

CITY OF WESTMINSTER ANNEX

The City of Westminster (Westminster) is a participant (Member Agency [MA]) in the Orange County Water and Wastewater Multi-Jurisdictional Hazard Mitigation Plan (HMP or Plan). As a participant MA, Westminster representatives were part of the HMP Planning Process and served on the Planning Team responsible for the Plan Update; refer to Section 2 of the Plan. The primary Plan, including the hazard mitigation plan procedural requirements and planning process apply to Westminster.

This Annex supplements information contained in the primary Plan and describes how Westminster’s risks vary from the planning area. The Risk Assessment (Section 3) summarizes the hazards and risks that pose a threat to Orange County. The primary Plan treats the entire County as the planning area and identifies which MAs are subject to a profiled hazard. The purpose of this Annex is to provide additional information specific to Westminster with a focus on the risk assessment and mitigation strategy.

HAZARD MITIGATION PLAN POINT OF CONTACT AND DEVELOPMENT TEAM

The following representatives attended the Planning Team meetings on behalf of Westminster and coordinated the hazard mitigation planning efforts with Westminster staff:

Primary Point of Contact

Rebecca Rodstein
 Administrative Analyst
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In addition to participating on the Planning Team, an internal team was also formed to support Planning Team representatives and provide information for the Plan update. The following staff served as Westminster’s internal hazard mitigation planning development team.

Representative	Title	How Participated
Scott Miller	Water Superintendent	Plan review

JURISDICTION PROFILE (Service Population: 94,000)

Westminster is located on eleven square miles of broad, flat coastal plain in western Orange County, five miles from the Pacific Ocean and 25 miles southeast of Los Angeles. It is a general law city that operates under the Council–Manager Form of government, which is responsible for establishing water rates.

The Westminster Water Division currently provides potable water to 94,000 residents and businesses in Westminster and parts of Midway City using 20,533 service connections. At present, Westminster has 10 active wells and three import water connections. Two of the three imported water interties (OC-09 and OC-35) are owned and operated by the West Orange County Water Board. The third pipeline (OC-53) is owned and operated by the City. On average, 75 percent of drinking water is produced by wells and 25 percent is imported. The Water Division does not manage wastewater disposal or recycled water for the City; Wastewater is handled by the Midway City Sanitation District.

HAZARDS

Detailed hazard profiles for the planning area are provided in Section 3. The City of Westminster is located inland and therefore is not subject to coastal hazards such as coastal storms/erosion and tsunamis. However, the City is subject to most other hazards identified in this Plan except for landslides/mudflows. Many of these hazards are dispersed and may affect the entire region, including climate change, drought, ground shaking from earthquakes, and high wind. The City contains 100-year flood zones primarily along its southeastern border and nearly the rest of the City is within the 500-year flood zone. The Prado Dam poses potential inundation hazards, as the entire City is within its inundation zone. Human-caused hazards and power outages are also hazards that could impact the City. There are no hazards that are unique to Westminster.

Based on the risk assessment, Westminster's development team identified the following hazards that affect Westminster and summarized their geographic extent, probability of future occurrence, magnitude/severity and significance; refer to Table R-1.

**Table R-1
Westminster Hazard Identification**

Hazard	Geographic Extent	Probability of Future Occurrences	Magnitude/Severity	Significance
Climate Change	Extensive	Likely	Limited	Medium/High
Contamination/ Salt Water Intrusion	Limited	Unlikely	Negligible	Low
Dam/Reservoir Failure	Significant	Unlikely	Critical	Medium
Drought	Extensive	Likely	Critical	Medium
Earthquake Fault Rupture & Seismic Hazards	Extensive	Occasional	Catastrophic	Medium
Flood	Significant	Likely	Limited	Medium
Geologic Hazards	Limited	Occasional	Negligible	Low
High Winds/Santa Ana Winds	Extensive	Highly Likely	Limited	Medium
Human-Caused Hazards	Limited	Occasional	Limited	Low
Power Outage	Significant	Occasional	Limited	Medium
Geographic Extent Limited: Less than 10% of planning area Significant: 10-50% of planning area Extensive: 50-100% of planning area		Magnitude/Severity Catastrophic—More than 50 percent of property severely damaged; shutdown of facilities for more than 30 days; and/or multiple deaths. Critical—25-50 percent of property severely damaged; shutdown of facilities for at least two weeks; and/or injuries and/or illnesses result in permanent disability. Limited—10-25 percent of property severely damaged; shutdown of facilities for more than a week; and/or injuries/illnesses treatable do not result in permanent disability. Negligible—Less than 10 percent of property severely damaged, shutdown of facilities and services for less than 24 hours; and/or injuries/illnesses treatable with first aid.		
Probability of Future Occurrences Highly Likely: Near 100% chance of occurrence in next year, or happens every year. Likely: Between 10 and 100% chance of occurrence in next year, or has a recurrence interval of 10 years or less. Occasional: Between 1 and 10% chance of occurrence in the next year, or has a recurrence interval of 11 to 100 years. Unlikely: Less than 1% chance of occurrence in next 100 years, or has a recurrence interval of greater than every 100 years.		Significance Low: Minimal potential impact Medium: Moderate potential impact High: Widespread potential impact		

