

# Annex D City of Galt

# **D.1** Introduction

This Annex details the hazard mitigation planning elements specific to the City of Galt, a previously participating jurisdiction of the 2016 Sacramento County Local Hazard Mitigation Plan (LHMP) Update. This Annex is not intended to be a standalone document, but appends to and supplements the information contained in the Base Plan document. As such, all sections of the Base Plan, including the planning process and other procedural requirements apply to and were met by the City. This Annex provides additional information specific to Galt, with a focus on providing additional details on the risk assessment and mitigation strategy for this community.

# **D.2** Planning Process

As described above, Galt followed the planning process detailed in Chapter 3 of the Base Plan. In addition to providing representation on the Sacramento County Hazard Mitigation Planning Committee (HMPC), the City formulated their own internal planning team to support the broader planning process requirements. Internal planning participants, their positions, and how they participated in the planning process are shown in Table D-1. Additional details on Plan participation and City representatives are included in Appendix A.

Table D-1 City of Galt - Planning Team

Name	Position/Title	How Participated
Bill Forrest	Senior Civil Engineer	Attended meetings, completed annex
Craig Hoffman	Community Development Director	Provided data
Rick Small	Interim Police Chief	Provided data

Coordination with other community planning efforts is paramount to the successful implementation of this LHMP Update. This section provides information on how the City integrated the previously approved 2016 Plan into existing planning mechanisms and programs. Specifically, the City incorporated into or implemented the 2016 LHMP through other plans and programs shown in Table D-2.

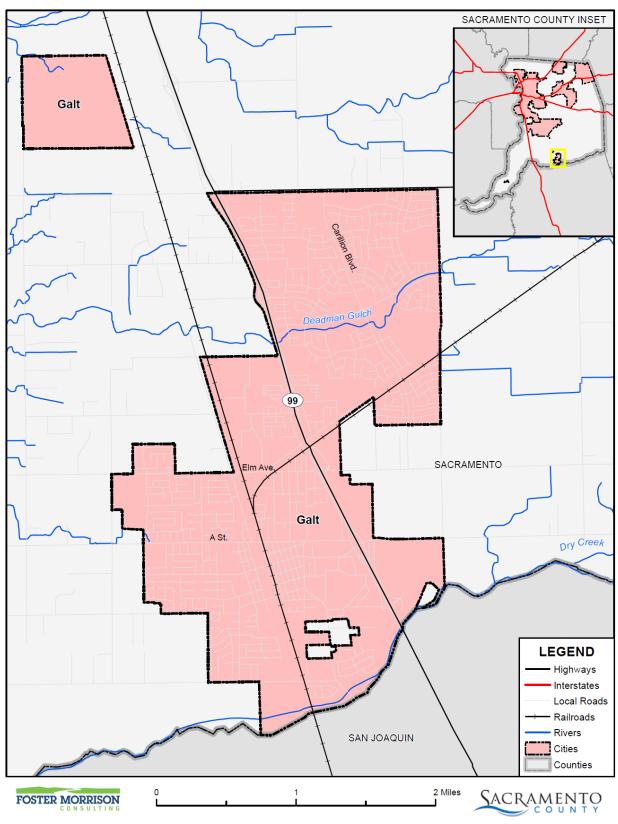
Table D-2 2016 LHMP Incorporation

Planning Mechanism 2016 LHMP Was Incorporated/Implemented In.	Details: How was it incorporated?
None.	Galt General Plan and Policies were adopted in 2009. The Galt City Council did adopt the 2016 LHMP. No hazard related planning has been completed by the City since 2016.

# **D.3** Community Profile

The community profile for the City of Galt is detailed in the following sections. Figure D-1 displays a City map and the location of Galt within Sacramento County.

Figure D-1 City of Galt



Data Source: Sacramento County GIS, Cal-Atlas; Map Date: 09/2020.

# D.3.1. Geography and Climate

Galt is located on State Route 99 in southern Sacramento County between the cities of Elk Grove and Lodi. The City is located 26 miles south of the Sacramento metro area, 24 miles north of Stockton metro area, and approximately 100 miles east of the San Francisco Bay Area. The community is surrounded by agricultural lands on the north, south, and east, and the Cosumnes River Preserve on the northwest and west (approximately three miles). Galt is located at 38°15′39″N longitude and 121°18′11″W latitude (38.260842, -121.303122). The City's elevation at City Hall is 47 feet.

The City's study area is characterized by a Mediterranean-type climate with wet, cold winters, and warm, dry summers. Most of the rainfall occurs between November and April with an average annual rainfall of 17.5 inches.

# D.3.2. History

Historical evidence suggests that the area around Galt has been inhabited by humans for at least 10,000 years. Plains Miwok lived primarily near the banks of major rivers, including the Cosumnes, Molekumne, and Sacramento. The Plains Miwok and other native inhabitants would relocate to the cooler foothills during the summer months to escape valley heat. The Plains Miwok first came into contact with Europeans in the latter eighteenth century when Spanish explorers entered the area. Many Plains Miwok disappeared through the combined effects of population removal to the missions and disease epidemics. Militarism, in reaction to Spanish expeditions, land seizures, and enslavement grew in the 1820s and 1830s particularly among the Plains Miwok. In the following decades, the arrival of more trappers, gold miners, and settlers exposed the Miwok to more new diseases.

The original 1850 Spanish land grant, Rancho del los Moquelumnes, was purchased in 1861 by Dr. Obed Harvey, considered today as Galt's founder. His purchase included much of the Dry Creek Township which was later established as the town of Galt in 1869 by the Western Pacific Railroad company. A prominent early settler, John McFarland, named the town after his former home in Ontario, Canada, which was named after a Scottish novelist, John Galt. The combination of favorable land for agriculture and the proximity to the railroad provided Galt with the economic support to continue to grow.

With the decline of gold mining in the Sierra Nevada foothills by the end of the eighteenth century, Galt, like many other Central Valley towns, saw the arrival of miners looking to start anew in agriculture. The City's proximity to several major rivers and the water resources of the Sacramento-San Joaquin River Delta made Galt ideal for the establishment of agriculture early in California's history.

A corollary of the vital agricultural and dairy industries was the inception of new industries in the area. With the large number of dairies in the area in need of distribution services, Fred Harvey, son of Dr. Obed Harvey, convinced the Utah Condensed Milk Company to establish a plant in Galt in 1917. In 1921, the company changed its name to the Sego Milk Products Company. After many years of prosperous service to the community, the Sego plant fell into disrepair and suffered a fire in 1992. The plant was later demolished due to the damage caused by the fire. The heritage of the dairy industry and agriculture in Galt continues to be vital to Galt's appeal and economic welfare.

America's first transcontinental highway, the Lincoln Highway, ran through Galt until it was ultimately replaced by State Route 99. Lincoln Way in central Galt is a remnant of this historic route. Galt grew around the rail depot and State Route 99 throughout the first half of the twentieth century. Improvements to State Route 99 in recent years have made Galt more accessible, which has resulted in increased population and growth to the west and northeast.

Today, Galt is at a strategic location between the growing areas of Sacramento and Stockton. The City's proximity to I-5 and SR 99 provides Galt excellent access to the rest of the Central Valley and California. Despite fast growth in the region, the City continues to maintain its small-town character while balancing the needs for housing and acknowledging its important agricultural heritage.

# D.3.3. Economy and Tax Base

US Census estimates show economic characteristics for the City of Galt. These are shown in Table D-3 and Table D-4. Mean household income in the City was \$89,357. Median household income in the City was \$75,638.

Table D-3 City of Galt – Civilian Employed Population 16 years and Over

Industry	Estimated Employment	Percent
Agriculture, forestry, fishing and hunting, and mining	357	2.9%
Construction	1,314	10.7%
Manufacturing	1,578	12.9%
Wholesale trade	706	5.8%
Retail trade	795	6.5%
Transportation and warehousing, and utilities	877	7.2%
Information	0	0.0%
Finance and insurance, and real estate and rental and leasing	937	7.7%
Professional, scientific, and management, and administrative and waste management services	777	6.3%
Educational services, and health care and social assistance	2,264	18.5%
Arts, entertainment, and recreation, and accommodation and food services	789	6.4%
Other services, except public administration	457	3.7%
Public administration	1,370	11.2%

Source: US Census Bureau American Community Survey 2019 Estimates

Table D-4 City of Galt – Income and Benefits

Income Bracket	Percent
<\$10,000	3.4%
\$10,000 - \$14,999	2.9%
\$15,000 - \$24,9999	7.3%
\$25,000 - \$34,999	8.8%

Income Bracket	Percent
\$35,000 - \$49,999	11.3%
\$50,000 - \$74,999	15.6%
\$75,000 - \$99,999	13.1%
\$100,000 - \$149,999	25.2%
\$150,000 - \$199,999	8.0%
\$200,000 or more	4.3%

Source: US Census Bureau American Community Survey 2019 Estimates

# Top Galt Employers include:

- ➤ Galt Elementary School District (7 schools)
- ➤ Galt High School District (2 schools)
- Walmart
- City of Galt
- Building Material Distributors
- Cal Waste
- Cardinal Glass

# D.3.4. Population

The California Department of Finance estimated the January 1, 2020, total population for the City of Galt was 25,849.

# D.4 Hazard Identification

Galt's identified the hazards that affect the City and summarized their location, extent, likelihood of future occurrence, potential magnitude, and significance specific to Galt (see Table D-5).

Table D-5 City of Galt—Hazard Identification Assessment

Hazard	Geographic Extent	Likelihood of Future Occurrences	Magnitude/ Severity	Significance	Climate Change Influence
Climate Change	Extensive	Likely	Limited	Medium	-
Dam Failure	Limited	Unlikely	Negligible	Low	Medium
Drought & Water Shortage	Significant	Unlikely	Negligible	Medium	High
Earthquake	Significant	Likely	Negligible	Low	Low
Earthquake Liquefaction	Limited	Unlikely	Negligible	Low	Low
Floods: 1%/0.2% annual chance	Limited	Occasional/ Unlikely	Limited	High	Medium
Floods: Localized Stormwater	Significant	Likely	Limited	Medium	Medium
Landslides, Mudslides, and Debris Flow	Limited	Unlikely	Negligible	Low	Medium
Levee Failure	Limited	Unlikely	Negligible	Low	Medium
Pandemic	Extensive	Likely	Critical	Medium	Medium
Severe Weather: Extreme Cold and Freeze	Extensive	Likely	Limited	Medium	Medium
Severe Weather: Extreme Heat	Extensive	Likely	Limited	Medium	High
Severe Weather: Heavy Rains and Storms	Extensive	Likely	Limited	Medium	Medium
Severe Weather: Wind and Tornado	Significant	Likely	Limited	Low	Low
Subsidence	Limited	Unlikely	Negligible	Low	Medium
Volcano	Limited	Unlikely	Negligible	Low	Low
Wildfire	Limited	Likely	Negligible	Medium	High

#### Geographic Extent

Limited: Less than 10% of planning area Significant: 10-50% of planning area Extensive: 50-100% of planning area

## Likelihood 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.

#### 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

#### Significance

Low: minimal potential impact Medium: moderate potential impact High: widespread potential impact

#### Climate Change Influence

Low: minimal potential impact Medium: moderate potential impact High: widespread potential impact

# D.5 Hazard Profile and Vulnerability Assessment

The intent of this section is to profile Galt's hazards and assess the City's vulnerability separate from that of the Sacramento County Planning Area as a whole, which has already been assessed in Section 4.3 Hazard Profiles and Vulnerability Assessment in the Base Plan. The hazard profiles in the Base Plan discuss overall impacts to the Sacramento County Planning Area and describes the hazard problem description, hazard location and extent, magnitude/severity, previous occurrences of hazard events and the likelihood of future occurrences. Hazard profile information specific to the City is included in this Annex. This vulnerability assessment analyzes the property, population, critical facilities, and other assets at risk to hazards ranked of medium or high significance specific to the City (as identified in the Significance column of Table D-5) and also includes a vulnerability assessment to the three primary hazards to the State of California: earthquake, flood, and wildfire. For more information about how hazards affect the County as a whole, see Chapter 4 Risk Assessment in the Base Plan.

the impact that the hazards listed could have on emergency response. Some examples include:

- Ability to respond to emergencies during flooding. With severe flooding, our personnel outside the City may be unable to get to work which would dramatically impact our ability to provide emergency services.
- Radio operability (as you mentioned). Severe storms, fires, etc. can damage radio towers which could impact our ability to communicate during a disaster.
- The PD is also a County EOC. As such, if the PD were damaged, the County would lose the EOC capabilities at this location.

#### D.5.1. Hazard Profiles

Each hazard vulnerability assessment in Section D.5.3, includes a hazard profile/problem description as to how each medium or high significant hazard affects the City and includes information on past hazard occurrences and the likelihood of future hazard occurrence. The intent of this section is to provide jurisdictional specific information on hazards and further describes how the hazards and risks differ across the Planning Area.

# D.5.2. Vulnerability Assessment and Assets at Risk

This section identifies Galt's total assets at risk, including values at risk, populations at risk, critical facilities and infrastructure, natural resources, and historic and cultural resources. Growth and development trends are also presented for the community. This data is not hazard specific, but is representative of total assets at risk within the community.

#### Values at Risk

The following data from the Sacramento County Assessor's Office is based on the 2020 Assessor's data. The methodology used to derive property values is the same as in Section 4.3.1 of the Base Plan. This data should only be used as a guideline to overall values in the County, as the information has some limitations. The most significant limitations are created by Proposition 13 and the Williamson Act as detailed in the Base Plan. With respect to Proposition 13, instead of adjusting property values annually, the values are not

adjusted or assessed at fair market value until a property transfer occurs. As a result, overall value information is most likely low and does not reflect current market value of properties within the County. It is also important to note, in the event of a disaster, it is generally the value of the infrastructure or improvements to the land that is of concern or at risk. Generally, the land itself is not a loss. However, depending on the type of hazard and impact of any given hazard event, land values may be adversely affected; thus, land values are included as appropriate. Table D-6 shows the 2020 Assessor's values and content replacement values (e.g., the values at risk) broken down by property use for the City.

Table D-6 City of Galt – Total Values at Risk by Property Use

Property Use	Total Parcel Count	Improved Parcel Count	Total Land Value	Improved Structure Value	Estimated Contents Value	Total Value
Agricultural	18	11	\$22,214,930	\$632,535	\$632,535	\$23,480,000
Care/Health	10	10	\$1,335,807	\$5,731,483	\$5,731,483	\$12,798,773
Church/Welfare	21	17	\$2,154,803	\$17,678,088	\$17,678,088	\$37,510,979
Industrial	59	50	\$22,128,890	\$77,165,566	\$115,748,352	\$215,042,807
Miscellaneous	124	0	\$180,046	\$0	\$0	\$180,046
Office	30	28	\$6,269,775	\$0	\$0	\$39,558,477
Public/Utilities	102	0	\$36	\$0	\$0	\$36
Recreational	3	2	\$163,644	\$332,437	\$332,437	\$828,518
Residential	7,281	7,231	\$508,341,229	\$1,509,190,230	\$754,595,105	\$2,772,126,569
Retail/ Commercial	98	89	\$41,612,139	\$100,790,499	\$100,790,499	\$243,193,137
Unknown	1	0	\$106,621	\$0	\$0	\$106,621
Vacant	239	10	\$39,949,561	\$1,167,655	\$0	\$41,117,216
Galt Total	7,986	7,448	\$644,457,481	\$1,729,332,844	\$1,012,152,850	\$3,385,943,179

Source: Sacramento County 2020 Parcel/Assessor's Data

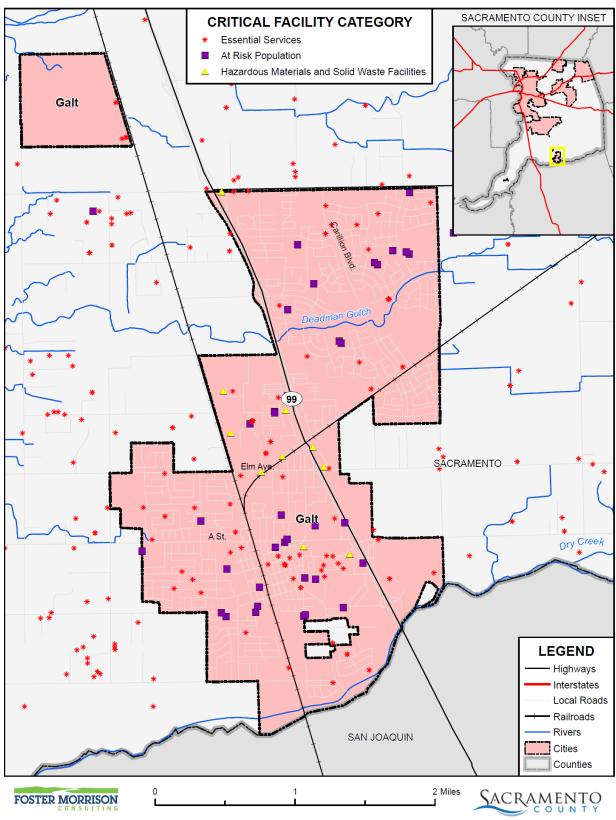
#### Critical Facilities and Infrastructure

Critical facilities and infrastructure are those buildings and infrastructure that are crucial to a community. Should these be damaged, it makes it more difficult for the community to respond to and recover from a disaster. For purposes of this Plan, a critical facility is defined as:

Any facility, including without limitation, a structure, infrastructure, property, equipment or service, that if adversely affected during a hazard event may result in severe consequences to public health and safety or interrupt essential services and operations for the community at any time before, during and after the hazard event.

A critical facility is classified by the following categories: (1) Essential Services Facilities, (2) At-risk Populations Facilities, (3) Hazardous Materials and Solid Waste Facilities. Critical facilities in the City are shown on Figure D-2 and detailed in Table D-7.

Figure D-2 City of Galt – Critical Facilities



Data Source: Sacramento County GIS, Cal-Atlas; Map Date: 08/2021.

Table D-7 City of Galt – Critical Facilities by Category and Type

Jurisdiction/Critical Facility Category	Critical Facility Type	Facility Count
	Cellular Tower	2
	Emergency Evacuation Center	5
	EMS Stations	2
	FDIC Insured Banks	6
	Fire Station	3
Essential Services Facilities	Law Enforcement	2
	Microwave Service Towers	55
	Sewage Treatment Plant	1
	Water Well	35
	Total	111
	Day Care Center	6
	Mobile Home Parks	4
At Risk Population Facilities	Places of Worship	14
	School	14
	Total	38
	EPA ER TRI Facility	3
Hazardous Materials and Solid Waste	Leaky Underground Storage Tank	7
Facilities	Waste Transfer Station	1
	Total	11
Galt Total		160

#### Natural Resources

Natural resources are unique to each area and are difficult to replace. Should a natural disaster occur, these species and locations are at risk. The City of Galt has a variety of natural resources of value to the community. Habitat types are listed below, detailed in Table D-8, and depicted in Figure D-3.

- Annual Grassland (including both disturbed and vernal pool grasslands)
- Cropland
- Orchard
- > Freshwater Marsh
- > Open Water (including both lacustrine and riverine habitats)
- Riparian (Scrub or Woodland)
- Urban/Developed Areas
- Vernal Pools
- Vineyards

Table D-8 Habitat Types within the City of Galt

Habitat Types	Acres (Approximate)	Percent Study Area
Annual Grassland	7,550	30%
Cropland	9,276	37%
Disturbed	21	<1%
Freshwater Marsh	135	<1%
Open Water	767	3%
Orchards	51	<1%
Other	10	<1%
Riparian (Scrub or Woodland)	320	1%
Seasonal Wetland	431	2%
Urban	5,232	21%
Vernal Pools	258	1%
Vineyards	954	4%
Total	25,006	100%

Note: "Other" includes those areas designated as recreational areas, the TNC Reserve, and roads.

Source: South Sacramento County Habitat Conservation Plan - 2018

Planning Area Boundary City Limit County Boundary HABITATS Cropland Annual Grassland Orchards Vineyards Riparian (Scrub or Woodland) Seasonal Wetland Vernal Pools Freshwater Marsh Open Water

Figure D-3 Riparian Habitats in the City of Galt

Source: City of Galt General Plan Environmental Impact Report (2008)

A list of special-status plant and animal species with potential to occur within the vicinity of the study area was compiled for the Environmental Impact Report for the City of Galt's General Plan. The list was based on data from the CNDDB (2007), CNPS electronic Inventory of Rare and Endangered Plants (CNPS, 2007),

the USFWS (2007), and biological literature pertaining to the region. Table D-9 lists those special-status species with at least a low likelihood for occurring within the study area. The locations of these species can be seen in Figure D-4 below.

