#7

MAR 17 2016

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Where Values Make The Difference

MEMORANDUM **FIRE, HEALTH & MEDICAL DEPARTMENT**

DATE: MARCH 17, 2016

TO: MAYOR AND COUNCIL

THRU: MARSHA REED, ACTING CITY MANAGER

FROM: THOMAS DWIGGINS, ACTING FIRE CHIEF

SUBJECT: 2015 MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

RECOMMENDATION: Staff recommends City Council pass and adopt Resolution No. 4933 approving the 2015 Multi-Jurisdictional Hazard Mitigation Plan.

BACKGROUND/DISCUSSION: The Multi-Jurisdictional Hazard Mitigation Plan (MJHMP) is updated every five years with the last update adopted through Resolution No. 4376 on March 11, 2010. The MJHMP is a document constructed through a collaborative effort between the Maricopa County Division of Emergency Management and all municipal and tribal governments within Maricopa County. The purpose of the plan is to clearly identify natural hazard vulnerabilities present within the City of Chandler as well as those present within all other jurisdictions in Maricopa County. In addition to hazard vulnerabilities, the Multi-Jurisdictional Hazard Mitigation Plan identifies potential and current mitigation actions.

FINANCIAL IMPLICATIONS: Adoption of the 2015 Multi-Jurisdictional Hazard Mitigation Plan has no financial implications.

PROPOSED MOTION: Move City Council pass and adopt Resolution No. 4933 approving the 2015 Multi-Jurisdictional Hazard Mitigation Plan.

Attachments:

1. Resolution No. 4933
2. City of Chandler Jurisdictional Summary

RESOLUTION NO. 4933

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CHANDLER, ARIZONA, ADOPTING THE 2015 MARICOPA COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN FOR THE CITY OF CHANDLER

WHEREAS, the City of Chandler has experienced damage from natural hazards such as flooding, drought, severe winds, and other causes on many occasions in the past century, resulting in loss of property and/or life, economic hardship, and threats to public health and safety;

WHEREAS, the 2015 Maricopa County Multi-Jurisdictional Hazard Mitigation Plan (the Plan) has been developed after more than one year of review, research and update work by the City of Chandler in association and cooperation with the Maricopa County Multi-Jurisdictional Planning Team for the reduction of hazard risk to the community;

WHEREAS, the Plan specifically addresses natural hazard vulnerabilities, mitigation strategies and plan maintenance procedures for the City of Chandler;

WHEREAS, the Plan is an update and replacement for the previous hazard mitigation plan for the City of Chandler;

WHEREAS, the Plan recommends several hazard mitigation actions/projects that will provide mitigation for specific natural hazards that impact the City of Chandler, with the effect of protecting people and property from loss associated with those hazards;

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Chandler, Arizona, as follows:

Section 1: That the Plan is hereby adopted by the City of Chandler.

Section 2: That the various City officers and employees are authorized and directed to periodically update the contact information set forth in the Plan and to perform all acts necessary to give effect to this Resolution.

PASSED AND ADOPTED by the Mayor and City Council of the City of Chandler, Arizona, this ____ day of _____, 2016.

ATTEST:

_____	_____
CITY CLERK	MAYOR

CERTIFICATION

I HEREBY CERTIFY that the above and foregoing Resolution No. 4933 was duly passed and adopted by the City Council of the City of Chandler, Arizona, at a regular meeting held on the _____ day of _____, 2016, and that a quorum was present thereat.

_____
CITY CLERK

APPROVED AS TO FORM:

_____
CITY ATTORNEY

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JURISDICTIONAL SUMMARY

FOR THE

CITY OF CHANDLER

MARICOPA COUNTY
MULTI-JURISDICTIONAL
HAZARD MITIGATION PLAN
2015

CITY OF CHANDLER JURISDICTIONAL SUMMARY

Chandler · Arizona

Across the United States, natural and human-caused disasters have led to increasing levels of death, injury, property damage, and interruption of business and government services. The toll on families and individuals can be immense and damaged businesses cannot contribute to the economy. The time, money and effort to respond to and recover from these emergencies or disasters divert public resources and attention from other important programs and problems. With 54 federal or state declarations and a total of 524 other recorded events, the 28 jurisdictions contained within Maricopa County, Arizona and participating in this planning effort recognize the consequences of disasters and the need to reduce the impacts of natural and human-caused hazards. The County and jurisdictions also know that with careful selection, mitigation actions in the form of projects and programs can become long-term, cost effective means for reducing the impact of natural and human-caused hazards.

The elected and appointed officials of Maricopa County and the 27 other participating jurisdictions demonstrated their commitment to hazard mitigation in 2009-2010 by preparing the first update of the Maricopa County Multi-Jurisdictional Hazard Mitigation Plan (2009 Plan). The 2009 Plan covered all 28 participating jurisdictions and was approved by FEMA on April 30, 2010. In order to remain compliant with the congressional regulations, the county and jurisdictions must perform full plan update and obtain FEMA approval.

In response, the Maricopa County Department of Emergency Management (MCDEM) secured a federal planning grant and hired JE Fuller/ Hydrology & Geomorphology, Inc. to assist the County and participating jurisdictions with the update process. MCDEM reconvened a multi-jurisdictional planning team (MJPT) comprised of veteran and first-time representatives from each participating jurisdiction, and other various county, state, and federal departments and organizations such as the National Weather Service and Arizona Public Service. The MJPT met monthly beginning in November 2014 and finishing in April 2015. Subsequent "catch up" meetings were conducted through June 2015 to assist several communities with finalizing assignments and the first draft of the updated 2015 Plan was issued in July 2015. The meetings and MJPT worked in a collaborative effort to review, evaluate, and update the 2009 Plan keeping the single, consolidated multi-jurisdictional plan format and approach. The accompanying 2009 Tribal Annexes for each of the two participating Indian Tribes, were eliminated and the pertinent data from each annex was updated and incorporated into the main body of the 2015 Plan. The 2015 Plan will continue to guide the County, tribes and participating local jurisdictions toward greater disaster resistance in full harmony with the character and needs of the community and region.

The Plan has been prepared in compliance with Section 322 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act or the Act), 42 U.S. C. 5165, enacted under Sec. 104 the Disaster Mitigation Act of 2000, (DMA 2000) Public Law 106-390 of October 30, 2000, as implemented at Title 44 CFR 201.6 and 201.7 dated October, 2007. The Plan includes risk assessments for multiple natural hazards, a public outreach effort at two phases of the planning process, and development of a mitigation strategy that incorporates measures intended to eliminate or reduce the effects of future disasters throughout the County. The development of the various 2015 Plan elements was accomplished through a joint and cooperative venture by members of the Maricopa County MJPT, with MCDEM serving as the lead agency and primary point of contact for the planning effort.