The identification of hazards provided in Table R-1 is highly dependent on the location of facilities within each agencies jurisdiction and takes into consideration the history of the hazard and associated damage (if any), information provided by agencies specializing in a specific hazard (e.g., FEMA, California Geological Survey), and relies upon each agencies’ expertise and knowledge.

Hazard Maps

The following maps show the location of hazard zones within the jurisdiction relative to potable water systems, as applicable.

VULNERABILITY AND RISK ASSESSMENT

Assets Susceptible to Hazard Events

Table R-2, Westminster Infrastructure and Exposure to Hazards, identifies Westminster’s water infrastructure assets that are located within the mapped hazard zones, identified above.

**Table R-2
Westminster Infrastructure and Exposure to Hazards**

Hazard		Infrastructure Type					
		Interties (#)	Pump Stations (#)	Pressure Control Stations (#)	Reservoirs (#)	Wells (#)	Potable Pipeline (miles)
Fire Hazard Zone	Moderate	0	0	0	0	0	0.04
	High	0	0	0	0	0	0
	Very High	0	0	0	0	0	0
FEMA Flood Zone	100-Year	0	0	0	0	2	0.2
	500-Year	3	2	2	3	13	20.1
Alquist-Priolo Rupture Zone		0	0	0	0	0	0
Ground Shaking	Moderate	0	0	0	0	0	0
	High	2	2	1	3	9	10.0
	Extreme	2	0	1	0	7	10.5
Liquefaction	Moderate	1	0	0	0	3	2.3
	High	3	2	2	3	13	18.2
	Very High	0	0	0	0	0	0
	Unknown	0	0	0	0	0	0
Landslide Zone		0	0	0	0	0	0
Tsunami Zone		0	0	0	0	0	0

A majority of the city’s potable water lines are in susceptible areas in the case of 500-year flood, and to a high amount of ground shaking or liquefaction during an earthquake. Additionally, the City has infrastructure or pipelines in all hazard areas except the Alquist-Priolo rupture zone and tsunami zone.

CAPABILITIES ASSESSMENT

The capabilities assessment is designed to identify existing local agencies, personnel, planning tools, public policy and programs, technology, and funds that have the capability to support hazard mitigation activities and strategies outlined in this Plan. Westminster’s internal development team revised the capabilities identified in the 2012 plan and collaborated to identify current local capabilities and mechanisms available to the MA for reducing damage from future hazard events. Tables R-3a through R-3d assess the authorities, policies, programs, and resources that the jurisdiction has in place that are available to help with the long-term reduction of risk through mitigation. These capabilities include planning and regulatory tools, administrative and technical resources, financial resources, and education and outreach programs.

**Table R-3a
Planning and Regulatory Capabilities Summary**

Ordinance, Plan, Policy, Program	Responsible Agency or Department	Description/Comments
Building Code	Planning Department, City of Westminster	Standards for constructed objects such as buildings and non-building structures. Continually updated and maintained.
Zoning Ordinance	Planning Department, City of Westminster	Regulates how property can be used. Planning Dept. continually updates and maintains.
Subdivision Ordinance or Regulations	Planning Department, City of Westminster	Regulates how property can be used. Planning Dept. continually updates and maintains.
Special Purpose Ordinance	County of Orange, Army Corp of Engineers, RWQCB,USFWS/CDRG	Can enact necessary ordinances to prevent region-wide disasters. Authority with other agencies when necessary.
Growth Management Ordinances	Planning Department, City of Westminster	Regulates how property can be used. Planning Dept. continually updates and maintains.
Site Plan Review Requirements	Planning Department, City of Westminster	Ensures plans are up to code. Planning Dept. continually updates and maintains.
General Plan	Planning Department, City of Westminster	A long-range vision document for the Westminster community including land use and safety and public health concerns. Planning Dept. and City updates as necessary. Most recent plan was updated in 2016.
Capital Improvements Plan	Public Works Department, City of Westminster	Plans for the future infrastructure needs, funding and timeline. Found in the Water Master Plan and bi-annual budget documents.
Economic Development Plan	City Manager's Office and Community Development Department, City of Westminster	Plans to increase City's revenue and support local businesses. Community Development/City Manager's Office continually updates and maintains.
Emergency Response Plan	Westminster Water Dept., WEROC	Plan for emergency situations including necessary actions and forms. WEROC and Westminster Water Division updates regularly.
Post-Disaster Recovery Plan	Westminster Water Dept., NIMS	Plan for returning to normal services following an emergency. Information provided by NIMS.
Real Estate Disclosure Requirements	State Board of Realtors	Discloses potential problems to a prospective buyer that could affect the value of the property/ safety concerns.
CA DPH (Security Issues)		Vulnerability Assessment.
Title M & 22 (potable)	USEPA	Coordinated by the USEPA.