Table D-9 Special-Status Species with Potential to Occur in the General Plan Study Area

Species/Animals/Mammals	Status: Fed/State/CNPS	General Habitat
<i>Taxidea taxus</i> American badger	/CSC/	Occurs in a wide variety of open forest, shrub, and grassland habitats that have friable soils for digging.
Birds		
Accipiter cooperii (nesting) Cooper's hawk	/CSC/	Nests in riparian areas and oak woodlands, forages at woodland edges.
Agelaius tricolor (nesting colony) Tricolored blackbird	/CSC/	Nests in dense thickets of cattails, tules, willow, blackberry, wild rose, and other tall herbs near fresh water.
Ardea alba (rookery) Great egret	/	Fresh and salt marshes, marshy ponds and tidal flats, nests in trees or shrubs
Ardea herodias (rookery) Great blue heron	//	Groves of tall trees, especially near shallow water foraging areas such as marshes, tide-flats, lakes, rivers/streams and wet meadows
Athene cunicularia hypugaea (burrow sites) Western burrowing owl	/CSC/	Forages in open plains, grasslands, and prairies; typically nests in abandoned small mammal burrows.
Buteo swainsoni (nesting) Swainson's hawk	/ST/	Forages in open plains, grasslands, and prairies; typically nests in abandoned small mammal burrows
Dendroica petechia brewsteri (nesting) Yellow warbler	/CSC/	Nests in dense riparian cover
Elanus leucurus (nesting) White-tailed kite	/CFP/	Forages in open plains, grasslands, and prairies; typically nests in trees
Nycticorax nycticorax (rookery) Black-crowned night heron	/	Forages in marshes swamps and wooded streams; nests in thickets or reedbeds.
Phalacrocorax auritus (rookery) Double-crested cormorant	/CSC/	Uses wide rock ledges on cliffs; rugged slopes; and live or dead trees. Feeds underwater on fish and crustaceans
R <i>iparia</i> (nesting) Bank swallow	/ST/	Banks of rivers, creeks, lakes, and seashores; nests in excavated dirt tunnels near the top of steep banks
Xanthocephalus xanthocephalus (nesting) Yellow-headed blackbird	/	Nests in freshwater emergent wetlands with dense vegetation and deep water. Often along borders of lakes or ponds. Nests only where large insects such as Odonata are abundant, nesting timed with maximum emergence of aquatic insects.
Reptiles		
Emys (=Clemmys) marmorata Western pond turtle	FSC/CSC/	Ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. Requires basking sites and suitable upland habitat for egg-laying. Requires aquatic habitats with suitable basking sites. Nest sites most often characterized as having gentle slopes (<15%) with little vegetation or sandy banks

Species/Animals/Mammals	Status: Fed/State/CNPS	General Habitat
Thamnophis gigas Giant garter snake	FT/ST/	Generally inhabits marshes, sloughs, ponds, slow-moving streams, ditches, and rice fields that have water from early spring till mid-fall. Emergent vegetation (cattails and bulrushes), open areas for sunning and high ground for hibernation and cover
Amphibians		
Ambystoma californiense California tiger salamander	FT/CSC/	Annual grassland and grassy understory of valley-foothill hardwood habitats in central and northern California. Needs underground refuges and vernal pools or other seasonal water sources
Rana aurora draytonii California red-legged frog	FT/CSC/	Breeds in slow moving streams, ponds, and marshes with emergent vegetation; forages in nearby uplands within about 200 feet.
Rana boylii Foothill yellow-legged frog	/CSC /	Breeds in shaded stream habitats with rocky, cobble substrate, usually below 6,000 feet in elevation. Absent or infrequent when introduced predators are present
Spea hammondii Western spadefoot toad	/CSC/	Occurs seasonally in grasslands, prairies, chaparral, and woodlands, in and around wet sites. Breeds in shallow, temporary pools formed by winter rains. Takes refuge in burrows.
Fish		
Hypomesus transpacificus Delta smelt	FT/ST/	Open surface waters in the Sacramento/San Joaquin Delta. Seasonally in Suisun Bay, Carquinez Strait and San Pablo Bay. Found in Delta estuaries with dense aquatic vegetation and low occurrence of predators. May be affected by downstream sedimentation
Oncorhynchus mykiss Central Valley ESU steelhead	FT//	This ESU enters the Sacramento and San Joaquin Rivers and their tributaries from July to May; spawning from December to April. Young move to rearing areas in and through the Sacramento and San Joaquin Rivers, Delta, and San Pablo and San Francisco Bays
Oncorhynchus tshanytscha Central Valley spring-run chinook	FT/ST/	This ESU enters the Sacramento and San Joaquin Rivers and tributaries March to July; spawning from late August to early October. Young move to rearing areas in and through the Sacramento and San Joaquin Rivers, Delta, and San Pablo and San Francisco Bays
Oncorhynchus tshanytscha winter-run chinook, Sacramento River	FE/SE/	This ESU enters the Sacramento River December to May; spawning peaks May and June. Upstream movement occurs more quickly than in spring run population. Young move to rearing areas in and through the Sacramento River, Delta, and San Pablo and San Francisco Bays
Oncorhynchus tshanytscha Central Valley fall/late-fall-run Chinook	FC/CSC/	This ESU enters the Sacramento and San Joaquin rivers and their tributaries from July to April; spawning October to February. Young move to rearing areas in and through the Sacramento and San Joaquin Rivers, Delta, and San Pablo and San Francisco Bays

Species/Animals/Mammals	Status: Fed/State/CNPS	General Habitat
Pogonichthys macrolepidotus Sacramento splittail	FD/CSC/	Currently known only from the Delta, Suisun Bay and associated marshes. Prefers slow moving river sections and dead end sloughs. Requires flooded vegetation for spawning and juvenile foraging habitat. Spawning occurs over flooded vegetation in tidal freshwater and euryhaline habitats of estuarine marshes and sloughs, and slow-moving reaches of large rivers
Invertebrates		
Andrena blennospermatis A vernal pool andrenid bee	//	Collects pollen from vernal pool flowers, especially Blennosperma. Bees nest in the uplands around vernal pools
Branchinecta lynchi Vernal pool fairy shrimp	/	Lifecycle restricted to vernal pools
Branchinecta mesovallensis Midvalley fairy shrimp	FSC//	Lifecycle restricted to vernal pools in the Central Valley
Desmocerus californicus dimorphus Valley elderberry longhorn beetle	FT//	Breeds and forages exclusively on elderberry shrubs (Sambucus mexicana) typically associated with riparian forests, riparian woodlands, elderberry savannas, and other Central Valley habitats. Occurs only in the Central Valley of California. Prefers to lay eggs in elderberries 2–8 inches in diameter; some preference shown for "stressed" elderberries
Hydrochara rickseckeri Ricksecker's water scavenger beetle	/	Occurs in slow moving waters, adults and larvae are aquatic
Lepidurus packardi Vernal pool tadpole shrimp	FE//	Lifecycle restricted to vernal pools
Linderiella occidentalis California linderiella	/	Lifecycle restricted to vernal pools
Vascular Plants		
Aster lentus Suisun Marsh aster	//1B.2	Rhizomatous herb occurring in tidal brackish and freshwater marshes. Found at 0-10 feet in elevation. Blooms May-Nov
Carex comosa Bristly sedge	//2.1	Generally found in lake-margin and edge habitats, Below 1,400 feet in elevation. Blooms May-Sept.
Castilleja campestris ssp. Succulent Succulent owl's-clover	FT/SE/1B.2	Occurs under vernally-flooded conditions in vernal-pool habitats such as valley and foothill grassland. Blooms Apr-May
Downingia pusilla Dwarf downingia	//2.2	Prefers lake margins, vernal pools and wet places sometimes playas and grasslands. Blooms Mar-May
Gratiola heterosepala Boggs Lake hedge-hyssop	FSC/SE/1B.2	Marshes and swamps, lake margins, and in clay substrate in vernal pools. Blooms Apr-Aug. 30-7,800 feet in elevation
Hibiscus lasiocarpus Rose-mallow	//2.2	Prefers freshwater marshes and swamps. Blooms Jun- Sep. Found below 100 feet.
<i>Juglans hindsii</i> Northern California black walnut	//1B.1	Occurs in riparian forest and woodland, Found below 1,500 feet elevation. Blooms April-May

Species/Animals/Mammals	Status: Fed/State/CNPS	General Habitat
Lathyrus jepsonii var. jepsonii Delta tule pea	FSC//1B.2	Occurs in both tidal freshwater and brackish marshes in the Central and San Joaquin Valleys and in the Bay Area. Blooms May-Sept
Legenere limosa Legenere	FSC//1B.1	Occurs in vernal pool beds. Blooms Apr-Jun.
Lilaeopsis masonii Mason's lilaeopsis	FSC/SR/1B.1	Generally occurs in riparian scrub, freshwater-marsh and brackish-marsh habitats, Found below 33 feet in elevation. Blooms Apr-Nov.
Limosella subulata Delta mudwort	//2.1	Generally occurs under wet conditions in tidal freshwater-marsh habitats, Found below 9 feet in elevation. Blooms May- Aug.
Orcuttia tenuis slender Orcutt grass	FT/SE/1B.1	Annual herb occurring in vernal pools. Found between 100 and 5,800 feet in elevation. Blooms May-October
Orcuttia viscida Sacramento Orcutt grass	FE/SE/1B.1	Occurs in vernal pools. Blooms Apr-Jul
Sagittaria sanfordii Sanford's arrowhead	FSC//1B.2	Found in assorted freshwater habitats including marshes, swamps and seasonal drainages. Blooms May-Oct.
Scutellaria lateriflora Blue skullcap	//2.2	Meadows and seeps, marshes and swamps. Blooms Jul-Sep. Found below 1,700 feet in elevation.

## STATUS CODES

Federal State CNPS

FE = Endangered

FT = Threatened

FC = Candidate

FD = Federally Delisted SE = Endangered

ST = Threatened

SR = Rare

CSC = California Special Concern species

SFP = Fully Protected Species

List 1B = Plants rare, threatened, or endangered in California and elsewhere

List 2 = Plants rare, threatened, or endangered in California, but more common elsewhere

List 3 = Plants about which we need more information--a review list

List 4 = Plants of limited distribution--a watch list

Source: CNDDB 2007, CDFG 2007, CNPS 2007, USFWS 2007

ANIMALS PLANTS Planning Area Boundary O Northwestern Pond Turtle Dwarf Downing a California Tiger Salamander City Limits Foothill Yellow-Legged Frog Giant Garter Snake ■ Succulent Ow's-Clover County Boundary O Great Blue Heron INVERTEBRATES O Greet Egret
O Black-Crowned Night Heron ♦ Vernal Pool Fairy Shrimp ♦ Midvalley Fairy Shrimp Sanford's Arrowhead California Linderiella
Vernal Poel Tudocci S White-Tailed Kite O Swamson's Hawk Vernal Pool Tadpool Shrimp O Tricolored Blackbird Valley Elderberry Longhorn Beetle

Figure D-4 California Natural Diversity Database Species in the City of Galt

Source: City of Galt 2030 General Plan Environmental Impact Report

#### Historic and Cultural Resources

Historic and cultural resources are difficult to replace. Should a natural disaster occur, these properties and locations can be at risk.

The City of Galt has a stock of historically significant homes, public buildings, and landmarks. To inventory these resources, the HMPC collected information from a number of sources. The California Department of Parks and Recreation Office of Historic Preservation (OHP) was the primary source of information. OHP administers the National Register of Historic Places, the California Register of Historical Resources, California Historical Landmarks, and the California Points of Historical Interest programs. Each program has different eligibility criteria and procedural requirements. These requirements are detailed in Section 4.3.1 of the Base Plan. Table D-10 lists the historical buildings in the City.

Table D-10 City of Galt – Historical Resources

Name (Landmark Plaque Number)	National Register	State Landmark	California Register	Point of Interest	Date Listed	City/Area
Brewster Building (N2099)	X				8/16/2000	Galt
Brewster House (N638)	X				6/23/1978	Galt
Liberty Schoolhouse (P579)				X	12/21/1981	Galt
Rae House (P743)				X	5/8/1991	Galt
Utah Condensed Milk Company Plant (N650)	X				8/3/1978	Galt

Source: California Department of Parks and Recreation Office of Historic Preservation, http://ohp.parks.ca.gov/

It should be noted that these lists may not be complete, as they may not include those currently in the nomination process and not yet listed. Additionally, as defined by the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA), any property over 50 years of age is considered a historic resource and is potentially eligible for the National Register. Thus, in the event that the property is to be altered, or has been altered, as the result of a major federal action, the property must be evaluated under the guidelines set forth by CEQA and NEPA. Structural mitigation projects are considered alterations for the purpose of this regulation.

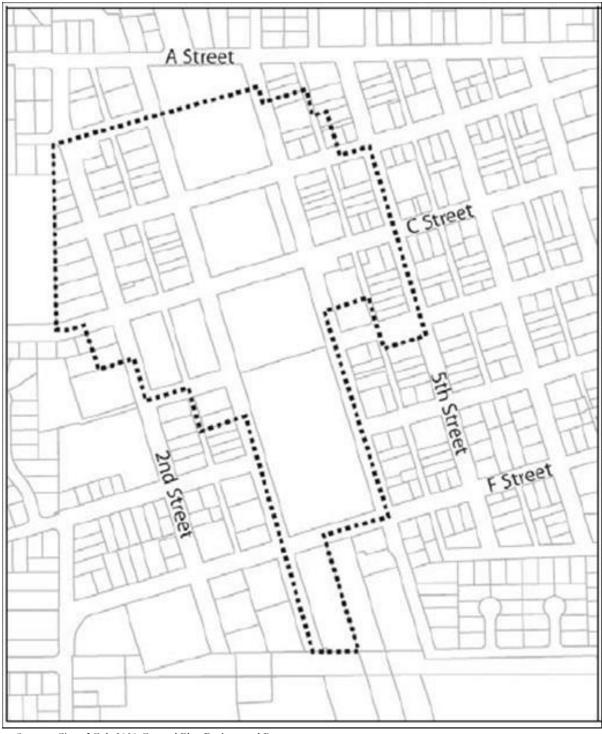
#### Locally Designated Historic Places

The City of Galt initiated a study in 1999 that looked at the possibility of the creation of a historic district within the downtown. In order for the district to be considered a significant resource, it would have to meet certain criteria set forth by local government and/or the National Register of Historic Places. The study focused primarily on structures that were within the boundary of the Historic Preservation District's Downtown Revitalization Historic Plan (see Figure D-5). The study was never completed, but does provide a background on potential preservation techniques that could be used in the future.

Old Town Galt has always been the heart of the community, extending from 2nd Street in the west to Lincoln Way in the east, and A Street in the north to F Street in the south. The historic commercial core is centered at the intersection of C Street and 4th Street. In the early 1900s most commercial activities fronted on 4th Street facing the railroad property where a 90-foot flagpole marked the center of town activity.

Today, the center of Galt's commercial activity is located at the intersection of C Street and Lincoln Way, with the C Street corridor (between Lincoln Way and Highway 99) providing the majority of commercial space for the Downtown area.

Figure D-5 Boundaries of the Historic Business District



Source: City of Galt 2030 General Plan Background Report

In addition to the registered sites, there are several assets within Galt that define the community and represent the City's history. Table D-11 is a listing of historic resources identified within Galt, including a description of their importance and relative condition. This information was derived from the City's 1990 General Plan and side notes have been added for more recent information, including that provided by the Galt Historical Society.

Table D-11 Historic Structures and Features in Galt

#	Street Address	Description	Importance	Condition	
1&2	120 7th St	Christian Church	Early church. Architecture Galt Local. Historical Landmark #4	Good	
3	236 6th St	1920's Bungalow			
4	603 C St	Residence	Eiler's Residence (1800s) (Sunny South)	Excellent	
5	Corner 6th and C	1920's Bungalow w/ water tower		Removed	
6	550 C St	Galt Water Tower	Galt Local Historical Landmark #1	Excellent	
7	-	-	-	-	
8	312 5th St	Victorian Residence	Early residence, architecture	Good	
9	318 5th St	Victorian Residence	Early residence, architecture	Removed	
10	324 5th St	Victorian Residence	Early residence, architecture	Good	
11	340 5th St	1920's Bungalow	Early residence, architecture	Good	
12	346 5th St	Victorian Cottage	Early residence, architecture	Good	
13	352 5th St	Victorian Cottage	Early residence, architecture	Removed	
14	113 4th St	Victorian Cottage (Sperry Res)	State Point of Historical Interest, Library-School House	Fair	
15, 16,17	149 4th St	Has been almost completely obscured by additions	General Store with gun slits (currently a mortuary)	Good - Building with additions would not be eligible for National Register	
18	201 4th St	2 story C. 1890's brick structure with cast iron columns and exquisite brick cornice details	National Register, Brewster Building, McFarland Building, Odd Fellows Hall	Poor	
19	215 & 217 4th St	C. 1920's one story fire brick structure w/ intricate cast iron vents. Five stores possible  Early Commercial, Dr. Harm's Office, rebuilt after 1924 fire.		Fair – 2/3 of structure painted and windows covered	
20,21	227 & 229 4th St	C. 1980's brick structure rebuilt in the 1930's Checkerboard brick pattern. Tile detail and vents, transom windows; interesting downspouts	Sawyer Building Telephone Exchange, Dr. Osler's Soda Fountain, Ray Arlin's Drug Store, rebuilt after1924 fire	Good – one upstairs window not original	

#	Street Address	Description	Importance	Condition		
22	409 C St	C. 1920's light brick building w/ intricate iron vents. Three storefronts. Currently used for Galt Activity Center  Early commercial, site of Galt Hotel and Estrellita Ballroom		Good		
23	4th & C St	C. 1890's two-story Halianate Victorian commercial block building. Two storefronts, plus upstairs rooms	Early commercial, Bank of Galt 1890s and Steiner's Market	Good		
24		C. 1890's two-story Victorian commercial building. Two storefronts, apartments upstairs.	Early commercial	Fair – Brick facing of lower façade detracts		
25	325 4th Street	Two-story Halianate Victorian brick commercial building. Has been converted completely (upstairs and downstairs apartments)	Early commercial façade has been severely altered. Upstairs bay windows also altered	Poor – Downstairs		
26	416 B Street	Old Blacksmith Shop		Removed		
27	206 5th Street	Brewster Howe OHP, 1979 Winn House, Brewster Residence, Justice Court, National Register		Excellent		
28	218 5th Street	First Court House/Jail		Poor		
29	417 B Street	Halianate Victorian Cottage	Early residence, architecture	Excellent		
30	4th Street across from Park	Old Diamond National Limber yards – typical 1 920's-40's	Example of railroad related industry frame lumber storage structure	Removed		
31	3rd and F Street [destroyed by fire in1992]	Old Sego Milk Plant	Example of railroad related industry	Removed		
34,35,36	128-1 40	Victorian cottages	Early residence, architecture			
37	200 3rd Street	First Congregational Church, frame church w/ prominent spire	Early church, first church built in Galt by John McFarland, architecture, Galt Local Historical Landmark #2	Excellent		
38	214 3rd Street	Victorian cottage	Early residence, architecture	Good		
39	530 3rd Street	St. Christopher's Church, gothic brick church w/ spire  Early church, architecture, second church built in Galt, architecture Galt Local Historical Landmark		Excellent		
40	119 2nd Street	1920's bungalow	Early residence, architecture	Fair		
41	127 2nd Street	1920's bungalow with Early residence, architecture water tower		Poor		
42	131 2nd Street [Demolished in 2003]	Vacant frame Victorian cottage	Early residence, architecture	Removed		

#	Street Address	Description	Importance	Condition
43	205 B Street	Residence	McAllister Property	Poor
44	205 2nd Street	1920's bungalow with water tower	w with Early residence, architecture, water tower	
45	NE corner 2nd & C	Victorian cottage	Early residence, architecture	
47	218 2nd Street	Residence	Granny McKinstry's home	Poor
48	244 2nd Street	Victorian cottage	Early residence, architecture	Fair
49	326 2nd Street	Residence	Dr. Obed Harvey's Office	Removed
50	204 Oak Avenue	Victorian residence	State Point of Historical Interest Rae Residence	Excellent
51	508 5th Street	Dutch Colonial with gambrel roof	State Historic Landmark, Leland	Good

Source: Historic Element, City of Galt General Plan, 1990. OHP, Historic Properties Data File for List Sacramento County, 2007. Galt Historical Society 2007.

# Growth and Development Trends

As part of the planning process, the HMPC looked at changes in growth and development, both past and future, and examined these changes in the context of hazard-prone areas, and how the changes in growth and development affect loss estimates and vulnerability over time. Information from the City of Galt General Plan Housing Element, the California Department of Finance, the US Census Bureau form the basis of this discussion.

#### Historic Population Trends and Current Population

Galt has grown largely to the southwest and northeast over the past two decades. While the expansion of the city limits has increased substantially, buildout of the city limits has been slower than expected. In 2007, 815 acres of available vacant land existed within the city limits (468 acres zoned residential and 347 acres zones nonresidential). Population growth can increase the number of people living in hazard prone areas. Galt has generally seen periods of large growth, with recent growth being slower. Galt has seen growth rates as shown in Table D-12.

Table D-12 City of Galt – Population Changes Since 1950

Year	Population	Change	% Change
1950	1,333	-	_
1960	1,868	535	40.1%
1970	3,200	1,332	71.3%
1980	5,514	3,314	72.3%
1990	8,889	3,375	61.2%
2000	19,472	10,583	119.1%
20101	23,647	4,165	21.4%
20202	25,249	1,602	6.8%

Source: <sup>1</sup>US Census Bureau, <sup>2</sup>California Department of Finance

#### **Special Populations and Disadvantaged Communities**

The Galt Place (at 400 D ST) and New Hope Senior Village (at Village Run Dr) are identified as low-income active adult apartment complexes. Comfrey Senior Apartments (at 975 Lake Park Drive) is an active adult apartment complex. Golden Living Center (at F ST) and Ehimas Residential Care (at 407 Maple ST) are assisted living and nursing care facilities. There are areas of low income in the City: Mercy Housing (at 805 Elk Hills Dr), Palm Gardens (at 701 A ST), Empire Village (at 245 Palin Ave), Hudson Bay Apartments (at 100 Lake Park Ave) are identified as low-income housing/apartments. In addition, throughout the City there are handicapped and non-English speaking citizens.

More detailed information regarding the City's special population can be found the 2021-2029 Housing Element Background Report, dated May 2021.

#### Land Use

State planning law requires that the land use element of a general plan include a statement of the standard population density, building intensity, and allowed uses for the various land use designations in the plan (Government Code Section 65302(a)). The City's land use designations are generally described below and mapped on the Land Use Diagram (Figure D-6). The Galt Municipal Code provides detailed land use and development standards for development.