The overall purpose of DMA 2000 was to establish a national program for pre-disaster mitigation, streamline administration of disaster relief at both the federal and state levels, and control federal costs of disaster assistance. Congress envisioned that implementation of these new requirements would result in the following key benefits:

- Reduction of loss of life and property, human suffering, economic disruption, and disaster costs.
- Prioritization of hazard mitigation planning at the local level, with an increased emphasis placed on planning and public involvement, assessing risks, implementing loss reduction measures, and ensuring that critical services/facilities survive a disaster.
- Establishment of economic incentives, awareness and education via federal support to state, tribal, and local governments that will result in forming community-based partnerships, implementing effective hazard mitigation measures, leveraging additional non-Federal resources, and establishing commitments to long-term hazard mitigation efforts.

CITY OF CHANDLER JURISDICTIONAL SUMMARY

Chandler · Arizona

In general, the DMA 2000 legislation requires all local, county, and tribal governments to develop a hazard mitigation plan for their respective communities in order to be eligible to receive certain federal non-emergency mitigation funds including Hazard Mitigation Grant Program (HMGP) and Pre-Disaster Mitigation Program (PDM). FEMA's Flood Mitigation Assistance Program (FMA) planning requirements are also satisfied by this plan as long as flooding is addressed.

In satisfying the regulatory requirements of DMA 2000, the primary purpose of this plan is to identify natural hazards that impact Chandler, assess the vulnerability and risk posed by those hazards to community-wide human and structural assets, develop strategies for mitigation of those identified hazards, present future maintenance procedures for the plan, and document the planning process. The Plan is divided into the following eight primary sections:

- Section 1 – Local Plan Adoption and FEMA Approval
- Section 2 – Introduction
- Section 3 – Planning Process
- Section 4 – Community Description
- Section 5 – Risk Assessment
- Section 6 – Mitigation Strategy
- Section 7 – Plan Maintenance Procedures
- Section 8 – Plan Tools

The planning process used to review and update the 2009 Plan included the organization and use of two planning team levels. The first was a Multi-Jurisdictional Planning Team (MJPT) that was comprised of one or more representatives from each participating jurisdiction. The second was the Local Planning Team (LPT) that was comprised of various staff and officials from the specific jurisdiction.

The role of the MJPT was to work with the planning consultant to perform the coordination, research, and planning element activities required to update the 2009 Plan. Attendance by each participating jurisdiction was required for every MJPT meeting as the meetings were structured to progress through the plan update process in a methodical, stepwise manner. Steps and procedures for updating the 2009 Plans were presented and discussed at each MJPT meeting, and homework assignments were normally given. Each meeting built on information discussed and homework assigned at the previous meeting. The MJPT representatives also had the responsibility of liaison to the LPT, and were tasked with the following:

- Conveying information and homework received at the MJPT meetings to the LPT
- Ensuring that all requested homework was completed fully and returned on a timely basis.
- Arranging for review and official adoption of the Plan.

The function and role of the LPT was to:

- Provide support and data
- Assist the MJPT representative in completing each homework assignment
- Make planning decisions regarding plan update components
- Review the Plan draft documents

The MJPT met five times from September 2014 to January 2015, with LPT meetings convened in between as needed to complete the homework and review/update tasks assigned.

The following are the contact details for the Plan primary point of contact for the City of Chandler:

Keith Hargis
Battalion Chief
Fire, Health and Medical Department
221 E. Boston St.
Chandler, AZ 85225
Work: 480.782.2161
Email: keith.hargus@chandleraz.gov

CITY OF CHANDLER JURISDICTIONAL SUMMARY

For information purposes, the following summarizes contact details for the Plan primary point of contact for Maricopa County:

Andrew Brady
Emergency Services Planner
Maricopa County Department of Emergency Management
5636 E. McDowell Rd.
Phoenix, AZ 85008
Work: 602.273.1411
Fax: 602.275.1638
Email: andrewbrady@mail.maricopa.gov

The following table summarizes the LPT for Chandler and roles of each person. The promulgation authorities are listed at the end of the table.

Name	Department / Division / Branch	Title	Planning Team Role / Description of Duties
Keith Hargis	Fire, Health & Medical	Battalion Chief	POC for the process. Lead LPC to ensure completion of project.
Dan Cook	Transportation and Development	Transportation Manager	Gather data and assist with and T & D requests
Warren White	Transportation and Development	Principal Engineer	Gather data and provide water specific expertise
Christina Pryor	Purchasing	Purchasing & Materials Manager	Gather data and assist with editing of documentation. Also provide purchasing insight and resource knowledge.
Rudy Hansen	Municipal Utilities	Security Coordinator	Gather data and assist in with municipal utility revisions
Gregg Capps	Municipal Utilities	Water Resource Manager	Gather data and assist in with municipal utility revisions
Blake Terhune	IT/GIS	IT Programmer/Analyst	Gather data and assist with any GIS needs
PROMULGATION AUTHORITY			
Jay Tibshraeny	City Council	Mayor	Plan Promulgation
Jack Sellers	City Council	Vice Mayor	Plan Promulgation
Nora Ellen	City Council	Council Member	Plan Promulgation
Kevin Hartke	City Council	Council Member	Plan Promulgation
Rick Heumann	City Council	Council Member	Plan Promulgation
René Lopez	City Council	Council Member	Plan Promulgation
Terry Roe	City Council	Council Member	Plan Promulgation

One of the key elements to the hazard mitigation planning process is the risk assessment. In performing a risk assessment, a community determines "what" can occur, "when" (how often) it is likely to occur, and "how bad" the effects could be. According to DMA 2000, the primary components of a risk assessment that answer the above questions are generally categorized into the following measures:

- ☑ **Identify Hazards**
- ☑ **Profile Hazard Events**
- ☑ **Assess Vulnerability to Hazards**

CITY OF CHANDLER JURISDICTIONAL SUMMARY

The risk assessment for Chandler utilized information developed by the LPT and Countywide hazard profile data. The vulnerability analysis results reported in the Plan reflect vulnerability at the community level as well as on a County-wide basis.

Following the lead of the State of Arizona, only natural hazards were considered for this update. The list of hazards in the 2009 Plan and the State Plan 2013[1] were reviewed and compared in an initial screening that used a systematic process that considered relevance, historical significance and experience, and catastrophic potential. The result was a list of hazards that are most relevant to Maricopa County. The Chandler LPT further reviewed the list to reflect only those hazards that have the most impact on Chandler. The following table summarizes the Countywide list of hazards. The hazards selected for mitigation by Chandler are shown in bold type.

Natural Hazard List for the Plan and Chandler	
• **Dam Inundation**	• Levee Failure
• **Drought**	• **Severe Wind**
• **Extreme Heat**	• **Subsidence**
• Fissure	• Wildfire
• **Flooding/Flash Flooding**	

Profiles were developed for each of the hazards by researching and mapping historical hazard events, obtaining other hazard mapping, analysis, and studies. In addition, Arizona used the Calculated Priority Risk Index (CPRI) for estimating.[2]. Hazard profile maps for Dam Inundation (Emergency Spillway and Dam Failure), Fissure, Flooding/Flash Flooding, Levee Failure, Subsidence, and Wildfire were developed. Maps specific to Chandler are provided following the text of this summary.

