FLOOD WARNING SYSTEMS

By
John D. Gwynne, P.E., CFM
Engineer Supervisor
Doña Ana County Flood Commission

WHY DO WE NEED FLOOD WARNING?

WHY DO WE NEED FLOOD WARNING?

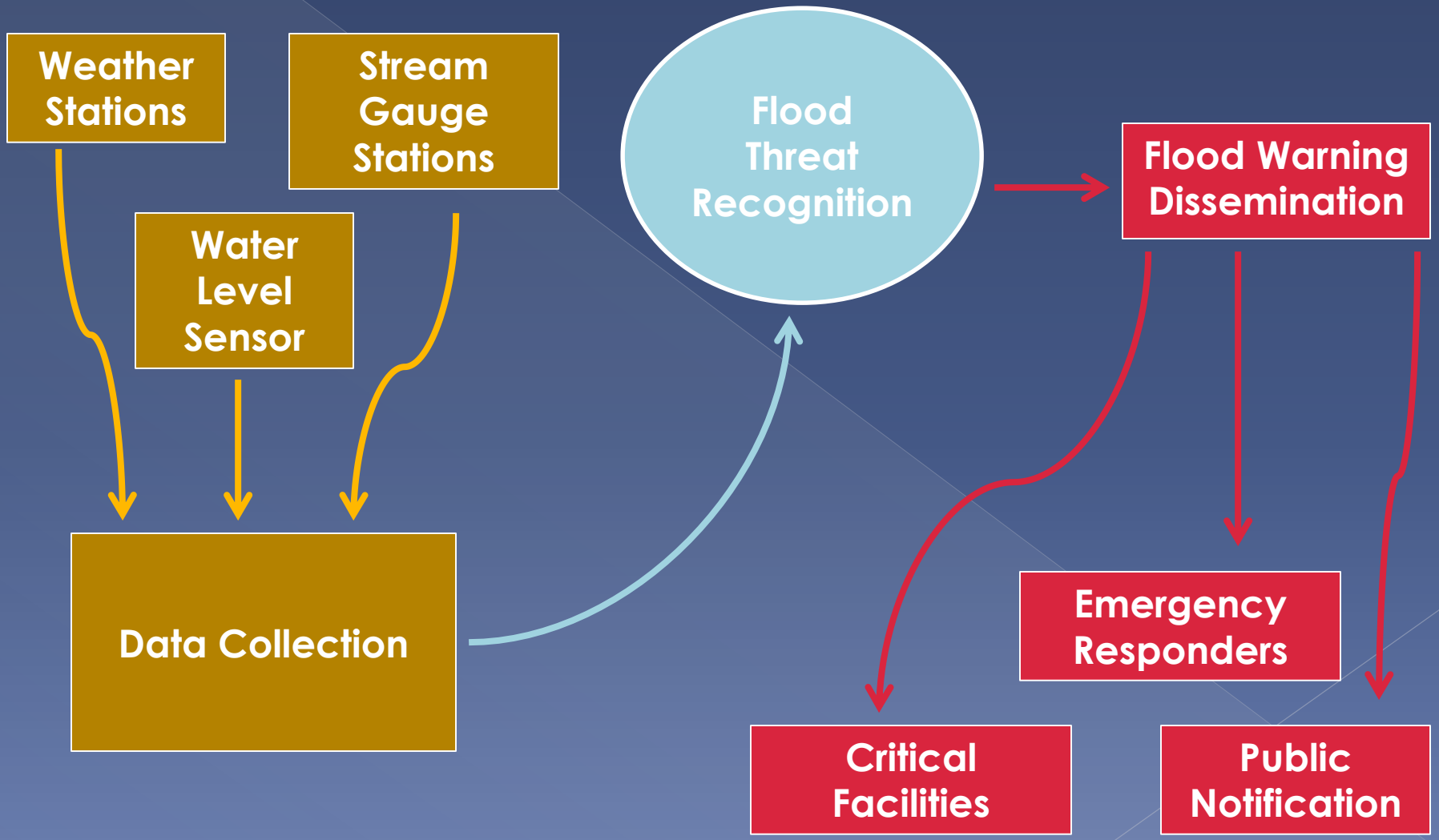
WHAT IS A FLOOD WARNING SYSTEM?

- Call In Complaints

- Weather Service Broadcasts

- Remote Monitoring System

FLOOD WARNING SYSTEM



DATA COLLECTION
Weather Stations

DATA COLLECTION
Water Level & Stream Gauge

FLOOD THREAT RECOGNITION
Software & Hardware

- Integrates different hydrologic & meteorologic data sources into one location.

