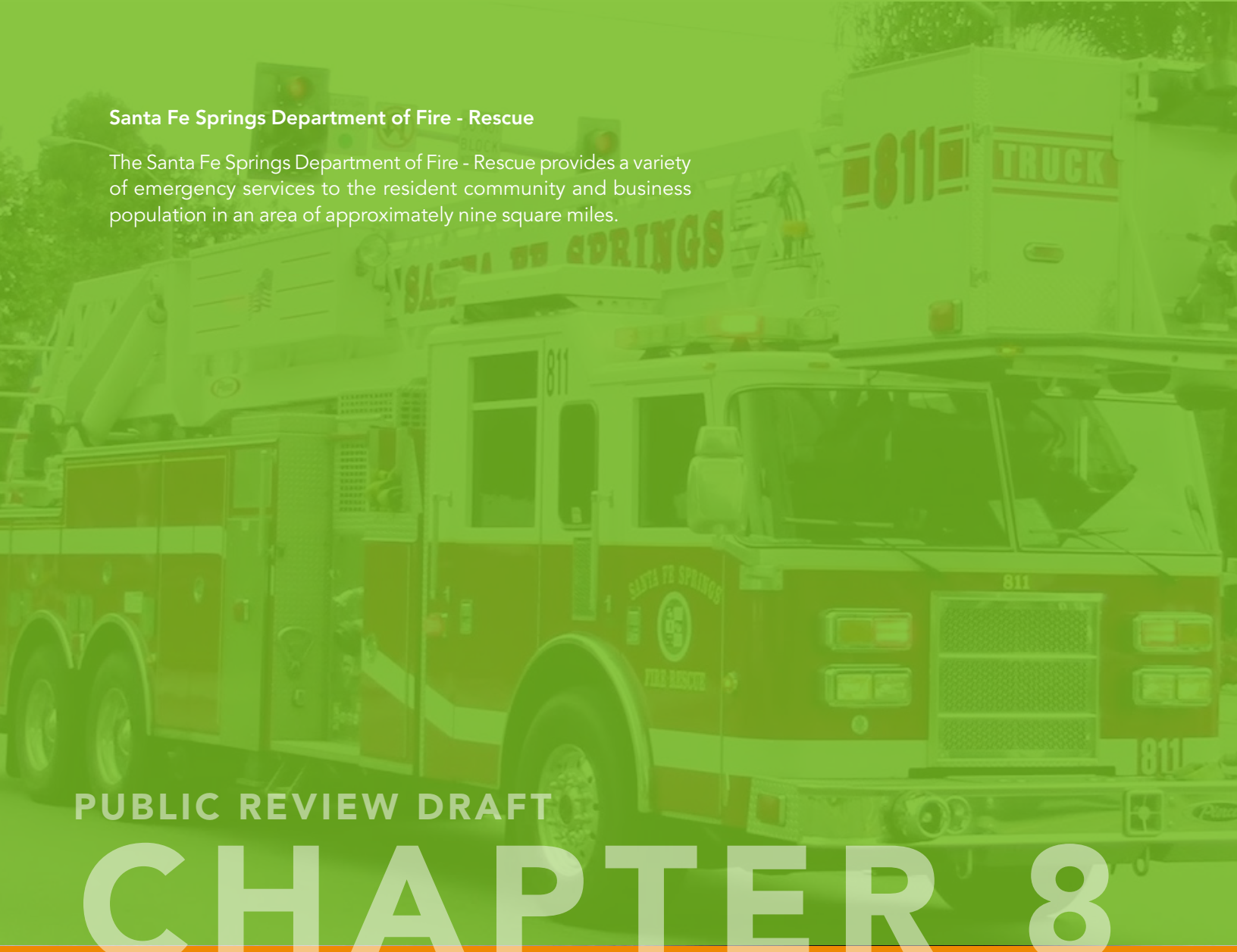


Santa Fe Springs Department of Fire - Rescue

The Santa Fe Springs Department of Fire - Rescue provides a variety of emergency services to the resident community and business population in an area of approximately nine square miles.

PUBLIC REVIEW DRAFT

CHAPTER 8

SAFETY ELEMENT

Re-Imagine
Santa Fe Springs
2040 GENERAL PLAN

Oil Derrick Pumps in Santa Fe Springs

Also known as a sucker rod pump, this machinery of gears and cranks pump, a polished rod up and down bringing up continuous, reliable flow of oil from deep wells to the surface.

Photo source: Whittier Daily News

CHAPTER 8: SAFETY ELEMENT

The Framework

The Safety Element works together with the Land Use, Open Space and Conservation, and Environmental Justice elements to create an urban environment in which residents, local workers, and visitors feel safe. City leaders emphasize prevention and preparation to minimize risk and mitigate hazards associated with urban fires, earthquakes, oil field operations, air pollution, truck and train traffic, climate change, and people who break the law. This element identifies the risks to life and property associated with local and regional conditions and defines the actions Santa Fe Springs will take to be prepared and resilient.

Under the Federal Disaster Mitigation Act of 2005, cities that wish to participate in federal disaster relief programs are required to prepare and regularly update a Local Hazard Mitigation Plan, or LHMP. Much of the LHMP content overlaps with the Safety Element content requirements regarding description of local hazards, risk assessment, description of preparedness and response capabilities, and mitigation strategies. Thus, this Safety Element references the LHMP and supplements its content where State General Plan law asks for more specific information—for example, planning within the City's sphere of influence.

While State law quite specifically identifies the types of hazards to be investigated and planned for in the Safety Element, not all apply to Santa Fe Springs. In the context of both hazard prevention and preparation, this element focuses on:

- Seismic and geotechnical conditions—regional and localized
- Flooding
- Urban fires
- Hazardous materials release threats
- Proactive planning with respect to evacuation routes, minimum road widths, and peak-load water supply
- Climate change vulnerability assessment
- Crime prevention

Through many existing programs, the City helps residents and businesses protect their properties. For example, the Municipal Code regulates structures, siting, operations, and enforcement to reduce risks posed by human-caused and natural hazards, including those associated with the extraction, processing, and transport of petroleum products. The City's Municipal Code Chapter 150 (Building Regulations) adopts the Los Angeles County Building Codes. Chapter 151 (Flood Damage Prevention) serves as the floodplain management ordinance. Chapter 152 (Hazardous Waste Facilities) details the suite of strict land use and emergency operations regulations required for hazardous waste facilities.

As a general policy and to supplement City resources and efforts, the Safety Element supports the comprehensive planning and emergency response procedures contained in the Los Angeles County Operational Area Emergency Response Plan and the Los Angeles County All-Hazards Mitigation Plan.

Planning for a Safe Community – The Context

Since the discovery of oil in Santa Fe Springs in the 1920s, it has largely been an industrial city. The land use distribution and patterns reflect this history, with industrial businesses occupying 72 percent of all land area in 2021 and residential neighborhoods largely located along the city's periphery. More than 50,000 workers employed by over 3,700 local businesses—largely involved in manufacturing and wholesale trades—commute into the city. While these businesses support a significant workforce, more than three-quarters of working Santa Fe Springs residents drive or take transit to jobs outside of the city, adding cars to the freeway network. Daily, anywhere from 30,000 to 50,000 vehicles travel along the major avenues that traverse Santa Fe Springs: Telegraph Road, Washington Boulevard, and Florence Avenue—each with multiple intersections and freeway on-ramps. A significant portion of these vehicles are heavy-duty trucks. During peak commute hours,

17,000 to 18,000 vehicles travel along I-605 freeway as it passes through the city. Thus, safety and emergency preparedness planning need to account for not just the 18,000 or so city residents but also the significant business presence and freeway traffic.

Of the 3,700 or so businesses located within the City, the U.S. Environmental Protection Agency (EPA) lists approximately 770 facilities in Santa Fe Springs whose activities involve using, storing, or transporting hazardous waste. Although highly regulated, these businesses present some level of risk and require that emergency response personnel be ready to respond to a myriad of potential accidents. In addition, all businesses and structures pose fire risks. Local employees and residents need to be aware of evacuation routes that provide rapid and safe distancing from fires or chemical accidents.

Sharing the same rail line right-of-way, BNSF Railway and metrolink traverses the north-south length of the city. The at-grade crossings create occasional traffic tie-ups and therefore pose increased risk of collisions.

The above paragraphs describe conditions created by humans that affect local safety conditions. Also relevant to public safety, the threat of earthquakes generated along local and regional fault systems and pockets of flooding during very unusual storm events. The adjacent chart identifies the human-caused and natural hazards of concern in Santa Fe Springs and the relative level of risk.

Anticipating Adverse Events and Conditions

The overarching goal of the Safety Element is to improve disaster planning and response for all types of potential adverse events: earthquakes, flooding, hazardous materials releases, urban fires, roadway and rail accidents, and increasingly, conditions associated with climate change (primarily extreme heat events), see Table S-1.