A vulnerability analysis was performed to assess and evaluate the City's population and critical facility exposure risk to the identified hazards. The risk was tabulated in terms of exposure loss estimates and human population exposure. Critical facilities were individually identified by the MJPT and LPT and supplemental residential facility information was obtained from FEMA's HAZUS program. It is estimated that there are at least $1.36 billion dollars[3] worth of critical and non-critical facilities within Chandler. Replacement value for residential buildings within Chandler are estimated to total over $33.2 billion. The 2014 City population estimate is 249,423. The following table summarizes the general results of the vulnerability analysis for each of the top hazards in the City.

[1] State of Arizona, Division of Emergency Management, 2013, *State of Arizona Multi-Hazard Mitigation Plan.*

[2] The CPRI is explained in detail in the Section 5.2.3 of the main Plan

[3] This estimate is likely to be inexact as there were many assets that the community was unable to obtain detailed replacement estimates for the Plan development schedule.

Hazard	Exposure Estimates [a]		
	Critical Facilities	Residential	Population [b]
Dam Failure (High Hazard)	$0	$1.3 billion	11,441
Drought	(None estimated)		249,423
Extreme Heat	(None estimated)		249,423
Fissure (High Hazard)	$0	$0	0
Flooding (High Hazard)	$36.2 million	$277.6 million	3,942
Levee Failure (High Hazard)	$0	$0	0
Severe Wind	(None estimated)		249,423
Subsidence	$515.0 million	$10.6 billion	102,227
Wildfire (High Hazard)	$0	$14.4 million	96

[a] – These numbers represent estimates of exposure that may result assuming all delineated hazard areas are impacted at the same time. Actual event losses may not impact the entire area during a single event.

[b] – These numbers represent the total human population potentially exposed to the hazard.

The MJPT and Chandler LPT developed a strategy for mitigating the hazard risks identified within the City. The mitigation strategy provides the "*what, when, and how*" of actions that will reduce or possibly remove the City's exposure to hazard risks, and is generally categorized into the following components:

- ☑ **Goals and Objectives**
- ☑ **Capability Assessment**
- ☑ **Mitigation Actions/Projects**
- ☑ **Implementation Strategy**

The MJPT reviewed and discussed the 2009 Plan goals and objectives and compared them to the 2013 State Plan. The result of the discussions resulted in establishing one goal and four clear objectives as follows:

- **GOAL:** Reduce or eliminate the risk to people and property from natural hazards.
  - **Objective 1:** Reduce or eliminate risks that threaten life and property in the incorporated, unincorporated, and Tribal jurisdictions within Maricopa County.
  - **Objective 2:** Reduce risk to critical facilities and infrastructure from natural hazards.
  - **Objective 3:** Promote hazard mitigation throughout the incorporated, unincorporated, and Tribal jurisdictions within Maricopa County.
  - **Objective 4:** Increase public awareness of hazards and risks that threaten the incorporated, unincorporated, and Tribal jurisdictions within Maricopa County.

This goal and four objectives will be used by all participating jurisdictions in the Plan.

The Chandler LPT reviewed and updated the community's capability assessment regarding legal, regulatory, technical/staff, and financial resources. The following tables summarize the results:

CITY OF CHANDLER JURISDICTIONAL SUMMARY

Legal and regulatory capabilities for Chandler		
Regulatory Tools for Hazard Mitigation	**Description**	**Responsible Department/Agency**
CODES	• 2012 International Building Code • 2011 National Electrical Code • 2012 International Plumbing Code • 2012 International Mechanical Code • 2012 International Residential Code • 2012 International Fuel Gas Code • 2012 International Energy Conservation Code • 2012 International Fire Code • 2012 International Existing Building Code • Chandler Code of Ordinances (Municode.com)	• Transportation and Development • Fire, Health and Medical Department • City Clerk
ORDINANCES	• Chandler Code of Ordinances (Municode.com): Floodplain Administration Ord. No. 3311 Weed Abatement Ord No. 3879 Land Use Zoning Ord. No. 3063	• Transportation and Development
PLANS, MANUALS, and/or GUIDELINES	• Engineering Standard Details and Specifications • Technical Design Manuals • Stormwater Prevention Plan • Flood Control District Floodplain Maps • Stormwater Master Plan	• Transportation and Development
STUDIES	• Chandler\Gilbert Floodplain Delineation Study - Ph 1 Eastern Canal • Chandler\Gilbert Floodplain Delineation Study - Ph 2 Consolidated Canal • Chandler\Gilbert Floodplain Delineation Study - Ph 3 Union Pacific RR and Arizona Av • Higley Area Drainage Master Plan	• Transportation and Development • Flood Control District of Maricopa County

CITY OF CHANDLER JURISDICTIONAL SUMMARY

Chandler · Arizona

Technical staff and personnel capabilities for Chandler		
Staff/Personnel Resources	☑	**Department/Agency - Position**
Planner(s) or engineer(s) with knowledge of land development and land management practices	☑	Transportation and Development– Planners
Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure	☑	Transportation and Development – Engineers
Planner(s) or engineer(s) with an understanding of natural and/or human-caused hazards	☑	Transportation and Development, Municipal Utilities – planners and engineers
Floodplain Manager	☑	Transportation and Development
Surveyors		
Staff with education or expertise to assess the community's vulnerability to hazards	☑	Fire, Health and Medical Department
Personnel skilled in GIS and/or HAZUS	☑	Information technology, Transportation and Development, Police, Fire, Health and Medical
Scientists familiar with the hazards of the community	☑	Municipal Utilities, Transportation and Development
Emergency manager	☑	Fire, Health and Medical Department
Grant writer(s)	☑	All Departments
Others		

Fiscal capabilities for Chandler		
Financial Resources	**Accessible or Eligible to Use (Yes, No, Don't Know)**	**Comments**
Community Development Block Grants	Yes	
Capital Improvements Project funding	Yes	
Authority to levy taxes for specific purposes	Yes	
Fees for water, sewer, gas, or electric service	Yes	
Impact fees for homebuyers or new developments/homes	Yes	
Incur debt through general obligation bonds	Yes	
Incur debt through special tax bonds	Yes	
Other		

Using the vulnerability analysis, capability assessment, and goals and objectives, the Chandler LPT then developed an updated list of mitigation actions/projects with an implementation strategy clearly defined. Each action/project was evaluated and prioritized based on: 1) Direct Impact on Life and/or Property; 2) Long-Term Solution; and 3) Benefit vs. Cost. The table on the following page summarizes the updated mitigation action/project list for Chandler.