**Table R-3b
Administrative and Technical Capabilities Summary**

Staff/Personnel or Type of Resource	Responsible Agency or Department	Description/Comments
Planner(s) or Engineer(s) with Knowledge of Land Development and Land Management Practices	Public Works (Engineers), Planning (Planners)	1 Planning Manager; 1 Associate Planner; 2 Assistant Planners; 3 Planning Technicians.
Engineer(s) or Professional(s) Trained in Construction Practices Related to Buildings and/or Infrastructure	Public Works (Engineers), Contractors	2 Principal Engineers; 3 Assoc. Civil Engineers; 1 Civil Engineering Assist.; 1 Engineering Technicians.
Planners or Engineer(s) with an Understanding of Natural and/or Human - Caused Hazards	Public Works (Engineers), Planning (Planners)	1 Planning Manager; 1 Associate Planner; 2 Assistant Planners; 3 Planning Technicians.
Floodplain manager	County of Orange	None on Westminster staff.
Surveyors	Public Works – Traffic Engineers – Technicians	1 Assoc. Civil Engineer; 1 Civil Engineering Assist.; 1 Engineering Technicians; 1 PW Inspector.
Staff with Education or Expertise to Assess the Community’s Vulnerability to Hazards	WEROC/County of Orange	None on Westminster staff.
Personnel Skilled in GIS and/or HAZUS	Public Works Employees / Center for Demographic Research, CSUF	Planning and Public Works personnel can access GIS.
Scientists Familiar with the Hazards of the Community	County of Orange, Cal Tech, Local Universities	None on Westminster staff.
Emergency Manager	Westminster Public Works – Water Superintendent	1 Water Superintendent.
Grant Writers	Westminster Public Works – Administrative Analyst	1 Water Analyst.
Lab Specialist & Lab Staff	Clinical Laboratory of San Bernardino	City staff utilizes an outside consultant.

**Table R-3c
Financial Capabilities Summary**

Financial Resources	Agency or Department	Description/Comments
Community Development Block Grants (CDBG)	Westminster Community Development Dept.	Funds local community development activities such as affordable housing, anti-poverty programs, and infrastructure development. Coordinated by Community Development Department.
Capital Improvements Project Funding	Westminster Public Works Department	Plans for the future infrastructure needs, funding and timeline. Found in the Water Master Plan and bi-annual budget documents.
Authority to Levy Taxes for Specific Purposes	Westminster City Council and Voter Approval	
Fees for Water, Sewer, Gas, or Electric Service	Westminster City Council (Water Services Only)	City Council controls water rate for customers.
Incur Debt Through General Obligation Bonds	Westminster City Council	
Incur Debt Through Special Tax and Revenue Bonds	Westminster City Council	
Grants	Westminster Public Works Dept.	

**Table R-3d
Education and Outreach Capability Summary**

Resource/Programs	Agency or Department	Description/Comments
Conservation Outreach	Westminster Water Division	Westminster Water Division participates in City events and holds Town Halls regarding conservation. The message could be changed to mitigation education.

MITIGATION STRATEGY

Mitigation Goals

Westminster adopts the hazard mitigation goals developed by the Planning Team; refer to Section 4.

Mitigation Actions

The internal development team reviewed the mitigation actions identified in the 2012 plan and the updated risk assessment to determine if the mitigation actions were completed, require modification, should be removed because they are no longer relevant, and/or should remain in the Plan Update. New mitigation actions to address the updated risk assessment and capabilities identified above were also considered and added. Table R-4, Westminster Mitigation Actions, identifies the mitigation actions, including the priority, hazard addressed, risk, timeframe, and potential funding sources.