Critical and essential safety facilities to consider in public safety/disaster response planning include police and fire stations, the emergency operations center at City Hall, evacuation shelters, public schools, open spaces and parklands, and City maintenance yard. These are command centers or otherwise places of relief and safe haven during an emergency. Maintaining critical infrastructure—water reservoirs, power lines and stations, transit stations, and data and communication lines—in good condition helps guard against disruption due to a disaster and in day-to-day operations.

Table S-1: Hazards and Risk Assessment

Hazard	Level of Risk
Earthquake	
» Surface Rupture	» Low
» Liquefaction	» High
» Ground Shaking	» High
Flooding	
» 100-Year Flood	» Low
» 500-Year Flood	» Low
» Dam Inundation	» Low
Fire	
» Chemical	» High
» Industrial	» Moderate
» High-pressure Lines	» Moderate
» Residential	» Low
» Wildland	» Low
» Hazardous Materials Release	» High
Vehicle Accidents	
» Truck/Auto	» Moderate
» Train	» Moderate
» Bicycle/Pedestrian	» Moderate
Climate Change Related	
» Extreme Heat Events	» Moderate
» Drought	» Moderate

Geologic and Seismic Hazards

Santa Fe Springs, like most California cities, lies within a seismically active region, with series of local and regional faults capable of producing significant earthquakes. Between 2021 and 2045, the Los Angeles region faces a 60 percent probability that it will experience one or more earthquakes of magnitude 6.7 or above, and a probability of seven percent for a magnitude 8.0 or above earthquake. Figure S-1 identifies the Norwalk fault running parallel to I-5 freeway in the southern portion of the City. The Puente Hill Blind Thrust Fault is also located underneath Santa Fe Springs, but not shown on Figure S-1.

The southern portion of the San Andreas fault represents the system with the greatest potential of producing a 6.7 to 8.0 magnitude or greater earthquake. The Elsinore and San Jacinto faults are also considered capable of a 6.7 earthquake and above. About nine miles south of Santa Fe Springs, the Newport-Inglewood fault is thought to be capable of a 7.0 magnitude event; the destructive 1933 Long Beach earthquake (6.3 magnitude) occurred along this fault zone.

The most recent damaging earthquakes that struck the Los Angeles Basin, the 1987 Whittier Narrows and 1994 Northridge, were produced by blind thrust faults—deep, folded geologic formations that do not appear on the surface. Despite the city's proximity to the 1987 Whittier Narrows epicenter, Santa Fe Springs experienced little damage to structures.

The geology underlying Santa Fe Springs consists of sand, loam, and clay soils which are highly susceptible to a condition known as "liquefaction;" liquefaction most frequently is of concern in association with an earthquake. Liquefaction occurs when water-saturated sediment temporarily loses strength and acts as a fluid, thus causing buildings to fail. In Santa Fe Springs, liquefaction hazards are present along the drainage channels on the periphery of the city, as well as residential and industrial areas in the north, residential neighborhoods and business areas west of Norwalk Boulevard, and primarily industrial areas south of Imperial Highway (Figure S-1). Although possible, liquefaction is unlikely to occur due to the water table depth of more than 50 feet citywide.

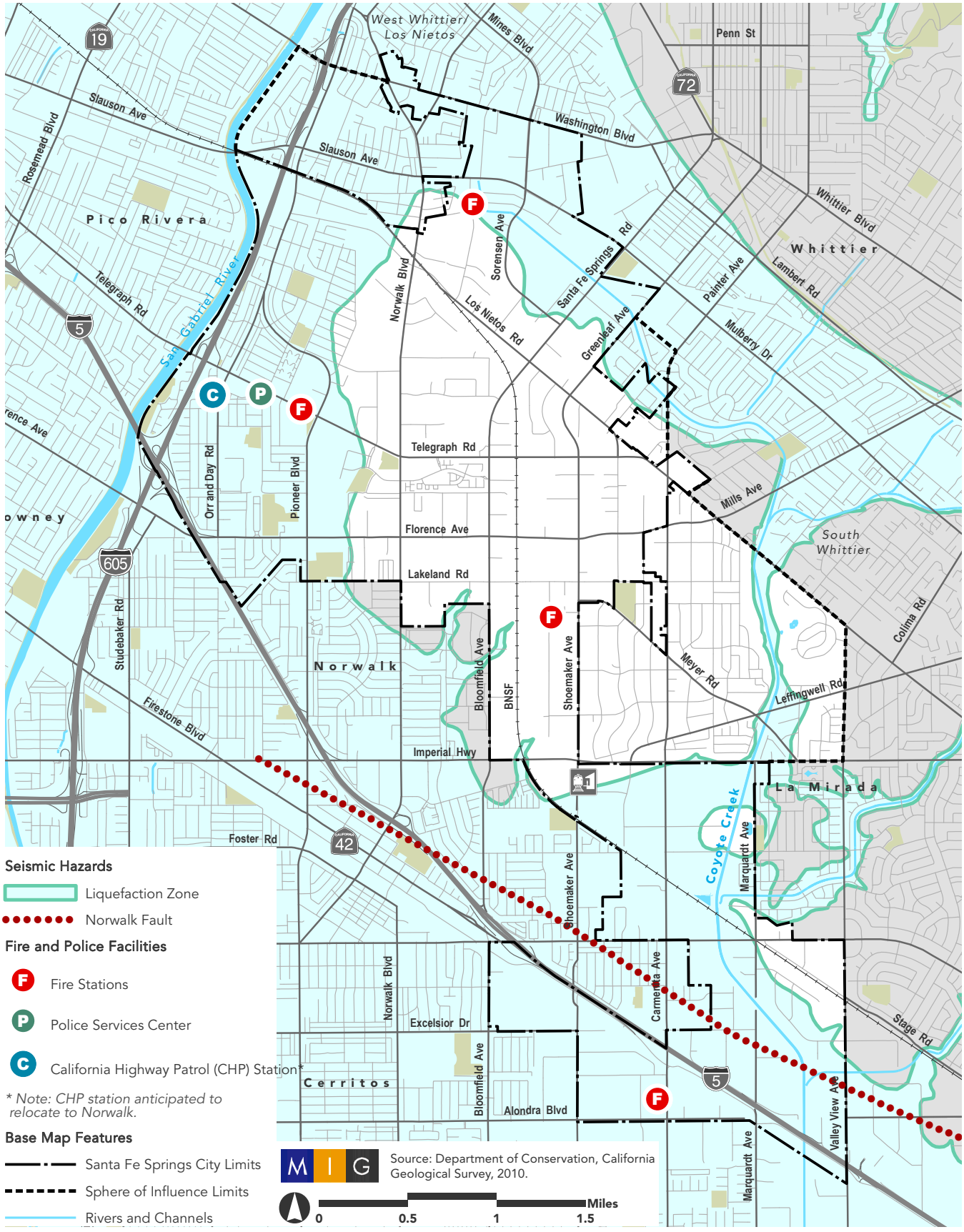
Notably, ground shaking and other earthquake-related hazards in Santa Fe Springs are not unusual in a California context. State and local building codes contain safeguards to prevent wide-scale building collapse. The primary issue of concern regarding geologic and seismic hazards is planning for the "big one:" a major earthquake with the potential to cause regional building damage, utility line and high-pressure gas line breaks, disruption of critical supply and service deliveries, injuries, and loss of life.

Measuring Earthquake Magnitude

An earthquake results from the shifting of earth along a division in the earth's crust, a "fault." This slippage releases energy that we perceive as ground shaking. Scientists frequently report earthquake events in terms of "magnitude" (M) using a logarithmic scale. This means that each whole number in magnitude increase represents a tenfold increase in intensity. Generally, a 5.3 M earthquake is classified as moderate, and a tenfold increase to 6.3M is described as a strong earthquake.

No matter its magnitude, an earthquake's effects will vary substantially throughout a region based on distance from the epicenter and the underlying surface geology. For example, Santa Fe Springs generally has loose soils that cause residents to experience more severe shaking than a community built on solid granitic geology.

Figure S-1: Seismic Hazards



Flooding and Dam Inundation Hazards

Regional flood control improvements constructed throughout the Los Angeles basin provide Santa Fe Springs with a high degree of flood protection. The Federal Emergency Management Agency (FEMA), as part of its flood insurance program, prepares maps that identify flood risks. As shown on Figure S-2, no 100-year flood zones exist within the city; flood zones associated with the San Gabriel River remain west of I-605. Risk of flooding from a 500-year flood event, defined as an event having a 0.02 percent chance of occurrence in any year, occurs primarily within the northern sphere of influence.

