiple hazards