The General Plan Area includes all land designated for or to be considered for future development as part of Galt under this General Plan. This boundary includes 13,400 acres, which is enough land for the projected residential and non-residential growth of the City to the year 2030 (see Figure D-6). The General Plan Area follows the Laguna Creek floodplain/1,500 feet north of Twin Cities Road on the north, Dry Creek on the south, Cherokee Lane on the east, and Sargent Road/Union Pacific railroad tracks on the west. This boundary is approximately 4,380 acres larger than the City's current (2007) sphere of influence (9,017 acres).

**Boundary and Symbol Legend** City Limits (2000) Existing 4 Lane Arterial Existing 4 Lane Arterial General Plan Boundary 500-Year FEMA Floodplain Maximum Fire Station Siting Zones for Future Fire Stations Land Use Legend 4244 29,580 286 1,286 500 A,588 913 3,799 1,041 288 1,128 412 294 46

Figure D-6 City of Galt 2030 Land Use

Source: City of Galt Housing Element, 2009

In addition to future land use inside current city limits, the City of Galt applied to the Sacramento Local Agency Formation Commission (LAFCo) to amend the Sphere of Influence (SOI) on July 20, 2009. The application is consistent with the newly adopted 2030 Galt General Plan. As part of this application submission, City staff prepared a Municipal Services Review (MSR), which was submitted with the SOI application.

The amended SOI application requested approximately 1,053 acres be added to the SOI on lands north of Twin Cities Road from Cherokee Road on the east to the U.P.R.R. mainline to the west. The northern boundary generally follows Skunk Creek between the eastern and western margins noted above. (see Figure D-7)

A simultaneous detachment of approximately 1,613 acres was also proposed. The detached area is located between Sargent and Christensen Roads and from Twin Cities Road south to the County boundary. The amended SOI would allow for future annexation and urbanization to the City of Galt.

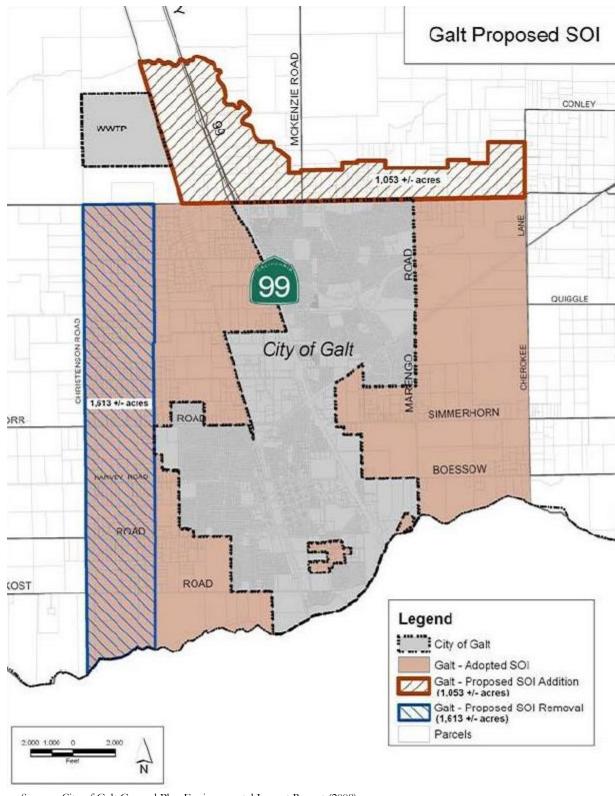


Figure D-7 Proposed Sphere of Influence for the City of Galt

Source: City of Galt General Plan Environmental Impact Report (2008)

#### Development since 2016 Plan

As discussed in Section 4.3.1 of the Base Plan, future development has occurred in the County since the last plan. Some of this has occurred in hazard prone areas. The City Community Development Department tracked total building permits issued since 2016 for the City. These are tracked by total development, property use type, and hazard risk area. These are shown in Table D-13 and Table D-14.

Table D-13 City of Galt – Total Development Since 2016

Property Use	2016	2017	2018	2019	2020
Agricultural	0	0	0	0	0
Commercial	0	0	0	0	0
Industrial	0	0	0	0	0
Residential	0	71	38	0	82
Unknown	0	0	0	0	0
Total	0	71	38	0	82

Source: City of Galt Community Development Department

Table D-14 City of Galt - Development in Hazard Areas since 2016

Property Use	1% Annual Chance Flood	Levee Protected Area	Wildfire Risk Area <sup>1</sup>	Other
Agricultural	0	0	0	0
Commercial	0	0	0	0
Industrial	0	0	0	0
Residential	0	0	0	0
Unknown	0	0	0	0
Total	0	0	0	0

Source: City of Galt Community Development Department

While the data shows no changes in development in the City since the 2016, including development in mapped hazard areas, all development is subject to current building standards to include any requirements for building in hazard areas which act to mitigate hazard exposure. Further development in hazard areas is only one factor of many that contribute to an overall change in hazard vulnerability. Based on these considerations, it cannot be definitively stated as to whether the development or even lack of development contributed to an increase or decrease in vulnerability for Galt.

#### **Future Development**

The Sacramento Council on Governments (SACOG) modeled population projections for the City of Galt and other areas of the region in 2012 for a Metropolitan Transportation Plan/Sustainable Communities Strategy report. This forecast uses a 2008 base year estimate with projections to 2020 and 2035 for population, housing units, households and employment. SACOG estimated the City population in 2020 and 2035 to be 26,015 and 30,732 respectively.

<sup>&</sup>lt;sup>1</sup>Moderate or higher wildfire risk area

More general information on growth and development in Sacramento County as a whole can be found in "Growth and Development Trends" in Section 4.3.1 Sacramento County Vulnerability and Assets at Risk of the Base Plan.

## **GIS** Analysis

The City of Galt provided a list of projects that the City is seeing be developed:

- Cardoso 2
- Caterina Estate
- Cedar Flats Estates (Phase 1 and 2)
- Dry Creek Oaks
- ➤ Greenwood Phase 1 and 2
- ➤ Liberty Ranch
- Morali Estates
- Parlin Oaks
- Simmerhorn Commercial
- Simmerhorn Ranch
- Summerfield
- > Twin Cities Commercial

Using GIS, the following methodology was used in determining parcel counts and acreages with future development projects in the City of Galt. Future development areas in the City were provided in mapped format by the City. Using the GIS parcel spatial file for each of these areas, the future development projects for which the analysis was to be performed were identified. Utilizing the future development project spatial layer, the parcel centroid data was intersected to determine the parcel counts within each area. Figure D-8 shows the locations of future development areas the City is planning to develop. Table D-15 shows the summary of parcels and acreages of each future development area in the City

**LEGEND** Highways Interstates Local Roads Railroads Galt Rivers Cities Counties 11 99 FUTURE DEVELOPMENT AREAS SACRAMENTO Elm Ave 1 - Cardoso 2 2 - Caterina Estate 10 3 - Cedar Flats Estates (Phase 1 and 2) Galt 4 - Dry Creek Oaks Dry Creek 5 - Greenwood Phase 1 and 2 4 SACRAMENTO COUNTY INSET 6 - Liberty Ranch 7 - Morali Estates 8 - Parlin Oaks 9 - Simmerhorn Commercial 10 - Simmerhorn Ranch 11 - Summerfield 12 - Twin Cities Commercial SAN JOAQUIN 2 Miles SACRAMENTO **FOSTER MORRISON** 

Figure D-8 City of Galt – Future Development Areas

Data Source: Sacramento County GIS, Cal-Atlas; Map Date: 07/2021.

Table D-15 City of Galt – Future Development Parcels and Acres

Future Development	Total Parcel Count	Improved Parcel Count	<b>Total Acres</b>
Cardoso 2	1	1	33.7
Caterina Estate	2	1	12.1
Cedar Flats Estates (Phase 1 and 2)	7	0	36.1
Dry Creek Oaks	5	0	86.8
Greenwood Phase 1 and 2	1	0	16.3
Liberty Ranch	4	4	333.8
Morali Estates	1	0	12.8
Parlin Oaks	1	0	16.3
Simmerhorn Commercial	4	0	48.4
Simmerhorn Ranch	2	1	115.2
Summerfield	1	1	58.8
Twin Cities Commercial	1	0	11.9
Grand Total	30	8	782.2

Source: City of Galt

# D.5.3. Vulnerability to Specific Hazards

This section provides the vulnerability assessment, including any quantifiable loss estimates, for those hazards identified above in Table D-5 as high or medium significance hazards. Impacts of past events and vulnerability of the City to specific hazards are further discussed below (see Section 4.1 Hazard Identification in the Base Plan for more detailed information about these hazards and their impacts on the Sacramento County Planning Area). Methodologies for evaluating vulnerabilities and calculating loss estimates are the same as those described in Section 4.3 of the Base Plan.

An estimate of the vulnerability of the City to each identified priority hazard, in addition to the estimate of likelihood of future occurrence, is provided in each of the hazard-specific sections that follow. Vulnerability is measured in general, qualitative terms and is a summary of the potential impact based on past occurrences, spatial extent, and damage and casualty potential. It is categorized into the following classifications:

- **Extremely Low**—The occurrence and potential cost of damage to life and property is very minimal to nonexistent.
- **Low**—Minimal potential impact. The occurrence and potential cost of damage to life and property is minimal.
- ➤ **Medium**—Moderate potential impact. This ranking carries a moderate threat level to the general population and/or built environment. Here the potential damage is more isolated and less costly than a more widespread disaster.
- ➤ **High**—Widespread potential impact. This ranking carries a high threat to the general population and/or built environment. The potential for damage is widespread. Hazards in this category may have occurred in the past.
- **Extremely High**—Very widespread with catastrophic impact.

Depending on the hazard and availability of data for analysis, this hazard specific vulnerability assessment also includes information on values at risk, populations at risk, critical facilities and infrastructure, and future development.

## Power Outage/Power Failure

An impact of almost all hazards below relates to power outages and/or power failures. The US power grid crisscrosses the country, bringing electricity to homes, offices, factories, warehouses, farms, traffic lights and even campgrounds. According to statistics gathered by the Department of Energy, major blackouts are on the upswing. Incredibly, over the past two decades, blackouts impacting at least 50,000 customers have increased 124 percent. The electric power industry does not have a universal agreement for classifying disruptions. Nevertheless, it is important to recognize that different types of outages are possible so that plans may be made to handle them effectively. In addition to blackouts, brownouts can occur. A brownout is an intentional or unintentional drop in voltage in an electrical power supply system. Intentional brownouts are used for load reduction in an emergency. Electric power disruptions can be generally grouped into two categories: intentional and unintentional. More information on types of power disruptions can be found in Section 4.3.2 of the Base Plan.

#### Public Safety Power Shutoff (PSPS)

A new intentional disruption type of power outage event has recently occurred in California. In recent years, several wildfires have started as a result of downed power lines or electrical equipment. This was the case for the Camp Fire in 2018. As a result, California's three largest energy companies (including PG&E), at the direction of the California Public Utilities Commission (CPUC), are coordinating to prepare all Californians for the threat of wildfires and power outages during times of extreme weather. To help protect customers and communities during extreme weather events, electric power may be shut off for public safety in an effort to prevent a wildfire. This is called a PSPS. More information on PSPS criteria can be found in Section 4.3.2 of the Base Plan.

Galt noted that the City is provided electricity by SMUD, and no PSPS events have occurred.

#### Climate Change

**Likelihood of Future Occurrence**—Likely **Vulnerability**—Medium

#### Hazard Profile and Problem Description

Climate change adaptation is a key priority of the State of California. The 2018 State of California Multi-Hazard Mitigation Plan stated that climate change is already affecting California. Sea levels have risen by as much as seven inches along the California coast over the last century, increasing erosion and pressure on the state's infrastructure, water supplies, and natural resources. The State has also seen increased average temperatures, more extreme hot days, fewer cold nights, a lengthening of the growing season, shifts in the water cycle with less winter precipitation falling as snow, and earlier runoff of both snowmelt and rainwater in the year. In addition to changes in average temperatures, sea level, and precipitation patterns, the intensity of extreme weather events is also changing.

#### Location and Extent

Climate change is a global phenomenon. It is expected to affect the whole of the City, Sacramento County, and State of California. There is no scale to measure the extent of climate change. Climate change exacerbates other hazards, such as drought, extreme heat, flooding, wildfire, and others. The speed of onset of climate change is very slow. The duration of climate change is not yet known, but is feared to be tens to hundreds of years.

#### **Past Occurrences**

Climate change has never been directly linked to any declared disasters. While the City noted that climate change is of concern, no specific impacts of climate change could be recalled. The City and HMPC members noted that the strength of storms does seem to be increasing and the temperatures are getting hotter.

#### Vulnerability to and Impacts from Climate Change

The 2012 California Adaptation Planning Guide (APG) prepared by California OES and CNRA was developed to provide guidance and support for local governments and regional collaboratives to address the unavoidable consequences of climate change. California's APG: Understanding Regional Characteristics has divided California into 11 different regions based on political boundaries, projected climate impacts, existing environmental setting, socioeconomic factors and regional designations. Sacramento County falls within the North Sierra Region characterized as a sparsely settled mountainous region where the region's economy is primarily tourism-based. The region is rich in natural resources, biodiversity, and is the source for the majority of water used by the state. This information can be used to guide climate adaptation planning in the City and Sacramento County Planning Area.

The California APG: Understanding Regional Characteristics identified the following impacts specific to the North Sierra region in which the Sacramento County Planning Area is part of:

- > Temperature increases
- Decreased precipitation
- Reduced snowpack
- Reduced tourism
- Ecosystem change
- > Sensitive species stress
- Increased wildfire

#### **Future Development**

The City could see population fluctuations as a result of climate impacts relative to those experienced in other regions, and these fluctuations are expected to impact demand for housing and other development. The City completed a Climate Action Plan in March 2020. Future Development Projects will need to submit a Climate Action Plan Consistency Review Checklist.

# Drought & Water Shortage

# **Likelihood of Future Occurrence**—Unlikely **Vulnerability**—Medium

#### Hazard Profile and Problem Description

Drought is a complex issue involving many factors—it occurs when a normal amount of precipitation and snow is not available to satisfy an area's usual water-consuming activities. Drought can often be defined regionally based on its effects. Drought is different than many of the other natural hazards in that it is not a distinct event and usually has a slow onset. Drought can severely impact a region both physically and economically. Drought affects different sectors in different ways and with varying intensities. Adequate water is the most critical issue and is critical for agriculture, manufacturing, tourism, recreation, and commercial and domestic use. As the population in the area continues to grow, so will the demand for water.

The City placed water meters on all water users in 2015, in advance of the State Mandate. In 2016, the rates were based on consumption. Since then, water consumption as relatively stable. Detailed data can be found in the Galt 2020 Urban Water Management Plan.

#### Location and Extent

Drought and water shortage are regional phenomenon. The whole of the County, as well as the whole of the City, is at risk. The US Drought Monitor categorizes drought conditions with the following scale:

- None
- ➤ D0 Abnormally dry
- ➤ D1 Moderate Drought
- ➤ D2 Severe Drought
- ➤ D3 Extreme drought
- ➤ D4 Exceptional drought

Drought has a slow speed of onset and a variable duration. Drought can last for a short period of time, which does not usually affect water shortages and for longer periods. Should a drought last for a long period of time, water shortage becomes a larger issue. Current drought conditions in the City and the County are shown in Section 4.3.8 of the Base Plan.

#### **Past Occurrences**

There have been two state and one federal disaster declaration from drought. This can be seen in Table D-16.

Table D-16 Sacramento County – State and Federal Drought Disaster Declarations 1950-2020

Disaster Type	State Declarations		Federal Declarations		
	Count Years		Count	Years	
Drought	2	2008, 2014	1	1977	

Since drought is a regional phenomenon, past occurrences of drought for the City are the same as those for the County and includes 4 multi-year droughts since 1950. Details on past drought occurrences can be found in Section 4.3.8 of the Base Plan.

The City called for Stage 3 water alert in 2015, with landscaping irrigation restricted to 2 times a week. Other years saw Stage 2 water alerts which called for water of landscaping 3 times a week. In 2021, the City is currently in a Stage 2 water alert.

## Vulnerability to and Impacts from Drought and Water Shortage

Based on historical information, the occurrence of drought in California, including the City, is cyclical, driven by weather patterns. Drought has occurred in the past and will occur in the future. Periods of actual drought with adverse impacts can vary in duration, and the period between droughts can be extended. Although an area may be under an extended dry period, determining when it becomes a drought is based on impacts to individual water users.

The City water supplies are all groundwater sources. In addition, the City Due to successful conservation efforts and response to the historic drought spanning water years 2012-2015, water demand (and thus the City's groundwater pumping volumes) were considerably lower from 2015 through 2019 (i.e., averaging 4,422 acre-feet [AF]) than they had been in the previous five years (i.e. averaging 5,502 AF). The City is one of seven Groundwater

Sustainability Agencies (GSAs) in the Cosumnes Subbasin of the San Joaquin Valley Basin (DWR Basin No. 5-022.16) who are working together to develop a single Groundwater Sustainability Plan (GSP). The GSAs have formed the Cosumnes Subbasin Sustainability Groundwater Management Act (SGMA) Working Group (Working Group) which meets at least once a month to discuss the development of the GSP including water management decisions. A more detailed discussion regarding the City's water supply can be found in the 2020 Urban water Management Plan.

The vulnerability of the City to drought is City-wide, but impacts may vary and include reduction in water supply and an increase in dry fuels. The potential for a reduction in water supply during drought conditions generally leads to both mandated and voluntary conservations measures during extended droughts. During these times, the costs of water can also increase. The increased dry fuels and fuel loads associated with drought conditions can also result in an increased fire danger. In areas of extremely dry fuels, the intensity and speed of fires can be significant. Water supply and flows for fire suppression can also be an issue during extended droughts.

Other qualitative impacts associated with drought in the City and Sacramento County Planning Area are those related to water intensive activities such as, municipal usage, commerce, tourism, recreation and agricultural use. Drought conditions can also cause soil to compact and not absorb water well, potentially making an area more susceptible to flooding.

With more precipitation likely falling as rain instead of snow in the Sierra's, and warmer temperatures causing decreased snowfall to melt faster and earlier, water supply is likely to become more unreliable. In

addition, drought and water shortage is predicted to become more common. This means less water available for use over the long run, and additional challenges for water supply reliability, especially during periods of extended drought.

#### **Future Development**

As the population in the area continues to grow, so will the demand for water. Ongoing planning will be needed by the City and water agencies to account for population growth and increased future water demands.

# **Earthquake**

# **Likelihood of Future Occurrence**—Unlikely **Vulnerability**—Low

Though considered a low significance hazard by the City, due to its significance in the State of California, earthquake is discussed here. It is still considered a low significance hazard for the City of Galt for mitigation strategy purposes.

## Hazard Profile and Problem Description

An earthquake is caused by a sudden slip on a fault. Stresses in the earth's outer layer push the sides of the fault together. Stress builds up, and the rocks slip suddenly, releasing energy in waves that travel through the earth's crust and cause the shaking that is felt during an earthquake. Earthquakes can cause structural damage, injury, and loss of life, as well as damage to infrastructure networks, such as water, power, gas, communication, and transportation. Earthquakes may also cause collateral emergencies including dam and levee failures, seiches, hazmat incidents, fires, avalanches, and landslides. The degree of damage depends on many interrelated factors. Among these are: the magnitude, focal depth, distance from the causative fault, source mechanism, duration of shaking, high rock accelerations, type of surface deposits or bedrock, degree of consolidation of surface deposits, presence of high groundwater, topography, and the design, type, and quality of building construction.

#### Location and Extent

Since earthquakes are regional events, the whole of the City is at risk to earthquake. Galt and the surrounding area are at limited risk from significant seismic and geologic hazards. Geological literature indicates that no major active faults transect the County; however, there are several subsurface faults in the Delta. The Midland fault, buried under alluvium, extends north of Bethel Island in the Delta to the east of Lake Berryessa and is considered inactive but possibly capable of generating a near 7.0 (Richter Scale) earthquake. This magnitude figure is speculative based on an 1895 earthquake measuring 6.9 on the Richter Scale with an epicenter possibly in the Midland Fault vicinity. However, oil and gas companies exploring the area's energy potential have identified several subsurface faults, none of which show any recent surface rupture. A second, presumably inactive, fault is in the vicinity of Citrus Heights near Antelope Road. This fault's only exposure is along a railroad cut where offsetting geologic beds can be seen. Neither the lateral extent of the trace, the magnitude of the offset, nor the age of faulting has been determined. To the east, the

Bear Mountain fault zone trends northwest-southeast through Amador and El Dorado Counties. Geologists believe this series of faults has not been active in historic time.

The amount of energy released during an earthquake is usually expressed as a magnitude and is measured directly from the earthquake as recorded on seismographs. An earthquake's magnitude is expressed in whole numbers and decimals (e.g., 6.8). Seismologists have developed several magnitude scales, as discussed in Section 4.3.9 of the Base Plan.

Another measure of earthquake severity is intensity. Intensity is an expression of the amount of shaking at any given location on the ground surface. Seismic shaking is typically the greatest cause of losses to structures during earthquakes. The City is located in an area where few earthquakes of significant magnitude occur, so both magnitude and intensity of earthquakes are expected to remain low. Seismic shaking maps for the area show Sacramento County and the City fall within a low to moderate shake risk.

#### **Past Occurrences**

The City noted no past occurrences of earthquakes or that affected the City in any meaningful way.

# Vulnerability to and Impacts from Earthquake

The combination of plate tectonics and associated California coastal mountain range building geology generates earthquake as a result of the periodic release of tectonic stresses. Sacramento County lies in the center of the North American and Pacific tectonic plate activity. There have been earthquakes as a result of this activity in the historic past, and there will continue to be earthquakes in the future.