Inundation from the Hoover Reservoir and Whittier Narrows Dam located five miles northwest of Santa Fe Springs poses the greatest flood threats (Figure S-2). Whittier Narrows Dam was built as a flood risk management and water conservation project in 1957; it creates a reservoir capacity of 9.75 million gallons of water. In 2016, the U.S. Army Corps of Engineers determined the dam is structurally unsafe and poses a potentially catastrophic risk to the communities along the San Gabriel River floodplain. In addition, engineers found that the mile-long earthen structure could fail if water were to flow over its crest or if seepage eroded the sandy soil underneath. Inundation from dam failure would mostly affect the commercial, industrial, and residential areas of the city west of Norwalk Boulevard. As of 2021, measures to permanently address these issues were underway, including the securing of federal funds for dam improvements.

Hazardous Materials

Hazardous materials are substances or chemicals capable of having a harmful effect on human health or the environment. Hazardous materials are commonly used for industrial and commercial applications, but we also use them in everyday activities, from painting our houses to servicing our cars.

Many federal, State, and County agencies regulate the use, manufacture, transport, and storage of hazardous materials. For example, federal regulations pursuant to the Resource Conservation and Recovery Act (RCRA) ensure the safe handling and disposal of municipal and industrial waste. Facilities that transport, generate, or treat hazardous waste must report their activities to the U.S. EPA and California Environmental Protection Agency (CalEPA), with the Department of Toxic Substances Control (DTSC), a CalEPA division, overseeing many programs focused on its mission to "protect public health and the environment from toxic harm." See Figure S-3 for location of businesses that generate hazardous waste.

With its many industrial and commercial businesses and residential neighborhoods adjacent to those businesses, Santa Fe Springs remains aware of the need to ensure compliance with regulations intended to protect people's health and guard against environmental harm. Past industrial activities—some occurring before protections were put in place—have created contaminated properties subject to remediation to improve health conditions. (Refer to the General Plan August 2020 Existing Conditions Technical Report for details regarding sites.) The Omega Chemical Corporation Superfund site just outside of the City limits has impacted groundwater conditions in Santa Fe Springs that require longer-term attention, see Figure S-4.

Oil Field Operations and High-Pressure Pipelines Lines

Oil Field Operations

Santa Fe Springs' history as a highly productive oil field also has created hazardous conditions. From the first successful oil well drilling in 1921, the petroleum industry thrived well into the 1980s. Consolidation of operations and declining productivity of the resource has reduced activity to about 10 city blocks (see Figure S-5), with inactive wells plugged. The presence of plugged, abandoned, and active oil wells , as well as contaminated soils creates challenges for reuse of those properties. However, successful remediation and redevelopment has occurred, with the conversion of former oil fields into productive industrial businesses and even a new