- Sets alerts & alarms based on operator parameters.
  - Operational Support
  - Emergency Operations
  - Post Event Analysis

FLOOD WARNING DISSEMINATION

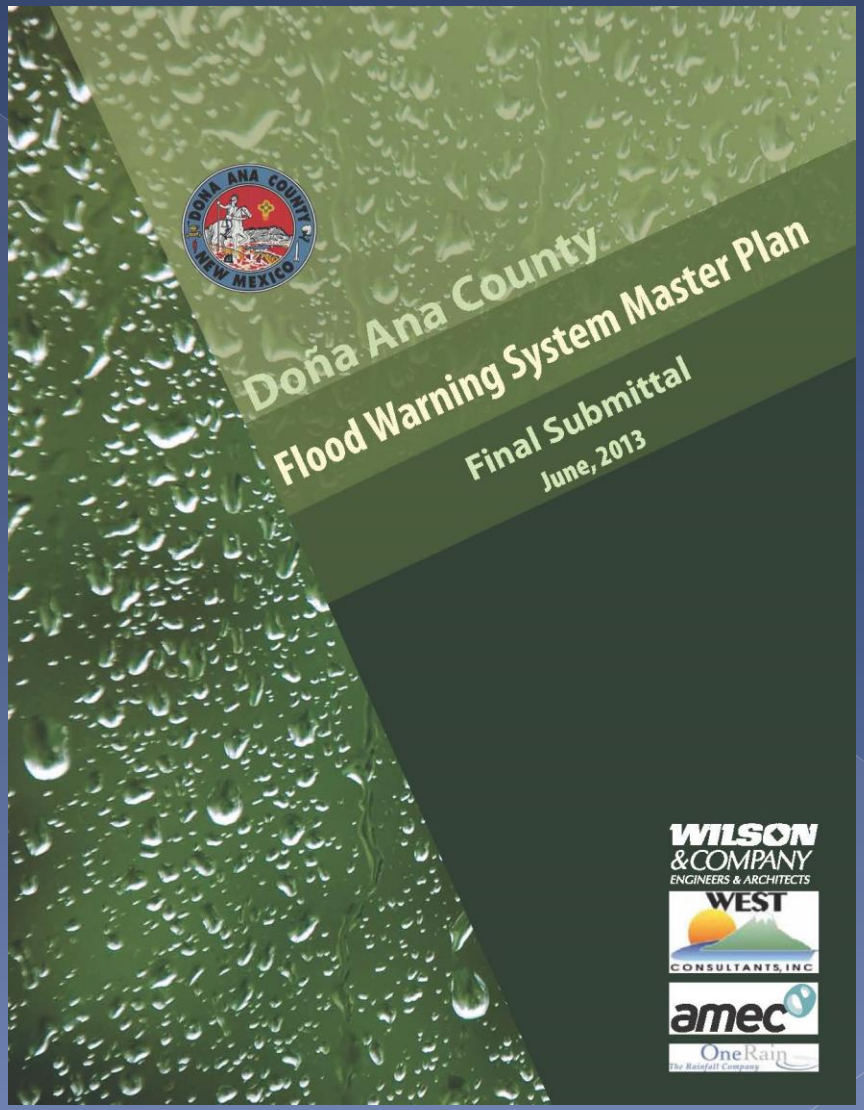
- Flood warning alerts and messages
  - Emergency Responders
  - Broadcast (TV, Radio)
  - Sirens
  - Social Network Message Boards
  - FEMA's Integrated Public Alert Warning System (IPAWS)
  - Reverse 911