Fault ruptures itself contributes very little to damage unless the structure or system element crosses the active fault; however, liquefaction can occur further from the source of the earthquake. In general, newer construction is more earthquake resistant than older construction due to enforcement of improved building codes. Manufactured housing is very susceptible to damage because their foundation systems are rarely braced for earthquake motions. Locally generated earthquake motions and associated liquefaction, even from very moderate events, tend to be more damaging to smaller buildings, especially those constructed of unreinforced masonry (URM) and soft story buildings. There are no URM or soft story buildings in the City.

The Uniform Building Code (UBC) identifies four seismic zones in the United States. The zones are numbered one through four, with Zone 4 representing the highest level of seismic hazard. The UBC establishes more stringent construction standards for areas within Zones 3 and 4. All of California lies within either Zone 3 or Zone 4. The City of Galt is within the less hazardous Zone 3.

Earthquake vulnerability is primarily based on population and the built environment. Urban areas in high seismic hazard zones are the most vulnerable, while uninhabited areas are less vulnerable.

Impacts from earthquake in the City will vary depending on the fault that the earthquake occurs on, the depth of the earthquake strike, and the intensity of shaking. Large events could cause damages to infrastructure, critical facilities, residential and commercial properties, and possible injuries or loss of life.

### Earthquake Analysis

Due to the regional effects of an earthquake, a Hazus earthquake analysis was performed on a countywide basis. This can be found in Section 4.3.11 of the Base Plan. While these runs were not done specific to the City, maps showing damage in the County show greater areas of damage near the cities in the County.

## **Future Development**

Although new growth and development corridors would fall in the area affected by earthquake, given the small chance of major earthquake and the building codes in effect, development in areas prone to earthquakes will continue to occur. The City enforces the state building code, which mandates construction techniques that minimize seismic hazards. Future development in the City is subject to these building codes.

# Flood: 1%/0.2% Annual Chance

**Likelihood of Future Occurrence**—Occasional/Unlikely **Vulnerability**—High

# Hazard Profile and Problem Description

This hazard analyzes the FEMA DFIRM 1% and 0.2% annual chance floods. These tend to be the larger floods that can occur in the County or in the City, and have caused damages in the past. Flooding is a significant problem in Sacramento County and the City. Historically, the City has been at risk to flooding primarily during the winter and spring months when river systems in the County swell with heavy rainfall and snowmelt runoff. Normally, storm floodwaters are kept within defined limits by a variety of storm drainage and flood control measures. Occasionally, extended heavy rains result in floodwaters that exceed normal high-water boundaries and cause damage. Flooding has occurred both within the 1% and 0.2% annual chance floodplains and in other localized areas.

#### Location and Extent

Runoff from the City's is primarily drained by a variety of local streams and creeks including Laguna Creek (south), Skunk Creek, Deadman Gulch, Hen Creek and Dry Creek, which drain to the Cosumnes River. The areas near the confluence of these smaller water courses with the Cosumnes River includes large areas of floodplain, which absorb excess flows from local watersheds during heavy rains and spring floods. Much of the stormwater of this floodplain is maintained through a complex system of levees and dikes. The City itself does not have nor need levees to provide protection.

The City of Galt has areas located in the 1% and 0.2% annual chance flood zones. This is seen in Figure D-9.

SACRAMENTO COUNTY INSET **DFIRM FLOOD ZONES** 1% Annual Chance Zone A Zone AE 0.2% Annual Chance Deadman Gulch 0.2% Annual Chance Other Areas Zone X SACRAMENTO Galt A St. **LEGEND** Highways Interstates Local Roads Railroads Rivers SAN JOAQUIN Cities Counties 2 Miles SACRAMENTO FOSTER MORRISON

Figure D-9 City of Galt – FEMA DFIRM Flood Zones

Data Source: FEMA NFHL 07/19/2018, Sacramento County GIS, Cal-Atlas; Map Date: 09/2020.

# Table D-17 details the DFIRM mapped flood zones located within the City.

Table D-17 City of Galt-DFIRM Flood Hazard Zones

Flood Zone	Description	Flood Zone Present in City	
A	1% annual chance flooding: No base flood elevations provided. Mandatory flood insurance purchase requirements and floodplain management standards apply.	X	
AE	1% annual chance flooding: Base flood elevations provided. Mandatory flood insurance purchase requirements and floodplain management standards apply.	X	
АН	Areas subject to inundation by 1-percent-annual-chance shallow flooding (usually areas of ponding) where average depths are between one and three feet. Base Flood Elevations (BFEs) derived from detailed hydraulic analyses are shown in this zone. Mandatory flood insurance purchase requirements and floodplain management standards apply.		
AO	Areas subject to inundation by 1-percent-annual-chance shallow flooding (usually sheet flow on sloping terrain) where average depths are between one and three feet. Average flood depths derived from detailed hydraulic analyses are shown in this zone. Mandatory flood insurance purchase requirements and floodplain management standards apply.		
A99	Areas subject to inundation by the 1-percent-annual-chance flood event, but which will ultimately be protected upon completion of an under-construction Federal flood protection system. These are areas of special flood hazard where enough progress has been made on the construction of a protection system, such as dikes, dams, and levees, to consider it complete for insurance rating purposes. Zone A99 may only be used when the flood protection system has reached specified statutory progress toward completion. No Base Flood Elevations (BFEs) or depths are shown. Mandatory flood insurance purchase requirements and floodplain management standards apply.		
Shaded X	0.2% annual chance flooding: The areas between the limits of the 1% annual chance flood and the 0.2-percent-annual-chance (or 500-year) flood. Flood insurance is not mandatory but is available.	X	
X Protected by Levee	Areas protected by levees from 1% annual chance flood event. Levee protection places these areas in the 0.2% annual chance flood zone. Flood insurance is not mandatory but is available.		
X (unshaded)	No flood hazard	X	

Source: FEMA

Additionally, flood extents can generally be measured in volume, velocity, and depths of flooding. Expected flood depths in the City vary, depending on the nature and extent of a flood event; specific depths are unknown. Flood durations in the City tend to be short to medium term, or until either the storm drainage system can catch up or flood waters move downstream. Flooding in the City tends to have a shorter speed of onset, due to the amount of water that flows through the City.

Geographical flood extents for the City from the FEMA DFIRMs are shown in Table D-18.

Table D-18 City of Galt – Geographical DFIRM Flood Zone Extents

Flood Zone	Total Acres	% of Total Acres	Improved Acres	% of Total Improved Acres	Unimproved Acres	% of Total Unimproved Acres
1% Annual Chance	409	10.59%	174	7.25%	235	16.02%
0.2% Annual Chance	10	0.26%	1	0.05%	9	0.60%
Other Areas	3,442	89.15%	2,218	92.69%	1,224	83.38%
Total	3,861	100.00%	2,393	100.00%	1,467	100.00%

Source: FEMA DFIRM 11/2/2018

#### **Past Occurrences**

A list of state and federal disaster declarations for Sacramento County from flooding is shown on Table D-19. These events also likely affected the City to some degree.

Table D-19 Sacramento County – State and Federal Disaster Declarations from Flood 1950-2020

Disaster Type		Federal Declarations		State Declarations
	Count	Years	Count	Years
Flood (including heavy rains and storms)	19	1950, 1955, 1958 (twice), 1963, 1969, 1982 (twice), 1983, 1986, 1995 (twice), 1996, 1997, 1998, 2008, 2017 (three times)	14	1955, 1958, 1964, 1969, 1983, 1986, 1995 (twice), 1997, 1998, 2006, 2017 (three times)

Source: Cal OES, FEMA

The last known flooding event occurred in the early 2000's due to unauthorized fill and modification to the Dry Creek floodplain.

#### Vulnerability to and Impacts from Flood

Floods have been a part of the City's historical past and will continue to be so in the future. During winter months, long periods of precipitation and the timing of that precipitation are critical in determining the threat of flood, and these characteristics further dictate the potential for widespread structural and property damages. Predominantly, the effects of flooding are generally confined to areas near the waterways of the County. As waterways grow in size from local drainages, so grows the threat of flood and dimensions of the threat. This threatens structures in the floodplain. Structures can also be damaged from trees falling as a result of water-saturated soils. Electrical power outages happen, and the interruption of power causes major problems. Loss of power is usually a precursor to closure of governmental offices and community businesses. Public schools may also be required to close or be placed on a delayed start schedule. Roads can be damaged and closed, causing safety and evacuation issues. People may be swept away in floodwaters, causing injuries or deaths.

Floods are among the costliest natural disasters in terms of human hardship and economic loss nationwide. Floods can cause substantial damage to structures, landscapes, and utilities as well as life safety issues. Floods can be extremely dangerous, and even six inches of moving water can knock over a person given a strong current. During a flood, people can also suffer heart attacks or electrocution due to electrical equipment short outs. Floodwaters can transport large objects downstream which can damage or remove stationary structures. Ground saturation can result in instability, collapse, or other damage. Objects can also be buried or destroyed through sediment deposition. Floodwaters can also break utility lines and interrupt services. Standing water can cause damage to crops, roads, foundations, and electrical circuits. Direct impacts, such as drowning, can be limited with adequate warning and public education about what to do during floods. Other problems connected with flooding and stormwater runoff include erosion, sedimentation, degradation of water quality, loss of environmental resources, and economic impacts.

The main concern with flooding is disruption of transportation systems in the City and surrounding areas. For example, Twin Cities Road, a major east-west transportation corridor from Hwy 99 to Interstate 5 was closed to vehicular traffic one year due to high waters associated the Cosumnes River since the 2016 LHMP.

#### Assets at Risk

Based on the vulnerability of Galt to the flood hazard, the sections that follow describes significant assets at risk in the City of Galt. This section includes the values at risk, flooded acres, population at risk, and critical facilities at risk.

#### Values at Risk

GIS was used to determine the possible impacts of flooding within the City of Galt. The methodology described in Section 4.3.12 of the Base Plan was followed in determining structures and values at risk to the 1% (100-year) and 0.2% (500-year) annual chance flood event. Table D-20 is a summary table for the City of Galt. Parcel counts, values, estimated contents, and total values in the City are shown for the 1% and 0.2% annual chance flood zones, as well as for those properties that fall outside of the mapped FEMA DFIRM flood zones. Table D-21 breaks down Table D-20 and shows the property use, improved parcel count, improved values, estimated contents, and total values that fall in FEMA flood zones in the City.

Table D-20 City of Galt – Count and Value of Parcels at Risk in Summary DFIRM Flood Zones

Flood Zone	Total Parcel Count	Improved Parcel Count	Total Land Value	Improved Structure Value	Estimated Contents Value	Total Value
1% Annual Chance Flood Hazard	36	9	\$16,234,029	\$1,836,738	\$2,169,686	\$20,240,454
0.2% Annual Chance Flood Hazard**	2	0	\$537,317	\$0	\$0	\$537,317
Other Areas	7,948	7,439	\$627,686,135	\$1,727,496,106	\$1,009,983,164	\$3,365,165,408
City of Galt Total	7,986	7,448	\$644,457,481	\$1,729,332,844	\$1,012,152,850	\$3,385,943,179

Source: FEMA 11/2/2018 DFIRM, Sacramento County 2020 Parcel/Assessor's Data

<sup>\*</sup>With respect to improve parcels within the floodplain, the actual structures on the parcels may not be located within the actual floodplain, may be elevated and or otherwise outside of the identified flood zone

\*\*This parcel count only includes those parcels in the 0.2% annual chance flood zone, exclusive of the 1% annual chance flood zone. The 0.2% annual chance flood, in actuality, also includes all parcels in the 1% annual chance flood zone.

Table D-21 City of Galt – Count and Values of Parcels\* at Risk by Detailed Flood Zone and Property Use

Flood Zone / Property Use	Total Parcel Count	Improved Parcel Count	Total Land Value	Improved Structure Value	Estimated Contents Value	Total Value
1% Annual Char	ice Flood	Hazard				
Zone A						
Agricultural	2	2	\$10,693,119	\$31,364	\$31,364	\$10,755,847
Care/Health	0	0	\$0	\$0	\$0	\$0
Church/Welfare	0	0	\$0	\$0	\$0	\$0
Industrial	2	2	\$1,028,205	\$1,020,032	\$1,530,048	\$3,578,286
Miscellaneous	5	0	\$96	\$0	\$0	\$96
Office	0	0	\$0	\$0	\$0	\$0
Public/Utilities	8	0	\$0	\$0	\$0	\$0
Recreational	0	0	\$0	\$0	\$0	\$0
Residential	3	3	\$1,697,774	\$354,138	\$177,070	\$2,228,982
Retail/ Commercial	1	1	\$217,825	\$116,204	\$116,204	\$450,233
Unknown	0	0	\$0	\$0	\$0	\$0
Vacant	7	0	\$86,865	\$0	\$0	\$86,865
Zone A Total	28	8	\$13,723,884	\$1,521,738	\$1,854,686	\$17,100,309
Zone AE						
Agricultural	2	0	\$57,735	\$0	\$0	\$57,735
Care / Health	0	0	\$0	\$0	\$0	\$0
Church / Welfare	0	0	\$0	\$0	\$0	\$0
Industrial	0	0	\$0	\$0	\$0	\$0
Miscellaneous	1	0	\$35,700	\$0	\$0	\$35,700
Office	0	0	\$0	\$0	\$0	\$0
Public / Utilities	2	0	\$0	\$0	\$0	\$0
Recreational	1	1	\$157,500	\$315,000	\$315,000	\$787,500
Residential	0	0	\$0	\$0	\$0	\$0
Retail / Commercial	0	0	\$0	\$0	\$0	\$0
Unknown	0	0	\$0	\$0	\$0	\$0
Vacant	2	0	\$2,259,210	\$0	\$0	\$2,259,210
Zone AE Total	8	1	\$2,510,145	\$315,000	\$315,000	\$3,140,145

Flood Zone / Property Use	Total Parcel Count	Improved Parcel Count	Total Land Value	Improved Structure Value	Estimated Contents Value	Total Value
1% Annual Chance Flood Hazard Total	36	9	\$16,234,029	\$1,836,738	\$2,169,686	\$20,240,454
0.2% Annual Cha	ance Floo	d Hazard**				
0.2% Annual Cha	ance					
Agricultural	0	0	\$0	\$0	\$0	\$0
Care/Health	0	0	\$0	\$0	\$0	\$0
Church/Welfare	0	0	\$0	\$0	\$0	\$0
Industrial	0	0	\$0	\$0	\$0	\$0
Miscellaneous	1	0	\$9	\$0	\$0	\$9
Office	0	0	\$0	\$0	\$0	\$0
Public/Utilities	0	0	\$0	\$0	\$0	\$0
Recreational	0	0	\$0	\$0	\$0	\$0
Residential	0	0	\$0	\$0	\$0	\$0
Retail/ Commercial	0	0	\$0	\$0	\$0	\$0
Unknown	0	0	\$0	\$0	\$0	\$0
Vacant	1	0	\$537,308	\$0	\$0	\$537,308
0.2% Annual Chance Total	2	0	\$537,317	\$0	\$0	\$537,317
0.2% Annual Chance Flood Hazard Total	2	0	\$537,317	\$0	\$0	\$537,317
Other Areas		'				
Zone X						
Agricultural	14	9	\$11,464,076	\$601,171	\$601,171	\$12,666,418
Care/Health	10	10	\$1,335,807	\$5,731,483	\$5,731,483	\$12,798,773
Church/Welfare	21	17	\$2,154,803	\$17,678,088	\$17,678,088	\$37,510,979
Industrial	57	48	\$21,100,685	\$76,145,534	\$114,218,304	\$211,464,521
Miscellaneous	117	0	\$144,241	\$0	\$0	\$144,241
Office	30	28	\$6,269,775	\$16,644,351	\$16,644,351	\$39,558,477
Public/Utilities	92	0	\$36	\$0	\$0	\$36
Recreational	2	1	\$6,144	\$17,437	\$17,437	\$41,018
Residential	7,278	7,228	\$506,643,455	\$1,508,836,092	\$754,418,035	\$2,769,897,587
Retail/ Commercial	97	88	\$41,394,314	\$100,674,295	\$100,674,295	\$242,742,904
Unknown	1	0	\$106,621	\$0	\$0	\$106,621
Vacant	229	10	\$37,066,178	\$1,167,655	\$0	\$38,233,833

Flood Zone / Property Use	Total Parcel Count	Improved Parcel Count	Total Land Value	Improved Structure Value	Estimated Contents Value	Total Value
Zone X Total	7,948	7,439	\$627,686,135	\$1,727,496,106	\$1,009,983,164	\$3,365,165,408
Other Areas Total	7,948	7,439	\$627,686,135	\$1,727,496,106	\$1,009,983,164	\$3,365,165,408
Galt Total	7,986	7,448	\$644,457,481	\$1,729,332,844	\$1,012,152,850	\$3,385,943,179

Source: FEMA 11/2/2018 DFIRM, Sacramento County 2020 Parcel/Assessor's Data

Table D-22 summarizes Table D-21 above and shows City of Galt loss estimates and improved values at risk by FEMA 1% and 0.2% annual chance flood zones.

Table D-22 City of Galt – Flood Loss Estimates

Flood Zone		Improved Parcel Count*	Improved Structure Value	Estimated Contents Value	Total Value	Loss Estimate	Loss Ratio
1% Annual Chance Flood Hazard	36	9	\$1,836,738	\$2,169,686	\$4,006,424	\$801,285	0.00%
0.2% Annual Chance Flood Hazard**	2	0	\$0	\$0	\$0	\$0	0.00%
Grand Total	38	9	\$1,836,738	\$2,169,686	\$4,006,424	\$801,285	0.00%

Source: FEMA 11/2/2018 DFIRM, Sacramento County 2020 Parcel/Assessor's Data

According to Table D-21 and Table D-22, the City of Galt has 9 parcels and \$4.0 million of structure and contents values or values in the 1% annual chance flood zone, and 0 improved parcels in the 0.2% annual chance flood zone. These values can be refined a step further. Applying the 20 percent damage factor as previously described in Section 4.3.11 of the Base Plan, there is a 1% chance in any given year of a flood event causing \$0.8 million in damage in the City of Galt. The loss ratio of 0.00% indicates that flood losses for 1% and 0.2% annual chance flooding, respectively, would be minor, and the City would be able to recover quickly.

<sup>\*</sup>With respect to improve parcels within the floodplain, the actual structures on the parcels may not be located within the actual floodplain, may be elevated and or otherwise outside of the identified flood zone

<sup>\*\*</sup>This parcel count only includes those parcels in the 0.2% annual chance flood zone, exclusive of the 1% annual chance flood zone. The 0.2% annual chance flood, in actuality, also includes all parcels in the 1% annual chance flood zone.

<sup>\*</sup>With respect to improve parcels within the floodplain, the actual structures on the parcels may not be located within the actual floodplain, may be elevated and or otherwise outside of the identified flood zone

<sup>\*\*</sup>This parcel count only includes those parcels in the 0.2% annual chance flood zone, exclusive of the 1% annual chance flood zone. The 0.2% annual chance flood, in actuality, also includes all parcels in the 1% annual chance flood zone.

### Flooded Acres

Also of interest is the land area affected by the various flood zones. The following is an analysis of flooded acres in the City in comparison to total area within the City limits. The same methodology, as discussed in Section 4.3.12 of the Base Plan, was used for the City of Galt as well as for the County as a whole. Table D-23 represents a summary and Table D-24 represents a detailed analysis of total acres for each FEMA DFIRM flood zone in the City.