Figure S-2: Flooding Hazards

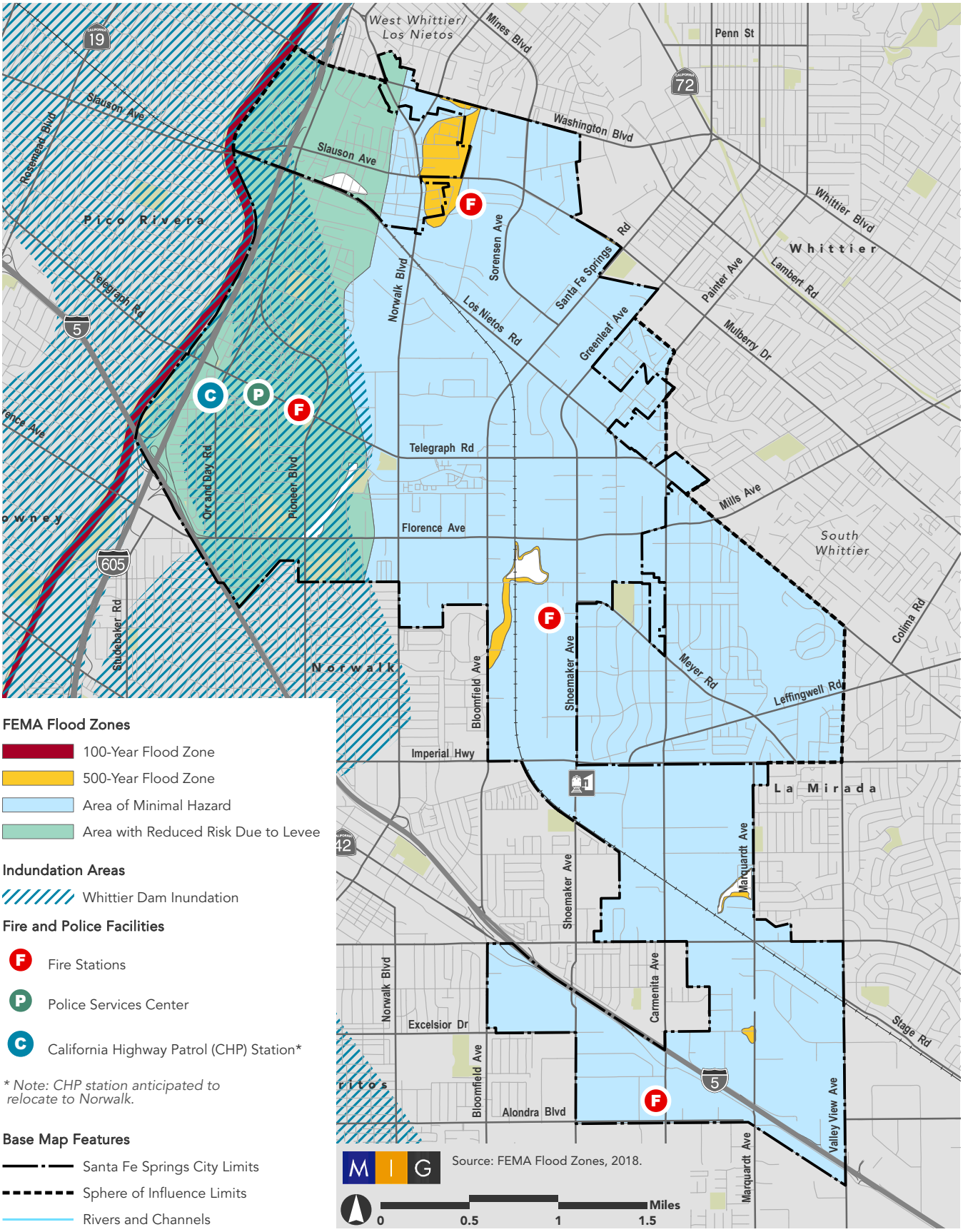


Figure S-3: Hazards Waste Generators

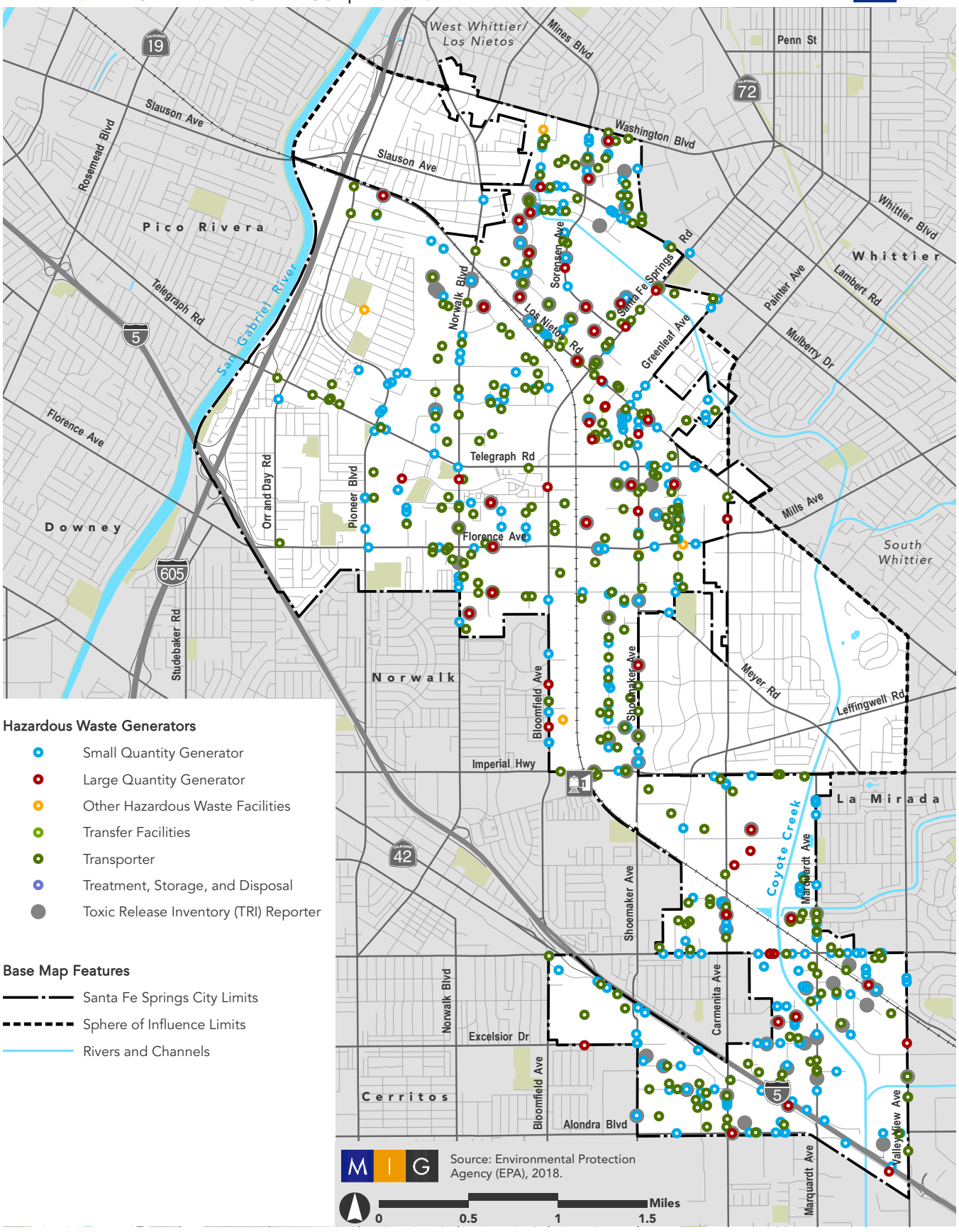


Figure S-4: Groundwater Contamination Plume

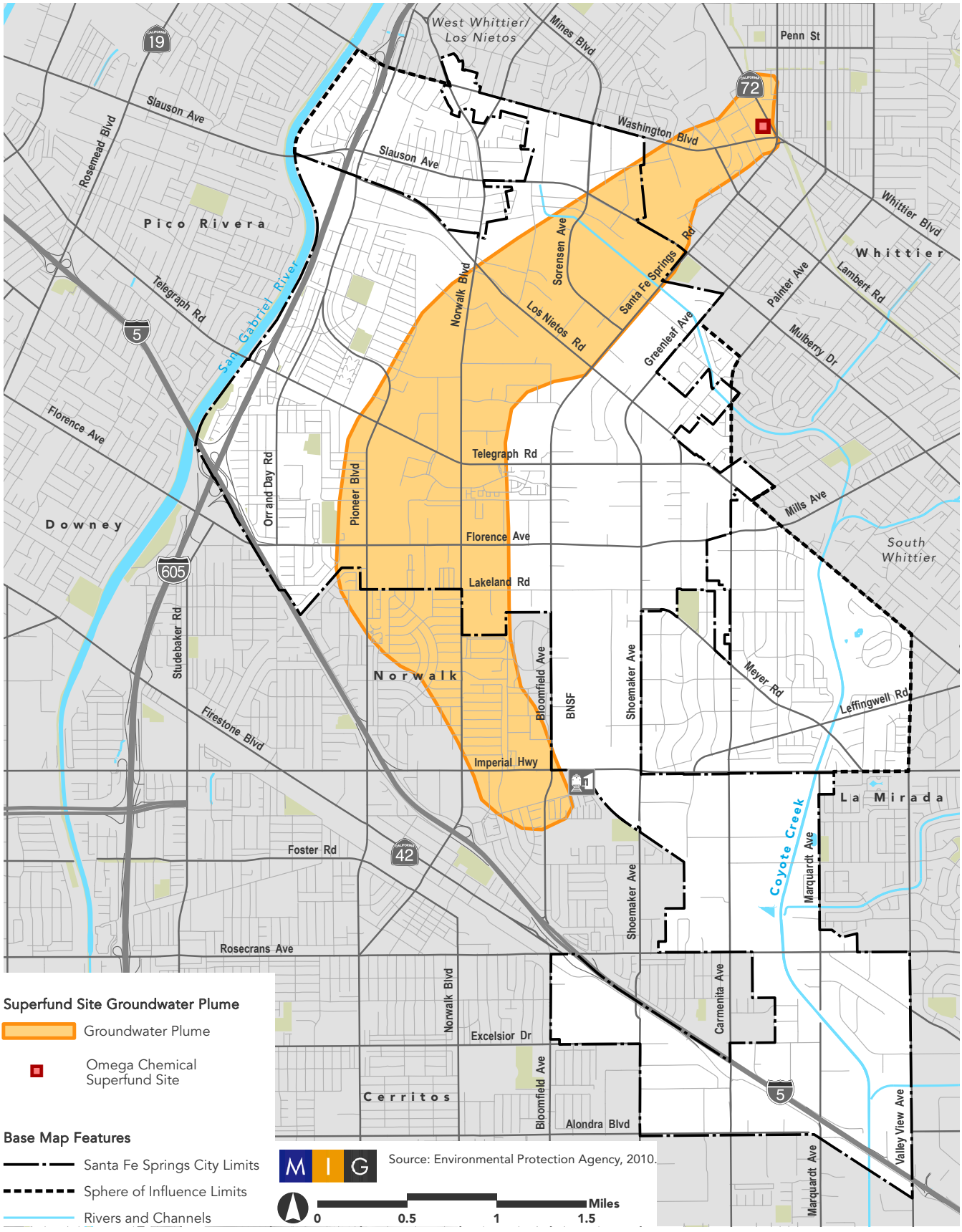
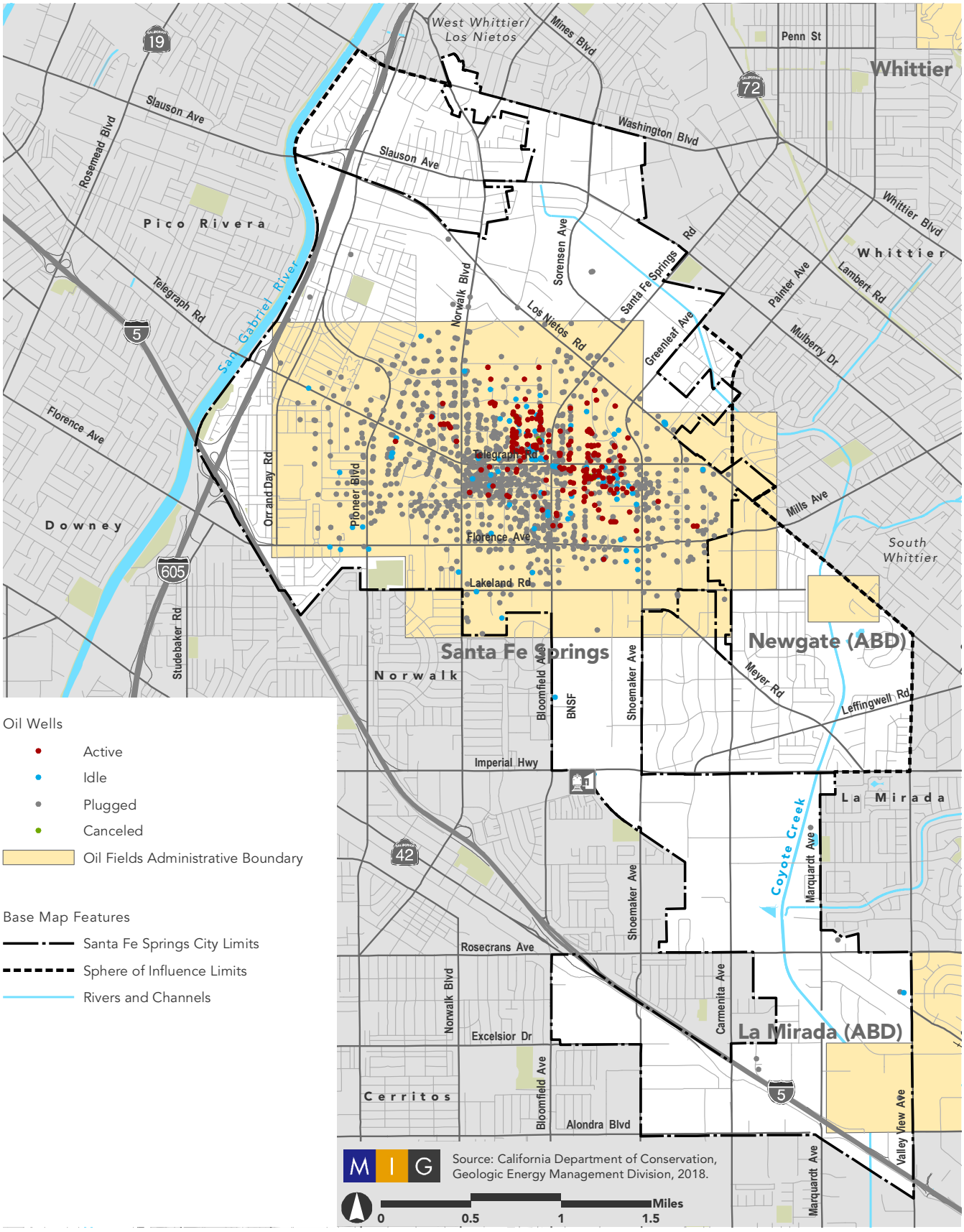


Figure S-5: Oil Wells



residential neighborhood—the Villages at Heritage Springs—where a few active oil wells remain.