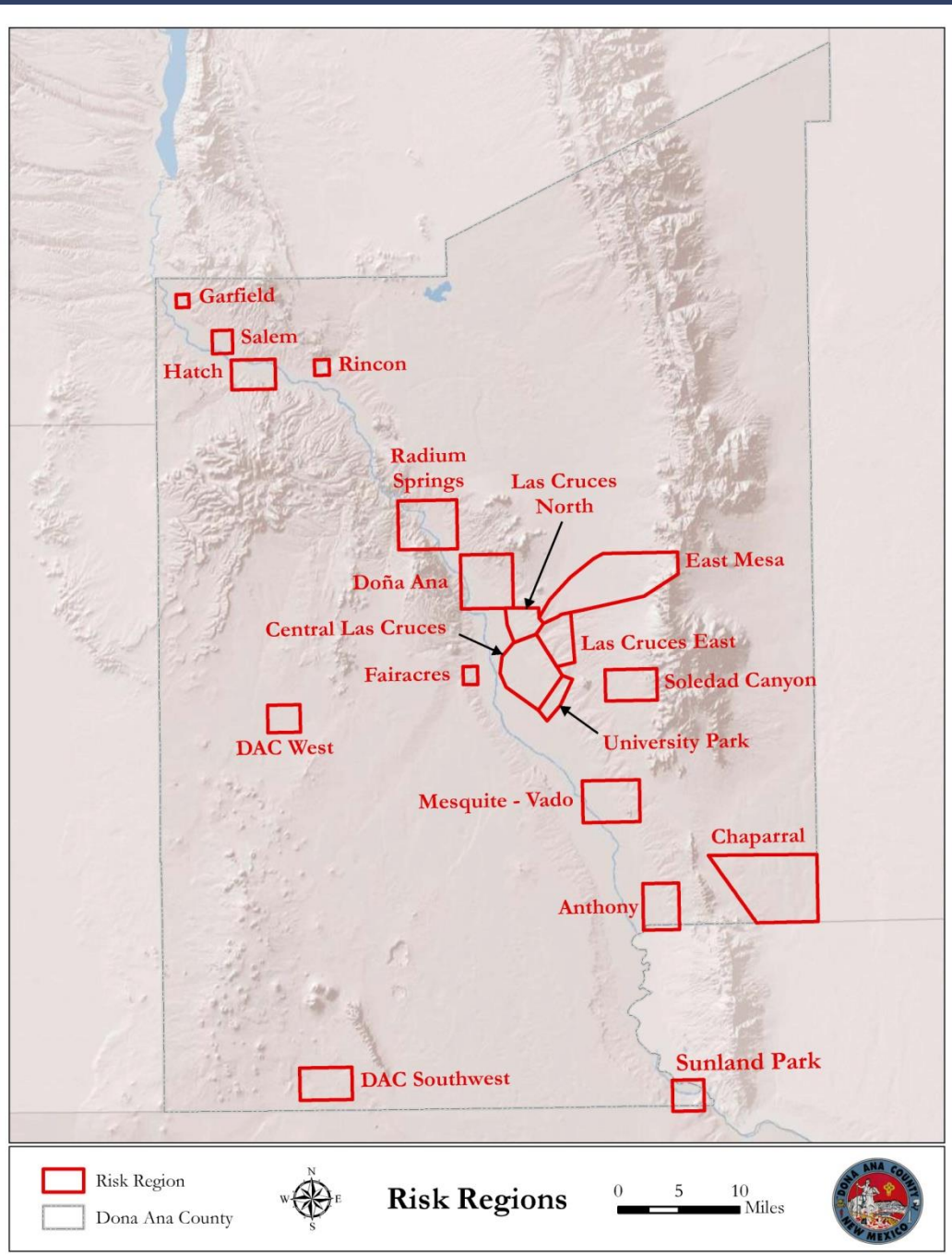
DOÑA ANA COUNTY STATUS

INTER-AGENCY COLABORATION

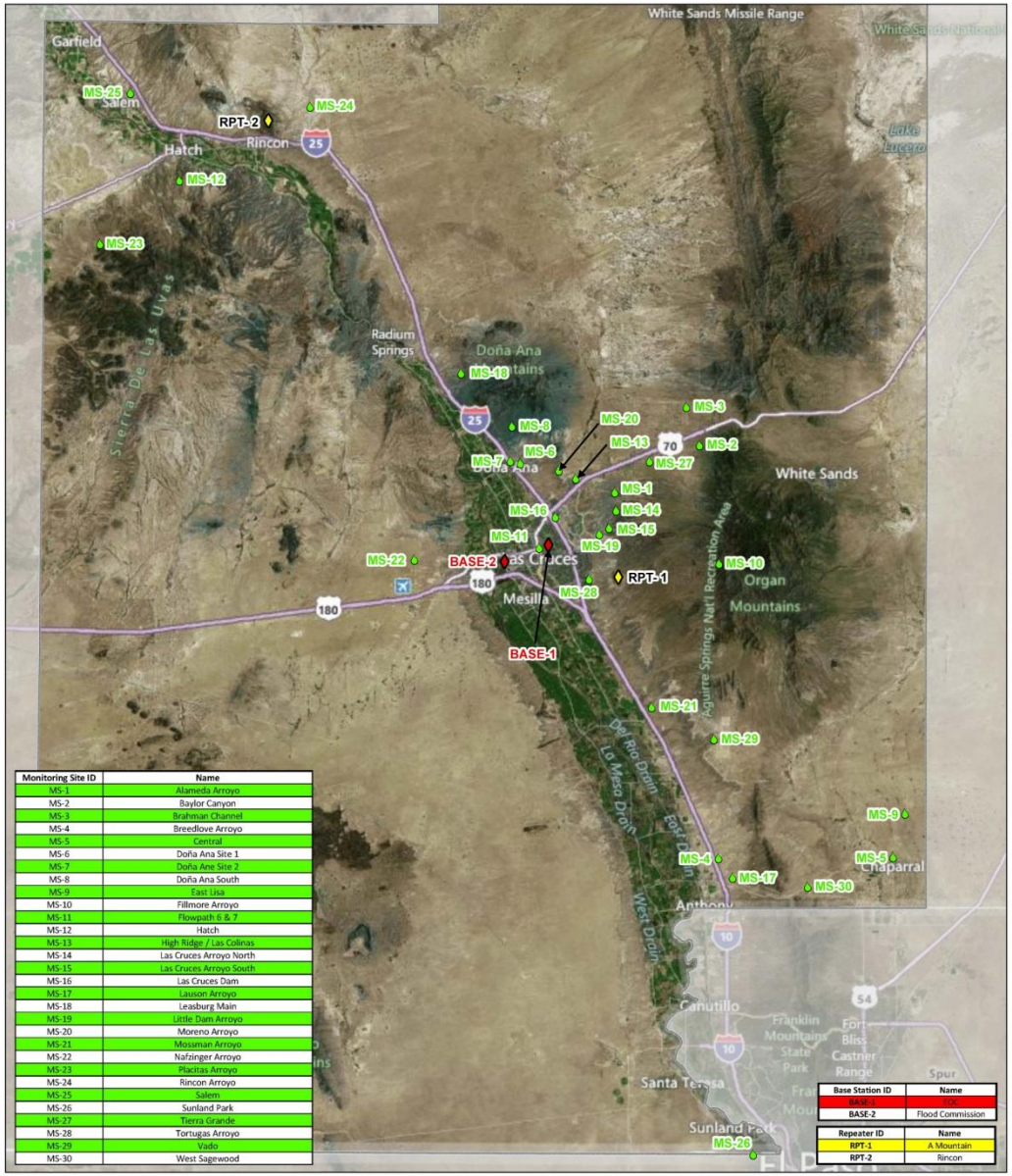
- Doña Ana County Flood Commission
- Elephant Butte Irrigation District
- City of Las Cruces
- National Weather Service
- New Mexico State University

DOÑA ANA COUNTY FLOOD COMMISSION




Garfield
Salem
Hatch
Rincon
Radium Springs
Las Cruces North
East Mesa
Doña Ana
Central Las Cruces
Las Cruces East
Fairacres
Soledad Canyon
DAC West
University Park
Mesquite - Vado
Chaparral
Anthony
Sunland Park
DAC Southwest
Risk Region
Dona Ana County
N
W
E
S
Risk Regions
0
5
10
Miles
DONA ANA COUNTY NEW MEXICO

Doña Ana County Flood Warning System Master Plan



Monitoring Site ID	Name
MS-1	Alameda Arroyo
MS-2	Baylor Canyon
MS-3	Brahman Channel
MS-4	Breedlove Arroyo
MS-5	Central
MS-6	Doña Ana Site 1
MS-7	Doña Ana Site 2
MS-8	Doña Ana South
MS-9	East Lisa