Table D-23 City of Galt – Flooded Acres by Flood Zone

Flood Zone	Total Acres	% of Total Acres	Improved Acres	% of Total Improved Acres	Unimproved Acres	% of Total Unimproved Acres
1% Annual Chance Flood Hazard	409	0.06%	174	0.05%	235	0.08%
0.2% Annual Chance Flood Hazard	10	0.00%	1	0.00%	9	0.00%
Other Areas	3,442	0.53%	2,218	0.61%	1,224	0.43%
Galt Total	3,861	0.60%	2,393	0.66%	1,467	0.52%

Source: FEMA 11/2/2018 DFIRM

Table D-24 City of Galt – Flooded Acres by Flood Zone and Property Use

Flood Zone/ Property Use	Total Acres	% of Total Acres	Improved Acres	% of Total Improved Acres	Unimproved Acres	% of Total Unimproved Acres
1% Annual Chan	ce Flood Haza	rd				
Zone A						
Agricultural	126.1	0.02%	124.1	0.03%	2.0	0.00%
Care/Health	0	0.00%	0	0.00%	0	0.00%
Church/Welfare	0	0.00%	0	0.00%	0	0.00%
Industrial	9.4	0.00%	9.4	0.00%	0	0.00%
Miscellaneous	37.6	0.01%	0	0.00%	37.6	0.01%
Office	0	0.00%	0	0.00%		
Public/Utilities	11.6	0.00%	0	0.00%	11.6	0.00%
Recreational	0	0.00%	0	0.00%	0	0.00%
Residential	27.7	0.00%	27.7	0.01%	0	0.00%
Retail/ Commercial	0.6	0.00%	0.6	0.00%	0	0.00%
Unknown	0	0.00%	0	0.00%	0	0.00%
Vacant	95.5	0.01%	0	0.00%	95.5	0.03%
Zone A Total	308.5	0.05%	161.8	0.04%	146.7	0.05%
Zone AE	•	•	•	•	•	•

Flood Zone/ Property Use	Total Acres	% of Total Acres	Improved Acres	% of Total Improved Acres	Unimproved Acres	% of Total Unimproved Acres
Agricultural	42.1	0.01%	7.4	0.00%	34.7	0.01%
Care/Health	0	0.00%	0	0.00%	0	0.00%
Church/Welfare	0	0.00%	0	0.00%	0	0.00%
Industrial	0	0.00%	0	0.00%	0	0.00%
Miscellaneous	19.1	0.00%	0	0.00%	19.1	0.01%
Office	0	0.00%	0	0.00%	0	0.00%
Public/Utilities	2.0	0.00%	0	0.00%	2.0	0.00%
Recreational	4.4	0.00%	4.4	0.00%	0	0.00%
Residential	0	0.00%	0	0.00%	0	0.00%
Retail/ Commercial	0	0.00%	0	0.00%	0	0.00%
Unknown	0	0.00%	0	0.00%	0	0.00%
Vacant	32.6	0.01%			32.6	0.01%
Zone AE Total	100.2	0.02%	11.8	0.00%	88.4	0.03%
1% Annual Chance Flood Hazard Total	408.7	0.06%	173.6	0.05%	235.0	0.08%
0.2% Annual Ch	ance Flood Ha	zard				
0.2% Annual Cha	ance					
Agricultural	0.2	0.00%	0.2	0.00%	0	0.00%
Care/Health	0	0.00%	0	0.00%	0	0.00%
Church/Welfare	0	0.00%	0	0.00%	0	0.00%
Industrial	0	0.00%	0	0.00%	0	0.00%
Miscellaneous	0.6	0.00%	0	0.00%	0.6	0.00%
Office	0	0.00%	0	0.00%	0	0.00%
Public/Utilities	1.8	0.00%	0	0.00%	1.8	0.00%
Recreational	1.1	0.00%	1.1	0.00%	0	0.00%
Residential	0.0	0.00%	0.0	0.00%	0	0.00%
Retail/ Commercial	0	0.00%	0	0.00%	0	0.00%
Unknown	0	0.00%	0	0.00%	0	0.00%
Vacant	6.3	0.00%	0	0.00%	6.3	0.00%
0.2% Annual Chance Total	10.1	0.00%	1.3	0.00%	8.8	0.00%
0.2% Annual Chance Flood Hazard Total	10.1	0.00%	1.3	0.00%	8.8	0.00%
Other Areas						

Flood Zone/ Property Use	Total Acres	% of Total Acres	Improved Acres	% of Total Improved Acres	Unimproved Acres	% of Total Unimproved Acres
Zone X						
Agricultural	380.4	0.06%	336.8	0.09%	43.7	0.02%
Care/Health	10.3	0.00%	10.3	0.00%		
Church/Welfare	77.1	0.01%	36.2	0.01%	41.0	0.01%
Industrial	173.6	0.03%	159.6	0.04%	14.0	0.00%
Miscellaneous	136.9	0.02%	0	0.00%	136.9	0.05%
Office	14.3	0.00%	11.9	0.00%	2.4	0.00%
Public/Utilities	190.5	0.03%	0	0.00%	190.5	0.07%
Recreational	0.4	0.00%	0.2	0.00%	0.3	0.00%
Residential	1,611.8	0.25%	1,580.7	0.44%	31.0	0.01%
Retail/ Commercial	86.5	0.01%	77.4	0.02%	9.0	0.00%
Unknown	0.7	0.00%	0	0.00%	0.7	0.00%
Vacant	759.4	0.12%	5.3	0.00%	754.1	0.27%
Zone X Total	3,442.0	0.53%	2,218.4	0.61%	1,223.6	0.43%
Other Areas Total	3,442.0	0.53%	2,218.4	0.61%	1,223.6	0.43%
Galt Total	3,860.8	0.60%	2,393.3	0.66%	1,467.5	0.52%

Source: FEMA 11/2/2018 DFIRM

### Population at Risk

The DFIRM flood zones were overlayed on the parcel layer. Those residential parcel centroids that intersect the flood zones were counted and multiplied by the 2010 Census Bureau average household factors for Galt -3.16. According to this analysis, there is a total population of 13 and 0 residents of the City at risk to flooding in the 1% and 0.2% annual chance floodplains, respectively. This is shown in Table D-25.

Table D-25 City of Galt – Count of Improved Residential Parcels and Population by Flood Zone

	1% Annua	al Chance	0.2% Annual Chance		
Jurisdiction	Improved Residential Parcels	Population at Risk	Improved Residential Parcels	Population at Risk	
Galt	4	13	0	0	

Source: FEMA DFIRM 11/2/2018, Sacramento County 2020 Parcel/Assessor's Data, US Census Bureau

### Critical Facilities at Risk

An analysis was performed on the critical facility inventory in Galt in identified DFIRM flood zones. GIS was used to determine whether the critical facility locations intersect a DFIRM flood zone, and if so, which flood zone they intersect. Details of critical facilities in DFIRM flood zones in the City of Galt are shown in Figure D-10 for and detailed by dam inundation in Table D-26. Details of critical facility definition, type, name, and address and jurisdiction by DFIRM flood zones are listed in Appendix F.

SACRAMENTO COUNTY INSET **CRITICAL FACILITY CATEGORY Essential Services** At Risk Population Hazardous Materials and Solid Waste Facilities **DFIRM FLOOD ZONES** 1% Annual Chance Zone A Zone AE 0.2% Annual Chance Deadman Gulch 0.2% Annual Chance Other Areas Zone X SACRAMENTO **LEGEND** Highways Interstates Local Roads Railroads Rivers SAN JOAQUIN Cities Counties 2 Miles SACRAMENTO **FOSTER MORRISON** 

Figure D-10 City of Galt – Critical Facilities and DFIRM Flood Zones

Data Source: FEMA NFHL 07/19/2018, Sacramento County GIS, Cal-Atlas; Map Date: 08/2021.

Table D-26

Flood Zone Critical Facility Category	Critical Facility Type	Facility Count	
1% Annual Chance Flood Hazard			
Essential Services Facilities	Water Well	1	
	Total	1	
1% Annual Chance Flood Hazard Total		1	
Other Areas			
	Cellular Tower	2	
	Emergency Evacuation Center	5	
	EMS Stations	2	
	FDIC Insured Banks	6	
	Fire Station	3	
Essential Services Facilities	Law Enforcement	2	
	Microwave Service Towers	55	
	Sewage Treatment Plant	1	
	Water Well	34	
	Total	110	
	Day Care Center	6	
	Mobile Home Parks	4	
At Risk Population Facilities	Places of Worship	14	
	School	14	
	Total	38	
	EPA ER TRI Facility	3	
Hander Maniel and Calid West Facilities	Leaky Underground Storage Tank	7	
Hazardous Materials and Solid Waste Facilities	Waste Transfer Station	1	
Total			
Other Areas Total		159	
Galt Total		160	

Source: City of Galt, FEMA 7/19/2018 DFIRM

# Insurance Coverage, Claims Paid, and Repetitive Losses

Standard property insurance does not include flood coverage because of the relatively high risk. The National Flood Insurance Program (NFIP) provides flood insurance to residents in those communities that participate in the NFIP. Federal financial assistance requires the purchase of flood for structures located within a 100-year floodplain – a requirement that affects nearly all mortgages financed through commercial lending institutions. Flood insurance is also recommended for all structures protected by levees, even if not mapped within a floodplain.

The City of Galt joined the National Flood Insurance Program (NFIP) on December 1, 1981. The City does not participate in the CRS program. NFIP data indicates that as of March 24, 2020, there were 58 flood insurance policies in force in the City with \$19,840,000 of coverage. Of the 58 policies, 55 were residential (single-family homes) and 3 were nonresidential properties. Of the 58 policies, 3 are in the A zones, while the other 55 are in B, C, and X zones. There have been 3 historical claims for flood losses totaling \$69,338.31. NFIP data further indicates that there are no repetitive loss (RL) or severe repetitive loss (SRL) buildings in Galt. There have been no substantial damage claims since 1978 in the City.

Based on this analysis of insurance coverage, the City has values at risk to the 1% annual chance and greater floods. Of the 9 improved parcels within the 1% annual chance flood zone, only 3 (or 33.3 percent) of those parcels maintain flood insurance. This can be seen on Table D-27.

Table D-27 City of Galt – Percentage of Policy Holders to Improved Parcels in the 1% Annual Chance Floodplain

Jurisdiction	SFHA (1% Annual		Percentage of 1% Annual Chance Floodplain Parcels Currently Insured
City of Galt	9	3	33.3%

Source: FEMA DFIRM 11/2/2018, Sacramento County 2020 Parcel/Assessor's Data, NFIP CIS data 3/2020.

### California Department of Water Resources Best Available Maps (BAM)

The FEMA regulatory maps provide just one perspective on flood risks in Sacramento County. Senate Bill 5 (SB 5), enacted in 2007, authorized the California DWR to develop the Best Available Maps (BAM) displaying 100- and 200-year floodplains for areas located within the Nevada-San Joaquin (SAC-SJ) Valley watershed. This effort was completed by DWR in 2008. DWR has expanded the BAM to cover all counties in the State and to include 500-year floodplains.

Different than the FEMA DFIRMs which have been prepared to support the NFIP and reflect only the 100-year event risk, the BAMs are provided for informational purposes and are intended to reflect current 100-, 200-(as applicable), and 500-year event risks using the best available data. The 100-year floodplain limits on the BAM are a composite of multiple 100-year floodplain mapping sources. It is intended to show all currently identified areas at risk for a 100-year flood event, including FEMA's 100-year floodplains. The BAM are comprised of different engineering studies performed by FEMA, Corps, and DWR for assessment of potential 100-, 200-, and 500-year floodplain areas. These studies are used for different planning and/or regulatory applications, and for each flood frequency may use varied analytical and quality control criteria depending on the study type requirements.

The value in the BAMs is that they provide a bigger picture view of potential flood risk to the City than that provided in the FEMA DFIRMs. The BAM map for Galt is shown in Figure D-11.

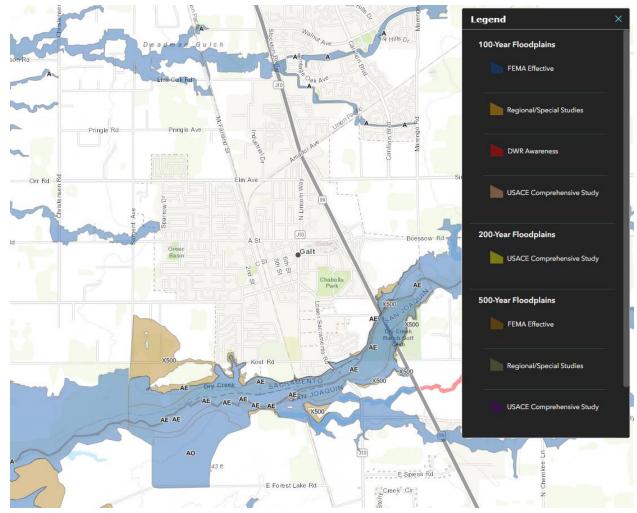


Figure D-11 City of Galt – Best Available Map

Source: California DWR

Legend explanation: Blue - FEMA 1%, Orange - Local 1% (developed from local agencies), Red - DWR 1%r (Awareness floodplains identify the 1% annual chance flood hazard areas using approximate assessment procedures.), Pink - USACE 1% (2002 Sac and San Joaquin River Basins Comp Study), Yellow - USACE 0.5% (2002 Sac and San Joaquin River Basins Comp Study), Tan - FEMA 0.2%, Grey - Local 0.2% (developed from local agencies), Purple - USACE 0.2% (2002 Sac and San Joaquin River Basins Comp Study).

#### **Future Development**

The potential for flooding may increase as floodwaters are channeled due to land development. Such changes can exacerbate flooding problems inside and outside of natural floodplains by altering or confining natural drainage channels. Floodplain modeling and master planning should be based on build out property use to ensure that all new development remains safe from future flooding. While local floodplain management, stormwater management, and water quality regulations and policies address these changes on a site-by-site basis, their cumulative effects can have a negative impact on the overall floodplain.

The City enforces the floodplain ordinance. If any development is to occur in the floodplain, it would have to conform to the elevation standards of the floodplain ordinance. No development is expected in the floodplain in the future.

# GIS Analysis

The City provided future development areas were used as the basis for the inventory of future development areas for the City. Using the GIS parcel spatial file for each of these areas, the areas and parcels associated with future development projects for which the analysis was to be performed were identified. Utilizing the future development project spatial layer, the parcel centroid data was intersected to determine the parcel counts within each area. Figure D-12 shows the locations of future development areas the City is planning to develop on the DFIRM flood zones. Table D-28 shows the parcels and acreages of each future development area in the City in the DFIRM flood zones.

**LEGEND** - Highways Interstates Local Roads Railroads Rivers Cities Counties **DFIRM FLOOD ZONES** 1% Annual Chance Zone A Zone AE 0.2% Annual Chance 0.2% Annual Chance Other Areas Zone X **FUTURE DEVELOPMENT AREAS** SACRAMENTO Elm A 1 - Cardoso 2 2 - Caterina Estate 10 3 - Cedar Flats Estates (Phase 1 and 2) Galt 4 - Dry Creek Oaks 5 - Greenwood Phase 1 and 2 RAMENTO COUNTY INSET 6 - Liberty Ranch 7 - Morali Estates 8 - Parlin Oaks 9 - Simmerhorn Commercial 10 - Simmerhorn Ranch 11 - Summerfield 12 - Twin Cities Commercial SAN JOAQUIN 2 Miles SACRAMENTO FOSTER MORRISON

Figure D-12 City of Galt – Future Development in DFRIM Flood Zones

Table D-28 City of Galt – Future Development in DFIRM Flood Zones

Flood Zone/ Future Development	Total Parcel Count	Improved Parcel Count	Total Acres
1% Annual Chance Flood Hazard			
Dry Creek Oaks	1	0	8.1
Liberty Ranch	2	2	167.5
1% Annual Chance Flood Hazard Total	3	2	175.6
Other Areas			
Cardoso 2	1	1	33.7
Caterina Estate	2	1	12.1
Cedar Flats Estates (Phase 1 and 2)	7	0	36.1
Dry Creek Oaks	4	0	78.7
Greenwood Phase 1 and 2	1	0	16.3
Liberty Ranch	2	2	166.3
Morali Estates	1	0	12.8
Parlin Oaks	1	0	16.3
Simmerhorn Commercial	4	0	48.4
Simmerhorn Ranch	2	1	115.2
Summerfield	1	1	58.8
Twin Cities Commercial	1	0	11.9
Other Areas Total	27	6	606.6
Grand Total	30	8	782.2

Source: City of Galt, FEMA 7/19/2018 DFIRM

# Flood: Localized Stormwater Flooding

**Likelihood of Future Occurrence**—Likely **Vulnerability**—Medium

## Hazard Profile and Problem Description

Flooding occurs in areas other than the FEMA mapped 1% and 0.2% annual chance floodplains. Flooding may be from drainages not studied by FEMA, lack of or inadequate drainage infrastructure, or inadequate maintenance. Localized, stormwater flooding occurs throughout the County during the rainy season from November through April. Prolonged heavy rainfall contributes to a large volume of runoff resulting in high peak flows of moderate duration.

Cloudburst storms, sometimes lasting as long as three hours, can occur any time from the late fall to early spring, and may occur as an extremely severe sequence within a general winter rainstorm. Flooding from cloudburst activity is characterized by high peak flow, short duration of flood flow, and a small volume of runoff.

#### Location and Extent

The City of Galt is subject to localized flooding throughout the City. Flood extents are usually measured in areas affected, velocity of flooding, and depths of flooding. Expected flood depths in the City vary by location. Flood durations in the City tend to be short to medium term, or until either the storm drainage system can catch up or flood waters move downstream. Localized flooding in the City tends to have a shorter speed of onset, especially when antecedent rainfall has soaked the ground and reduced its capacity to absorb additional moisture.

The City tracks localized flooding areas. Affected localized flood areas identified by the City of Galt are summarized in Table D-29.

Table D-29 City of Galt – List of Localized Flooding Problem Areas

Area Name	Flooding	Pavement Deterioration	Washout	High Water	Landslide/ Mudslide	Debris	Downed Trees
Cobble Hill Way		X					
intersection Walnut Ave/Park Terrace Drive; Beeler Way				X		X	
C ST and Market St				X			
G St and H St, between UPRR tracks and Church St				X			
Park Ave/Camellia Way.				X			
Cul-de-Sac end of Crystal Way, by Dry Creek Golf Course	X			X			

Source: City of Galt

#### **Past Occurrences**

The City noted the following past occurrences of localized flooding:

Localized flooding was observed at C/Market St, end of Crystal Way and H St since the 2016 LHMP. The City is implementing Capital Improvement Program (CIP) and Development Project improvements to address localized flooding

#### Vulnerability to and Impacts from Localized Flooding

Historically, much of the growth in the City and County has occurred adjacent to streams, resulting in significant damages to property, and losses from disruption of community activities when the streams overflow. Additional development in the watersheds of these streams affects both the frequency and duration of damaging floods through an increase in stormwater runoff.

Primary concerns associated with stormwater flooding include impacts to infrastructure that provides a means of ingress and egress throughout the community. Ground saturation can result in instability, collapse, or other damage to trees, structures, roadways and other critical infrastructure. Objects can also

be buried or destroyed through sediment deposition. Floodwaters can break utility lines and interrupt services. Standing water can cause damage to crops, roads, and foundations. Other problems connected with flooding and stormwater runoff include erosion, sedimentation, degradation of water quality, losses of environmental resources, and certain health hazards.

### **Future Development**

Future development in the City will add more impervious surfaces causing an increase in stormwater runoff and the continued need to drain these waters. The City will need to be proactive to ensure that increased development has proper siting and drainage for stormwaters. The risk of localized flooding to future development can also be minimized by accurate recordkeeping of repetitive localized storm activity. Mitigating the root causes of the localized stormwater flooding will reduce future risks of losses. The City's 2010 Storm Drainage System Master Plan identifies detention basins, pipe sizes and retrofit of existing storm drainpipes to handle future development.

#### **Pandemic**

**Likelihood of Future Occurrence**—Likely **Vulnerability**—Medium

# Hazard Profile and Problem Description

According to the World Health Organization (WHO), a disease epidemic occurs when there are more cases of that disease than normal. A pandemic is a worldwide epidemic of a disease. A pandemic may occur when a new virus appears against which the human population has no immunity. A pandemic occurs when a new virus emerges for which people have little or no immunity, and for which there is no vaccine. This disease spreads easily person-to-person, causes serious illness, and can sweep across the country and around the world in a very short time. The U.S. Centers for Disease Control and Prevention has been working closely with other countries and the WHO to strengthen systems to detect outbreaks of that might cause a pandemic and to assist with pandemic planning and preparation. An especially severe a pandemic could lead to high levels of illness, death, social disruption, and economic loss.

#### Location and Extent

During a pandemic, the whole of the City, County, and surrounding region is at risk, as pandemic is a regional, national, or international event. The speed of onset of pandemic is usually short, while the duration is variable, but can last for more than a year as shown in the 1918/1919 Spanish Flu. There is no scientific scale to measure the magnitude of pandemic. Pandemics are usually measured in numbers affected by the pandemic, and by number who die from complications from the pandemic.

#### **Past Occurrences**

There has been one state and federal disaster declaration due to pandemic, as shown in Table D-30.

Table D-30 Sacramento County – State and Federal Pandemic Disaster Declarations 1950-2020

Disaster Type	Federal Declarations		State Declarations		
	Count Years		Count	Years	
Pandemic	1	2020	1	2020	

Source: Cal OES, FEMA

The 20th century saw three outbreaks of pandemic flu.

- > The 1918-1919 Influenza Pandemic (H1N1)
- ➤ The February 1957-1958 Influenza Pandemic (H2N2)
- ➤ The 1968 Influenza Pandemic (H3N2)

To date, the 21st century has seen two acknowledged pandemics.

- **2009 Swine Flu (H1N1)**
- > 2019/2020 COVID 19

Following Sacramento County COVID-19 guidelines, businesses in the city and the City of Galt offices were closed to the public for many months. Public meetings such as the City Council and Planning Commission shifted to a Zoom format. City Recreation programs were cancelled. Schools also shifted to an online learning format

# Vulnerability to and Impacts from Pandemic

Pandemic has and will continue to have impacts on human health in the region. A pandemic occurs when a new virus emerges for which there is little or no immunity in the human population; the virus causes serious illness and spreads easily from person-to-person worldwide. There are several strategies that public health officials can use to combat a pandemic. Constant surveillance regarding current pandemic, use of infection control techniques, and administration of vaccines once they become available. Citizens can help prevent spread of a pandemic by staying home, or "self-quarantining," if they suspect they are infected. Pandemic does not affect the buildings, critical facilities, and infrastructure in the City. Pandemic can have varying levels of impact to the citizens of the City and greater County, depending on the nature of the pandemic.

Impacts could range from school and business closings to the interruption of basic services such as public transportation, health care, and the delivery of food and essential medicines. Hospitalizations and deaths can occur, especially to the elderly or those with pre-existing underlying conditions. As seen with Covid-19, multiple businesses were forced to close temporarily (some permanently) an unemployment rose significantly. Supply chains for food can be interrupted. Prisons may need to release prisoners to comply with social distance standards. Loss of tax revenue due to closed businesses and operations were an impact of the pandemic.

### **Future Development**

Future development is not expected to be significantly impacted by this hazard, though population growth in the City could increase exposure to a pandemic, and increase the ability of a disease to be transmitted among the population of the City. If the median age of City residents continues to increase, vulnerability to pandemic diseases may increase, due to the fact that these diseases are often more deadly to senior citizens.

#### Severe Weather: Extreme Cold and Freeze

**Likelihood of Future Occurrence**—Likely **Vulnerability**—Medium

# Hazard Profile and Problem Description

According to the National Weather Service), extreme cold often accompanies a winter storm or is left in its wake. Freezing temperatures can also occur without the accompanying winter storm.