CITY OF CHANDLER JURISDICTIONAL SUMMARY

Chandler · Arizona

Mitigation actions and projects and implementation strategy for Chandler

Mitigation Action/Project					Implementation Strategy				
ID No.	Description	Hazard(s) Mitigated	Community Assets Mitigated (Ex/New)	Estimated Cost	Priority Ranking	Planning Mechanism(s) for Implementation	Anticipated Completion Date	Primary Agency / Job Title Responsible for Implementation	Funding Source(s)
1	Review building permits for compliance with Floodplain Ordinance and NFIP regulations.	Flood	Both	Staff time	High	Staff Training/ Floodplain Regulations	Annual-Ongoing	Transportation and Development/ City Engineer	General Fund
2	Maintain the currency of the safety element of the Chandler General Plan.	Drought, Extreme Heat, Flood, Severe Wind	Both	Staff time -consultant cost for update of GP	High	Review and Update General Plan	Annual-Ongoing	Planning Manager	General Fund
3	Continue to ensure through proper planning, zoning and building codes that all safety measures are in place for new building construction and placement. The city will coordinate with the county flood control district.	Flood, Severe Wind	New	Staff time	High	Continue to update codes to newest versions and add amendments were appropriate	Annual-Ongoing	Transportation and Development/Building Official	General Fund
4	Continue to maintain a diverse water portfolio which includes surface water from Salt, Verde and Colorado River watersheds and groundwater. Minimize any reductions to existing supplies by protecting and securing existing water rights, and meeting environmental requirements of water supplies. Maximize the use of existing assets to ensure adequate water supply is available from over 30 groundwater wells, two surface water treatment plants, use of recharged water, and encourage the use of reclaimed water for appropriate purposes. Continue to implement the city's Drought Plan.	Drought	Both	Staff time	High	Continue to maintain a diverse city water portfolio by reviewing and updating current and future needs on a regular basis	Annual-Ongoing	Municipal Utilities Director	Enterprise Fund
5	Each city department will be encouraged to rank the vulnerability of existing assets, with assistance from the Emergency Management Workgroup, and implement protection plans as needed, with the highest vulnerability being implemented first.	Drought, Extreme Heat, Flood, Severe Wind	Both	Staff time	Medium	Emergency Management Group Meetings	Annual-Ongoing	Fire, Health and Medical Department	General Fund

CITY OF CHANDLER JURISDICTIONAL SUMMARY

Chandler · Arizona

Mitigation actions and projects and implementation strategy for Chandler

Mitigation Action/Project					Implementation Strategy				
ID No.	Description	Hazard(s) Mitigated	Community Assets Mitigated (Ex/New)	Estimated Cost	Priority Ranking	Planning Mechanism(s) for Implementation	Anticipated Completion Date	Primary Agency / Job Title Responsible for Implementation	Funding Source(s)
6	Continue to ensure that the City of Chandler Drought Management Plan is updated to meet the needs of the city to mitigate drought severity.	Drought	Both	Staff time	Medium	Continue to review and update the plan as appropriate	Ongoing	Municipal Utilities/ Municipal Utilities Director	Enterprise Fund
7	Annually coordinate with federal, state, and local dam owners to get updates on any changes in dam safety conditions and emergency action plan information.	Dam Failure	Both	Staff time	Medium	Attend informational meetings	Annual	Fire, Health and Medical Department	General Fund
8	Analyze and identify dam failure inundation limits to identify and/or update evacuation routes.	Dam Failure	Both	Staff time	Medium	Update EOP as needed including evacuation routes	Ongoing	Fire, Health and Medical Department/ Municipal Utilities Department	General Fund
9	Provide links to the Arizona Department of Water Resources website as a part of a public campaign to raise awareness to the hazards and locations of active subsidence.	Subsidence	Both	Staff time	Medium	Maintain current webpage links	Ongoing	Communications and Public Affairs Department	General Fund
10	Include addressing subsidence risk as a regular part of the land development and public works projects review and permitting.	Subsidence	Both	Staff time	Medium	Maintain a robust zoning and planning evaluation process	Ongoing	Transportation and Development Department	General Fund

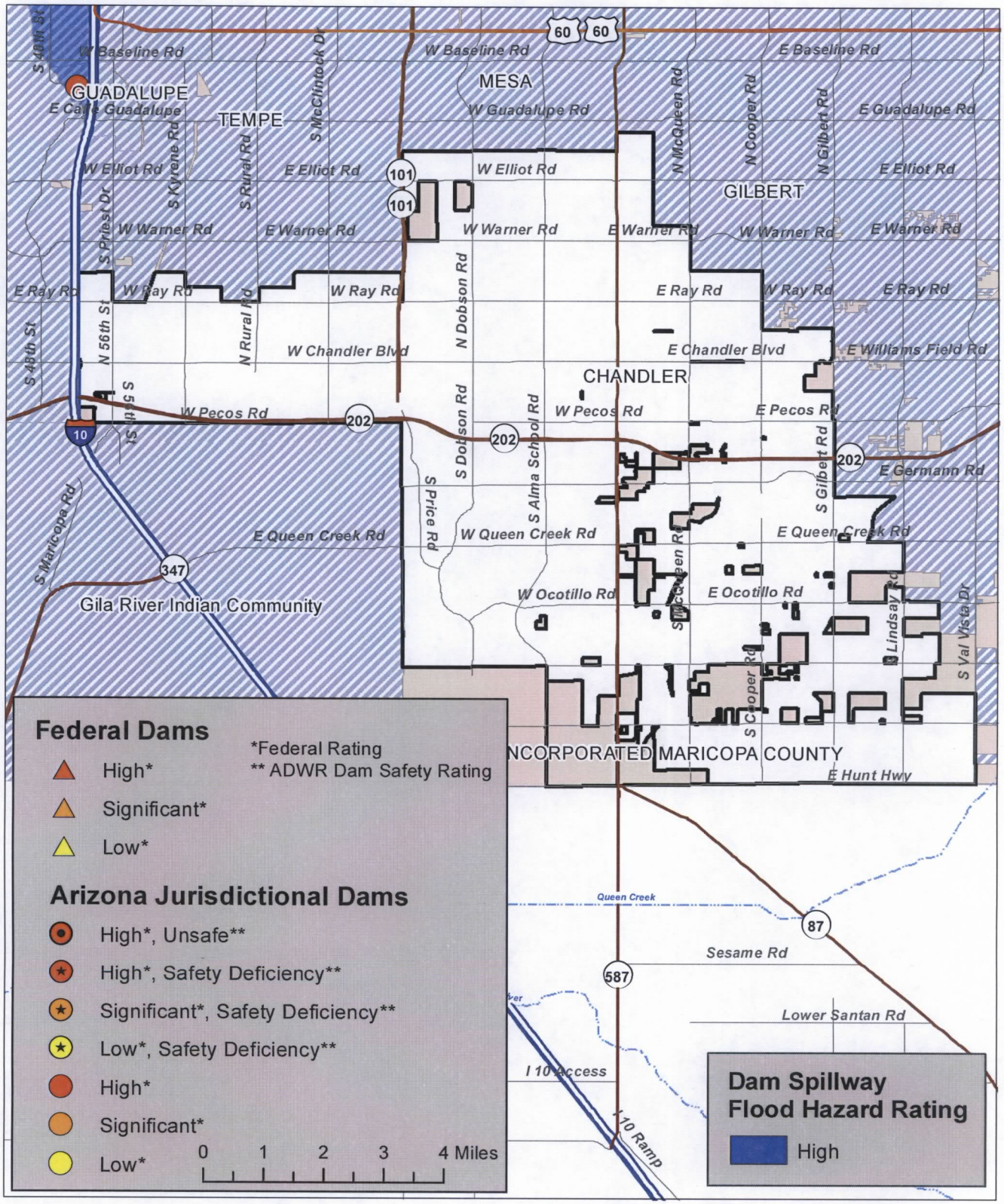
As a final step in the planning process, plan maintenance procedures were developed by the MJPT to establish guidelines for maintaining, reviewing, and updating the Plan over the next five (5) years. The MJPT reviewed the current DMA 2000 rules and October 2011 FEMA guidance document and discussed a strategy for performing the required monitoring and evaluation of the Plan over the next 5-year cycle. The MJPT has established the following monitoring and evaluation procedures:

- **Schedule** – The Plan shall be reviewed on at least an annual basis. MCDEM will take the lead to send out an email request to each jurisdiction via the MJPT on or around the month of May.
- **Review Content** – Within the email request distributed by MCDEM, each of the jurisdictions will be requested to provide responses to the following questions:
    - ***Hazard Identification:*** *Have the risks and hazards changed?*
    - ***Goals and Objectives:*** *Are the goals and objectives still able to address current and expected conditions?*
    - ***Mitigation Projects and Actions:*** *For each mitigation action/project summarized in Section 6.3.2:*
        - *Has there been activity on the project – Yes or No?*
        - *If Yes, briefly describe what has been done and the current status of the action/project.*
- **Documentation** – Each jurisdiction will review and evaluate the Plan as it relates to their community and document responses to the above questions in the form of an email. MCDEM will archive email responses in a digital format and store with the Plan for incorporation during the next Plan update. Any hard copies will be included in Appendix E.

A formal presentation of the review material will be presented to a jurisdiction's council or board only if a major update to the Plan is proposed prior to the next five year update.

At the five year update, the following actions will be taken:

- ✓ One year prior to the plan expiration date, the MJPT will re-convene to review and assess the materials accumulated in Appendix E of the Plan.
- ✓ The MJPT will update and/or revise the appropriate or affected portions of the plan and produce a revised plan document.
- ✓ The revised plan document will be presented before the respective councils and boards for an official concurrence/adoption of the changes.
- ✓ The revised plan will be submitted to ADEM and FEMA for review, comment and approval.



Legend

Communities

- Chandler
- Maricopa County
- Other Communities

- Arterial Road
- Major Streams

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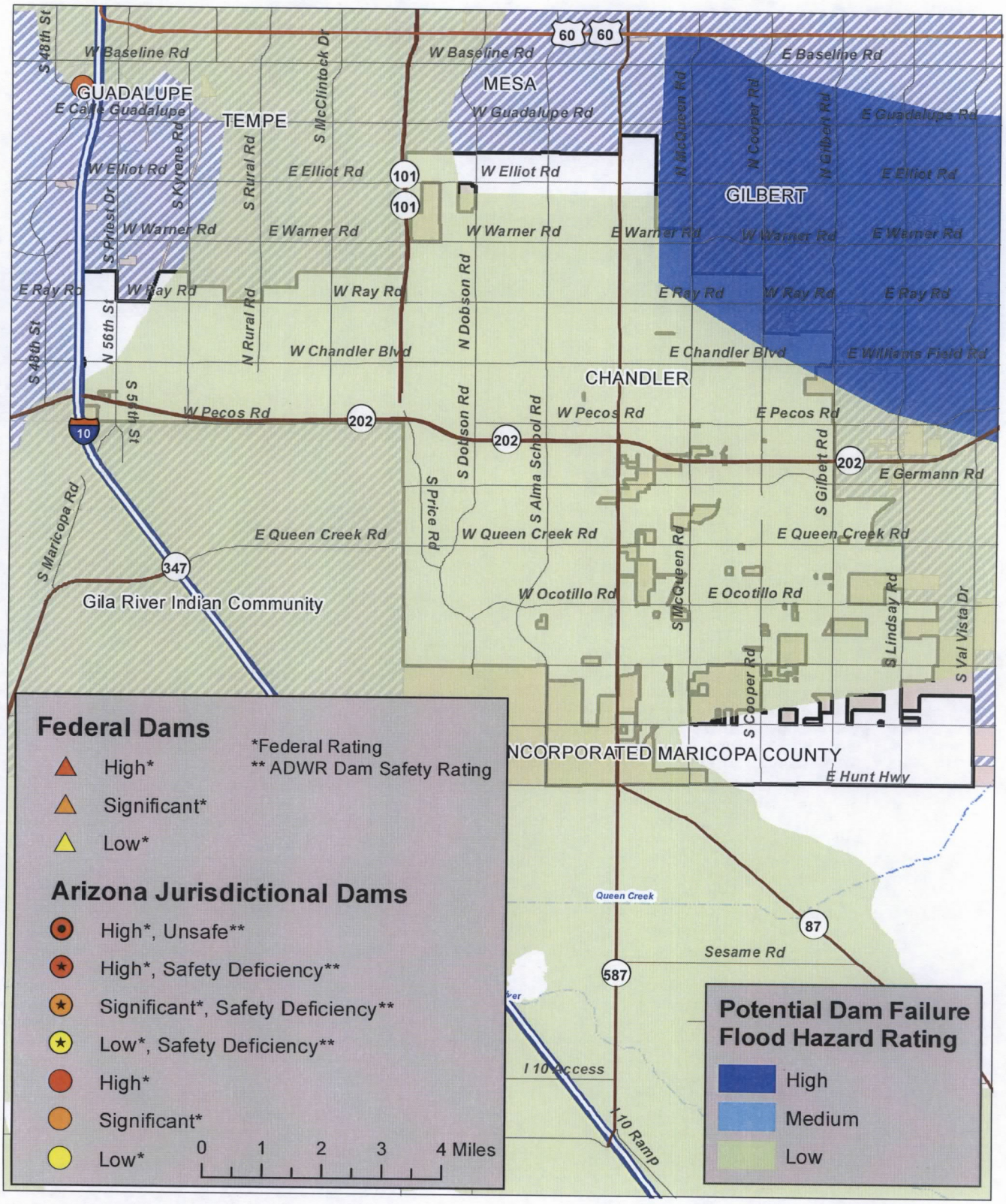
Maricopa County Multi-Jurisdictional Hazard Mitigation Plan