Prior to the dissolution of redevelopment in California in 2012, the City was an active partner in developing properties with environmental challenges to productive uses. Although those resources no longer exist, the resolve remains to eliminate hazardous conditions and allow new investment of benefit to the entire community.

Urban Fires and High-Pressure Pipelines

Throughout California, the threats posed to communities by extreme heat events and dry vegetation in open space has significantly elevated fire threats and the damage caused by wildland fires that have encroached beyond the wildland/urban interface. Suburban cities like Santa Rosa in 2017 and Ventura in 2018 experienced ravaging fires that leapt from nearby hillsides into the residential neighborhoods. Santa Fe Springs lies distant enough from the Puente Hills that wildland fire threats, as mapped by the California Department of Forestry and Fire Protection, do not exist in the city. However, given the high concentration of industrial businesses, the history of oil extraction, and number of subsurface high-pressure pipelines, the potential for damaging urban fires to occur—and those involving potentially dangerous chemicals and trapped methane—is not inconsiderable.

Urban Fires

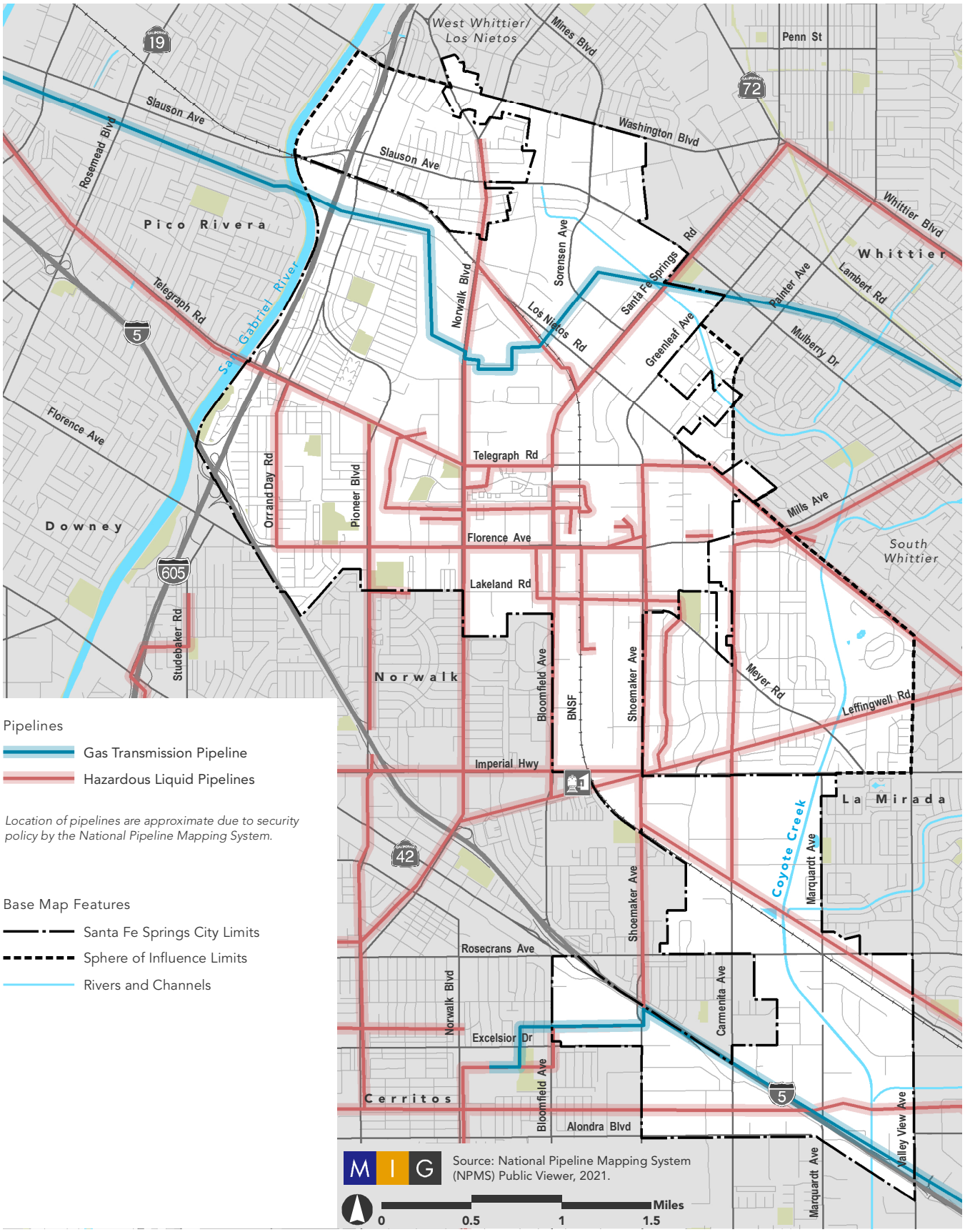
The City of Santa Fe Springs Department of Fire-Rescue, which serves Santa Fe Springs, maintains detailed information about the types of materials stored at all businesses. Regular inspection and education programs work to mitigate risk—and to allow first responders to be well prepared when responding to a fire at an industrial or commercial business. Also, with active oil wells continuing to pump at isolated locations, such as those operating at The Villages of Heritage Springs, the City must ensure appropriate protections and emergency response capabilities associated with fire risk.

High-Pressure Pipelines

Many miles of high-pressure pipelines traverse Santa Fe Springs, transporting liquids and gases used and produced by local businesses, as well as petroleum products to locations throughout the Los Angeles region. See Figure S-6 for locations of gas transmission and hazardous liquid pipelines. The chief concern regards unintentional disturbance during any excavation activities for new development, particularly on former oil field sites. Pipelines, existing active and inactive, are strictly regulated by federal and State agencies, and the City—given the history of oil operations—requires extensive documentation for any project that could affect these lines.

Warehouse fire in Santa Fe Springs

Figure S-6: Pipelines



Climate Change and Resiliency

Climate change is a long-term shift in global or regional climate patterns. Often climate change refers specifically to the rise in global temperatures from the mid-twentieth century to today. Climate is sometimes mistaken for weather. But climate is different from weather because it is measured over a long period of time, whereas weather can change from day to day, or from year to year. The climate of an area includes seasonal temperatures and rainfall averages and wind patterns. Climate change is the long-term alteration of temperature and typical weather patterns in a place, causing weather patterns. Scientists today agree that the Earth's rising temperatures are fueling longer and hotter heat waves, more frequent droughts, and heavier rainfall. More locally, records maintained by the California South Coast National Oceanic and Atmospheric Administration (NOAA) Climate Division for the Los Angeles region show a significant upward trend of around 0.160 ° C (Celsius) per decade in the annual average, maximum, and minimum temperatures.

Humans—and more specifically, the greenhouse gas (GHG) emissions we generate—are the leading cause of the Earth's rapidly changing climate. Greenhouse gases play an important role in keeping the planet warm enough to inhabit. The amount of these gases in our atmosphere has skyrocketed in recent decades. The burning of fossil fuels like coal, oil, and gas for electricity, heat, and transportation is the primary source of human-generated emissions. Curbing dangerous climate change requires significant reductions in emissions, as well as the use of alternatives to fossil fuels worldwide.

Addressing climate change impacts requires two categories of action: 1) reducing the greenhouse gas emissions that contribute to a changing climate and 2) adapting in the near term to the anticipated changes, recognizing that "righting the ship" will be a longer process that will require positive actions world-wide.

In the context of climate change, adaptation can be defined as "an adjustment in natural or human systems to a new or changing environment." The California

Solar panels on large industrial roof tops at the Golden Springs Business Center, are creating electricity and reducing carbon emissions, specifically carbon dioxide. Carbon dioxide, which is a greenhouse gas, is contributing to global warming and climate change.

approach to adaptation planning is focused on reducing harm from the effects of a changing climate. This includes climate change mitigation such as reducing greenhouse gas emissions, as outlined in the Conservation and Open Space Element.