#### Location and Extent

Extreme cold and freeze are regional issues, meaning the entire City is at risk to cold weather and freeze events. While there is no scale (i.e. Richter, Enhanced Fujita) to measure the effects of extreme cold and freeze, temperature data from the County from the WRCC indicates minimum temperatures fall below 32°F on 8.3 days with no days falling below 0°F. Freeze has a slow onset and can generally be predicted in advance for the County. Freeze events can last for hours (in a cold overnight), or for days to weeks at a time.

# **Past Occurrences**

There has been no federal or state disaster declarations in the County for extreme cold and freeze. The City noted that cold and freeze is a regional phenomenon; events that affected the County also affected the City. Those past occurrences were shown in the Base Plan in Section 4.3.3.

Past occurrences of extreme cold and freeze in the City are shown in both Table D-31 and Table D-32.

Table D-31 Record Low Temperatures in the City of Galt

Month	Temperature	Date Month		Temperature	Date
January	20°	1/05/1950	July	48°	7/8/1983
February	23°	2/07/1989	August	48°	8/5/1950
March	26°	3/5/1971	September	42°	9/30/2007
April	31°	4/9/1999	October	35°	10/30/1948
May	34°	5/3/1950	November	26°	11/21/1941
June	41°	6/7/1950	December	18°	12/22/1990

Source: Western Regional Climate Center, Sacramento FAA Airport Station

Table D-32 Average Number of Days in a Month Below 32°F in Galt

Month	Days Below 32°F	Month	Days Below 32°F
January	7.2	July	0
February	2.2	August	0
March	0.5	September	0
April	0	October	0
May	0	November	1.5
June	0	December	6.2

Source: Western Regional Climate Center, Sacramento FAA Airport Station

The City has no record of opening warming centers since the 2016 LHMP.

# Vulnerability to and Impacts from Severe Weather: Extreme Cold and Freeze

The City experiences temperatures below 32 degrees during the winter months. The temperature moves to the low 20s in rather extreme situations. Freeze can cause injury or loss of life to residents of the City. While it is rare for buildings to be affected directly by freeze, damages to pipes that feed building can be damaged during periods of extreme cold.

Extreme cold and freeze can affect critical facilities and infrastructure, down trees, break pipes, and can be a life safety issue. When extreme cold is coupled with high winds or ice storms, power lines may be downed, resulting in an interruption of utilities and critical services. Transportation networks, communications, and utilities infrastructure are the most vulnerable physical assets in the City. The elderly and young population is most vulnerable to temperature extremes. Health impacts are the primary concern with this hazard, though economic impacts are also an issue. The residents of nursing homes and elder care facilities, as well as transient and homeless populations are especially vulnerable to extreme cold events.

### **Future Development**

Future development built to code should be able to withstand issues associated with extreme cold and freeze events. Pipes at risk of freezing should be buried or insulated from freeze as new facilities are improved or added. Utilities should be undergrounded where possible for new developments. Vulnerability to extreme cold will increase as the average age of the population in the County shifts and homelessness becomes more of an issue.

# Severe Weather: Extreme Heat

**Likelihood of Future Occurrence**—Likely **Vulnerability**—Medium

## Hazard Profile and Problem Description

According to FEMA, extreme heat is defined as temperatures that hover 10 degrees or more above the average high temperature for the region and lasts for several weeks. Heat kills by taxing the human body

beyond its abilities. In extreme heat and high humidity, evaporation is slowed, and the body must work extra hard to maintain a normal temperature. Most heat disorders occur because the victim has been overexposed to heat or has over-exercised for his or her age and physical condition. Older adults, young children, and those who are sick or overweight are more likely to succumb to extreme heat.

In addition to the risks faced by citizens of the City, there are risks to the built environment from extreme heat. While extreme heat on its own does not usually affect structures, extreme heat during times of drought can cause wildfire risk to heighten. Extreme heat can lead to power outages and when combined with high winds, to Public Safety Power Shutdown (PSPS) events, creating significant issues in the City. However, PSPS events in the City have been declining with PG&E's refined system for shutting power off in high wildfire risk areas.

#### Location and Extent

Heat is a regional phenomenon and affects the whole of the City. Heat emergencies are often slower to develop, taking several days of continuous, oppressive heat before a significant or quantifiable impact is seen. Heat waves do not strike victims immediately, but rather their cumulative effects slowly affect vulnerable populations and communities. Heat waves do not generally cause damage or elicit the immediate response of floods, fires, earthquakes, or other more "typical" disaster scenarios.

The NWS has in place a system to initiate alert procedures (advisories or warnings) when extreme heat is expected to have a significant impact on public safety. The expected severity of the heat determines whether advisories or warnings are issued. The NWS HeatRisk forecast provides a quick view of heat risk potential over the upcoming seven days. The heat risk is portrayed in a numeric (0-4) and color (green/yellow/orange/red/magenta) scale which is similar in approach to the Air Quality Index (AQI) or the UV Index. This can be seen in Section 4.3.3 of the Base Plan.

#### **Past Occurrences**

The City Planning Team noted that since extreme heat is a regional phenomenon, events that affected the County also affected the City. Those past occurrences were shown in the Base Plan in Section 4.3.3.

Past average occurrences of extreme heat in the City of Galt are shown in both Table D-33 and Table D-34.

Table D-33 Record High Temperatures in the City of Galt

Month	Temperature	Date	Month	Temperature	Date
January	74°	1/12/2009	July	114°	7//1983
February	76°	2/19/1964	August	110°	8/10/1996
March	88°	3/5/1971	September	108°	9/01/1950
April	95°	4/9/1999	October	104°	10/02/2001
May	105°	5/3/1950	November	87°	11/01/1960
June	115°	6/7/1950	December	73°	12/02/2011

Source: Western Regional Climate Center, Sacramento FAA Airport Station

Table D-34 Average Number of Days in a Month Exceeding 90°F in Galt

Month	Days Exceeding 90°F	Month	Days Exceeding 90°F
January	0	July	21.4
February	0	August	19.0
March	0	September	12.6
April	0.5	October	2.5
May	5.5	November	0
June	11.6	December	0

Source: Western Regional Climate Center, Sacramento FAA Airport Station

The City has record of opening cooling centers 4 times since the 2016 LHMP.

# Vulnerability to and Impacts from Extreme Heat

The City experiences temperatures in excess of 100°F during the summer and fall months. The temperature moves to 105-115°F in rather extreme situations. During these times, drought conditions may worsen and the City may see an increase in dry fuels. Also, power outage and PSPS events may occur during these times as well. Health issues are the primary concern with this hazard, although economic impacts can also be an issue.

The elderly and individuals below the poverty level are the most vulnerable to extreme temperatures. Nursing homes and elder care facilities are especially vulnerable to extreme heat events if power outages occur and air conditioning is not available. In addition, individuals below the poverty level may be at increased risk to extreme heat if use of air conditioning is not affordable. This is especially true of homeless people and the transient population.

Days of extreme heat have been known to result in medical emergencies, and unpredictable human behavior. Periods of extended heat and dryness (droughts) can have major economic, agricultural, and water resources impacts. Extreme heat can also dry out vegetations, making it more vulnerable to wildfire ignitions. Days of extreme heat have been known to result in medical emergencies, civil unrest, and unpredictable human behavior.

# **Future Development**

Future development of new buildings in the City will likely not be affected by extreme heat. Extreme heat is more likely to affect vulnerable populations. Vulnerability to extreme heat will increase as the average age of the population in each City shifts. It is encouraged that nursing homes and elder care facilities have emergency plans or backup power to address power failure during times of extreme heat and in the event of a PSPS. Low income residents and homeless populations are also vulnerable. Cooling centers for these populations should be utilized when necessary.

# Severe Weather: Heavy Rains and Storms

**Likelihood of Future Occurrence**—Likely **Vulnerability**—Medium

# Hazard Profile and Problem Description

Storms in the City occur annually and are generally characterized by heavy rain often accompanied by strong winds and sometimes lightning and hail. Approximately 10 percent of the thunderstorms that occur each year in the United States are classified as severe. A thunderstorm is classified as severe when it contains one or more of the following phenomena: hail that is three-quarters of an inch or greater, winds in excess of 50 knots (57.5 mph), or a tornado. Heavy precipitation in the City falls mainly in the fall, winter, and spring months. Wind often accompanies these storms; hail and lightning are rare in the City.

#### Location and Extent

Heavy rain events occur on a regional basis. Rains and storms can occur in any location of the City. All portions of the City are at risk to heavy rains. Most of the severe rains occur during the fall, winter, and spring months. There is no scale by which heavy rains and severe storms are measured. Magnitude of storms is measured often in rainfall and damages. The speed of onset of heavy rains can be short, but accurate weather prediction mechanisms often let the public know of upcoming events. Hail and lightning are rare in the City and Sacramento County. Duration of severe storms in California, Sacramento County, and the City can range from minutes to hours to days. Information on precipitation extremes can be found in Section 4.3.4 of the Base Plan.

#### **Past Occurrences**

According to historical hazard data, severe weather, including heavy rains and storms, is an annual occurrence in the City. This is the cause of many of the federal disaster declarations related to flooding. More information can be found in the Localized Stormwater section above.

### Vulnerability to and Impacts from Heavy Rain and Storms

Heavy rain and severe storms are the most frequent type of severe weather occurrences in the City. These events can cause significant and localized flooding. Elongated events, or events that occur during times where the ground is already saturated can cause 1% and 0.2% annual chance flooding. Wind often accompanies these storms and has caused damage in the past. Hail and lightning are rare in the City, but also can cause damage, with lightning occasionally igniting wildfires.

Actual damage associated with the effects of severe weather include impacts to property, critical facilities (such as utilities), and life safety. Power outages may also occur. Heavy rains and storms often result in flooding creating significant issues. Roads can become impassable and ground saturation can result in instability, collapse, or other damage to trees, structures, roadways and other critical infrastructure. Floodwaters and downed trees can break utilities and interrupt services.

### **Future Development**

Building codes in the City ensure that new development is built to current building standards, which should reduce the risk to future development in the City from heavy rains and storms. New critical facilities should be built to withstand hail damage, lightning, and thunderstorm winds. With adherence to development standards, future losses to new development should be minimal.

#### Wildfire

**Likelihood of Future Occurrence**—Likely **Vulnerability**—Medium

# Hazard Profile and Problem Description

Wildland fire and the risk of a conflagration is an ongoing concern for the City of Galt. Throughout California, communities are increasingly concerned about wildfire safety as increased development in the foothills and mountain areas and subsequent fire control practices have affected the natural cycle of the ecosystem. Wildland fires affect grass, forest, and brushlands, as well as any structures located within them. Where there is human access to wildland areas the risk of fire increases due to a greater chance for human carelessness and historical fire management practices. Historically, the fire season extends from early spring through late fall of each year during the hotter, dryer months; however, in recent years, the risk of wildfire has become a year around concern. Fire conditions arise from a combination of high temperatures, low moisture content in the air and fuel, accumulation of vegetation, and high winds. These high winds can result in red flag days, and can result in PSPS events in the City. While wildfire risk has predominantly been associated with more remote forested areas and wildland urban interface (WUI) areas, significant wildfires can also occur in more populated, urban areas.

#### Location and Extent

Wildfire can affect all areas of the City. CAL FIRE has estimated that the risk varies across the City and has created maps showing risk variance. Following the methodology described in Section 4.3.19 of the Base Plan, wildfire maps for the City of Galt were created. Figure D-13 shows the CAL FIRE Fire Hazard Severity Zone (FHSZ) in the City. As shown on the maps, FHSZs within the City range from urban unzoned to moderate. Figure D-14 shows the CAL FIRE Fire Threat Areas in the City. As shown on the maps, fire threat within the City ranges from low to moderate.

SACRAMENTO COUNTY INSET Deadman Gulch SACRAMENTO ... Galt A St. **LEGEND** - Highways Interstates Local Roads FIRE HAZARD SEVERITY ZONES Railroads Moderate Rivers SAN JOAQUIN

Figure D-13 City of Galt – Fire Hazard Severity Zones

Data Source: Cal-Fire 2017 (Draft 9/2007 - c34fhszl06\_1, Adopted 11/2007 - fhsz06\_3\_34, Recommended 10/2008 - c34fhszl06\_3), Sacramento County GIS, Cal-Atlas; Map Date: 09/2020.

FOSTER MORRISON

Non-Wildland/Non-Urban

Urban Unzoned

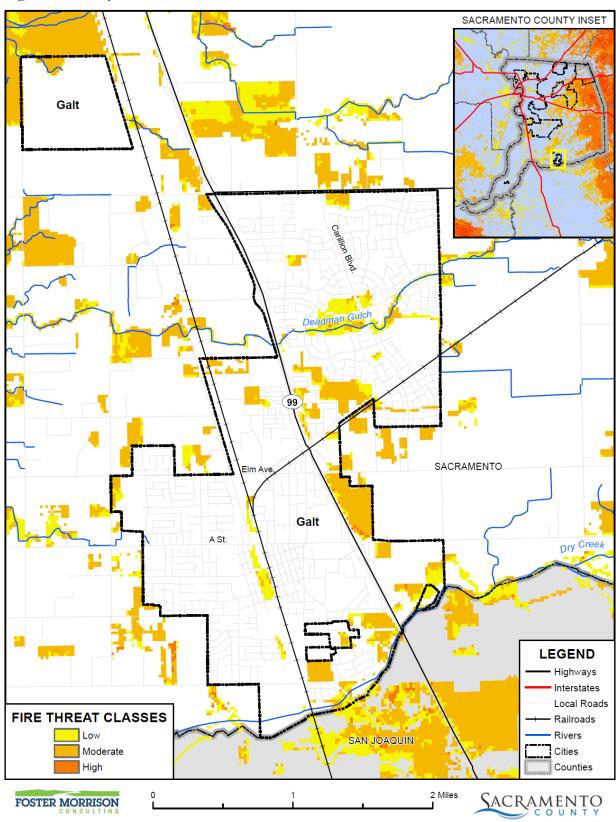
Cities

SACRAMENTO

2 Miles

Counties

Figure D-14 City of Galt – Fire Threat Areas



Data Source: Cal-Fire 2017 Fire Threat Data (fthrt14\_2), Sacramento County GIS, Cal-Atlas; Map Date: 09/2020.

Wildfires tend to be measured in structure damages, injuries, and loss of life as well as on acres burned. Fires can have a quick speed of onset, especially during periods of drought or during hot dry summer months. Fires can burn for a short period of time, or may have durations lasting for a week or more. Geographical FHSZ extent from CAL FIRE is shown in Table D-35. Geographical Fire Threat Area extents from CAL FIRE are shown on Table D-36.

Table D-35 City of Galt – Geographical FHSZ Extents

Fire Hazard Severity Zone	Total Acres	% of Total Acres	Improved Acres	% of Total Improved Acres	Unimproved Acres	% of Total Unimproved Acres
Very High	0	0.00%	0	0.00%	0	0.00%
High	0	0.00%	0	0.00%	0	0.00%
Moderate	757.6	19.62%	345.6	14.44%	412.0	28.08%
Non- Wildland/non- Urban	815.2	21.11%	449.3	18.77%	365.9	24.94%
Urban Unzoned	2,288.0	59.26%	1,598.4	66.79%	689.5	46.99%
Total	3,860.8	100.00%	2,393.3	100.00%	1,467.5	100.00%

Source: CAL FIRE

Table D-36 City of Galt – Geographical Fire Threat Area Extents

Fire Hazard Severity Zone	Total Acres	% of Total Acres	Improved Acres	% of Total Improved Acres	Unimproved Acres	% of Total Unimproved Acres
Very High	0	0.00%	0	0.00%	0	0.00%
High	2.0	0.05%	0	0.00%	2.0	0.14%
Moderate	258.0	6.68%	45.9	1.92%	212.1	14.45%
Low	150.0	3.88%	23.5	0.98%	126.5	8.62%
No Threat	3,450.8	89.38%	2,323.9	97.10%	1,126.9	76.79%
Total	3,860.8	100.00%	2,393.3	100.00%	1,467.5	100.00%

Source: CAL FIRE

### **Past Occurrences**

There has been no state and one federal disaster declaration due to fire, as shown in Table D-37. It should be noted that this fire disaster was from an explosion in Roseville, and not from an actual wildfire.

Table D-37 Sacramento County – State and Federal Wildfire Disaster Declarations 1950-2020

Disaster Type		Federal Declarations	State Declarations		
	Count	Years	Count	Years	
Fire	1	1973	0	_	

Source: Cal OES, FEMA

The City experienced significant smoke and air quality issues from wildfires in 2018 and 2019.

# Vulnerability to and Impacts from Wildfire

Fuel loads in the County and Cities, along with geographical and topographical features, create the potential for both natural and human-caused fires that can result in loss of life and property. These factors, combined with natural weather conditions common to the area, including periods of drought, high temperatures, low relative humidity, and periodic winds, can result in frequent and sometimes catastrophic fires. The more urbanized areas within the County are not immune from fire. The dry vegetation and hot and sometimes windy weather, combined with continued growth in the WUI areas, results in an increase in the number of ignitions. Any fire, once ignited, has the potential to quickly become a large, out-of-control fire. As development continues throughout the County and City, especially in these interface areas, the risk and vulnerability to wildfires will likely increase.

Galt is not immune to numerous types of grass and brush fires and any one of them may accelerate into an urban interface wildfire. Such a situation could lead to evacuation of large portions of the population and the potential for significant loss of personal property, structures, and rangeland. The natural fuels available in or near the City vary greatly in the rate and intensity of burning. Fires in heavy brush and stands of trees burn with great intensity but more slowly than in dry grass and leaves. Dense fuels will propagate fire better than sparse fuels.

Potential impacts from wildfire include loss of life and injuries; damage to structures and other improvements, natural and cultural resources, croplands, and timber; and loss of recreational opportunities. Wildfires can cause short-term and long-term disruption to the City. Fires can have devastating effects on watersheds through loss of vegetation and soil erosion, which may impact the City by changing runoff patterns, increasing sedimentation, reducing natural and reservoir water storage capacity, and degrading water quality. Fires can also affect air quality in the City; smoke and air pollution from wildfires can be a severe health hazard.

Although the physical damages and casualties arising from wildland-urban interface fires may be severe, it is important to recognize that they also cause significant economic impacts by resulting in a loss of function of buildings and infrastructure. Economic impacts of loss of transportation and utility services may include traffic delays/detours from road and bridge closures and loss of electric power, potable water, and wastewater services. Schools and businesses can be forced to close for extended periods of time. Recently, the threat of wildfire, combined with the potential for high winds, heat, and low humidity, has caused PG&E to initiate a PSPS which can also significantly impact a community through loss of services, business closures, and other impacts associated with loss of power for an extended period. In addition, catastrophic wildfire can create favorable conditions for other hazards such as flooding, landslides, and erosion during the rainy season.

Air quality, economic losses due to impacted structure. Wildfire impacts to urban development has been heightened since the 2017 Santa Rosa and 2018 Paradise wildfires.

#### Assets at Risk

Based on the vulnerability of Galt to the wildfire hazard, the sections that follow describes significant assets at risk in the City of Galt. This section includes the values at risk, population at risk, and critical facilities at risk.

# Values at Risk in Fire Hazard Severity Zones

GIS was used to determine the possible impacts of wildfire within the City of Galt. The methodology described in Section 4.3.19 of the Base Plan was followed in determining structures and values at risk in fire hazard severity zones. Summary analysis results for Galt are shown in Table D-38, which summarizes total parcel counts, improved parcel counts and their structure values by fire hazard severity zone. Table D-39 breaks out the Table D-38 by adding the property use details by fire hazard severity zone for the City.