Chandler · Arizona

Map #1D5
City of Chandler
Dam Spillway
Flood Hazard Map
as of Jan. 2015



Legend

Communities

- Chandler
- Maricopa County
- Other Communities
- Arterial Road
- Major Streams

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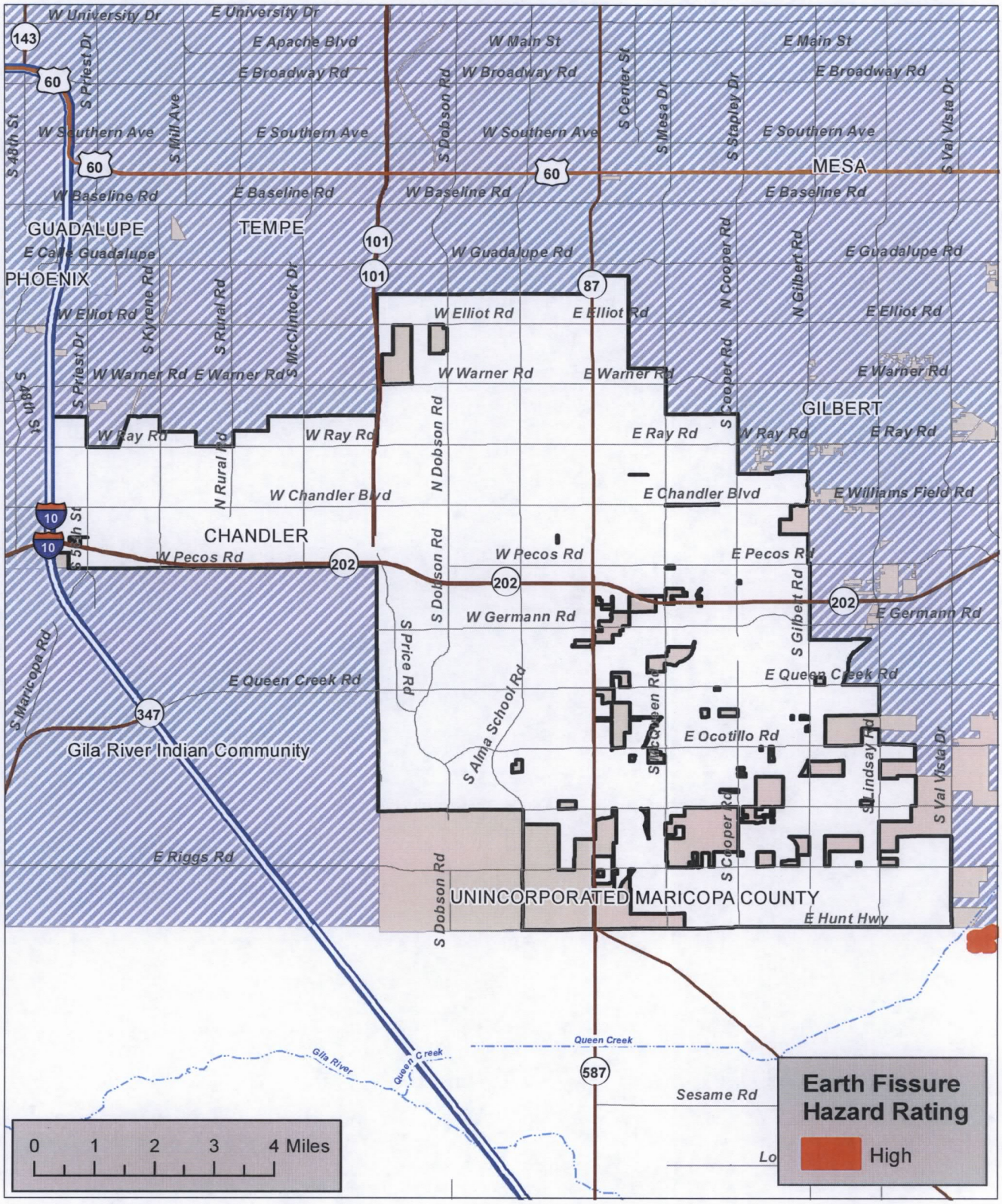
Maricopa County Multi-Jurisdictional Hazard Mitigation Plan

Chandler · Arizona

Map #2D5
City of Chandler
Potential Dam Failure
Flood Hazard Map
as of Jan. 2015



Legend

Communities

- Chandler
- Maricopa County
- Other Communities

- Arterial Road
- Major Streams

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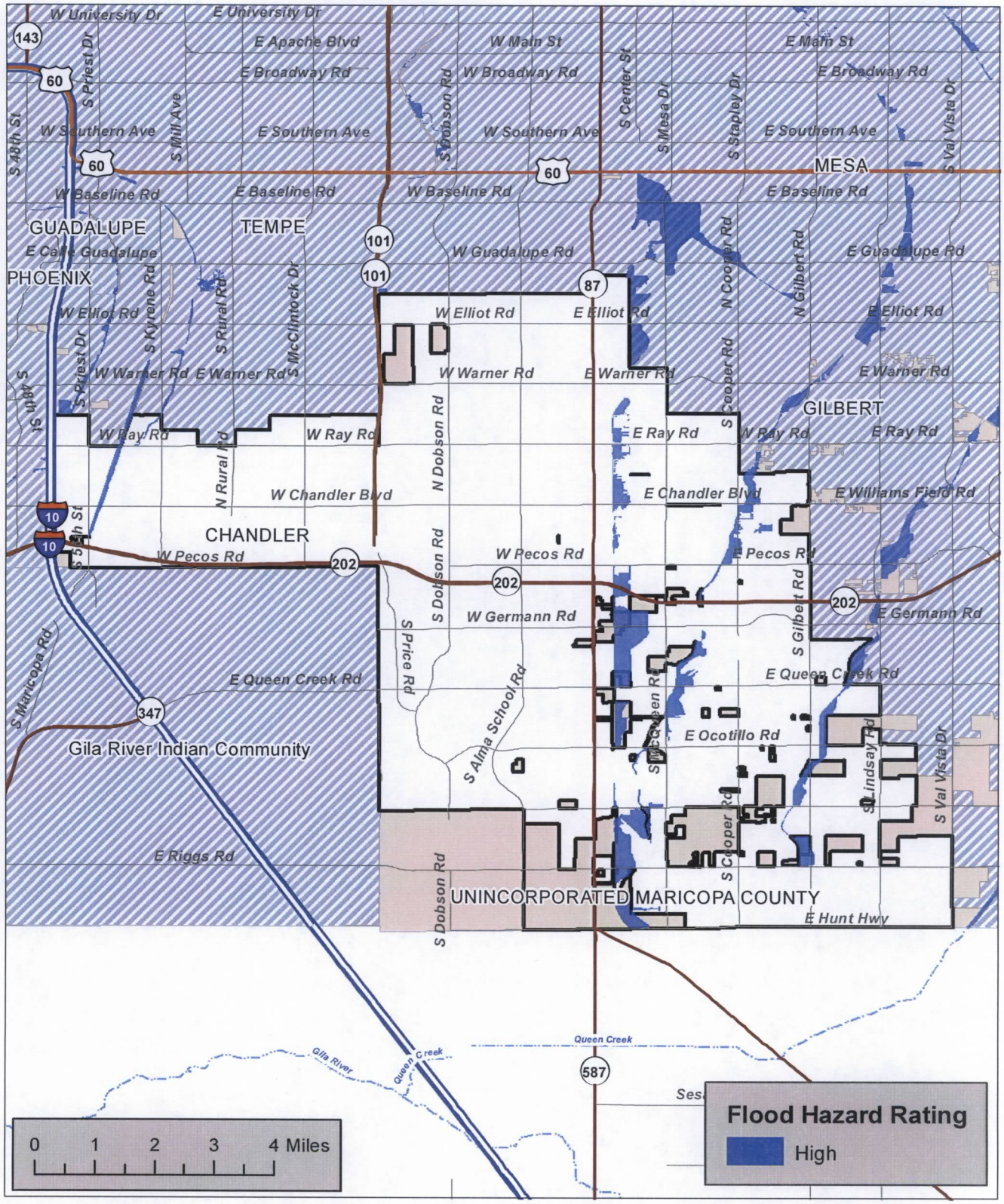
Maricopa County Multi-Jurisdictional Hazard Mitigation Plan