MS-10	Fillmore Arroyo
MS-11	Flowpath 6 & 7
MS-12	Hatch
MS-13	High Ridge / Las Colinas
MS-14	Las Cruces Arroyo North
MS-15	Las Cruces Arroyo South
MS-16	Las Cruces Dam
MS-17	Lauson Arroyo
MS-18	Leasburg Main
MS-19	Little Dam Arroyo
MS-20	Moreno Arroyo
MS-21	Mossman Arroyo
MS-22	Nafzinger Arroyo
MS-23	Placitas Arroyo
MS-24	Rincon Arroyo
MS-25	Salem
MS-26	Sunland Park
MS-27	Tierra Grande
MS-28	Tortugas Arroyo
MS-29	Vado
MS-30	West Sagewood

Base Station ID	Name
BASE-1	Mesilla
BASE-2	Flood Commission

Repeater ID	Name
RPT-1	A Mountain
RPT-2	Rincon

Monitoring Station (MS)
Base Station (BASE)
Repeater (RPT)
Doña Ana County

0 4 8 Miles

amec
WEST CONSULTANTS, INC.
WILSON & COMPANY
OneRain

nitoring Site ID	Name
MS-1	Alameda Arroyo
MS-2	Baylor Canyon
MS-3	Brahman Channel
MS-4	Breedlove Arroyo
MS-5	Central
MS-6	Doña Ana Site 1

WEB INTERFACE

Demonstration

Questions?