Californians can anticipate experiencing many adverse consequences of climate change: hotter summers, extended periods of drought, frequent and more severe wildland fires, flooding from extreme storm events and due to the denuding of hills due to fires, and effects on agricultural crops, among others. In Santa Fe Springs, higher average temperatures and drought represent the chief concerns. Of particular note is how lower-income households may be more adversely affected by an inability to afford expensive air conditioning and needed healthcare. Heat waves threaten power sources needed for cooling devices and cooling centers. Fires may be sparked by local overheated transmission lines, and fires in the Puente Hills and San Gabriel Mountains could increase downstream flood risks. And the COVID-19 pandemic of 2020-2021 showed how easily hospitals can be overcome under disaster conditions.

Table S-2 identifies strategies to address specific climate change concerns.

Table S-2: Climate Adaption Strategies

Climate Change Concern	Strategies
Heat Waves	» Increase the number of local solar energy sources (on homes, at businesses, and at critical facilities) to create reliable and less expensive power sources. » Seek grants and financial support that augment household capacities for purchasing needed electric power.
Increased Urban Heat Island Effects	» Amend capital improvement priorities to reduce the city's vulnerability to the health effects of heat waves by intentionally avoiding excessive street widening projects that worsen the urban heat island effect. » Incorporate into public works projects environmental design concepts such as greater tree canopies, increased groundwater recharge, reduced storm water runoff, "cool" materials.
Drought	» Expand the number of rainwater collection facilities, and design stormwater capture infrastructure to boost local water supplies. » Conduct water use education programs and enforce reduced water use requirements year-round; make water conservation practices part of residents' and businesses' DNA. » Encourage replacement of lawns with low-water-use, climate-appropriate landscaping. » Encourage installation of drip irrigation systems.
Flooding	» Consult with the Los Angeles County Department of Public Works regarding the ability of levee systems along the San Gabriel River and Coyote Creek to withstand any new flood hazards that may be identified over time. » Ensure flood evacuation information is included in any emergency preparedness materials provided to residents and businesses.

Emergency Preparedness and Emergency Services

"An ounce of prevention is worth a pound of cure." This well-known adage was written by Benjamin Franklin who, interestingly, directed it to fire-threatened Philadelphians in 1736. The City embraces this philosophy and directs public safety resources toward preparedness and prevention to avoid upset incidents and to minimize the loss of life and property in the event of a disaster.

The Santa Fe Springs Department of Fire - Rescue and the Department of Police Services (contracting to the Whittier Police Department) direct emergency preparedness, response, medical services, law enforcement, and code enforcement operations. Activities are coordinated with the County of Los Angeles Office of Emergency Management, which has the responsibility of comprehensively planning for, responding to, and recovering from large-scale emergencies and disasters that impact Los Angeles County.

Emergency Preparedness

Department of Fire - Rescue staff help businesses and residents safeguard their buildings and residences and prepare themselves for emergencies. Foremost, emergency preparedness for businesses involves prevention: ensuring compliance with fire safety standards and keeping fire alarm systems in good working order. The Environmental Protection and Fire Prevention Division (EPD) is involved in the review of development plans, conducts site inspections, and runs education regarding family emergency plans and business emergency plans, including information regarding "sheltering in place" in the event of an accidental chemical or other airborne hazard release—not uncommon risks in this highly industrialized city like Santa Fe Springs. To strengthen preparedness planning, residents are offered advice on how to survive without emergency services. The Emergency Operations Center (EOC) provides staff trainings and emergency drills, as well as operating as a command center in the event of an emergency.

The Environmental Projection and Fire Prevention Division specifically addresses protections against harmful exposures to hazardous substances through proactive measures. The EPD is one of 81 designated Certified Unified Program Agencies in California that has administrative oversight authority for:

- Hazardous Materials Release Response Plan and Inventories
- California Fire Code Hazardous Material Management Plan and Hazardous Materials Inventory Statements
- Hazardous Waste Generator and On-site Hazardous Waste Treatment Programs
- Underground Storage Tank regulations
- Aboveground Petroleum Storage Tank regulations
- California Accidental Release Prevention (CalARP) Program and CalARP Public Notice

With this authority, EPD staff can proactively and quickly identify potential public safety threats and act to minimize those threats.

Emergency Services

Even with rigorous prevention and preparedness practices, accidents do happen. The Department of Fire – Rescue staff are well equipped to respond to any emergency, from fire suppression to emergency medical services, from hazardous materials response to urban search and rescue. This breadth of services demonstrates the City's commitment to providing the industrial business community with a high level of support and also ensuring that residents are well protected.

The City's urban search and rescue staff are trained to respond to a variety of emergencies or disasters: earthquakes, storms, floods, dam failures, technological accidents, terrorist activities, and hazardous materials releases. The HazMat Team responds to hazardous materials incidents that could pose a major hazard to

life, environment, and property. The HazMat Team also responds to unknown materials that are abandoned, illegally dumped, or spilled, as well as intentional acts using hazardous materials. The Department's emergency medical technicians can begin basic life-saving measures and assist paramedics, who provide the next level of emergency care.

Emergency Evacuation Routes

When a disastrous event occurs, people need to be removed from the impacted area quickly to minimize the level of harm. The evacuation routes used depend upon the location and scope of the incident. Localized accidents such as a building fire might require only adjacent properties to be evacuated away from the immediate area. If a chemical release is involved, a broader evacuation zone may be designated, with streets closed to allow affected people to move quickly away and emergency response personnel to move in. For larger scale disasters, such as an earthquake, larger populations may need to vacate, using routes emergency personnel designate to move many people to safe locations.

Santa Fe Springs benefits from a well-defined grid network of arterial highways that can quickly be adapted to provide one-way traffic flow away from industrial accidents or other adverse conditions. Figure S-7 indicates key routes designated as emergency evacuation routes. The actual routes used depend upon the location, type, and scope of the upset event.

Peak Flow Water Supply

Effective fighting of urban fires requires a reliable public water system with water pressures sufficient to suppress fires of all types in all buildings citywide while meeting daily water supply demand. In Santa Fe Springs, 4,000 gallons per minute (gpm) is the standard for minimum fire flow requirement. This can be accomplished through use of fire sprinkler systems, additional open space areas around a building, specified construction materials, separation walls, limitations on flammable/hazardous materials in inventory, creating better fire apparatus access, methane monitoring sytems and various other protection techniques.

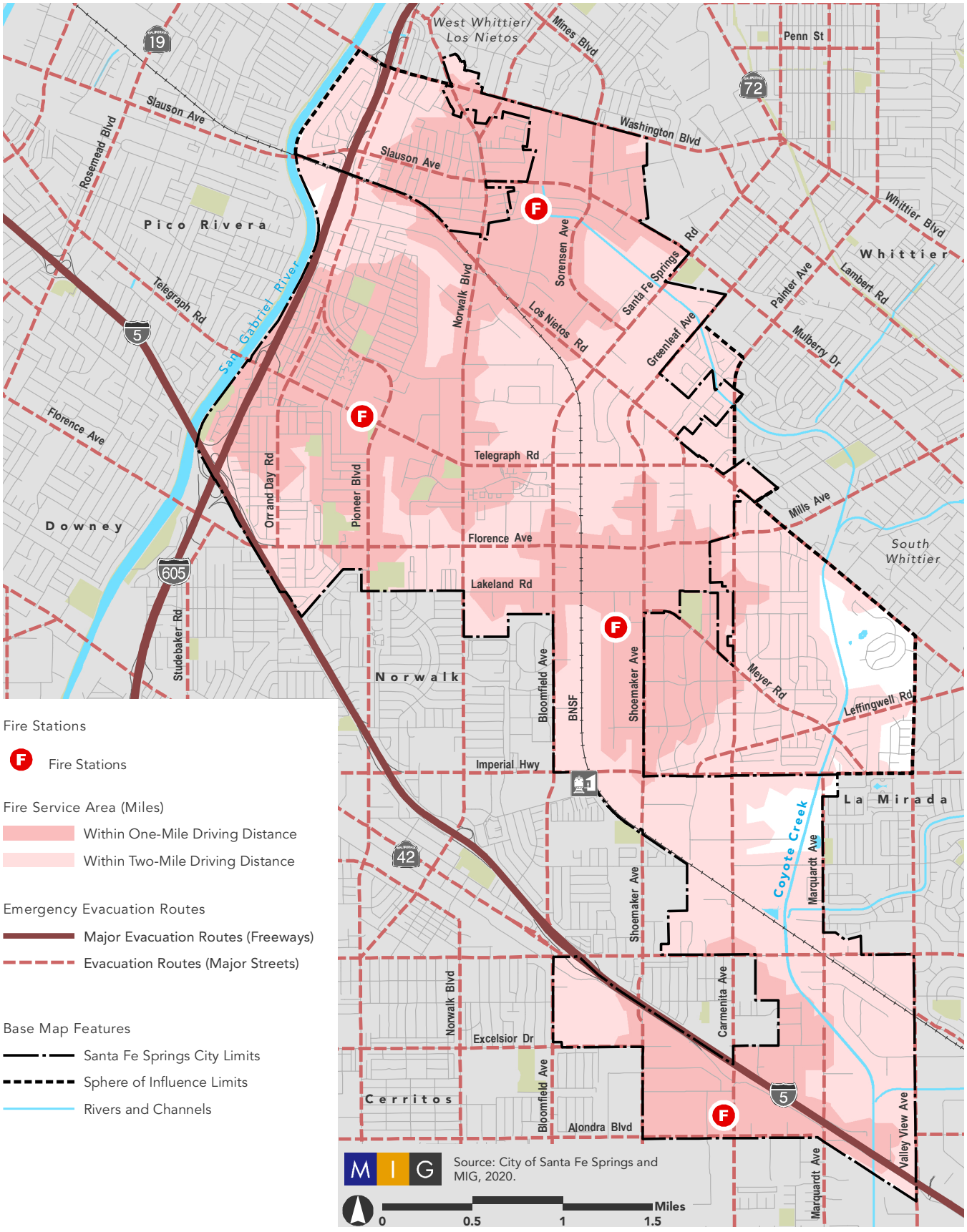
Because the City owns and operates its own water system, it readily can ensure peak flow to all customers while meeting fire flow requirements. As part of periodic updates to the water system master plan, any anticipated deficiencies can be identified and funding source for improvements planned.