**Table R-4
Westminster Mitigation Actions**

Priority (High, Medium, or Low)	Action/Task/Project Description	Location/ Facility	Risk (High, Medium, or Low)	Cost	Timeframe (Immediate, Short Term, or Long Term)	Possible Funding Sources	Status/ Progress (New, Existing, Modified)	Status Rationale
Multi-Hazard								
High	Purchase a portable generator.	City of Westminster / mobile to all well sites equipped with electrical hookups (R1,R2,125,107 a,75a,3 & (4 / equipped in summer 2013)	Medium	\$300,000	Short term	Water Division Budget	Existing	In progress.
Drought								
High	Develop and implement a public outreach and water conservation program.	City of Westminster	High	\$75,000	Ongoing	Water Division Budget	Ongoing	Ongoing in every Fiscal Year. Continuous.
Earthquake								
High	Continue annual inspections to ensure seismic valves are in place and operational.	Hoover Street Reservoir	Medium	\$2,000	Ongoing	Water Division Budget	Existing	Reservoir constructed in 2003; undergoes regular inspections.
High	Continue annual inspections to ensure seismic valves are in place & operational for OC-53 import connection (Dale / Katella).	Dale & Katella Streets	Medium	\$2,000	Ongoing	Water Division Budget	Existing	Existing seismic shut off valve in place.
Low	Install flexible valves between well discharge head and piping.	All 10 well sites	Medium	\$85,000	Long term	CIP	Modified	Future project.
High	Secure SCADA system.	Hoover St Reservoir	High	\$5,000	Immediate	Water Division Budget	Existing	SCADA system currently being updated. To be completed in 2018.
High	Install permanent redundant Scada System.	New Administrative Building	Medium	\$1,200,000	Immediate	CIP	Existing	SCADA system currently being upgraded. To be completed in 2018.
Human-Caused								
Medium	Install cyber security locks systems at all well sites.	City of Westminster / all well sites	Medium	\$40,000	Short to Long Term	CIP	Existing	SCADA system currently being upgraded. To be completed in 2018.

**Table R-4 [continued]
Westminster Mitigation Actions**

Priority (High, Medium, or Low)	Action/Task/Project Description	Location/Facility	Risk (High, Medium, or Low)	Cost	Timeframe (Immediate, Short Term, or Long Term)	Possible Funding Sources	Status/Progress (New, Existing, Modified)	Status Rationale
Medium	Develop and expand cooperation with W.E.R.O.C. for additional training regarding response to human caused hazards (Terrorism, Bomb Threats, Contamination, etc.).	City of Westminster / Reservoir & Well Sites	Medium	\$2,000	Ongoing	Water Division Budget	Existing	Continuous. Expanding on NIMS.
Medium	Continue & expand education for all personnel on possible human caused hazards (Competent Person, shoring, confined space, collapsed building rescue, etc.).	City of Westminster Corporation Yard / in the field	Medium	\$5,000	Ongoing	Water Division Budget	Existing	Continuously complying with OSHA requirements.
Contamination								
High	Cyber security enhancements.	City of Westminster / all well sites	Medium	\$40,000	Immediate	CIP	Existing	New SCADA project includes improved firewalls and programming to ensure data safety. In progress and to be completed 2018.
Medium	Continue contamination trainings.	City of Westminster Corporation Yard / in the field	Low	\$2,000	Ongoing	Water Division Budget	Ongoing	Continue training new employees in contamination preparedness.
Wildland/Urban Fires								
Low	Create water source signage for fire suppression and GPS coordinates of water tanks for first responders (fire and water utility staff), to simplify identifying available water sources.	City of Westminster / all well sites	Medium	\$2,000	Long term	Water Division Budget	New	Anticipated 2020.
<p>Notes: Timeframe to Completion of Project: "Immediate" is up to 1 year; "Short Term" is 1 to 3 years; "Long Term" is 3 years or longer. Status: "New" refers to a mitigation initiative newly created as part of the plan update process; "Existing" refers to an unfinished initiative that is carried over from the 2012 plan; "Modified" refers to an existing initiative that carried over from the previous plan, but has changed to limit or expand its scope of activities. Status Rationale: A statement of justification as to why the project is currently in the status it is in.</p>								

Completed or Removed Mitigation Initiatives

The following mitigation actions from the 2012 plan have been completed or are in progress and therefore are removed from the Plan update.

Mitigation: Install flexible valves between MWD import connections and piping (3).

Status: Removed; never executed.

Mitigation: Install flexible piping for emergency interties (3).

Status: Removed; never executed.

Mitigation: Retrofit new Administrative Building.

Status: Building completed in 2015.

Mitigation: Improve block wall around Well R1 (raise height on lower portion).

Status: Removed; Project no longer needed.

Mitigation: Install cameras at the Reservoir and well sites without cameras.

Status: Project completed 2016.

Mitigation: Install motion detectors at the all well sites.

Status: Project completed 2016.

PLAN INTEGRATION

Westminster's General Plan, Capital Improvement Plan, Municipal Code, Water Master Plan, Wastewater Master Plan, Emergency Operations Plan, and annual budget process are all used to implement mitigation initiatives identified in this annex. Westminster updates its Capital Improvements Project list on a regular basis with the budgeting process and includes available resources to make progress on hazard mitigation items. Water, Engineering, and Planning staff are used to organize the tasks and contractors are used when necessary to complete projects. After adoption of the HMP, the City will continue to integrate mitigation priorities into these documents.