Table D-38 City of Galt - Count and Value of Parcels by Fire Hazard Severity Zone

Fire Hazard Severity Zone	Total Parcel Count	Improved Parcel Count	Total Land Value	Improved Structure Value	Estimated Contents Value	Total Value
Moderate	515	450	\$55,943,481	\$153,171,395	\$118,098,793	\$327,213,685
Non- Wildland/Non- Urban	60	39	\$27,392,033	\$13,676,004	\$6,986,499	\$48,054,537
Urban Unzoned	7,411	6,959	\$561,121,967	\$1,562,485,445	\$887,067,558	\$3,010,674,957
Galt Total	7,986	7,448	\$644,457,481	\$1,729,332,844	\$1,012,152,850	\$3,385,943,179

Source: Sacramento County 2020 Parcel/Assessor's Data, CAL FIRE

Table D-39 City of Galt – Count and Value of Parcels by Fire Hazard Severity Zone and Property Use

Fire Hazard Severity Zone / Property Use	Total Parcel Count	Improved Parcel Count	Total Land Value	Improved Structure Value	Estimated Contents Value	Total Value
Moderate						
Agricultural	10	6	\$266,368	\$335,547	\$335,547	\$937,462
Care/Health	2	2	\$240,433	\$488,628	\$488,628	\$1,217,689
Church/Welfare	2	2	\$803,126	\$8,344,196	\$8,344,196	\$17,491,518
Industrial	11	8	\$7,712,554	\$35,654,513	\$53,481,769	\$96,848,837
Miscellaneous	14	0	\$1,419	\$0	\$0	\$1,419
Office	0	0	\$0	\$0	\$0	\$0
Public/Utilities	7	0	\$18	\$0	\$0	\$18
Recreational	0	0	\$0	\$0	\$0	\$0
Residential	436	430	\$35,124,382	\$105,799,697	\$52,899,839	\$193,823,933
Retail / Commercial	2	2	\$1,527,822	\$2,548,814	\$2,548,814	\$6,625,450

Fire Hazard Severity Zone / Property Use	Total Parcel Count	Improved Parcel Count	Total Land Value	Improved Structure Value	Estimated Contents Value	Total Value
Unknown	1	0	\$106,621	\$0	\$0	\$106,621
Vacant	30	0	\$10,160,738	\$0	\$0	\$10,160,738
Moderate Total	515	450	\$55,943,481	\$153,171,395	\$118,098,793	\$327,213,685
Non-Wildland/I	Non-Urbar	1				
Agricultural	8	5	\$21,948,562	\$296,988	\$296,988	\$22,542,538
Care/Health	0	0	\$0	\$0	\$0	\$0
Church/Welfare	1	0	\$0	\$0	\$0	\$0
Industrial	0	0	\$0	\$0	\$0	\$0
Miscellaneous	4	0	\$35,727	\$0	\$0	\$35,727
Office	0	0	\$0	\$0	\$0	\$0
Public/Utilities	6	0	\$0	\$0	\$0	\$0
Recreational	0	0	\$0	\$0	\$0	\$0
Residential	35	34	\$5,217,661	\$13,379,016	\$6,689,511	\$25,286,189
Retail / Commercial	0	0	\$0	\$0	\$0	\$0
Unknown	0	0	\$0	\$0	\$0	\$0
Vacant	6	0	\$190,083	\$0	\$0	\$190,083
Non- Wildland/Non- Urban Total	60	39	\$27,392,033	\$13,676,004	\$6,986,499	\$48,054,537
Urban Unzoned	L					
Agricultural	0	0	\$0	\$0	\$0	\$0
Care/Health	8	8	\$1,095,374	\$5,242,855	\$5,242,855	\$11,581,084
Church/Welfare	18	15	\$1,351,677	\$9,333,892	\$9,333,892	\$20,019,461
Industrial	48	42	\$14,416,336	\$41,511,053	\$62,266,583	\$118,193,970
Miscellaneous	106	0	\$142,900	\$0	\$0	\$142,900
Office	30	28	\$6,269,775	\$16,644,351	\$16,644,351	\$39,558,477
Public/Utilities	89	0	\$18	\$0	\$0	\$18
Recreational	3	2	\$163,644	\$332,437	\$332,437	\$828,518
Residential	6,810	6,767	\$467,999,186	\$1,390,011,517	\$695,005,755	\$2,553,016,447
Retail / Commercial	96	87	\$40,084,317	\$98,241,685	\$98,241,685	\$236,567,687
Unknown	0	0	\$0	\$0	\$0	\$0
Vacant	203	10	\$29,598,740	\$1,167,655	\$0	\$30,766,395
Urban Unzoned Total	7,411	6,959	\$561,121,967	\$1,562,485,445	\$887,067,558	\$3,010,674,957
Galt Total	7,986	7,448	\$644,457,481	\$1,729,332,844	\$1,012,152,850	\$3,385,943,179

Source: Sacramento County 2020 Parcel/Assessor's Data, CAL FIRE

GIS was used to determine the possible impacts of wildfire within the City of Galt. The methodology described in Section 4.3.19 of the Base Plan was followed in determining structures and values at risk in fire threat area. Summary analysis results for Galt are shown in Table D-40, which summarizes total parcel counts, improved parcel counts and their structure values by fire threat area. Table D-41 breaks out the Table D-40 by adding the property use details by threat areas for the City.

Table D-40 City of Galt - Count and Value of Parcels by Fire Threat Area

Fire Threat Class	Total Parcel Count	Improved Parcel Count	Total Land Value	Improved Structure Value	Estimated Contents Value	Total Value
Very High	0	0	\$0	\$0	\$0	\$0
High	0	0	\$0	\$0	\$0	\$0
Moderate	117	76	\$19,244,497	\$26,116,639	\$14,330,175	\$59,691,317
Low	83	7	\$9,060,926	\$1,236,367	\$618,184	\$10,915,477
No Threat	7,786	7,365	\$616,152,058	\$1,701,979,838	\$997,204,491	\$3,315,336,385
Galt Total	7,986	7,448	\$644,457,481	\$1,729,332,844	\$1,012,152,850	\$3,385,943,179

Source: Sacramento County 2020 Parcel/Assessor's Data, CAL FIRE

Table D-41 City of Galt - Count and Value of Parcels by Fire Threat Area and Property Use

Fire Threat Class / Property Use	Total Parcel Count	Improved Parcel Count	Total Land Value	Improved Structure Value	Estimated Contents Value	Total Value
Moderate						
Agricultural	0	0	\$0	\$0	\$0	\$0
Care/Health	0	0	\$0	\$0	\$0	\$0
Church/Welfare	0	0	\$0	\$0	\$0	\$0
Industrial	0	0	\$0	\$0	\$0	\$0
Miscellaneous	2	0	\$20	\$0	\$0	\$20
Office	0	0	\$0	\$0	\$0	\$0
Public/Utilities	1	0	\$0	\$0	\$0	\$0
Recreational	0	0	\$0	\$0	\$0	\$0
Residential	77	75	\$8,648,795	\$23,572,925	\$11,786,461	\$44,008,187
Retail/ Commercial	1	1	\$906,622	\$2,543,714	\$2,543,714	\$5,994,050
Unknown	1	0	\$106,621	\$0	\$0	\$106,621
Vacant	35	0	\$9,582,439	\$0	\$0	\$9,582,439
Moderate Total	117	76	\$19,244,497	\$26,116,639	\$14,330,175	\$59,691,317
Low						
Agricultural	0	0	\$0	\$0	\$0	\$0

Fire Threat Class / Property Use	Total Parcel Count	Improved Parcel Count	Total Land Value	Improved Structure Value	Estimated Contents Value	Total Value
Care/Health	0	0	\$0	\$0	\$0	\$0
Church/Welfare	0	0	\$0	\$0	\$0	\$0
Industrial	0	0	\$0	\$0	\$0	\$0
Miscellaneous	10	0	\$90,161	\$0	\$0	\$90,161
Office	0	0	\$0	\$0	\$0	\$0
Public/Utilities	8	0	\$0	\$0	\$0	\$0
Recreational	0	0	\$0	\$0	\$0	\$0
Residential	8	7	\$865,573	\$1,236,367	\$618,184	\$2,720,124
Retail/ Commercial	0	0	\$0	\$0	\$0	\$0
Unknown	0	0	\$0	\$0	\$0	\$0
Vacant	57	0	\$8,105,192	\$0	\$0	\$8,105,192
Low Total	83	7	\$9,060,926	\$1,236,367	\$618,184	\$10,915,477
No Threat						
Agricultural	18	11	\$22,214,930	\$632,535	\$632,535	\$23,480,000
Care/Health	10	10	\$1,335,807	\$5,731,483	\$5,731,483	\$12,798,773
Church/Welfare	21	17	\$2,154,803	\$17,678,088	\$17,678,088	\$37,510,979
Industrial	59	50	\$22,128,890	\$77,165,566	\$115,748,352	\$215,042,807
Miscellaneous	112	0	\$89,865	\$0	\$0	\$89,865
Office	30	28	\$6,269,775	\$16,644,351	\$16,644,351	\$39,558,477
Public/Utilities	93	0	\$36	\$0	\$0	\$36
Recreational	3	2	\$163,644	\$332,437	\$332,437	\$828,518
Residential	7,196	7,149	\$498,826,861	\$1,484,380,938	\$742,190,460	\$2,725,398,258
Retail/ Commercial	97	88	\$40,705,517	\$98,246,785	\$98,246,785	\$237,199,087
Unknown	0	0	\$0	\$0	\$0	\$0
Vacant	147	10	\$22,261,930	\$1,167,655	\$0	\$23,429,585
No Threat Total	7,786	7,365	\$616,152,058	\$1,701,979,838	\$997,204,491	\$3,315,336,385
Galt Total	7,986	7,448	\$644,457,481	\$1,729,332,844	\$1,012,152,850	\$3,385,943,179

Source: Sacramento County 2020 Parcel/Assessor's Data, CAL FIRE

## Population at Risk

The FHSZ dataset was overlayed on the parcel layer. Those residential parcel centroids that intersect the FHSZs were counted and multiplied by the 2010 Census Bureau average household factors for the City of Galt -3.16. According to this analysis, there is a total population of 1,359 residents of Galt at risk to

moderate or higher FHSZs, while there is a total of 237 in the moderate or higher fire threat areas. This is shown in Table D-42 and Table D-43, respectively.

Table D-42 City of Galt – Count of Improved Residential Parcels and Population by Fire Hazard Severity Zone

	Very High		Hi	gh	Moderate	
Jurisdiction	Improved Residential Parcels	Population at Risk	Improved Residential Parcels	Population at Risk	Improved Residential Parcels	Population at Risk
Galt	0	0	0	0	430	1,359

Source: CAL FIRE, US Census Bureau Average Household Sizes: Galt (3.16);

Table D-43 City of Galt – Count of Improved Residential Parcels and Population by Fire Threat Area

	Very	High	Hi	gh	Moderate	
Jurisdiction	Improved Residential Parcels	Population at Risk	Improved Residential Parcels	Population at Risk	Improved Residential Parcels	Population at Risk
Galt	0	0	0	0	75	237

Source: CAL FIRE, US Census Bureau Average Household Sizes: Galt (3.16)

#### Critical Facilities at Risk

An analysis was performed on the critical facility inventory in Galt in identified FHSZs. Critical facilities in a FHSZ in the City of Galt are shown in Figure D-15 and detailed in Table D-44. Critical facilities in a fire threat area in the City of Galt are shown in Figure D-16 and detailed in Table D-45. Details of critical facility definition, type, name and address and jurisdiction by fire hazard severity zone are listed in Appendix F.

SACRAMENTO COUNTY INSET **CRITICAL FACILITY CATEGORY Essential Services** At Risk Population Hazardous Materials and Solid Waste Facilities Galt' Deadman Gulch <mark>S</mark>ÅCRAMENTO **LEGEND** - Highways Interstates Local Roads FIRE HAZARD SEVERITY ZONES Railroads Moderate Rivers SAN JOAQUIN Non-Wildland/Non-Urban Cities Urban Unzoned Counties 2 Miles SACRAMENTO FOSTER MORRISON

Figure D-15 City of Galt – Critical Facilities in Fire Hazard Severity Zones

Data Source: Cal-Fire 2017 (Draft 9/2007 - c34fhszl06\_1, Adopted 11/2007 - fhsz06\_3\_34, Recommended 10/2008 - c34fhszl06\_3), Sacramento County GIS, Cal-Atlas; Map Date: 08/2021.

Table D-44 City of Galt – Critical Facilities by Fire Hazard Severity Zone

Fire Hazard Severity Zone/Critical Facility Category	Critical Facility Type	Facility Count
Moderate		
	Microwave Service Towers	2
Essential Services Facilities	Water Well	6
	Total	8
	School	1
At Risk Population Facilities	Total	1
Hazardous Materials and Solid Waste	Leaky Underground Storage Tank	1
Facilities	Total	1
Moderate Total		10
Non-Wildland/Non-Urban		
	Cellular Tower	1
	Microwave Service Towers	6
Essential Services Facilities	Water Well	1
	Total	8
	School	2
At Risk Population Facilities	Total	2
Non-Wildland/Non-Urban Total	10	
Urban Unzoned		<u>'</u>
	Cellular Tower	1
	Emergency Evacuation Center	5
	EMS Stations	2
	FDIC Insured Banks	6
	Fire Station	3
Essential Services Facilities	Law Enforcement	2
	Microwave Service Towers	47
	Sewage Treatment Plant	1
	Water Well	28
	Total	95
	Day Care Center	6
	Mobile Home Parks	4
At Risk Population Facilities	Places of Worship	14
	School	11
	Total	35
Hazardous Materials and Solid Waste	EPA ER TRI Facility	3
Facilities	Leaky Underground Storage Tank	6

Fire Hazard Severity Zone/Critical Facility Category	Critical Facility Type	Facility Count
	Waste Transfer Station	1
	Total	10
Urban Unzoned Total		140
Galt Total		160

Source: CAL FIRE, Sacramento County

SACRAMENTO COUNTY INSET **CRITICAL FACILITY CATEGORY Essential Services** At Risk Population Hazardous Materials and Solid Waste Facilities Galt SACRAMENTO Dry Creek **LEGEND** · Highways Interstates Local Roads FIRE THREAT CLASSES Railroads Low Rivers SAN JOAQUIN Cities Moderate High Counties 2 Miles SACRAMENTO **FOSTER MORRISON** 

Figure D-16 City of Galt – Critical Facilities in Fire Threat Areas

Data Source: Cal-Fire 2017 Fire Threat Data (fthrt14\_2), Sacramento County GIS, Cal-Atlas; Map Date: 08/2021.

Table D-45 City of Galt – Critical Facilities by Fire Threat Areas

Fire Threat/ Critical Facility Category Critical Facility Type		Facility Count
Low		
E dile i E W	Water Well	1
Essential Services Facilities	Total	1
Low Total	1	
No Threat		
	Cellular Tower	2
	Emergency Evacuation Center	5
	EMS Stations	2
	FDIC Insured Banks	6
Essential Services Facilities	Fire Station	3
Essential Services Facilities	Law Enforcement	2
	Microwave Service Towers	55
	Sewage Treatment Plant	1
	Water Well	34
	Total	110
	Day Care Center	6
	Mobile Home Parks	4
At Risk Population Facilities	Places of Worship	14
	School	14
	Total	38
	EPA ER TRI Facility	3
Hazardous Materials and Solid Waste Facilities	Leaky Underground Storage Tank	7
Trazardous Materiais and Solid Waste Facilities	Waste Transfer Station	1
	Total	11
No Threat Total	159	
Galt Total		160

Source: CAL FIRE, Sacramento County

## **Future Development**

Additional growth and development within moderate or higher fire hazard severity zones in the City would place additional values at risk to wildfire. City building codes are in effect and should continue to be updated as appropriate to reduce this risk. The City has required new residential development to have fire sprinklers since the 2016 LHMP.

## GIS Analysis

The City provided future development areas were used as the basis for the inventory of future development areas for the City. Using the GIS parcel spatial file for each of these areas, the areas and parcels associated with future development projects for which the analysis was to be performed were identified. Utilizing the future development project spatial layer, the parcel centroid data was intersected to determine the parcel counts within each area. Figure D-17 shows the locations of future development areas the City is planning to develop on the FHSZs. Table D-46 shows the parcels and acreages of each future development area in the City in each FHSZ. Figure D-18 shows the locations of future development areas the City is planning to develop on the Fire Threat Area. Table D-47 shows the parcels and acreages of each future development area in the City in each Fire Threat Area.

**LEGEND** Highways Interstates Local Roads Railroads **Galt** Rivers Cities Counties 11 99 **FUTURE DEVELOPMENT AREAS** SACRAMENTO Elm A 1 - Cardoso 2 2 - Caterina Estate **10** 3 - Cedar Flats Estates (Phase 1 and 2) Galt 4 - Dry Creek Oaks 5 - Greenwood Phase 1 and 2 4 SACRAMENTO COUNTY INSET 6 - Liberty Ranch 7 - Morali Estates 8 - Parlin Oaks 9 - Simmerhorn Commercial 10 - Simmerhorn Ranch 11 - Summerfield 12 - Twin Cities Commercial FIRE HAZARD SEVERITY ZONES Moderate SAN JOAQUIN Non-Wildland/Non-Urban Urban Unzoned 2 Miles SACRAMENTO FOSTER MORRISON

Figure D-17 City of Galt – Future Development in Fire Hazard Severity Zones

Data Source: Cal-Fire 2017 (Draft 9/2007 - c34fhszl06\_1, Adopted 11/2007 - fhsz06\_3\_34, Recommended 10/2008 - c34fhszl06\_3), Sacramento County GIS, Cal-Atlas; Map Date: 07/2021.

Table D-46 City of Galt – Future Development by Fire Hazard Severity Zone

Fire Hazard Severity Zone/ Future Development	Total Parcel Count	Improved Parcel Count	<b>Total Acres</b>
Moderate			
Cedar Flats Estates (Phase 1 and 2)	6	0	31.0
Dry Creek Oaks	2	0	55.4
Simmerhorn Commercial	4	0	48.4
Twin Cities Commercial	1	0	11.9
Moderate Total	13	0	146.7
Non-Wildland/Non-Urban			
Cardoso 2	1	1	33.7
Caterina Estate	1	0	10.3
Dry Creek Oaks	3	0	31.4
Liberty Ranch	4	4	333.8
Simmerhorn Ranch	2	1	115.2
Summerfield	1	1	58.8
Non-Wildland/Non-Urban Total	12	7	583.1
Urban Unzoned			
Caterina Estate	1	1	1.9
Cedar Flats Estates (Phase 1 and 2)	1	0	5.0
Greenwood Phase 1 and 2	1	0	16.3
Morali Estates	1	0	12.8
Parlin Oaks	1	0	16.3
Urban Unzoned Total	5	1	52.4
Grand Total	30	8	782.2

Source: City of Galt, CAL FIRE

**LEGEND** - Highways Interstates Local Roads Railroads Galt Rivers Cities Counties 99 **FUTURE DEVELOPMENT AREAS** SACRAMENTO Elm Av 1 - Cardoso 2 2 - Caterina Estate 10 3 - Cedar Flats Estates (Phase 1 and 2) Galt 4 - Dry Creek Oaks Dry Creek 5 - Greenwood Phase 1 and 2 4 SACRAMENTO COUNTY INSET 6 - Liberty Ranch 7 - Morali Estates 8 - Parlin Oaks 9 - Simmerhorn Commercial 10 - Simmerhorn Ranch 11 - Summerfield 12 - Twin Cities Commercial FIRE THREAT CLASSES Low SAN JOAQUIN Moderate High 2 Miles SACRAMENTO FOSTER MORRISON

Figure D-18 City of Galt – Future Development in Fire Threat Areas

Data Source: Cal-Fire 2017 Fire Threat Data (fthrt14\_2), Sacramento County GIS, Cal-Atlas; Map Date: 07/2021.

Table D-47 City of Galt – Future Development in Fire Threat Areas

Fire Threat/Future Development	Total Parcel Count	Improved Parcel Count	Total Acres
Moderate			
Cedar Flats Estates (Phase 1 and 2)	5	0	31.8
Simmerhorn Commercial	3	0	44.8
Twin Cities Commercial	1	0	11.9
Moderate Total	9	0	88.5
Low			
Cedar Flats Estates (Phase 1 and 2)	2	0	4.2
Parlin Oaks	1	0	16.3
Simmerhorn Commercial	1	0	3.6
Low Total	4	0	24.1
No Threat			
Cardoso 2	1	1	33.7
Caterina Estate	2	1	12.1
Dry Creek Oaks	5	0	86.8
Greenwood Phase 1 and 2	1	0	16.3
Liberty Ranch	4	4	333.8
Morali Estates	1	0	12.8
Simmerhorn Ranch	2	1	115.2
Summerfield	1	1	58.8
No Threat Total	17	8	669.5
Grand Total	30	8	782.2

Source: City of Galt, CAL FIRE

# D.6 Capability Assessment

Capabilities are the programs and policies currently in use to reduce hazard impacts or that could be used to implement hazard mitigation activities. This capabilities assessment is divided into five sections: regulatory mitigation capabilities, administrative and technical mitigation capabilities, fiscal mitigation capabilities, and mitigation education, outreach, and partnerships.

# D.6.1. Regulatory Mitigation Capabilities

Table D-48 lists regulatory mitigation capabilities, including planning and land management tools, typically used by local jurisdictions to implement hazard mitigation activities and indicates those that are in place in the City of Galt.

Table D-48 City of Galt Regulatory Mitigation Capabilities

Plans	Y/N Year	Does the plan/program address hazards?  Does the plan identify projects to include in the mitigation strategy?  Can the plan be used to implement mitigation actions?
Comprehensive/Master Plan/General Plan	Y 2009	
Capital Improvements Plan	Y	CIP is updated with every two-year budget cycle
Economic Development Plan	Y 2015	
Local Emergency Operations Plan	Y	
Continuity of Operations Plan	N	
Transportation Plan	N	
Stormwater Management Plan/Program	Y	
Engineering Studies for Streams	Y	FEMA adopted modified floodplain maps for portions of the City on October 20, 2016, based upon more detailed study of Dry Creek.
Community Wildfire Protection Plan	N	
Other special plans (e.g., brownfields redevelopment, disaster recovery, coastal zone management, climate change adaptation)		
Building Code, Permitting, and Inspections	Y/N	Are codes adequately enforced?
Building Code	Y	Version/Year: 2020 CBC
Building Code Effectiveness Grading Schedule (BCEGS) Score		Score:
Fire department ISO rating:		Rating:
Site plan review requirements	Y	
	\$7 /\$T	Is the ordinance an effective measure for reducing hazard impacts?
Land Use Planning and Ordinances	Y/N	Is the ordinance adequately administered and enforced?
Zoning ordinance	Y	Revised/Combined with subdivision ordinance 6/2015
Subdivision ordinance	Y	Revised/Combined with zoning ordinance 6/2015
Floodplain ordinance	Y 2012	
Natural hazard specific ordinance (stormwater, steep slope, wildfire)	Y 2002	Stormwater Protection
Flood insurance rate maps	Y 2012/2016	
Elevation Certificates		
Acquisition of land for open space and public recreation uses		
Erosion or sediment control program	Y 2002	

Other

#### How can these capabilities be expanded and improved to reduce risk?

Expand use of GIS systems to geographically locate issues in the City would help to expand capabilities and reduce risk. As any plans are updated, the City will review how those plans can help reduce hazards in the City, reduction risk.

Source: City of Galt

### General Plan

The City Council adopted the City of Galt's General Plan on April 7, 2009. Adoption of the General Plan in 2009 culminated a five-year period during which the City worked with the General Plan Advisory Committee, Planning Commission, and the City Council to update the General Plan.