Crime Prevention

The City contracts with the Whittier Police Department for law enforcement services. City-dedicated law enforcement officers work from the Police Services Center located in a building at the Santa Fe Springs City Hall, with staff responsible (Santa Fe Springs Department of Police Services or Whittier Police Officers) for the management of all local law enforcement services except jailing and dispatch. To connect and create partnerships with residents and business owners, the Department prefers to designate precincts with dedicated teams of police sergeants, sworn officers, and public safety staff involved in report preparation and traffic duties. Emphasis is placed on creating community partnerships that minimize the need for aggressive police presence and encourage residents to assist with crime prevention awareness in their neighborhoods.

As with its emergency response service, staff focuses law enforcement efforts on crime prevention and problem-solving policing. In particular, the City recognizes the value in working with parents and youth to address adverse behaviors that can hinder success in school and community life. Police staff also work with business owners to improve security and reduce property crimes.

Figure S-7: Fire Service and Evacuation Routes



Goals and Policies

The following goals and policies provide guidance in addressing the current and future challenges the City will confront.

To help identify goals and policies that align with the General Plan Guiding Principles, the following symbologies represent each of the Guiding Principles:

- HS — **Healthy and Safe Neighborhoods**
- ES — **Economic Strength and Local Businesses**
- D — **Downtown**
- DE — **Diversified Economy**
- EJ — **Environmental Justice**
- CSE — **Clean and Sustainable Environment**
- ARC — **Adaptive and Resilient Community**
- EI — **Equitable and Inclusionary**
- ADT — **Active and Diverse Transportation**
- T — **Technology**

Geologic and Seismic Hazards

GOAL S-1: A COMMUNITY WELL PREPARED TO RESPOND EARTHQUAKES

Policy S-1.1: ARC
Earthquake Preparation. Educate the community on actions to take before, during, and after a major earthquake, including establishing family emergency disaster plans to prepare for and after an earthquake event.

Policy S-1.2: ARC
Training. Provide ongoing training to encourage preparedness and reduce the potential risk loss of life, property damage, and social and housing disruption resulting from an earthquake.

Policy S-1.3: HS
Agency Consultation. Consult emergency Preparedness with Federal, State, County, School Districts and other local agencies to prepare for response and recovery efforts in the event of an earthquake.

Policy S-1.4: ARC
Minimize Property Damage. Encourage property owners to undertake seismic retrofit of structures vulnerable to moderate to severe ground shaking caused by earthquakes.

Policy S-1.5: HS
Seismic Standards. Ensure that all new development adheres to City and State seismic and geotechnical standards.

Policy S-1.6: ARC
Earthquake Recovery Resiliency. Identify a plan of action and consult with different responsible agencies to respond to and recover from a major earthquake.

Policy S-1.7: **Infrastructure Resilience**. Establish City plans and work with utility providers to ensure programs and systems are in place for continued functionality of water, sewer, electric power, natural gas, and communications infrastructure during and after a major earthquake.

ARC

Policy S-1.8: **Geotechnical Hazard Mitigation.** Require that projects in areas susceptible to liquefaction and other geologic hazards demonstrate that all appropriate engineering and planning mitigations are implemented.

HS

GOAL S-2. PROTECTION FROM FLOOD AND DAM INUNDATION HAZARDS

Policy S-2.1: **Storm Drainage System.** Consult with Los Angeles County Public Works to ensure that existing and future regional storm drain facilities within and adjacent to Santa Fe Springs are designed, operated, and maintained to accommodate projected drainage needs associated with major storm events and climate change effects.

HS

Policy S-2.2: **Localized Ponding Mitigation.** Require developers to address localized ponding, where it may exist, as part of site improvements.

HS

Policy S-2.3: **Dam Inundation.** Consult with appropriate agencies and monitor the upgrade/retrofit of the Whittier Narrow Dam to protect the community against catastrophic damage that could result from a combination of an extreme weather, seismic, and/or climate change event.

HS

Policy S-2.4: **Shelters.** Seek ways to enhance the City's sheltering facilities outside of the potential dam inundation area, including places of worship, schools, and public buildings.

HS

Hazardous Materials and Oil Field Operations

GOAL S-3: MINIMIZE EXPOSURE OF RESIDENTS, BUSINESSES, AND HABITATS TO HAZARDOUS MATERIALS AND THEIR DELETERIOUS EFFECTS

Policy S-3.1: **Hazardous Waste Siting.** Discourage the siting of facilities that utilize hazardous materials or generate hazardous wastes within one-quarter mile of any private or public school, park, or similar place where people congregate in numbers.

CSE

Policy S-3.2: **Hazardous Materials Locations.** Monitor and evaluate commercial and industrial uses that generate, store, and transport hazardous materials to determine the need for buffer zones or setbacks to minimize risks to residential neighborhoods, schools, parks, and community facilities.

CSE

Policy S-3.3: **Hazardous Air Pollution.** Consult with the South Coast Air Quality Management District regarding the emissions monitoring of industrial operators that use or produce hazardous materials/toxic compounds.

CSE

Policy S-3.4: **Minimize Exposure.** Re-evaluate manufacturing zones land use regulations to determine the appropriate types of industrial uses to allow, with a particular focus on those that handle or generate large quantities of hazardous materials.

CSE

Policy S-3.5: **Contamination Protection.** Protect natural resources—including groundwater—from hazardous waste and materials contamination.
CSE

Policy S-3.6: **Oil Drilling and Production.** Promote the gradual consolidation and elimination of oil drilling and production sites to advance the City's climate adaptation and resiliency strategies, local reduction of greenhouse gases, and land use goals.
CSE

Policy S-3.7: **Contamination Remediation.** Consult with the U.S. Environmental Protection Agency and responsible State agencies on the ongoing remediation and cleanup of contaminated properties and groundwater, with aim to recondition sites for productive land uses.
CSE

Policy S-3.8: **Agency Collaboration.** Consult with State, federal, and Los Angeles County agencies to develop and promote best practices related to the use, storage, transportation, and disposal of hazardous materials.
CSE

Policy S-3.9: **Hazard Mitigation.** Coordinate and integrate hazard mitigation activities with emergency operations plans and procedures.
CSE

Policy S-3.10: **Proper Hazardous Materials Management.** Promote the proper collection, handling, recycling, reuse, treatment, and long-term disposal of hazardous waste from households, businesses, and government operations.
CSE

Policy S-3.11: **Public Awareness.** Develop and implement education and outreach programs to increase public awareness of the risks associated with natural, human-caused, and technological hazards.
CSE

GOAL S-4: MINIMIZED RISK OF URBAN FIRES AND THEIR ASSOCIATED ADVERSE EFFECTS

Policy S-4.1: **Petroleum-related Fire Sources.** Reduce the sources of significant combustion and urban fires, including active producer well sites, active water injection wells, oil industry tank farms and compression plants, and aboveground tanks storing flammable or combustible liquids.
HS

Policy S-4.2: **New Development Risks.** Evaluate developments and other intensification of uses for a potential increase to the level of fire risk, susceptibility to urban fires, and exposure to high-level fire.
HS

Policy S-4.3: **Underground Sources.** Identify and map underground pipelines that convey various combustible materials and use that information when assessing the suitability of a proposed land use or public improvement.
HS

Policy S-4.4: **Fire Inspections.** Conduct regular fire inspections of industrial and commercial businesses in the City to ensure their compliance with fire safety regulations.
HS

Policy S-4.5: **Fire Prevention Education:** Conduct ongoing local fire safety education and awareness programs for residents and businesses.
HS

Climate Change and Resiliency

GOAL S-5: A RESILIENT COMMUNITY WELL PREPARED TO RESPOND AND ADAPT TO CLIMATE CHANGE

Policy S-5.1: **Essential Public Facilities.** Evaluate the resiliency of essential public facilities to risks and hazards of earthquakes, flooding, fire, and other hazards, and address any deficiencies.