Chandler · Arizona

Map #3D5
City of Chandler
Earth Fissure Hazard Map
as of Jan. 2015



Legend

Communities

- Chandler
- Maricopa County
- Other Communities

- Arterial Road
- Major Streams

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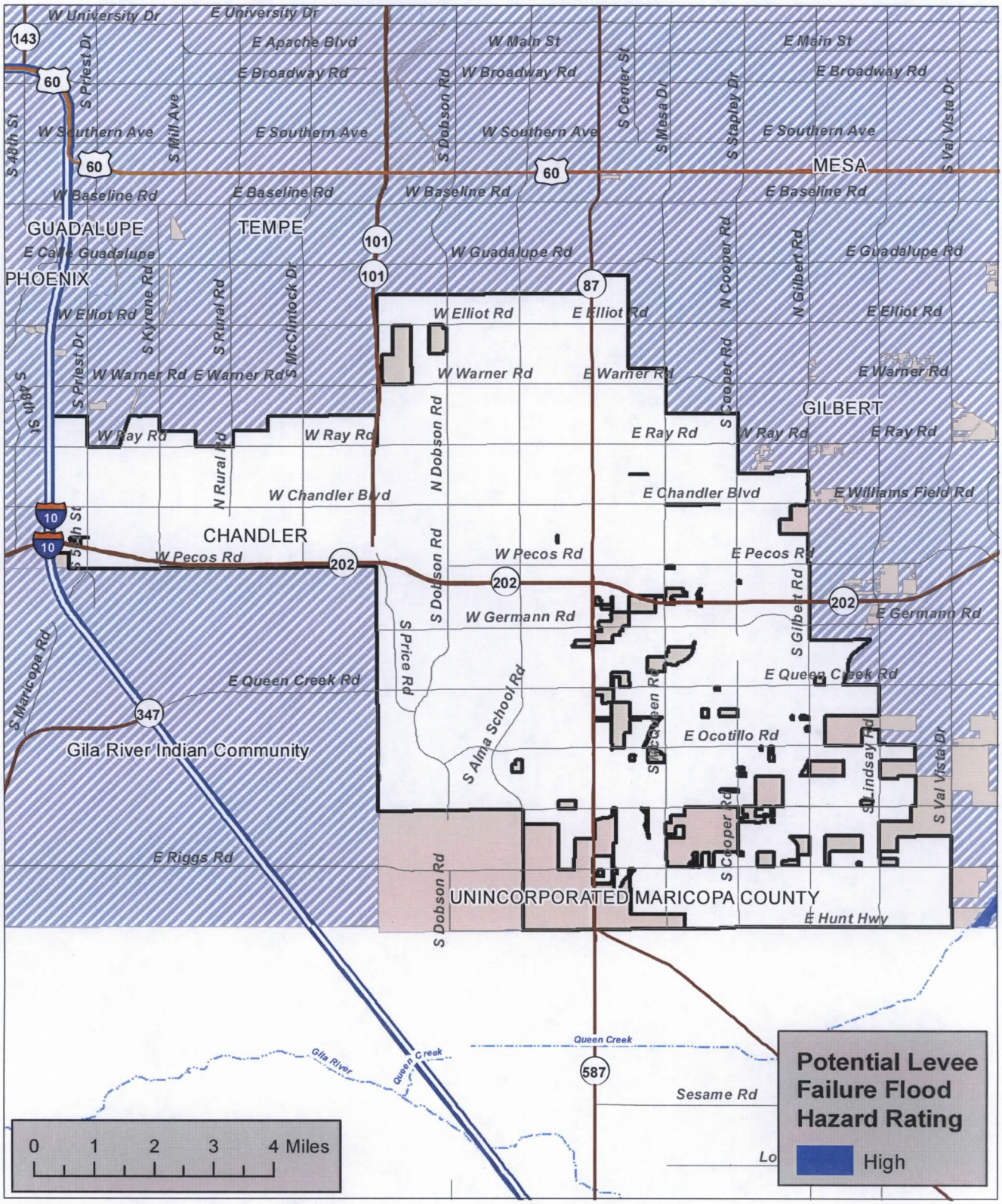
Maricopa County Multi-Jurisdictional Hazard Mitigation Plan