The General Plan sets out a long-term vision for Galt's growth and outlines policies, standards, and programs to guide day-to-day decisions concerning Galt's development through the year 2030. Designed to meet the State planning requirements, the General Plan consists of two documents: The Existing Conditions Report and the Policy Document. The Existing Conditions Report inventories and analyzes the existing conditions and trends in Galt and provides the formal supporting documentation for general plan policies. The Policy Document is divided into two main parts. Part I is a summary of the General Plan, describing the nature and purpose of the plan, highlighting the guiding principles of the plan, and outlining the plan's main proposals. Part II contains explicit statements of goals, policies, standards, implementation programs, and quantified objectives that constitute the formal policy of the City of Galt for land use, development and environmental quality.

In addition to the General Plan Existing Conditions Report and General Plan Policy Document, an Environmental Impact Report (EIR) analyzing the impacts and implications of the General Plan was prepared. The EIR, which is not formerly part of the General Plan, was prepared to meet the requirements of the California Environmental Quality Act.

## D.6.2. Administrative/Technical Mitigation Capabilities

Table D-49 identifies the City department(s) responsible for activities related to mitigation and loss prevention in Galt.

Table D-49 City of Galt's Administrative and Technical Mitigation Capabilities

Administration	Y/N	Describe capability Is coordination effective?
Planning Commission	Y	
Mitigation Planning Committee	N	
Maintenance programs to reduce risk (e.g., tree trimming, clearing drainage systems)	Y	
Mutual aid agreements	Y	
Other		

Staff	Y/N FT/PT	Is staffing adequate to enforce regulations? Is staff trained on hazards and mitigation? Is coordination between agencies and staff effective?			
Chief Building Official	Y PT	Staffing is adequate and well trained.			
Floodplain Administrator	Y FT	Staffing is adequate and well trained.			
Emergency Manager	Y	Staffing is adequate and well trained.			
Community Planner	Y	Staffing is adequate and well trained.			
Civil Engineer	Y	Staffing is adequate and well trained.			
GIS Coordinator	N				
Other					
Technical					
Warning systems/services (Reverse 911, outdoor warning signals)	N				
Hazard data and information	Y				
Grant writing	N				
Hazus analysis	N				
Other					
How can these capabilities be expanded and improved to reduce risk?					
Expand use of GIS systems to geographically locate issues in the City. The City is seeking to hire a GIS coordinator, which would expand capabilities and reduce risk.					

Source: City of Galt

# D.6.3. Fiscal Mitigation Capabilities

Table D-50 identifies financial tools or resources that the City could potentially use to help fund mitigation activities.

Table D-50 City of Galt's Fiscal Mitigation Capabilities

Funding Resource	Access/ Eligibility (Y/N)	Has the funding resource been used in past and for what type of activities? Could the resource be used to fund future mitigation actions?
Capital improvements project funding	Y	
Authority to levy taxes for specific purposes	Y	
Fees for water, sewer, gas, or electric services	Y	Water, sewer, storm drainage
Impact fees for new development	Y	
Storm water utility fee	Y	Only adequate to fund minor maintenance projects
Incur debt through general obligation bonds and/or special tax bonds	Y	
Incur debt through private activities	Y	

Funding Resource	Access/ Eligibility (Y/N)	Has the funding resource been used in past and for what type of activities? Could the resource be used to fund future mitigation actions?	
Community Development Block Grant	Y		
Other federal funding programs	Y	Federal transportation grants thru SACOG, COVID relief funding	
State funding programs	Y	State Revolving Loan Fund, grants thru State Legislature actions, Parks and rec Fund programs, State grants thru SACOG, COVID relief funding	
Other			
How can these capabilities be expanded and improved to reduce risk?			

Assistance in developing a viable storm drainage utility fee would expand capabilities and reduce risk. Expansion of Community Facilities Districts (CFD) or other financial programs to cover maintenance costs beyond just new developments. This would expand capabilities and reduce risks from hazards.

Source: City of Galt

## D.6.4. Mitigation Education, Outreach, and Partnerships

Table D-51 identifies education and outreach programs and methods already in place that could be/or are used to implement mitigation activities and communicate hazard-related information.

Table D-51 City of Galt's Mitigation Education, Outreach, and Partnerships

Program/Organization	Yes/No	Describe program/organization and how relates to disaster resilience and mitigation.  Could the program/organization help implement future mitigation activities?		
Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc.	Y	City provides space for a community garden next to a City Park. City has a beautification committee also. Both entities assist the City with environmental protection education and outreach.		
Ongoing public education or information program (e.g., responsible water use, fire safety, household preparedness, environmental education)	Y	Quarterly newsletter mailed to every City Utility Account		
Natural disaster or safety related school programs	Y	Safe Routes to Schools		
StormReady certification	N			
Firewise Communities certification	N			
Public-private partnership initiatives addressing disaster-related issues	Y	Community Emergency Response Team (CERT)		
Other				
How can these capabilities be expanded and improved to reduce risk?				
The City may increase public outreach in other areas if funding is available. The City is weighing StormReady certification. Both of these could expand capability and reduce risk.				

Source: City of Galt

## **D.7** Mitigation Strategy

## D.7.1. Mitigation Goals and Objectives

The City of Galt adopts the hazard mitigation goals and objectives developed by the HMPC and described in Chapter 5 Mitigation Strategy.

## D.7.2. NFIP Mitigation Strategy

The City of Galt joined the National Flood Insurance Program (NFIP) on December 1, 1981. As a participant of the NFIP, the City of Galt has administered floodplain management regulations that meet the minimum requirements of the NFIP. The management program objective is to protect people and property within the City. The City of Galt will continue to comply with the requirements of the NFIP in the future.

In addition, the City of Galt actively participates with Sacramento County to address local NFIP issues through a regional approach. Many of the program activities are the same for the City of Galt as for Sacramento County since participation at the County level includes all local jurisdictions.

The City of Galt Community Development and Public Works Departments provides public outreach activities which include map information services, public awareness, public hazard disclosure, and flood protection information. This information is readily available to the public and consists of current and accurate flood mapping. In addition, the Community Development and Public Works Departments provides information about our stormwater management program and up-to-date information related to the maintenance of our drainage system.

The NFIP's Community Rating System (CRS) is a voluntary incentive program that recognizes and encourages community floodplain management activities that exceed the minimum NFIP requirements. As a result, flood insurance premium rates are discounted to reflect the reduced flood risk resulting from the community actions meeting the three goals of the CRS which are to reduce flood losses, facilitate accurate insurance rating, and promote the awareness of flood insurance. The City of Galt is not a current participant in the CRS program.

More information about the floodplain administration in the City of Galt can be found in Table D-52.

Table D-52 City of Galt Compliance with NFIP

NFIP Topic	Comments
Insurance Summary	
How many NFIP policies are in the community? What is the total premium and coverage?	58 policies \$25,251 in premiums \$19,840,000 in coverage
How many claims have been paid in the community? What is the total amount of paid claims? How many of the claims were for substantial damage?	3 claims \$69,338.31 in claims paid 0 substantial damage claims
How many structures are exposed to flood risk within the community?	9 in 1% annual chance 0 in 0.2% annual chance

NFIP Topic	Comments
Repetitive Loss (RL) and Severe Repetitive Loss Properties (SRL)	0 RL properties 0 SRL properties
Describe any areas of flood risk with limited NFIP policy coverage	There are no areas with limited NFIP coverage.
Staff Resources	
Is the Community Floodplain Administrator or NFIP Coordinator certified?	No
Provide an explanation of NFIP administration services (e.g., permit review, GIS, education or outreach, inspections, engineering capability)	Permit review, engineering capabilities
What are the barriers to running an effective NFIP program in the community, if any?	None
Compliance History	
Is the community in good standing with the NFIP?	Y
Are there any outstanding compliance issues (i.e., current violations)?	N
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	CAV 7/27/2010 CAC 5/20/2016
Is a CAV or CAC scheduled or needed?	No
Regulation	
When did the community enter the NFIP?	12/1/1981
Are the FIRMs digital or paper?	Digital
Do floodplain development regulations meet or exceed FEMA or State minimum requirements? If so, in what ways?	Minimum floor elevation is one foot above BFE
Provide an explanation of the permitting process.	All building permits over \$20,000 in value are reviewed
Community Rating System	
Does the community participate in CRS?	N
What is the community's CRS Class Ranking?	N/A
What categories and activities provide CRS points and how can the class be improved?	N/A
Does the plan include CRS planning requirements?	N/A

## D.7.3. Mitigation Actions

The planning team for the City of Galt identified and prioritized the following mitigation actions based on the risk assessment. Background information and information on how each action will be implemented and administered, such as ideas for implementation, responsible office, potential funding, estimated cost, and timeline are also included. The following hazards were considered a priority for purposes of mitigation action planning:

- Climate Change
- Drought & Water Shortage
- Floods: 1%/0.2% annual chance

➤ Floods: Localized Stormwater

Pandemic

> Severe Weather: Extreme Cold and Freeze

> Severe Weather: Extreme Heat

> Severe Weather: Heavy Rains and Storms

Wildfire

It should be noted that many of the projects submitted by each jurisdiction in Table 5-4 in the Base Plan benefit all jurisdictions whether or not they are the lead agency. Further, many of these mitigation efforts are collaborative efforts among multiple local, state, and federal agencies. In addition, the countywide public outreach action, as well as many of the emergency services actions, apply to all hazards regardless of hazard priority. Collectively, this multi-jurisdictional mitigation strategy includes only those actions and projects which reflect the actual priorities and capacity of each jurisdiction to implement over the next 5-years covered by this plan. It should further be noted, that although a jurisdiction may not have specific projects identified for each priority hazard for the five year coverage of this planning process, each jurisdiction has focused on identifying those projects which are realistic and reasonable for them to implement and would like to preserve their hazard priorities should future projects be identified where the implementing jurisdiction has the future capacity to implement.

#### Multi-Hazard Actions

#### Action 1. Integrate Local Hazard Mitigation Plan into Safety Element of General Plan

**Hazards Addressed**: Multi-hazard (Climate Change, Drought & Water Shortage, Floods: 1%/0.2% annual chance, Floods: Localized Stormwater, Pandemic, Severe Weather: Extreme Cold and Freeze, Severe Weather: Extreme Heat, Severe Weather: Heavy Rains and Storms, Wildfire)

**Goals Addressed**: 1, 2, 3, 4, 5

**Issue/Background**: Local jurisdictional reimbursement for mitigation projects and cost recovery after a disaster is guided by Government Code Section 8685.9 (AB 2140).

**Project Description**: Specifically, this section requires that each jurisdiction adopt a local hazard mitigation plan (LHMP) in accordance with the federal Disaster Mitigation Act of 2000 as part of the Safety Element of its General Plan. Adoption of the LHMP into the Safety Element of the General Plan may be by reference or incorporation.

Other Alternatives: No action

**Existing Planning Mechanisms through which Action will be Implemented**: Safety Element of General Plan

Responsible Office: City of Galt Community Development Department

**Cost Estimate**: Jurisdictional board/staff time

**Potential Funding**: Local budgets

**Benefits** (avoided Losses): Incorporation of an adopted LHMP into the Safety Element of the General Plan will help jurisdictions maximize the cost recovery potential following a disaster.

**Schedule**: As soon as possible

Priority (H, M, L): High

Action 2. Enhance Public Education and Awareness of Natural Hazards and Public

**Understanding of Disaster Preparedness** 

**Hazards Addressed**: Multi-hazard (Climate Change, Drought & Water Shortage, Floods: 1%/0.2% annual chance, Floods: Localized Stormwater, Pandemic, Severe Weather: Extreme Cold and Freeze, Severe Weather: Extreme Heat, Severe Weather: Heavy Rains and Storms, Wildfire)

**Goals Addressed**: 1, 2, 3, 4, 5

**Issue/Background**: The City and County play a key role in public outreach/education efforts to communicate the potential risk and vulnerability of their community to the effects of natural hazards. A comprehensive multi-hazard public education program will better inform the community of natural hazards of concern and actions the public can take to be better prepared for the next natural disaster event.

**Project Description**: A comprehensive multi-hazard outreach program will ascertain both broad and targeted educational needs throughout the community. The City will work with the County and other agencies as appropriate to develop timely and consistent annual outreach messages in order to communicate the risk and vulnerability of natural hazards of concern to the community. This includes measures the public can take to be better prepared and to reduce the damages and other impacts from a hazard event.

**Other Alternatives**: Continue public information activities currently in place.

**Existing Planning Mechanism(s) through which Action Will Be Implemented**: Existing County outreach programs will be reviewed for effectiveness and leveraged and expanded upon to reach the broader region.

**Responsible Office**: City of Galt in partnership with the County

**Cost Estimate**: Annual costs to be determined, and will depend on the scope and frequency of activities and events as well as volunteer participation

**Benefits** (Losses Avoided): Increase residents' knowledge of potential hazards and activities required to mitigate hazards and be better prepared. Protect lives and reduce damages, relatively low cost to implement.

Potential Funding: Local budgets, grant funds

**Timeline:** Ongoing/Annual public awareness campaign

Priority (H, M, L): High

# Action 3. Future Development Projects shall complete a Climate Action Plan Consistency Review Checklist

Hazards Addressed: Climate Change, Drought, Extreme Heat, Flooding, Wildfire

**Goals Addressed**: 1, 2, 3, 4, 5

**Issue/Background**: Climate change adaptation is a key priority of the State of California. The 2018 State of California Multi-Hazard Mitigation Plan stated that climate change is already affecting California. The State has also seen increased average temperatures, more extreme hot days, fewer cold nights, a lengthening of the growing season, shifts in the water cycle with less winter precipitation falling as snow, and earlier runoff of both snowmelt and rainwater in the year. In addition to changes in average temperatures, sea level, and precipitation patterns, the intensity of extreme weather events is also changing. Climate change is a global phenomenon. It is expected to affect the whole of the City, Sacramento County, and State of California. There is no scale to measure the extent of climate change. Climate change exacerbates other hazards, such as drought, extreme heat, flooding, wildfire, and others.

**Project Description**: Future Development Projects will need to submit a Climate Action Plan Consistency Review Checklist.

Other Alternatives: None

Existing Planning Mechanism(s) through which Action Will Be Implemented: The City completed a Climate Action Plan in March 2020, from which the Climate Action Plan Consistency Review Checklist was developed

Responsible Agency/ Department/Partners: City of Galt Community Development Department

**Cost Estimate**: \$0- Part of development application so cost for this mitigation measure is included in the expected costs on the part of the development as well as City staff time.

**Benefits** (Losses Avoided): Mitigate the impacts of greenhouse gas emissions and its global effect on climate change

Potential Funding: Development application fees

**Timeline**: Started in 2021, on-going thereafter

Project Priority (H, M, L): M

Action 4. Develop a Robust Geographic Based System (GIS) to Geographically Locate Issues/Actions/Mitigation in the City

**Hazards Addressed**: Multi-hazard (Floods: 1%/0.2% annual chance, Floods: Localized Stormwater, Severe Weather: Heavy Rains and Storms, Wildfire, Pandemic)

**Goals Addressed**: 1, 2, 3, 4, 5

**Issue/Background**: The City does not have a robust coordinated GIS to be used by City staff to catalog geographic based information about the City, its infrastructure, maintenance activities/actions/mitigations.

**Project Description**: Use consultants and City staff to develop and enhance existing GIS based information into a robust and usable data system.

Other Alternatives: Continue to use "paper", anecdotal and other data collection methods.

**Existing Planning Mechanism(s) through which Action Will Be Implemented**: Local Budgets and Capital Improvement Programs

Responsible Agency/ Department/Partners: City of Galt Public Works

**Cost Estimate**: Annual costs to be determined by budget process.

**Benefits** (Losses Avoided): Maintain City assets, reduce damages and mitigate hazard impacts to the residents of the City.

Potential Funding: Local Budgets, grant funds

Timeline: Ongoing

Project Priority (H, M, L): H

### Action 5. Perform Vegetative Control of City Drainages and Channels by Natural Methods

**Hazards Addressed**: Multi-hazard (Drought and Water Shortage, Floods: 1%/0.2% annual chance, Floods: Localized Stormwater, Severe Weather: Heavy Rains and Storms, Wildfire)

**Goals Addressed**: 1, 2, 3, 4, 5

**Issue/Background**: The City does not have permits from US Army Corps of Engineers (Regulatory Branch-Nationwide Permit) and California State Department of Fish and Wildlife (Streambed Alternation Agreement) for "mechanical" maintenance (e.g. use of excavators) of its drainages, channels and open space areas, that the use has a potential to discharge fill and/or dredged material in the waters of the US and State of California. The City has had past success utilizing natural methods (specifically goats) to maintain and control vegetation within these areas. This also aids in reduction of wildfire risk.

**Project Description**: A coordinated plan to use natural methods to control vegetation in the City's drainages, channels and open space areas on a regular basis would mitigate the potential impacts on multiple hazards as identified.

**Other Alternatives**: Obtain necessary permits to do more "traditional" maintenance.

**Existing Planning Mechanism(s) through which Action Will Be Implemented**: Local Budgets and Capital Improvement Programs and

**Responsible Agency/ Department/Partners**: City of Galt Public Works

**Cost Estimate**: Annual costs to be determined by budget process.

Benefits (Losses Avoided): Protect lives, structures and reduce damages, relatively low cost to implement.

Potential Funding: Local Budgets, grant funds

Timeline: Ongoing

**Project Priority (H, M, L)**: H

Action 6. Continue Work with the Other Groundwater Sustainability Agencies (GSAs) in the Cosumnes Subbasin of the San Joaquin Valley Basin (DWR Basin No. 5-022.16) who are Working Together to Develop a Single Groundwater Sustainability Plan (GSP).

Hazards Addressed: Drought & Water Shortage

**Goals Addressed**: 1, 2, 3, 4, 5

**Issue/Background**: The City water supplies are all groundwater sources. The City is one of seven Groundwater Sustainability Agencies (GSAs) in the Cosumnes Subbasin of the San Joaquin Valley Basin (DWR Basin No. 5-022.16) who are working together to develop a single Groundwater Sustainability Plan (GSP). The GSAs have formed the Cosumnes Subbasin Sustainability Groundwater Management Act (SGMA) Working Group (Working Group) which meets at least once a month to discuss the development of the GSP including water management decisions for the groundwater basin.

**Project Description**: Continue work with the Cosumnes Subbasin Sustainability Groundwater Management Act (SGMA) Working Group (Working Group) who are working together to develop a single Groundwater Sustainability Plan (GSP).

**Other Alternatives**: None

Existing Planning Mechanism(s) through which Action Will Be Implemented: Local budgets

Responsible Agency/ Department/Partners: City of Galt Public Works Departments

Cost Estimate: Jurisdictional board/staff (and consultant) time.

**Benefits** (Losses Avoided): To have the Cosumnes Subbasin of the San Joaquin Valley Basin provide a sustainable and long-term groundwater supply for all basin users.

**Potential Funding**: Local Budgets, grants

Timeline: On-going

Project Priority (H, M, L): M

# Action 7. Increase Resiliency of City Critical Infrastructure and Emergency Operations and Against Hazards

**Hazards Addressed**: Multi-hazard (Climate Change, Drought & Water Shortage, Floods: 1%/0.2% annual chance, Floods: Localized Stormwater, Pandemic, Severe Weather: Extreme Cold and Freeze, Severe Weather: Extreme Heat, Severe Weather: Heavy Rains and Storms, Wildfire)

**Goals Addressed**: 1, 2, 3, 4, 5

**Issue/Background**: Impacts of natural hazards events could affect the ability of City staff to responds effectively to emergency events and provide critical infrastructure needs.

**Project Description**: Evaluate city critical facilities such as police and public works assets such as buildings, communication systems, and infrastructure (e.g. wells, wastewater facilities, roads) to determine necessary improvements for increasing resiliency against natural hazard events and operations during natural hazard events.

Other Alternatives: None

Existing Planning Mechanism(s) through which Action Will Be Implemented: Local Operation and Maintenance budgets and Capital Improvement Program

Responsible Agency/ Department/Partners: City of Galt Police and Public Works Departments

**Cost Estimate**: Jurisdictional board/staff time.

Benefits (Losses Avoided): Protect lives, reduce damages and operational downtimes.

Potential Funding: Local Budgets, grants

Timeline: As needed

Project Priority (H, M, L): M

#### Action 8. Maintain City Drainages, Channels and Open Spaces

**Hazards Addressed**: Multi-hazard (Floods: 1%/0.2% annual chance, Floods: Localized Stormwater, Severe Weather: Heavy Rains and Storms, Wildfire, Pandemic)

**Goals Addressed**: 1, 2, 3, 4, 5

**Issue/Background:** The City does not have permits from US Army Corps of Engineers (Regulatory Branch-Nationwide Permit) and California State Department of Fish and Wildlife (Streambed Alternation Agreement) for "mechanical" maintenance (e.g. use of excavators) of its drainages, channels and open space areas, that the use has a potential to discharge fill and/or dredged material in the waters of the US and State of California. Initiate the permit process (and associated studies) for the regulatory agencies and obtain said permits.

**Project Description**: A coordinated plan to develop a maintenance program to address vegetation, sediment, erosion and vectors in the City's drainages, channels and open space areas on a regular basis would mitigate the potential impacts of multiple hazards as identified.

**Other Alternatives**: Continue to use other natural methods to do maintenance.

**Existing Planning Mechanism(s) through which Action Will Be Implemented**: Local Budgets and Capital Improvement Programs

Responsible Agency/ Department/Partners: City of Galt Public Works

**Cost Estimate**: Annual costs to be determined by budget process.

**Benefits (Losses Avoided)**: Protect lives, structures and reduce damages, Improve flow capacity of drainages

Potential Funding: Local Budgets, grant funds

Timeline: Ongoing

Project Priority (H, M, L): H