ARC

Policy S-5.2: **Climate Change and Adaptation Lens**. Integrate climate hazards, adaptation, and resiliency into the update of plans, regulatory codes, and policies.

ARC

Policy S-5.3: **Resilient Power Planning.** Identify the top critical City building/facilities in need of protection against power outages and assess the need for power protection and back-up facilities.

ARC

Policy S-5.4: **Resilient Building Approaches.** Support building and site improvements that reduce energy and water use and urban heat island effects.

ARC

Policy S-5.5: **Vulnerability Assessments.** Evaluate, identify, and put forward strategies to reduce the climate effects on the health of disadvantaged communities and vulnerable populations.

ARC

Policy S-5.6: **Heat Response.** Set up early heat wave warning systems, communicate heat wave risks, suggest protective actions, and designate cooling centers that target vulnerable populations.

ARC

Policy S-5.7: **Passive Solar Design.** Encourage passive solar design for new development and community facilities, including cool roofs, architectural features that cool interiors, shade shelter areas, shaded playgrounds, and bus shelter canopies.

ARC

Policy S-5.8: **Urban Heat Island Countermeasures.** Integrate solutions to address urban heat island effect, particularly in disadvantaged communities, by utilizing green infrastructure, shading building surfaces, expanding tree canopies over parking lots and expansive pavements, and expanding the urban forest.

ARC

Policy S-5.9: **Prioritize Capital Investments.** Apply climate change adaptation criteria for projects that prioritize investments in capital planning and critical infrastructure in higher-risk areas and disadvantaged neighborhoods.

Emergency Preparedness/Emergency Services/Crime Prevention

GOAL S-6: A COMMUNITY WORKING TOGETHER TO AVOID INJURY AND LOSS OF LIFE RESULTING FROM LARGE DISASTER

Policy S-6.1: **Community Emergency Response and Preparedness.** Support active participation by residents and businesses through volunteer programs focused on emergency preparedness and response and recovery from an emergency event, including specialized programs to address special need and vulnerable populations.

HS

Policy S-6.2: **Emergency Preparedness Plans.** Regularly review and update emergency preparedness and operations plan to create up-

HS

to-date disaster management systems. Include in the plans evacuation planning approaches that responds to a multitude of emergency conditions and locations.

Policy S-6.3: **Disaster Preparedness.** Promote coordinated disaster preparedness efforts that help the community learn about disasters and take steps to plan ahead and guard against adverse impacts.

HS

Policy S-6.4: **Emergency Preparedness Education and Training.** Continue to educate and train City staff, residents, students, and the business community regarding appropriate actions to take during an emergency, including the conduct of simulation exercises.

HS

Policy S-6.5: **Disaster Communications.** Improve and maintain an adequate communications system through the creation of redundancies and enhanced use effectiveness.

HS

Policy S-6.6: **Supplies and Equipment.** Maintain and enhance the City's inventory of dedicated emergency preparedness supplies and equipment to meet community needs.

HS

Policy S-6.7: **Training.** Maintain an adequate and fully functional Emergency Operations Center to ensure that City Personnel is trained and prepared to respond to emergency situations and disasters accordingly, including:

HS

» Conduct annual disaster response exercises relevant to the types of disasters affecting the community.

» Continue to work cooperatively with adjacent jurisdictions and regional agencies to address emergency preparedness.

» Maintain the City's Local Hazard Mitigation Plan.

» Keep up to date the Emergency Operations Center Activation Procedures.

GOAL S-7: A FIRE DEPARTMENT THAT RESPONDS EFFECTIVELY TO THE NEEDS OF THE COMMUNITY

Policy S-7.1: **Adequate Fire Suppression Resources.** Ensure that the City has adequate Fire Department resources to meet response time standards, keep pace with growth, and provide a high level of service.

HS

Policy S-7.2: **Fire Stations Modernization.** Evaluate the need to replace, upgrade, and/or modernize existing fire stations.

T

Policy S-7.3: **Fire Technology.** Continue to seek technological and information system advances which will enhance the efficiency and effectiveness of the Fire Department.

T

Policy S-7.4: **Inter-Agency Coordination.** Seek the highest levels of intra-city and inter-agency coordination of fire activity operations.

HS

Policy S-7.5: **Urban Fire Enforcement.** Enforce fire standards and regulations in the review of building plans and administration of building inspections.

HS

Policy S-7.6: **Fire Suppression Systems.** Regulate and enforce the installation of fire protection water system standards for new construction projects, including the installation of fire hydrants providing adequate fire flow, fire sprinklers, suppression systems, and methane monitoring.

HS

Policy S-7.7: **Fire Prevention Services.** Provide effective fire prevention services through the review of proposed development projects, evaluation of industrial operations and facilities, examination of the transport of hazardous materials, and identification of oil and gas pipeline networks.

HS

Policy S-7.8: **Highest Standardization Rating.** Maintain the highest possible Insurance Services Office (ISO) rating for the City's Fire Department.

HS

GOAL S-8: A HIGHLY RESPONSIVE, WELL-EQUIPPED POLICE FORCE ATTUNED TO COMMUNITY NEEDS

Policy S-8.1: **Adequate Law Enforcement Resources.** Maintain adequate resources (stations, personnel, and equipment) to enable the police services to meet response time standards, provide high levels of service, use modern law enforcement practices, and serve as safety ambassadors within the community.

HS

Policy S-8.2: **Cultural Competency Training.** Ensure that all police personnel receive comprehensive cultural competency training to better serve the needs of the City's diverse population.

EI

Policy S-8.3: **Community Policing.** Promote community policing initiatives and expand neighborhood watch and similar programs, such as crime prevention education and citizens' patrol programs.

EI

Policy S-8.4: **Community Engagement.** Expand community engagement with residents, businesses, school districts, and community and neighborhood organizations to develop and expand partnerships to prevent crime, build public trust, and proactively address public safety issues.

EI

Policy S-8.5: **Coordinate Enforcement Tools.** Support streamlining the enforcement and adjudication processes to increase the effectiveness of public safety programs.

HS

Policy S-8.6: **State of the Art Police Practices.** Promote use of technology to improve efficiency, productivity and ensure best practices in policing.

T

Policy S-8.7: **Agency Management.** Maintain the Police Services Department that continues to promote accountability, transparency, and fairness, and is adaptable to a changing community.

EI

Policy S-8.8: **Service Delivery.** Provide high levels of fair and equitable service and continue to promote the use on non-sworn public safety personnel to maximize the efficiency of sworn police personnel.

EI

Policy S-8.9: **Code Enforcement.** Use of code enforcement personnel to identify public safety hazards and encourage businesses and residents to assist in reducing community risks such as structural hazards, hazardous

HS

material, property maintenance, waste, and environmental hazards.

GOAL S-9: LIVING AND WORKING ENVIRONMENTS SAFE FROM CRIME

Policy S-9.1: HS

Resource Allocation. Enhance the Police Department's crime-fighting strategies by strengthening the distinct resources needed to address traffic safety, transport of hazardous materials, quality of life and code enforcement, and community-based intervention and diversion programs.

Policy S-9.2: T

Data Tools and Information Systems. Support an information technology infrastructure to assist in reducing and preventing crime, and encourage the use of technology to provide access to accurate data and quality information.

Policy S-9.3: HS

Benchmarks for Public Safety. Keep crime rates, service response times, and property loss rates at the lowest levels possible, and keep crime clearance rates and property recovery at the highest levels.

Policy S-9.4: EI

Youth-centered Strategies. Increase coordination between schools and the City to identify and develop effective approaches to juvenile crime concerns and trends affecting the community's youth. Employ proactive and preventive strategies including support of school-based systems such as school attendance review boards and Family and Youth Intervention Program Strategies.

Policy S-9.5: HS

Regional Cooperation and Network. Integrate regional approaches to reduce crime in the city including intergovernmental relations with neighboring police agencies and the Los Angeles County Sheriff's Department serving unincorporated and surrounding areas.

Policy S-9.6: HS

Crime Prevention in Project Design. Incorporate consideration of public safety in the review of new developments such as site planning, lighting, and active transportation, including the implementation of Crime Prevention through Environmental Design principles in the design of private development projects and public facilities.

Policy S-9.7: EI

Programming. Promote youth civic engagement, cultural diversity, and drug awareness programs.

This page left intentionally blank.