Chandler · Arizona

Map #4D5
City of Chandler
Flood Hazard Map
as of Jan. 2015



Legend

Communities

- Chandler
- Maricopa County
- Other Communities

- Arterial Road
- Major Streams

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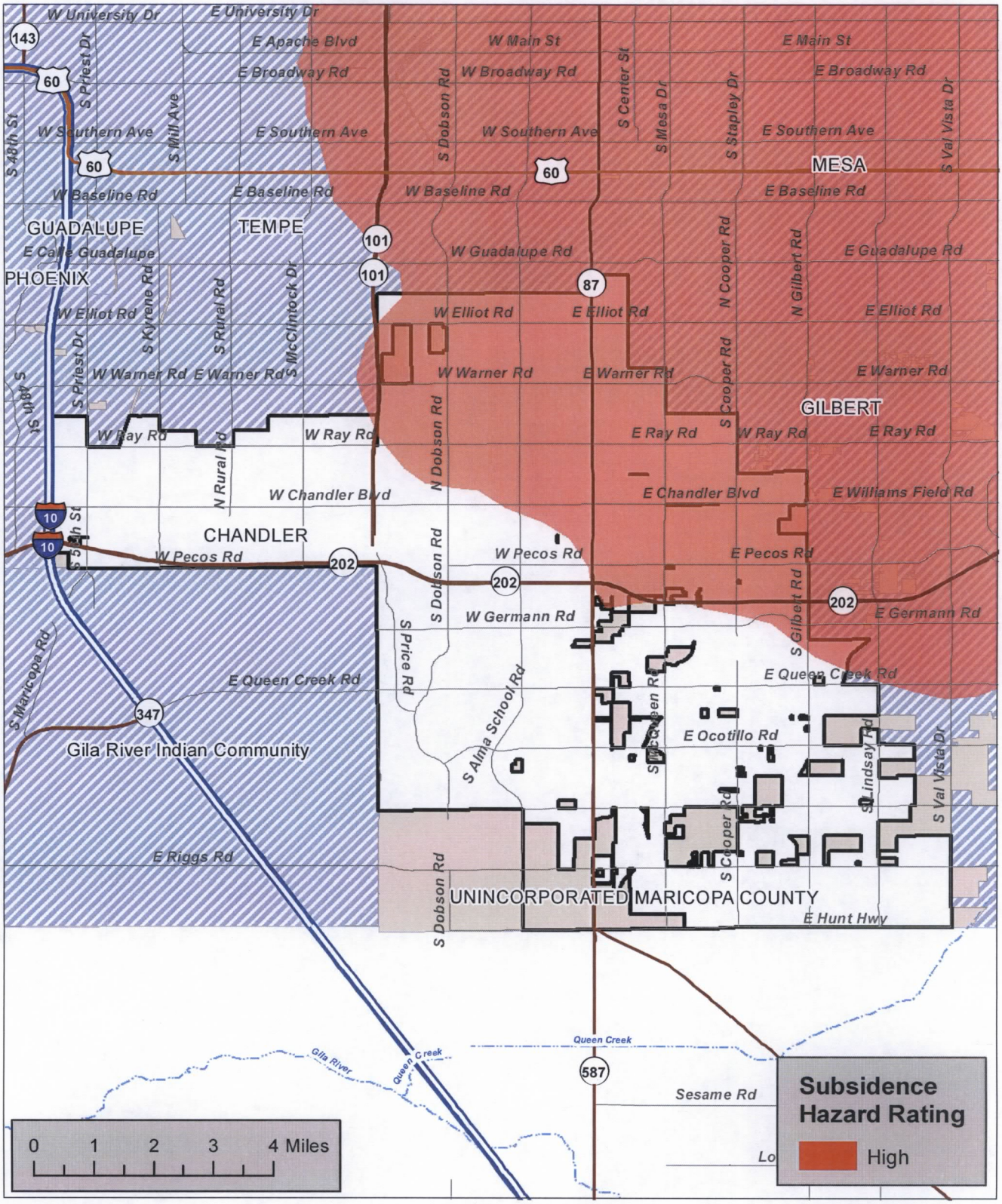
Maricopa County Multi-Jurisdictional Hazard Mitigation Plan

Chandler · Arizona

Map #5D5
City of Chandler
Potential Levee Failure Flood Hazard Map
as of Jan. 2015



Legend

Communities

- Chandler
- Maricopa County
- Other Communities
- Arterial Road
- Major Streams

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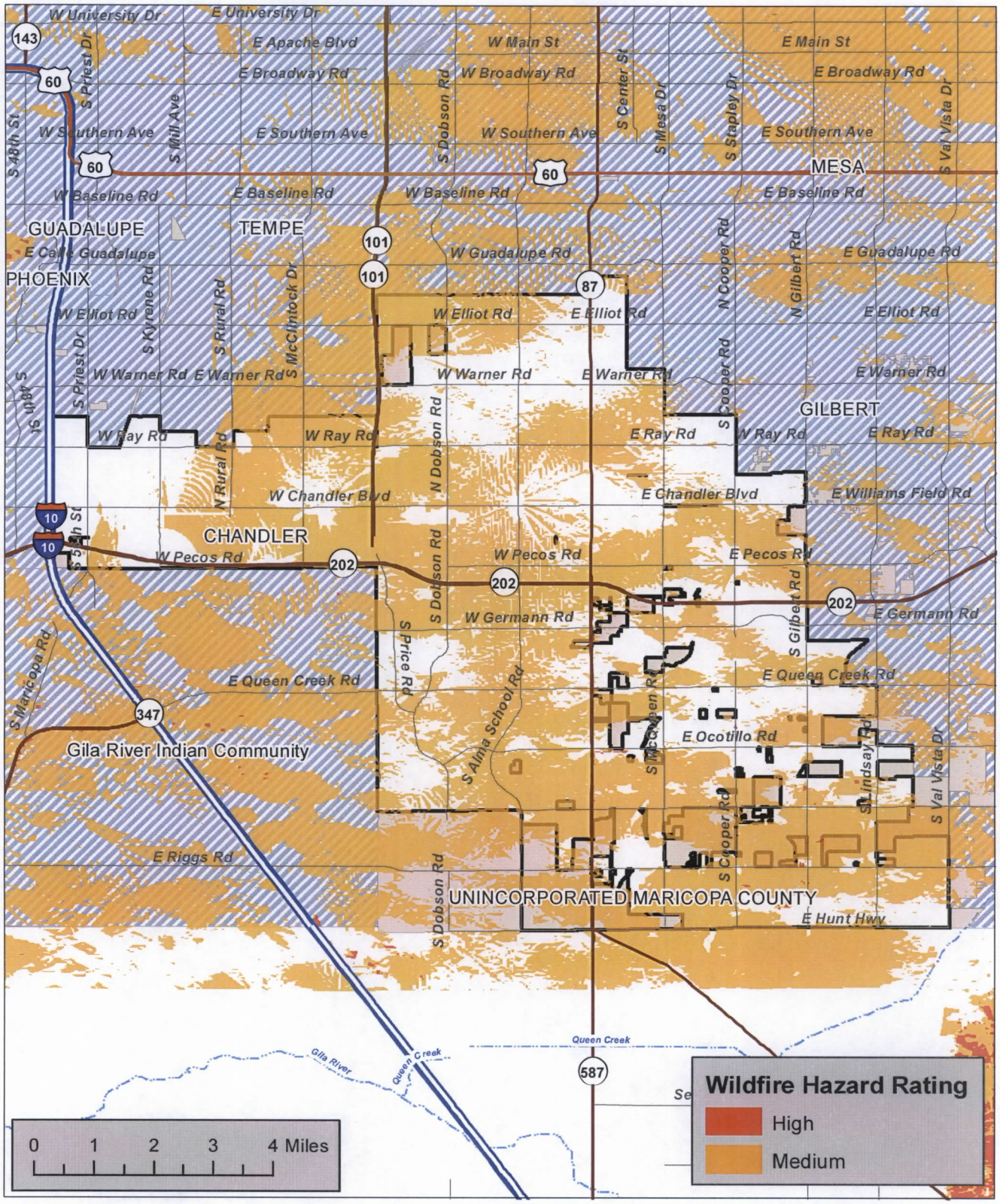
Maricopa County Multi-Jurisdictional Hazard Mitigation Plan

Chandler · Arizona

Map #6D5
City of Chandler
Subsidence Hazard Map
as of Jan. 2015



Legend

Communities

- Chandler
- Maricopa County
- Other Communities

- Arterial Road
- Major Streams

N

Maricopa County Multi-Jurisdictional Hazard Mitigation Plan

Chandler · Arizona

Map #7D5
City of Chandler
Wildfire Hazard Map
as of Jan. 2015